



As the U.S. confronts climate change and works to enhance the resiliency of our nation's housing and building supply, these *Insurers' Principles of Climate Change Adaptation* outline the steps policymakers – in collaboration with the insurance industry and other private sector stakeholders – should take to improve the resilience of American homes, businesses, and communities. The undersigned members of the property re/insurance industry recognize the interconnectedness of the natural and built environment and the vital role that residential, business, and community resilience must play for the United States to effectively adapt to a changing climate. Through its support for the Insurance Institute for Business & Home Safety (IBHS), the property casualty

re/insurance industry has long invested in top-tier building science research to prevent avoidable suffering, strengthen our homes and businesses, inform the insurance industry, and support thriving communities.

These *Insurers' Principles of Climate Change Adaptation* build on that analytical foundation and provide a pathway for American policymakers – in collaboration with the re/insurance industry and other private sector stakeholders – to take affirmative steps to improve the resilience of American homes, businesses, and communities and help our nation effectively adapt to the impacts of changing climate conditions.

## Principle 1: Climate Change Adaptation is Necessary

The United States is already experiencing changes in both the frequency and severity of natural catastrophes:

- As ocean temperatures rise from the tropics to the mid-latitudes, the added source of heat energy can increase the maximum potential intensity of hurricanes;<sup>1</sup>
- A warming atmosphere adds to the available energy for severe convective storms and may expand geographic regions that experience the hazards of severe storms, such as hail, straight-line winds, and tornadoes;<sup>2</sup>
- A warmer atmosphere also holds more water, leading to heavier rainfall and associated flooding;<sup>3</sup>
- Along coasts, sea level rise attributed to climate change results in sunny day flooding as well as dangerous storm surges;<sup>4</sup> and
- In the West, temperature shifts, drought, and winds changes coupled with many decades of fire suppression policies and dense development in areas prone to wildfire have significantly increased the risk of more frequent, costly, and dangerous wildfires.<sup>5</sup>

The need for climate change adaptation is clear, and it reinforces our national need to invest in the resilience of the homes and commercial structures where people live and work. We have the knowledge to make our homes and commercial structures more resilient to natural hazards. Doing so will reduce avoidable suffering, displacement, and economic disruption. Such investments are smart fiscal choices, returning an average of \$6 for every \$1 provided by a federal mitigation grant, or a 500 percent return on investment.<sup>6</sup> Given its important societal and economic benefits, adaptation is both a sound fiscal strategy and a good public policy.

- **Develop a National Climate Resilience Strategy.** The Biden-Harris Administration should develop a National Climate Resilience Strategy. While this Strategy would be wide-ranging, it should include, at a minimum, approaches to improve residential-, business- and community-resilience consistent with these Principles.

<sup>1</sup>United States Geological Survey, How can climate change affect natural disasters?, available at [https://www.ipcc.ch/site/assets/uploads/sites/3/2019/11/08\\_SROCC\\_Ch04\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/sites/3/2019/11/08_SROCC_Ch04_FINAL.pdf)

<sup>2</sup>Kelly Mahoney, Extreme Hail Storms and Climate Change: Foretelling the Future in Tiny, Turbulent Crystal Balls?, Bulletin of the American Meteorological Society, Volume 101:1 (January 2020), available at <https://journals.ametsoc.org/bams/article/101/1/S17/346395/Extreme-Hail-Storms-and-Climate-Change-Foretelling>.

<sup>3</sup>IPCC, Special Report: Global Warming of 1.5 °C, Summary for Policymakers (October 2018), available at [https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15\\_SPM\\_version\\_report\\_LR.pdf](https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf).

<sup>4</sup>IPCC, Special Report on the Ocean and Cryosphere in a Changing Climate (September 2019), available at [https://www.ipcc.ch/site/assets/uploads/sites/3/2019/11/08\\_SROCC\\_Ch04\\_FINAL.pdf](https://www.ipcc.ch/site/assets/uploads/sites/3/2019/11/08_SROCC_Ch04_FINAL.pdf)

<sup>5</sup>Alejandro Borunda, The science connecting wildfires to climate change, National Geographic (September 2020), available at <https://www.nationalgeographic.com/science/2020/09/climate-change-increases-risk-fires-western-us/#close>

<sup>6</sup>National Institute of Building Sciences, Natural Hazard Mitigation Saves (2019), available at [https://www.nibs.org/files/pdfs/NIBS\\_MMC\\_Mitigation-Saves\\_2019.pdf](https://www.nibs.org/files/pdfs/NIBS_MMC_Mitigation-Saves_2019.pdf)

## Principle 2: Building Codes and Land Use Support Tomorrow's Resilience

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Up-to-date building codes – enacted on a statewide basis and strongly enforced – are fundamental to strengthening communities against severe weather and adapting to the consequences of climate change. As documented in FEMA's landmark Building Codes Save report, if all new buildings were built to modern editions of model building codes, the United States would save more than \$600 billion by 2060. Likewise, local decisions regarding land use – where structures are built – significantly impact the resilience of families, businesses, and communities. For example, the number of homes in the wildland-urban interface increased by 41% from 1991-2010, contributing greatly to the significant increase in wildfire-related losses experienced in recent years.

- **Enacting Model Building Codes** – All states should enact and enforce strong building codes based on the most current iteration of model building codes, and make related permitting processes easier and more consumer friendly. Congress should continue to encourage statewide building codes by preferencing all Stafford Act funding for those states that enact and enforce strong building codes.
- **Incorporating Climate Risk in Land Use Decisions** – State, local, Tribal and territorial governments (SLTTs) should consider the risk of changing climate conditions in urban and regional comprehensive land use planning, hazard mitigation planning, and transportation planning decisions. Congress should direct appropriate federal agencies to provide SLTTs with maps that designate lands where the risk of climate-affected natural disasters are high or are expected to increase over time, as well as other technical assistance.

## Principle 3: Prioritize Funding for Increasing Resilience of Existing Structures

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For existing homes and buildings, Federal and state programs should provide cost-effective support to encourage property owners to make investments to strengthen existing homes and buildings before a natural disaster occurs. Following a natural disaster, the government should encourage and financially support rebuilding with a higher degree of resilience so the homes and business in the impacted community are better prepared to withstand the next disaster.

- **Tax Incentives for "Sunny Day" Investments** – The government should use the tax code to incentivize resilience investments by (i) developing state and federal tax credits for sunny day resilience investments and (ii) ending the federal taxation of the grants received by property owners from state-based catastrophe-loss mitigation programs. Specific approaches should be pursued to ensure such tools are accessible to low-and-moderate income households.
- **Building Back Better** – Following a disaster, property owners and communities should have the ability to build back stronger so that they are more resilient in the face of future disasters. Timely government funding that can assist in rebuilding, rather than reimbursing property owners after the fact, can assist in building back stronger. Also, federal agencies like FEMA and HUD should require that all rebuilding meet region- and hazard-specific resilience standards, such as the IBHS FORTIFIED standards.

## Principle 4: Make Resilience Available for All

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Communities of color and low income communities often experience the impacts of natural disasters and climate change disproportionately. Far from a luxury, residential and community resilience are basic needs – the absence of which is most keenly felt by those who lack the resources to invest in it themselves. Identifying mechanisms to financially support investments in resilience for these communities should be a public policy priority.

- **Equitable Resilience Assistance** – Financial incentives that support resilience should be tailored to be usable for all Americans, regardless of financial means. In considering public investment in affordable housing and other programs that support low in-

come-communities, Congress should include funding for resilience to natural disasters. Relatedly, public funding for affordable housing at all levels of government should always require resilient construction so these structures can withstand severe weather.

- **Supporting All Communities Post-Disaster** – Federal programs supporting community resilience – such as Stafford Act funding from FEMA – should do more to assist communities of color and low-income communities. While all communities should have a financial stake in responding to natural disasters, FEMA should have the flexibility to alter the cost-share for needs-based subsidies so large-scale resilience projects are not limited to just the wealthiest communities that can afford a 25 percent cost-share.

## Principle 5: Leverage Climate Data and Analytics to Support Climate Change Adaptation

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Climate change adaptation decisions – particularly at the local level – should be informed by the best available data and expertise on natural hazards, climate change, and building and infrastructure science. Public sector data, when combined with private sector and academic expertise, can be a powerful catalyst for strengthening resilience. Congress should facilitate pathways to leverage such data and analytical methodologies in support of informed decision-making by SLTTs.

**Prioritizing Resilience Decisions with Data** – Federal data such as FEMA's National Risk Index and Census Bureau surveys can be mined to identify areas – down to the census tract level – that have elevated natural hazard risks, low community resilience, and high socioeconomic vulnerability. Such data should be utilized to craft government programs designed to assist the most vulnerable and at-risk communities, such as bond programs that support community resilience measures or individual financial assistance to strengthen the resilience of homes.

**Making Relevant Data Public and Accessible** – Using FEMA's OpenFEMA portal as a model, federal departments and agencies – including USDA, HUD and SBA – should make census tract level data relevant to current and future climate risks, economic impacts and resilience opportunities available to the public. This will allow the private sector to analyze and, where possible, supplement the data in support of community resilience.

## Principle 6: Enhance Resilience for Public Infrastructure and Facilities

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More should be done to prioritize the resilience of public buildings and facilities, including community infrastructure in the energy, water, and transportation sectors as well as resilience-enhancing infrastructure like dams, levees, and natural-based solutions. When government dollars are invested, there needs to be a reasonable expectation that the first dollars will be the last. Increased resilience and appropriate insurance coverage for public buildings, as well as other innovative insurance solutions, help ensure that taxpayers are not paying twice for the same project.

- **Make All Infrastructure Resilient** – It is essential that infrastructure, from roads to dams to electric grids, are resilient to climate change and natural disasters. In its recent infrastructure report card, the American Society of Civil Engineers raised the grade of American infrastructure to a C-, but dams scored a D. Strong, resilient infrastructure can help communities quickly recover from natural disasters. However, vulnerable infrastructure can have devastating impacts on communities. As Congress considers new spending on infrastructure, enduring resilience should be an essential component of all projects, so new infrastructure is built to withstand changing climate conditions many decades in the future.
- **Encouraging SLTTs' Physical and Financial Resiliency** – SLTTs should do more to strengthen the physical and financial resilience of public buildings like schools, town halls, and city-owned structures. This includes purchasing insurance protection and building back resiliently following a natural disaster. SLTTs should also pursue innovative insurance solutions that can help them bear the financial burdens of natural disasters. The federal government should stop incentivizing communities to underinvest in insurance because they know FEMA will pay the bill post-disaster.

# Insurers' Principles of Climate Change Adaptation



IBHS and the undersigned representatives of the property re/insurance industry look forward to working with the Biden-Harris Administration, Congress, and SLTT policymakers to enact smart climate change adaptation policies that will make our country stronger, our families safer, and our communities more resilient.

