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Testimony of
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Before the
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Emergency Management and Technology

Future of FEMA: Perspectives from the Emergency Management Community

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Marsh McLennan

Marsh McLennan is the world's leading professional services firm in the areas of risk, strategy, and people. Our more than 90,000 colleagues advise clients in 130 countries. We help corporate and public sector clients navigate an increasingly dynamic environment and address the most complex challenges of our time through four market-leading businesses — Marsh, Guy Carpenter, Mercer, and Oliver Wyman.

We have a deep understanding of disaster resilience and recovery issues, having been engaged with risk management and insurance challenges since our founding more than 150 years ago. We work with clients — including individuals, businesses, organizations, governments, and communities — to analyze their disaster risk exposures, help them implement solutions before, during, and after an event, and address and mitigate the financial impact of natural disasters through insurance and other risk transfer tools.

Executive Summary

The nation needs to have a clear vision — across all levels of government — that balances how best to prepare for and respond to disasters and foster resilience. The Federal Emergency Management Agency (FEMA) has long been a vital part of that vision.

Resilience

- There is an opportunity now to underscore FEMA's mission of supporting state and local governments *before* a disaster — as a risk advisor, steward of a culture of resilience, and a funder of high-impact community projects.
- With the ongoing increase in the frequency and severity of natural disasters, proactive measures are needed to mitigate risks and safeguard the well-being of communities.
- Risk reduction and risk transfer should be the cornerstone of a resilience-focused approach.
- Many states have developed innovative disaster resilience programs that support a national resilience strategy.

FEMA programs cut both ways

- FEMA's pre-disaster programs — such as the Homeland Security Grant Program (HSGP), Building Resilient Infrastructure and Communities (BRIC), and Flood Mitigation Assistance (FMA) — incentivize resilience.
- Others, such as some aspects of the FEMA Public Assistance grant program, create disincentives.
- FEMA should work to correct the belief among some people that they do not need to be financially prepared before disasters because, they wrongly think, the agency will make them whole.
- The agency should also encourage individuals to prioritize risk-reduction measures.

NFIP and private flood insurance

- Flooding remains the most common peril, involved in 90% of natural disasters in the US.
- Insurance, including through the National Flood Insurance Program (NFIP), is a critical aspect of a flood resilience strategy. However, there is a growing gap in funding flood losses through insurance, which results in many individuals, businesses, and communities not having the financial resources to recover following a flood.
- Reasons for low coverage rates include affordability constraints, limited risk awareness, poor understanding of insurance, and behavioral biases in decision-making. The continuing flood resilience gap in the US means that many individuals, businesses, and communities lack the financial resources to effectively recover following a flood or other disaster.
- The public and private flood insurance markets could be improved through strengthening and protecting the NFIP, growing the private flood insurance market, addressing gaps in coverage, embracing innovations such as parametric insurance, and more.
- At the same time, local building and zoning laws can go a long way to creating more resilient communities.

Innovative programs

- Programs such as community-based catastrophe insurance (CBCI) can help enhance financial resilience, provide affordable coverage, and incentivize risk reduction.
- Public-private collaboration will also be essential for developing solutions and incentivizing resilience to address the increasing impacts of natural disasters.

Introduction

On January 24, 2025, President Donald J. Trump issued an executive order (EO) establishing the Council to Assess the Federal Emergency Management Agency. The EO and associated Council present an opportunity to have needed conversations about potential FEMA reforms and, more broadly, appropriate levels of burden-sharing between federal, state, and local governments, as well as the private sector.

As stated in the New York Times:

> A growing number of federal emergency managers say FEMA is overextended. “The real question is how those burdens should be shared at all levels of government,” said Daniel Kaniewski, the second-highest ranking official at FEMA during Mr. Trump’s first administration and now a managing director at Marsh McLennan, a consulting firm.
>
> The past four administrators of FEMA — two appointed by Democrats, and two appointed by Mr. Trump — have made versions of that argument, calling for states to do more. But states generally want more help, not less.

The Stafford Act of 1988, the Homeland Security Act of 2002, and the National Flood Insurance Act of 1968 are the principal statutes that form the basis of FEMA’s mission. Adding in a patchwork of regulations, policies, and guidance, you can see the challenges facing recipients of FEMA

assistance and FEMA itself.

Numerous potential FEMA reforms have been proposed over the years by stakeholders, the Government Accountability Office (GAO), and various think tanks. Following Hurricanes Katrina and Maria, policymakers adopted reforms, such as the Post-Katrina Emergency Management Reform Act of 2006 and the Disaster Recovery Reform Act of 2018.

It's important to underscore that FEMA is not a first responder. State and local emergency managers are on the frontlines of disasters. Consistent with the Stafford Act, FEMA provides supplemental assistance when requested by a governor and approved by the President.

FEMA provides both a coordinating function among federal agencies and a funding mechanism through its Disaster Relief Fund. The goal of the agency is to support state and local governments and disaster survivors in their time of need.

While recent commentary has largely focused on FEMA's disaster response and recovery mission, this hearing and the President's EO provide an opportunity to consider the agency's equally important mission of helping state and local governments *before* a disaster strikes. The agency refers to this pre-disaster mission as "resilience," with FEMA Resilience housing its pre-disaster programs.

Marsh McLennan operates at the nexus of risk management and risk transfer, and is thus directly aligned with FEMA's resilience mission. Insurance plays a strong role in both signaling and mitigating risk, and as such can help inform state and local officials' risk-based decisions.

Insurance pricing is driven by the level of risk — for today's discussion, the frequency and severity of disasters. For example, some are questioning insurance pricing and whether Southern California communities remain insurable against wildfires. But the real question is whether we are prepared to match the magnitude of risks we face with the magnitude of effort required to manage them.

By reducing the physical and financial impacts of disasters, we can transfer risks off the backs of disaster survivors—and the federal balance sheet. To do so we must align on resilience as our collective North Star.

Resilience

Without a long-term commitment to resilience, society faces a never-ending risk crisis. We must break the cycle of destruction and instead build stronger and more resilient structures and communities. FEMA defines resilience as "the ability to prepare for threats and hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions." More practically, resilience at FEMA can be thought of as three equally important elements: preparedness, mitigation, and insurance. Each is a core component of the FEMA Resilience organization and, more generally, any emergency management resilience strategy, with each component complementary to the other. For example, investing in hazard mitigation can make insurance more available or affordable to a community.

In an era of escalating risks and evolving challenges, the insurance industry — like FEMA — is at a crossroads. As we witness the increasing frequency and severity of natural hazards such as flooding and wildfires, there is a pressing need for proactive measures to mitigate risks and safeguard the well-being of communities. Embracing the transformative power of risk reduction in

the built environment is not just a strategy for sustainable development; it is a vital step toward reducing federal taxpayer impacts and fortifying insurance markets against the uncertainties of our changing world.

Resilient reconstruction — rebuilding in a way that reduces future disaster impacts — also has a role to play. To rebuild following a disaster using the same guidelines and methods as before would be shortsighted. For example, California and Los Angeles officials are now considering how best to reconstruct the homes, businesses, and, in many cases, entire neighborhoods that were destroyed this year by wildfire. Incorporating fire-resistant building materials and adopting and enforcing wildland-urban interface (WUI) building codes would make LA more resilient to future wildfires. These actions would also encourage insurers to provide coverage.

By collectively prioritizing resilience, we have an opportunity to not only reduce the frequency and severity of losses, but also to foster a more resilient and insurable built environment.

FEMA incentives and disincentives

FEMA, through its various grant programs, both incentivizes and disincentivizes resilience investments by state and local governments.

FEMA programs that incentivize resilience

FEMA's pre-disaster programs aimed at incentivizing resilience include preparedness and hazard mitigation grants. The Homeland Security Grant Program (HSGP) is one example of a preparedness grant program, described as "a suite of risk-based grants to assist state, local, tribal and territorial efforts in preventing, protecting against, mitigating, responding to and recovering from acts of terrorism and other threats."

Other examples of grants that incentivize resilience include FEMA's Building Resilient Infrastructure and Communities (BRIC) and Flood Mitigation Assistance (FMA) grant programs. BRIC was created through the Disaster Recovery Reform Act of 2018 with the aim of reducing disaster losses; both programs provide funding for communities to reduce risks and build resilience.

FEMA's hazard mitigation grant programs have a demonstrable benefit to society. The National Institute of Building Sciences (NIBS) study Natural Hazard Mitigation Saves found that every $1 invested in disaster mitigation saves $6 in future disaster-related costs.

A 2024 report — The Preparedness Payoff — by the U.S. Chamber of Commerce and Allstate built on the NIBS findings and found that for every $1 invested in hazard mitigation, there is a return of $13 in reduced losses and economic savings.

Following a disaster, FEMA incentivizes resilient reconstruction through its Hazard Mitigation Grant Program (HMGP), which provides post-disaster hazard mitigation funding based on estimated total federal assistance provided following a presidentially declared disaster. This can be up to 15% (or 20% with a FEMA-designated enhanced state mitigation plan), which can be spent on allowable hazard mitigation activities.

And most importantly, mitigation measures not only save money—they save lives. More resilient homes, businesses, and infrastructure means individuals, employees, and families will be safe when disaster strikes.

FEMA programs that disincentivize resilience

There are also FEMA grants that can be seen as disincentivizing state and local governments from investing in resilience. These are the post-disaster Public Assistance (PA) grants, particularly those focused on so-called "permanent work." By providing a minimum reimbursement of 75% of disaster losses related to government infrastructure and buildings, the federal government provides *de facto* no-cost insurance to public entities. It does so without regard to any efforts made by these governments to reduce their risks.

Under the current approach, the federal government agrees to reimburse a state receiving a disaster declaration at a minimum of 75% of all costs, without regard to risk. No private insurance underwriter would agree to such terms. This creates a potential moral hazard, whereby the federal government shifts the costs of disaster risk from their communities to the federal taxpayer.

The most glaring of the various categories of Public Assistance is the so-called "Category E – Public Buildings and contents." In the 20 years from 1999 to 2019, FEMA provided $19 billion to states to reimburse them for their losses to public buildings and contents. At 22% of the total amount obligated during this period, it represents the largest share of any permanent work category.

FEMA and other stakeholders have long recognized both the burden such a program places on FEMA and federal taxpayers and how it discourages state and local governments from investing in resilience. Consider this example from 25 years ago, described in a RAND study on the FEMA PA program:

> In 2000, FEMA published an advance notice of proposed rulemaking in the Federal Register outlining potential reforms to the PA program. In the notice, FEMA argued that, by paying for facility repair costs regardless of whether the facility had insurance, the PA program creates a disincentive for the owner to obtain insurance before a disaster occurs. OIG echoed these concerns several years later, stating, "[T]he PA program pays for building repair costs following a first disaster. This effectively eliminates any incentive to purchase insurance before a disaster occurs.

In 2016, FEMA proposed a "disaster deductible" concept, which would have required a predetermined level of financial or other commitment from a state before providing PA funding.

> FEMA believes the deductible model would incentivize Recipients to make meaningful improvements in disaster planning, fiscal capacity for disaster response and recovery, and risk mitigation while contributing to more effective stewardship of taxpayer dollars. For example, Recipients could potentially receive credit toward their deductible requirement through proactive pre-event actions such as adopting enhanced building codes, establishing and maintaining a disaster relief fund or self-insurance plan, or adopting other measures that reduce the Recipient's risk from disaster events. The deductible model would increase stakeholder investment and participation in disaster recovery and building for future risk, thereby strengthening our nation's resilience to disaster events and reducing the cost of disasters in the long term.

More recently, in the first Trump Administration, the President's FY21 budget request included the following language (page 112):

> FEMA's current program is a no-limit, no-premium insurance policy for State and local

governments, which disincentivizes self-protection and burdens taxpayers with the risky decisions made by State and local governments. Eliminating this assistance will encourage State and local governments to more responsibly manage their risk, including better land management and planning, purchasing insurance, and/or investing in mitigation.

Despite the attention brought to Category E expenses over the past 25 years, no actions were taken.

Local governments own over 3 million buildings. Having the federal taxpayer pay for damage to these insurable structures represents a missed opportunity to transfer risk off the federal balance sheet and onto the private insurance markets. Thus, FEMA should consider eliminating eligibility for Category E projects.

Moreover, with the development of innovative risk transfer solutions, such as parametric insurance (described below), public infrastructure once thought to be uninsurable could be covered by the private insurance markets. This means that FEMA could consider limiting, over time, other categories of PA beyond Category E as governments and the insurance industry adjust to a new reality of public-private burden sharing.

FEMA assistance to individuals vs homeowners/renters insurance

Up to this point, we have focused on programs that provide funding to governments. But FEMA also provides funding to those impacted by disasters. The FEMA Individual and Households Program (IA) provides assistance to disaster survivors following a presidential declaration. FEMA IA provides a safety net, nothing more, nothing less. Those with insurance will recover more quickly and more fully than those who rely solely on FEMA assistance.

Insurance is a financial shock absorber for disasters. By purchasing homeowners or renters insurance, individuals are protecting themselves and their families against the financial trauma they would otherwise face in the wake of a disaster. This includes not only repairing or replacing your home and personal belongings, but also temporary housing and additional living expenses while you are displaced from your home. According to a recent study, those with property insurance were 82% less likely to have significant financial burdens after a hurricane than those without.

FEMA should do its best to correct a belief among many Americans that they do not need insurance because the agency will make them whole.

The process of buying insurance also forces homeowners (as well as business owners and governments) to understand their risks, and the price of these risks. Homeowners can consult home disaster guides produced by the industry-funded nonprofit Insurance Institute for Business & Home Safety to learn more about steps they can take to address these risks. Insurance agents and brokers can also help advise homeowners how best to mitigate these risks and potentially lower their premiums.

Similarly, FEMA should encourage homeowners in disaster-prone areas to invest in hazard mitigation measures, such as retrofitting a home in a seismically active area or elevating a home in a flood zone. Some of these actions are relatively easy and affordable, such as reducing the risk of wildfire losses by removing brush around a home. Taking these steps can save lives, reduce financial losses, and even reduce insurance premiums. For more on this topic, see: Americans lack savings for unrelenting disasters.

FEMA can incentivize individuals to take these actions by encouraging grant recipients (primarily states) to focus on community-based programs. States on their own can also incentivize these actions through grant programs to homeowners.

How FEMA can further incentivize resilience

As discussed earlier, FEMA preparedness and hazard mitigation grants incentivize resilience, while post-disaster Public Assistance grants generally disincentive governments from investing in resilience. One exception to this rule of thumb is the Public Assistance incentive authority granted to FEMA in the 2018 Balanced Budget Act.

FEMA Public Assistance Incentive Policy

The Public Assistance Incentive authority amends Section 406(b) of the Stafford Act to increase the federal cost share of its PA programs for communities that take proactive steps to reduce hazards. The resilience measures identified in the statute — mitigation plans, insurance, emergency management programs, building codes, risk ratings, state/local mitigation funding, and tax incentives — aim to reduce financial losses and human suffering while getting communities up and running quickly after a disaster. By raising the federal cost share for FEMA PA on a sliding scale from 75% to 85%, a community that takes proactive steps could receive millions of dollars more in post-disaster funding.

At the tail end of the last Administration, FEMA issued an interim Public Assistance Mitigation Cost Share Incentives Policy. However, as noted in a letter from BuildStrong America, signed by our firm and such organizations as the National Institute of Building Sciences and the U.S. Chamber of Commerce:

> While the law aimed to incentivize proactive state investments in risk reduction, the interim policy falls short of meeting congressional intent, missing critical opportunities to operationalize key measures of the law.

Instead of encouraging proactive state and local investments in disaster resilience, the interim policy spends additional taxpayer funds on post-disaster activities. Rather than encouraging pre-disaster mitigation, it focuses on post-disaster grant compliance. It disregards effective state-led resilience programs, neglects critical infrastructure, ignores the role of insurance, and fails to acknowledge the tools emergency managers could employ to build resilience.

We encourage FEMA to revise the interim policy to foster a proactive approach to resilience. The policy should empower states, recognize successful programs, and prioritize essential mitigation measures to safeguard our communities from future disaster risks.

Insurance roadblocks

Insurance is just as critical to achieving resilience as are preparedness and mitigation, yet applicants may not purchase insurance under existing FEMA grant programs. This poses a challenge for state and local officials who wish to reduce the financial risks to their communities. It also stands in contrast to other resilience measures which *are* eligible under FEMA grants programs. Thus, a community that has already taken other resilience actions is not eligible to protect their (and, in the case of those actions funded by federal grants, the federal taxpayers') investment.

Further, the PA program creates additional challenges. Without insurance, a community struck by a disaster will be eligible for federal assistance following a presidential disaster declaration. Those with insurance will not. This creates a disincentive for governments to use insurance to protect themselves and their communities from the financial impacts of disasters, resulting in a potential moral hazard underwritten by the federal taxpayer.

New challenges

With recent reported staff cuts at FEMA, the agency is being asked to do more with less and may need to triage where it spends its limited resources. Historically, when its funding runs low or the agency is stretched thin due to current disasters, FEMA prioritizes the immediate needs of disaster survivors. Whether due to staff shortages or other resource constraints, this could mean a shift away from resilience activities, which could have significant long-term implications for communities at risk of disasters.

Such a disruption could mean a larger role for state and local governments, and the insurance industry. The conversation about burden-sharing among federal, state, and local governments will become more acute. Even if programs continue to exist, staff shortages could mean delays in the delivery of assistance. Such delays could be financially untenable for state and local governments with cash flow needs, making insurance more necessary for state and local governments.

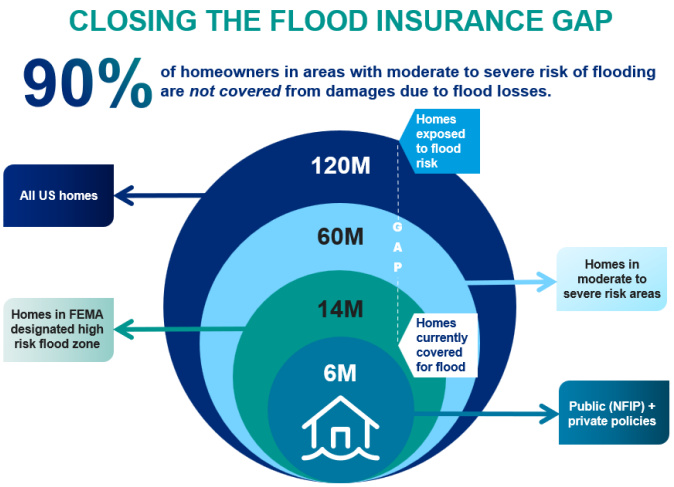
Thus, the insurance industry should be prepared to support state and local officials as they consider alternative funding arrangements, including budgeting for disasters with “rainy day funds” and placing insurance to reduce budget impacts.

NFIP and the private flood insurance market

While FEMA takes an all-hazards approach, flooding remains a persistent peril, with 90% of natural disasters in the US involving floods. Flooding disproportionately affects lower-income communities, which are more vulnerable and more exposed to flooding. One way to help bridge the divide is by increasing participation in flood insurance. Studies have shown that individuals and communities with flood insurance recover better and faster than those without.

It’s important to keep in mind that insurance is but one piece of a flood resilience strategy, along with investment in risk reduction measures, enhanced access to flood risk data, and smarter land use planning. But, while insurance is a critical part of recovery from natural disasters, many households and businesses simply do not have adequate coverage for repairs and rebuilding.

In fact, as stated in a recent report from Marsh McLennan’s Torrent Technologies: “There is a persistent and growing gap in funding flood losses through insurance. Closing this gap is essential for accelerating recovery, alleviating suffering, and enhancing flood resilience.”



The reasons for low coverage rates vary and include affordability constraints, limited risk awareness, poor understanding of insurance, and behavioral biases in decision-making. The continuing flood resilience gap in the US means that many individuals, businesses, and communities do not have the financial resources to effectively recover following a flood or other disaster.

We believe there are several ways to improve the public and private flood insurance markets, including:

Strengthen the NFIP. With current debt of more than $22 billion and hundreds of millions of dollars in interest payable annually, the NFIP needs reform and long-term reauthorization to become a sustainable source of flood insurance. A sound financial framework for the NFIP authorized by Congress would help reinforce the program.

A key part of FEMA's sound financial framework is its new pricing methodology, Risk Rating 2.0. The rating program is intended to make NFIP premiums more actuarially sound to better reflect the underlying flood risk and recognize loss mitigation efforts. To address affordability concerns associated with the new risk-adjusted rates, Congress could consider authorizing targeted assistance, such as a means-tested assistance program.

Protect the NFIP with reinsurance solutions. Guy Carpenter, a business of Marsh McLennan, is FEMA's broker, securing reinsurance for the NFIP. Reinsurance is backed by professional reinsurers and capital market investors; these programs help to supplement the financial resources of the NFIP following significant flooding events, while at the same time protecting the NFIP and taxpayers by transferring risk. For example, Hurricane Harvey triggered a full reinsurance payout, saving taxpayers over $850 million.

Grow the private flood market. FEMA has proposed a package of NFIP reforms in which the agency recognizes the role of a private flood insurance market in supplementing and supporting the government-backed program. As flood risks increase, so too has the need for the private flood insurance market, which is expected to keep growing.

At the same time, advances in risk assessment and data analytics are making the flood peril increasingly predictable and revealing that many properties — especially those outside FEMA flood zones—are at greater risk than previously understood.

Private flood insurance can offer options that make purchasing flood coverage easier and more attractive. Each property that obtains flood coverage in the private market is a risk the NFIP and US taxpayers do not have to bear. The private market offers the possibility for innovation and products to further close the flood insurance gap.

Address gaps in NFIP coverage. The NFIP has gaps in coverage for residential and commercial properties. For residential properties, additional living expenses (funds to pay living expenses while the flooded property is repaired) are not included in NFIP policies. For commercial properties, business interruption is not covered by NFIP. As we have seen in previous flood events, those homeowners and businesses without these types of coverage struggled to recover. Of note, private

flood policies often do cover these expenses for homeowners and businesses.

Embrace innovations such as parametric insurance. To attract new stakeholders, the flood insurance market and its regulators must embrace innovative alternatives that complement the NFIP. One option that has gained increasing traction in recent years is parametric insurance, which deploys a measurable index with predefined triggers for payout.

Unlike most forms of traditional property insurance, pricing is based primarily on the probability of the loss indexed being triggered, rather than by the specific risk of damage suffered by the benefit's recipients. Parametric solutions offer a more expedited contract payout, typically getting funds into the hands of those who have suffered a loss in a matter of days, which can accelerate recovery. This is particularly important when it comes to floods, as a delay in restoration can result in the proliferation of mold, which over time contributes to health problems.

Promote excess flood coverage to complement the NFIP. While the NFIP remains a valuable source of flood insurance, its coverage limits are insufficient for many higher-value properties with flood exposure. Such properties need excess coverage to supplement NFIP protection. For example, in the third quarter of 2023, the median price of homes sold in the US was $431,000, according to Federal Reserve data; this substantially exceeds the NFIP dwelling limit of $250,000.

Leverage existing NFIP incentive programs such as the Community Rating System (CRS). CRS is a voluntary incentive program that recognizes and encourages community floodplain management practices that exceed the NFIP's minimum requirements. Over 1,500 communities participate nationwide.

In CRS communities, flood insurance premium rates are discounted to reflect the reduced flood risk that results from community efforts to address the program's three goals:

1. Reduce and avoid flood damage to insurable property.
2. Strengthen and support the insurance aspects of the NFIP.
3. Foster comprehensive floodplain management.

Tulsa, Oklahoma, and Roseville, California, are the only two communities to have achieved the highest rating of Class 1. NFIP policyholders in these cities receive the CRS program maximum discount of 45%. Both communities made concerted efforts to invest in flood resilience following catastrophic flooding events.

See also: As Floods Become Bigger and More Common, Risks from Insurance Gaps Also Grow

Innovative state and local resilience programs

As FEMA has put in place resilience programs, states too have launched programs that build resilience.

While federal resilience grants often receive the most attention, several states are allocating state budgets and leveraging other funding sources to build resilience programs. For example, South Carolina's Strategic Statewide Resilience and Risk Reduction Plan is notable because it's not simply a plan; the state provided $200 million to fund identified project priorities, largely focused on flood resilience.

Other states offer resilience grant programs directed to homeowners. Many of these programs are

in the southeastern US and focus on home retrofits for wind events, such as hurricanes and tornadoes.

Alabama: The Strengthen Alabama Homes program provides grants for homeowners to fund wind mitigation measures for single-family homes. The grants pay 100% of mitigation costs up to $10,000 to meet the Insurance Institute for Business and Home Safety (IBHS) FORTIFIED™ standard, designed to reduce wind and wind-driven water impacts caused by hurricanes. Funding for this program is provided by the insurance industry, rather than the government (which administers the program).

Given the program has been providing homeowners grants for a decade, researchers from the University of Alabama, Auburn University, and the University of Mississippi sought to determine the benefits of the program, and of hazard mitigation investments more broadly. Their landmark study empirically demonstrated the value of hazard mitigation investments, providing strong incentives for homeowners to invest in hazard mitigation:

- **Lower insurance premiums**: *Fortified* homes have 16% to 40% lower property insurance premiums.
- **Higher resale value**: *Fortified* homes sell for 6% to 7% more than other homes.

This is not a federal program, but a standard promulgated by a non-profit organization (IBHS) together with a state statute linked to insurance premiums and real estate market dynamics. The study's findings demonstrate that a homeowner can be incentivized to invest in hazard mitigation even in the absence of federal funding.

Florida: My Safe Florida Home Program aims at strengthening homes against hurricanes. Owners of single-family homes and townhouses may apply for a free home hurricane inspection. If recommended by the inspection, homeowners become eligible to apply for financial assistance for improvements to roofs, doors, and windows. It is a matching program — for every $1 invested by the homeowner the state will provide $2 toward the project, equivalent to two-thirds of the project cost, up to $10,000. The program also waives state sales tax (6%) on the retail purchases of impact-resistant doors, garage doors, and windows. The Florida legislature provided over $176 million for the program.

South Carolina: The South Carolina Safe Home program, administered by the South Carolina Department of Insurance, provides matching and non-matching grant funds to help coastal property owners retrofit their homes to make them more resistant to hurricanes and high winds. The funds provided by the program are for the sole purpose of retrofitting owner-occupied, single-family homes.

Louisiana: Louisiana officials launched a $30 million hazard mitigation grant program for residential and commercial buildings, modeled on the above-mentioned Alabama program. The grants will provide up to $10,000 to retrofit roofs to a *Fortified* home standard, thereby making Louisiana homes and businesses more resilient to hurricanes. Unlike the Alabama program, which is funded by the insurance industry, the Louisiana program is state-funded. Similar to what researchers found in Alabama, Louisiana residents who retrofit or build their homes to the *Fortified* standard could save 20% to over 50% on the wind portion of their homeowner's insurance.

Building codes and zoning laws

Local officials have significant influence over the resilience of their communities because they can

determine how and where residential and commercial structures are sited and built. This is best demonstrated through zoning and building code ordinances. By requiring that structures be situated outside disaster-prone areas and built to a resilient standard, local officials can reduce disaster impacts to their communities. NIBS has determined that adopting a disaster-resistant model building code results in a savings of $11 for every $1 spent to adopt and enforce the code.

In the decades since Hurricane Andrew struck southern Florida in 1992, the state has developed some of the country's strongest building codes, which are credited with significantly reducing the damage from hurricanes. Among other things, Florida's building codes require new construction to withstand high winds, floodwaters, and other storm-related stresses. This has helped protect homes and reduced the overall impact hurricanes have on communities, avoiding more than $1 billion in average insured losses for Florida alone.

Community-based catastrophe insurance

An innovative approach to boost financial protection for communities that Marsh McLennan is involved in is known as community-based catastrophe insurance (CBCI). Essentially, CBCI provides disaster insurance arranged by a local government, quasi-governmental body, or community group to cover a group of properties.

The benefits of CBCI fall into three main areas: enhancing financial resilience, providing affordable coverage, and creating incentives for risk reduction at the community and individual levels (see Figure 1).

Figure 01: Potential benefits of CBCI

Source: Marsh McLennan

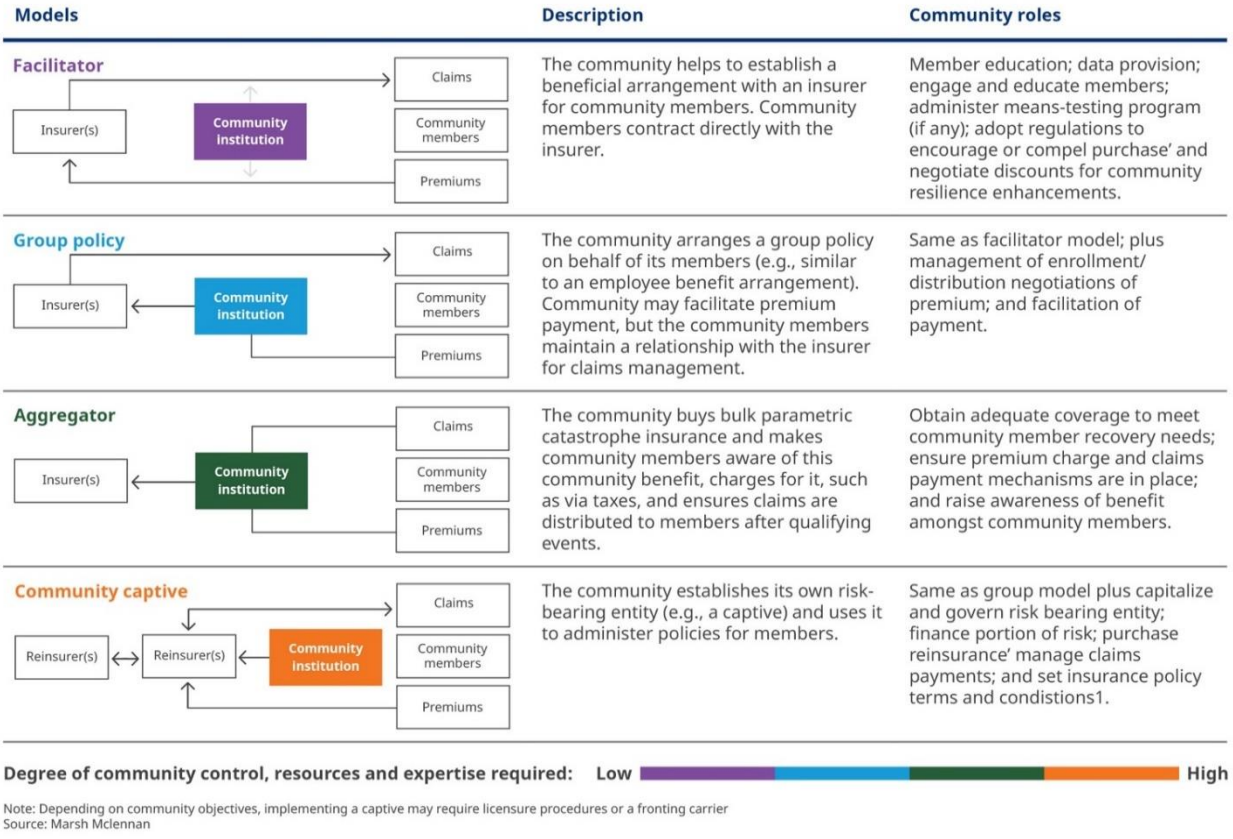
This type of program is flexible and can be created to cover a single hazard or a range of natural disasters for a given community, including floods, wildfires, earthquakes, and others. Such broad applications can further incentivize a community's risk management efforts — risk reduction, risk communication, and risk transfer — across multiple perils.

One benefit of community-based catastrophe insurance is the flexibility it allows in defining

"community," which can be an agency or municipal government, a neighborhood association, a business improvement district, or any number of entities. The primary requirement is that the involved community has the authority to secure or facilitate insurance coverage on behalf of multiple properties.

Within broad parameters, CBCI has much flexibility in its structure and design, with varying degrees of community responsibilities possible (see Figure 2). These range from a facilitator model, where the community members contract with insurers, to a captive insurer, in which the community establishes and operates its own risk-bearing entity.

Figure 2: CBCI delivery models



Note: Depending on community objectives, implementing a captive may require licensure procedures or a fronting carrier
Source: Marsh Mclennan

To facilitate these types of transactions, it would be helpful for FEMA to allow eligibility for grant funding for CBCI, and to clarify whether the proceeds from a parametric insurance policy (specifically tailored to cover losses not eligible under the Public Assistance program) can count toward the state's Public Assistance matching requirement.

A CBCI pilot program: Boosting financial resilience in NYC neighborhoods

Marsh McLennan is currently involved with a project in New York City, which is the nation's first CBCI. The project's goal is to increase the financial resilience of low- and moderate-income

households to flood risk. These communities are increasingly vulnerable to flooding and are, in many instances, under-insured or uninsured.

Guy Carpenter, a business of Marsh McLennan, is working with the City of New York; the non-profits Center for NYC Neighborhoods (CNYCN), Environmental Defense Fund, and SBP; reinsurer Swiss Re; and insurtechs ICEYE and Raincoat to pilot the program in designated neighborhoods.

The program, which was recently renewed for a second year, is built on a parametric model, described earlier. Once a qualified event triggers a payment, homeowners can apply for assistance. Qualified applicants can then quickly receive a grant up to $15,000 from CNYCN following a qualified flood event.

The payments will support residents and their broader communities in getting back to normal faster. We are proud to have helped kickstart this innovative program and hope it will help other communities to establish their own CBCI program. Federal grant funding could be a catalyst here.

Public-private partnerships

What the insurance industry can do

Public-private collaboration involving policymakers is essential for developing sustainable solutions.

Relationships matter in insurance. For example, insurance agents often have strong connections with homeowners and businesses in their communities. We believe that agents and brokers talking with clients about their exposure and ways they can manage the risk and build resilience is a good way for them to demonstrate their value and enhance those relationships. Likewise, insurers and reinsurers should see how resilience actions by their insureds not only reduce risks to an individual home or business, but also to the (re)insurer's portfolio.

The insurance industry and FEMA should work with national stakeholder organizations that advocate and educate on the importance of resilience as a force multiplier at the state and local levels. For example, BuildStrong America has advocated for increased investments in resilience on the federal and state level for over a decade. Joining forces with firefighters, emergency responders, insurers, engineers, architects, contractors, manufacturers, consumer organizations, code specialists, and many others committed to resilience, BuildStrong successfully pushed for the Disaster Recovery Reform Act of 2018. The Act created FEMA's BRIC program, as well as additional measures to enhance BRIC through proposals like the Resilient AMERICA Act, which would create a set-aside for building code adoption and enforcement and another set-aside for residential retrofits.

The Federal Alliance for Safe Homes (FLASH) is the leading consumer advocate for strengthening homes and safeguarding families from natural and manmade disasters. Through programs like Inspect2Protect— which helps local communities and individuals to understand the building code where they live — and The Homeowner's Guide to Insurance, FLASH designs and develops effective and easy-to-use tools and techniques to foster mitigation behavior change.

The insurance industry and other stakeholders should work with FEMA and consensus-based model code-developing organizations, such as the International Code Council (ICC), to encourage additional hazard mitigation opportunities and investments for communities and individuals. For example, FEMA and the insurance industry could encourage modern code adoption and enforcement requirements following a major disaster. Currently, only repair and reconstruction of public facilities is required to be done to the latest editions of model codes.

How the private sector can incentivize resilience

In addition to FEMA's preparedness and hazard mitigation grants, the finance, insurance, and real estate industries can also incentivize resilience investments. The National Institute of Building Sciences (NIBS) developed a roadmap for resilience incentives, specifically focused on residential buildings subject to flood. NIBS identified "co-beneficiaries" of mitigation investments and highlighted how these co-beneficiaries can help pay for such investments (see Figures 4 and 5).

Figure 4: How resilience provides value

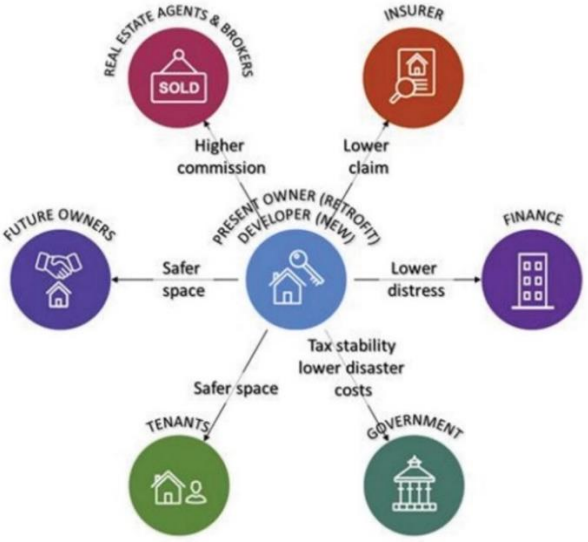
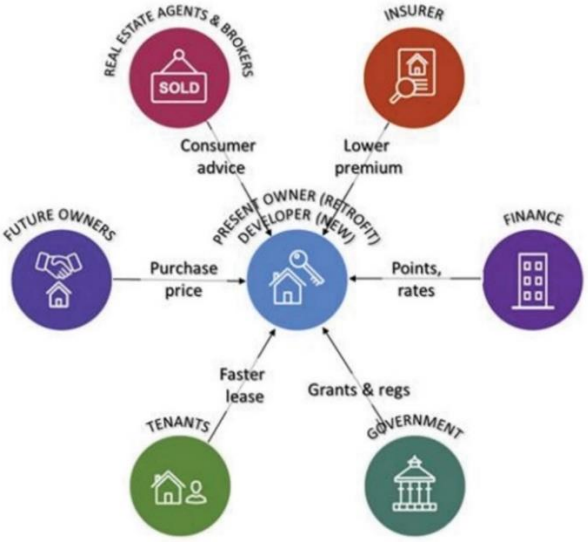


Figure 5: How co-beneficiaries can help pay



Source: "National Institute of Building Sciences", Resilience Incentivization Roadmap 2.0, Page v, Figures ES1-A and ES1-B

Engaging co-beneficiaries is not without its challenges, as the NIBS report highlights:

1. **Mitigation saves, but it doesn't do so in proportion to individual stakeholder investments.** Investment in disaster resilience makes financial sense for society — but for individual stakeholders the cost can seem to exceed the benefits.

   For example, the $5,000 it might cost to retrofit an existing house benefits the current owner, future owners, insurers (by limiting the risk of flood-related claims, assuming the property is insured against flood), financial institutions holding the property owner's mortgage, and so forth. The retrofit saves society more than it costs in places with at least a 1-in-100 chance of basement flooding per year. It saves up to 13 times the cost in the highest hazard locations.

   But, to the homeowner paying the entire cost, the investment can seem hard to justify. (Building for flood resilience at the time of initial construction is less expensive and more cost-effective, and it makes sense even when flooding occurs less frequently.)

2. **Co-beneficiaries can share the cost of such investments — but they face similar challenges to those of the property owner.** In the $5,000 basement-flood retrofit example, mortgage holders and governments would save in the long run by offering a total of $3,300 in incentives anywhere with at least a 1-in-100 chance of basement flooding per year. Homeowners would end up paying only $1,700 and saving more than they pay in both

moderate- as well as high-hazard locations. Why don't co-beneficiaries provide these incentives? Because stakeholders' interests are intertwined, but not aligned.

3. **Public-private coordination is essential.** Co-beneficiaries are interested in aligning incentives, though it would require engagement from governments and industry stakeholders.

Engaging industry and government stakeholders to align resilience incentives is essential, just as we raised with the financial services sector at a U.S. Department of the Treasury roundtable following Hurricanes Helene and Milton.

A comprehensive resilience strategy

Federal, state, and local officials need a clear vision that moves beyond unsustainable paradigms of protection and strikes a balance between addressing crises and fostering resilience. Insurance and risk transfer certainly have an important role to play, but must be combined with a broader, coordinated resilience strategy.

Ideally, insurance would be paired with risk reduction measures such as hazard mitigation, building codes adoption, enforcement, retrofits, and community resilience planning. While a few states (such as those mentioned earlier) have their own resilience grant programs, the preponderance of resilience grant funding is provided by the federal government, principally FEMA (such as through the BRIC and FMA programs).

Pairing these federal and/or state grants with risk transfer solutions can be a force multiplier. We believe that CBCI projects, like the NYC pilot, demonstrate the value of risk reduction measures alongside the benefits of risk transfer. We would like to see FEMA encourage more such innovation and experimentation.

That said, CBCI and other private risk transfer programs could be more successful if disincentives present in existing statutes and regulations are addressed. For example, the Stafford Act contains disincentives for homeowners and governments from purchasing insurance because FEMA's recovery programs provide funding to uninsured individuals and state and local governments after a disaster.

As such, many individuals wrongly believe they will be made whole by FEMA assistance following a major disaster. Meanwhile, governments are not inclined to insure their buildings and infrastructure because they will receive funding that covers most of their losses if the president declares a disaster. Mitigation investment will fall short of desired outcomes without corresponding risk transfer strategies.

Conclusion

Given the scale and complexity of the challenges presented by disaster risk, we believe that FEMA plays a vital role in preparing for, responding to, and mitigating disasters. As with any longstanding organization, it is good to revisit its mission, tools, and impact at times, and we are glad to have been asked to participate in this hearing.

While the effects of disasters are felt most acutely in the states and communities where they occur, their ripple effects extend more broadly to human, economic, and social costs such as supply chain disruptions, infrastructure failure, and hardship to the economy. Over time, FEMA has had a positive influence in helping to mitigate and manage the risks.

Today, conventional strategies and policies are insufficient to address the rapidly changing risk levels, and it appears we are at a time in which market forces are helping to drive decision-making toward the social good promoted by resilience.

The federal government's unqualified financial support of the nation's spiraling disaster recovery costs is unsustainable. FEMA and emergency management agencies at all levels of government need to embrace a proactive approach that prioritizes preparedness, hazard mitigation, and insurance. In short, disaster resilience. But governments alone cannot solve this challenge.

Achieving resilience will require partnerships between governments and private industry. Together, the public and private sectors can incentivize individuals and governments to reduce disaster impacts and build resilience in their homes, and their communities.