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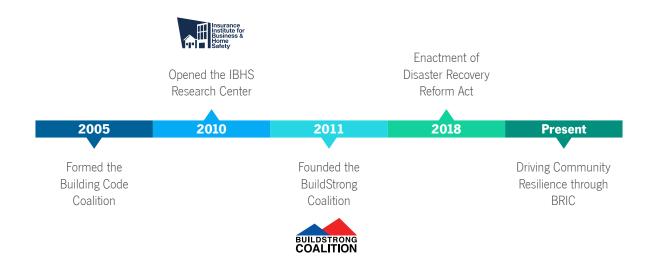
National Association of Mutual Insurance Companies

The National Association of Mutual Insurance Companies is the largest property/casualty insurance trade group with a diverse membership of more than 1,400 local, regional, and national member companies, including seven of the top 10 property/casualty insurers in the United States. NAMIC members lead the personal lines sector representing 66 percent of the homeowner's insurance market and 53 percent of the auto market.

Through our advocacy programs we promote public policy solutions that benefit NAMIC member companies and the policyholders they serve and foster greater understanding and recognition of the unique alignment of interests between management and policyholders of mutual companies.

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The BuildStrong Coalition

The BuildStrong Coalition, formed in 2011 to respond to an increasing number of severe disasters, is comprised of a diverse group of members representing firefighters, emergency responders, emergency managers, insurers, engineers, architects, contractors, and manufacturers, as well as consumer organizations, code specialists, and many others committed to building a more disaster-resilient nation.

The BRIC Program: A Transformational Opportunity

The Coalition spent many years educating lawmakers in Washington, D.C., about the power of stronger building codes and mitigation to saving lives. Successes saw the advancement of multiple pieces of legislation, including the Safe Building Code Incentive Act and the National Mitigation Investment Act. The most important success to date was in 2018 when the transformational Disaster Recovery Reform Act was signed into law. The DRRA contains a historic set of provisions giving America's communities new opportunities to be more resilient, including through the creation of the Building Resilient Infrastructure and Communities Program.

BRIC Program Pocket Guide: Purpose

This guide is intended for those looking to learn more about mitigation and resilience and how to be a part of, if not initiate, a conversation about risks and hazards, the identification of efforts to draw down risk, and the implementation of investments to better help individuals and communities withstand and recover from the next disaster.

While Mother Nature is powerful, communities are not powerless against severe weather. We can - and we must - act, and act now to reduce the damage that may be inflicted today and prevent damage that is avoidable in the future. There will never be a more ideal time to ensure practical, real-world solutions, informed by the latest building science and attainable for all, to take root in our communities. Through decades of research, the science has laid out what we need to do, yet we must take it that last mile to our communities, where actions, big and small, can reduce the impact of these relentless disasters on our lives. It is incredibly encouraging to see programs like the Federal Emergency Management Agency's Building Resilient Infrastructure and Communities Grant Program emerge as a catalyst for those efforts. As champions of resilience, I encourage you to use the BRIC Pocket Guide, weaving it into every community initiative to instill an appreciation that resilience is a sound financial investment and vital to thriving communities today and for generations to come.

Roy Wright, President & CEO Insurance Institute of Business & Home Safety

INTRODUCTION: WHY THIS MATTERS

WHY THIS MATTERS: STORM FREQUENCY & SEVERITY

Despite COVID-related lockdowns, travel and meeting restrictions, mask mandates, and social distancing, the nation responded to **historic numbers of natural disasters**. According to Munich Re, hurricanes, wildfires, and other disasters across the United States caused **\$95 billion in damage** in 2020, the fourth highest cost on record.

The North Atlantic hurricane season records were broken with 30 named storms forming, and 12 making landfall. It was the most active wildfire year on record across the West with nearly 10.3 million acres consumed. And according to the National Oceanic and Atmospheric Administration, in 2020, there were 22 weather and climate disaster events with losses exceeding \$1 billion each across the United States – shattering the previous annual record of 16 events that occurred in 2011 and 2017 – which included tropical cyclones, severe storms, drought, wildfires, and a derecho.²

RESILIENCE & MITIGATION: DEFINED AND EXPLAINED

According to FEMA's National Mitigation Framework, "Threats and hazards present long-term risks to people and their property. Mitigation is risk management action taken to avoid, reduce, or transfer those risks. By reducing the impact of disasters, mitigation supports protection and prevention activities, eases response, and speeds recovery to create better prepared and more resilient communities." The National Institute for Standards and Technology explains, "... resilience refers to the ability to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruption."

TRAJECTORY & SUPPORT FOR FUNDING RESILIENCE: RETURNS ON INVESTMENT

During the last 20 years, the nation has seen an increase in the number of severe disasters as well as an increase in costs and losses associated with those disasters. This current trajectory is not sustainable and can only be curbed through comprehensive investments in mitigation and resilience. We know these are smart investments, resulting not only in saved lives, properties, and livelihoods, but also taxpayer dollars.

	ADOPT CODE	ABOVE CODE	BUILDING RETROFIT	LIFELINE RETROFIT	FEDERAL GRANTS	
Overall Benefit-Cost Ratio	7:1	7:1	7:1	7:1	7:1	
Cost (\$ billion)	\$1 /year	\$4 /year	\$520	\$0.6	\$27	
Benefit (\$ billion)	\$13 /year	\$16 /year	\$2200	\$2.5	\$160	
Riverine Flood	6:1	5:1	6:1	8:1	7:1	
Hurricane Surge	not applicable	7:1	not applicable	not applicable	not applicable	
Wind	10:1	5:1	6:1	7:1	5:1	
Earthquake	12:1	4:1	13:1	3:1	3:1	
Wildland-Urban Interface Fire		4:1	2:1		3:1	
Source: The National Institute of Building Services						

¹ https://www.munichre.com/en/company/media-relations/media-information-and-corporate-news/media-information/2021/2020-natural-disasters-balance.html

 $^{^2} https://www.climate.gov/news-features/blogs/beyond-data/2020-us-billion-dollar-weather-and-climate-disasters-historical and the state of the st$

 $^{^3\,}https://www.fema.gov/sites/default/files/2020-04/National_Mitigation_Framework2nd_june2016.pdf$

⁴ https://www.nist.gov/community-resilience

⁵ https://www.iii.org/fact-statistic/facts-statistics-us-catastrophes

The National Institute of Building Sciences has looked at the returns on investments in mitigation, which show for every dollar invested in mitigation – whether through adopting up-to-date building codes, exceeding those codes, or executing building retrofits on residences, buildings, or lifeline infrastructure – communities may expect to see anywhere from an estimated **\$4** to **\$11** return on that **\$1** investment.

Using this mounting data and evidence, particularly in the wake of the significant 2017 disasters, there was a historic shift of attention focused on disaster resilience and resources available to invest in reducing disaster impacts. Government and community leaders must start thinking about the benefits of investing wisely BEFORE the next disaster occurs to help minimize the impacts and costs of disaster.

FUNDING RESILIENCE:

FEMA'S NEW BUILDING RESILIENT INFRASTRUCTURE AND COMMUNITIES GRANT PROGRAM

The most significant program to come out of this shift in focus is FEMA's Building Resilient Infrastructure and Communities Grant Program, which makes a transformational change in the way the federal government approaches catastrophes by making more money available to communities to undertake risk-mitigating activities before a natural disaster strikes.

Historically, minimal, inconsistent, and unreliable funding was available for pre-disaster mitigation. However, with passage of the Disaster Recovery Reform Act of 2018, an amount equal to 6 percent of the resources spent for every presidentially declared disaster can be automatically deposited into a new pre-disaster mitigation fund known as the BRIC fund.® This massively enhanced mitigation fund, which could grow by more than \$1 billion in years of significant disaster impacts, will be available for states and communities to implement cost-effective, risk-reducing measures to proactively mitigate against the risk of disasters.

WHAT COULD THIS MEAN FOR YOU

So, we KNOW resilience is the right thing to do and there may be resources available, but... What can you do?

How can you help increase resilience through your neighborhood, community, region, and state?

How can you help identify and put the right resources into the hands of state, local, and tribal governments and also facilitate community engagement and partnerships for truly innovative and transformational efforts that tackle disaster risks, climate impact, and vulnerabilities on the local, regional, and national scales?

Where can you get the tools and resources to be successful at every level of government?

Answer: There's a new federal grant program at FEMA ready to help!
This program outlines the steps you can take to help your state and community be more competitive in their efforts to secure funding and additional resources to transform their risk profiles?

FIRST STEP?

Get a resilience checkup! Assess your awareness. Concentrate on collaboration. Test your tools!

⁶ http://2021.nibs.org/files/pdfs/NIBS_MMC_MitigationSaves_2019.pdf

⁷ https://www.climate.gov/news-features/blogs/beyond-data/2017-us-billion-dollar-weather-and-climate-disasters-historic-year

⁸ https://crsreports.congress.gov/product/pdf/IN/IN11515

THE RESILIENCE CHECK-UP

Becoming increasingly resilient is an ongoing process. Regardless of where a state or community is in its mitigation initiatives, something more can be done. Put simply, these actions fall into three categories: Awareness, Collaboration, and Tools.

IT'S TIME TO ACT!







AWARENESS is about the stages of gathering information to be in a better position to understand risks, consequences, resources, methods, and process. It may include taking an inventory of what's in place today, or it may expand over time to consider what's happening in other places. Awareness also involves identifying the steps that can be taken to increase a community's and state's competitiveness to leverage federal grant programs like BRIC.

COLLABORATION is about people and partnerships. It is bringing many stakeholders to the table to share data, help educate, identify priorities, and see projects through to completion.

TOOLS is about aiding resilience that encompass a range of mechanisms. Laws, regulations, training, inspection, funding, plans, databases, or websites – these are the kinds of tools that could help bolster the resilience of a state, its communities, and its people. But one of the most important tools is money to fund resilience and mitigation activities.

The purpose for these steps is to be ready to **ACT**. Everyone has a role to play: individuals, thought leaders, decision makers and policymakers, nonprofits, state, local, and tribal officials, and elected officials like legislators, mayors, and commissioners. In rural and urban areas, state agencies and administrations, businesses, the arts and humanities, organizations, and citizens must all be part of an inclusive conversation.

As you walk through the **ACT** of your resilience checkup, this guide aims to help identify a few key steps that track the specific technical and qualitative criteria that will be used by FEMA to evaluate applications for assistance and determine mitigation project eligibility and competitiveness.

Regardless of where you come into this conversation, there's room for you to help your state and communities **ACT**. Through your leadership, you can drive mitigation and resilience to save lives, property, and limited government resources.

ACT: ANNUAL ACTIVITY & BRIC CYCLE

Check-up: What if we told you that FEMA's BRIC Program can provide you with funding and resources as you set out to ACT to increase resilience? If you want to position your state or community to be competitive for the next round of BRIC Program funding, here is additional practical information.

Begin Preparing & Understanding the BRIC Annual Funding Cycle's Timing and Deadlines

The BRIC cycle is a rolling process, so you can always be preparing to jump in. The inaugural year for FEMA's BRIC Program was 2020, with the first awards announced during the summer of 2021.

Line Up Additional Funding to Meet Cost-Share Requirement

The BRIC Program and other disaster mitigation programs require that states and communities contribute toward funding as well, with FEMA providing 75 percent of projected costs in federal funding. However, FEMA allows tremendous flexibility in how the remaining 25 percent of eligible project costs can be paid for – funds can be paid directly or covered by donated labor, time, and materials. This is another area where collaboration and creative partnerships can be force multipliers, allowing federal resources to serve as "seed money" to be leveraged with other lines of funding from multiple sources to truly tackle large, creative, and transformational resilience projects.

Consider the Range of Possibilities

Individuals and communities are kept safe in times of disasters through the strength of their homes, buildings, and the infrastructure that provides critical resources and services in affected areas. Even in a pandemic, we have learned the importance of our residences as critical shelter. As you and partners seek to plan how you will ACT, there are many possibilities. We know the adoption of the latest edition of the building codes has the greatest estimated return on investment – \$11 for every \$1 invested. Disaster-resilient and sustainable construction and the use of stronger building codes have been proven to save lives, reduce the damage of natural disasters, and protect the environment. Unfortunately, only a handful of states have adopted the most modern building codes, while others may lack the resources to adequately implement and enforce codes. State and local governments need help and support to adopt modern building codes, while simultaneously equipping communities with the tools and resources needed to carry out meaningful enforcement regimes.

Target Requests to Expand Capacity; Innovate With Project Design; and/or Share Contributions

The BRIC Program aims to shift the federal focus from reactive disaster spending toward research-supported, proactive investment in community resilience. FEMA anticipates the BRIC -program funding projects that demonstrate innovative approaches to partnerships, such as shared funding mechanisms and/or project design. For example, an innovative project may bring multiple funding sources or in-kind resources from a range of private- and public-sector stakeholders or offer multiple benefits to a community in addition to risk reduction. BRIC will fund capability and capacity-building activities that enhance the knowledge, skills, expertise, etc. of the current workforce to expand or improve the administration of mitigation assistance. This includes activities like building code activities, partnerships, project scoping, and mitigation planning and planning-related activities.





AWARENESS: RISKS, RESOURCES & PLANS

Check-up: Are you informed about vulnerabilities and ways to reduce them?

Awareness is your first step. States and communities must be aware of their risks and the need to develop a plan for how to draw down those risks. Further, they must be aware of the types of projects that will be the most impactful to increasing resilience, as well as those key steps that will ensure those projects are highly competitive for FEMA BRIC funding.

Identify Risks & Resources

Developing an initial, then an increasingly comprehensive, understanding of your local, regional, and statewide landscape is a next critical step. Many areas are completely unaware of the risks they face, the likelihood those risks will result in impacts, and what those impacts will be. Understanding risk, opportunities to mitigate, and the availability of different resources to leverage provides an important basis for analysis and decision making. Most importantly, identifying these risks helps prioritize efforts to combat those risks and increase resilience against potential impacts. This awareness helps decision makers get past the thought that "this will never happen to us," and identify those tactical steps, planning efforts, and initiatives that will have the greatest impact on reducing risk and vulnerability.







AWARENESS: BUILDING CODES

Be Aware of Residential Building Health: Focus on Building Codes

Keeping individuals safe in their homes is essential for community resilience when facing a disaster. If we are forced from our homes by a disaster, we are putting additional strains on community and government resources. Science has shown strong building codes and standards, as well as appropriate land use decisions, save homes and lives.

Are you in a community where there is no building code, or it is seen as unfeasible to implement the latest comprehensive building code? This is where your voice and the involvement of key strategic partners can make the greatest difference. Community leaders and policymakers must be aware of the risks and how taking key steps like the implementation of building codes not only reduces the risk of future impacts but can increase community competitiveness and livability, drive economic development, and enable the community to leverage even more resources by increasing their competitiveness for additional federal funding, like a BRIC grant.

Strengthen Existing Homes

Communities cannot only be focused on new construction when it comes to resilience. Investment in strengthening the vulnerability of existing homes, as well as proactively avoiding an increased future risk through new development, is one of the greatest ways to increase community resilience. Federal resources are available through BRIC and other programs to develop, support, and fund state-led residential resilience grant programs.

Retrofit projects play a role in residential resilience, acknowledging the reality that 70 percent of the built environment is aging and are not close to current building standards. States and localities can help homeowners obtain federal funding assistance for residential resilience and retrofit projects, significantly reducing the homeowner's expenses for the project. Further, states and communities can design their own grant programs, leveraging federal funding to issue homeowner grants and assistance to mitigate their properties.



Land use planning may be an essential component of comprehensive hazard mitigation planning, which is eligible for BRIC funding. Land use planning is a principal means of reducing risk from hazards. As the primary tool for hazard mitigation at the community level, effective land use planning is critically important in the management of natural disaster hazards. The regulation of land use, such as limiting the development of floodplains, can reduce residents' exposure.

Land use considerations go hand in hand with identifying risks and hazards and implementing and enforcing building codes. Effective land use planning in areas that are vulnerable to natural hazards can significantly reduce disaster risk and build resilience to existing and future communities. Together, strong codes and land use regulations help support communities, individuals, businesses, and nonprofits getting back to work and restoring the economic engines that feed community vitality.

⁹ https://www.fema.gov/sites/default/files/2020-11/fema_building-codes-save_study.pdf

AWARENESS: BUILDING CODE SHOWCASE

"What do consumers expect?"

By Leslie Chapman-Henderson CEO, Federal Alliance for Safe Homes

Engineering analysis shows that two out of three communities prone to severe weather do not have the building codes they need. Yet consumer research by the nonprofit Federal Alliance for Safe Homes found that eight of 10 mistakenly believe their codes are adequate. Upon learning their community may not use a code or their codes may be outdated, 84 percent of consumers surveyed were concerned, very concerned, or extremely concerned.

Research from the National Severe Storms Laboratory's Flooded Locations & Simulated Hydrographs Project found that consumers are not worried about codes, but not because they do not value them. Instead, they are not worried because they have confidence that their leaders and builders are "looking out" for them. Once they understood that not all states, cities, or towns adopt codes, they developed a high-interest level and strong feelings, as reflected in the statements below.

- State and local leaders should protect the integrity and independence of building code enforcement (46% Strongly Agree/45% Agree)
- It's important for state and local elected officials to prepare communities to resist damage from a natural disaster or extreme weather (40% Strongly Agree/47% Agree)
- My state and local leaders should adopt the latest building codes to protect the community from disasters (40% Strongly Agree/46% Agree)

Building codes are proven performers and provide the foundation for resilience in the face of disasters, from earthquakes and floods to hurricanes, tornadoes, and wildfires. In nearly all cases, the newer the code, the stronger and safer the home.



That is why FLASH created the No Code. No Confidence. Initiative. NCNC is designed to close the gap between public understanding of life-saving codes and the actuality of code status in every community. The NCNC initiative features television public service announcements, public outreach, and the Inspect2Protect.org digital lookup tool to raise awareness, expand understanding, and increase transparency. Users visit the website to learn about personal disaster risk, look up specific codes used in their communities, and identify retrofits and upgrade options to increase home strength in the face of disasters.





AWARENESS: BUILDING CODE EFFECTIVENESS GRADING SCHEDULE SHOWCASE

The Building Code Effectiveness Grading Schedule is an independent assessment of a community's building code adoption and enforcement activities, resulting in a score of 1 (best) to 10 and is a BRIC criterion. For more information on BCEGS, please visit the ISO-Mitigation website at https://www.isomitigation.com/bcegs/.

"What is BCEGS?"

By Dale Thomure

Manager, Community Hazard Mitigation, ISO

The BCEGS program evaluates building code enforcement efforts at the jurisdictional level in three areas: code administration, plan review, and field inspection. We collect and analyze more than 1,200 data elements to calculate scores for one- and two-family residential properties and for commercial or industrial properties. Scores range from a minimum of 0 to a maximum of 100. ISO translates the scores to a scaled class rating of 1 (exemplary commitment to building code enforcement) to 10. Communities are reevaluated generally every four to five years nationally (every three years in Florida) or as substantial changes are made to department operations.

By focusing on classifications at the community level, BCEGS can provide differentiation at the highest geographic resolution possible for commercial and residential construction. During the more than 20 years that BCEGS has been in place, the concept of resilient communities has gained much greater awareness and momentum with key stakeholders, community leaders, and consumers. Programs at the national level down to the smallest communities participating in BCEGS are embracing resilience and seeking solutions to enhance social and financial stability into the future.

BCEGS Schedule: Areas of Focus

Many factors are considered in every BCEGS classification. The information below list key areas of focus but is not all-inclusive:

Administration of Building Codes	Plan Review	Field Inspection
Adopted Building Code	Plan Review Staffing	Inspection Staffing
Adopted Sub-Codes	Experience of Plan Review Personnel	Experience of Inspection Personnel
State and Local Code Amendments	Detail of Plan Review	Management of Inspection Activity
Method of Code Adoption	Management of Plan Review Activity	Inspection Checklists
Natural Hazards Impacting the Jurisdiction	Natural Hazards Impacting the Jurisdiction	Special Inspections
Staff Training and Education	Staff Training and Education	Inspections for Natural Hazard Mitigation
Certification of Staff	Certification of Staff	Final Inspections
Qualification of the Building Official	Qualification of the Building Official	Certificates of Occupancy
Utilization of Design Professionals	Utilization of Design Professionals	
Zoning and Land-Use Provisions		
Contractor Licensing Programs		
Public Awareness Programs		
Appeals Process		
Administrative Policies and Procedures		
Quality Assurance Programs		

COLLABORATION: OUTREACH & PARTNERSHIPS

Check-up: Are you conducting outreach, bringing the right entities into the conversation, and building community strength by fostering collaboration?

Recognize the Power of Local and State Actions

FEMA is not going to make your community whole. This is why resilience is such an important topic of conversation. Resilience is a network, a system of systems as strong as its links. When investing community-wide, region-wide, statewide, and even nationwide, we are supporting each other in these savings and avoiding loss. The disaster resilience conversation is a tremendous opportunity to bring in new partners, alliances, and coalitions.

Gather Your Team & Focus on a Unifying Resilience Goal

Traditionally, this has been a conversation primarily between emergency managers and mitigation officers. Now, this dialogue must grow to involve those engaged with disasters, including lifeline infrastructure such as transportation, energy and water; community and economic development; land use; residential and commercial building; and insurance/financial industry. This isn't only a government conversation. Government must leverage the resources and engagement of the private sector and the community.

Expanded federal authorities recognize that partnerships are critical and encouraged. It is important to get the right voices to the table as essential community partners in resilience.

Understand What Healthy Collaboration Looks Like

Who has firsthand knowledge of the impact disasters have on people and places? Who has experience in communities in the wake of devastating and catastrophic disasters?

BRIC money is available to support states, tribes, territories, and communities throughout the nation as they design and begin new mitigation projects designed to increase community resilience through building codes, community lifelines, and creative partnerships and community engagement. Community resilience cannot be achieved without leveraging a broad network of partners to include all levels of government, the private sector, nonprofits, and educational institutions, among others. These partners are key to driving investments in mitigation projects, building capability through training and technical assistance, planning for increased resilience, promoting mitigation activities, and sharing information to build a culture of preparedness.

Don't underestimate the importance of collaborators and partners, including your own voice, contributing important information and momentum to a state's mitigation and resilience efforts.

This is an exciting and unprecedented time for engaging and working together on resiliency because states – and all levels of government – should be looking carefully at funding opportunities/approaches available through the newly created BRIC Program housed at FEMA that massively increases federal investment in pre-disaster hazard mitigation.

COLLABORATION: OUTREACH & PARTNERSHIPS

Use Your Voice - With Many Partners, Take on Roles to Drive Resilience

Draw the right collaborators to the table.

- Present data and analysis to help educate community partners and decision makers on risk, the importance of building codes, and best practices
- Influence outcomes
- Bring people together
- Present new, innovative, creative, transformational solutions and approaches
- Be a force multiplier
- · Connect community leaders with federal, state, local, and private-sector resources
- Help leverage federal investments for the greatest impact
- Seek private-sector partners that also have a vested interest in reducing risks, saving money, and protecting the community. These entities can help in planning, risk identification, and code adoption, particularly in some of those more challenging environments
- Generate more community partners.

Help identify potential regulatory challenges that might need to be addressed to facilitate and encourage public-private partnerships. Governments need help working with the private sector to increase community and national resilience. The private sector is currently conducting high-level work throughout the resilience and mitigation arena, and there is tremendous opportunity to utilize expertise and industry knowledge, take advantage of existing programs, identify best practices, and incorporate lessons learned from the private sector. By leveraging the private sector and encouraging and facilitating public-private partnerships, we can maximize available resources for the benefit of the country.







The Maryland Experience

By Russell Strickland Executive Director of the Maryland Emergency Management Agency

As we collectively move beyond a traditional mitigation mindset to one that incorporates large infrastructure projects and partnerships, we must think broadly about resilience. Building dynamic partnerships across the whole community to include nonprofits and the private sector will expand our capacity to reduce risk across the landscape. Maryland, under the leadership of Gov. Larry Hogan, is making great strides in establishing partnerships across sectors and across nations to bring innovative solutions to the challenges we are facing. During his 2019-2020 chairmanship of the National Governors Association, Gov. Hogan made strengthening the resilience of America's critical infrastructure a top focus for states.

Infrastructure investment is essential to resilience. In the first year of the Building Resilient Infrastructure in Communities Program, the Maryland Emergency Management Agency submitted applications for state and local projects valued at more than \$78 million of projects, combined from 24 locally developed community-based projects, for federal support. Here is a great example: Maryland submitted a proposal for the Middle Branch of Baltimore City. The area is home to the nation's first Urban Wildlife Refuge but plagued by flooding and environmental degradation. The BRIC proposal will be the catalyst to address flooding and climate change risk and support a vulnerable community with valuable

environmental resources. Additionally, this area supports critical infrastructure and facilities, such as Harbor Hospital and a main thoroughfare to support activity for the Port of Baltimore. Reducing the flooding risk will continue to ensure the protection of these vital community services. BRIC provides opportunities to support capacity- and capability-building activities for communities to identify and develop resilience projects. However, there are opportunities for greater flexibility within this program to support the development of complex, innovative projects and also prioritize resources for vulnerable communities.

Further, MEMA is working closely with the state's other departments and agencies, most notably the Maryland Insurance Administration, as well as state legislators to build the necessary framework for the state to be successful with BRIC and other mitigation investments. As a result of the 2021 Maryland General Assembly legislative session, Maryland established a new Resilient Maryland Revolving Loan, which provides low-cost loans for resilience and hazard mitigation projects in the state.

As a coastal state, Maryland will undoubtedly have to deal with the impacts of climate change, but the actions we are taking today are helping us become a leader in building resilience.





TOOLS: WHAT YOU CAN USE

Check-up: Have you secured the correct tools to build significant and transformational resilience? Laws, regulations, training, inspection, funding, plans, databases, and websites – the kinds of tools that could help bolster the resilience of a state, its communities, and its people. But one of the most important tools is money to drive resilience and mitigation activities.

Begin Where You Are & Continue Improving

Resilience is an ongoing, dynamic endeavor. No matter what phase your state or community is in, you must identify, access, and leverage the right tools. There are tools to help you increase awareness and collaboration and, most importantly, funding.

The tools presented below not only help identify resources like BRIC funding, but they also support states and communities in taking the necessary steps to successfully secure this funding and then leveraging those resources to help communities avoid catastrophic damage.

Sharpen Your Tools

Once you have awareness of your baseline starting point and you have partners with whom to collaborate, take steps to improve the tools available to help strengthen resiliency.

- Risk Identification published information to reflect and communicate understanding of hazards, e.g., FEMA's National Risk Index¹⁰
- Planning Documents such as hazard mitigation or land use
- Building Code adopted recent version, as well as whether it is understood, used, and enforced
- Funding Capacity, Tools, and Projects
- Governance Structure for collaborative- and focused-driven solutions and outcomes
- Technology supports educating, communicating, and decision-making

Make Building Codes Matter More With Training, Education, & Enforcement

Adopted building codes are only helpful if they are enforced and inform development decision-making. Investment in building codes also means investments in training, education, and enforcement.

Build Local Capacity and Capabilities for Resilience

By setting clearly articulated priorities, organizations naturally drive resources in terms of workforce, training, funding, and more toward those priorities. When disaster mitigation and resilience are top priorities, resources are driven to address those priorities, including funding and staffing. Resources are also available to be leveraged toward creative solutions and new and innovative tools to reduce vulnerabilities to disasters. Examples include revolving loan funds at the state and regional levels and rainy-day accounts that help in the wake of disasters.

¹⁰ https://www.fema.gov/flood-maps/products-tools/national-risk-index

Governance Structure Via Mitigation and Resilience Officers and Councils

Establishing a framework that prioritizes, fosters, and facilitates healthy risk identification, management, and disaster resilience requires states to build a governance structure, and, if needed, the legislative framework to make this work happen. This could involve states adopting or updating to the latest building codes, establishing a mitigation or resilience council across agencies and disciplines, identifying a chief resilience officer, tackling land use challenges, or even prioritizing resources to energize capacity and capability building at the local level.

TOOLS: RESOURCES SHOWCASE

Alabama Resiliency Council

By Lars Powell, Ph.D.

Director, University of Alabama, Center for Insurance Information and Research

The Alabama Resiliency Council was created through deliberate and thoughtful collaboration among the Alabama Department of Insurance, the Alabama Emergency Management Agency, and the University of Alabama, with generous input from IBHS and Smart Home America. ALDOI Commissioner Jim Ridling and AEMA director Brian Hastings set forth a vision recognizing that limitations inherent in state agencies prevent a holistic approach to resilience. For example, separate agencies are responsible for fire hazards, water hazards, wind hazards, and health hazards, with very little interaction.

A research team at UA proposed the Resiliency Council as a vehicle to centralize resiliency efforts. The centerpiece of this project is the state hazard mitigation plan. Historically, the SHMP has been a 500-page document including a lot of great information that is nearly impossible to use. The team at UA is leveraging the funding normally spent on consultants who produce the SHMP, combined with existing internal and external research funding, to produce a relational database and dashboard tool in place of the SHMP. The dashboard tool will allow AEMA and other entities concerned with resilience to design and evaluate loss mitigation projects, track progress from current and past projects, and monitor resiliency at the state-enterprise level. The system will also create SHMP reports that meet all FEMA requirements.



TOOLS: RESOURCES SHOWCASE

Making SC Homes Safer and Stronger Since 2007, One Retrofit at a Time

By Ray Farmer

Director, South Carolina Department of Insurance

The South Carolina Safe Home program is celebrating 14 years of home mitigation.

SC Safe Home Rooted in Solving the Coastal Property Insurance Crisis of the Mid-2000s

The program began in 2007 as part of an omnibus bill to overhaul the property insurance market in the state. As with many coastal states, South Carolina was in a crisis. Property insurers were fleeing the coast or requesting massive rate increases after realizing the high costs of catastrophic weather from the 2005 hurricane season. With a dedicated funding stream coming from insurance premium tax revenues, SC Safe Home issued its first grants in the fall of 2007. Since then, the program has awarded more than 6,870 grants totaling more than \$28.3 million.

Program Grant Awards Aimed at Coastal Mitigation Against Strong Winds and Hurricanes

South Carolina law says grants can be used for the following improvements:

- ✓ Roof deck attachment
- ✓ Secondary water barrier
- ✓ Roof covering
- ✓ Brace gable ends
- ✓ Reinforcing roof-to-wall connections

- ✓ Opening protection
- ✓ Exterior doors
- ✓ Tie downs
- ✓ Problems due to structural components
- ✓ Manufactured home piers, anchors, and tie downs

By far, the most popular mitigation project has been roof replacements. Grants are provided on a matching and non-matching basis. Non-matching grants are available for certain low-income households. No grant may exceed \$5,000. Additional details are available at https://doi.sc.gov/605/SC-Safe-Home.

Public Education and Outreach Are Also a Key Charge

SC Safe Home is also charged with public education and outreach. These efforts are designed to increase awareness so our citizens can be better prepared for hurricanes and other natural disasters. They're typically focused on mitigation measures and other ways to prepare in advance of an emergency. For example, each year we partner with The Home Depot to host the Storm Expo. This is generally held at one of the coastal stores around the start of hurricane season. Due to COVID-19, the 2021 event focused on providing emergency starter kits to coastal residents along with educational materials about the importance of emergency preparedness and mitigation.





Safe Home Law Incentivizes Coastal Mitigation in Other Ways

The 2007 law that created the program, the Omnibus Coastal Property Insurance Reform Act of 2007, included other measures to increase pre-disaster mitigation and strengthen the state's property insurance market. For example, these include state income tax credits for fortification projects, Catastrophe Savings Accounts, and qualified insurance premiums over 5 percent of income up to \$1,250.

SC Safe Home Realizes Administrative Efficiencies With Online Application Portal

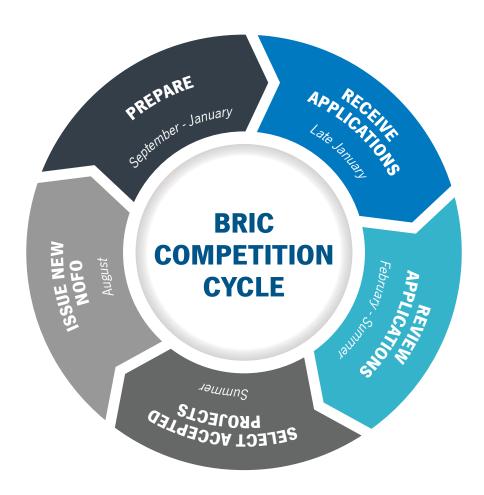
In 2017, the program implemented an online system for applications and administrative functions. This system allows staff to generate reports, extract data, and quickly communicate with applicants, inspectors, and contractors. Staff is now able to provide key preparedness information and updates to stakeholders via a newsletter and survey grant recipients for feedback on their satisfaction with the program.

New Partnership With the Insurance Institute for Business and Home Safety

SC Safe Home recently partnered with IBHS on a dual designation for roof retrofits. These projects can now get an IBHS Fortified Roof designation in addition to a Safe Home certificate upon completion of the project. This designation is being considered for more than 125 completed projects and could increase the insurance discounts for these homeowners and make their homes a more attractive risk for insurers. We took this partnership a step further in 2020 when we submitted a grant application for funding under FEMA's BRIC Program. If awarded, this grant would have provided funding to retrofit a sampling of SC Safe Home's completed homes to the IBHS Fortified Gold standard. This exercise would help determine the feasibility of bringing existing homes into compliance with the most stringent IBHS fortified designation.



NEXT STEPS: FROM ACT TO ACTION



BRIC is expected to run every year on a deadline cycle with an open window for submitting applications from Sept. 30 through Jan. 30. Because the funding is automatically generated and does not require an annual appropriation, the program is set up to be self-sustaining. In years with significant disaster spending, the BRIC Program could award well over \$1 billion in funding.

Develop a Comprehensive Hazard Mitigation Plan

Planning is key. Mitigation is most effective when it is part of a long-term strategy integrated with community processes and plans. Mitigation planning allows communities to think ahead and act before a disaster to reduce loss of life, property, and other financial losses later. Does your state and community have a comprehensive mitigation plan accurately identifying risks and hazards, appropriately prioritizing the best projects and investments to reduce those risks, and integrating other community efforts, priorities, and initiatives? Being aware of state and community planning efforts is vital to assessing your resilience. Further, a comprehensive, up-to-date, and FEMA-approved statewide hazard mitigation plan is a requirement for receiving FEMA mitigation assistance. As you walk through the BRIC technical and qualitative criteria these elements should be built into comprehensive planning and prioritized mitigation and resilience projects.

Align Awareness Efforts to Increase Resilience - The FEMA BRIC Criteria

Awareness of risks and hazards provides a solid foundation for states and communities to successfully apply for and implement BRIC grant funding to transform their level of disaster resilience. The criteria developed by FEMA incentivizes certain efforts and initiatives that have the greatest impact on community resilience and disaster mitigation.

BRIC Criterion: Risk Reduction/Resiliency Effectiveness and Future Conditions – Identify projects that effectively reduce risk and increase resilience, including a cost benefit analysis: realize ancillary benefits; leverage innovation; anticipate future conditions, such as population/demographic/climate changes, sea level rise, etc.; and cite data sources, assumptions, and models.

BRIC Criterion: Building Code Adoption and Building Code Effectiveness Grading Schedule Rating of 1 to 5 – Adopt one of the two most recent versions of the International Building Code and the International Residential Code model codes published by the International Code Council. Invest in community building code adoption and enforcement activities, including management and training to increase your community BCEGS score.

BRIC Criterion: Infrastructure Projects That Mitigate Risk to Lifelines – Identify projects that mitigate natural hazard risk to critical physical structures, facilities, and systems that provide support to a community, its population, and its economy, including safety and security; food, water, and shelter; health and medical; energy; communications; transportation; and hazardous materials.

BRIC Criterion: Implementation Measures, Nature-Based Solutions, and Population Impacted – Identify projects that can be well-managed, successfully implemented, and incorporate innovative techniques to facilitate implementation. Consider nature-based solutions and projects demonstrating community-wide benefits and identify the proportion of the population, particularly socially vulnerable populations, that will be impacted.

Construct a Stable Foundation With Building Codes

The implementation and enforcement of the latest ICC building codes can drive the most significant improvements in a community's resilience as well as provide a tremendous return on investment. Having a baseline understanding of applicable building codes is essential. Does my community or state have an adopted building code? Is the adopted building code the latest version? Is the adopted building code being enforced? How healthy are the entities charged with code enforcement, inspections, training?

FEMA funds both structural and non-structural retrofits to existing buildings for hazard mitigation. Mitigation retrofit projects are defined as modifications to the elements of a building to reduce or eliminate the risk of future damage and to protect inhabitants. FEMA's pre- and post-disaster mitigation funding have resources for these eligible projects. Further, these programs comply with local, state, or national building codes, standards, and regulations, such as the International Code Council's International Building Code, the Florida Building Code, and the American Society of Civil Engineers, and American Society for Testing Materials International Standards, for structural retrofits.

Become Familiar With Building Code Resources

International Code Council: The ICC provides code resources and tracks the implementation across the country. https://www.iccsafe.org/codessave/

FORTIFIED Construction Standards: The Insurance Institute for Building and Home Safety has leveraged science and data to develop strong construction standards and home retrofits to increase home resilience and the ability to withstand a disaster. https://ibhs.org/fortified/

Building Codes:

Why They Matter? https://www.fema.gov/blog/why-should-strong-building-codes-matter-you

Where to Find Them? https://ibhs.org/public-policy/building-codes-by-state/

What's This About Enforcement or Effectiveness Grades?

https://www.isomitigation.com/bcegs/; https://www.isomitigation.com/bcegs/what-why-when-and-what-do-i-do/

Who Can Help?

https://www.fema.gov/sites/default/files/2020-08/fema_bric-and-building-codes_support_document_August_2020.pdf

https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/introduction-to-building-codes/

Align Collaboration Efforts to Increase Resilience - The FEMA BRIC Criteria

Collaboration is a key aspect in two of BRIC criterion:

BRIC Criterion: Outreach Activities

Identify projects that incorporate outreach activities that advance mitigation.

BRIC Criterion: Leveraging Partners

Incorporate state, tribal, private, and local community partnerships that will enhance the outcome of projects through financial and in-kind contributions, support, and promotion increasing awareness and impacts across multiple jurisdictions.

Capture and Share Information With Technology

Possibilities for technology include simple communication such as a website to share educational information about building codes, retrofitting projects, and other programs. Options may also include more detailed mechanisms for housing and sharing an online inventory to assist in understanding risk, improving planning, and making even more informed decisions.

Choose Impactful Projects by Using Cost-Benefit Analysis

One of the exciting aspects about FEMA's programs and one of the reasons why Congress was supportive of expanding and enhancing pre-disaster mitigation is that FEMA's mitigation programs must be risk reducing and cost effective. These programs are not throwing money at the problem. A cost-benefit analysis provides a comprehensive understanding of not only the future damage that will be avoided, but also how investments in mitigation and resilience provide benefits for the community, region, and state. This is a wonderful tool that can help you get through your community conversations to identify the best steps and the best projects to draw down disaster hazards in your community.

ACT: ONGOING ACTIVITY – THE CONVERSATION CONTINUES

Support Efforts to Help Shape the Next Chapter in Resiliency



Lead/Support Efforts to Encourage State/Local Government to Establish/Update Building Codes

Eligible building code adoption and enforcement activities for the BRIC Program are activities that:

- Evaluate adoption and/or implementation of codes that reduce risk;
- · Enhance existing adopted codes to incorporate more current requirements or higher standards; and
- Develop professional workforce capabilities through technical assistance and training.

Eligible potential building code adoption and enforcement activities under BRIC to enhance state and local knowledge, skills, and expertise:

- Evaluate which code adoption and enforcement activities are best suited for the jurisdiction. BRIC may also allow
 a community the option to decide to enter a Memorandum of Agreement or Intergovernmental Agreement with an
 adjacent jurisdiction or third-party provider to permit and enforce appropriate building codes;
- Adopt building codes or develop building code requirements, including publication of those requirements related to land use, zoning, floodplain management, infrastructure, urban-wildland defensible space, e.g., building, stormwater management regulations, or other areas that help make the community more resilient;
- Improve or modify current or existing building code requirements to reflect the latest code edition, exceed the latest code edition, or develop or modify building-code-coordinated requirements, including publication of those requirements related to land use, zoning, floodplain management, infrastructure, urban-wildland defensible space, e.g., stormwater management regulations), or other areas that help make the community more resilient;
- Enhance existing adopted codes and enforcement to incorporate more current requirements, higher standards, electronic permitting, online model code access, virtual inspection technology, and remote building codes administration;
- Provide or pursue training, including individual certification courses, such as for inspectors, plans reviewers, certified floodplain managers, etc., and training for the public and private sectors;
- Develop activities related to improving code enforcement by evaluating processes, implementing an inspection program, improving Building Code Effectiveness Grading Schedule score, improving Community Rating System rating, etc.; and
- Conduct public awareness outreach activities related to new requirements.

Through BRIC, FEMA will continue to invest in a variety of mitigation activities with an added focus on infrastructure projects and community lifelines.



CAPITOL HILL

Being Considered by Congress: Beyond BRIC

With the enactment of the Disaster Recovery Reform Act in 2018 creating the groundbreaking BRIC Program and making a host of major changes to federal disaster policy, now is the time for Congress to pass the next generation of disaster reform legislation designed to better prepare our communities for the next storm.

In this vein, we are calling on Congress to pass the next transformational disaster mitigation legislation, the Resilient Assistance Mitigation for Environmentally Resilient Infrastructure and Construction by Americans, or the Resilient AMERICA Act, to increase incentives, tools, and resources to protect homes and communities ahead of disasters. This includes provisions that will:

- Boost BRIC funding and continue to redirect unspent disaster dollars into the program;
- Create a new pilot program at FEMA to facilitate the design and execution of model state-run grant programs; and
- Create new tools for building code adoption and enforcement.

Join us in working with the thought leaders in Congress, including members of the House Transportation and Infrastructure Committee, in supporting the introduction, consideration, and ultimate passage of this important step to continue to drive resilience across the nation. We must continue to ensure that mitigation and resilience are part of the ongoing infrastructure conversation, as well as COVID recovery.

RESOURCES: WHERE TO LOOK

Become Familiar With Resilience Resources – Where to Look

FEMA Mitigation and Resilience

- FEMA BRIC Website
- FEMA National Risk Index
- BRIC Partnership Activities
- Ready Business
- National Business Emergency Operations Center
- Resilient Nation Partnership Network
- Hazard Mitigation Assistance Guidance, Feb. 27, 2015
- Mitigation Action Portfolio
- HMA Cost Share Guide
- Community Lifelines Implementation Toolkit

- Hazard Mitigation Planning
- ISO Mitigation BCEGS®
- · Connecting Mitigation and Equity
- Connecting Mitigation and Municipal Finance
- Connecting Mitigation to Arts and Culture
- Connecting Mitigation and Electric Power
- Benefit Cost Analysis
- Public Assistance Program and Policy Guide Version 4
- FEMA Grants Outcome User Guide
- The Stafford Act and Related Authorities

Other Federal Programs

- CDBG-DR Laws, Regulations, and Federal Register Notices
- Small Business Administration Disaster Assistance
- Economic Development Administration and Disaster Recovery

Other Resources

- Maryland's Private Sector Integration Program
- State Resilience Assessment and Planning Tool

U.S. Chamber of Commerce

- Resilience in a Box
- Disaster Preparedness and Recovery Quick Guides

State Residential Resilience Grant Programs

- · Strengthen Alabama
- South Carolina Safe Home Mitigation Grant Program
- California Residential Mitigation Program

CONTINUE TO BECOME MORE AWARE, COLLABORATE TO DEVELOP PARTNERSHIPS, IMPROVE TOOLS, AND **ACT** TO MAKE A DIFFERENCE

BRIC is about helping to support communities in taking the next great step to protect themselves from disasters. Whether new or experienced with these efforts, resilience is an evolving and continuing process.



IT'S TIME TO ACT!

CATE PAOLINO

Cate Paolino, JD, MPA, MBA, serves as NAMIC's Director of Public Policy. She is responsible for providing the association and its membership with key policy expertise and analysis on legislative and regulatory issues of interest to the property/casualty insurance industry at the state, federal, and international levels.

Cate is a former NAMIC Regional Vice President of the Northeast Region. She came to NAMIC from Travelers, where she worked in business insurance serving as senior counsel and second vice president, Regulatory Research and Compliance. She spent more than 10 years as senior counsel at the American Insurance Association. Her skill set includes legislative and regulatory analysis, legislative drafting including the drafting of model legislation, experience with commercial insurance issues, and drafting and presenting testimony.

She holds an MPA from Brown University, an EMBA from Suffolk University, and a law degree from the University of Connecticut.

ANDREW HUFF

Andrew Huff serves as NAMIC's Senior Federal Affairs Director and spearheads advocacy efforts surrounding a wide range of issues affecting the property/casualty insurance industry.

Huff joined NAMIC in 2015 following time spent working on Capitol Hill and as a lobbyist for a trade association representing a sector of the financial services industry. Prior to joining NAMIC, he was a professional staff member for the majority office of the U.S. House of Representatives Committee on Small Business.

Huff is originally from the Outer Banks of North Carolina. He holds a Bachelor of Arts degree in Political Science from North Carolina State University.

PAMELA WILLIAMS

Pamela Williams currently serves as the Executive Director of the BuildStrong Coalition, a group of firefighters, emergency responders, insurers, engineers, architects, contractors and manufacturers, as well as consumer organizations, code specialists, and many others committed to building a more resilient America. She also serves on the National Advisory Council for the Federal Emergency Management Agency in the Standards Setting & Accrediting position.

Prior to joining BuildStrong, she served as counsel for the U.S. House Transportation and Infrastructure Subcommittee on Economic Development, Public Buildings and Emergency Management. In that role, Williams advised the committee and congressional leadership on emergency management, FEMA, the Stafford Act, and disaster-related matters. Most notably, she was the principal drafter and successfully led negotiations with multiple committees, House leadership, the Senate, and the administration, culminating in enactment of the Disaster Recovery Reform Act.

Previously, Williams served at FEMA as the deputy director of congressional affairs an associate chief counsel for legislation and policy. She holds a J.D. from the University of Denver, a Master of Public Administration from the University of Kansas, and a Bachelor of Arts in English from Baylor University.

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