



POST-EVENT REPORT OF THE 2ND ANNUAL NATIONAL THOUGHT LEADER FORUM AND SENATE HEARING ON MITIGATION AND DISASTER RESPONSE

June 2014



Highlights from the 2nd Annual National Thought Leader Forum

"Mitigation is a national priority. It should not be just, 'Oh, after the fact we'll talk about it.' No. It should be the way we do business."

– Senator Mark Begich



"As the Chairman of the Emergency Management Subcommittee, I'm working with my colleagues on both sides of the aisle to explore ways Congress can help encourage mitigation practices that will save lives and taxpayer money from disasters."

– Rep. Lou Barletta



"I think the federal government does have a role in playing to incentivize folks and incentivize states to do what, frankly, is not only right, but also what is cost efficient and what saves lives."

– Rep. Mario Diaz-Balart



"Woe to the member of Congress that thinks it's not going to touch them. It will – if they're lucky, it will only cost them their election. And if they're unlucky, it will cost people lives."

– Rep. Elizabeth Esty



"What are the incentives that move people to make the right choices? What are the incentives to make builders build to codes that are stronger than others? What are the incentives to make sure that there's a demand, that residents prefer that? Well, we believe that by working with the insurance industry, the banking community, local urban developments, state and local governments, the code industry, pulling all of these folks together, the federal government can play a role in establishing a better market that leads to better decisions."

– Assistant Secretary David Heyman

Build America Stronger

On behalf of the BuildStrong Coalition, I am pleased to present our report from the 2nd Annual National Thought Leader Forum on Building Codes for a Stronger and Safer America. The forum was held on May 1st and was co-hosted by the BuildStrong Coalition and the Congressional Fire Services Institute (CFSI) on Capitol Hill. The event coincided with the launch of National Building Safety Month and featured three keynote speakers, a congressional panel, and an industry roundtable.

Throughout the forum, policy makers, industry professionals and thought leaders in the commercial and nonprofit sectors drew the following conclusions regarding the nation's current infrastructure for building codes and the opportunities for action to achieve greater resiliency and financial stability:

Invest Now & Benefit Later: Strengthening prevention efforts through strong building codes and other mitigation practices will reduce economic losses from disasters and save lives in the future.

Strong Homes + Strong Business = Strong Communities: Building codes and other mitigation efforts serve as the foundation for building and establishing community resiliency in a disaster— whether a hurricane, flood, wildfire, earthquake, or tornado.

Incentives Work: Incentive programs that encourage states, homeowners, and businesses to make safety-conscious decisions will mitigate damage, costs, and lives lost from disasters in the future.

Progress Will Require Collaboration: Establishing and enforcing building codes and mitigation practices that protect lives and save money will require cooperation and support from partners in the government, industry, and emergency preparedness community.

Dr. Robert Detlefsen, Vice President of Public Policy for the National Association of Mutual Insurance Companies (NAMIC), reiterated these conclusions on behalf of the BuildStrong Coalition before the U.S. Senate Committee on Homeland Security & Governmental Affairs Subcommittee on Emergency Management, Intergovernmental Affairs, and the District of Columbia during a hearing titled “The Role of Mitigation in Reducing Federal Expenditures for Disaster Response” on May 14th.

I believe both the 2nd Annual National Thought Leaders Forum and BuildStrong's Senate testimony underscore the great progress the BuildStrong Coalition has made over the years.

Since its inception in 2011, the BuildStrong Coalition has hosted a National Thought Leader Forum in 2013 and 2014 on Building Codes for a Stronger and Safer America; hosted a congressional delegation and South Carolina Governor Nikki Haley at the IBHS Research Center in Richburg, South Carolina; achieved House and Senate Introduction of the Safe Building Code Incentive Act in the 112th and 113th Congresses with 48 and 43 Co-sponsors respectively, the most of any disaster legislation in their Congress; testified before the House Transportation and Infrastructure Subcommittee on Economic Development, Public Buildings, and Emergency Management; testified before the House Science, Space, and Technology Subcommittee on Research and Technology; and testified twice before the Senate Homeland Security & Governmental Affairs Emergency Management, Intergovernmental Relations, & the District of Columbia.

I want to thank our members for all their time and resources dedicated to making these accomplishments possible. I look forward to building upon our success in the years to come as we continue our work towards our goal of making America more resilient to natural disasters.

Sincerely,

Jimi Grande
Chairman, BuildStrong Coalition



KEYNOTE SPEAKERS

Throughout the forum, participants had the opportunity to hear from three leaders in Congress on the issues of disaster mitigation, response, and research. Each of the speakers brought their own perspective to the event based on their diverse political and private sector experiences.

Senator Mark Begich is the Chairman of Homeland Security & Governmental Affairs Subcommittee on Emergency Management, Intergovernmental Affairs, and the District of Columbia and author of S.1991, the Disaster Savings Accounts Act of 2014.

Congressman Lou Barletta is the Chairman of the House Transportation and Infrastructure Subcommittee on Economic Development, Public Buildings, and Emergency Management.

Congressman Randy Neugebauer is Chairman of the House Committee on Financial Services, Subcommittee on Housing and Insurance and is the lead Sponsor of the National Windstorm Impact Reduction Reauthorization Act of 2013.



"We know mitigation efforts like building codes, flood-proofing, and earthquake design standards can relieve, or in some cases eliminate, the human and financial impact of disasters on the nation. As the Chairman of the Emergency Management Subcommittee, I'm working with my colleagues on both sides of the aisle to explore ways Congress can help encourage mitigation practices that will save lives and taxpayer money from disasters."

"We can't change a natural disaster. We don't know when it will come. It could come an hour from now somewhere. It could come in the middle of the night. It could come at any time. But there are things that we can do to lessen the impact that these disasters have. And I think that's where we really need to focus a lot of our attention on here in Washington and what we can do to build our communities to withstand some of these disasters when they do come."

—Congressman Lou Barletta (R-PA)

"It's not just about getting the local building inspector interested in these issues. We've got to get a broader spectrum of the population interested as well."

"One of the things I think people just think about, 'Well, we just need to change the building codes.' Well, maybe changing the building codes is part of the answer. But what we need to do is have an incentive built into the system."

—Congressman Randy Neugebauer (R-TX)



"Mitigation is a national priority. It should not be just, 'Oh, after the fact we'll talk about it.' No. It should be the way we do business."

"That's the goal. It's not the goal to say, 'Well, you've got to check this box and then we're done.' The goal is increase safety; prevent possible loss in the future in life and property. That's the goal. And if we keep those goals in mind, especially around issues around disaster relief and mitigation, we can make a big difference."

—Senator Mark Begich (D-AK)

CONGRESSIONAL PANEL

During the forum, a bipartisan panel of members of Congress from across the United States addressed the issue of increasing costs of natural disasters and ways Congress and the federal government can help bend that cost curve by incentivizing better mitigation techniques. The members who participated in the panel were Rep. Mario Diaz-Balart (R-FL), Rep. Elizabeth Esty (D-CT), Rep. Dennis Ross (R-FL), and Rep. Ed Perlmutter (D-CO).

The following are the major themes that were discussed during the congressional panel:

Rep. Mario Diaz-Balart (R-FL) Member of the House Appropriations Committee

Congressman Diaz-Balart has been a champion of mitigation issues for more than 20 years. During the panel he discussed two pieces of legislation he has authored, BuildStrong's signature priority, H.R. 1878 the Safe Building Code Incentive Act and H.R. 2241, the Disaster Savings and Resilient Construction Act. Congressman Diaz-Balart also discussed his experience in the State Legislature of Florida as the state was recovering from Hurricane Andrew. Due to his leadership during the recovery, Florida has some of the strongest building codes in the country.

"I think the federal government does have a role in playing to incentivize folks and incentivize states to do what, frankly, is not only right, but also what is cost efficient and what saves lives."

"It's not whether we're going to get hit by disasters. It's just when. One of the bills, as you've heard, provides an incentive after you've been hit, when you're rebuilding something that's already been devastated. Let's make sure it's at a higher standard and it creates incentives for that. I mean, if that's not logical and common sense, I don't know what is."



Rep. Ed Perlmutter (D-CO) Member of the House Financial Services Committee

Colorado has been subjected to a number of recent wildfires and floods that have been devastating to families and the economy. The federal government has made a total of 13 disaster declarations in the last three years. Congressman Perlmutter discussed the importance of Colorado rebuilding using better mitigation techniques and building standards to avoid this type of widespread damage in the future.

"One entire town was wiped out, the town of Lyons, Colorado, which is famous for its jazz festivals, its rock festivals. There are several breweries, small craft breweries in the town. And that town, I was seeing its annual budget is \$1 million. And it has at least \$50 million damage to infrastructure within the city. And so it's taking everybody working together to rebuild this town, which is in a beautiful spot, but needs to be rebuilt in a way that we don't have this kind of loss in the future. So from a community planning standpoint, coupled with a construction standpoint, the practices in Colorado are going to be enhanced, because the cost has been tremendous."



Rep. Dennis Ross (R-FL) Member of the House Financial Services Committee

During his time in the Florida State Legislature, Congressman Ross helped create a state mitigation program to ease the burden of dislocation on families after a disaster. He discussed that every \$1 invested in mitigation saves \$4 in relief aid. This investment can also prevent destruction and family dislocation during disasters. Congressman Ross also discussed that there are a number of ways the federal government can incentivize and encourage better behavior by consumers, which is why he authored the Disaster Savings Account Act of 2013, which the BuildStrong Coalition supports, to help encourage homeowners to take proactive steps to protect themselves from natural disasters.

“This is obviously a very bipartisan issue. Natural disasters don't pick parties, they don't pick gender, they don't pick race. They are geographic, and they are going to hit.”

“But we can't expect each state to want to impose strong building codes. So what I've done is I've filed the Disaster Savings Account because tax policy, besides raising revenues, also affects behavior. You know, you've got a mortgage interest deduction that might incentivize somebody to buy a bigger home. You've got charitable deductions that may incentivize people to give to charities beyond what they normally would. Let's give them an opportunity to use pre-tax dollars to create a stronger home.”

Rep. Elizabeth Esty (D-CT) Member of the House Transportation and Infrastructure Committee

Congresswoman Esty, a co-sponsor of the Safe Building Code Incentive Act, was a vocal advocate for collaboration by local, states and federal governments to address the issues of mitigation and stronger building codes. Congresswoman Esty also touched on the need for stronger “political will” from elected officials in addressing these issues because simply hoping storms won't hit might cost politicians their election, but it might also cost people their lives.

“I am so passionate about the need for government, local, state, and federal, to work together. And I think the bottom line is this: We need to make it easy for people to do the right thing -- easy to do the right thing. And we know safer building codes are the right thing. Safer building codes up front, and for darn sure, safer building codes after we know what the problem has been.”



INDUSTRY STAKEHOLDER PANEL

During the forum, a group of industry stakeholders discussed what role the federal government could play to incentivize stronger construction in order to reduce the costs of natural disasters and save lives. The panelists identified a wide variety of practical strategies to lessen the impact of natural disasters on our communities.

The panel included: David Heyman, Assistant Secretary for Policy for the Department of Homeland Security (DHS); Bill Windsor, Associate Vice President of Consumer Safety for Nationwide Insurance and Member of the BuildStrong Coalition Executive Committee; Bill Jenaway, President of the Congressional Fire Services Institute (CFSI); Dominic Sims, CEO of the International Code Council (ICC); and Michael Lingerfelt, Disaster Assistance Committee Chair for the American Institute of Architects (AIA).

David Heyman, Assistant Secretary for Policy, Department of Homeland Security (DHS)

In his role as Asst. Secretary for Policy, David Heyman leads the Department of Homeland Security's efforts on mitigation. During the forum, he discussed Resilient STAR, a pilot program developed by the Department of Homeland Security to promote and recognize more resilient building designs and practices.

"So, if it's our policy, if we have – if it's our policy to be prepared and to mitigate, if we have a strategy on how to be prepared, if we have building codes that can be adopted, and people and communities have a personal self-interest of preservation and sustainment, why are we not doing this?"



David Heyman



Dr. Bill Jenaway

Bill Jenaway, President, Congressional Fire Services Institute (CFSI)

Throughout his career in the fire services and insurance industry, Dr. Jenaway has seen real-world damage in the aftermaths of disasters and the difference that strong building codes make in mitigating that damage. Dr. Jenaway explained the importance of creating a political market for legislators to step up and implement strong codes.

"So when you look at managing, long term, a community, I think you can do that with zoning and with codes. But here's the \$64 million question. Who has the political will to step up and do that? That's the bottom line. And I would say if we can get legislators to step up, at all levels—local, county, state, and federal—if we can get them to step up and have a political will to implement strong codes, we will have a stronger America and we will be able to take that return on investment and use that money on more important things."



Bill Windsor

Bill Windsor, Associate Vice President of Consumer Safety for Nationwide Insurance and Member of the BuildStrong Coalition Executive Committee

Mr. Windsor shared the devastating impact natural disasters have on communities around the country. He explained that at Nationwide, he sees every day the impact of natural disasters on his company's members.

"But, you know, the impacts of these storms goes well beyond just the individual. It's really the impact on the community that can be far more devastating. Many communities impacted by natural disaster will never fully recover. We know that 25 percent of small businesses that are impacted by a natural disaster never reopen their doors. Communities hit by a natural disaster see a loss of jobs, a loss of tax base, and a reduction in the services that they can provide that are needed by the community."

Dominic Sims, CEO, International Code Council (ICC)

As CEO of the ICC, the organization responsible for developing model codes, Mr. Simms discussed the importance of code enforcement and his thoughts on the most efficient way to allocate the scarce mitigation funds under the Stafford Act.

"But what's perhaps more important is that Congress consider how to best allocate scarce resources. And by allocating mitigation funds under the Stafford Act, those funds should be prioritized to states that are doing the right thing by adopting the most current building codes and standards."

Julie Rochman, President and CEO, Insurance Institute for Business and Home Safety

In her role as moderator, Ms. Rochman urged the members of Congress to act as natural disasters have the potential to impact every state and community across the country. She warned of the financial and individual consequences of complacency by thinking areas of the country are impervious to natural disasters. There are initiatives that people can take right now will make a big difference.

"I think one of the members of Congress said it very well: Woe to the member of Congress who doesn't think this is going to impact their district. Natural disasters occur every day all across our country. And the cost in lives and property damage and business-interrupt and community displacement is incredible. And we need to stop."

Michael Lingerfelt, Disaster Assistance Committee Chair, American Institute of Architects (AIA)

Mr. Lingerfelt offered a unique perspective on the size and scope of the problem, stating that since 2007, federally declared disasters have affected 243 million people. According to Mr. Lingerfelt, it is our responsibility to mitigate both man-made and natural disasters.

"The AIA supports government and private-sector policies, programs, codes, and incentives that promote resilient building design, lead to a robust infrastructure, and support a stronger, more competitive economy."



Julie Rochman

Senate Subcommittee on Emergency Management, Intergovernmental Relations, and the District of Columbia; Hearing on the Role of Mitigation in Reducing Federal Expenditures for Disaster Response

Hearing Summary

On Wednesday, May 14th, the U.S. Senate Homeland Security Committee's Subcommittee on Emergency Management, Intergovernmental Relations and the District of Columbia held a hearing to examine the potential relationship between investment in mitigation and disaster response. Dr. Robert Detlefsen, Vice President of Public Policy at the National Association of Mutual Insurance Companies, testified on behalf of the BuildStrong Coalition.

David Miller, Associate Administrator, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, Christopher Currie, Director, Emergency Management and National Preparedness Issues, Government Accountability Office, and Chad Berginnis, Executive Director, Association of State Floodplain Managers joined Dr. Detlefsen on the panel.

During his opening remarks, Senator Begich set the theme of the hearing and outlined its purpose, to examine the potential relationship between investment in mitigation and disaster response. He gave a brief overview of the rising federal expenditures on disaster assistance in recent years and strongly endorsed mitigation as the most effective solution to reducing those costs. Mitigation not only reduces costs in the aftermath of a disaster, but also reduces the overall risk level therefore reducing insurance premiums for consumers. Sen. Begich concluded his remarks by stating that he believes this issue is one of the greatest challenges facing the insurance industry and emergency management community.

Although each witness brought their own expertise and focus to the hearing, there were a number of reoccurring themes throughout the opening testimonies. Most noticeably, all four witnesses agreed that federal spending on natural disasters has increased drastically in recent years and is on an unsustainable path. Furthermore, the witnesses stated that mitigation is one of the best and only tools we have to address this problem. Although a number of different regulatory and legislative proposals were discussed, the witnesses agreed that the federal government needs to do more to



encourage states and individuals to invest in mitigation by providing basic incentives.

Mr. Miller discussed FEMA's ongoing mitigation programs and proposed ways to educate, incentivize, and fund state, local and tribal efforts to build stronger communities. One specific initiative he discussed was a recent FEMA undertaking to develop a national mitigation framework by coordinating national-level mitigation activities with other federal agencies and state, local, tribal and territorial governments. Mr. Miller underscored the notion that mitigation is a shared responsibility, not just the responsibility of the federal government. Mr. Berginnis also agreed that we must tackle the problem at the national level with a broad national commitment to risk reduction.

Mr. Currie testified that individuals may lack incentives to take resilient-building measures. He noted that increased awareness of the hazards associated with living in a certain area or previous experience with disasters does not necessarily persuade individuals to take preventive measures against future disasters. Residents of hazard-prone areas tend to treat the possibility of a disaster's occurrence as sufficiently low to permit them to ignore the consequences. Additionally, Mr. Currie testified that a lack of comprehensive, reliable data to make decisions about cost-benefit tradeoffs may also inhibit local governments from deciding to invest in hazard mitigation activities.

Dr. Detlefsen echoed these points during his testimony while outlining legislation, the *Disaster Savings Account Act of 2014*, to incentivize individuals to invest in hazard mitigation. According to Dr. Detlefsen, the Disaster Savings Account Act is a common sense proposal that allows homeowners to create a tax-free savings account to be used for mitigation activities.

Mr. Berginnis reiterated these points and stated that there seems to be a common misperception that preparedness and response activities should happen now, while mitigation activities can wait. He said that this misperception creates missed opportunities to not only reduce risk but also to save money for taxpayers and those affected by the disaster.

The witnesses agreed that hazard mitigation is not just a federal responsibility. States must also do their share. However, there are certain things the federal government can do to incentivize states to make the right decision. Throughout the hearing, Dr. Detlefsen urged the subcommittee to support S. 924, the *Safe Building Code Incentive Act*. Under the proposed law, states that adopt and enforce nationally recognized model building codes for residential and commercial structures would qualify for an additional 4% of funding available for post-disaster grants, which will be administered by FEMA through the Stafford Act. He testified that the legislation is a forward-thinking investment from the federal government to incentivize states to not only to build stronger, safer homes and businesses,

but to save lives and prevent losses.

During his testimony, Mr. Berginnis emphasized that the reduction of risk is key to reducing disaster-related cost to the nation, to states and communities, and to property owners. In short, hazard mitigation saves money and represents a societal investment, not a cost. He stated that as the costs associated with natural disasters continue to rise, mitigation is the key to reducing risk and to reducing costs.

BuildStrong Coalition Testimony

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

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. 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.

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' Multi-hazard 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. 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 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.



Dr. Detlefsen (middle) and Jimi Grande (second from right) talk with FEMA's David Miller (left) and Emergency Management Subcommittee staff (far right).

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 2nd 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.

About Us

BuildStrong is a coalition of national business and consumer organizations, companies, and emergency management officials dedicated to promoting stronger building codes. The BuildStrong Coalition urges enactment of The Safe Building Code Incentive Act. This legislation would encourage states to adopt model building codes to protect property and ultimately save lives from the devastation of natural disasters.



Our coalition members include:

**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 Association of Fire Chiefs
International Code Council
Liberty Mutual Insurance
MetLife
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
NeighborWorks America
Professional Insurance Agents
Property Casualty Insurers Association of America
Reinsurance Association of America
Simpson Strong-Tie Co
Solutia
Travelers
State Farm Insurance Companies
The Hartford
USAA**

The Effectiveness of Strong Building Codes



In the past two years, according to the National Oceanic and Atmospheric Administration, there have been 25 major disasters, each of which has caused more than \$1 billion in economic losses. When the final costs associated with Superstorm Sandy are tabulated, the economic toll of these disasters is likely to near \$200 billion. There is an urgent need in Congress to pass the Safe Building Code Incentive Act to fortify the nation's defenses against future disasters.

The enforcement of strong building codes at the statewide level provides the best first line of defense against future natural disasters. When homes and office buildings are constructed using the best practices of modern building science it is simply harder for Mother Nature to knock them down.

The scientific evidence supporting the effectiveness of strong building codes as a disaster mitigation strategy is overwhelming.

- ♦ In a landmark study conducted in the aftermath of Hurricane Katrina, researchers at the Louisiana State University Hurricane Center estimated that strong building codes could have reduced wind damage by 80%, saving \$8 billion.

- ♦ A study conducted by the Insurance Institute for Business & Home Safety estimated that Florida's modern building codes helped reduce the cost of property damage from Hurricane Charley by more than 40 percent.
- ♦ Another study commissioned by the Federal Emergency Management Agency that was conducted by the National Institute of Building Sciences in 2005, found that for every \$1 dollar invested in disaster mitigation activities, such as the adoption and enforcement of strong building codes, the nation saves \$4 in future disaster losses.
- ♦ Finally, another comprehensive study conducted by the respected Milliman firm found that widespread adoption of strong building codes would have reduced FEMA-related hurricane costs by \$11 billion over a two decade period.

First responders, emergency management experts and insurers agree. The adoption and enforcement of strong building codes will help save lives, protect property and ultimately reduce taxpayer exposure to natural disasters.

The Safe Building Code Incentive Act



BILL OVERVIEW

The Safe Building Code Incentive Act of 2013 was introduced on May 8, 2013 by U.S. Rep. Mario Diaz-Balart (R-FL) and Senator Robert Menendez (D-NJ). The bill currently has the support of 37 cosponsors in the House of Representatives and 4 cosponsors in the Senate.

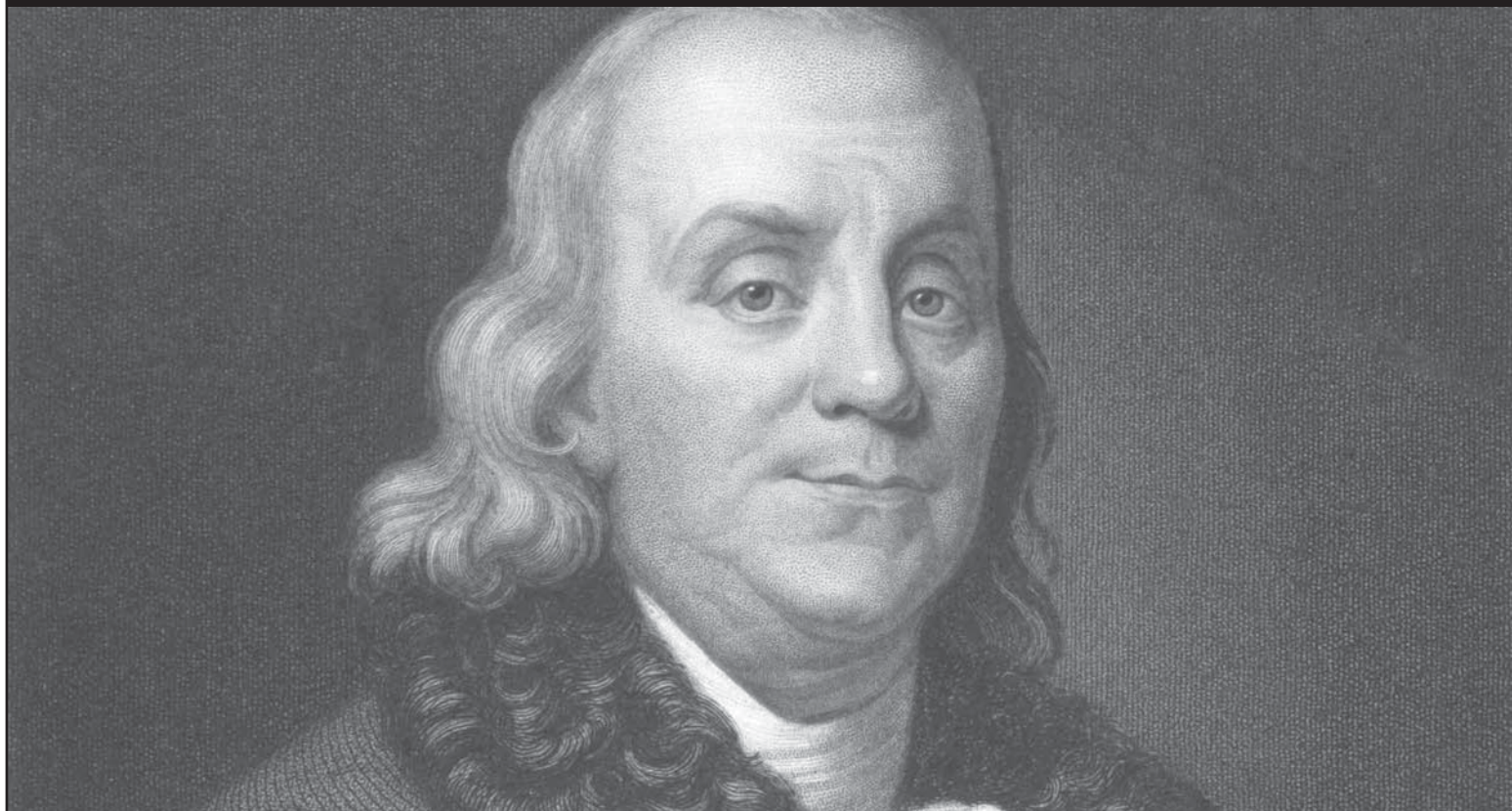
Strong building codes are a proven defense against natural disasters. The goal of the Safe Building Code Incentive Act is to encourage widespread, statewide adoption of model building codes as a disaster mitigation strategy.

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 a higher standard in order to eventually reduce the need for more disaster recovery money.

Today, 33 states and the District of Columbia have adopted statewide building codes and could be eligible for additional disaster relief upon enactment of the Safe Building Code Incentive Act. Those States are California, New Jersey, New Mexico, Florida, South Carolina, Louisiana, Utah, Maryland, Virginia, Michigan, Washington, Connecticut, North Carolina, Indiana, Massachusetts, New York, Rhode Island, Oklahoma, Wisconsin, Oregon, Alabama, Tennessee, Arkansas, New Hampshire, Georgia, Ohio, Hawaii, Pennsylvania, Kentucky, Vermont, Maine, West Virginia, and Minnesota.

The sponsors of the Safe Building Code Incentive Act are striving to make the enforcement of strong building codes the national norm, instead of the exception.

Want to reduce the costs of natural disasters?



Remember the advice of America's most famous firefighter.

"An ounce of prevention is worth a pound of cure."

According to the National Oceanic and Atmospheric Administration, there have been 151 major natural disasters in the United States that exceed \$1 billion of economic losses between 1980 and 2013. The cumulative cost of these weather-related catastrophes is \$1 trillion.

Policymakers looking to reduce the taxpayer costs of natural disasters should remember Ben Franklin's timeless words. An ounce of prevention is worth a pound of cure.

Strong building codes are a preventative measure that can help save lives, protect property and reduce taxpayer exposure to natural disasters. The Safe Building Code Incentive

Act is a bipartisan bill that encourages states to adopt strong building codes by providing additional disaster relief assistance to those that do. Firefighters, emergency management experts and insurers all agree. This legislation will help mitigate the costs of natural disasters.

We know Mother Nature will strike again. Will we be better prepared next time? If Congress follows Ben Franklin's advice, we will be.

www.buildstrongamerica.com

