



# STRATEGY 2026

TURNING SCIENCE INTO SOLUTIONS

*Adopted by the Board, November 2023*



# Turning Science into Solutions: IBHS's Strategy 2026

IBHS's **groundbreaking research is closing gaps in building science** to strengthen the nation's resilience against the growing threat of severe weather and wildfire, **bringing science to life, educating audiences, and driving change.**

The Institute's **unique capabilities** to test full-scale structures against high-wind, wind-driven rain, hail, and wildfire allow researchers to **identify vulnerabilities** – the points of failure – during these events. That research then flows into **achievable, affordable, and effective solutions** to guide building practices, retrofits, and mitigation programs for residential and commercial properties.

IBHS has been at the **forefront of building science research** since the opening of its Research Center in 2010. IBHS has **fundamentally shaped** the state of scientific knowledge and the resilience solutions available across our core perils of wind, wind-driven rain, hail, and wildfire. This includes:

- Exposing the true vulnerability of asphalt shingles to wind and expected lifespan in high wind environments.
- Bringing the sealed roof deck into the International Residential Code.
- Reaching 50,000 FORTIFIED designations and launching the FORTIFIED Multifamily standard.
- Driving market changing actions by shingle manufacturers through impact resistant shingle product testing and performance rating, resulting in improved products.
- Synthesizing existing wildfire research into the Wildfire Prepared Home program to provide homeowners with a clear pathway to meaningfully reduce wildfire ignition risk.
- Unraveling the details of building-to-building fire spread.

These accomplishments can be measured in stronger construction methods, improved test standards for building materials, innovative grant programs to drive early-adoption of resilient construction and – of critical importance – adoption and enforcement of modern building codes, which are **foundational to a more resilient future.**

With this strategic plan, we turn the page to the next chapter of resilience, which will **take IBHS science further, and our influence farther, than ever before.** In this next chapter, IBHS will:

- Challenge the status quo of American roofs and provide consumers with the information they need to make educated choices about protecting their most valuable investment.
- Confront suburban conflagration by further diagnosing and communicating the linkages of how wildfires spread through communities and developing neighborhood-level mitigation solutions.
- Explore ways to strengthen the resilience of our most vulnerable homes and communities.
- Scale the mitigation solutions – FORTIFIED and Wildfire Prepared Home – that we know work to keep families housed and communities thriving.
- Amplify the science we know strengthens resilience by providing more education, tools, and resources to the many voices that reach homeowners, business-owners, and policymakers around the country.

**The story of a more resilient America is not yet finished.** Too often, the cycle of disruption and displacement continues, and the losses resulting from these events remain significant. The next three years will build on IBHS's **foundational research**, serve **Member companies**, bring forth more **science-backed solutions** and create **pathways for more homes, businesses, and communities to benefit.**

**Join us.**





# STRATEGY 2026

TURNING SCIENCE INTO SOLUTIONS

## Enduring Commitments

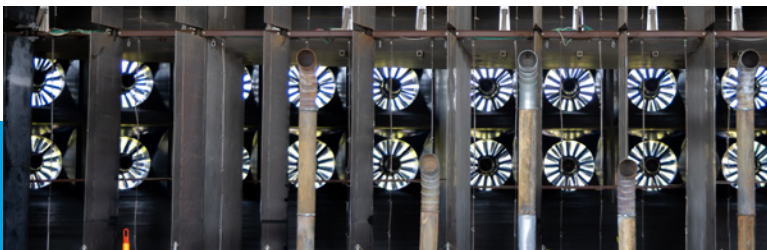
- *Staying within the Scientific Centers of Gravity*
- *Advancing Climate Change Resilience and Adaptation*
- *Making Resilience Accessible for All*
- *Driving Change with Data*

## Driving Resilient Choices

- *Expanding the Reach of Wildfire Prepared Home*
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- *Advancing Resilience through Codes and Standards*
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- *Roof Roadmaps*
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- *Commercial Occupancy*
- *Garage Doors & Ancillary Structures as Damage Amplifiers*
- *Strengthening Resilience of Manufactured Housing through Retrofits*
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- *Advancing Knowledge of Effects of Wind and Wind-Driven Rain*
- *Advancing Wildfire Research*
- *Emerging Construction Techniques and Materials*
- *Field Elements of IBHS Research*





## WHY IBHS?

Severe weather disrupts lives, displaces families, and drives financial loss. IBHS delivers top-tier science and translates it into action so we can prevent avoidable suffering, strengthen our homes and businesses, inform the insurance industry, and support thriving communities.

The Insurance Institute for Business & Home Safety (IBHS) is an independent, 501(C) nonprofit scientific research and communications organization supported by property insurers, reinsurers, and affiliated companies. IBHS's building safety research leads to real-world solutions for home and business owners, helping to create more resilient communities.



## Enduring Commitments

This plan lays out a vision that will guide the next three years of work at IBHS. And yet we know that the challenges posed by severe weather to our homes, businesses, and communities are enduring, extending well beyond any three-year period.

Thus, we recognize the need for a set of Enduring Commitments that match the unbounded time-horizon of the challenge we confront. These four Enduring Commitments are a through-line across IBHS work, guiding our priorities and pursuits in this plan and beyond.

### Enduring Commitment 1: Staying within the Scientific Centers of Gravity

Gaps in the scientific knowledge of IBHS's core perils of wind, wind-driven rain, hail, and wildfire still exist.

- Some of these gaps can only be filled using the unique capabilities of the IBHS Research Center, which requires ongoing diligence in identifying, prioritizing, and funding risk-mitigating projects.
- Other gaps require focused scientific efforts conducted external to the IBHS campus, which requires strong collaboration between IBHS and other researchers to maximize opportunities for scientific advancement across the IBHS core perils.

In both cases, investment of resources in capital expenditures, relationships, and external research will help maintain IBHS's place within the most important scientific conversations across our disciplines.

**Enduring Commitment:** IBHS will (1) fund the necessary capital endeavors to maintain the Research Center's unique position in the building science field; and (2) further strengthen relationships between IBHS and the science community, judiciously invest in external research, and bring more researchers to the IBHS Research Center and into IBHS conversations about our core perils.

### Strategic Partner: Grant Program Partners

IBHS works closely with public and private organizations that advance resilience through grant programs that use the FORTIFIED program to advance resilience through roof retrofits. These programs nudge homeowners toward action, making FORTIFIED financially attractive as well as resilient. They also develop a market for FORTIFIED, familiarizing roofing contractors and builders with the program and homeowners with the benefits of resilience.

- The **Alabama Department of Insurance** has invested more than \$55 million in its Strengthen Alabama Homes program between 2016 and 2023. The program provides Alabama homeowners with \$10,000 grants to replace their roofs with a FORTIFIED Roof.
- The **Louisiana Department of Insurance**

## Enduring Commitment 2:

### Advancing Climate Change Resilience and Adaptation

In its influence on our core perils, climate change contributes to the damage, dislocation, and disruption that IBHS seeks to reduce or eliminate through advances in building science. In addition to IBHS's core perils, climate change exerts an influence on various forms of flooding, which interact with perils studied by IBHS.

Climate change underscores the importance of the IBHS mission of translating building science into actions that prevent avoidable suffering.

- IBHS science can help individuals and whole communities mitigate the risks involving wind, fire, and weather-related water (in all its forms, from flooding to wind-driven rain to winter weather damage).
- Confronting risks associated with climate-influenced weather also requires enhanced messaging linking the realities of climate change to existing mitigation actions in a holistic way.

**Enduring Commitment:** IBHS will collaborate with other resilience shapers and deliver adaptive strategies to bend down the risk curve on the impacts of climate change.



launched the Fortify Louisiana Homes program in 2023, with \$30 million in grants available for Louisiana homeowners.

- The **North Carolina Insurance Underwriting Association** provides grants to policyholders in the Outer Banks and Barrier Islands to incentivize FORTIFIED roofs through the Strengthen Your Roof and Strengthen Your Coastal Roof programs. The investment of this grant program has resulted in nearly 10,000 homes obtaining a FORTIFIED designation as of 2023.
- The **Federal Home Loan Bank of Dallas** started the FORTIFIED Fund program, which provides grants to pay for FORTIFIED roofs on existing homes and new construction. Notably, the FORTIFIED Fund is the first FORTIFIED grant program started by an organization outside of the insurance market.

### Enduring Commitment 3: Making Resilience Accessible for All

“Resilience for All” is the principle that a home that can withstand severe weather is a basic human need—not a luxury item. And yet for too many Americans, a resilient home is inaccessible: either unavailable, unaffordable, or both.

IBHS science and solutions such as FORTIFIED and Wildfire Prepared Home are *available* to all, but they are not yet *accessible* to all. Change requires rethinking how IBHS resources, as well as public, private and philanthropic funding, reach communities that are vulnerable to severe weather and yet unable to mitigate their risk. Collaborating with Member companies, IBHS will work to close these gaps.

**Enduring Commitment: IBHS will (1) work with public, private, non-profit, and philanthropic sectors to incorporate resilient construction as a foundational element of investments in affordable housing and disaster recovery for both new construction and retrofits; and (2) broadly make IBHS resources and information available.**



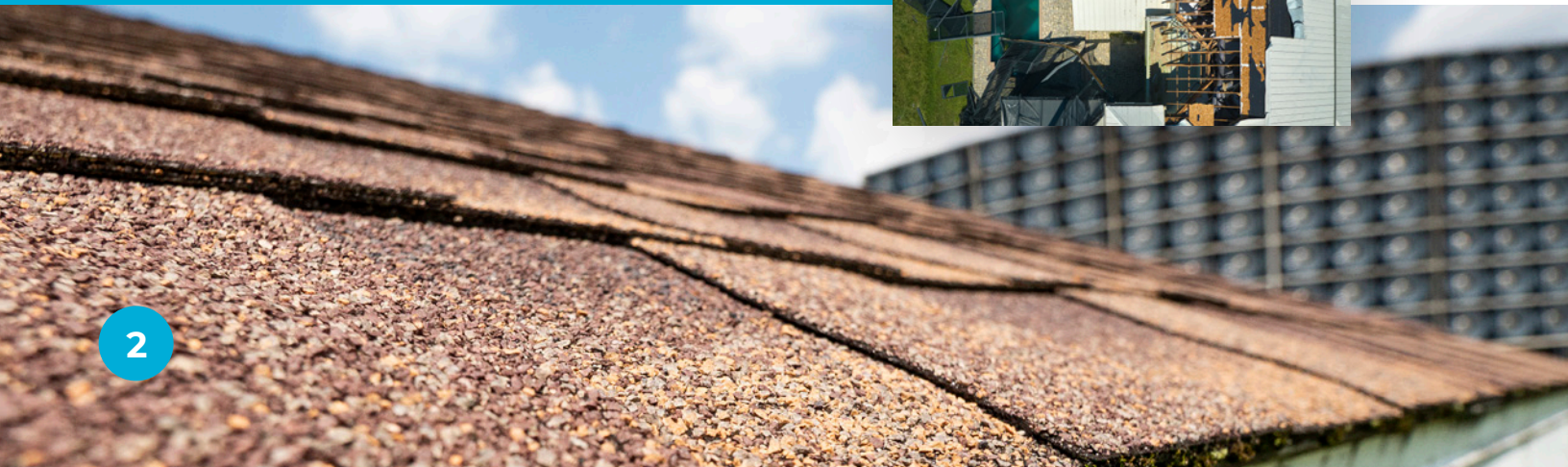
### Enduring Commitment 4: Driving Change with Data

Across IBHS’s core perils, a lack of actionable information underlies the resilience gap that puts too many families, businesses, and communities at risk from the consequences of severe weather. Property owners, community leaders, policymakers, and even insurers are awash in too much noise and not enough clear, concise, and helpful direction.

Data is at the heart of IBHS’s mission and pursuits.

- The unique research IBHS conducts results in specialized data about the vulnerabilities of the built environment to severe weather.
- We apply these data to further testing and analytics to identify pathways to mitigate risks and strengthen the resilience of the built environment.
- We seek out data and data-informed analysis from experts in other fields – such as behavioral economics – to improve the way we communicate with consumers and other audiences.
- We help IBHS Members apply our insights to their data arising from severe weather events.

**Enduring Commitment: IBHS will integrate experimental testing data, applied data analytics, socio-economic datasets, and behavioral economics to identify effective mitigation actions and the factors that change behavior.**



## Bringing Science to Life

IBHS scientists bring together meteorology, engineering, modeling, and data analysis to better understand the complex interaction between severe weather and the built environment. This pioneering research brings science to the buildings where people sleep, eat, gather, play, worship, and work - the places in which we live our lives - across three research lanes:

- **Science-Based Solutions** - Translating decades of IBHS building science research into products and programs that can help property owners and communities mitigate the risk of severe weather across IBHS's core perils of wind, wind-driven rain, hail, and wildfire.
- **Applied Science** - Quantitatively assessing the vulnerability and performance of building products using existing building science research and testing.
- **Foundational Research** - Conducting essential research at the IBHS Research Center and in the field that advances our understanding of the vulnerability of the built environment to severe weather.

### Science-based Solutions Roof Roadmaps

#### Problem

Roofing systems - in particular, asphalt shingle roofs - are failing American homeowners. Asphalt shingles remain the dominant roof cover in North America, representing nearly three-quarters of all single-family home roofs. Little progress has been made in reducing the asphalt shingle's vulnerability to wind and wind-driven rain, and failures continue to occur at wind speeds well below the supposed design level.

The expectations of most American homeowners about the lifespan of their asphalt shingle roof - supported by decades-long product warranties - are not matched by the efficacy of the product.

#### Path Forward

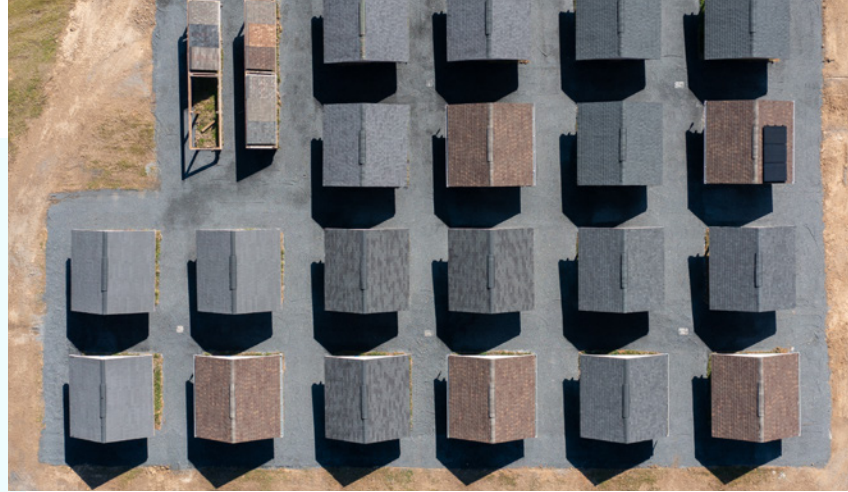
IBHS research has exposed the vulnerabilities of asphalt shingles, including the impact of aging, but manufacturers have not developed a lasting solution.

It is probable that asphalt shingles have not improved because consumers keep buying the products without knowing or demanding better, with insurers footing the bill 30 percent of the time.

Only through detailed, science-based guidance can consumer expectations for the performance of asphalt shingles and other building components be reset.

#### IBHS will...

Evaluate the relative wind performance across roof systems both for residential and commercial construction, forming the basis for a series of "Roofing Roadmaps" that provide guidance on the best and worst wind performing roofs systems over their lifetime.



### Relative Performance to Hail

#### Problem

Hail events also continue to drive losses associated with severe convective storms. These losses stem from damage to roofs and other building components such as siding, walls, and windows. IBHS has amassed a significant database on the hail performance of different roof and wall components, as well as hail research in both the field and the lab.

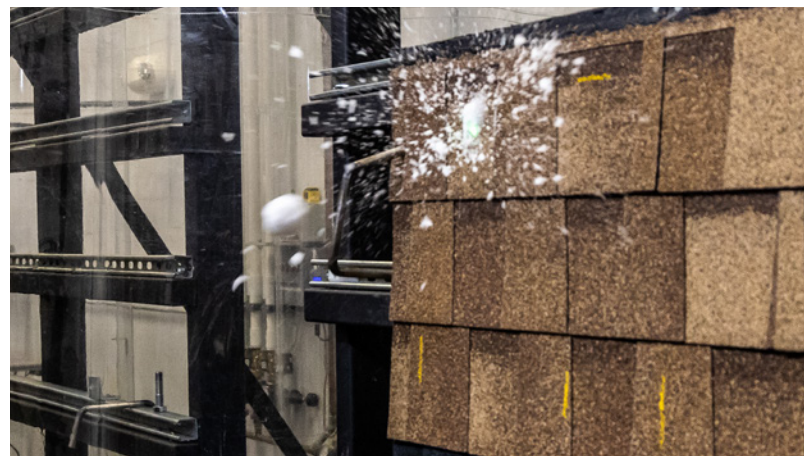
Consumers need a better understanding of the relative performance of different roofing, siding, and other building components to hail so they can make informed choices.

#### Path Forward

Necessary action includes evaluations of the relative performance of roofing, siding, and other building components to hail, directly contrasting between different product types, and clearly communicating differentiation between good and bad performance.

#### IBHS will...

Evaluate the relative performance of roofing, siding, and other building components to hail and provide consumers and IBHS Members with guidance comparing product types.



## Community Dimensions of Wildfire Resilience

### Problem

The most catastrophic wildfires move from wildlands into suburban communities. In communities with fuels connecting houses to each other and to the surrounding wildland, even parcel-level mitigation actions – while essential – are only part of the solution to reduce overall wildfire risk.

Conflagration risk is particularly stark for communities in which fuels, whether structural or dense vegetation, are close to homes.

Understanding and then mitigating the complex set of variables related to community resilience to wildfire is difficult because of the multiplicity of variables that contribute to – or reduce – it. These variables include topography, wind, vegetation management, neighborhood density, nature-based solutions (like fire breaks and buffers), the percentage of homes in a neighborhood that have undertaken meaningful property-level mitigation actions, infrastructure robustness (water, power, and evacuation routes), and community-wide engagement. Data related to these variables are neither consolidated nor consistent.

### Path Forward

Addressing wildfire resilience at a community or neighborhood scale – whether comprised of single-family homes, multifamily buildings (e.g., townhomes, garden apartment complexes, and low-rise apartment buildings), or a combination of the two – requires developing a framework to analyze the interconnectivity of these variables, identifying data sources for these variables, *and* encouraging whole neighborhoods to undertake the necessary mitigation actions. It requires community action *and* ongoing diligence by individual homeowners.

IBHS is developing a neighborhood-scale designation for at-risk communities. This endeavor requires additional research centered around the influence of connective fuels between structures and how much fuel management is needed, as well as a neighborhood-scale risk analysis tool, rooted in an open-source data framework, that can meet the needs for such a designation program. Alongside this research, a vast scale of data must be consolidated into an open-source platform that is publicly available and usable.

### IBHS will...

**Develop wildfire designation programs at the neighborhood scale for single family homes, townhouses, and multifamily structures.**

**Develop the data standards and minimum requirements to evaluate and monitor a community's wildfire hazards and lead the development of a consortium to pursue an open-source data repository of this information.**

## Commercial Occupancy

### Problem

Commercial structures are not homogenous. Warehouses are different from hotels, which are different from schools, which are different from agricultural buildings.

Each type of commercial occupancy has specific needs and operational intricacies as they relate to severe weather, but the guidance provided to insurers and property owners historically has been general.

### Path Forward

Commercial insurers and their insureds need science-based guidance that is specific to the vulnerabilities and risks associated with their category of occupancy. In 2022, IBHS began providing guidance targeted to specific types of occupancies, including condominiums and apartment buildings, warehouses, hotels, and restaurants. This should continue, and IBHS guidance regarding business continuity should also follow this occupancy-specific approach.

### IBHS will...

**Develop peril-specific guidance across different occupancy types – such as educational buildings, places of worship, strip malls, and medical offices.**

### Strategic Partner: SBA & III

The **U.S. Small Business Administration (SBA)** helps Americans start, grow, and build resilient businesses. SBA was created in 1953 as an independent agency of the federal government to aid, counsel, assist and protect the interests of small business concerns; preserve free competitive enterprise; and maintain and strengthen the overall economy of our nation. SBA reviews Congressional legislation and testifies on behalf of small businesses. It assesses the impact of regulatory burden on small businesses.

SBA provides low-interest disaster loans to help businesses and homeowners recover from declared disasters. With an SBA Disaster Loan, home and business owners can rebuild using IBHS's FORTIFIED construction standards.

The **Insurance Information Institute (III)** is the trusted source of unique, data-driven insights on insurance to inform and empower consumers. They serve consumers, media and professionals seeking insurance information.

SBA and IBHS formalized their relationship through a Co-Sponsorship Agreement in 2018, with III joining in 2020. Through this agreement, the parties jointly host events and prepare/distribute materials focused on disaster preparedness, business continuity, and structural mitigation. A [Resource Recovery page](#) for post disasters has been jointly created.





## Applied Science

### Garage Doors & Ancillary Structures as Damage Amplifiers



#### Problem

Damage amplifiers are individual building components whose failure can significantly increase overall damage to the structure. When damage amplifiers fail, everything gets worse.

IBHS research has identified garage and commercial overhead doors as significant damage amplifiers, as their failure in high wind conditions leads to an internal pressurization that results in even more significant structural failure.

- Wind-rated doors mitigate this risk, and yet access remains a challenge. Wind-rated

doors are expensive and difficult to source in many parts of the country that experience high winds, particularly in inland states.

Ancillary structures such as carports and pool lanais also amplify damage to primary structures in consistent and understood ways. Here, too, known mitigations that reduce the amplification of damage caused by these ancillary structures are not used.

#### Path Forward

IBHS research on residential garage doors and commercial roller doors has identified ways to improve designs that can reduce - although not eliminate - existing failure rates during high wind events. Mitigations for ancillary structures are also understood.

The next step is to better quantify the risk posed by garage doors and ancillary structures and educate stakeholders on the importance of mitigating damage amplifiers.

#### IBHS will...

**Educate the public on the vulnerability and consequences of damage amplifiers - such as garage doors and ancillary structures - focusing on consumers, contractors, code officials, and insurers.**



## Strengthening Resilience of Manufactured Housing through Retrofits

#### Problem

Manufactured housing makes up a large portion of the housing stock in areas prone to hurricanes, high winds, and wildfire. However, the HUD Code - which governs the construction of manufactured housing - utilizes wind maps that have been outdated for decades, resulting in the least resilient manufactured homes being placed in certain hurricane-prone areas.

The result: too many families live in manufactured housing not designed to weather the hurricanes and other high winds prevalent in their area.

#### Path Forward

Manufactured housing can remain an affordable and resilient housing option if retrofitted or built for improved resilience to severe weather. Existing knowledge can be applied to improve the HUD Code and state and local installation requirements - in particular, anchoring requirements - to make manufactured homes better able to withstand severe weather. Where appropriate, FORTIFIED designations may be possible for eligible classes of manufactured homes.

These code improvements would not help the existing stock of manufactured housing that remains vulnerable to severe weather. Analysis based in existing knowledge should identify retrofits to strengthen the resilience of all manufactured homes, even if they are not eligible for a FORTIFIED designation. Across the board, success will involve engagement with the manufactured housing industry, HUD, and the state and local code officials that oversee installation of this form of housing.

#### IBHS will...

**Develop pathways for eligible classes of manufactured housing to achieve FORTIFIED designations.**

**Identify cost-effective retrofits to improve a manufactured home's resistance to uplift, sliding, and overturning due to wind.**

### Strategic Partner: FEMA

The **Federal Emergency Management Administration (FEMA)** leads the federal response to disasters, with a mission to help people before, during, and after disasters. In 2022, IBHS and FEMA entered a Memorandum of Understanding to collaborate on the advancement of building codes, disaster building performance, IBHS research, and a shared vision of pre-disaster mitigation and post-disaster recovery. IBHS also works closely with the U.S. Department of Housing and Urban Development, Small Business Administration, and other federal departments and agencies that address housing, resilience, and disaster recovery.

## Interior Water & Winter Weather

### Problem

Interior water damage – caused by issues like leaky pipes and connections between pipes and water-using appliances – continues to be a significant cause of non-catastrophe insured losses every year.

Recent losses arising from interior water have grown as construction trends favoring additional water sources and possible points of failure.

Interior water damage can be exacerbated by winter weather, which can lead to frozen pipes, ice dams, and high snow loads on roofs.

### Path Forward

Analysis of construction trends, age of construction, and insurance claims is needed to advance the insurance industry’s understanding of the cause(s) of the rising costs of interior water damage. In addition to this analysis, continued education efforts will provide property owners with guidance about ways to mitigate risks associated with winter weather, particularly regarding the intersection of winter weather and interior water damage.

### IBHS will...

**Examine the increase of interior water losses in both frequency and severity as related to larger square footage of structures, changes in construction trends, interior design, inadequate plumbing designs, and rising home values.**



## Foundational Research

### Advancing Knowledge of Effects of Wind and Wind-Driven Rain

### Problem

Wherever there is wind and wind-driven rain, damage to buildings and building components follow. Although we know this damage can be amplified or exacerbated by fatigue – such as the aging of materials, the duration of severe weather events, and the frequency of the hazard over time – we do not yet have a precise understanding of how fatigue effects building components and the overall structure.

Additionally, further research is necessary to better understand how water enters structures through building components.

### Path Forward

Further research at the IBHS Research Center is needed to better understand the effects of fatigue on building components and overall structures. This research includes:

- using the development of a design loading regime to examine fatigue effects from a single event, as well as separate loading regimes for different types of wind events;
- identifying where building components fail at loads below their design strength due to the cyclical nature of the wind loads acting upon them and develop research plans for addressing the most critical needs; and
- expanding our observational dataset through post-event investigations and aerial imagery analyses to help identify and diagnose the additional risk components have on overall building performance more acutely.

In addition, further research is needed to develop an understanding of water entry through building components, including the influence of wind gusts, and compare to current static water entry tests. This requires developing testing philosophies and correlating laboratory observations with real-world observations following severe weather.

### IBHS will...

**Examine when and where performance of building components is affected by the duration of events or multiple lower intensity events and how this compares to our typical expectations of performance.**

**Research the ways water enters buildings and acts as a damage amplifier in the wind-driven rain context.**



## Advancing Wildfire Research

### Problem

Notwithstanding the significant advances IBHS has led in the wildfire lane, the severity of the risk and the existing state of knowledge demand additional research. In particular, we are aware of scientific gaps concerning structural separation, landscape vegetation, and the relative contributions of different mitigation actions to the systemic approach to wildfire risk reduction.



### Path Forward

Understanding risk and assessing damage to buildings due to wildfires has traditionally mostly been binary - focusing on whether a building or building component fails. Further research at the IBHS Research Center can help move beyond this binary and develop a probabilistic framework for wildfire mitigation actions. This research will include:

- experimental testing to obtain new knowledge on the risk posed by landscape vegetation both type and density;
- addressing core questions related to structure separation distance that exacerbates or mitigates wildfire risk; and
- characterizing the threat posed by embers from structural fuels and how they may act as a risk amplifier if not properly addressed in mitigation strategies.

### IBHS will...

**Conduct wildfire exposure research to advance scientific understanding of the resilience or vulnerability of building and landscape components.**

**Study the impact of fire spread and conflagration effects within communities.**

**Develop the probabilistic framework for wildfire mitigation actions to show relative contributions to the overall probability that a home ignites, as is available for other perils.**

## Emerging Construction Techniques and Materials

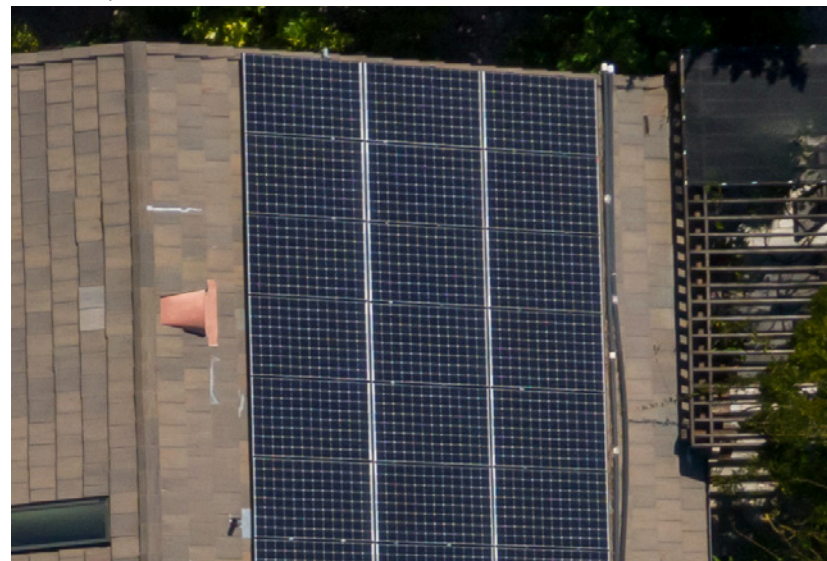
### Problem

Over the past 10-15 years, the pace of new technologies entering the traditional building construction space has accelerated. Some, like solar panels or new materials, have an uncertain effect on the resilience of buildings, particularly in the context of varying installation approaches.

The pace of widespread adoption of these products is significantly faster (years) than codes and standards can adapt to the changing landscape (decades).

In other cases, product manufacturers of new techniques or materials make claims of increased performance or resilience.

There is either little evidence to support the claims or the manufacturers rely on evaluation using existing test methods or standards that were never designed for these types of products and do not adequately capture the performance of the products.



### Path Forward

As the pace of adoption of emerging construction techniques and materials accelerates, so too must the pace of performance evaluation so their risks, and how these techniques and materials perform during severe weather, can be better understood. This may include closer collaboration with the manufacturers to discern how quickly new technologies are coming to market and how they differ from traditional techniques.

### IBHS will...

**Continue engagement with the building and manufacturing community and conduct research as appropriate to advance IBHS and IBHS Member knowledge of emerging techniques and materials.**

## Field Elements of IBHS Research

### Problem

The IBHS core perils of wind, wind-driven rain, hail, and wildfire continue to be the areas in which IBHS can uniquely and profoundly drive change in the built environment. Much of this research work is done in the IBHS Research Center, yet knowledge gaps are not filled with laboratory science alone. Field deployments are necessary supplements to the experimental research done at the Research Center.

### Path Forward

Field work is a vital part of research initiatives within each of IBHS's core perils. IBHS can leverage field investigations of severe weather events to verify findings from the IBHS Research Center, identify future research pursuits, understand the impact of building codes through detailed performance assessments, and discover other vulnerabilities that can only be uncovered in the field. This work may be conducted solely by IBHS researchers or in partnership with Members or academic partners.

In addition, post-event engagement provides IBHS with an invaluable opportunity to engage and educate communities and property owners through in-person meetings and media engagement during times when severe weather is most salient. In some cases, this can be done most effectively on the ground.

### IBHS will...

Engage on the ground following severe weather events when there is a research rationale, an education and engagement rationale, or both.



## Driving Resilient Choices

In addition to its leading-edge science, IBHS's mission focuses on translating that research into actions that are achievable, affordable, and effective. Educating audiences – including scientists, architects, builders, contractors, property owners, and policymakers – is central to this mission, as is encouraging these stakeholders to change the status quo and advance resilience.

In doing so, IBHS works down three lanes:

- 1. Reaching More Homes and Communities** – Advancing resilience through FORTIFIED and Wildfire Prepared Home
- 2. Advancing Resilience through Codes and Standards** – Contributing IBHS science to building codes and standards and advancing code adoption at state and local levels.
- 3. Amplifying IBHS Influence** – Building and strengthening relationships with external parties in the scientific, insurance, housing, and resilience industries to amplify and share IBHS science, guidance, and programs.

## Reaching More Homes and Communities

### Expanding the Reach of Wildfire Prepared Home

#### Problem

Wildfire risk has increased significantly in the past 10 years across the American West. The key to preventing wildfires from becoming disasters is to keep them from entering and spreading into the built environment—in particular, neighborhoods.

Although wildfire science has sufficiently advanced to offer a clear pathway to reduce home ignitions via the Wildfire Prepared Home program, a multiplicity of voices, policy levers, and personal preferences undermine consumer understanding and adoption.

Amid this noise, emotional attachment to the status quo – especially when it comes to vegetation surrounding homes – can undermine adoption of wildfire risk mitigation.

#### Path Forward

Wildfire Prepared Home, launched in California in 2022, provides homeowners with a science-backed suite of mitigation actions to meaningfully reduce wildfire risk at the parcel level. Further investment and innovation can make Wildfire Prepared Home *the* trusted solution for parcel-level wildfire mitigation in communities across western states and meet increasing consumer demand in California and beyond.

Next steps include identifying partners within states and local communities and encouraging them to recognize and use the Wildfire Prepared Home program; continuing messaging efforts aimed at consumers; development and application of behavioral economics to nudge consumers; and utilizing new technologies to streamline operations of the program. These efforts will be paired with engagement for community-scale risk reduction as IBHS advances down that path.

#### IBHS will...

Coordinate with state and local government to adopt science-backed approaches to wildfire mitigation programs and building codes and defensible space requirements.

Expand use of technology-enabled intelligence to screen applications and assist with quality assurance.

Assist IBHS Members and insurance industry participants in incorporating Wildfire Prepared Home in modeling and related activities.

### Strategic Partner: CAL FIRE

The **California Department of Forestry and Fire Protection's (CAL FIRE)** mission is to serve and safeguard the people and protect the property and resources of California. CAL FIRE is California's fire department, serving the citizens on over 31 million acres of public and private land. IBHS and CAL FIRE collaborate to lessen the impact of destructive wildfires by improving the resiliency of existing and future communities. This includes providing the science behind the built environment mitigation actions that matter to improve the California Building Code Chapter 7A, pre-fire preparedness and mitigation programs, post-fire analysis, and IBHS research. In 2024, IBHS in partnership with CAL FIRE will initiate Wind Driven Building-to-Building Fire Spread experiments to understand and provide guidance on separation distances needed between Auxiliary Dwelling Units (ADUs) and the home on a parcel.



## Expanding the Reach of FORTIFIED

### Problem

IBHS research and post-event investigations agree: FORTIFIED works, reducing losses and keeping families in their homes after severe weather passes. The FORTIFIED program has momentum, reaching its 50,000<sup>th</sup> designation and rolling out a multifamily standard to make resilience accessible to more homeowners and renters. Growth has been steadily accelerating, particularly along the coast. Public funding is flowing into the space as markets and stakeholders seek to address the need for proven resilience strategies. FORTIFIED is also influential: following the incorporation of FORTIFIED-level requirements into the Florida Building Code, 435,000 Florida homes built or re-roofed in 2022 reached a “FORTIFIED-like” level of resilience.

Despite this success, FORTIFIED has been used to strengthen the resilience of only a small fraction of U.S. properties at risk for hurricanes, tornadoes, and other high-wind events, in both coastal and inland regions. Further, while FORTIFIED-like homes resulting from building code advancements is a positive step, these homes lacked verification processes to ensure compliance with the technical standard and confidence that resilience has been strengthened. Significant headwinds remain with respect to growing program awareness and influencing entrenched consumer habits around managing property risk.

### Path Forward

FORTIFIED will sustain and increase its momentum through continued focus on market development as well as a renewed focus on technology and partnerships to help the program to continue to scale.

FORTIFIED’s markets of strength are Alabama, Louisiana, and North Carolina. In these states, IBHS will use public investments and market development to expand FORTIFIED from the coast to inland communities statewide. In other states - along the Gulf Coast, Mid-Atlantic, Northeast, and Midwest - IBHS will collaborate with policymakers to encourage public investments in FORTIFIED housing and other supporting policy levers.

Strong building codes, insurance incentives and endorsements, and public investments in FORTIFIED (such as retrofit grant programs, incentives or requirements in disaster recovery and housing programs) are powerful catalysts to FORTIFIED market growth. These policy levers have a multiplier effect on IBHS Member companies’ ongoing investment in FORTIFIED, bringing resilience to more families while simultaneously creating a supply and a demand for the program by educating homeowners, roofing contractors, and builders.

Technology is also a key enabler of FORTIFIED growth. Investment in technology and relationships could identify innovative ways to enhance and scale the direct submit program and to incorporate the FORTIFIED verification process into existing roofing practices and transform FORTIFIED-like roofs into FORTIFIED Roof designations. This could have wider application than FORTIFIED-like roofs.

FORTIFIED growth will also be aided by demonstrating its value through catastrophe modeling. With new in-house data analytics resources in place, IBHS can engage with catastrophe modelers to further incorporate FORTIFIED into models for hurricanes and severe convective storms to improve both the accuracy and usability of these tools. This intentional focus on a critical industry tool will enable Members to better understand the impact of FORTIFIED on risks, the loss environment, and drive better solutions for inland states.

### IBHS will...

**Double total program FORTIFIED Home designations by 2026 from 60k to 120k while maintaining focus on the Roof at the current level of 65% of the total designations.**

**Grow FORTIFIED High Wind and High Wind & Hail from 8 percent to 25 percent of annual designation volume by 2026.**

**Expand the footprint of FORTIFIED into three additional coastal states via public investments in housing programs, disaster recovery programs, and retrofit programs.**

**Use technology and partnerships to (a) integrate FORTIFIED verification process into roofing practices in jurisdictions with FORTIFIED-like building codes, and (b) improve how FORTIFIED is applied in catastrophe models for severe convective storms and hail.**

## Strategic Partner: Smart Home America

**Smart Home America** (SHA) is a 501(c)(3) nonprofit that provides disaster resilience education and technical assistance to empower communities to build stronger. SHA works closely with IBHS to advance strong building codes and adoption of the FORTIFIED program. In particular, SHA fills a critical role by educating policymakers, builders, developers, insurance agents, and other stakeholders with an interest in resilient construction practices. To this end, SHA provides technical assistance to communities, holds continuing education classes for a variety of professions, and answers technical questions about the FORTIFIED community.

hailstorms, only a single community in the entire country (Fort Collins, Colorado) has a hail provision in its building codes. The first step toward exploring the broader codification of hail is to work to include hail hazard mapping into the ASCE 7 standard. This, combined with the movement toward adopting the IBHS Hail Impact Test Protocol as a consensus standard, could provide the necessary framework to open the door to codification efforts.

### IBHS will...

**Expand the Rating the States report to inland and Western states, with a broadened focus on different perils such as severe convective storm and wildfire and a more detailed analysis of code environments at the local level for states lacking statewide codes.**

**Provide local jurisdictions with packages that contain different tiers of “model” ordinances to aid jurisdictions that may lack time and resources to develop them.**

**Engage code and standards bodies to improve the treatment of wildfire and hail in consensus standards and codes.**

## Advancing Resilience through Codes and Standards

### Problem

Codes and standards, when adopted into law, are powerful tools to strengthen the resilience of newly constructed buildings. Post-disaster investigations make clear: modern building codes, when strongly enforced, work.

And yet, not a single new state has adopted a building code since 2008. In the absence of statewide codes, local jurisdictions must try to fill the gap—and they do not always have the resources to succeed.

*The result: only 31 percent of Americans live in communities with modern codes in place.*

Additionally, although consensus codes and standards have improved dramatically since the modern code era began in 2000, opportunities for improvement exist, particularly with how they address wildfire and hail.

### Path Forward

Communities need better tools to understand their code environment and - in the absence of state action - improve it themselves. This requires knowledge, education, technical assistance, and funding. IBHS can provide some of this necessary help by expanding on existing tools such as IBHS's Rating the States report and FLASH's No Code, No Confidence tool. In addition, IBHS can help local jurisdictions with technical assistance, such as model ordinances that provide peril-specific requirements that can supplement existing building codes.

Separately, while consensus codes and standards have made great strides in the last 20 years, additional improvement is possible and would advance resilience - especially regarding wildfire and hail. IBHS has long contributed its science and expertise to the code and standards process and will continue to do so in forums like the ICC 605 standard working group, the International Wildland Urban Interface Code, and the California Building Code development committees. For



## Amplifying IBHS Influence

### Problem

The number of stakeholders, audiences, and communities that would benefit from IBHS science and solutions exceeds our capacity to reach them. It is critical to have outside organizations and individuals amplify our message.

- Builders, developers, and architects are critical decision-makers about how buildings are constructed. While some advocate for resilience, many builders and developers reject resilient construction practices as costly and complicated. Absent a stronger relationship between IBHS and the construction industry, they are a barrier – to the advancement of building codes and the adoption of FORTIFIED and Wildfire Prepared Home – rather than a partner in educating consumers and championing for resilience with policymakers.
- Weather broadcast professionals have a captive audience at the times when resilience is most salient to property owners: before, during, and after severe weather. Without knowing the right questions to ask and the most helpful solutions to convey, these journalists miss a crucial opportunity to educate consumers.
- Insurance industry participants – including IBHS Members, national, regional, and state insurance trade associations, and the National Association of Insurance Commissioners and state insurance regulators – have immense reach into communities around the country. And yet, resilience competes with other issues important to an industry that touches nearly every aspect of society and the economy.

However, these outside groups may not have the knowledge or the rationale to collaborate or share our science and solutions.

### Path Forward

By educating trusted individuals and groups about IBHS science, programs, and key messages, we create alliances that amplify our message, expand our influence, and reach more consumers. This includes bringing stakeholders from other industries into our science and solutions, using the Research Center as a key educational tool; identifying and celebrating success stories led by others; and collaborating with and activating state and community-level organizations in support of resilient building techniques.

### IBHS will...

**Identify points of agreement and collaboration to advance resilience between the insurance industry and the building industry, focusing on the importance, simplicity, cost-effectiveness, and value of resilient construction practices.**

**Expand engagement with the weather broadcast community through organizations like the American Meteorological Society, the National Weather Association, and local National Weather Service offices.**

**Continue collaboration between IBHS and insurance industry stakeholders to amplify research and science-based solutions.**

### Strategic Partner: NAIC

The **National Association of Insurance Commissioners (NAIC)** is the U.S. standard-setting organization for the coordination of the regulation of multistate insurers across 56 different jurisdictions within the United States. The NAIC provides education, training, and thought leadership within the state insurance regulatory community and beyond, including on topics like strong building codes, climate risk reduction, and public funding for resilient retrofits.

IBHS and the NAIC formalized their relationship through a Memorandum of Understanding in 2023, which will allow for increased education opportunities, engagement at NAIC events and at the IBHS Research Center campus, and coordinated efforts to advance resilience through research, communications, and media engagement.







# STRATEGY 2026

TURNING SCIENCE INTO SOLUTIONS

## Enduring Commitments

- *Staying within the Scientific Centers of Gravity*
- *Advancing Climate Change Resilience and Adaptation*
- *Making Resilience Accessible for All*
- *Driving Change with Data*

## Driving Resilient Choices

- *Expanding the Reach of Wildfire Prepared Home*
- *Expanding the Reach of FORTIFIED*
- *Advancing Resilience through Codes and Standards*
- *Amplifying IBHS Influence*

## Science-based Solutions

- *Roof Roadmaps*
- *Relative Performance to Hail*
- *Community Dimensions of Wildfire Resilience*
- *Commercial Occupancy*
- *Garage Doors & Ancillary Structures as Damage Amplifiers*
- *Strengthening Resilience of Manufactured Housing through Retrofits*
- *Interior Water & Winter Weather*
- *Advancing Knowledge of Effects of Wind and Wind-Driven Rain*
- *Advancing Wildfire Research*
- *Emerging Construction Techniques and Materials*
- *Field Elements of IBHS Research*



