The PEW charitable trusts

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How States Pay for Natural Disasters in an Era of Rising Costs

A nationwide assessment of budgeting strategies and practices

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Cover photo: Volunteers work to clean up damage in Cookeville, Tennessee, on March 4, 2020, after a deadly tornado ripped through the Nashville area. States use a variety of strategies to cover the costs of severe storms and other natural disasters. Brett Carlsen/Getty Images

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The Pew Charitable Trusts is driven by the power of knowledge to solve today's most challenging problems. Pew applies a rigorous, analytical approach to improve public policy, inform the public, and invigorate civic life.

Overview

Although catastrophes with large federal government responses capture the most public attention, state governments play an oft-overlooked role in paying for natural disasters. When the costs from natural disasters such as storms, earthquakes, and wildfires exceed a local government's capacity to respond, states must be ready to step in with resources, personnel, and financial support for affected areas. And for larger disasters, states can request a presidential declaration, which makes federal funds available to supplement state and local resources.

In addition to meeting people's immediate needs in the aftermath of disasters, states fund programs that help communities rebuild over time, repair state-owned and other critical infrastructure, and contribute to long-term preparedness and risk-reduction efforts to help communities become less vulnerable to future disasters. Even in major disasters, states often must pay upfront for costs that are later partially or fully reimbursed by the federal government.

And as disasters become more expensive, frequent, and severe, states are under increasing pressure from federal policymakers—who are seeking to manage their own rising costs—to invest more in emergency management capabilities, fiscal reserves, recovery programs, and cost-saving mitigation activities. These ongoing state and federal policy discussions have intensified the need for policymakers at both levels to understand the budgetary tools that states rely on to make sure sufficient funds are available when it matters most for communities.

To help policymakers better understand how states manage these unpredictable and growing costs, The Pew Charitable Trusts assessed states' use of five budgeting tools that the Government Accountability Office and previous Pew research had identified as common natural disaster-funding mechanisms: statewide disaster accounts, rainy day funds, supplemental appropriations, transfer authority, and state agency budgets. The researchers also looked at states' use of insurance to protect themselves from losses associated with damage to their own property and assets.

Two of the five mechanisms—statewide disaster accounts and rainy day funds—allow states to plan ahead and pre-emptively put aside resources, while supplemental appropriations and transfer authority give states flexibility to respond to events requiring additional funds. State agency budgets can function in both ways depending on the circumstances.

Pew found that all 50 states and Washington, D.C., make use of at least three of the five mechanisms, while 46 states and the district employ at least four. Although this study did not examine budgeting practices for public health emergencies, states are employing some of these tools in response to the COVID-19 pandemic, according to the National Conference of State Legislatures. States differ in how and under which circumstances they apply each strategy for natural disasters. The analysis reveals both parallels and variability in states' approaches, which can be instructive as state policymakers examine their fiscal options in the face of increasingly expensive disasters and as federal decision-makers review and design their policies:

• 46 states and the district have a disaster account to cover costs incurred by state and sometimes local governments. Of those, 39 states and the district have at least one account designated for natural disasters or other emergencies, and nine and the district have a flexible contingency fund that can be used for disaster expenses. Twelve states and the district keep more than one disaster account. States make deposits to these accounts at varied frequencies and in differing amounts. For instance, new contributions ranged from \$250,000 in Nebraska and Rhode Island for the fiscal 2017-19 biennium and fiscal 2018, respectively, to \$200 million in New York in fiscal year 2018. The guidelines for using these funds also vary across states, as do the ability to carry balances forward for future use and the revenue sources used to fill the accounts.

- 35 states and the district may use rainy day or reserve funds—savings designed to help manage unexpected revenue shortfalls or spending demands—to cover disaster-related costs. Twenty-one of these states and the district specify disasters or emergencies as an intended use of their rainy day funds. However, most states can use their accounts for disasters and emergencies at lawmakers' discretion even when those purposes are not explicitly named, and in eight states such legislative flexibility is written into law. Nine states reported that although their funds are intended for economic emergencies, they could redirect money to disasters if necessary. Another seven states reported that although they were legally permitted to use their funds for disasters, they had not done so in at least the past five years.
- Every state and the district can use supplemental appropriations to fill shortfalls caused by disasters. This method is an extension of legislatures' power to make budgeting decisions and allows states to deploy revenue to pay for disaster costs outside of their regular budget cycles. Because most state legislatures do not meet year-round, they may call a special session or designate a committee to appropriate the needed funds in a timely manner.
- 42 states and the district designate an official or entity with transfer authority—the power to move funds within state government—for disaster purposes. In most instances, the authorized officials can transfer needed resources with little or no additional legislative action. In 24 states, the governor assumes this power as part of an emergency declaration; in six, a council or commission made up of executive and sometimes legislative officials can move funds; in 10, that ability is delegated to a state agency; and in 11 of the 42 states, plus the district, multiple officials must approve at least some transfer requests. The amount and sources of money that these entities can redirect vary across states: Some have access that is limited to specific accounts or agency budgets, while others can transfer funds from any source within the state.
- Every state and the district permit agencies to use their own budgets for disaster needs. Of these, Colorado, Florida, Maryland, New Jersey, Rhode Island, and Tennessee use state agency budgets as the first source of state disaster resources. In some states, only a small number of agencies can spend their budgets on disasters, whereas in others virtually all agencies can. Across the 50 states and the district, the way agencies spend during a disaster depends on how their budgets are structured: Some use a flexible pot of money, others spend funds designated for disasters, and still others redirect dollars originally intended for other activities. In 34 of these states, a governor's emergency declaration is required to loosen statutory restrictions on agency budgets to allow agencies to spend for disaster needs.

This report outlines the role states play in paying for disasters and key findings about the approaches they take to budgeting for natural catastrophes. The intent is to help all levels of government be ready to meet immediate needs, cover the costs of long-term recovery efforts, and invest in preparedness and mitigation activities.

Rising disaster costs highlight intergovernmental challenges

In the U.S., public funding for natural disaster assistance involves a complex spending relationship across the levels of government. Localities are typically the first responders and source of money; state and federal resources come into play as the scale of destruction and the costs increase.¹

The state role in the disaster funding system is twofold: First, states pay for disasters—often in conjunction with local governments—that are within their capacity to manage, and which therefore do not qualify for federal assistance. In such instances, governors may issue an emergency or disaster declaration to mobilize state resources.² Regardless of whether a gubernatorial declaration is issued, however, at least some state funding may be used to support immediate response capabilities, such as search and rescue and evacuation efforts, longer-term recovery programs to help communities get back to normal, and mitigation activities intended to reduce the impact of future events.³ 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 states or localities are partially or fully reimbursed for recovery-related expenditures.⁴

In recent years, however, as costs have risen, federal policymakers have called for states to take increased responsibility for funding disaster preparedness, mitigation, response, and recovery.⁵ At a meeting of the Federal Emergency Management Agency's (FEMA's) National Advisory Council in November 2019, then-acting FEMA Administrator Peter Gaynor described current federal spending on natural disasters as "unsustainable."

"The only way we can survive as a nation," he said, "is to set aside pre-disaster money and build state and local capacity."⁶

Federal policy proposals aimed at managing the rising price tag of disasters, such as increasing the threshold at which states can be eligible to receive federal spending or tying federal aid to evidence that states are proactively investing in fiscal reserves or mitigation measures, would have implications for state spending and, in turn, how states budget money to pay for disaster costs.⁷ This is particularly important because, unlike the federal government, almost all states are required by law to balance revenue and expenditures.⁸

The combined impact of more expensive disasters and intergovernmental fiscal pressures has placed new emphasis on the mechanisms that state policymakers use to meet disaster-related needs. However, to date, a comprehensive view of these tools has not been available. This study aims to begin to fill that gap.

About this study

Pew undertook a study to inventory and classify how the 50 states and Washington, D.C., budget for natural disasters. Pew reviewed the literature and identified three major sources of information:

First, in a 2015 report, the U.S. Government Accountability Office (GAO) studied the mechanisms that 10 states—Alaska, California, Florida, Indiana, Missouri, New York, North Dakota, Oklahoma, Vermont, and West Virginia—used to pay for disaster costs. GAO summarized its findings into four categories: statewide disaster accounts, state agency budgets, transfer authority, and supplemental appropriations.⁹

Second, the National Association of State Budget Officers (NASBO) published a report in 2015 on state budget processes, which contains detailed information on statewide disaster accounts, including which states have accounts, their names and purposes, and the amount appropriated to them in fiscal 2014.¹⁰

Finally, previous Pew research on state rainy day funds has identified natural disasters and emergencies as a permissible use in some states.¹¹

Based on this source material, Pew expanded GAO's framework to include rainy day funds. The team then searched publicly available information on the five mechanisms from statutes, constitutions, and websites for each state and the district. Researchers also examined states' use of insurance to cover state property for disaster damage. Pew then submitted the collected information to state budget offices for review and verification. All 50 states and the district responded to the request, and Pew discussed items in further detail during calls or via email with representatives from 39 states and the district.

Portions of this analysis began in summer 2017, and communications with state officials continued through March 6, 2020. As of April 1, 2020, 18 states had enacted supplemental appropriations or rainy day fund transfers as part of their response to the 2020 COVID-19 pandemic; however, researchers did not request information from states related to public health emergencies.¹²

With this study, Pew set out to inventory and characterize states' use of budget approaches, not to evaluate the effectiveness of any of the five mechanisms or specific state strategies for funding disaster costs. For more information on the methodology and limitations, see the appendix.

Five disaster budgeting strategies

This report examines five methods—identified by and defined according to GAO's findings, previous Pew research, and information collected during this study¹³—that states use to ensure that money is available when needed to pay for disaster costs:

- **Statewide disaster accounts.** Specialized accounts that provide money to state agencies or localities for disaster expenditures. Mississippi, for example, appropriates funds to its Disaster Assistance Trust Fund for military and response team reimbursement, the state's portion of cost shares for federal disaster assistance, and other disaster-related costs to the state.¹⁴
- **Reserves or rainy day funds.** Reserves and balances are funds available to states to fill budget gaps, although there may be varied levels of restriction on their use. Rainy day funds are often dedicated to budget stabilization in a downturn or other unforeseen circumstances and may have restrictions on the fiscal or economic conditions in which they can be used. For instance, Texas lawmakers appropriated \$3.5 billion in fiscal 2019 from the state's rainy day fund for Hurricane Harvey recovery efforts and infrastructure investments aimed at mitigating future risk.¹⁵
- **Supplemental appropriations.** When advance funding proves insufficient to cover disaster costs during a fiscal year, every state legislature can appropriate additional funds to pay the remaining costs. North Carolina's General Assembly, for example, passed supplemental budget legislation to pay for costs from Hurricane Florence in fiscal 2019.¹⁶
- **Transfer authority.** Some states allow designated officials or entities (for example, the governor, the state budget director, or a special committee) to move funds within an agency's budget, between agencies, or between accounts or reserves after the start of the fiscal year to pay for disaster costs. For example, North Dakota law permits the governor to transfer the "direction, personnel, or functions" of state agencies and departments during an emergency and authorizes the emergency commission, in conjunction with the office of management and budget, to transfer funds from the state's contingency account or treasury as needed for disasters.¹⁷
- State agency budgets. State agencies, particularly those with missions relevant to disaster response and recovery, cover a portion of disaster costs through their regular budgets. They may use funds intended for disasters or redirect money from nondisaster-related programs. In Virginia, for instance, state agencies can spend budgets initially intended for other purposes on disasters.¹⁸

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

Further, these mechanisms should be understood as broad categories, covering a variety of approaches. And states may employ these tools individually or in tandem: Forty-six states and the district have legal provisions allowing the use of at least four of these mechanisms. (See Figure 1.) Diversifying their budgeting options in this way can give states greater flexibility to address the unpredictable costs of disasters, but some states report relying primarily on a single mechanism.¹⁹ Ultimately, no two states fund their disaster assistance operations the same way, and a given mechanism may differ significantly in structure or application from one state to the next.

Figure 1 46 States and the District Can Use at Least 4 of 5 Budget Tools to Pay for Disasters

Use of each mechanism, by state

СТ	MA	РА	J	AL	AR	со		A	١K	AL	AR	AK	КҮ	МА		АК	AL	AR
AK	AL	SC	C	СТ	DE	GA		A	١Z	CA	со	NH	NV	ОК		AZ	CA	со
AR	AZ	CA		IL	IN	KS		C	т	DC	DE	AL	VT	WA		СТ	DC	DE
со	DC	DE	1	LA	MD	NH			FL	GA	HI	AR	AZ	CA		FL	GA	н
FL	GA	н	N	٧V	ОН	VA		1	A	ID	IL	со	СТ	DC		IA	ID	IL.
IA	ID	IL	A	٩K	AZ	CA		1	N	KS	KY	DE	FL	GA		IN	KS	KY
IN	KS	KY		oc	FL	н			.A	MA	MD	HI	IA	ID		LA	MA	MD
LA	MD	ME		IA	ID	КҮ		N	ΛE	МІ	MN	IL	IN	KS		ME	МІ	MN
мі	MN	мо	N	ЛА	ME	МІ		N	10	MS	МТ	LA	MD	ME		мо	MS	мт
MS	МТ	NC	N	٨N	мо	MS		N	IC	ND	NE	МІ	MN	мо		NC	ND	NE
ND	NE	NH	Ν	лт	NC	ND		N	IH	NJ	NM	MS	МТ	NC		NH	NJ	NM
NJ	NM	NV	r	NE	NJ	NM		N	IV	NY	ОН	ND	NE	NJ		NV	NY	ОН
NY	ОН	ОК	N	Y	ок	OR		C	ж	OR	PA	NM	NY	ОН		ок	OR	РА
OR	RI	SD	P	PA	RI	SC		F	RI	SC	SD	OR	PA	RI		RI	SC	SD
TN	тх	UT	S	SD	TN	тх		т	N	тх	UT	SC	SD	TN		TN	ТΧ	UT
VA	VT	WA	L	JT	VT	WA		V	Ά	VT	WA	ТΧ	UT	VA		VA	VT	WA
wı	wv	WY	V	NI	wv	WY		v	VI	wv	WY	WI	wv	WY		wı	wv	WY
Sta disast	atewi er acc			ainy	⁄ day f	unds				oleme opriat			ransfe uthori				te age udget	
	DEEMDTIVE							ECT		C 11/F								

PREEMPTIVE

RESPONSIVE

VARIABLE

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

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46 states and the district have a statewide disaster account

Disaster accounts hold dollars to cover costs incurred across state agencies, provide funding for federally required cost shares, and in some cases provide assistance for local governments.²⁰ Having an established account for disaster funding is a pre-emptive approach to budgeting for these costly events. These accounts have been widely adopted across the country; only Connecticut, Massachusetts, Pennsylvania, and South Carolina do not have one. Disaster accounts vary across states both in structure and in how they are funded. (See Figure 2.)

States use different types of disaster accounts

Disaster or emergency accounts

Thirty-nine states and the district have accounts for which disasters or emergencies are the named purpose, although states do not uniformly define "disaster" or "emergency." These accounts all provide a method of storing money for use when a natural disaster hits, but the rules governing their intended use differ. Some are specialized, such as North Dakota's Disaster Relief Fund, which is meant only to cover the state's share of FEMA grants and to reimburse local search and rescue costs, and Nebraska's Governor's Emergency Fund, which is intended to help localities "maintain or promptly restore essential public facilities or services when threatened by or damaged as the result of a natural or man-made disaster."²¹ Kansas' Emergency Fund, on the other hand, has many purposes, including "preservation of the public health and the protection of persons and property from extraordinary conditions arising after...appropriations were made by the preceding regular legislative session."²²

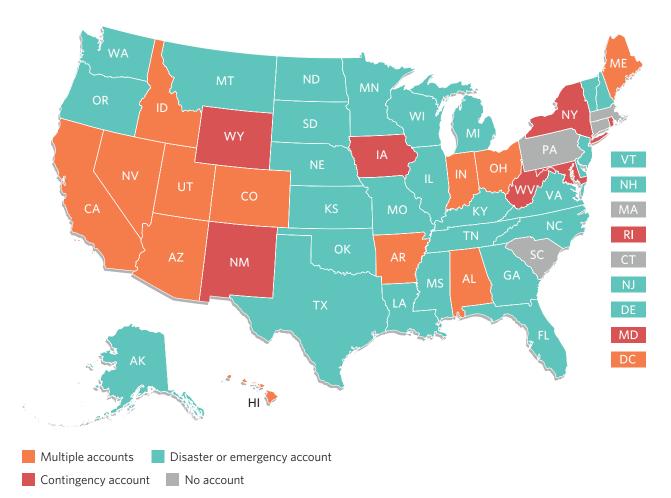
Contingency accounts

lowa, Maine, Maryland, New Mexico, New York, Ohio, Rhode Island, West Virginia, Wyoming, and the district designate or set money aside in a flexible contingency account, rather than an explicit disaster or emergency account, which can be used for events for which costs are difficult to predict, including natural disasters.²³ Although these are not named disaster or emergency accounts, they fulfill a similar role in paying statewide or local disaster costs. For example, Iowa's Executive Council controls a contingent fund for repairs to state-owned property, Ioans to local governments, and the state's share of federal individual and public assistance grants, among other uses.²⁴ And although funds are not held in a specific account, New York's Legislature annually appropriates \$200 million in general funds that the governor and budget director may access to respond to acts of terrorism, natural disasters, or other emergencies.²⁵

Multiple accounts

Twelve states—Alabama, Arizona, Arkansas, California, Colorado, Hawaii, Idaho, Indiana, Maine, Nevada, Ohio, and Utah—and the district have more than one disaster account, which in some cases enables them to set aside funds for particular needs. For example, Utah's State Disaster Recovery Restricted Account covers costs of emergency services in state-declared disasters; its Wildland Fire Suppression Fund is reserved for wildfire response; and the state-administered Local Government Emergency Response Loan Fund provides financing to municipalities to pay for disaster needs and aid they give to other states under the Emergency Management Assistance Compact.²⁶ Similarly, Nevada's two disaster accounts serve different purposes and are administered by different entities. The Interim Finance Committee, made up of state legislators, controls the Disaster Relief Account, which it uses to make grants and loans to state agencies and local governments for disasters and emergencies, and the Division of Emergency Management administers the Emergency Assistance Account, which is used to provide state entities and local governments with supplemental funding or to cover the division's direct disaster-related costs.²⁷

Figure 2 Most States Have a Specific Disaster or Emergency Account Accounts by type and state



Notes: A disaster or emergency account has disaster or emergency as its named purpose, a contingency account holds money set aside for costs that are difficult to predict, and "multiple accounts" refers to the state's having more than one statewide disaster account. No account: State does not have a statewide disaster account.

Sources: Pew's 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

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States employ a range of strategies to fund disaster accounts

States fund their disaster accounts at various levels and using an array of revenue sources. To better understand the variety of approaches, Pew asked states for information about the amount and origin of funds appropriated to their disaster accounts at the beginning of fiscal 2018 and received information from 48 states. (See Table 1.) These reports update and complement research by NASBO and found that:²⁸

- The amount appropriated varied significantly. New appropriations to state disaster accounts ranged from \$250,000 in Nebraska and Rhode Island for the fiscal 2017-19 biennium and fiscal 2018, respectively, to \$200 million in New York in fiscal 2018. The amount that states allocate to these accounts may depend on variables not explored in this study, such as the size of their overall budget, available funds, and disaster risk. Some states provided additional funding throughout the fiscal year: Alaska added \$2 million to its Disaster Relief Fund at the outset of fiscal 2018 and an additional \$10.2 million in two infusions later that year.²⁹ Seventeen states reported that no new funding was allocated to any statewide disaster accounts in fiscal 2018.³⁰ Alabama, California, Colorado, Idaho, Maine, Nevada, and Ohio have multiple accounts, but each state reported providing no new funding to at least one of its accounts.
- Most states allow account balances to roll over across fiscal years.³¹ For example, Nebraska dedicated \$250,000 in new money to its disaster fund in fiscal 2018 and re-appropriated \$7.31 million in previously allocated funds, for a total of more than \$7.5 million. Tennessee's Reserve for Disaster Relief receives \$4 million each year, but unspent funds can carry over; the account had \$26.1 million as of June 30, 2018.³²
- Some states do not allow balances to accumulate but instead redirect unused money to disaster-related investments. Arizona, for instance, can use any money remaining in its disaster account at the end of the fiscal year to fund mitigation efforts, which are activities intended to reduce the impact of future disasters.³³
- Funding for disaster accounts comes from different sources. At least 28 states fund their disaster accounts with general fund revenue, but several—including Florida, Nebraska, North Dakota, and Wisconsin—draw on special sources of money, such as revenue from oil and gas taxes and fees on homeowner and commercial insurance. Several rely on a mix of general funds, trust funds, and other sources. In some states, these accounts also hold federal funds that the state draws down after major disasters.

Table 1

27 States Appropriated New Funding to at Least 1 Statewide Disaster Account at the Start of Fiscal 2018

Amount allocated by state and account

State	Account name	Amount appropriated at the start of fiscal 2018
	Alabama Disaster Recovery Fund	Unfunded
	Alabama Law Enforcement Agency—Emergency Code	\$56,700
Alabama	Finance FEMA	\$5,287,908
	Local Emergency Management Agency Assistance Fund	\$420,000
	Military Active Duty Pay	\$500,000
Alaska	Disaster Relief Fund	\$2,000,000
Arizona	Fire Suppression Fund	\$4,000,000
Anzona	Governor's Emergency Fund	\$4,000,000

		Amount appropriated at
State	Account name	the start of fiscal 2018
	Catastrophic Loss Fund	
Arkansas	Disaster Recovery Fund	\$17,569,984*
Aikaiisas	Disaster Response Fund	φ17,507,70 4
	Hazard Mitigation Fund	
	Disaster Assistance Fund	\$0
California	Disaster Relief Fund	Unfunded
	Disaster Response Emergency Operations Account (within the Special Fund for Economic Uncertainties)	\$1,000,000
Colorado	Disaster Emergency Fund	\$12,500,000
Colorado	Wildfire Emergency Response Fund	\$O [†]
Connecticut	No account	No account
Delaware	State Emergency Management Fund	Unfunded
District of Colombia	Emergency Cash Reserve Fund	Data unavailable
	Contingency Cash Reserve Fund	Data unavailable
Florida	Emergency Management, Preparedness, and Assistance Trust Fund	\$15,284,704
Georgia	Governor's Emergency Fund	\$11,062,041
Hawaii	Firefighter's Contingency Fund	Data unavailable
	Major Disaster Fund	Data unavailable
Idaho	Disaster Emergency Account	\$0
	Governor's Emergency Fund	\$0
Illinois	Disaster Response and Recovery Fund	Data unavailable
	Emergency Management Contingency Fund	\$114,456
Indiana	Governor's Civil and Military Contingency Fund	\$119,004
	State Disaster Relief Fund	\$485,000
lowa	Contingent fund	\$0
Kansas	State Emergency Fund	\$1,315,138
Kentucky	Disaster Relief Funding Program trust fund	\$0

State	Account name	Amount appropriated at the start of fiscal 2018
Louisiana	State Emergency Response Fund	\$1,100,000
Maine	Disaster Recovery Fund	Unfunded
Maine	State Contingent Account	\$O [‡]
Maryland	Catastrophic Event Account	\$O [†]
Massachusetts	No account	No account
Michigan	Disaster and Emergency Contingency Fund	\$O [†]
Minnesota	Disaster Assistance Contingency Account	\$10,000,000*
Mississippi	Disaster Assistance Trust Fund	\$20,000,000
Missouri	Missouri Disaster Fund	\$0 ^s
Montana	Fire Suppression Fund	\$O [†]
Nebraska	Governor's Emergency Fund	\$250,000* ^{†§}
Nevada	Disaster Relief Account	\$2,000,000"
Nevada	Emergency Assistance Account	\$0
New Hampshire	Emergency Fund	\$0
New Jersey	Emergency Services Fund	\$0
New Mexico	Appropriation Contingency Fund	Unfunded
New York	Miscellaneous all state departments and agencies—public safety and emergency response	\$200,000,000
North Carolina	North Carolina State Emergency Response and Disaster Relief Fund	\$22,300,000*
North Dakota	State Disaster Relief Fund	\$12,292,597 ^{*†}
	Controlling Board Emergency Purposes/Contingencies Fund	\$7,500,000*
Ohio	Controlling Board Disaster Services Fund	\$O [†]
	State Disaster Relief Fund	\$0
Oklahoma	State Emergency Fund	\$0
Oregon	Oregon Disaster Response Fund	\$0
Pennsylvania	No account	No account
Rhode Island	Governor's Contingency Fund	\$250,000

State	Account name	Amount appropriated at the start of fiscal 2018
South Carolina	No account	No account
South Dakota	Special emergency and disaster special revenue fund	\$0
Tennessee	Reserve for Disaster Relief	\$4,000,000 [†]
Texas	Disaster Contingency Fund	\$100,000,000
	Disaster Recovery Restricted Account	\$11,113,142
Utah	Local Government Emergency Response Loan Fund	\$104,100
	Wildland Fire Suppression Fund	\$7,093,015
Vermont	Emergency Relief and Assistance Fund	\$2,000,000
Virginia	Virginia Disaster Recovery Fund	\$0
Washington	Disaster Response Account	\$77,483,000 ^{*s}
West Virginia	Civil Contingent Fund	\$O [†]
Wisconsin	Wisconsin Disaster Fund	\$711,200*
Wyoming	Special Contingent Fund	\$500,000*

* The state follows a biennial appropriation schedule. Except for the Wyoming figure, these numbers reflect the total of each state's biennial appropriation at the beginning of fiscal 2017 plus any additional appropriations contributed at the beginning of fiscal 2018.

[†] The state appropriated the amount shown at the beginning of fiscal 2018 but reported that additional state money was available in the account: Colorado, \$64,000; Maryland, \$7,229,411; Michigan, \$4,600,000; Montana, \$36,000,000; Nebraska, \$7,563,552; North Dakota, \$37,292,597; Ohio, \$25,300,000; Tennessee, \$26,100,000; West Virginia, \$67,024,402.

* Maine added \$350,000 in surplus funds at the end of fiscal 2018.

[§] The state reported additional federal funds in account: Missouri, \$100,506,359; Nebraska, \$12,569,922; Washington, \$64,586,000.

^{II} Nevada funded its Disaster Relief Account appropriation for 2018 through quarterly transfers of \$500,000 each.

Note: The amount that states allocate to statewide disaster accounts may depend on variables not explored in this study, such as overall budget size, available funds, and disaster risk. Accounts marked as \$0 at the beginning of 2018 may still hold money from previous years or be funded for specific disasters. In contrast, accounts listed as unfunded have not stored or received money in recent years.

Sources: Pew analysis of data provided by states; biennial appropriation label is either from state comments during verification or 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

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35 states and the district can use rainy day funds to cover disaster-related costs

States put funds aside in reserves for use in the event of budgetary shortfalls.³⁴ Rainy day funds are reserves that are generally intended to stabilize budgets during economic downturns or other unexpected financial emergencies, such as natural disasters. Like statewide disaster accounts, rainy day funds can provide states with a ready source of money when an event occurs.

Forty-eight states and the district have rainy day funds, and previous Pew research has shown that state statutes often do not provide clear purposes or conditions for withdrawing funds.³⁵ Where conditions do exist in law, they differ widely across states. Thirty-five states and the district allow the use of rainy day funds for disasters, though only 14 and the district explicitly name disasters as an intended purpose for the fund. Seven others—Michigan, New Jersey, Oklahoma, Oregon, Pennsylvania, South Dakota, and Vermont—specify "emergencies," which may include natural disasters as well as fiscal or other crises, among their funds' designated uses.

Eight states designate at least one of their rainy day funds for any use the legislature deems necessary. (See Figure 3.) For example, the Texas constitution states that a two-thirds majority in the Legislature may "appropriate amounts from the economic stabilization fund [ESF] at any time for any purpose,"³⁶ and in 2019 state lawmakers appropriated \$3.5 billion from the ESF for disaster purposes, including recovery efforts and flood control projects, following Hurricane Harvey.³⁷ Similarly, Iowa, Minnesota, Montana, Nebraska, Oregon, Rhode Island, South Dakota, Tennessee, and Wisconsin have funds for "economic emergencies" that are not expressly intended for natural disasters but could be used to cover those costs if necessary.

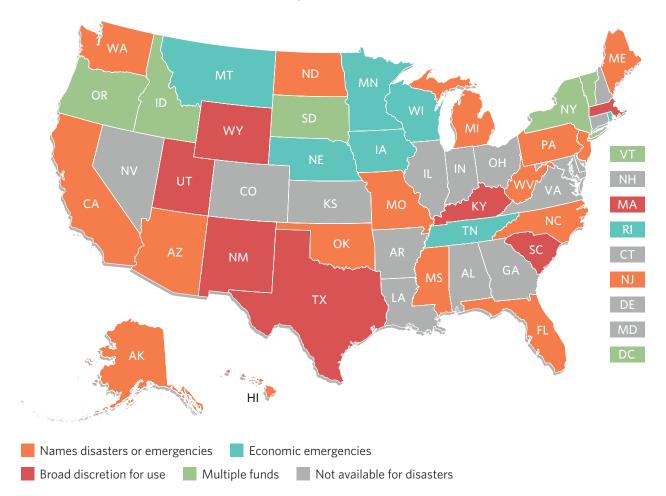
Washington, D.C., Idaho, New York, Oregon, South Dakota, and Vermont have multiple rainy day funds that can be used for natural disasters. The district, Idaho, and New York specify in statute that multiple funds are available for natural disasters. Both of Vermont's funds are available for disaster purposes but follow different processes for deployment of fund resources: The General Assembly and the commissioner of the Department of Finance and Management decide the use of the General Fund Budget Stabilization Reserve, while statute designates the General Fund Balance Reserve as available for "unforeseen or emergency needs."³⁸



A helicopter drops water near firefighters battling a blaze near Simi Valley, California, on Oct. 30, 2019. The state is one of 35 (plus Washington, D.C.) that can use their rainy day funds to pay for wildfires and other natural disasters.

Figure 3 21 States and Washington, D.C., Designate Natural Disasters or Emergencies as a Purpose of Their Rainy Day Funds

Use of funds for natural disasters, by state and restriction level



Notes: "Names disasters or emergencies" means state statute designates "disasters" or generally defined "emergencies" as conditions for withdrawing money from the fund. "Economic emergencies" means state statute specifies the fund's purpose as "revenue shortfalls," "economic downturns," or other situations related to economic conditions, but the fund could be used for natural disasters. "Broad discretion for use" means state statute provides for the fund to be used at the legislature's discretion. "Multiple funds" means the state has at least two rainy day funds that can be used for disasters. And "Not available for disasters" means that the state either has a rainy day fund but cannot use it for natural disasters or does not have a rainy day fund. Respondents from Massachusetts, Nebraska, New Jersey, Rhode Island, Tennessee, Utah, and Wisconsin reported that their states are not statutorily prohibited from using a rainy day fund for disaster purposes but have not done so in at least the past five years.

Sources: Pew analysis of data from The Pew Charitable Trusts, "When to Use State Rainy Day Funds" (2017), https://www.pewtrusts.org/en/research-and-analysis/reports/2017/04/when-to-use-state-rainy-day-funds; state statutes, constitutions, and websites; and correspondence with state budget offices

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Legislatures can decide if and when to use their states' rainy day funds for disaster costs even in states where statutes specify the account's purpose. In Minnesota, for instance, the budget reserve account is designated for an economic downturn, but the Legislature can pull funds to pay for a disaster if necessary.³⁹ Additionally, Massachusetts, Nebraska, New Jersey, Rhode Island, Tennessee, Utah, and Wisconsin reported that although spending their rainy day funds on disasters is not expressly prohibited, their legislatures generally do not or have not recently done so.

Fourteen states reported that their rainy day funds are unavailable for disaster costs, and Louisiana's Budget Stabilization Fund and one of South Carolina's funds are constitutionally restricted to specific purposes that do not include disasters.⁴⁰

Every state and the district uses supplemental appropriations to fill budget shortfalls after disasters

Every state legislature and the D.C. Council may add money to one or more parts of an existing budget to cover disaster costs outside of the standard appropriations cycle. Supplemental appropriations can act as a responsive tool that allows states to react to unforeseen budgetary needs resulting from natural disasters. Yet Pew's research also revealed nuance in how states' budget processes, such as legislative session length, affect when and how they use supplemental appropriations for natural disasters.

Legislative schedules influence supplemental appropriations

State legislative sessions range from about one month to year-round and may be annual or biennial.⁴¹ Although this study found no direct correlation between legislative schedules and the use of supplemental appropriations, states tend to approach this mechanism differently, depending on when their legislatures meet. For instance, Massachusetts officials noted that, because the state's Legislature operates all year, supplemental appropriations are always available, so the state exclusively relies on them to reimburse disaster costs.⁴² States in which the legislature meets for only part of the year can also use this tool but must do so differently. Oregon and New Hampshire, for example, grant a select committee of legislators the power to appropriate funds if necessary after the yearly session has adjourned.⁴³ Wyoming, alternatively, reserves days each year in case the governor needs to call a special legislative session to provide funds.⁴⁴ North Carolina, which enacts its budgets every other year, called the Legislature into special sessions in fiscal 2017 and 2019 to pass emergency appropriations for hurricane relief.⁴⁵

Some states favor supplemental appropriations for disasters, while others avoid them

Supplemental appropriations range from a primary tool for paying for disasters in some states, such as Massachusetts and Rhode Island, to an option of last resort for catastrophic costs in others. Officials from Arkansas, New Jersey, New Mexico, Pennsylvania, and Wisconsin noted that their states allow but have not used supplemental appropriations for disaster purposes in recent years.⁴⁶ Further, some states reported that introduction of new budget mechanisms had altered their reliance on supplemental appropriations. For example, Minnesota has not appropriated supplemental funds for specific disasters since the state established a disaster account in 2014, though the option remains available.⁴⁷

42 states and the district assign transfer authority to a designated official or entity

Forty-two states and the district designate an official or entity, such as the governor, budget director, or a special committee, to transfer funds within or between agencies or from statewide reserve accounts to pay for disaster costs. This approach enables these states to respond to sudden and shifting funding needs outside of the regular appropriations process.

Transfer authority rests with a range of officials

In 24 states, the governor has authority to transfer funds during a declared emergency, as does the mayor of Washington, D.C.⁴⁸ For example, in Tennessee, the governor may move any funds, including those appropriated for another purpose, when the state emergency management agency's general resources are insufficient to cover the state's costs.⁴⁹ In another seven states—Maryland, Missouri, New Jersey, New York, Oregon, Rhode Island, and West Virginia—the governor may transfer funds but only in collaboration with the legislature, budget agency, or a specified committee. (See Table 2.)

Six states have commissions, committees, or councils, made up of executive and sometimes legislative officials, that are empowered to authorize or recommend funds transfers to pay for disasters.⁵⁰ In Connecticut, the ninemember Finance Advisory Committee—made up of the governor, lieutenant governor, comptroller, treasurer, and five legislators—has authority to transfer resources within agencies.⁵¹ Additionally, in North Dakota, Ohio, and Oregon, transfers approved by the designated entities may require the approval of another authority, such as a legislative committee or the state budget office. For instance, North Dakota's emergency commission—which comprises the governor, secretary of state, and legislative leadership—can move money between funds or line items to meet disaster needs, but if that spending threatens the operations of state programs or objectives, the commission must get approval from the Legislative Budget Section Committee.⁵²

Ten states delegate some transfer power to state agencies such as the emergency or financial management agency. In Mississippi, the emergency management director can work with the executive director of finance and administration to move money from the state's Working Cash-Stabilization Reserve Fund or the Budget Contingency Fund into the Disaster Assistance Trust Fund during an emergency.⁵³ In Arizona and Delaware, agencies must work with the budget office to shift funds within their agency budgets for disaster purposes. Neither of these states allows interagency transfers. In six states, one or more agencies work with an additional state entity to approve transfer requests.

Connecticut, Iowa, Louisiana, Montana, North Dakota, New Jersey, New York, South Carolina, and Utah use multiple transfer methods, each involving different actors and restrictions.



Archie Sanders, left, gets help from his neighbor, Jason Johnson, to build a temporary levee to hold back floodwaters caused by Hurricane Florence along the Waccamaw River in Conway, South Carolina, on Sept. 23, 2018. South Carolina officials have broad authority to transfer money for use in covering the costs of natural disasters, such as floods.

Table 2 Most States Allow Governors, Councils, or Agencies to Move Money to Pay for Disasters

How states assign transfer authority

State	Governor	Agency	Commission, committee, or council
Alabama	\checkmark		
Alaska			
Arizona		\checkmark	
Arkansas	\checkmark		
California	\checkmark		
Colorado			\checkmark
Connecticut		\checkmark	\checkmark
Delaware		\checkmark	
District of Columbia	\checkmark^*		
Florida	\checkmark		
Georgia	\checkmark		
Hawaii	\checkmark		
Idaho	\checkmark		
Illinois	\checkmark		
Indiana		\checkmark	
lowa	\checkmark		\checkmark
Kansas			\checkmark
Kentucky			
Louisiana		√ †	\checkmark
Maine	\checkmark		
Maryland	√ †		
Massachusetts			
Michigan	\checkmark		
Minnesota		\checkmark	
Mississippi		\checkmark	
Missouri	√ †	\checkmark^{\dagger}	
Montana	\checkmark	\checkmark	
Nebraska	\checkmark		

State	Governor	Agency	Commission, committee, or council
Nevada			
New Hampshire			
New Jersey	√ †	\checkmark	
New Mexico	\checkmark		
New York	√ †	\checkmark^{\dagger}	
North Carolina	\checkmark		
North Dakota	\checkmark	\checkmark^{\dagger}	v †
Ohio		\checkmark^{\dagger}	v †
Oklahoma			
Oregon	v †		v †
Pennsylvania	\checkmark		
Rhode Island	√ †		
South Carolina	\checkmark		\checkmark
South Dakota		\checkmark	
Tennessee	\checkmark		
Texas	\checkmark		
Utah	\checkmark	\checkmark	
Vermont			
Virginia	\checkmark		
Washington			
West Virginia	√ †		
Wisconsin		\checkmark^{\dagger}	
Wyoming	\checkmark		

^{*} The mayor transfers funds but needs approval from the D.C. Council for amounts above \$500,000.

[†]Transferring entity needs additional approval from another unit within state government in at least some circumstances. Sources: Pew's analysis of state statutes, constitutions, and websites; and correspondence with state budget offices

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States restrict which funds may be moved

Although most states allow some type of transfer for emergency spending, they vary significantly in terms of which funds can be moved. (See Figure 4.) Six states empower an authorized official or entity to transfer money only within agencies; four permit transfers between or within agencies; 19 allow money to be moved from a disaster-specific fund or the general fund to state agencies; and 21 and the district grant broad authority, allowing designated officials to move money from almost any source.

Figure 4 21 States and the District Allow Virtually Any Funds to Be Transferred for Disaster-Related Purposes

Transfer authority for emergency funds by state



BROAD AUTHORITY LIMITED AUTHORITY

Notes: This figure represents findings for all 50 states and the district. "Broad authority" means the state empowers designated officials to move money from almost any source, including specific funds, between or within agencies, within agencies, or within programs. "Specific funds" means the officials may transfer money from designated accounts, such as a general fund, rainy day fund, or disaster account, during an emergency. "Between or within agencies" means the state permits inter- or intra-agency transfers. "Within agencies" means the state allows intra-agency transfers. "Within programs" means the state allows intra-agency transfers. "Within programs" means the state allows transfers within a given appropriation number or budget line item. Some states use more than one type of transfer authority. States with broad authority only appear under that category, because it encompasses all transfer types. States that use multiple limited transfer methods appear in all applicable categories. Therefore, counts of states in this figure differ slightly from those listed in the text of this report, which also include broad authority states under the applicable limited methods.

Sources: Pew's analysis of state statutes, constitutions, and websites; and correspondence with state budget offices © 2020 The Pew Charitable Trusts

Every state and the district permits agencies to use their own budgets for disaster needs

In every state, agencies that participate in disaster response and recovery can cover those costs from their own budgets. When disaster funds are budgeted into an agency's normal activities, this is a pre-emptive approach but can also be a responsive tool, allowing agency resources intended for other purposes or those from the budgets of agencies not generally involved in disasters to be redirected toward disaster needs. Some state agencies can spend whenever a disaster occurs, while others need explicit direction from the governor. (See Table 3.)

State agencies as the first line of defense

In Colorado, Florida, Maryland, New Jersey, Rhode Island, and Tennessee, agency budgets are the first source of funding during an emergency. Colorado's statute is typical. It says, "It is the legislative intent that first recourse be to funds regularly appropriated to state and local agencies." The state also has a disaster account, but those resources can be accessed only if the governor determines that agency funds are insufficient to cover the costs.⁵⁴

States designate which agencies can spend on disasters

Fourteen states and the district authorize only certain agencies to spend on emergency response. In Wyoming, for instance, the Department of Transportation has used its budget for costs such as repairing a bridge damaged in 2011, but most agencies in the state do not have this authority without additional approval from the Legislature or governor.⁵⁵ Minnesota assigns disaster responsibilities and spending power in its emergency management statutes for 13 agencies, including Education, Health, Human Services, and Natural Resources.⁵⁶ In contrast, at least 11 states authorize most or all agencies across state government to spend on disasters if necessary. In Washington state, agencies may use any funding that is not restricted for specific activities for disaster expenses.⁵⁷

Agency spending depends on budget structures

Legislatures direct how agencies can use their resources

All state legislatures appropriate money to agencies, but the type and extent of restrictions they place on that funding differ across states, departments, and even programs. For example, some departments or programs receive flexible appropriations, which allow agency officials to designate funds for various activities from that larger amount. In other cases, legislatures strictly limit how agency funding can be used. States often use a mix of these methods across agencies and programs.⁵⁸

These variations affect the way agencies pay for costs when a disaster strikes. Some have funds set aside in their budgets for emergencies, even sometimes for specific types of disasters or risks. For instance, Montana's Department of Natural Resources and Conservation pays for wildfire protection, which includes preventing or putting out fires, using money budgeted to its forestry division for that purpose.⁵⁹ On the other hand, agencies may be able to use flexible appropriations for disasters as long as they have sufficient funds. Most agencies in Arizona, for instance, can use their lump-sum appropriation "in any way they see fit, including for emergency spending."⁶⁰

Some states or agencies require a governor's emergency declaration

In 34 states, even some with strictly defined agency appropriations, a governor's emergency declaration changes budgeting restrictions to allow agency spending on disasters.⁶¹ Pew found that 25 of those states had statutes with language nearly identical to that of Kansas, which authorizes the governor to "utilize all available resources of the state government and of each political subdivision as reasonably necessary to cope with the disaster."⁶² According to Barry Dussé, former director of Louisiana's Office of Planning and Budget, the ultimate result of these provisions is to effectively relax the legislative restrictions that normally prohibit agencies from spending funds on activities other than their specified purposes.⁶³

Table 3 States Impose a Range of Conditions on When and How Agencies Can Use Their Budgets for Disaster Costs

Agencies that may spend their own resources on emergencies, by state

State	Only selected agencies	All or virtually all agencies	Modified rules for agency spending in cases of emergency declaration
Alabama		\checkmark	
Alaska			\checkmark
Arizona		\checkmark	
Arkansas	\checkmark		
California	\checkmark		\checkmark
Colorado		\checkmark^*	
Connecticut		\checkmark	
Delaware	\checkmark		\checkmark
District of Columbia	\checkmark		\checkmark
Florida		\checkmark^*	
Georgia			\checkmark
Hawaii		\checkmark	\checkmark
Idaho	\checkmark		
Illinois			\checkmark
Indiana			\checkmark
lowa			\checkmark
Kansas	\checkmark		\checkmark
Kentucky			\checkmark
Louisiana [†]		\checkmark	\checkmark
Maine			\checkmark
Maryland		\checkmark^*	
Massachusetts	\checkmark		
Michigan			\checkmark
Minnesota	\checkmark		
Mississippi		\checkmark	
Missouri	\checkmark		\checkmark
Montana	\checkmark		

State	Only selected agencies	All or virtually all agencies	Modified rules for agency spending in cases of emergency declaration
Nebraska			~
Nevada			\checkmark
New Hampshire ‡			\checkmark
New Jersey		\checkmark^{\star}	\checkmark
New Mexico			\checkmark
New York		\checkmark	\checkmark
North Carolina			\checkmark
North Dakota [§]			\checkmark
Ohio	\checkmark		\checkmark
Oklahoma			\checkmark
Oregon		\checkmark	
Pennsylvania			\checkmark
Rhode Island		\checkmark^{\star}	\checkmark
South Carolina	\checkmark		
South Dakota			\checkmark
Tennessee		\checkmark^{\star}	\checkmark
Texas			\checkmark
Utah		\checkmark	\checkmark
Vermont	\checkmark		
Virginia ^{II}		\checkmark	\checkmark
Washington		\checkmark	
West Virginia	\checkmark		
Wisconsin		\checkmark	\checkmark
Wyoming	\checkmark		\checkmark

* Agency budgets are the first recourse during a disaster.

[†] Agencies use their operating budgets until the state appropriates alternative funding.

* Some state agencies allocate a minimal amount of operating funds to cover administrative costs associated with emergency support functions.

[§] Agencies can spend if they have enough funds, but the state reported that costs are typically too high for them to do so.

I State agencies cover the initial costs of disasters but are later reimbursed, with the exception of the Department of Transportation, which uses its nongeneral fund appropriation to cover its disaster-related costs.

Sources: Pew analysis of data from state statutes, constitutions, and websites; and correspondence with state budget offices © 2020 The Pew Charitable Trusts

State policymakers must adapt when agency budgets are spent for disasters

Although allowing state agencies to use their own resources for disasters makes funds more readily available, that convenience may come at the expense of the programs and activities for which the money was initially intended. According to the Connecticut Office of Policy and Management, disaster spending from agency budgets sometimes requires "reprioritization of activities in order to free up funds from their initially intended use for redirection to support ... emergency-related activities."⁶⁴

That redirection of funds may leave budget gaps that policymakers must fill, generally by appropriating new funds or moving existing ones. For example, in Massachusetts, money spent by state agencies to cover emergency costs may be reimbursed when the Legislature passes a supplemental appropriation.⁶⁵ And in Mississippi, money can be transferred to agencies from the statewide disaster fund.⁶⁶

Beyond Budgeting: States' Use of Insurance for Disasters

In addition to budgeting tools, at least 42 states and the district employ insurance to protect state-owned and, occasionally, locally owned assets, such as real estate and infrastructure, from disaster losses. In 27 states and the district, an office of risk management or insurance administers these policies, while in seven others the responsibility falls to the department of administration or administrative services. Some states assign insurance tasks to the office of treasury, general services, or even the governor. In South Carolina, Iowa, and West Virginia, an official body, comprising the governor, other executive officials, and selected state legislators, makes decisions on risk management policies and insurance procurement.

The types of insurance that states carry depend on their individual needs. States may purchase insurance from the private sector, or they may self-insure by committing to pay for damage to state assets using state funds. More than 21 states and the district use a combination of commercial insurance and self-insurance to help manage disaster risk.

For this study, states provided Pew with important information on how they use insurance, but more research is needed to understand how they could better mitigate their disaster risk using this method and to identify promising practices around the use of different insurance types.

Commercial insurance

At least 25 states and the district purchase commercial insurance for state property, thereby transferring some natural disaster risk to the private sector. States buy policies for different assets, levels of loss, and hazards. For example:

- In West Virginia, the Board of Risk and Insurance Management secures insurance policies for stateowned property that include coverage for earthquake and flood damage. The agency also assists boards of education, county commissions, cities and towns, and other groups in procuring appropriate policies.⁶⁷
- The Mississippi Department of Finance and Administration purchases multiple policies to cover state property, except for the state university system. The policies include coastal exposure insurance to

manage the costs of a major windstorm or hurricane.68

- Washington buys policies for "some buildings, ferries, ferry terminals, and limited coverage on bridges and tunnels."⁶⁹
- Arizona and Georgia purchase coverage from private providers for losses above a specified threshold but primarily rely on self-insurance.⁷⁰

Self-insurance

At least 36 states and the district self-insure state-owned properties for disaster costs, and they do so for a variety of reasons. For instance, one year Colorado did not receive any bids from private insurers and needed an alternate method to manage its risk.⁷¹ And in Montana, the level of risk to state government and the high costs of commercial insurance prompted the state to self-insure starting in the 1970s, although it has since used a combination of the two types.⁷²

In general, self-insurance funds help states set aside money for potential costs. South Carolina's State Fiscal Accountability Authority administers the state's Insurance Reserve Fund. Participating state and local entities pay premiums and receive partial coverage for damage to their buildings and other assets from a range of events, including high winds, floods, and earthquakes.⁷³ Wyoming conducts an annual actuarial study to estimate the amount of money the state's self-insurance fund needs to cover risks not addressed by its commercial policies, and each agency then contributes an amount based on its individual history and risk, as determined by the state study. The state can also use the fund, which held \$47,410,898 at the beginning of calendar year 2019, for the deductibles on its private policies.⁷⁴

Conclusion

When disasters strike, state funds need to flow quickly. The 50 states and Washington, D.C., use a combination of disaster accounts, rainy day funds, agency budgets, transfer authority, and supplemental appropriations to ensure that money is available when it matters most. Every state can use at least three of these mechanisms, but the way they employ and combine them in practice takes many forms.

As disasters become more severe, frequent, and expensive, the federal government is looking to manage rising costs in ways that could change how much states pay and under what circumstances. In this context, policymakers at the state and federal levels need a clear understanding of states' methods for dealing with disaster costs so they can assess where improvements can be made.

Appendix: Methodology

Selection of budget mechanisms

Pew reviewed the relevant literature and identified two major sources of information about state budgeting for disasters: a 2015 GAO report that used semistructured interviews with 10 states to identify common budgeting mechanisms and a 2015 NASBO report on state budget processes that includes information about disaster-specific accounts. Additionally, a 2017 Pew report identified states where disasters may be a permissible use of rainy day funds.

Using the GAO and NASBO studies as a starting point, Pew researchers developed definitions, in consultation with state budgeting experts, for statewide disaster accounts, state agency budgets, transfer authority, reserves and rainy day funds, supplemental appropriations, and insurance. Pew also invited states to share information on other mechanisms they use. Alabama, Alaska, Connecticut, Florida, Minnesota, Mississippi, Montana, Pennsylvania, and Wyoming provided descriptive data on approaches to budgeting that did not match any of the five mechanisms studied here, but that information is not included in this report.

Data gathering and verification

Initial data collection

Pew researchers used the definitions they developed for the five mechanisms to review publicly available reports, state statutes and constitutions, and websites to find references to the use of those methods in the 50 states and the district. Researchers also recorded a description of how each method was used in a given state, the source of the information, and the appropriate statutory or constitutional citation.

State verification

In fall 2018, Pew researchers sent the collected information, along with a request for additional data about amounts appropriated to statewide disaster accounts at the outset of state fiscal year 2018, to state budget officers for review and verification. Pew staff members then contacted via email and telephone budget offices from 13 states—Alabama, Arizona, Louisiana, Maine, Massachusetts, Minnesota, Montana, New Hampshire, New Mexico, North Dakota, Utah, Washington, Wyoming—and the district to resolve unclear data. Finally, before publication of this report, researchers again sent each state excerpts showing how their information would be presented, requested corrections, and worked with 26 states to answer outstanding questions. Ultimately, officials from every state and the district reviewed the material and provided feedback.

Data analysis

After consolidating the states' verification responses, researchers identified and analyzed themes across states within each mechanism, created codes for each theme, and refined the coding over multiple rounds of review. At least two researchers confirmed the coding for every state listed for each mechanism.

Limitations

For the initial stages of this analysis, researchers relied on publicly available data sources, primarily statutes, constitutions, and department pages on state websites, and did not search state regulations. To mitigate any omission or misinterpretation resulting from this approach, the researchers verified the information directly with state officials. Therefore, this research relies in part on self-reported data and information from state officials. The researchers went to great lengths to develop clear and comprehensive data collection instruments; inspect responses for possible inaccuracies; and probe respondents for corrections, clarity, and explanation. But independently verifying every data point was beyond the scope of this analysis.

Pew collected information on states' use of insurance, but the data were not detailed enough to present state-bystate findings. Instead, this research revealed themes that should be clarified in future research.

Focus on natural disasters

Based on external consultation, Pew limited its examination to natural disasters. However, some states' methods for addressing other disasters and emergencies are deeply intertwined with those for natural disasters. For instance, Maryland sets aside money for natural disasters and other calamitous situations in its Catastrophic Event Account.⁷⁵

Endnotes

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- 2 National Emergency Management Association, "2020 Biennial Report" (2020), https://www.nemaweb.org/index.php/resources/onlinestore/product/41-2020-nema-biennial-report-digital-version.
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- 19 Oregon Rev. Stat. § 401.525(2), https://www.oregonlegislature.gov/bills_laws/ors/ors401.html; L. Logsdon, executive budget officer, Minnesota Management and Budget—Budget Division, email to The Pew Charitable Trusts, Nov. 14, 2018; T. Mullaney, executive director/ state budget officer, Rhode Island Office of Management and Budget, email to The Pew Charitable Trusts, Nov. 5, 2018; B. Shim, finance director, Massachusetts Executive Office for Administration and Finance, email to The Pew Charitable Trusts, Feb. 20, 2020.
- 20 U.S. Government Accountability Office, "Budgeting for Disasters."
- 21 North Dakota Cent. Code § 37-17.1-27, https://www.legis.nd.gov/cencode/t37c17-1.pdf#nameddest=37-17p1-27; Nebraska Emergency Management Agency, "Governor's Emergency Fund Guidelines for Public Officials" (2018), https://nema.nebraska.gov/sites/nema. nebraska.gov/files/doc/gov-guide.pdf.
- 22 Kansas Stat. Ann. § 75-3713, http://www.ksrevisor.org/statutes/chapters/ch75/075_037_0013.html.
- 23 National Association of State Budget Officers, "Budget Processes in the States," 150. NASBO defines a contingency fund as "a fund set apart to provide for unforeseen expenditures or for anticipated purposes of uncertain amounts."
- 24 Iowa Code § 29C.20, https://www.legis.iowa.gov/docs/code/29C.20.pdf.
- 25 R.M. Barbato, chief budget examiner, New York State Division of the Budget, email to The Pew Charitable Trusts, Nov. 8, 2018.
- 26 Utah Code § 53-2a-603 (2019), https://le.utah.gov/xcode/Title53/Chapter2a/53-2a-S603.html; Utah Code § 65A-8-204 (2019), https://le.utah.gov/xcode/Title65A/Chapter8/65A-8-S204.html?v=C65A-8-S204_2016051020160510; Utah Code § 53-2a-607 (2016), https://le.utah.gov/xcode/Title53/Chapter2A/53-2a-S607.html?v=C53-2a-S607_2016051020160510. For more information about the Emergency Management Assistance Compact, see A. Stauffer and C. Foard, "In Natural Disasters, States Lend Each Other a Hand," The Pew Charitable Trusts, Sept. 6, 2017, https://www.pewtrusts.org/en/research-and-analysis/articles/2017/09/06/in-naturaldisasters-states-lend-each-other-a-hand.
- 27 Nevada Rev. Stat. § 414.135, https://www.leg.state.nv.us/NRS/NRS-414.html#NRS414Sec135; Nevada Rev. Stat. § 353.2735, https:// www.leg.state.nv.us/NRS/NRS-353.html#NRS353Sec2735. The statutes for both funds also state that they can be used "for any other purpose authorized by the Legislature."
- 28 National Association of State Budget Officers, "Budget Processes in the States."
- 29 M. Fowler, policy analyst, Alaska Office of Management and Budget, email to The Pew Charitable Trusts, Nov. 2, 2018.
- 30 The states are Delaware, Idaho, Iowa, Kentucky, Maine, Maryland, Michigan, Missouri, Montana, New Hampshire, New Jersey, New Mexico, Oklahoma, Oregon, South Dakota, Virginia, and West Virginia. Some of these states' accounts contained money that rolled over from previous years and others were unfunded.
- 31 National Association of State Budget Officers, "Budget Processes in the States," 82-84.
- 32 Tennessee H.B. 2644 (2017), http://www.capitol.tn.gov/Bills/110/Bill/HB2644.pdf; D.C. Thurman, director, Tennessee Department of Finance and Administration—Division of Budget, email to The Pew Charitable Trusts, Nov. 1, 2018.
- 33 W. Smith-Reeve, deputy director and emergency management director, Arizona Department of Emergency and Military Affairs, email to The Pew Charitable Trusts, June 20, 2019.
- 34 The Pew Charitable Trusts, "Fiscal 50: State Trends and Analysis."
- 35 The Pew Charitable Trusts, "When to Use State Rainy Day Funds"; The Pew Charitable Trusts, "Why States Save" (2015), https://www. pewtrusts.org/en/research-and-analysis/reports/2015/12/why-states-save; Montana Code Ann. § 17-7-130, https://leg.mt.gov/bills/ mca/title_0170/chapter_0070/part_0010/section_0300/0170-0070-0010-0300.html. In 2015, Pew described 47 states with rainy day funds. Since that publication, Montana also has established a fund.
- 36 Texas Const. Art. III, § 49-G, https://statutes.capitol.texas.gov/Docs/CN/htm/CN.3.htm.
- 37 Texas Comptroller of Public Accounts, "ESF History Table"; S.B. 500, 86th Texas Legislature; Hicks email.
- 38 Vermont Stat. Ann., Title 32 §§ 308 and 308c, https://legislature.vermont.gov/statutes/fullchapter/32/005; D.C. Code § 47-392.02, https://code.dccouncil.us/dc/council/code/sections/47-392.02.html#; New York Exec. Code § 29-E, https://www.nysenate.gov/ legislation/laws/EXC/29-E; New York State Fin. Code § 92-CC, https://www.nysenate.gov/legislation/laws/STF/92-CC; Oregon Const Art. X-A § 4.
- 39 L. Logsdon, executive budget officer, Minnesota Management and Budget—Budget Division, email to The Pew Charitable Trusts, May 6, 2019; Minnesota Stat. § 16a.152 (2019), https://www.revisor.mn.gov/statutes/cite/16A.152.
- 40 The states are Alabama, Arkansas, Colorado, Connecticut, Delaware, Georgia, Illinois, Indiana, Kansas, Maryland, Nevada, New Hampshire, Ohio, and Virginia. South Carolina Const. Art. III, § 36; South Carolina Code Ann. § 11-11-320, https://www.scstatehouse.gov/code/t11c011.php; Louisiana Const. Art. VII § 10.3.
- 41 The Pew Charitable Trusts, "Stateline 2020 Calendar," *Stateline*, Jan. 16, 2020, https://www.pewtrusts.org/en/research-and-analysis/ blogs/stateline/2020/01/16/stateline-2020-calendar.

- 42 Shim, email.
- 43 Oregon Const. Art. X-a, § 4; J. Bouchard, assistant commissioner, New Hampshire Department of Administrative Services, email to The Pew Charitable Trusts, May 10, 2019; New Hampshire Rev. Stat. Ann. 9:13-D, http://www.gencourt.state.nh.us/rsa/html/1/9/9-13-d.htm.
- 44 K. Hibbard, deputy director, Wyoming Department of Administration—Budget and Economic Analysis divisions, call to The Pew Charitable Trusts, April 24, 2019.
- 45 A. Brueggemann, assistant state budget officer for budget execution, North Carolina Office of State Budget and Management, email to The Pew Charitable Trusts, Nov. 2, 2018.
- 46 Mullaney, email.
- 47 Logsdon, email.
- 48 Statutes in Illinois, Michigan, Nebraska, North Dakota, and other states allow the governor to "transfer the direction, personnel, or functions of state departments and agencies or units thereof for the purpose of performing or facilitating emergency management." Although this does not necessarily constitute authority to transfer funds, it does represent a form of "in-kind" movement of resources between state entities, which can reduce the sending agency's capacity, producing a cost not unlike the transfer of funds. See Illinois 20 ILCS 3305/7, http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=36&&ChapterID=5; Michigan Comp. Laws § 30.405 (C), http://www.legislature.mi.gov/(S(xyiluzhiegrytlsixvhibyjw))/mileg.aspx?page=getobject&objectname=mcl-30-405; North Dakota Cent. Code §§ 37-17.1-05 and 54-16-04; Nebraska Rev. Stat. § 81-829.40(6c), https://nebraskalegislature.gov/laws/statutes.php?statute=81-829.40.
- 49 Tennessee Code Ann. § 58-2-109 (2000).
- 50 These states are Connecticut, Colorado, Iowa, Kansas, Louisiana, and South Carolina.
- 51 Connecticut Gen. Stat. § 4-87, https://www.cga.ct.gov/current/pub/chap_050.htm#sec_4-87; Connecticut Gen. Stat. § 4-93, https:// www.cga.ct.gov/current/pub/chap_050.htm#sec_4-93.
- 52 North Dakota Cent. Code § 54-16, https://www.legis.nd.gov/cencode/t54c16.pdf; North Dakota Legislative Branch, "Interim Committee Studies and Assignments," North Dakota Legislative Council, accessed Feb. 18, 2020, https://www.legis.nd.gov/assembly/66-2019/ committees/interim/budget-section.
- 53 Mississippi Code Ann. § 33-15-308.
- 54 Colorado Rev. Stat. Ann. § 24-33.5-706 (4)(a) (2018).
- 55 Hibbard, call.
- 56 Minnesota Rev. Stat. §§ 12a.04-.16 (2019), https://www.revisor.mn.gov/statutes/cite/12A.
- 57 L. Mattos, executive assistant to the director, Washington Office of Financial Management, email to The Pew Charitable Trusts, March 2, 2020.
- 58 National Association of State Budget Officers, "Budget Processes in the States"; Thurman, email.
- 59 Montana Department of Natural Resources and Conservation, "Fire Protection," accessed Dec. 12, 2019, http://dnrc.mt.gov/divisions/ forestry/fire-and-aviation; B. Doig, lead budget analyst, Montana's Office of the Governor, call to The Pew Charitable Trusts, May 8, 2019; Montana Legislative Fiscal Division, "Natural Resources and Conservation, Forestry and Trust Lands Management Division: Program Budget Comparison," fiscal 2017 and 2019 bienniums, https://leg.mt.gov/content/Publications/fiscal/Budget-Books/2019/Fiscal-Report/section_c/5706-35.pdf.
- 60 S. Walter, budget analyst, Arizona Governor's Office of Strategic Planning and Budgeting, email to The Pew Charitable Trusts, April 24, 2019. Arizona agencies are prohibited from using money appropriated as a line item with specific uses that do not include disasters.
- 61 The mayor of Washington, D.C., also has this power. Previous research from the Centers for Disease Control and Prevention in partnership with the National Nurse-Led Care Consortium found that governors in 35 states can remove any statutory barriers to emergency response. This differs from Pew's count, which focused on statutes related to accessing funds from state government for use in emergency response. See G. Sunshine et al., "An Assessment of State Laws Providing Gubernatorial Authority to Remove Legal Barriers to Emergency Response," *Health Security* 17, no. 2 (2019), https://www.liebertpub.com/doi/abs/10.1089/hs.2018.0126.
- 62 Kansas Stat. Ann. § 48-925 (2008), http://ksrevisor.org/statutes/chapters/ch48/048_009_0025.html.
- 63 B. Dussé, director, Louisiana Office of Planning and Budget, call to The Pew Charitable Trusts, April 22, 2019.
- 64 P. Potamianos, executive budget officer, Connecticut Office of Policy and Management—Budget Division, email to The Pew Charitable Trusts, Oct. 18, 2018.
- 65 Shim, email.
- 66 Mississippi Code Ann. § 33-15-311.

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- 68 G. Roberson, president, State Risk and Insurance Management Association Executive Committee, email to The Pew Charitable Trusts, July 24, 2019.
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