How States Can Manage the Challenges of Paying for Natural Disasters

3 recommendations for policymakers facing rising costs, tight budgets, and changing federal directives

Overview

From wildfires in the West to hurricanes in the Gulf of Mexico and along the Eastern Seaboard, natural disasters are becoming more frequent and more severe throughout the United States. Ensuring that public funding is available to respond to, recover from, mitigate against, and prepare for these events involves a complex relationship across all levels of government: federal, state, and local. The rising cost and frequency of disasters, as well as the fiscal impacts of the COVID-19 pandemic, are putting pressure on budgets at all three levels, fueling debates that could affect the intergovernmental dynamics of the disaster funding system. This changing landscape has brought the critical but understudied role of states to the forefront.

In this context, research by The Pew Charitable Trusts has uncovered three actions that state policymakers can take to improve their understanding of the fiscal impact of natural disasters on state budgets and assess how resources might be better allocated for the long term:

- **Comprehensive tracking.** States should track their spending on disasters across all of the agencies and disaster phases—response, recovery, mitigation, and preparedness.
- **Budgeting mechanism assessments.** States should examine the budgeting methods they use to pay for disasters to determine if those approaches are meeting their needs.
- **Mitigation integration.** States should consider how their spending and budgeting practices incorporate investments in disaster mitigation—efforts undertaken to reduce harm from future disasters; every mitigation dollar spent can save an average of $6 in post-disaster recovery costs.

Although states face uncertainty associated with the rising costs of these events, these steps can help them manage the challenges moving forward.

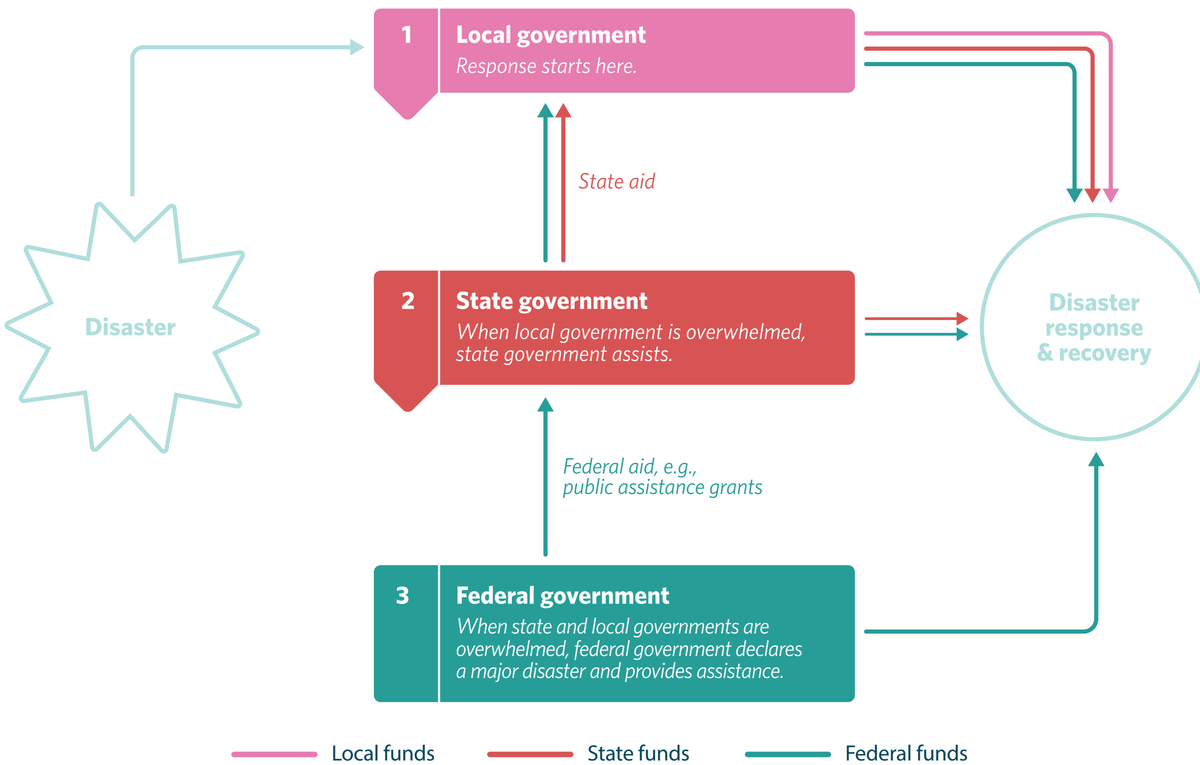
The states' role

Federal, state, and local governments all play a role in the U.S. disaster assistance system. Local governments are typically the first responders and the initial source of money; state and federal resources come into play as the scale of destruction and costs increase. (See Figure 1.)

Figure 1

Natural Disaster Spending on Response and Recovery Is Highly Intertwined Across Levels of Government

Schematic representation of funding flows



Notes: Funding flows are representative and reflect mainly post-disaster activity for a declared major disaster. They do not reflect funding amounts or the process for all federal and state programs. State and local funds include cost share payments related to federal programs.

Sources: Pew's analysis of information from J.T. Brown and D.J. Richardson, "FEMA's Public Assistance Grant Program: Background and Considerations for Congress" (2015), https://crsreports.congress.gov/product/pdf/R/R43990; U.S. Government Accountability Office, "Budgeting for Disasters: Approaches to Budgeting for Disasters in Selected States" (2015), https://www.gao.gov/products/GAO-15-424; Federal Emergency Management Agency, "FEMA Public Assistance Guide" (2007), http://www.fema.gov/pdf/government/grant/pa/paguide07.pdf

The state role in this system is twofold: First, states pay for disasters that are within their fiscal and logistical capacity to manage, often in conjunction with local governments. State funding in these instances may support immediate response efforts, such as search and rescue, and evacuation; longer-term programs to help communities recover; and mitigation activities to reduce the impact of future events. Second, when disasters are too expensive for states to pay for themselves, they leverage their money to receive federal funds, typically in the form of cost-sharing agreements through which the federal government partially or fully reimburses state or local expenditures. Even before the COVID-19 pandemic, all 50 states and Washington, D.C., had requested and received at least one federal major disaster declaration—the mechanism outlined in the Robert T. Stafford Disaster Relief and Emergency Assistance Act that allows the federal government to provide supplemental resources and reimbursements to states and localities for larger, more costly disasters—since 2015.[1]

In recent years, however, as costs have risen, federal policymakers have called for states to take increased responsibility for disaster-related expenses. As of June 2020 and at Congress' direction, the Federal Emergency Management Agency (FEMA) was considering updates to the eligibility criteria for the public assistance program, its largest financial aid program for state and local governments, which helps pay for repairs to public buildings and infrastructure.[2] In particular, FEMA is planning to propose raising the per capita indicator, the damage threshold that it uses to determine whether a disaster qualifies for public assistance funding. The Government Accountability Office has argued that the current benchmark is too low and results in the federal government paying for disaster recovery costs that could be borne by state and local governments. This proposed change would result in states paying a larger portion of post-disaster costs.[3] At the same time, the federal and state roles are under increased scrutiny as a result of the COVID-19 pandemic, which has hit state budgets with new spending demands and decreased tax revenue, and has prompted unprecedented levels of federal spending on aid to states and localities, including through some of the programs typically used for natural disaster response and recovery.

Federal policies have increased pressure on states

The federal government has spent significant taxpayer funds on natural disaster assistance in recent years:

- Expenditures for FEMA's public assistance program increased by 23% when comparing the 2000-09 and 2010-19 decades.[4]
- From 2005 through 2019, the federal government spent $460 billion on disaster assistance, and previous Pew research has shown that a significant portion of federal disaster spending happens in agencies outside of FEMA: At least 17 major departments and agencies contribute through dozens of programs and activities.[5]

As federal policymakers debate future natural disaster spending and seek ways to manage rising costs, they are likely to continue pressuring states to invest more in emergency management capabilities, fiscal reserves, recovery programs, and mitigation activities. In addition to increasing the per capita indicator, federal policymakers have proposed tying federal aid to evidence of state fiscal capacity or investment in mitigation.[6] Such policies would have implications for how states budget for disasters because, unlike the federal government, almost all states are statutorily required to balance revenue and expenditures.

Critical state data is lacking

Complicating debates over which level of government should pay for natural disaster assistance is the fact that most states do not have a comprehensive accounting for what they currently spend on these events. Pew surveyed state emergency management agencies and found that most states do not track their disaster spending across all agencies involved—such as transportation, housing, health, and environmental protection—or all phases of a disaster.[7]

Despite the obstacles that states face in collecting spending information—interagency complexity, the fact that disaster spending may not receive consistent policymaker attention, and agencies' capacity to collect and report data—Pew received survey responses from 23 states that were sufficiently robust to show that states differ in the amount and composition of their disaster expenditures. Eight of those states worked with Pew to provide more complete data, and among those, spending on their own programs ranged widely over a five-year period, from 93% of total disaster expenditures in Delaware to zero in Wyoming, with the balance directed to cost shares for federal programs.

This variation implies that federal policy changes that rely on states' own spending, programs, or investment in mitigation as metrics could affect states very differently. To better inform federal policy proposals, Pew recommends that policymakers at both levels prioritize comprehensive tracking of natural disaster assistance. Federal decisions made without data about state contributions risk shifting spending from one level of government to another while missing opportunities to encourage investments in mitigation that could help control growth in the nation's disaster costs.

States Taking Action

Several states have recently implemented more comprehensive tracking of their natural disaster assistance:

- **Colorado** passed HB20-1426, which requires the Office of State Planning and Budgeting to make quarterly reports to the legislature on spending from the disaster emergency fund. These reports, the first of which is due in September 2020, will include details such as which disaster the spending relates to, the amount of money transferred into and out of the account, and the agencies that spent and received the funds.[8]
- The **North Carolina** Office of Recovery and Resiliency was established by statute in 2018 and is tasked with tracking the state's spending on disasters across all agencies and disaster phases.[9]
- In **Ohio,** the state's budget office and emergency management agency jointly developed a system to collect state-level spending on disasters across agencies. The budget office's broad authority to compel agencies to report their data was an important element in the policy, which has resulted in more complete information about the amount and purpose of the state's disaster expenditures.[10]
- A 2019 budget provision requires the **Virginia** Department of Emergency Management to report annually to the executive branch and legislature on state agency expenditures using funds from the state Disaster Recovery Fund as well as any contracts executed to address disaster needs.[11]

Assessing state budgeting mechanisms

In addition to expanding their understanding of how much money they spend on disasters, states should evaluate whether the tools they use to budget for those costs are up to the challenges posed by a changing policy landscape and more frequent and severe natural hazards. Pew examined the five most common mechanisms—statewide disaster accounts, rainy day funds, supplemental appropriations, transfer authority, and state agency budgets—and found that 46 states and D.C. can employ at least four of them and that the remaining four states can use at least three.[12] (See Figure 2.)

Broadly speaking, statewide disaster accounts and rainy day funds are preemptive measures that states use to appropriate resources in anticipation of future disasters, while supplemental appropriations and transfer authority are responsive measures, allowing states to allocate money during and after an event. State agency budgets, meanwhile, can function in both ways.

Figure 2

46 States and the District Can Use at Least 4 of 5 Budget Tools to Pay for Disasters

Use of each mechanism, by state

Note: Lighter shades indicate that the state cannot use the selected mechanism for disasters.

Sources: Pew analysis of data from the National Association of State Budget Officers, "Budget Processes in the States" (2015), https://www.nasbo.org/reports-data/budget-processes-in-the-states; state statutes, constitutions, and websites; and correspondence with state budget offices

Although in general states make use of similar tools, they differ in how and under which circumstances they apply each strategy.[13] For instance, 46 states and D.C. have a statewide disaster account, but they appropriated widely varied amounts. For fiscal year 2018, at least 17 states did not appropriate money to their accounts, but among those that did, new contributions ranged from $250,000 in Rhode Island and Nebraska to a $200 million contingency appropriation in New York.[14] Comparing the use of these tools across states can be instructive to state policymakers as they examine their fiscal options and as federal decision-makers manage rising costs in ways that could leave states paying a greater share.

Shifting spending to mitigation can help all levels of government

By comprehensively tracking how much they spend on disaster assistance and assessing their budgeting practices, states can make more strategic decisions, such as devoting more resources to mitigation strategies.[15] When examining the return on mitigation investments in the contiguous 48 states, Pew found that, although the amount varies, every state saves at least three times as much in post-disaster recovery costs as it invests in mitigation. (See Figure 3.)[16] At the high end of the range, Kansas saved $6.81 on average per dollar invested in mitigation between 1993 and 2016.

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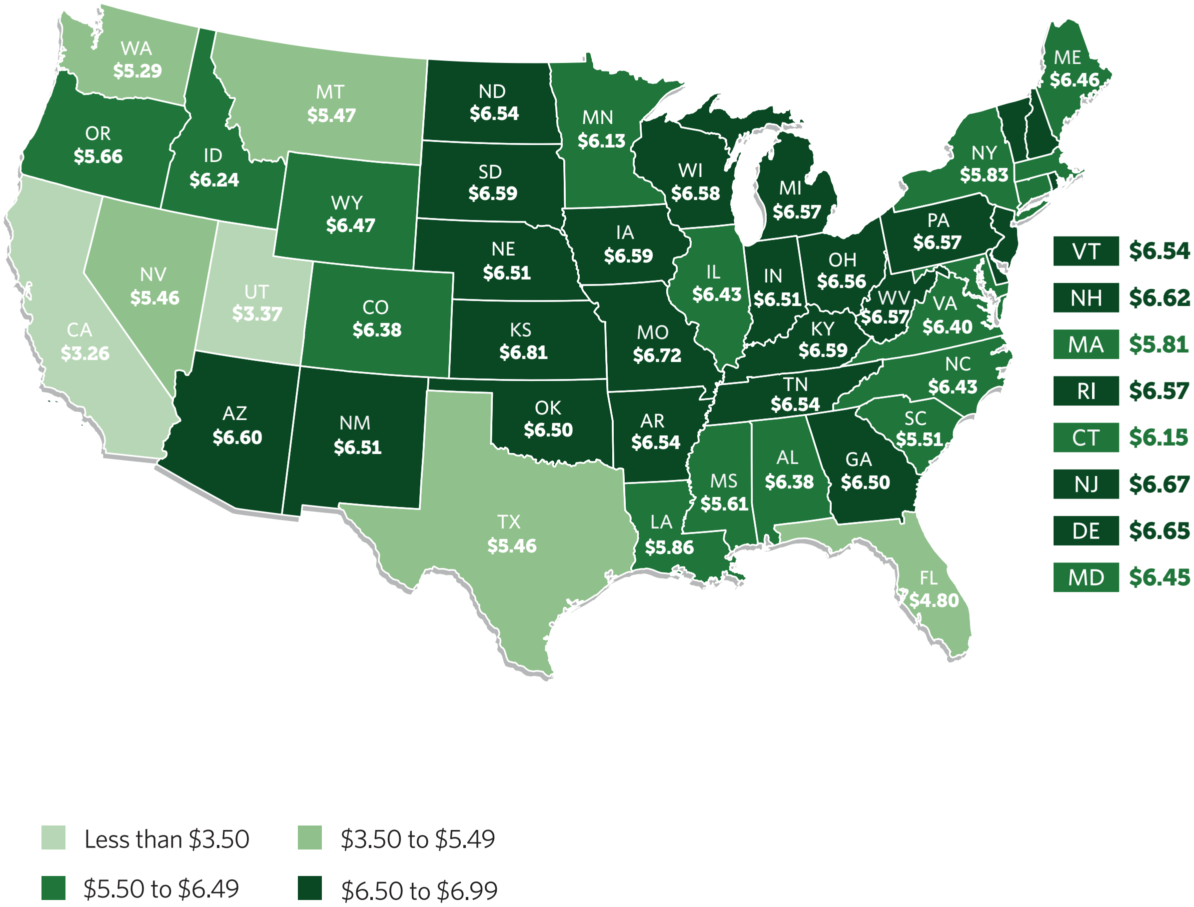
Figure 3

Return on Investment From Mitigation Activities Varies by State

Money saved on average per dollar spent for select federal mitigation programs, 1993-2016



Note: Alaska and Hawaii are not included because of data limitations. Federal programs include the Federal Emergency Management Agency's Public Assistance, Flood Mitigation Assistance, Hazard Mitigation, and Pre-Disaster Mitigation grant programs, the U.S. Department of Housing and Urban Development's Community Development Block Grant Program, and 18 U.S. Department of Commerce Economic Development Administration programs. Because the National Institute of Building Sciences uses a representative sample of mitigation projects for its calculation, small sample sizes in some states mean that their state- and hazard-specific benefit-cost ratios may be less definitive than those for other states.

Sources: Pew analysis of data from National Institute of Building Sciences Multi-Hazard Mitigation Council, (April 18, 2018); K. Porter et al., "Natural Hazard Mitigation Saves: 2019 Report" (2019), https://cdn.ymaws.com/www.nibs.org/resource/resmgr/reports/mitigation_saves_2019/mitigationsaves2019report.pdf

Better tracking of disaster spending at the state level is needed to clarify the extent of state and local investments across agencies and phases of disaster, and to inform strategic decisions about funding of cost-saving mitigation measures.

Conclusion

Natural disasters, such as floods, earthquakes, and wildfires, are inevitable, and policymakers will continue to face the challenges of covering the many costs that come with them. State policymakers can help manage the fiscal impacts of future events by implementing spending tracking, identifying opportunities to improve budgeting practices, and prioritizing mitigation investments that can save money down the road. As budgets continue to be squeezed and disasters increase in frequency and severity, taking action now is more important than ever.

Endnotes

1 Pew analysis of data from Department of Homeland Security, "OpenFEMA Dataset: Disaster Declarations Summaries - V1, 1953-2020," accessed May 9, 2020, https://www.fema.gov/about/openfema/data-sets#disaster.

2 Federal Emergency Management Agency, "Disaster Recovery Reform Act of 2018, Provisions 1230(a)-1239," accessed June 16, 2020, https://www.fema.gov/disaster-recovery-reform-act-2018.

3 U.S. Government Accountability Office, "COVID-19: Opportunities to Improve Federal Response and Recovery Efforts" (2020), https://www.gao.gov/reports/GAO-20-625/#appendix42.

4 Pew analysis of data from Department of Homeland Security, "OpenFEMA Dataset: Public Assistance Funded Projects Details - V1, 1991-2019," accessed May 13, 2020, https://www.fema.gov/about/openfema/data-sets#public. This figure includes only public assistance spending for natural disasters in the 50 states and the D.C. Data was adjusted using GDP deflator for fiscal year 2019.

5 U.S. Government Accountability Office, "National Preparedness Additional Actions Needed to Address Gaps in the Nation's Emergency Management Capabilities" (2020), https://www.gao.gov/assets/710/706612.pdf; The Pew Charitable Trusts, "Federal Disaster Assistance Goes Beyond FEMA," Sept. 29, 2017, https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2017/09/federal-disaster-assistance-goes-beyond-fema. The $460 billion figure includes $277.6 billion that federal departments and agencies spent during fiscal 2005 through 2014, plus funds provided in supplemental appropriations following major disasters from 2015 to 2019.

6 Federal Emergency Management Agency, "Factors Considered When Evaluating a Governor's Request for Individual Assistance for a Major Disaster," 44 C.F.R. 206.48(b) (2019), https://www.federalregister.gov/documents/2019/03/21/2019-05388/factors-considered-when-evaluating-a-governors-request-for-individual-assistance-for-a-major; Bipartisan Budget Act of 2018, H.R.1892, U.S. House of Representatives (2018), https://www.congress.gov/bill/115th-congress/house-bill/1892/text; Federal Emergency Management Agency, "Disaster Recovery Reform Act of 2018, Provisions 1230(a)-1239."

7 The Pew Charitable Trusts, "What We Don't Know About State Spending on Natural Disasters Could Cost Us" (2018), https://www.pewtrusts.org/en/research-and-analysis/reports/2018/06/19/what-we-dont-know-about-state-spending-on-natural-disasters-could-cost-us.

8 Limit Emergency Spending and Authorize Additional Appropriation, HB20-1426, 72nd Colorado General Assembly (2020), https://leg.colorado.gov/bills/hb20-1426.

9 Hurricane Florence Disaster Recovery Act, Session Law 2018-136, General Assembly of North Carolina (2018), https://www.ncleg.net/EnactedLegislation/SessionLaws/HTML/2017-2018/SL2018-136.html.

10 The Pew Charitable Trusts, "How Ohio Designed Its System to Track Natural Disaster Spending," May 17, 2019, https://www.pewtrusts.org/en/research-and-analysis/articles/2019/05/17/how-ohio-designed-its-system-to-track-natural-disaster-spending.

11 Budget Bill, HB1700 (Chapter 854) Item 402, June 16, 2020 (2019), https://budget.lis.virginia.gov/item/2019/1/HB1700/Chapter/1/402/.

12 The Pew Charitable Trusts, "How States Pay for Natural Disasters in an Era of Rising Costs" (2020), https://www.pewtrusts.org/en/research-and-analysis/reports/2020/05/how-states-pay-for-natural-disasters-in-an-era-of-rising-costs.

13 Ibid.

14 Ibid. Most states allow account balances to roll over across fiscal years. For example, Nebraska re-appropriated $7.31 million in existing funds in addition to the new $250,000 appropriation for the fiscal 2017-19 biennium.

15 For further information on cost savings related to mitigation activities, see K. Porter et al., "Natural Hazard Mitigation Saves: 2019 Report" (National Institute of Building Sciences, 2019), https://cdn.ymaws.com/www.nibs.org/resource/resmgr/reports/mitigation_saves_2019/mitigationsaves2019report.pdf.

16 A. Stauffer, C. Foard, and E. Spence, "Data Highlight State-by-State Benefits of Federal Natural Disaster Mitigation Grants," The Pew Charitable Trusts, June 17, 2019, https://www.pewtrusts.org/en/research-and-analysis/articles/2019/06/17/data-highlight-state-by-state-benefits-of-federal-natural-disaster-mitigation-grants.

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