



Testimony

Of the

**BuildStrong Coalition**

Submitted to the

United States Senate

Homeland Security and Government Affairs Subcommittee on Emergency

Management, Intergovernmental Relations, and the District of Columbia,

Hearing on

The Role of Mitigation in Reducing Federal Expenditures for Disaster Response”

May 14, 2014, 2:30 p.m. EST



## Introduction

Chairman Begich, Ranking Member Paul and Members of the Homeland Security and Government Affairs Subcommittee on Emergency Management, Intergovernmental Relations and the District of Columbia, the BuildStrong Coalition thanks you for holding this hearing to examine the role of the private sector in emergency preparedness and response.

My name is Robert Detlefsen and I am the Vice President for Public Policy for the National Association of Mutual Insurance Companies. We are the largest property/casualty insurance trade association in the country, serving regional and local mutual insurance companies on main streets across America as well as many of the country's largest national insurers. The 1,400 NAMIC member companies serve more than 135 million auto, home and business policyholders and write more than \$196 billion in annual premiums, accounting for 50 percent of the automobile/homeowners market and 31 percent of the business insurance market. Through our advocacy programs, we promote public policy solutions that benefit NAMIC companies and the consumers we serve. Our educational programs enable us to become better leaders in our companies and the insurance industry for the benefit of our policyholders.

The insurance industry plays a vital role in helping individuals and businesses prepare for and recover from the potentially devastating effects of a disaster such as a catastrophic hurricane, storm, or wildfire. Superstorm Sandy, one of the most damaging storms to hit the United States, caused 72 deaths and \$18.75 billion in insured property losses in 15 states and the District of Columbia, according to Property Claim Services (PCS). Moody's Analytics, an economic research firm, puts total losses from Sandy at \$49.9 billion. Of this amount, approximately \$30 billion comes from physical storm damage. The remaining \$19.9 billion of losses comes from lost business activity.

NAMIC is proud to be one of the founding members of the BuildStrong Coalition, a group of national business and consumer organizations, companies, firefighters, emergency managers and building professionals dedicated to promoting stronger building codes. It is the mission of the BuildStrong Coalition to educate elected officials, families, communities and businesses on how to mitigate and recover from the devastating effects of natural disasters. BuildStrong strongly advocates incentive-based approaches to spur more states to adopt statewide model building codes and has made *S. 924, The Safe Building Code Incentive Act*, its signature priority. The goal of this legislation is to increase the number of states with minimum construction standards. BuildStrong is also a strong supporter of *S. 1991, The Disaster Savings Account of 2014*, which provides an incentive for homeowners to make their homes more resilient through a tax-free savings account to be used on mitigation activities. The coalition also supports *H.R. 2241, The Disaster Savings and Resilient Construction Act of 2013*, which provides a tax credit to businesses or homeowners who rebuild to resilient construction standards in declared federal disaster areas.



The nature of extreme events—as well as their effect on the economy—varies considerably. Natural disasters such as tornadoes, hurricanes and earthquakes, can last anywhere from a few seconds to several hours but cause substantial destruction in a concentrated area. Other disasters such as droughts and major floods tend to last much longer and cause damage over a more expansive area. However, regardless of their duration, disasters can leave an economic imprint on a community that lingers for years after the initial damage.

The BuildStrong Coalition shares the subcommittee’s goal of helping communities to prepare for and recover from natural disasters while saving taxpayer money in the process. Our first consideration, however, must always be the safety of our communities and the American people. Our thoughts and prayers go out to the victims of recent tragedies caused by natural disasters. Tragic events like these compel us to advance legislation to fortify the country’s defenses against future storms.

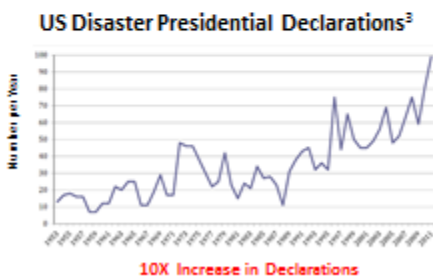
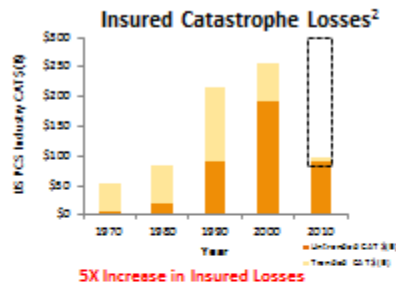
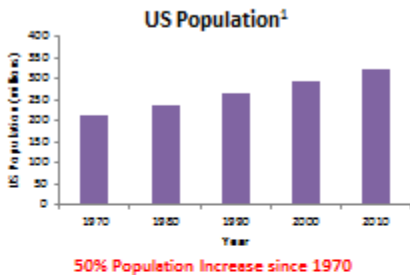
#### The Number of Natural Disasters is Increasing—How We Can Reduce the Economic Impact

The United States has spent nearly \$1 trillion dollars on disaster recovery and rebuilding since 1983. Natural disasters are increasing in frequency and severity every year. There were 128 natural disasters in the United States in 2013. Of these disasters, 70 were severe thunderstorms, 22 heat/wildfires, 20 floods, and 10 snowstorms. Six of the top ten significant natural catastrophes in 2013 (events with \$1 billion economic loss and/or 50 fatalities) were thunderstorms, which can occur in every region of this country. In 2013 alone, there were 60 presidential major disaster declarations. Natural disasters not only disrupt lives and destroy homes, but they also destroy livelihoods and cause an enormous amount of lost economic activity. A 2010 study by the National Federation of Independent Businesses found that 30 percent of small businesses fail to reopen following a presidential disaster declaration or emergency.

Although there are always year-to-year fluctuations in severe weather and its consequences, over time, the aggregated losses have been immense. From 1993 to 2012, insured catastrophe losses in the U.S. totaled \$391.7 billion, an average of almost \$20 billion per year. According to National Weather Service reports, severe weather events regularly occur in every state of the country in every month of the year – including winter storms, thunderstorms, tornadoes and hail, tropical cyclones, extreme temperature fluctuations, and drought. In addition to insured losses, the economic and human costs of severe weather are of growing concern to people and policymakers at the local, state, and national levels.



## U.S. Catastrophes



### US Government Role in Natural Disaster Relief

Disaster	Federal aid as % of total damage
Hurricane Sandy (2012)	77%
Hurricane Ike (2008)	69%
Hurricane Katrina (2005)	50%
Hurricane Hugo (1989)	23%
Hurricane Diane (1955)	6%

Federal Gov't now pays Majority of Losses

<sup>1</sup> US Census Bureau  
<sup>2</sup> US PCS as of 9/30/10. Trended for inflation, population & cost of insurance  
<sup>3</sup> See names of US Disaster Presidential Declarations

Insurance coverage for losses resulting from natural disasters is typically less than 20 percent of the total loss because of limited participation in voluntary insurance coverage and losses that are outside the scope of typical insurance coverage. The federal government covers the remainder of the cost through emergency allocations, which require spending that directly increases the national debt. For decades, Congress has provided insufficient funding for disaster relief and then added funds in the middle of fiscal years. Supplemental disaster funds were appropriated in 17 of the 22 budget years between fiscal year 1989 and 2010, according to the Congressional Research Service.

Disaster losses have also increased as a result of population shifts that have increased the density and number of communities inhabiting high-risk areas, particularly those subject to coastal windstorms, storm surge, and wildfires. For example, coastal counties along the Gulf of Mexico and the Atlantic seaboard make up only three percent of the total U.S. landmass, yet account for about 15 percent of the population<sup>1</sup> Wildland-urban interface (WUI) zones accounted for nearly 60 percent of new construction during the most recent period studied by the U.S. Forest Service.<sup>2</sup>

<sup>1</sup> This estimate is based on the coastal counties outlined by AIR Worldwide in, "The Coastline at Risk: 2008 Update to the Estimated Insured Value of U.S. Coastal Properties", and population and land area figures from the U.S. Census Bureau.

<sup>2</sup> See <http://www.fs.fed.us/pnw/research/fire/wildland-urban.htm> (time period is the 1990s).



Rebuilding homes and lives in the aftermath of a disaster might take years, but often the rebuilding that occurs is neither stronger nor safer than before. Science shows that enhancing structures, usually for small upfront costs, saves homeowners and taxpayers money in the long run. Research conducted by the Insurance Institute for Business and Home Safety (IBHS) at a state-of-the-art Research Center in South Carolina further illustrates the important role that model building codes and superior construction standards can play in reducing the costs of natural disasters. For example, one test of small commercial facilities (such as those found in shopping centers throughout the U.S. found a tenfold increase in damages for the specimen built according to “common” practices compared to “best practices” endorsed by the masonry institute.

The research conducted by organizations like IBHS demonstrates how the human and financial toll of natural disasters can be greatly reduced by building stronger homes and business structures. With relatively simple upgrades in construction techniques such as strapping to create a continuous load path from the roof, through the walls, and into the foundation, using thicker roof decking, and using textured, rather than smooth nails, test residential homes were able to withstand 110 mile-per-hour winds with little damage. On the other hand, test homes with the same floor plan that were not upgraded, were completely destroyed at wind speeds of only 95 mph to 100 mph. The average costs of these upgrades to a new home can be as low as three to five percent of the value of the home. Taking steps to prepare in these ways before a disaster hits can make a major difference.

### Stronger Building for a Safer, More Resilient America

The purpose of model building codes is to ensure that minimum standards are used in the design, construction, and maintenance of the places where people live. Building codes are intended to increase the safety and integrity of structures, thereby reducing deaths, injuries and property damage from a wide range of hazards. Uniform, statewide codes promote a level, predictable playing field for designers, builders and suppliers. Codes also offer a degree of comfort for buyers who care about the safety and soundness of their homes but lack the technical expertise to evaluate building plans or construction techniques. Building codes also allow for economies of scale in the production of building materials and construction, as well as a level of safety for first responders during and after fires and other disaster events.

Model codes are developed nationally in the U.S. by a consensus process involving researchers, construction experts, and local building officials. They are adopted and enforced at the state level to mitigate the effects of severe weather inherent to each state. Statewide building codes are not mandated by the federal government today and would not be pursuant to the enactment of *The Safe Building Code Incentive Act*.

*The Safe Building Code Incentive Act* is a mechanism by which states are incentivized, not mandated, to adopt and enforce model building codes. The proposed legislation would provide an additional 4 percent of post-disaster recovery funds to all states that adopt and enforce model



codes. The incentive is meant to encourage more states to rebuild to higher standards in order to eventually reduce the need for more disaster recovery money.

In recent years, there have been several significant studies that support the conclusion that enforcing model statewide building codes saves lives and greatly reduces property damage and the subsequent need for federal disaster aid.

In a study conducted in the aftermath of Hurricane Katrina, researchers at the Louisiana State University Hurricane Center estimated that stronger building codes would have reduced wind damage from Katrina by 80 percent, saving taxpayers and the local economy \$8 billion. Louisiana has since adopted and enforced model building codes.

In 2005, FEMA commissioned a study by the National Institute of Building Sciences' Multihazard Mitigation Council. The study, based on the work of more than 50 national experts, sought to assess the future savings from hazard mitigation activities. According to the study, every federal dollar spent on hazard mitigation (actions to reduce disaster losses) provides the nation with about \$4 in future savings.<sup>3</sup> BuildStrong supports current proposals to update and expand the study.

In response to the devastating tornadoes in the spring of 2011, the FEMA Building Science Branch of the Federal Insurance and Mitigation Administration (FIMA) deployed a Mitigation Assessment Team (MAT) to Alabama, Georgia, Mississippi, Tennessee and Missouri to assess the damage caused by these storms. This report presented 49 recommendations directed at improving public safety and building performance during tornado events. The adoption and enforcement of model building codes was recommended more frequently than any other measure in the MAT report.

Another study found that losses from Hurricane Andrew, which struck south Florida in 1992 and caused more than \$20 billion in insured damage (adjusted for inflation), would have been reduced by 50 percent for residential property and by 40 percent for commercial property if those structures were built in accordance with Florida's 2004 statewide building code. An IBHS study following Hurricane Charley in 2004 found that modern building codes reduced the severity of property losses by 42 percent and the frequency of losses by 60 percent.

Although we have been able to gather valuable data on the effects of building codes and other mitigation measures from studies like these, additional research is needed to provide market participants with the tools necessary to make America's homes and businesses more resilient. That is why BuildStrong supports funding by the National Institute of Standards and

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<sup>3</sup> Multihazard Mitigation Council, December 19, 2005 ; <http://www.nibs.org/index.php/mmc/news/Entry/newstudydisastermitigationiscosteffectiveandreducefuturelosses>



Technology, the National Science Foundation, and the National Institutes of Health for research and testing on how to reduce the cost of disasters. The IBHS Research Center represents a tangible \$40 million initial investment and a continuing multi-million dollar annual commitment by insurers to research, test, and facilitate the effectiveness, affordability, and financial value of stronger building codes and better built structures. As we have seen today, insured losses from natural disasters have skyrocketed in recent years. However, these losses pale in comparison to the losses incurred by the federal government. Natural disasters cost the federal government hundreds of billions of dollars each congress; yet, research and testing for mitigation and building performance has been underfunded for decades. This is why BuildStrong supports H.R. 1786, *The National Windstorm Impact Reduction Reauthorization Act of 2013*. This legislation develops and encourages the implementation of cost-effective mitigation measures, implements windstorm risk reduction measures by federal, state, and local governments, develops performance-based engineering tools and wind-related model building codes and standards, and ultimately achieves measurable reductions in the loss of life and property from windstorms.

Despite the evidence, most states have not enacted statewide building codes and necessary enforcement measures. In fact, a number of states have weakened their standards or lengthened their code cycles in recent years, including North Carolina and Louisiana. We believe that *The Safe Building Code Incentive Act* would help to correct this situation and refocus attention on the long-term savings and benefits from the adoption and enforcement of strong building codes.

### Conclusion

I want to thank the subcommittee again for holding this important hearing and for providing the BuildStrong Coalition with the opportunity to discuss the crucial role strong building codes and other mitigation can play in making the nation safer and more secure in the face of natural disasters and bending the cost curve when it comes to disaster recovery. I also want to thank the Chairman for participating in BuildStrong's 2<sup>nd</sup> Annual Thought Leader's Forum on Building Codes for a Stronger, Safer America. He has been a leader on efforts to better prepare this country for the inevitable natural disasters it will face.

The ongoing need for emergency funding has often created political battles divided along party and geographic lines. We know that natural disasters are inevitable, and while planning for the costs associated with these disasters is not a perfect science, there is a need for the federal government to better prepare and budget for the storms before they occur. Merely hoping the weather cooperates and relying on luck during hurricane season is not the way to establish FEMA's disaster relief budget.

### BuildStrong Coalition Members

The American Institute of Architects  
American Society of Civil Engineers



Allstate Insurance Company  
American Insurance Association  
Concrete Reinforcing Steel Institute  
Congressional Fire Services Institute  
Council of Insurance Agents and Brokers  
Farmers Insurance Group of Companies  
Federal Alliance for Safe Homes  
Financial Services Roundtable  
Firemen's Association of the State of New York  
Florida Association of Counties  
Florida Emergency Preparedness Association  
The Insurance Institute for Business and Home Safety  
Independent Insurance Agents and Brokers of America  
International Code Council  
International Association of Fire Chiefs  
Liberty Mutual Insurance  
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National Association of State Fire Marshals  
National Association of Mutual Insurance Companies  
National Council of Structural Engineers Association  
National Fire Protection Association  
National Institute of Building Sciences  
National Ready Mixed Concrete Association  
Nationwide Insurance  
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