

America Prepared: A New Approach

Building a Nation Prepared for Extreme Weather

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THE OPPORTUNITY

With each new extreme weather event ravaging the country—whether a flood, wildfire, prolonged drought, superstorm, or extreme heat wave—the nation turns its attention to saving lives and rebuilding. But as the frequency and intensity of such events grow, it is increasingly clear that we need to rethink this reactive approach. Preventative solutions already exist—for example, burying electrical wiring underground and adding storage backup to avoid power disruptions, building with advanced materials to reduce wildfire risk, restoring and [avoiding floodplains](#) to reduce storm surge impacts—but are not being adopted at the scale needed.

Box 1. Definitions

Resilience is the ability to withstand and recover rapidly from adverse conditions and disruptions.

Preparedness involves actions that prepare for threat and hazards, adapt to changing conditions, and reduce the impact of hazards on communities, businesses, and people.

Federal policy and programs can play a critical role in helping communities—especially those with limited resources—ensure both security and economic vitality in the face of increasing threats from natural hazards. But to get there, the federal government needs a more coordinated approach to empower state and local governments, as well as local institutions and private-sector partners that are working hand in hand with homeowners, businesses, and local and Tribal governments. Together, we can make our communities safer, reducing impacts and the cost and time for recovery.

In this brief we recommend four critical proactive actions the federal government could take to effectively and cost-efficiently prepare the nation for these extreme events and reduce their catastrophic impacts.

“Taxpayers nationwide are also on the hook. Since 2020, Congress has appropriated an average of \$46 billion per year for disaster relief, triple the average of the prior decade (in constant 2023 dollars). Late last year, Congress rushed through \$100 billion in aid for disasters including hurricanes Helene and Milton.” Greg Ip, The Wall Street Journal

WHY FEDERAL LEADERSHIP IS NEEDED

While preventative actions need to be taken at all levels, the federal government is in a unique position to empower, accelerate, and inform action by households, businesses, farms, and state and local governments:

- The federal government is the insurer of last resort, facing increasing expenditures of taxpayer dollars
- National research and innovation support can enable development of new preparedness technologies and services enhancing global competitiveness and local economies
- The federal government manages national weather satellite instrumentation and technical expertise and is the sole provider of weather data and predictions critical to planning
- Federal programs can fund and empower state and local action
- National tax and financial policies can enable private-sector resilience financing necessary to complement public spending.

Federal investment in preparedness is necessary to reduce fiscal exposure from the ballooning costs of natural hazards being picked up by governments—and thus ensure responsible stewardship of taxpayer dollars (Box 2). Proactively strengthening infrastructure and communities now is far more cost-effective than paying for disaster recovery later. Each federal dollar invested in preparedness saves an estimated \$4 to \$17 depending on the type of investment (see [Appendix](#) for details).

Federal incentives for private-sector investment and innovation can promote economic growth and competitiveness. US innovations in building better and stronger can feed an emerging global resilience economy. The market for climate resilient related investments is projected to reach **\$2 trillion annually by 2026**, according to Bloomberg. Federal investment in private sector resilience solutions through [research hubs](#), climate data centers, [technology accelerators](#), [innovation incubators](#), and national innovation competitions can help the United States compete in this globally expanding sector. Federal action can also support our emergent export sector, connecting American businesses to customers worldwide. Federal [investments](#) are critical to accelerate the advancement in and deployment of a wide variety of products and services: early warning systems, coastal barriers, solar-powered desalination and wastewater treatment, vertical farming and hydroponic agriculture, drought-resistant seeds, more efficient irrigation techniques, improved cooling and insulation, climate-adapted housing, nature-based solutions, and a variety of other innovations underway on resilient infrastructure and technology.

Box 2. Costs and Financial Risk for the Federal Government Given Current Trends

Weather-related losses are already significant and are projected to grow even more as part of the federal budget and national debt in the years ahead. According to NOAA, the cost of extreme weather events in the United States in 2022 totaled more than \$165 billion. And this cost fails to capture the devastation from lives lost, the toll on health care, and the impacts on American families and communities upended and displaced. The rising costs are driven by increased exposure, with population and urban growth in high-risk areas near coasts, wildfire-prone forests and grasslands, and river floodplains. But many long-settled communities, including rural towns and small and mid-sized cities, also face growing threats and losses.

Shifting climate is also contributing to the increasing frequency and intensity of certain types of extreme weather. OMB estimates that the nation will face \$134 billion in annual expenditure impacts for six types of disasters—and as much as \$2 trillion in lost revenue annually by the end of the century.

GAO has identified six sectors that pose significant financial risks to the federal government resulting from the projected impacts of climate change: crop insurance, coastal disaster relief, health care expenditures, wildland fire suppression, flood insurance, and sea level rise. Federal flood insurance payouts are expected to increase by \$4 billion per year by 2050, while hurricanes could reduce America's balance sheet by \$36 billion per year by the same time. These findings underscore the urgent need for proactive measures to curb rising costs.

Due to scale and cost of instrumentation (such as geospatial weather satellites) and expertise, the federal government is uniquely positioned to collect accurate, forward-looking technical data on the shifting scope of extreme weather events. The federal government provides both (1) data on natural hazard-related risks through a number of science agencies (NOAA, USDA, USGS, and others) and (2) funding for use of this data for local planning and projects. This allows the federal government to develop authoritative projections of future risk and support their use by state and local governments and businesses. However, to take full advantage of these data, they need to be translated into information that is more forward-looking, consistent, and user-friendly so it can be used by local planners, investors, and construction firms (Box 3).

The federal government also can play a critical role to ensure that national funding for preparedness reaches the communities that need it most. The majority of federal funding to support communities facing weather-related disasters is still reactive, tied to disaster declarations, rather than proactively targeting communities at the highest risk of future losses. The evidence shows that this is a major problem for many communities, but especially those that are exposed to increasingly frequent extreme weather events, leaving them little time to recover—let alone build resilience—before the next shock hits. What funding is available for preparedness is scattered across agencies and programs, difficult for communities to navigate, has complicated planning and application processes, and is offered at funding levels insufficient to meet the apparent need (Box 4).

Targeted federal incentives and policies can crowd-in private-sector resilience financing. Companies from insurance to shipping to agriculture increasingly experience the economic impacts from large-scale disasters on their workforce, supply chains, and bottom line.

Box 3. Advancements Needed in Federal Weather and Hazard Data

Forward-looking: Many federal datasets are still based on past trends, even though it is known that the scale, severity, and frequency of extreme weather events is shifting. While there are some efforts to include projections of future risk, they are moving too slowly.

Consistent and clear: Different federal agencies use different models and have different projections of future hazards and risks. As a result, there is no clear federal standard for which data should be used. The lack of clarity creates uncertainty and risk for engineers, builders, investors, and local governments, who are forced to choose which standard to use. Uncertainty makes it difficult for local officials to plan for infrastructure projects that can withstand future risk.

User-friendly and actionable: Climate and natural hazard data and projections need to be downscaled and incorporated into user-friendly applications relevant to local decision-making. Local officials need the ability to incorporate information on changing risks into local decisions, such as where to build roads, how to update zoning maps or what is needed for upgrading stormwater systems. Local planners and investors increasingly recognize these growing risks but lack the broadly available models and tools to integrate these risks into their decision-making. User-friendly models and tools are needed for the full suite of risks a community faces. At this time, only well-resourced communities, startups in emerging industries (such as InsurTech), and well-trained private-sector consultants have the expertise to use, supplement, and enhance existing data and models.

Box 4. Example of Insufficient Funding for Preparedness

The federal funds available for pre-disaster mitigation, such as FEMA's Building Resilient Infrastructure and Communities (BRIC), DOE's Home Energy Rebates, DOT's PROTECT grants, and the USDA's Rural Development programs, are critical and have historically had strong bipartisan support. However, demand continues to outpace supply, with rural and less-populous states often left behind. For example, in 2020–2021, fewer than 10% of nationally competitive BRIC grant submissions were funded, with more than 80% of awards going to wealthier, more populous states and leaving rural communities with little access to the funds. While this is indicative, there is no comprehensive analysis on the scale of funding available relative to the resources needed to finance resilience across America. The misalignment between funding distribution and risk prioritization must be addressed to ensure all communities are equally protected.

They are thus increasingly more interested in partnering in resilience-building. The financial sector and local financial managers are similarly interested in **long-term value creation through resilience investment of their assets**. Private-sector investors are emerging as important partners for innovative financial products and policies such as catastrophe bonds and **green bonds** for climate adaptation projects. Local governments are exploring **resilience utility districts**, **infrastructure banks**, and tax increment financing.

These financial instruments can attract private investment to fund resilience projects and pre-disaster mitigation, but these tools often require public incentives like revolving loan funds, tradable tax credits, or credit enhancements (such as federal or state loan guarantees or loan insurance) to catalyze and/or scale private investment. Federal incentives, such as lower federal cost share requirements, and targeted tax incentives, like enhanced low-income housing tax credits, can also make these financial tools accessible to smaller, more rural, and less-advantaged communities.

RECOMMENDED CONGRESSIONAL ACTION

Despite the inherent need, federal action on preparedness has been hampered by a piecemeal approach. Supporting preparedness has been a [complex task for the federal government](#) given the expansive nature of hazard mitigation, which encompasses all types of perils (e.g., flooding, wildfire, extreme heat, sea level rise, hurricanes) and affects a vast array of infrastructure and services (homes, roads, businesses, farms, communications, electricity, hospitals, schools, and more). And those are just the major categories of impacts centered on physical hazard to property, not to mention the profound effects on health—both physical and mental— and the ability to go to school, work, and earn income, among other routines of daily life.

The GAO reported that federal agencies are not regularly prioritizing funding by projects' potential to reduce future risk. They identified a number of reasons for this, including the varying nature of the risk and local needs, the need for coordination with local governments and communities, and the need for congressional authority.

Congressional action is needed to help focus the power of federal action on addressing the preparedness needs of the nation. Extreme weather events impact the entire country, transcending geographic boundaries and political division. A wide range of constituencies have supported congressional action on resilience and preparedness (see the [Appendix](#) for a list). Congress has demonstrated its heightened concern over the last five years by introducing more than 50 bipartisan resilience- and adaptation-related bills. These bills cover a wide range of topics, including resilient forest and rangeland management, updating building codes, coastal adaptation planning, pre-disaster planning and preparedness, evaluation of flood risks over the lifetime of federally funded projects, wildfire risk reduction programs, and use of green infrastructure to protect water utilities. However, taking on each of these specific issues individually and without consideration of overlapping needs and how to best get resources for communities is likely inefficient and potentially ineffective.

A first step should be to lay the groundwork to support a coordinated and cost-effective federal approach, as called for by GAO. As a helpful starting point, [GAO recommended legislation](#) to authorize changes to federal investments to limit fiscal exposure while ensuring that each dollar spent on resilience delivers maximum impact. To achieve this, GAO identified a national climate resilience strategic plan, a national climate information system, and expanded use of economics information to prioritize action and investment based on risk. By taking a fiscally responsible approach to climate adaptation, the federal government can protect both the economy and taxpayers from the escalating costs of inaction.

Extreme weather events and natural hazards impact virtually every congressional district in the country, transcending geographic boundaries and political division. Congress can capitalize on the [public's interest in preparedness](#) to coordinate federal actions for efficiency and effectiveness. They can:

1. Empower a national preparedness lead with presidential authority
2. Develop and implement a National Preparedness and Resilience Plan
3. Align climate-informed information on extreme weather and natural hazard risks and build an information pipeline to support local decision-making
4. Simplify federal support for risk reduction and empower state and local action

Recommendation 1:

Empower a National Preparedness Lead with Presidential Authority

Establish a new top-level federal position with the authority to create and implement a national resilience strategy that reshapes federal preparedness capacity and resources.

Experience has shown that a dedicated lead with direct authority from Congress and access to the President is necessary to provide cohesive federal leadership for such a complex cross-government, all-of-society issue.

A preparedness lead will need the power to coordinate across federal agencies and work with Congress in a focused and accountable way on policies, annual budget proposals, and more. They will also need to engage with the private and nonprofit sectors and engage state, local, territorial, and Tribal governments to create and implement a national resilience strategy that reshapes federal capacity and resources. The preparedness lead would also be positioned to engage, when needed, with counterparts in other nations on national security, commerce and trade, and other vital issues that cross borders. This lead would be the primary voice for federal action to build preparedness—reframing resilience as proactive and cost-effective investment, not just disaster response—keeping federal action aligned and coordinated, all while working with agencies to strategically establish and energize partnerships with local and Tribal governments, community organizations, the private sector, and philanthropies.

This leadership role could be established within an existing executive office or as a senior advisor in the White House with dedicated staff in critical offices such as NSC, OSTP, OMB, CEA, and CEQ. See Box 5 for several examples of how this could be structured.

Former federal officials believe it would be difficult for a preparedness lead to have the necessary authority to be effective without a direct line to the White House and its established policy and budget units. Any authorized new functions will need clear lines of accountability and relationship to established functions, such as to the NSC, which participates in disaster declarations and other critical functions, and OMB, which coordinates signoff on those declarations and plays many other coordinated policy execution functions including government budgeting.

The leader must have the authority and clear presidential directive to form an interagency coordination body (several strong models exist, with documented track records and pros and cons), inform the design and redesign of federal programs and policies, and work with Congress to ensure that efforts are streamlined and targeted to address the growing needs of communities across the country, starting with implementing the recommendations that follow.

Box 5. Example Role Structure Options for the National Preparedness Lead

- Establish a government-wide coordination function at OMB, consistent with others already in operation, with presidential direction to work closely with the EOP policy councils, executive agencies, and independent agencies.
- Establish the function with a dual appointment to two or more policy councils charged with collaboratively leading on national preparedness and resilience policy (e.g., NSC, CEQ), with the lead jointly appointed as such at the deputy assistant to the president level or above.
- Establish a new White House office, ideally with the director appointed at the assistant to the president level (Cabinet rank), dedicated to preparedness and resilience and likewise given the remit to work with all the interested bodies, leveraging their policy design, budgeting, rulemaking, management, and other functions.

Recommendation 2:

Develop and Implement a National Preparedness and Resilience Plan

Designate a lead agency or executive office and call for a federal process to develop and implement the nation’s first National Preparedness and Resilience Plan. To be successful, planning and implementation would need resources and capacity, effective interagency coordination mechanisms, and a process to bring in the experience and needs of states, local governments, businesses, and other affected constituencies.

A growing number of experts and organizations are calling for a plan to coordinate and streamline federal, state, and local efforts to build resilience against growing risks from natural hazards. This plan would serve three critical functions: (1) assess extreme weather and climate-related risks and vulnerabilities across sectors and regions, (2) develop policies and implementation strategies to reduce those risks in as coordinated and efficient a manner as possible, and (3) establish a system to monitor and evaluate progress, driving continuous improvement to ensure taxpayer dollars are well-spent. The plan should include improvements to national weather information and simplifying federal support as described below.

A well-designed plan and implementation strategy would allow the federal government to direct investments and policies where they are most needed. By outlining clear goals and specific actions, the government could reorganize incentives, funding, and capacities to ensure a focused, effective, and fiscally sound response to extreme weather and shifting climate challenges. Such a plan will help guide decision-making, align resources, and focus investments in a way that prepares households, communities, and businesses to face future extreme events.¹ The [GAO’s disaster resilience framework](#) lays out a strategic approach that could be the foundation of a national plan.

Recommendation 3: Align Climate-Informed Information on Extreme Weather and Natural Hazard Risks and Build an Information Pipeline That Can Support Local Decision-Making and Preparedness

3a: As part of the national strategy, call for a task force or the National Academies to (1) identify and designate the best existing data and models for incorporating historical and future risk into federal data products, (2) identify what, if anything, needs to change to make these data useful for local planning, and (3) lay out a roadmap prioritizing federal action to fill critical gaps.

The review should consider the value of generating a unified and authoritative set of [future projections](#) of natural hazard risk downscaled for use by federal, state, and local decision-makers. Congress can also call for a study of user needs to inform federal priorities on natural hazard risk data and projections.

The severity and frequency of natural hazards is changing. Thus, past experience is no longer sufficient for predicting future risk and impacts. The federal government needs to ensure its data and modeling products are (1) forward-looking, given shifting risks, (2) aligned and consistent (so there is not contradictory information being shared), (3) clear about purpose and use, and

¹ Initial steps already taken toward a national preparedness and resilience plan include efforts to evaluate climate-related risks and vulnerability through the [National Climate Assessment](#) and the [2023 National Climate Resilience Framework](#).

Box 6. Past Recommendations on Improving National Data

In 2015, the GAO found that the extreme weather and natural hazard–related information needs of federal, state, local, and private-sector decision-makers were not being met. GAO recommended, “(1) a focused and accountable organization, (2) authoritative data that define the best available information for decision makers, and (3) technical assistance to help decision makers access, translate, and use climate information in planning.”

In 2016 a number of agencies surveyed analysts working with community planners on their use of federal data on historical and future risk. They found that analysts want data that can be tailored to their specific local applications.

PCAST released a report in April 2023 that recommended federal actions to (1) better quantify and disseminate information on current and future risks of extreme weather, including risks of human and financial losses caused by flood, fire, storms, and drought; and (2) bolster the emerging private ecosystem providing climate risk information.

(4) accessible and **useful for community planning** (including for financial planning, engineering, environmental and land use planning, and insurance).

Some steps have been taken in this direction, but not nearly enough to ensure that local communities have the risk information they need to inform investment decisions. Congress should act to ensure federal investments meet the current and future needs of the nation and build on the investments already made in weather-related risk information.

3b: As part of the national strategy, authorize a single organization with authority and capacity to drive coordination and make decisions on alignment and authoritative sources of data on natural hazard risk. This could be a single federal agency or a coordination mechanism, like a Congressionally chartered and funded nonpartisan nonprofit.

One of the reasons cited for limited federal progress is the lack of “a focused and accountable organization” with authority to set direction and drive change across multiple agencies. The USGCRP has informally taken on this role, given that it is an interagency body made up of the agency offices that collect data and do risk projections for extreme weather and natural hazards. Some suggest expanding its authority. Others suggest following the National Weather Service model of a **Weather-Ready Nation** and expanding it to host authoritative interagency data and projections for helping communities plan for future risks. There have also been legislative proposals for a centralized clearinghouse that would enhance access to and usability of resilience and preparedness data.²

² The National Coordination on Adaptation and Resilience for Security Act of 2023 (S.3261/ H.R. 6311) includes a mandate to “establish an adaptation and resilience clearinghouse that [...] increases the accessibility and utility of adaptation and resilience data and information produced, published, or hosted by the Federal Government.”

3c: As part of the national strategy, call for increased public-private collaboration between federal data producers and the private users of that data to accelerate and strengthen data relevance and uptake for purposes of pricing insurance, mortgages, and other financial products dependent on the accuracy of federal data.

For example, NOAA recently signed an MOU with the Reinsurance Association of America to collaborate on the development of new data products. This partnership could allow the insurance and reinsurance industries to obtain more relevant projected weather data to inform their pricing of insurance, mortgages and other financial products. Another example is an agreement between NOAA and The Electric Power Research Institute focused on power grid resilience. Private-sector data companies are also developing new data products using federal data, providing tools for home buyers to evaluate risk and helping to identify critical data gaps that limit risk prediction.

Recommendation 4: Simplify Federal Support for Risk Reduction and Empower State and Local Action

4a: As part of the national strategy, create a roadmap for coordinating, streamlining, and prioritizing federal investments.

A special task force or study should be established to (1) evaluate federal programs that either focus on preparedness and resilience or should, make recommendations on which programs should be prioritized and which should be sunset or merged, where the gaps are, and what changes to these programs could make them more effective; and (2) create a list of priority major infrastructure and other large federal investments based on their ability to reduce risks, save lives, and reduce impacts to businesses and property, while also saving money for taxpayers.

Resilience, adaptation, and preparedness are multifaceted, and multiple programs across multiple agencies are required to address these diverse aspects. However, a multitude of programs is rarely efficient, and more programs does not always result in better outcomes. Recently passed legislation included 80 different federal programs that fund preparedness and resilience. Of the 51 bipartisan resilience bills introduced over the last five years, most propose new programs and only a few focus on structural issues (Table 2 in the Appendix). A congressionally authorized study could provide a roadmap for streamlining federal programs and prioritizing federal investments where they are most needed by state, Tribal, and local governments and businesses, enabling locally driven initiatives and incentivizing private investment. Congress now has an opportunity to review this fragmented and sprawling approach and consider a range of options for strengthening and consolidating programs, expanding a focus on results and accountability, and empowering proven and practical mechanisms for coordination rather than opting for a “super-agency” with an unworkable mission or mandate.

4b: As part of the national strategy, create a more efficient mechanism for state and local governments, business, and individuals to access federal preparedness resources. Build efficiency and cut red tape through regional or topical interagency coordination mechanisms, providing a single point of entry, pooled funding across programs and agencies, and common or—at minimum—aligned planning, application, and reporting processes.

Given numerous federal programs across an array of federal agencies, it is hard for households, businesses, and local governments to navigate existing resources and identify and access the support that they need. In addition, applications can be long and complicated, reporting

Box 7. Example Interagency Mechanisms for Streamlining Community Support

Interagency mechanisms have been proposed as a means to simplify and enhance the efficiency of the processes by which states and local governments obtain preparedness resources across agencies with different priorities and authorities. However, interagency efficiency efforts to date have been limited to some interagency hazard-specific portals and strategies (e.g., Heat.gov, National Wildfire Strategy), and a few initiatives for interagency collaboration on technical assistance (e.g., Thriving Communities Network, The Climate Smart Communities Initiative). These efforts, while a good start, do not address the full suite of preparedness needs and may not have necessary sustained support.

A number of additional models are worth exploring: (1) a “clearinghouse” model; (2) a pooled funding model with a single application, MOUs, or interagency agreements to enable fund transfers and align goals; and (3) a regional hub model. A “concierge service” to support integrated outcomes in a single location.

While each of these supports the overarching goals of better alignment of federal resources and streamlined access to these resources, they do so to varying degrees. The clearinghouse model provides the least alignment but may be the easiest to execute, pooled funding and regional integration may have the most alignment and easiest access but be the hardest to execute, and MOUs fall somewhere in between. While the mechanism would be designed to harmonize federal programs, it would be valuable to design them with the capacity to crowd-in funding from other sources, including state, private sector, or philanthropic. (See examples of each model in the [Models for Improving Access](#) section in the Appendix.)

requirements burdensome, and funding windows short. One of the most significant barriers to accessing federal funding is the lack of local or Tribal government capacity to access and manage these resources. The government has worked to address this primarily through technical assistance programs often attached to existing funding programs. A recent report identified [100+ technical assistance programs for infrastructure and resilience](#) spread across agencies and programs.

While federal technical assistance programs provide a valuable service, the proliferation of so many bespoke programs can overwhelm users. For years communities have been asking for a simpler, more efficient federal approach to support preparedness and resilience-building—rather than 100+ technical assistance programs. Those seeking federal support would like to have one place to go—one portal or one call center—where they could access centralized support to meet their needs regardless of which agency runs the program and whether the applicants are local governments, small businesses, households, or others. Many have suggested organizing these hubs at the state or regional level given that risks (e.g., flood, fire) and needs (e.g., elevating infrastructure, forest management) vary regionally. Ideally, planning and application processes and requirements would also be as aligned as possible across agency programs (e.g., an integrated planning and common application across agencies and programs). See Box 7 for more specific ideas on interagency mechanisms.

Another challenge is that processes are getting in the way of progress. This is not unique to preparedness programs. Each funding program has its own planning requirements, rules, applications, and reporting processes. And permitting, when required, can be costly and time-consuming. There are a number of steps that can be taken to address redundancies and inefficiencies, simplify procedures, use technology to automate tasks and reduce staff time, set clear timelines and methods for tracking progress, set up cross-function and cross-agency teams,

and empower frontline employees. Congressional action will be needed to establish priorities, clarify where the authority lies to lead this work and address conflicting authorities and requirements across federal programs.

The United States will undoubtedly continue wrestling with hurricanes, wildfires, storm surges, and other extreme weather events. The question is whether the federal government will provide the leadership needed so that communities, businesses, and individuals can better prepare—or if we will remain trapped in recovery and rebuilding and continue to pay the price. Congress has the unique ability to establish priorities, clarify lines of authority, and ensure services and resources arrive where they are needed to prepare. **Now is the time to take action that will save lives, property, infrastructure, and taxpayer dollars.**

APPENDIX

Table 1. Cost-Benefit Ratios of Resilience Implementation

For every \$1 spent on...	\$X in avoided costs
Building coastal homes 2 feet above the 1% annual chance flood level ³	\$17
Resilience and preparedness overall spending ³	\$13
Adoption and enforcement of modern building codes ⁴	\$11
Adoption of updated building codes to address high winds ⁴	\$10
Investing in coastal wetland and reef restoration ³	\$7
Building above code to address hurricane surge ⁴	\$7
Adoption of updated building codes to address riverine floods ⁴	\$6
Retrofitting coastal buildings and updating utilities ⁵	\$4
Building above code to address fire in the wildland-urban interface ⁴	\$4
Investments in building retrofits to address multiple hazards ⁴	\$4

Constituencies Supporting Congressional Action on Resilience and Preparedness (Based on Publicly Available Letters of Support)

- American Council of Engineering Companies
- American Property Casualty Insurance Association
- American Public Works Association
- American Society of Civil Engineers
- American Society of Landscape Architects
- BuildStrong America
- Center for Climate and Energy Solutions
- City Parks Alliance
- Ecological Restoration Business Association
- Geos Institute
- International Association of Plumbing and Mechanical Officials
- Interstate Council on Water Policy
- Mississippi River Cities and Towns Initiative
- National Association of Counties
- National Association of Flood and Stormwater Management Agencies
- National Association of Mutual Insurance Companies
- National Governors Association
- National League of Cities
- Reinsurance Association of America
- Resilience Innovation Hub
- Smart Growth America
- Team Rubicon
- The American Flood Coalition
- The American Society of Adaptation Professionals
- The Bipartisan Policy Center
- The Insurance Institute for Business and Home Safety
- The National Audubon Society
- The Nature Conservancy
- The Rural Community Assistance Partnership
- The Theodore Roosevelt Conservation Partnership
- The US Chamber of Commerce

³ Source: [US Chamber of Commerce Foundation](#)

⁴ Source: [National Institute of Building Sciences](#)

⁵ Source: [FEMA](#)

Table 2. Bipartisan Bills from 2019–2024 That Propose Structural Changes to Enhance Coordination of Resilience and Preparedness Efforts

Senate No.	House No.	Title	Topic	1. National Plan	2. Resilience Data	3. Resilience Lead	4. Coordinated Action and Structures
S.3875	H.R.7242	Community Disaster and Resilience Zones Act of 2022	Identifies and designates community disaster resilience zones	X			X
S.3510	H.R.7863	Disaster Resiliency Planning Act	Requires OMB to establish guidance that requires federal agencies to incorporate natural disaster resilience into real property asset management and investment decisions				X
S.558	H.R.1438	Flood Level Observation, Operations, and Decision Support (FLOODS) Act	Forecasting and the communication of flood, tornado, and hurricane events by NOAA		X		
	H.R.481	Flood Resiliency and Taxpayer Savings Act of 2021	Requires federal agencies to take specified actions to evaluate and mitigate the risk of floods to federally funded projects				X
	H.R.3431	Increasing Community Access to Resiliency Grants Act of 2021	Creation of a database with links to all resilience and adaptation grant opportunities				X
S.3531	H.R.6461	National Climate Adaptation and Resilience Strategy Act	Establishes a chief resilience officer and national adaptation plan	X	X	X	X
S.3261	H.R.6311	National Coordination on Adaptation and Resilience for Security Act of 2023	Streamlines the federal response to climate hazards that threaten human health and well-being, critical infrastructure, and natural environments	X	X	X	X
S.1282	H.R.2760	Built to Last Act of 2021	Identifies and supports research that enables a consistent, federal set of forward-looking, long-term meteorological information that (1) models future extreme weather events, other environmental trends, projections, and up-to-date observations, and (2) is suitable for specified uses, including federal and nonfederal efforts to develop and adopt standards, building codes, and voluntary certifications		X		

Models for Improving Access to Federal Preparedness Resources

Clearinghouse and Help Desk Model

- [EDA Economic Development Integration](#) is a website featuring several forms of clearinghouse information: a monthly email listserv of open federal grant resources, an online Federal Economic Development Program Matrix, and multiple federal economic development resources (along with those from state and local sources).
- The [Clearinghouse for Environmental Finance](#) is a website hosted by the EPA, providing a portal for communities to find funding sources and basic information on financing air-, water-, and land-based environmental projects.
- Examples can also be found at the state level. For instance, the State of Minnesota hosts a web portal, [State Aid for Local Transportation](#), that provides comprehensive information on state resources for local governments as they plan, construct, and maintain all aspects of their transportation systems.

Funding Alignment Model—Federal Pooled Funding With a Single Application

- In 2011, 16 federal agencies joined forces to offer a competitive grants program for public-private partnerships: the [Innovation Accelerator Challenge](#). Three federal agencies pooled their funding and 13 additional agencies provided technical support. The program had a single competitive application process.

Funding Alignment Model—Pooling Federal, Philanthropic, Private and Other Sources of Funding

- [Neighborworks America](#) is a Congressionally chartered and funded nonpartisan nonprofit capacity-building organization created to support communities in developing affordable housing, with related financial counseling to ensure community access to housing. The group includes top leadership from HUD, the FDIC, the Federal Reserve, OCC, and the National Credit Union Administration as the Board of Directors. Funding is authorized directly by Congress and the group is also able to directly solicit foundation and corporate philanthropic support.
- Another example is the [National Fish and Wildlife Foundation](#), which was created by Congress in 1984 as a nonprofit corporation that receives and manages donations to support conservation. It can combine funding across multiple federal agencies as well as from state governments, the private sector, philanthropy, and natural resource damage assessment claims.

Regional Coordination Model with Shared Governance and Funding

- [FEMA Recovery Support Function](#) coordinates multiple federal, state, and local agencies in recovery from disasters, including increasingly extreme weather-related disasters, across agencies using shared principles, coordinating structures, and operational plans.
- Another example is the [White House Detroit Working Group](#) was created in 2011 to address the city's bankruptcy. The White House brought together multiple federal, state, and local partners to coordinate government resources toward neighborhood stability and long-term economic revitalization and resilience. In addition to federal funding, the group leveraged significant private-sector and philanthropic commitments.

ABBREVIATIONS

BRIC	Building Resilient Infrastructure and Communities (FEMA program)
CEA	US Council of Economic Advisers
CEQ	US Council on Environmental Quality
DOT	US Department of Transportation
EDA	US Economic Development Administration
EOP	Executive Office of the President
EPA	US Environmental Protection Agency
FDIC	Federal Deposit Insurance Corporation
FEMA	Federal Emergency Management Agency
HUD	US Department of Housing and Urban Development
MOU	memorandum/a of understanding
NOAA	National Oceanic and Atmospheric Administration
NSC	National Security Council
OCC	Office of the Comptroller of the Currency
OMB	Office of Management and Budget
OSTP	Office of Science and Technology Policy
PCAST	Presidential Council of Advisors on Science and Technology
USDA	US Department of Agriculture
USGCRP	US Global Change Research Program
USGS	US Geological Survey

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Acknowledgements

I would like to extend my sincere gratitude to everyone who contributed to the successful completion of this report. I thank Sara Mason, Alice Hill, Melissa Roberts, and Francis Bouchard whose guidance and expertise were invaluable in shaping the direction and content of this work. Their constructive feedback and encouragement provided the foundation for this report.

Citation

Olander, L., X. Briggs, and E. Losos. 2025. *America Prepared: A New Approach—Building a Nation Prepared for Extreme Weather*. Durham, NC: Nicholas Institute for Energy, Environment & Sustainability, Duke University.
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Updated 01/23/2025