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**STATEMENT FOR THE RECORD**

**On behalf of the  
National Emergency Management Association**

**Submitted to the House Committee on Transportation & Infrastructure  
Subcommittee on Economic Development, Public Buildings, and Emergency Management**

***Examining the Role and Effectiveness of Building Codes in Mitigating Against Disasters***

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Thank you, Chairman Perry, Ranking Member Titus, and distinguished members of the Committee for allowing me to testify today.

I am proud to testify today representing the National Emergency Management Association (NEMA). NEMA represents the state emergency management directors of all 50 states, territories, and the District of Columbia. As Secretary of the Maryland Department of Emergency Management, and on behalf of my colleagues in state emergency management, we thank you for holding this discussion on the importance of strong mitigation through resilience programs and supporting code initiatives.

## **UNDERSTANDING THE LANDSCAPE OF MITIGATION AND RESILIENCE**

As disasters become more frequent and larger in scale, scope, and complexity, we know we will never be able to respond our way out of the vulnerabilities our communities face. Instead, we must invest in mitigation projects that work with our communities to build resilience where it is needed most. I am known among my colleagues for saying, “mitigation is the center of the universe,” because these projects are imperative as we seek to avert the worst possible impacts of disasters and prepare our communities for when the next disaster strikes. Investments in mitigation are key to ensuring that when a disaster occurs, the communit(ies) affected will be able to withstand its impacts and rapidly recover.

We must also place comprehensive, transformational mitigation at the forefront of our national security strategy to reduce risk. For that to be effective, communities need to be supported and provided the resources to pursue a pathway to increase their resilience. This includes support for the full lifecycle of their mitigation projects—from inception to implementation. We must also be flexible with communities across the United States and recognize that each has its own set of unique risks, vulnerabilities and opportunities. Only then can we implement solutions that overcome various community obstacles and continue to build upon our successes.

As a coastal state, Maryland is prone to a host of water-related hazards, including flooding, severe storms, and hurricanes, as well as tornadoes, earthquakes, and excessive heat. This is in addition to the risks faced across our nation by threats such as pandemics. Just as our threats are varied and diverse, so must be the actions we take to mitigate those threats. Some mitigation activities can be as simple and individual as washing hands and wearing a mask to combat COVID-19 or purchasing flood insurance when living in a flood zone. In other cases, mitigation activities may be as large as conducting coastal restoration to lessen the impacts of climate change in the Chesapeake Bay.

Resilience cannot just be a “buzz word” used to identify a long-term goal. Rather, it must be actionable and tangible to be effective. NEMA remains focused on identifying and promoting methods to ensure that resilience is incorporated into all stages of emergency management, from updating preparedness and mitigation plans to incorporating resiliency principles into exercises and rebuilding stronger post-disaster. By making resilience a cornerstone of all that we do as emergency managers, we can drive improvements that make our communities safer and better able to adapt to changing threats for generations to come.

Maryland and other states across the nation are working to inculcate a culture of preparedness and promote resilience through increased public awareness of risk, enhancements to critical infrastructure, and mitigation projects that incorporate nature-based solutions and public-private partnerships.

## **IMPLEMENTATION OF CONSENSUS-BASED BUILDING CODES**

Strong building codes save lives and protect property. Moreover, the research is clear that building code adoption and enforcement are among the most cost-effective measures that governments can enact. A commonly cited statistic (and appropriately so) from a series of ongoing National Institute of Building Sciences (NIBS) studies is that mitigation investments return \$6 for every \$1 invested. Even more impressive, the study's authors found that there is a national benefit of \$11 in return for every \$1 invested in designing buildings to model building codes.

In 2020, FEMA released *Building Codes Save: A Nationwide Study* which concluded that the U.S. will avoid \$132 billion in losses from hazard events by 2040 because of buildings built to international standards. While not all codes are appropriate in all instances, ensuring building codes meet the needs of a locality and its hazard profile has a demonstrated impact on community resilience in the event of a disaster.

We have seen this play out nationwide where more modern, research-based building codes have been implemented. Notably, Alaska underwent a 7.0 earthquake in late 2018 that was very geographically similar to the famed 1964 earthquake which killed more than 100 people. In 2018, however, with the adoption of model building codes, there were no reported deaths or serious injuries. In addition to life saving, utilizing codes can save costs too. In Pennsylvania, grant elevated homes were not impacted by flood waters along the Schuylkill River in West Norriton Township, Montgomery County (PA) during Tropical Storm Ida. These homes had been retrofitted to new code and to best available data heights through a FEMA grant, experienced no damages on the first floor and below and thus saving a significant amount in rebuilding and had no collateral debris impact and first responders did not have to operate around these grant funded structures in high velocity waters under tree canopies, nor direct precious ancillary resources to this local catastrophic event.

## **MANAGING FEDERAL PROGRAMS AND BUILDING CODES WITHIN MARYLAND**

Historically, Maryland has not received any awards under FEMA's Hazard Mitigation Assistance programs related to building codes. With the addition of the Building Code Plus-Up state set-aside within FEMA's FY23 Building Resilience Infrastructure in Communities (BRIC) awards, Maryland applied for four projects requesting a total of \$1,999,998 in federal dollars. The Maryland Department of Environment (MDE) is the sub-applicant for all four projects which have been "Selected for Further Review." A brief summary of each project applied for is as follows:

- **Increase Transparency of & Accessibility to Building Codes.** MDE will create a central repository of local floodplain ordinances and adopted building codes, including identification of higher standards, for every community in the State.

- **Flood Resilience Through Building Codes - Enhance Building Codes Statewide.** This project will complete five distinct, but related, tasks including code-coordinate the Maryland Model Ordinance; create and adopt a State Floodplain Ordinance; completing a needs assessment to improve the review of State projects based on FEMA’s State Assessment; developing elevation certificates for State buildings near the floodplain; and train professional staff statewide on the provisions in the Maryland Floodplain Ordinance after it is adopted.
- **Flood Resilience Through Building Codes - Evaluate Higher Standards for Resiliency.** This project will help communities and the State to understand better the costs and benefits of incorporating resilience design through enhanced building codes and higher standards outside of the Special Flood Hazard Area (SFHA). In this project, MDE will: undertake a cost-benefit analysis of the State adoption of higher standards in areas inside and outside of the SFHA for State Facilities; use a watershed approach and case study to examine the costs and benefits of adopting a local floodplain and higher standards in the NFIP community of Westernport and then expand that analysis to the full Georges Creek watershed; and create guidance for all communities on the benefits of adopting higher standards.
- **Flood Resilience Through Building Codes - Building Codes Training and Local Land Use Policy Workshops.** This project will develop, promote, and deliver professional workforce capabilities through technical assistance and training by developing and implementing a robust state-wide training program for flood provisions in building codes, ordinances, higher standards, and regulations. The training will be in the form of multiple regional workshops targeted for Floodplain Administrators (FPAs) and building inspectors. Training will be offered in each region of the state and will include specific material that will address the needs and requirements of each participating community. A one-stop-shop webpage will be created to allow access to course material for future reference and refresher training.

While the FY24 program is not yet released, Maryland has already fielded interest in additional building-code related projects.

## **BUILDING CODES AS A COMPONENT OF BRIC SCORING**

Building codes are an essential mitigation tool and play a significant role in programs such as FEMA’s BRIC program scoring. Building code initiatives, however, cannot be a “one-size-fits-all” solution nationwide. When considering local versus state building codes as a criterion for BRIC scoring, both levels of adoption and enforcement present unique benefits and challenges. For states, a challenge lies in comparing building code requirements, metrics, and implementation on a national scale. At the local level, smaller or under-resourced jurisdictions may lack the expertise, funding, or staff to develop and enforce strong building codes, leading to inconsistent protection across the state and negatively impacting BRIC scores for projects in those areas. Furthermore, it has frequently been noted that the adoption process to stay current with code models is a significant challenge for both state and local governments, partly because the necessary review and approval process can take years to complete.

Due to the significant differences in risk, capacity, and resources across the nation, many states opposed using state building codes as a criterion in the BRIC program scoring. While updated building codes are an important mitigation consideration, and there may be some benefits related to statewide consistency, there are significant downsides to comparing building code implementation and enforcement across all states. Nearly half of states, for example, do not have a statewide building code, so their communities would be at a significant disadvantage—particularly the non-coastal, rural states and many of our nation’s territories. Even in states that do have statewide building codes, however, they can be politically charged, and state emergency management agencies often lack the ability to influence code updates. As a result, using state building codes as a BRIC scoring criterion would effectively penalize communities and emergency management agencies for decisions of state legislatures, leading to missed opportunities to execute critical mitigation projects.

Many of the issues cited above regarding the use of state building codes for BRIC scoring also apply to the use of local building codes. Furthermore, there is a misconception that many local jurisdictions do not adopt and enforce building codes because they disagree with them, or do not want to direct residents on how to handle their property. Many communities understand the importance and benefits of building code adoption and enforcement, but do not have the financial capabilities or capacity to adopt and enforce a building code or run a local building code program. Even when local communities are able to adopt updated building codes, the frequency with which new codes are released makes it unrealistic for many local communities to keep up.

Congress should also bear in mind that states vary in issues as simple as the definition of “local.” For example, in several New England states, there are no county seats of government. This significantly increases the number of local governments working directly with the state and penalizes small, rural, and under-resourced communities already struggling to receive funding.

Given FEMA’s current preference to ensure equitable access to, and equitable delivery of federal programs, having building code adoption and enforcement as a scoring criterion within the BRIC program would be in conflict. Instead of using building code adoption and enforcement as a criterion in BRIC scoring, FEMA should focus on *incentivization* of building code adoption and enforcement. For example, remove requirements and incentives from scoring criterion, but provide incentives later in the process, such as cost share adjustments for adoption and enforcement. If build codes must be a criterion for BRIC scoring, both state and local sub-applicants should have opportunities to earn additional points for adopting more stringent, hazard-specific building codes tailored to their risks—without the penalty of losing points. Another proposed approach is a change to a “state OR local code” approach, in which the community gets to choose whichever awards them more points in the scoring process.

In short, given the important role the BRIC program plays enabling communities to reduce their hazard risk and enhance resiliency, FEMA’s approach to scoring must not make it harder for disadvantaged, rural, and highly vulnerable communities to compete.

## **SOLUTIONS BEYOND BRIC**

The Bipartisan Budget Act of 2018 (P.L. 115—123) included a provision entitled *Federal Cost-Share Adjustments for Repair, Restoration, and Replacement of Damaged Facilities* (SEC. 20606). This provision allows the President to provide incentives to grantees to invest in measures that increase

readiness for, and resilience from, a major disaster by recognizing those investments through a sliding scale that increases the minimum federal share. Implementing the approved language would give states concrete actions to incentivize resilience and empower them to take proactive steps to drive down disaster costs *before* an incident occurs. Despite the statutory one-year deadline, the lack of movement on implementing Sec. 20606 delays an opportunity for engagement and innovation to incentivize resilient strategies.

NEMA remains confident that raising the federal cost share for FEMA's post-disaster Public Assistance program from 75% up to 85% for proven mitigation measures represents a powerful motivator for all communities to invest in resilience. Were FEMA to demonstrate a willingness to recognize and reward such investments in mitigation and resilience by implementing this now six-year-old provision of law, it would inspire communities to harden themselves against future disasters by undertaking the prescribed actions.

### **INTEGRATING COMMUNITY LIFELINES INTO MITIGATION AND RESILIENCE EFFORTS**

BRIC is an opportunity to create transformative, community-based projects that work with the private sector, homeowners, locals, and other stakeholders that incentivize large infrastructure projects for community lifelines. Maryland officials have testified before Congress in the past on the importance of investing in resilient transportation and infrastructure projects which bolster our collective resilience in the face of disasters and cyber threats. As a designated community lifeline, resilient infrastructure and transportation networks will enable areas affected by disaster to more rapidly return to normal function.

Ensuring community lifelines, particularly energy and communication, are resilient against hazard impacts is a priority for Maryland and many other states to ensure the safety and security of our residents post-disaster. Proactive investments in mitigation can help enable the quick restoration of these community lifelines when impacted by disasters, which aids in response efforts, prevents loss of life and property, and decreases the overall cost of recovery. As the assets, services, and capabilities that comprise community lifelines are often owned and operated by the private sector, this further underscores the need to embrace partnerships and educate those outside of traditional emergency management on the role everyone can play in mitigation and resilience.

### **CONCLUSION**

On behalf of the state emergency managers, thank you again for holding this hearing and drawing attention to the needs of the emergency management community. In Maryland, we are acutely aware of the need to build upon the momentum from the implementation of the BRIC program to further improve mitigation and resilience efforts to ensure we effectively support our communities in their time of need. As you consider the topics of this hearing, please remember that investing in mitigation and resilience makes real differences in the lives of those affected by disasters and allows us to build back smarter to lessen the impacts of future events. While every community's approach to mitigation and resilience building will differ based on their unique risk environments, priorities, and areas of vulnerability, the cumulative effect will be a stronger nation better postured to adapt to the threats of the future.