V.

State Policy Recommendations for Protecting Against Financial Threats from Climate Change

B. DISASTER READINESS AND RECOVERY REFORMS

Climate change is straining state budgets, with disaster recovery and mitigation costs rising steadily. A recent Pew analysis shows that as the rate of billion-dollar disasters increases, state spending associated with those costs is also increasing. Yet, while climate impacts and their related costs grow, federal support for states is shrinking.

Mounting costs from climate change demonstrate the clear benefit of building greater capacity to prepare for and recover from disasters at the state and local level.

When disasters strike, state and local officials are typically the best positioned to respond. Directing the deployment of first responders, and coordinating the resources of state and local governmental entities as well as private and charitable organizations in overseeing disaster recovery, is a bedrock responsibility of state governments.

Disaster management, from preparedness to response and recovery, has long been a partnership among multiple layers of governments and private entities, and the system in place today has evolved and been refined over many years. Officials have created a complex but critical system of collaboration across many sectors of society, one in which local governments may reach out to state governments for assistance, depending on the scale of the event and the damages wrought. Assistance needs and requests may also escalate, necessitating federal involvement as well.

Traditionally, many of the largest disasters, with response and recovery costs beyond the capacity of states, have drawn presidential disaster declarations. Those declarations, made under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, can result in significant funding from the federal government.

Though still requiring a non-federal match in most cases, this assistance can be used for emergency response and debris removal as well as repair or replacement of community assets, including roads and bridges, water and wastewater utilities, schools, fire and police stations and other damaged public buildings. In some cases, these declarations also open up the possibility of modest aid to disaster-impacted individuals and opportunities for assistance with community hazard mitigation projects.

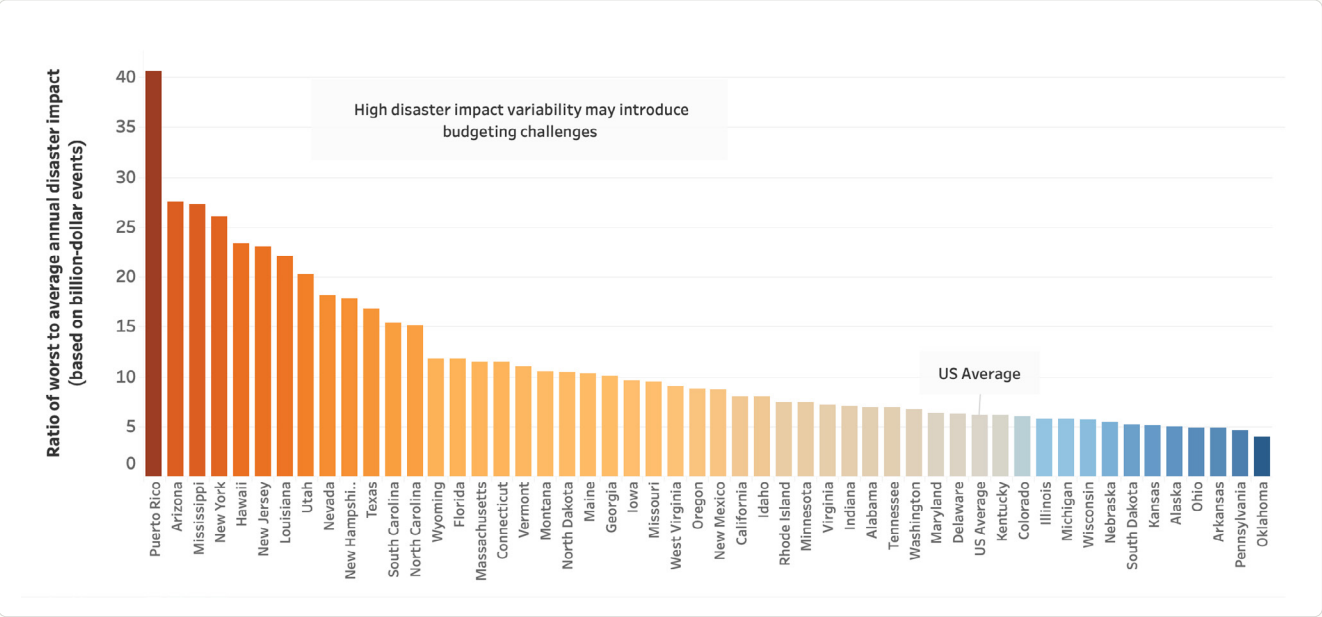
NOAA Sea Grant fellows working on a climate resilience project in New Hampshire. Source: Rebecca Irelan, New Hampshire Sea Grant

The federal assistance provided after larger disasters has been significant. The Carnegie Endowment for International Peace analyzed a decade of federal disaster spending data and found that three programs alone — the Public Assistance and Individual Assistance funds administered by the Federal Emergency Management Agency (FEMA) and the Department of Housing and Urban Development's (HUD) Community Development Block Grant Disaster Recovery programs — have obligated roughly $114 billion for disaster recovery since 2015. And while these three programs are major sources of disaster funding, they are, as Carnegie and others have pointed out, only three of roughly 30 federal programs addressing disasters.

Unfortunately, it appears that states facing a rapid escalation in disaster costs may now be facing a significant shrinkage in federal support. The Trump administration has made clear its intention to lessen the footprint of the federal government in disaster management. It has clawed back previously promised mitigation funding; delayed disaster declaration decisions; proposed to quadruple the damage sums required to qualify for federal disaster assistance; substantially increased states' matching burdens; and openly floated the possibility of eliminating FEMA entirely.

These proposed changes come alongside cuts to staffing, programs, and contracts that contribute to a fuller understanding of climate threats and their impacts. Acting FEMA Administrator David Richardson revealed the strategy is to move toward a 50/50 federal-state cost share — even though many states are unprepared for such a shift. Just Solutions used federal disaster and state budget data to compile a report entitled "FEMA Rollback Threatens to Overwhelm States," which situated the cost of disasters in the context of overall state spending:

> "Six states and Puerto Rico—including large states like Texas and Florida—have faced disaster impacts that exceed their most recent total annual state expenditures (excluding federal funding). However, these incredibly high damage levels should not obscure the fact that even much smaller budget impacts can be hard for states to accommodate. We calculate that nearly two-thirds of states and Puerto Rico have had years in which annual billion-dollar disaster impacts (CPI-adjusted) exceeded 10% of their state expenditures (for the most recent year available, 2024)—and again, these numbers do not include impacts like business disruption, do not include smaller disasters, and are expected to continue to increase in the coming years."



Source: Just Solutions via data from NOAA

Thankfully, many states have already been thinking creatively about rising disaster costs. Even prior to the Trump administration's moves to reduce federal support, gridlocked congressional negotiations over omnibus spending bills have routinely left FEMA's disaster relief fund underfunded during peak disaster season. According to Maddison Farris, Federal Affairs Manager for the state of Oklahoma, states "...rely strongly on our federal partners to help communities recover, but the current system is simply not keeping up with the scale or the speed of what's necessary."

This unfortunate pattern had prompted state governmental leaders to bolster their own capacity to support climate resilience. Beyond shielding communities from the fallout from a federal policy retreat, bolstering state capacity for climate resilience can yield substantial economic benefits.

A 2005 study from the National Institute of Building Sciences (NIBS) concluded that every dollar spent on FEMA-funded disaster mitigation projects netted, on average, $4 in savings. In 2017, an expanded analysis put the figure at $6 in average savings, and in 2019, NIBS found savings ranging from $2 to $12 per dollar invested in projects. JPMorgan Chase recently issued a report emphasizing hugely underappreciated returns from adaptation investments, and the World Economic Forum estimated that for every $1 spent on disaster risk reduction, avoided disaster recovery costs may actually be as high as $43. States can and should realize these benefits if the federal government will not.

The challenge of keeping communities safe with escalating threats and less federal assistance, then, will require innovation and initiative from state leaders.

POLICY RECOMMENDATION 1

Adopt a comprehensive disaster and climate resilience strategy that includes a long-term commitment to investment and risk mitigation

State legislatures should lay out a "whole of government" approach to improving long-term resilience by funding a statewide climate resilience strategy and coordinating all relevant state agencies through an institutional body that will inform and execute on that strategy. Just as we recommend that state governments task a specific agency with coordinating the mission of stabilizing insurance markets, a state governmental agency should be tasked with executing a climate resilience strategy that enlists and coordinates the work of numerous agencies.

This sort of comprehensive approach may help to avoid problems that can result when agency actions conflict or work at cross-purposes to broader resiliency goals – for example, spending limited road funds in an area of increasing sea-level rise, disregarding flood risk in siting low-income housing, or failing to consider wildfire risks in planning transmission corridors and improvements. By placing resilience considerations on the table for multiple state agencies and localities, this approach can also promote multi-benefit projects, such as greenbelt projects that provide recreation opportunities and flood mitigation benefits, culvert sizing that eliminates road flooding and creates fish passage, or levee setbacks that reduce sediment loss and improve water quality while also lowering the risk of catastrophic levee failure.

Several states facing serious impacts from wildfire or flooding have taken this comprehensive approach via legislation, which should be replicated and expanded by states across the country.

LEADERSHIP PROFILE

Maine Governor Janet Mills

Gov. Mills signing LD 1 in April 2025, surrounded by legislative leaders. Source: Office of Gov. Janet Mills.

Maine's efforts to address the impacts of climate change track back to "Maine Won't Wait," the state's first 4-year plan for climate action. While a large portion of the 2020 plan addressed emissions and clean energy, the wide-reaching document also called for actions to mitigate the impacts of climate-fueled disasters, including updating land-use regulations and practices, empowering local governments to strengthen community resilience, investing in climate-ready infrastructure, and revising scoring criteria for state conservation funding to incorporate climate resiliency goals.

Maine's broad plan was the creation of the Maine Climate Council, itself a product of legislation signed into law by Governor Janet Mills in 2019. Cautioned by the Climate Council's Scientific and Technical Subcommittee to consider managing for relative sea level rise of 1.5 feet by 2050 and 3.9 feet by 2100, Maine has continued moving forward on resiliency in multiple sectors.

After punishing storms in December of 2023 and January of 2024, Governor Mills issued an Executive Order that established the Maine Infrastructure Rebuilding and Resilience Commission and called for reviewing and evaluating the state's own storm response, identifying near-term investments and actions needed, and developing a longer-term plan to strengthen infrastructure against the impacts of climate change.

The Commission's final report, issued in May 2025, was blunt: "Maine, like all states, depends on federal funding and coordination for disaster preparedness and hazard mitigation." The report also noted the termination of FEMA's Building Resilient Infrastructure and Communities (BRIC) grant program and cautioned that "[s]uch sweeping and unprecedented policy reversals fundamentally complicate this work." The report emphasized that "[d]espite these significant headwinds, the Plan remains urgent and critical."

Release of Maine's new infrastructure resilience plan came just weeks after additional state action. In April, Governor Mills signed LD 1, An Act to Increase Storm Preparedness for Maine's Communities, Homes, and Infrastructure. LD 1 was bipartisan, passed the Maine Senate unanimously, and used a combination of federal funding and fee revenue collected by the Bureau of Insurance. The bill had multiple components, including a new HoME Resilience Program, which will offer financial assistance to homeowners to strengthen roofs and protect their homes from flooding. The bill also made funding available for updating emergency communications and early warning systems, commits money to leverage federal funds associated with FEMA's Safeguarding Tomorrow Revolving Loan program, and created the State Resilience Office within the Maine Office of Community Affairs. Enactment of LD 1 demonstrates a long-term commitment to disaster planning and systematically improves disaster response across the state.

In 2025, New Mexico passed SB 33, known as the Wildfire Prepared Act. The law expanded the previously established State Fire Planning Task Force, providing for membership from the State's Superintendent of Insurance, other insurance industry representatives, emergency management professionals, and wildlife science experts. Under the new law, the Task Force is responsible for issuing standards for defensible space in areas at risk of wildfire, developing guidelines for certifying properties as wildfire-prepared, and disbursing wildfire safety grants. The bipartisan bill, which was adopted on an emergency basis, also provided funding for hiring and training additional staff to improve building codes and adopt safer ecological forest management practices.

South Carolina also has taken an ambitious whole-of-government approach to disaster readiness and resilience, pairing new planning and programs with financial commitments. After six major disasters hit the Palmetto State over a five-year period, the Disaster Relief and Resilience Act was signed by Governor Henry McMaster in 2020. Passed with strong bipartisan support, that law established the South Carolina Office of Resilience to coordinate post-disaster recovery operations and to accelerate pre-disaster resilience efforts across the state. The law called for a governor-appointed Chief Resilience Officer to helm the new office and authorized two new funds – the Resilience Revolving Fund and the Disaster Recovery and Resilience Reserve Fund. The law also required the new office to oversee the creation of a "Strategic Statewide Resilience and Risk Reduction Plan" to guide new state investment in flood mitigation projects and to develop recommendations for new resilience programs and policies.

As discussed above, Maine's legislature made its top priority in 2025 establishing a state strategy for increased funding and long-term planning toward better disaster response.

POLICY RECOMMENDATION 2

Establish programs to embed mitigation and climate adaptation expertise across agencies and communities

Decades of disasters have illustrated the power of natural hazards to impact an immensely broad range of human activity: rendering families homeless, obliterating roadways, cutting off access to power, closing medical facilities, disrupting school attendance, halting operations at water and facilities, shuttering small businesses, and more. With the prospect of more of this to come, states should recognize the need to foster a new level of resilience awareness and expertise across the multitude of government operations at the state level and, ideally, within local jurisdictions across the state.

Even as states opt for creating offices and appointing officials whose primary focus will be on promoting resilience, there will be a need for educating a broad cross-section of the workforce and the public to support resilience efforts and, to borrow a phrasing from the State of Colorado, become "Resiliency Champions."

One approach, pioneered by the Maryland Department of Natural Resources in 2018, involves continuing education and training programs specifically designed for state and local government officials, infrastructure managers, and business leaders. The Climate Leadership Academy, now replicated in Delaware and facilitated by the Association of Climate Change Officers, allows for a professional certification.

The Pennsylvania Climate Change Mitigation and Resilience Network ("the PA Climate Network") was launched by the GreenGov Council in 2023 to promote climate problem solving in Pennsylvania. Its aim is to connect and educate diverse stakeholders across Pennsylvania and share best practices to ensure they can advance informed climate solutions.

Massachusetts has also moved the needle on resilience education. The Municipal Vulnerability Preparedness (MVP) grant program helps Massachusetts communities begin planning for climate change resiliency and then provides for financial assistance on projects developed through those planning processes. Cities and towns become MVP-designated after preparing a plan that identifies existing and future vulnerabilities and strengths and develops and prioritizes adaptation actions. To implement the program, the state was divided into regions, each with a regional MVP coordinator who helps conduct resilience trainings, hosts regional workshops, and acts as a point of contact with the local communities. Nearly every municipality in the state has enrolled in the program.

As discussed above, states should have long-term disaster preparedness plans in place, and should also designate lead agencies to manage insurance market disruptions. Part of this comprehensive strategy should include staffing every agency involved in disaster response with individuals with a range of expertise, including forecasters, engineers, planners, builders, emergency managers, insurance specialists, finance experts and floodplain managers.

POLICY RECOMMENDATION 3

Integrate insurance market considerations with climate and disaster preparedness

Risk reduction investments can make insurance markets healthier, which means it is vital for states to embed those investments into the functions of state agencies. For example, state insurers of last resort should be empowered to drive risk reduction investments and take those investments into account. This sort of integration can take many forms, but at the core, states must deploy their disaster preparedness spending in a manner that helps residents improve their overall insurance and resilience picture.

Various hazard mitigation and home hardening measures have been proven to lower insurance losses from flood, wind, and fire. These include ecological forest management and flood risk management practices, as well as standards for better home fortification. Colorado's HB 1182, a policy endorsed in this report's insurance regulation section, requires insurers to factor these climate resilient practices into insurance modeling. The Insurance Institute for Business & Home Safety (IBHS) has tested risk reduction strategies, including the FORTIFIED roof standard. State policies have encouraged risk reduction practices affirmed by

Source: Performance of FORTIFIED Home Construction in Hurricane Sally, Alabama Department of Insurance

IBHS, such as the California Department of Insurance's Safer from Wildfires standard, which includes FORTIFIED roofs as well as other steps to reduce wildfire risk. The Minnesota legislature's creation of the Strengthen Minnesota Homes program to fund more FORTIFIED roofs mandated that insurers provide a premium discount to participants in the program.

In the Wildfire Prepared Act, New Mexico lawmakers required communities to certify wildfire preparedness standards consistent with those set by the IBHS to receive wildfire safety grants. Through these provisions, the Wildfire Prepared Act made the goal of healthier insurance markets in New Mexico a part of the work of the wildfire safety task force. Because the Wildfire Prepared Act includes IBHS standards, the grants will support risk reduction investments that have proven benefits for insurance companies and policyholders.

In Alabama, the state's efforts to integrate insurance policies with mitigation incentives have expanded over time and now offer a model being considered by several other states. In 2011, Alabama's legislature enacted legislation requiring insurers to provide discounts for certain homes that met the IBHS FORTIFIED Roof standard. In 2015, the discount requirement was extended to commercial buildings and homes statewide, and in 2016 the state began offering grants of up to $10,000 for residential wind mitigation. Since that time the Strengthen Alabama Homes (SAH) program has awarded more than $70 million for FORTIFIED roof projects on more than 7,000 homes. In addition, more than 40,000 Alabama homeowners have installed roofing meeting the same standard without state funding. Alabama's insurance commissioner recently released data that showed that roofs aligned with the FORTIFIED standard, including roofs that had participated in the state's roof fortification program, had lower insurance losses from Hurricane Sally, a Category 2 event in 2020.

POLICY RECOMMENDATION 4

Invest in collecting, updating, and analyzing other critical vulnerability data

Whether working through comprehensive climate resilience strategies or simply using budget appropriation measures to support mitigation and recovery efforts, states will need good information about both current and future risks. By setting aside funds to improve and sustain data collection, run risk scenarios, and analyze the implications of hazards, states can make wise decisions about needed resilience investments and help the public gain a better understanding of climate risk throughout the state.

The impacts of climate change within a given state or community, of course, are not entirely predictable. The consequences of climate-fueled wildfires, droughts, or floods will vary based on multiple factors, including population growth and land use patterns, forest and agricultural management practices, capacity and condition of local stormwater infrastructure, and timing and volume of precipitation events. The challenge, then, is to collect and share credible science-informed data, recognizing both the utility and the uncertainty of that data. As discussed below, the nation's experience with flood risk mapping has not set a good precedent for such endeavors, but recent efforts in several states offer useful examples of innovation in this area.

BOX 07

State efforts to improve understanding of flood risks

Flood waters from Tropical Storm Irene in 2011 on the Ottauquechee River in Quechee, Vermont flooding buildings on the northern shore of the river. Source: Stephen Flanders.

Flooding can happen anywhere — in urban areas where storm drainage systems are overwhelmed, in coastal locales when high tides combined with high water tables cause sunny-day flooding, or even in arid or fire-scorched regions where the lack of vegetation to slow the movement of water makes flash floods a powerful threat to life and property. Nevertheless, there are areas along rivers and streams and on the coastlines where large floods have a greater likelihood of occurring. These are the areas depicted by the flood maps used in the NFIP. Unfortunately, the lines on FEMA maps have long been wrongly interpreted as a clear demarcation of flood-safe versus flood-vulnerable. The Special Flood Hazard Areas (SFHAs) on flood maps are not worst-case predictions for future floods. They are statistical constructs based on historical data and current conditions.

After disastrous flooding in 2010 and 2011, the Vermont legislature acted to address a blind spot in the mapping approaches long used by FEMA for flood maps across the country. While the FEMA flood maps focus largely on riverine and coastal overflow and rely on map updates to capture changes in river channels and conditions, Vermont enacted legislation establishing a River Corridor and Floodplain Management Program. That program, which promoted the protection of land areas over which streams and rivers may naturally migrate, provided localities and the public with river corridor data supplementing the standard FEMA flood maps. While this longstanding effort has been

centered on certain developed areas, legislation enacted in 2024 will bring even greater emphasis to river corridor protection and restoration. Act 121, dubbed the Flood Safety Act, will engage the State's Department of Environmental Conservation in the regulation of development in river corridors statewide and enhance the protection of wetlands.

With a focus on sea-level rise rather than river corridors, New Jersey is yet another state that has acted to supplement the FEMA insurance map information. Since 2021, New Jersey's Municipal Land Use Law has required local governments to complete a climate change hazard vulnerability assessment as they prepare updates to local master plans. The State's Resilient NJ program offers direct technical assistance to localities and shares information and data, including "Sea-Level Rise Guidance for New Jersey;"; "New Jersey's Rising Seas and Changing Coastal Storms;" a climate resilience funding directory; and an online mapping tool that allows consideration of flood risks over different time horizons. Executive Order 89 prompted much of this effort and charged a New Jersey Chief Resilience Officer with developing a statewide Climate Resilience Strategy.

In Colorado, another state that set up a dedicated Resiliency Office to spearhead collaboration and coordination across agencies, community leaders and others can access a state tool to facilitate resiliency planning and action. The Future Avoided Cost Explorer estimates vulnerabilities across the state out to the year 2050 for three types of hazards: flooding, drought, and wildfire. The tool combines three different climate scenarios with four population change scenarios to estimate economic losses and various adaptation alternatives across multiple sectors, including agriculture, tourism, and homes and businesses. Offered as a tool for first-order analysis, the Explorer can help policymakers identify areas for further study and priority action.

Among Maine LD 1's provisions is $9 million for the "Flood Ready Maine" program, which will update maps and models used to estimate flood risk throughout the state. Flood Ready Maine funds a data hub that will continue to pool and track how households, communities, and stormwater infrastructure have responded to storms over time. The data hub will inform the ongoing updating of Maine's floodplain maps.

One additional option is flood history disclosure policies, enabling homebuyers and renters to understand their exposure to flood risk. The strength of flood history disclosure policies varies state by state. An analysis by NRDC found that the best flood history disclosure policies require "disclosure of whether the property is in a designated floodplain, whether there have been any flood damages to structures on the property, and whether there is any requirement to carry flood insurance." Better-quality policies also require, "additional disclosures, such as the cost of flood insurance or an elevation certificate." A recent example of a state requiring this robust level of disclosure is a new policy by North Carolina's Real Estate Commission, which mandates transparency on flood history and risk.

POLICY RECOMMENDATION 5

Use building codes and other regulations to improve the durability and resilience of residential and commercial structures.

The most common building codes in the U.S. come from the International Code Council (ICC) and from the American Society of Civil Engineers, which issues its own standards for Flood Resistant Design and Construction. Both sets of standards are updated periodically and vetted through a consensus process as information and science regarding building function improves. As IBHS President Roy Wright noted in testimony to a House Subcommittee in 2021, proper application of these standards can reduce damage and disruption from natural hazards. Nonetheless, even as climate-fueled natural hazards inflict increasing damages from wind, fire, and flooding across the United States, many states have held back on updating statewide codes to improve resilience and allow for speedier recovery after disasters. This should change.

Cabins at Gulf State Park were damaged during Hurricane Sally in 2020. Source: Gulf Coast Media

Over the years, a number of studies have assessed both the cost and the potential mitigation value of code adoption and building limits. For example, a post-Katrina Louisiana State University study concluded that homes built to a newer code in flooded areas were 65% less likely to sustain hurricane damage; a Wharton Risk Center study linked reduced hail damage losses with enforced code requirements on roofing; a Louisiana study of the state's FORTIFIED grant program found that a FORTIFIED roof pays for itself in under five years; and a Colorado post-flood study found that enacted development restrictions had avoided damages of $486 million and that siting limits for construction of critical facilities had saved $23 million. That latter study also showed that communities that had instituted a "freeboard" standard — requiring new buildings to be elevated beyond the level dictated by FEMA flood maps — cut losses by $206 million.

An updated federal study, "Building Codes Save: A Nationwide Study," which modeled building code impacts on the more than 18 million buildings constructed since 2000, determined that the average annualized loss avoided by application of up-to-date codes was roughly $1.6 billion.

From 2018 to 2023, Florida ranked first for building code adoption and enforcement among coastal states according to a report from IBHS. As a result of Florida's commitment to updating and enforcing new building codes, IBHS estimated that in the wake of Hurricane Ian, the state prevented between $1 billion and $3 billion in damages to single family homes alone. Despite these compel-

ling numbers, code adoption lags elsewhere. FEMA's National Preparedness Report from 2023 said that the failure of most states to adopt new building codes that account for climate change is "one of the most significant factors that compounds risk and increases costs from natural hazards." And the 2024 National Preparedness Report noted that as of 2023, 35 states received FEMA's lowest ranking for adoption of hazard resistant building codes.

States that are ready to promote resilient building codes can find resources available from FEMA, including the Building Codes Adoption Playbook, the Building Codes Toolkit for Homeowners and Occupants, and the National Building Code Adoption Tracking Portal, which provides a view of various code adoptions across the nation. Other useful information for regulating building construction or land use can be found from IBHS, the International Code Council (ICC), the HUD, the EPA, and the Association of State Floodplain Managers (ASFPM). States that wish to go beyond code adoption may want to consult ASFPM resources related to No Adverse Impact, a strategy for managing floodplains that aims to improve upon the long outdated rules associated with the NFIP.

C. STATE BANKING REGULATOR REFORMS

State banking regulators have significant legal authority to reduce climate-related risk to financial institutions, encourage community resilience to disasters, and support transition investment. They also oversee much of the financial system. Their authority covers not only state-chartered banks and savings associations (collectively, banks), but also credit unions and certain other nonbank financial companies.

Federal regulators' backsliding on climate risk creates a dangerous gap that threatens these institutions, households, and the financial system. Even as they shut their eyes to a globally recognized financial risk, Trump appointees are reducing the frequency and intensity of regulatory oversight. The administration has unilaterally curtailed the independence of the federal banking agencies and the NCUA, promised to exempt banks under $100 billion in assets from many regulations, and is proposing to reduce capital requirements that underpin financial system resilience. The administration is also trying to eliminate the Consumer Financial Protection Bureau (CFPB), the only federal regulator with oversight over financial services provided to consumers by nonbanks. Curtailing federal oversight increases the danger of institution failures, consumer harm, and a climate risk-driven financial crisis.

State banking regulators can and should fill the gaps left by this federal withdrawal. The loss of the CFPB's presence has already drawn commitments from states to fill the gap, and state banking regulators should similarly address the federal withdrawal on prudential and other regulatory measures.

State banking regulators have primary oversight over state-chartered banks and credit unions. State examiners supervise those institutions, checking that they operate in a safe and sound manner and follow the law, including consumer protection laws. Banks and credit unions need a charter and must meet requirements set by the chartering agency to get and maintain it, as well as to avoid various enforcement actions. Of the 4,500 insured banks in the US, about 3,500 are chartered by a state banking regulator. These tend to be smaller on average and in aggregate. State-chartered banks hold just over $8 trillion in assets and $6 trillion in deposits, compared to $16 trillion in assets and $11 trillion in deposits at federally chartered banks. However, some large banks have state charters. In contrast, of the roughly 4,400 federally insured credit unions, about 1,600 have a state charter, and federally insured state credit unions account for close to half of all insured credit unions' $2.4 trillion in assets and $2 trillion in deposits.