



Rainy Day Fund Strategies

A CALL TO ACTION

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July 2019
WORKING PAPER

This paper was prepared for the Volcker Alliance for its project on truth and integrity in government finance. The views expressed in this paper are those of the authors and do not necessarily reflect the position of the Volcker Alliance. Any errors or omissions are the responsibility of the authors.



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Printed July 2019

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EXECUTIVE SUMMARY

TOTALING \$62.4 BILLION IN 2019,¹ rainy day funds are the savings accounts of US states. They are vital fiscal tools that help governments cope with natural disasters and can help them avoid crushing spending cuts when economies falter and revenues nosedive. In this working paper, the Volcker Alliance examines the reserve fund policies and practices of all fifty states, based on the findings and data underlying our 2017 and 2018 *Truth and Integrity in State Budgeting* reports. This paper builds on the Alliance's grading of state reserve funds and identifying of best practices (both contained in the reports), and subsequent research. It discusses why rainy day funds are crucial and offers states detailed guidelines to bolster their policies for withdrawals and replenishments, and for linking reserves and revenue volatility.

We also offer ten rainy day fund policy improvements that states can adopt to better protect themselves against economic, fiscal, and natural disasters.

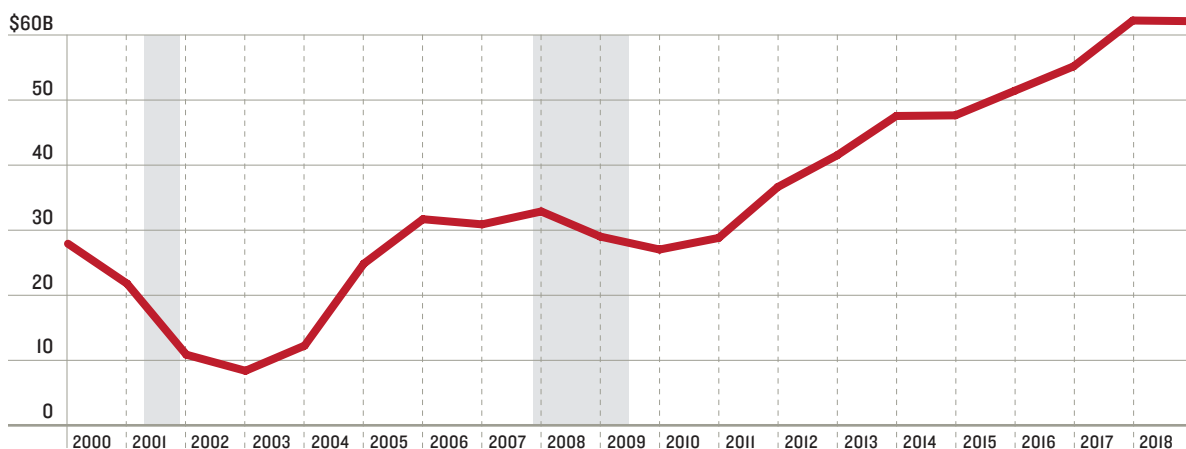
INTRODUCTION

US STATES HAVE AMASSED \$62.4 billion in rainy day funds as of 2019, more than double their level at the end of the 2007–09 recession.² States use these funds, vital tools for fiscal stability, to maintain budgetary balance in times of fiscal stress brought on by unexpected revenue declines due to economic contractions, drops in energy prices, or other financial strains, as well as by increased expenditures stemming from natural disasters such as hurricanes or floods.

The Volcker Alliance reports *Truth and Integrity in State Budgeting: Preventing the Next Fiscal Crisis* (2018) and *Truth and Integrity in State Budgeting: What is the Reality?* (2017) graded all fifty states in five categories, including on the effectiveness of their policies to maintain, grow, and use their rainy day funds and other fiscal reserves. In our 2018 study, only seventeen states received top average grades of A in this category for fiscal 2016 through 2018, while ten were graded C or worse. The chief shortcoming identified in the 2018 evaluation was that thirty-one states had not established policies that tie rainy day fund balances or contributions to revenue volatility. The Volcker Alliance has since added Connecticut to the list of states with volatility-related policies, bringing the number without to thirty. Even many of those that maintain such a link need to strengthen their policies for governing rainy day funds—some radically.³

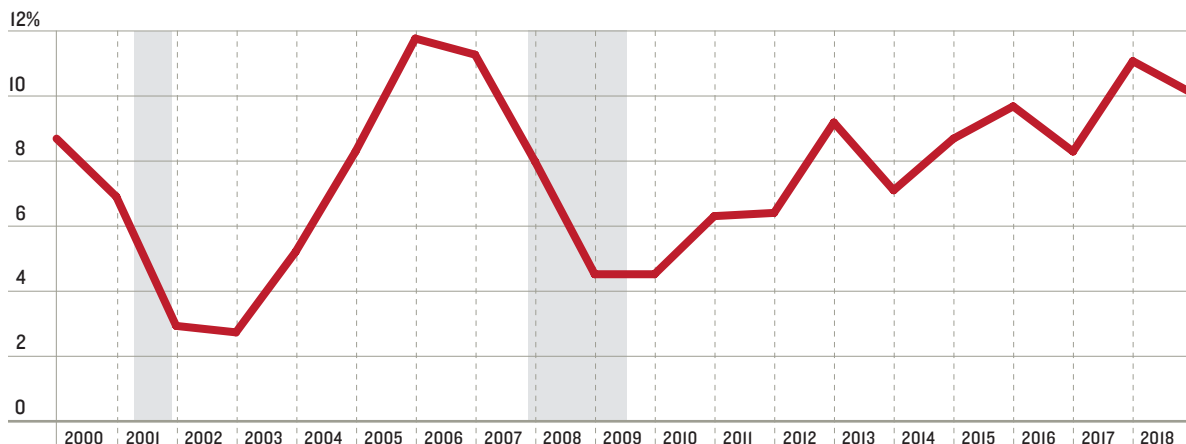
At the heart of this working paper is a ten-point rainy day fund action program that states should use as a template for statutory reforms in areas that need improvement most, including policies for withdrawals and replenishments, and for tying reserve contributions and balances to revenue volatility. To help guide policymakers, each action item is accompanied

CHART 1: Total state rainy day fund balances, in billions of current dollars. Shaded areas indicate recessions.



SOURCES National Association of State Budget Officers; National Bureau of Economic Research.

CHART 2: Rainy day balances as a percentage of general fund expenditures. (Median balances. Shaded areas indicate recessions.)



SOURCES National Association of State Budget Officers; National Bureau of Economic Research.

by an example of a state that has successfully deployed a particularly strong rainy day fund practice, including links to relevant statutes or constitutional amendments.

The size of rainy day funds varies from state to state, both in dollars and as a percentage of expenditures from the general fund, the primary vehicle for financing recurring programs. The biggest rainy day funds as measured by percentage of general fund spending include those in natural resource-rich states such as Alaska, New Mexico, and Wyoming, where extremely volatile revenues accentuate the need for fiscal buffers. In contrast, some fiscally stressed states—including Illinois, Kansas, Kentucky, New Jersey, and Pennsylvania—keep little or no rainy day funds on hand.

Florida created the first rainy day fund in 1959, spurred by challenges stemming from a crop freeze the year before.⁴ Thirty-one other states established funds in the 1970s and 1980s.⁵ Though fifteen states require a supermajority vote in the legislature to tap rainy day funds in certain instances, the reserves typically are the most efficient way for states to weather revenue declines. The alternatives would be raising taxes, slashing expenditures, or borrowing from dedicated long-term savings accounts, such as the Alaska Permanent Fund, or other funds earmarked for transportation or education.

Rules governing rainy day funds are usually set out in statutes. Yet legislators and governors typically are not penalized if they choose to forgo contributions or make appropriations at will. Nonetheless, states that fail to maintain adequate reserves may face credit rating downgrades and the uncertainty of implementing fiscal policies with little or no cushion for emergencies. Those alone are ample reasons to maintain healthy reserves to cope with the rainy days, months, and years that inevitably occur.

STRATEGIES: Fund Withdrawals

SETTING CONDITIONS FOR WITHDRAWALS from rainy day funds is important to prevent them from financing the politically popular program of the moment. Whether the purpose of a withdrawal is to cover a revenue shortfall in the current fiscal year, reduce deficits from previous periods, or help pay for reconstruction after natural disasters, states should clearly define the economic or fiscal indicators that may justify drawdowns, as well as acceptable uses for the money.

Political preconditions for fund withdrawals, such as legislative approval by simple or supermajority vote, should also be codified and well understood. In this way, states can help guard against frivolous use of taxpayer dollars while directing reserve funds toward the most pressing needs.

Seven states – Illinois, Kansas, Kentucky, Maryland, Nebraska, Ohio, and Wyoming – lack or have limited policies governing use of rainy day funds. Many of the other forty-three could improve their procedures for withdrawals. The ten action items in this working paper include several of the best practices we have identified for governing drawdowns.

States withdraw the most from rainy day funds when tax collections decline, generally during or after recessions. For example, total state rainy day fund balances fell almost \$5 billion between 2006, the eve of the last US recession, and 2010, the first full year of the current

CALL TO ACTION

Establish Rules to Govern Withdrawals

ACTION Instead of giving a governor or legislature discretionary power to tap rainy day funds, establish formulas directing when and how reserves can be tapped.

WHY THIS MATTERS Statutes defining appropriate uses of budget stabilization funds establish a framework for decisions about drawing down cash.



BEST-PRACTICE EXAMPLE Indiana statutes permit transfers from the Counter-Cyclical Revenue and Economic Stabilization Fund to the general fund only when revenues have decreased by more than 2 percent from one fiscal year to the next.¹

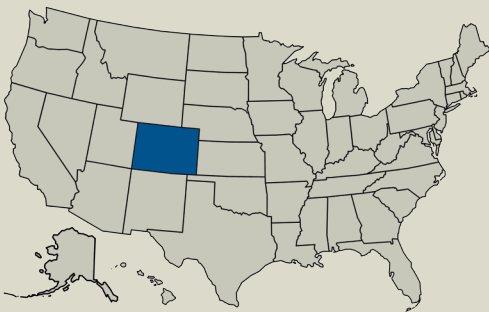
1. Ind. Code § 4-10-18-4, <https://www.volckeralliance.org/indiana-rdf-example>.

CALL TO ACTION

Limit Reserve Withdrawals to Stretch Out Cash

ACTION To help extend the life of reserves, enact rules that require offsetting budget actions in conjunction with rainy day fund withdrawals over certain amounts.

WHY THIS MATTERS While a rainy day fund can help sustain spending and keep budgets balanced through economic downturns, spending cuts or other actions may be required to preserve cash until revenues improve.



BEST-PRACTICE EXAMPLE Colorado does not have a formally designated rainy day fund, but its general fund reserve balance serves the same purpose and has rules for withdrawals and replenishments. A governor must cut general fund spending if half or more of the reserve balance will be used in a fiscal year. The goal of the restriction is to preserve at least half of the reserve fund's statutorily required balance for future use.¹

1. Colo. Rev. Stat. § 24-75-201.5, <https://www.volckeralliance.org/colorado-rdf-example>.

recovery, according to the National Association of State Budget Officers. In 2010, rainy day fund balances could cover only 1.6 percent of the year's general fund spending for all fifty states.⁶ But as the economy and tax revenues have strengthened, rainy day fund withdrawals have shrunk and balances have rebounded to 7.3 percent of general fund expenditures.

In fact, only a handful of states have made withdrawals in the last few years.⁷ North Dakota, for one, took \$572 million out of its budget stabilization fund to avoid spending cuts or tax increases as natural gas prices and severance tax revenues dived in its 2015–17 biennium.⁸ While the fund held the equivalent of 18 percent of general fund spending in 2015, the withdrawals caused the balance to plunge to 2 percent in 2017. (As gas prices have recovered, the state has rebuilt the rainy day fund to 10 percent of general fund spending.)

At the time, North Dakota law gave the governor authority to withdraw from the stabilization fund when biennial revenues were at least 2.5 percent less than estimated by the most recently adjourned special or regular legislative session. The withdrawal process was tightened in 2017 and now requires that cuts be made to agency budgets before any transfers from the fund.⁹ This process does not require legislative approval.¹⁰

CALL TO ACTION

Guard Against Frivolous Fund Use

ACTION Require a supermajority vote of the legislature if money is to be withdrawn for purposes other than an economic downturn, health or safety emergency, or unexpected revenue shortfall.

WHY THIS MATTERS

Flexibility may be desirable in deploying rainy day funds, but only if states enact protections against unnecessary uses.


BEST-PRACTICE EXAMPLE

North Carolina allows using the Savings Reserve Account in “extraordinary” circumstances—which are undefined—if two-thirds of the members “present and voting” in both legislative houses approve the withdrawal.¹

1. N.C. Stat. § 143C-4-2, <https://www.volckeralliance.org/north-carolina-rdf-example>.

North Dakota’s withdrawal rules are one example of how states describe the circumstances under which rainy day funds can be tapped. Thirty-nine states refer either to a revenue shortfall or an imbalance between revenues and expenditures. The statute governing Indiana’s Counter-Cyclical Revenue and Economic Stabilization Fund requires a transfer into the general fund when the annual growth rate of that fund for the current fiscal year drops by 2 percent or more from the previous one. After the state auditor and budget director certify that condition, the state treasurer makes the transfer.¹¹

In Minnesota, which has a two-year budget, the withdrawal process begins with the commissioner of management and budget’s conclusion that the state faces an economic downturn based on various benchmarks, including lower wage growth. The commissioner then estimates whether the amount available from revenues for the remainder of the biennium will be less than needed. After obtaining the governor’s approval and consulting the Legislative Advisory Commission,¹² the commissioner can move money out of the budget reserve account.”¹³

Twenty-five states, including New Jersey, Florida, and Washington, have legislation specifying that health and safety emergencies, such as natural disasters, are appropriate triggers for tapping rainy day funds.

Nine states link rainy day fund use to particular economic indicators that signal a downturn, in some cases in conjunction with an imbalance between expenditures and revenues.

Definitions of economic downturns can vary. In New York, the labor commissioner prepares a monthly composite index of business indicators using components such as private sector employment, average weekly hours of manufacturing workers, and total sales tax collection. The state's reserve funds can be used only after this index declines for five consecutive months.¹⁴

Washington, meanwhile, allows withdrawals from the budget stabilization account when employment growth is forecast at less than 1 percent. The legislature must approve the move by a simple majority.¹⁵

Fifteen states specify conditions other than economic downturns, revenue shortfalls, or budgetary imbalances for dipping into rainy day funds. Georgia legislators may appropriate an amount equal to 1 percent of the preceding year's net general fund revenue to finance K-12 school programs.¹⁶ And Maine law permits the governor to use the Budget Stabilization Fund to pay death benefits for families of law enforcement officers, firefighters, and emergency medical services workers, or to supplement school funding when a municipality is affected by a sudden and severe drop in property valuations.¹⁷

Regardless of statutes detailing the allowed use of rainy day funds, fifteen states, including California, Delaware, Oklahoma, and Oregon, take steps to avoid overuse of reserves by requiring a legislative supermajority in both houses to approve some withdrawals.

In Missouri, a two-thirds legislative majority is required to authorize rainy day fund withdrawals when revenues are less than budgeted appropriations.¹⁸ Alaska law requires a three-fourths majority of each house to tap the reserve "for any public purpose," but a simple majority can use budget reserve funds when money available for appropriation is less than the previous year.¹⁹

TABLE I: State policies for rainy day fund withdrawals

STATE	NO OR LIMITED POLICY	REVENUE SHORTFALL	REVENUE GROWTH BELOW TREND	ECONOMIC DOWNTURN	HEALTH OR SAFETY EMERGENCY	MISCELLANEOUS OTHER USES	SUPERMAJORITY REQUIRED FOR SOME SPENDING
Alabama		✓					
Alaska		✓		✓	✓	✓	✓
Arizona			✓	✓			
Arkansas			✓		✓		
California		✓			✓		✓
Colorado		✓			✓	✓	
Connecticut		✓					
Delaware		✓			✓	✓	✓
Florida		✓			✓		
Georgia		✓				✓	
Hawaii				✓	✓	✓	✓
Idaho		✓			✓		
Illinois	✓						
Indiana		✓					
Iowa		✓					✓
Kansas	✓						
Kentucky	✓						
Louisiana		✓					✓
Maine		✓			✓	✓	
Maryland	✓						
Massachusetts		✓		✓	✓	✓	
Michigan				✓			
Minnesota		✓		✓			
Mississippi		✓			✓		
Missouri		✓			✓		✓
Montana		✓				✓	
Nebraska	✓						
Nevada		✓			✓	✓	
New Hampshire		✓			✓	✓	✓
New Jersey		✓			✓		
New Mexico		✓			✓		✓
New York				✓	✓		
North Carolina		✓			✓	✓	✓
North Dakota		✓					
Ohio	✓						
Oklahoma		✓			✓		✓
Oregon		✓					✓
Pennsylvania		✓		✓	✓		✓
Rhode Island		✓					
South Carolina		✓					
South Dakota		✓			✓		
Tennessee		✓					
Texas		✓			✓		✓
Utah		✓				✓	
Vermont		✓			✓		
Virginia		✓					
Washington				✓	✓	✓	✓
West Virginia		✓			✓		
Wisconsin		✓					
Wyoming	✓						

SOURCES Volcker Alliance, Pew Charitable Trusts.

STRATEGIES: FUNDING AND REPLENISHMENT

RAINY DAY FUNDS ARE OF LITTLE USE if states lack statutes or other rules to ensure that reserves are replenished after they are tapped and that they keep growing until the next fiscal emergency. Only Kansas and Arkansas lack this kind of mechanism, although Kansas has set a deposit plan scheduled to take effect in fiscal 2020.²⁰ And while several states have found ways to get around replenishment rules, at least twenty-six have taken advantage of the recovery in the economy and in tax receipts after the 2007–09 recession to amass more in rainy day funds than they had before the downturn.²¹

States employ six basic methods to govern contributions to rainy day funds. Some states, including Hawaii, Texas, and Michigan, use more than one strategy, but most restrict their funding guidelines to a specific approach.

Twenty-five states, including Delaware, Georgia, Idaho, and Indiana, must move a portion of their unencumbered general fund balances, including surpluses from the current or a recently completed fiscal year, into their rainy day funds.

In New Hampshire, the account is replenished at the end of each two-year budget cycle, when the comptroller transfers the balance from the general fund.²² In other states, only a portion of surplus revenues are designated for the rainy day fund. In Maine, 80 percent of the unencumbered general fund balance is moved to the Budget Stabilization Fund after the

CALL TO ACTION

Set a Fund Replenishment Plan

ACTION Establish a reasonable and reliable schedule for replenishing rainy day funds after withdrawals.

WHY THIS MATTERS

A predetermined replenishment schedule assures that money will be in the fund when it is next needed.

BEST-PRACTICE EXAMPLE In Florida, an expenditure from the state’s Budget Stabi-



lization Fund must be restored in five equal annual transfers from its General Revenue Fund, although the legislature may make exceptions. Payments begin in the third fiscal year after a withdrawal.¹

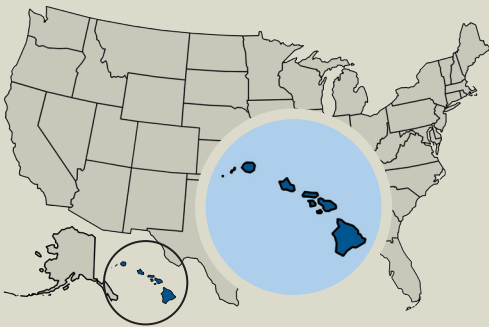
1. Fla. Stat. § 215.32 (1)(c), <https://www.volckeralliance.org/florida-rdf-example>.

CALL TO ACTION

Define Revenue Sources for the Rainy Day Fund

ACTION Establish a specific revenue source or sources to provide money automatically for rainy day funds.

WHY THIS MATTERS Policies that require clearly delineated revenue sources help build reserves consistently.



BEST-PRACTICE EXAMPLE While Hawaii’s legislature has discretion to deposit into reserves whatever additional funds it deems necessary, it is guided by certain rules. For example, 15 percent of the state’s annual proceeds from the 1998 Tobacco Master Settlement Agreement—a legal settlement between cigarette producers and forty-six states, the District of Columbia, and several territories—must be deposited into the Emergency and Budget Reserve Fund each year. Five percent of Hawaii’s general fund balance at the close of the fiscal year is also transferred to the rainy day fund, so long as general fund revenues rise by 5 percent in each of two consecutive years.¹

1. Hawaii Rev. Stat. §328L-2, <https://www.volckeralliance.org/hawaii-rdf-example-1>; and Hawaii Rev. Stat. § 328L-3, <https://www.volckeralliance.org/hawaii-rdf-example-2>.

state satisfies a series of statutory requirements. This mandated transfer ceases only when the reserve fund reaches 18 percent of general fund monies from the preceding year.²³ Though Maine’s stabilization fund was almost empty from 2009 to 2011, it currently could cover 8 percent of general fund expenditures.

After drawing down surpluses, the most common approach for contributing to a rainy day fund is to tap a dedicated funding source. Sixteen states follow this procedure. Among the most typical sources are specific portions of general fund revenues or a defined portion of a single revenue source, such as severance tax collections. For instance, the Washington Constitution requires the state to deposit into the budget stabilization account at the end of each fiscal year an amount equivalent to 1 percent of general fund revenues.²⁴ As of 2019, the account contained the equivalent of 5 percent of general fund spending.

Washington follows another approach. In 2011, voters approved a measure to transfer an additional three-quarters of “extraordinary revenue growth” to the state’s rainy day fund at the end of a biennial budget cycle. Extraordinary in this case is defined as two-year revenue growth that is one-third higher than the average percentage growth in revenues for the prior five budget terms. The exception is if employ-

ment growth in the preceding biennium is less than 1 percent in each fiscal year.²⁵

Maryland’s code obliges the governor to appropriate cash to the rainy day fund based on a sliding scale that links the contribution amount to the size of the Revenue Stabilization Account relative to general fund revenues. If the account balance drops to the equivalent of less than 3 percent of estimated general fund revenues in a given fiscal year, the governor is required to include \$100 million in the proposed budget, which must be approved by the legislature. If the balance is between 3 percent and 7.5 percent, the appropriation drops to \$50 million.²⁶ The state currently has 5 percent of general fund expenditures in the stabilization account.

In nine states, including Missouri, North Carolina, and Virginia, statutes do not spell out the specific revenue sources for rainy day funding. Generally, these states have other statutory guidance ensuring that reserve accounts are funded and replenished, but details—such as where the money comes from or how much is deposited at any one time—are left to the legislature and executive branch.

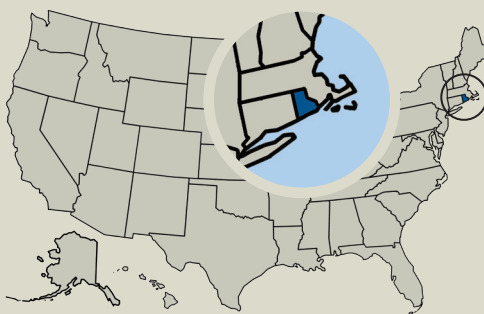
In New York, the law puts rainy day funding decisions in the hands of the budget director, who may make an annual request that the comptroller transfer up to 0.75 percent of that fiscal year’s general fund spending into its rainy day reserve.²⁷ New York’s fund currently contains the equivalent of 2 percent of general fund spending.

CALL TO ACTION

Ensure That the Rainy Day Fund Is Replenished After Use

ACTION Enact measures requiring that reserve funds be repaid after being tapped.

WHY THIS MATTERS Restocking rainy day funds is critical to ensure that reserves are available to address future economic downturns, revenue shortfalls, or natural disasters.



BEST-PRACTICE EXAMPLE Rhode Island statutes direct the state to limit general fund appropriations to 97 percent of general revenues in a fiscal year. The remainder is to be allocated to the budget reserve and cash stabilization account until it reaches 5 percent of general revenues. Anything over that amount is earmarked for the Rhode Island Capital Plan fund.¹

1. R.I. Stat. § 35-3-20.1, <https://www.volckeralliance.org/rhode-island-rdf-example>.

CALL TO ACTION

Put Surpluses Into the Rainy Day Fund

ACTION When the economy is expanding and revenues are surging, tap any resulting budget surpluses for the rainy day fund.

WHY THIS MATTERS

A surplus is generally caused by a revenue windfall. Contributing a portion of the extra receipts to the rainy day fund can soften the impact of future economic downturns and avoid the creation of budgets built on nonrecurring revenues.



BEST-PRACTICE EXAMPLE

Georgia requires that any surplus in state funds at the end of the fiscal year be added to the Revenue Shortfall Reserve as long as its balance does not exceed 15 percent of the previous fiscal year's net revenue.¹

1. Ga. Code Ann. § 45-12-93, <https://www.volckeralliance.org/georgia-rdf-example>.

The state has another policy shared by seven others: statutes spelling out time frames for depositing money into rainy day funds or repaying withdrawals. In New York, money taken out of the reserve fund must be repaid within three years.²⁸ In Rhode Island, funds must be repaid during the fiscal year that follows a transfer from the budget reserve and cash stabilization fund.²⁹ That account has remained at 5 percent of general fund spending since 2012.

Minnesota, Montana, Nebraska, and Oklahoma make deposits into their rainy day funds when revenues are at a set level above the revenue estimate.³⁰ A Wisconsin act created a similar rule in 2001. When tax revenues are above projections, half of the unexpected collections go into the budget stabilization fund. This is in effect only if the fund balance is not more than 5 percent of general fund expenditures.³¹ From 2013 through 2018, Wisconsin's stabilization account had the equivalent of 2 percent of that spending.

Arizona has a statutory formula tying contributions to its Budget Stabilization Fund to increases in total personal income tax collections adjusted for inflation. However, the legislature stopped adding to the fund in 2015 and formally suspended the policy for 2018, 2019, and 2020.³² Even so, the stabilization fund totaled \$468 million,³³ or 4 percent of general fund spending, as of May 26, 2019. Governor Doug Ducey signed a bill on May 27 adding \$542 million to the rainy day account, bringing it to a record \$1 billion.³⁴

TABLE 2: State policies for rainy day fund replenishment

STATE	NO OR LIMITED POLICY	DEDICATED FUNDING SOURCE	IRREGULAR FUNDING SOURCE	SURPLUS	REVENUE ABOVE ESTIMATE	FORMULA FOR FUNDING	SET PERIOD REQUIRED FOR REPLENISHMENT
Alabama		✓					✓
Alaska		✓		✓			
Arizona			✓			✓	
Arkansas	✓						
California		✓					✓
Colorado		✓		✓			✓
Connecticut		✓					
Delaware				✓			✓
Florida			✓				✓
Georgia				✓			
Hawaii		✓		✓		✓	
Idaho				✓		✓	
Illinois			✓			✓	
Indiana				✓		✓	
Iowa				✓			
Kansas	✓						
Kentucky				✓			
Louisiana		✓					
Maine				✓			
Maryland				✓		✓	
Massachusetts		✓					
Michigan		✓				✓	
Minnesota		✓		✓	✓		
Mississippi				✓			
Missouri			✓				✓
Montana					✓		
Nebraska					✓		
Nevada		✓		✓		✓	
New Hampshire				✓			
New Jersey					✓		
New Mexico				✓			
New York			✓				✓
North Carolina			✓			✓	
North Dakota				✓			
Ohio				✓			
Oklahoma					✓		
Oregon		✓					
Pennsylvania				✓			
Rhode Island		✓					
South Carolina			✓	✓			✓
South Dakota				✓			
Tennessee			✓			✓	
Texas		✓		✓			
Utah				✓			
Vermont				✓			
Virginia			✓			✓	
Washington		✓				✓	
West Virginia		✓		✓			
Wisconsin					✓		
Wyoming		✓				✓	

SOURCE Volcker Alliance

STRATEGIES: RAINY DAY FUNDS AND VOLATILITY

AS RECENTLY AS TWO DECADES AGO, a minimum rainy day fund balance equivalent to 5 percent of general fund revenues or expenditures was widely regarded as sufficient to protect states from having to make severe cuts to balance budgets during economic downturns.³⁵ Florida is one of several states still adhering to this rule of thumb for its Budget Stabilization Fund.³⁶

While the origin of the 5 percent figure is obscure, a nearly two-decades-old paper by Philip G. Joyce, then an associate professor of public administration at George Washington University and now senior associate dean at the University of Maryland School of Public Policy, argued that states should tie the amount in their reserves to the historical volatility of their economy and revenue structures rather than to a fixed target.³⁷ As other academics have joined Joyce’s camp,³⁸ twenty states have scrapped the traditional one-size-fits-all approach in favor of a more flexible standard that reflects how much their revenue and economies change from year to year. Indeed, one of the key determinants of the Volcker Alliance’s grades for rainy day funds is whether a state has factored revenue volatility into determining the amount it should set aside. All seventeen states that received a top A grade in reserve funds for fiscal 2016 through 2018 followed this standard.

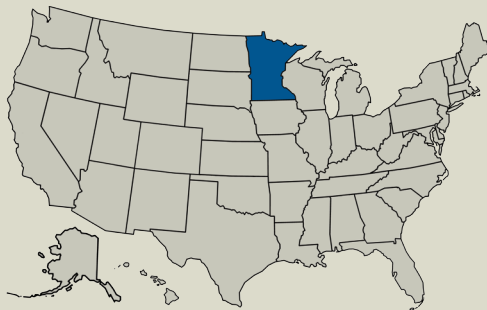
CALL TO ACTION

Use Revenue Volatility to Guide Reserve Policies

ACTION Consider the volatility of tax revenues when calculating the adequacy of reserves.

WHY THIS MATTERS

The more volatile a state’s revenue streams, the more likely it is that unexpected downturns will occur. Typical drivers of such volatility may include capital gains and other income taxes, as well as severance levies. Formally considering this volatility when calculating the ideal amount of cash in a rainy day fund may help prevent



tax increases or program cuts.

BEST-PRACTICE EXAMPLE

Minnesota’s commissioner of management and budget develops and annually reviews a methodology for evaluating the adequacy of the budget reserve

account. These reviews consider volatility of the state’s general fund tax structure and economy.¹

1. Minn. Stat. §16A.152, <https://www.volckeralliance.org/minnesota-rdf-example>.

As of fiscal 2019, state rainy day fund assets totaled \$62.4 billion, according to data from the National Association of State Budget Officers. The total is one of the highest since at least 2000 and more than double the level after tax collections plummeted in the 2007–09 recession. But with states’ tax revenue increasingly volatile in recent years, the need for a shift to a flexible standard has become more pressing. From 2000 to 2013, for example, forty-two states showed a rise in such volatility.³⁹

States may adopt rainy day fund policies based on volatility for different reasons. Montana and North Dakota depend on tax revenues from the production of oil, gas, and minerals that can drop precipitously when energy prices fall and balloon when they recover. California and Massachusetts, meanwhile, are among states that rely on capital gains tax receipts, which can ebb and flow with the fortunes of financial markets.⁴⁰

Connecticut became the most recent state to introduce volatility into its budget reserve fund equation, with legislation passed in 2017. What made Connecticut change the policy was the realization that its income had fluctuated dramatically because of its dependence on capital gains taxes paid by hedge fund managers and others in the state’s large financial services industry. Its progressive income tax for individuals, with rates of 3 percent to 6.99 percent, exacerbated the volatility: Good years on Wall Street would yield bonanzas for tax collectors, while bear markets left the state short.

Connecticut now limits the amount of personal income tax collections that can be used

CALL TO ACTION

Parlay Revenue Volatility Into Reserves

ACTION Deposit excess cash into the rainy day fund when revenues exceed a predetermined amount.

WHY THIS MATTERS Reserving a portion of volatile revenues, such as those from severance or capital gains taxes, helps governments avoid creating unsustainable budgets and provides savings for leaner years.



BEST-PRACTICE EXAMPLE California’s constitution requires the state to set aside deposits equal to 1.5 percent of general fund revenues and capital gains tax proceeds that exceed 8 percent of general fund revenues.¹

1. Cal. Const. art. XVI, § 20–22, <https://www.volckeralliance.org/california-rdf-example>.

to balance the budget to an exact sum, which increases over time. The cap was set at \$3.1 billion for 2019 and \$3.3 billion for 2020. Any amount above this so-called volatility cap is automatically transferred to the state’s Budget Reserve Fund.

While most states allow the legislature to override rules governing rainy day fund contributions, Connecticut does not give lawmakers that option. As part of the state’s new policy, legislators passed a so-called bond lock requiring that as long as any general obligation debt issued from May 15, 2018, to June 30, 2020, is outstanding, the state must comply with the volatility cap for stocking the reserve fund.⁴¹

States that account for volatility in setting their goals for reserve funds use a variety of other mechanisms to link the two.

Nine states—Alaska, California, Louisiana, Massachusetts, North Dakota, Oklahoma, Texas, Utah, and Washington—rely on specific revenue streams, typically related to natural resources or capital gains. For instance, since 1985 Oklahoma has had a Constitutional Reserve Fund, which receives 100 percent of the state’s surplus after expenditures at yearend. Increasing concerns over swings in proceeds from oil and mineral extraction, as well as from corporate income taxes, prompted legislators in 2016 to create the Revenue Stabilization Fund,

CALL TO ACTION

Use Revenue History To Determine Rainy Day Deposits

ACTION Employ data on historical revenue trends to help stock the rainy day fund.

WHY THIS MATTERS

Rather than set a specific percentage of general fund revenue as a savings target, states should examine historical revenue patterns to help establish the number of weeks of expenditures that reserves should cover.

BEST-PRACTICE EXAMPLE In calculating rainy day fund deposits, Virginia includes growth



of personal, corporate, and some sales tax revenues for six previous fiscal years. The annual required deposit is half of the growth in these categories in excess of the average expansion over the period studied. The calculation excludes revenue

growth from increases in income or retail sales tax rates or from repealed exemptions.¹

1. Va. Code § 2.2-1829, <https://www.volckeralliance.org/virginia-rdf-example>.

an additional reserve. It receives contributions from gross production taxes on oil and gas and from the corporate income tax when either exceed their five-year averages.⁴² Louisiana, meanwhile, draws rainy day fund deposits from excess revenues from oil severance taxes, royalty and bonus payments, or rentals.⁴³ Similarly, Alaska's constitution requires that the state Budget Reserve Account get any monies generated by the resolution of disputes over mineral-related income.⁴⁴

Seven states—Arizona, Idaho, Indiana, Michigan, Minnesota, North Carolina, and Tennessee—use economic formulas to develop funding levels. Indiana contributes to the state fund when personal income grows more than 2 percent from the previous year.⁴⁵ Idaho law requires the state controller to transfer money from the general fund to the budget stabilization fund when the former's total revenues at the end of the fiscal year exceed those of the previous year by more than 4 percent.⁴⁶

In Minnesota, Montana, North Carolina, Utah, and Virginia, rainy day fund withdrawals and replenishments must be accompanied by a study or analysis of state revenue volatility. Utah requires that the executive and legislative branches produce a report every three years that analyzes reserve fund balances in relation to revenue volatility, including federal funding.⁴⁷

TABLE 3: State policies for linking rainy day funds to revenue volatility

STATE	NO OR LIMITED POLICY	TAP VOLATILE REVENUE STREAMS	USE ECONOMIC FORMULA	USE BUDGETARY FORMULA	PERFORM REVENUE VOLATILITY ANALYSIS
Alabama	✓				
Alaska		✓			
Arizona			✓		
Arkansas	✓				
California		✓			
Colorado	✓				
Connecticut				✓	
Delaware	✓				
Florida	✓				
Georgia	✓				
Hawaii				✓	
Idaho				✓	
Illinois	✓				
Indiana			✓		
Iowa	✓				
Kansas	✓				
Kentucky	✓				
Louisiana		✓			
Maine	✓				
Maryland	✓				
Massachusetts		✓			
Michigan			✓		
Minnesota					✓
Mississippi	✓				
Missouri	✓				
Montana				✓	✓
Nebraska	✓				
Nevada	✓				
New Hampshire	✓				
New Jersey	✓				
New Mexico	✓				
New York	✓				
North Carolina				✓	✓
North Dakota		✓			
Ohio	✓				
Oklahoma		✓		✓	
Oregon	✓				
Pennsylvania	✓				
Rhode Island	✓				
South Carolina	✓				
South Dakota	✓				
Tennessee				✓	
Texas		✓			
Utah		✓			✓
Vermont	✓				
Virginia				✓	✓
Washington		✓		✓	
West Virginia	✓				
Wisconsin	✓				
Wyoming	✓				

SOURCE Volcker Alliance

CONCLUSION

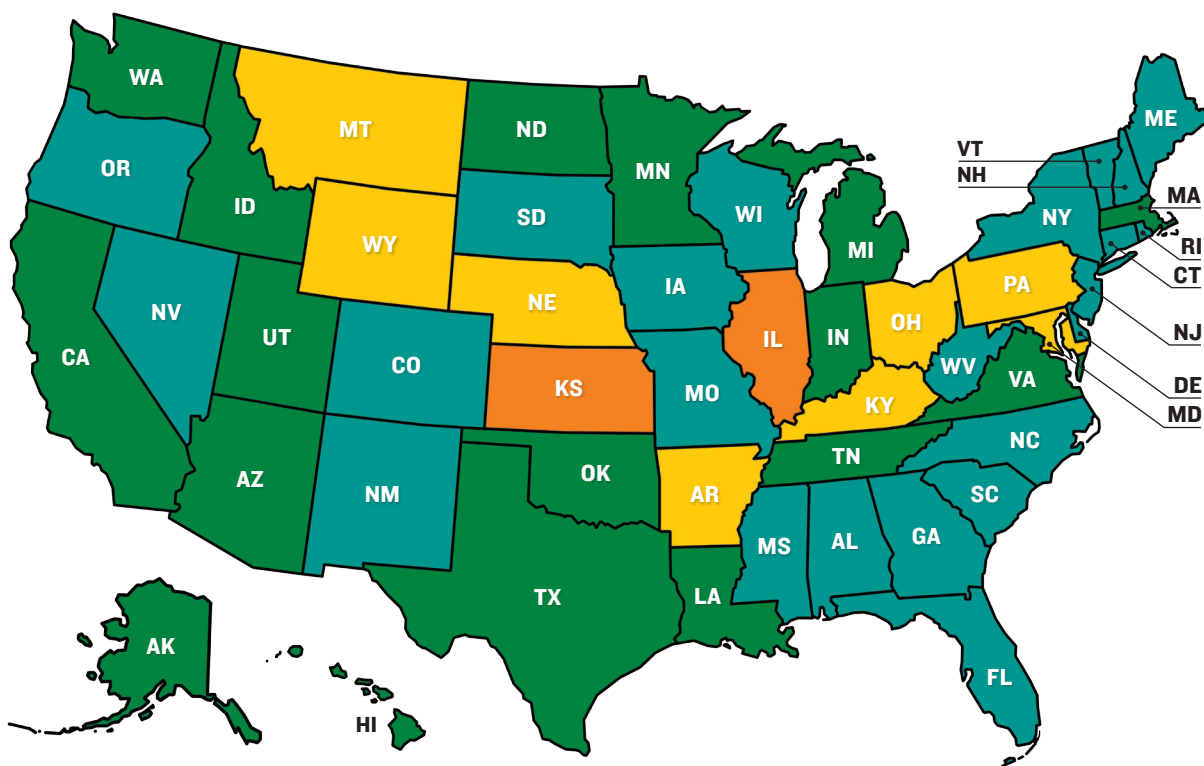
THIS WORKING PAPER IS A CALL TO ACTION for states that need to strengthen their rainy day fund policies. Wherever needed, these improvements must include safeguards against improper withdrawals, statutory guidelines for replenishments, and the consideration of revenue volatility to help determine funding levels.




In the recovery that has followed the end of the Great Recession,⁴⁸ states have steadily rebuilt rainy day funds that were depleted in the contraction. If recent history is a guide, the funds will continue to grow until about a year after the next recession begins. At that point, states may well face the consequences of not following the ten action items outlined in the preceding pages.

In the appendices that follow, readers will find tables and charts that, combined with the action items, comprise a best-practices resource center for rainy day fund improvement. Among the appendix items are comprehensive tables and charts on the history of rainy day funds over the past two decades and the Volcker Alliance's most recent grades and tables on reserve funds, published originally in the study *Truth and Integrity in State Budgeting: Preventing the Next Fiscal Crisis*. While winning an A grade for reserves doesn't guarantee long-term fiscal success, the mark does signal that a state values budgetary stability and sustainability over one-time strategies and is willing to invest substantial amounts of taxpayer cash to help reach these goals.

APPENDIX A: Reserve Fund Grades, FY 2016–2018

This table contains assessments of states’ balances and policies for reserve funds for fiscal 2016 through 2018. States were graded on a scale of A to D-minus, the lowest possible, on whether they had policies (set by constitution, referendum, statute, or other formal rule) for the use and replenishment of rainy day funds; whether the rainy day fund balance (or contribution) was specifically tied to the historical trend of revenue volatility; and whether the rainy day fund or general fund balances were greater than zero on the first day of the fiscal year.


KEY

GRADE (3-YEAR AVERAGE)		TREND	
A	Scored 81%-100%		Score rose from fiscal 2016 through 2018
B	Scored 61%-80%		No net change in score from fiscal 2016 through 2018
C	Scored 40%-60%		Score fell from fiscal 2016 through 2018
D	Scored 20%-39%		
D-	Scored 0%-19%		

RESERVE FUNDS

STATE	GRADE	TREND
Alaska	A	—
Arizona	A	—
California	A	—
Hawaii	A	—
Idaho	A	—
Indiana	A	—
Louisiana	A	—
Massachusetts	A	—
Michigan	A	—
Minnesota	A	—
North Dakota	A	—
Oklahoma	A	↗
Tennessee	A	—
Texas	A	—
Utah	A	—
Virginia	A	—
Washington	A	—
Alabama	B	—
Colorado	B	—
Connecticut	B	—
Delaware	B	—
Florida	B	—
Georgia	B	—
Iowa	B	—
Maine	B	—
Mississippi	B	—

STATE	GRADE	TREND
Missouri	B	—
Nevada	B	—
New Hampshire	B	—
New Jersey	B	—
New Mexico	B	—
New York	B	—
North Carolina	B	↗
Oregon	B	—
Rhode Island	B	—
South Carolina	B	—
South Dakota	B	—
Vermont	B	—
West Virginia	B	—
Wisconsin	B	—
Arkansas	C	—
Kentucky	C	—
Maryland	C	—
Montana	C	↗
Nebraska	C	—
Ohio	C	—
Pennsylvania	C	↘
Wyoming	C	↗
Illinois	D	↘
Kansas	D	—
US AVERAGE	B	↗

APPENDIX B: Total Rainy Day Fund Balances, 2000–19 (in millions of current dollars)

STATE	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Alabama	\$2.5	\$7.5	\$260.8	\$68.0	\$104.0	\$157.0	\$418.7	\$676.6	\$248.0	\$178.7
Alaska	2,734.2	2,994.8	2,114.0	2,092.5	2,155.1	2,274.2	2,267.1	3,015.2	5,601.2	8,897.9
Arizona	407.7	391.5	64.7	13.8	13.5	160.8	501.6	677.0	218.6	3.0
Arkansas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
California	8,665.5	1,563.8	0.0	0.0	0.0	9,112.3	10,071.4	3,014.8	0.0	0.0
Colorado	583.4	0.0	0.0	0.0	121.8	0.0	0.0	267.0	283.5	443.8
Connecticut	564.0	594.7	0.0	0.0	302.2	666.1	1,112.5	1,381.7	1,381.7	1,381.7
Delaware	114.0	126.0	128.0	129.0	136.5	148.2	161.1	175.4	182.8	186.4
Florida	1,666.1	894.0	940.9	958.9	966.4	988.2	1,069.3	1,236.8	1,344.8	273.9
Georgia	551.3	734.4	700.3	184.7	51.6	256.6	793.0	1,544.6	1,024.5	217.3
Hawaii	5.8	21.2	49.9	0.0	54.0	54.1	53.5	61.5	74.0	60.4
Idaho	36.0	53.2	53.1	0.0	0.0	16.0	108.6	121.6	140.6	128.2
Illinois	0.0	225.0	225.7	225.7	276.0	276.0	276.0	276.0	276.0	276.0
Indiana	539.9	525.9	269.2	278.5	242.2	316.5	328.1	344.2	363.0	365.2
Iowa	443.8	405.2	165.6	0.0	163.0	225.6	391.8	535.1	592.4	519.0
Kansas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kentucky	278.6	239.8	0.0	5.1	50.8	28.8	119.0	231.5	214.8	7.1
Louisiana	59.0	196.7	266.1	0.0	239.3	461.7	681.2	682.7	775.6	853.7
Maine	143.7	143.7	20.2	0.0	33.0	47.0	79.9	115.5	130.4	0.0
Maryland	582.0	888.0	548.0	490.2	496.6	521.4	758.8	1,432.2	684.8	691.8
Massachusetts	1,608.4	2,294.2	881.8	641.3	1,137.3	1,728.4	2,154.7	2,335.0	2,119.2	841.3
Michigan	1,264.4	994.2	145.2	0.0	81.9	1.9	2.1	2.1	2.2	2.2
Minnesota	1,379.7	1,574.2	0.0	103.7	1,003.0	1,339.7	1,112.7	1,145.3	1,222.1	0.0
Mississippi	231.9	189.5	111.0	22.6	41.0	19.9	73.4	54.2	365.0	334.0
Missouri	142.8	150.7	235.0	231.2	222.1	231.7	246.5	268.3	278.7	260.3
Montana	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nebraska	142.2	170.2	110.1	59.1	87.0	177.2	273.6	516.1	545.5	578.2
Nevada	136.3	136.3	136.3	1.3	72.0	155.7	184.0	267.6	72.6	0.6
New Hampshire	20.0	55.2	0.0	17.3	17.3	17.3	69.0	89.0	89.0	9.3
New Jersey	698.2	720.0	0.0	0.0	282.4	288.7	559.8	484.6	734.7	0.0
New Mexico	0.0	0.0	0.0	0.0	447.3	688.1	798.2	651.0	735.1	388.6
New York	547.0	627.0	710.0	710.0	794.0	872.0	944.0	1,031.0	1,206.0	1,206.0
North Carolina	37.5	157.5	0.0	150.0	267.1	312.6	628.8	786.6	786.6	150.0
North Dakota	0.0	40.0	25.0	6.0	0.0	100.0	100.0	200.0	200.0	325.0
Ohio	1,002.5	1,010.6	427.9	180.7	180.7	574.9	1,010.7	1,012.3	1,012.0	0.0
Oklahoma	157.6	340.1	72.4	0.1	217.5	461.3	495.7	571.6	596.6	596.6
Oregon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	621.8	112.6
Pennsylvania	1,097.4	1,126.7	0.0	70.0	260.2	328.9	512.0	713.4	742.1	755.0
Rhode Island	71.3	79.7	82.0	83.6	84.3	90.9	95.4	78.7	102.9	80.1
South Carolina	145.4	60.5	0.0	0.0	25.2	75.2	153.5	167.7	95.1	0.0
South Dakota	36.6	110.6	115.6	106.5	158.0	134.3	137.2	132.5	107.0	107.0
Tennessee	165.1	178.0	178.0	178.0	217.0	275.4	325.0	542.9	750.0	556.5
Texas	84.7	196.5	903.9	560.5	365.6	6.9	405.2	1,311.4	4,355.4	6,275.7
Utah	109.7	120.3	19.5	26.6	66.9	146.1	254.9	313.4	413.8	418.5
Vermont	41.4	43.0	12.8	23.6	44.5	45.8	51.8	55.2	57.8	60.0
Virginia	574.6	715.6	472.4	247.5	340.0	482.3	1,064.7	1,189.8	1,014.9	575.1
Washington	754.0	462.1	116.1	0.0	0.0	0.0	4.2	293.3	303.2	21.4
West Virginia	73.2	79.1	56.2	57.8	53.6	79.3	359.1	514.9	581.1	472.6
Wisconsin	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.4	1.3	1.5
Wyoming	38.7	64.8	64.8	247.0	247.0	446.0	446.0	295.0	296.0	398.0
TOTAL	\$27,938	\$21,702	\$10,683	\$8,171	\$12,119	\$24,791	\$31,654	\$30,869	\$32,944	\$29,010
TOTAL IN BILLIONS	\$27.9	\$21.7	\$10.7	\$8.2	\$12.1	\$24.8	\$31.7	\$30.9	\$32.9	\$29.0

APPENDIX B: Total Rainy Day Fund Balances, 2000–19 (in millions of current dollars)

STATE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Alabama	\$0.0	\$0.0	\$14.4	\$14.4	\$11.2	\$411.7	\$530.2	\$766.2	\$783.5	\$852.7
Alaska	10,363.6	12,981.0	15,880.1	16,332.0	15,597.0	10,441.8	7,108.9	4,641.3	2,562.1	2,035.7
Arizona	0.0	0.0	250.1	454.1	455.3	457.6	460.8	461.4	458.3	462.9
Arkansas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	123.4	126.6	126.6
California	0.0	0.0	0.0	1,572.9	4,619.0	4,084.8	7,223.6	11,250.8	16,727.9	15,930.4
Colorado	132.6	156.7	281.1	373.0	410.9	709.2	512.7	614.5	1,273.8	1,068.5
Connecticut	0.0	0.0	93.4	270.7	519.2	406.0	235.6	212.9	1,185.2	1,515.3
Delaware	186.4	186.4	186.4	198.9	201.7	212.5	214.7	221.1	231.6	240.4
Florida	274.9	279.2	493.8	708.5	924.7	1,139.2	1,353.7	1,384.4	1,416.5	1,483.0
Georgia	116.0	328.4	378.0	717.3	862.8	1,431.2	2,032.9	2,308.6	2,556.6	N/A
Hawaii	63.0	0.0	24.2	24.2	83.2	90.2	100.9	311.3	375.7	384.2
Idaho	30.8	0.1	23.9	135.1	161.5	243.8	259.4	413.0	393.8	393.8
Illinois	0.0	0.0	0.0	0.0	275.7	275.7	276.5	9.9	9.9	9.9
Indiana	0.0	57.2	351.6	515.1	968.9	1,254.2	1,468.1	1,474.4	1,419.1	1,354.6
Iowa	421.9	440.3	601.3	611.1	669.9	697.8	729.1	605.3	620.3	762.1
Kansas	0.0	0.0	0.0	0.0	0.0	0.0	N/A	0.0	0.0	0.0
Kentucky	0.0	0.0	121.7	121.7	77.1	77.1	235.7	150.5	93.8	127.2
Louisiana	643.9	646.8	442.9	443.9	444.5	469.9	359.0	286.8	321.1	322.6
Maine	0.2	0.0	44.8	59.7	93.2	118.5	122.3	208.7	287.8	287.8
Maryland	611.6	624.4	671.5	705.0	763.6	773.5	832.4	832.5	856.8	880.4
Massachusetts	669.8	1,379.1	1,652.1	1,556.8	1,243.0	1,252.4	1,291.5	1,300.7	1,793.3	2,161.2
Michigan	2.2	2.2	365.1	505.6	386.2	498.1	612.4	710.0	1,008.1	1,051.2
Minnesota	0.0	8.7	657.6	656.0	661.0	994.3	1,969.1	1,980.3	1,998.0	1,991.0
Mississippi	257.0	191.0	99.6	31.5	109.5	395.0	349.8	268.5	288.3	314.3
Missouri	260.3	247.2	250.5	277.0	277.0	269.8	291.3	293.6	304.5	319.6
Montana	0.0	0.0	0.0	0.0	0.0	0.0	N/A	0.0	0.0	45.7
Nebraska	467.2	313.2	428.9	384.1	719.1	727.8	730.7	680.7	340.0	333.5
Nevada	0.0	0.0	39.2	84.7	28.1	0.0	0.0	146.2	179.8	294.3
New Hampshire	9.3	9.3	9.3	9.3	9.3	22.3	93.0	100.0	110.0	110.6
New Jersey	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Mexico	278.1	500.8	712.9	651.4	637.9	613.1	147.8	0.0	448.9	1,482.7
New York	1,206.0	1,206.0	1,306.0	1,306.0	1,481.0	1,798.0	1,798.0	1,798.0	1,798.0	1,798.0
North Carolina	150.0	295.6	418.8	651.3	651.4	851.6	1,575.2	1,838.2	1,849.0	2,010.8
North Dakota	325.0	386.4	386.4	583.5	583.5	572.5	572.5	38.3	113.3	209.2
Ohio	0.0	0.0	246.9	482.0	1,477.9	1,477.9	2,004.6	2,034.1	2,034.1	2,691.6
Oklahoma	249.1	249.2	577.5	535.2	535.2	385.2	240.6	93.3	451.6	N/A
Oregon	215.6	15.5	128.2	69.4	153.3	391.2	549.5	760.6	940.0	1,209.9
Pennsylvania	0.7	0.1	0.1	0.1	0.2	0.2	0.2	0.4	0.4	14.4
Rhode Island	112.3	130.0	153.4	172.0	176.7	185.4	191.6	192.6	198.5	201.3
South Carolina	111.0	711.8	288.3	387.7	407.8	447.3	458.6	487.2	508.9	530.7
South Dakota	107.0	107.0	134.7	134.7	139.3	149.2	143.3	157.4	159.5	176.4
Tennessee	453.1	283.6	306.0	356.0	456.0	491.5	568.0	668.0	800.0	861.0
Texas	7,692.6	5,012.4	6,133.4	6,170.2	6,703.5	8,468.9	9,714.8	10,290.0	10,455.3	11,850.6
Utah	210.0	232.5	277.0	403.0	431.6	490.6	493.1	507.5	507.5	592.8
Vermont	57.3	54.4	58.1	74.4	71.2	76.1	78.1	106.6	132.8	206.7
Virginia	295.2	299.4	303.0	439.9	687.5	467.7	235.5	548.8	439.7	488.0
Washington	95.0	0.6	130.0	270.0	414.6	513.0	550.0	1,638.0	1,364.0	1,139.0
West Virginia	556.0	659.1	851.4	914.5	955.9	869.1	778.7	652.4	709.7	729.3
Wisconsin	1.7	16.6	125.4	279.3	279.7	280.3	281.2	282.9	320.1	N/A
Wyoming	398.0	752.0	765.0	927.0	926.0	1,811.0	1,811.0	1,538.0	1,538.0	1,324.0
TOTAL	\$27,024	\$28,764	\$36,664	\$41,570	\$47,743	\$47,794	\$51,586	\$55,389	\$62,492	\$62,376
TOTAL IN BILLIONS	\$27.0	\$28.8	\$36.7	\$41.6	\$47.7	\$47.8	\$51.6	\$55.4	\$62.5	\$62.4

SOURCE National Association of State Budget Officers. **NOTE** N/A: Not available.

APPENDIX C: Rainy Day Fund Balances as a Percentage of General Fund Expenditures, 2000–19

STATE	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Alabama	0%	0%	5%	1%	2%	3%	6%	8%	3%	2%
Alaska	121%	132%	88%	84%	93%	74%	70%	55%	103%	155%
Arizona	7%	6%	1%	0%	0%	2%	6%	7%	2%	0%
Arkansas	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
California	13%	2%	0%	0%	0%	11%	11%	3%	0%	0%
Colorado	10%	0%	0%	0%	2%	0%	0%	4%	4%	6%
Connecticut	5%	5%	0%	0%	2%	5%	8%	9%	8%	8%
Delaware	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%
Florida	9%	4%	5%	5%	5%	4%	4%	4%	5%	1%
Georgia	4%	5%	5%	1%	0%	2%	4%	8%	5%	1%
Hawaii	0%	1%	1%	0%	1%	1%	1%	1%	1%	1%
Idaho	2%	3%	3%	0%	0%	1%	5%	5%	5%	4%
Illinois	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Indiana	6%	6%	3%	3%	2%	3%	3%	3%	3%	3%
Iowa	9%	8%	4%	0%	4%	5%	8%	10%	10%	9%
Kansas	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Kentucky	4%	3%	0%	0%	1%	0%	1%	3%	2%	0%
Louisiana	1%	3%	4%	0%	4%	6%	9%	7%	8%	9%
Maine	6%	5%	1%	0%	1%	2%	3%	4%	4%	0%
Maryland	6%	9%	5%	5%	5%	5%	6%	10%	5%	5%
Massachusetts	8%	10%	4%	3%	5%	7%	8%	8%	6%	3%
Michigan	13%	10%	2%	0%	1%	0%	0%	0%	0%	0%
Minnesota	12%	12%	0%	1%	7%	9%	7%	7%	7%	0%
Mississippi	7%	5%	3%	1%	1%	1%	2%	1%	7%	7%
Missouri	2%	2%	3%	4%	3%	3%	3%	3%	3%	3%
Montana	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Nebraska	6%	7%	4%	2%	3%	7%	9%	17%	17%	17%
Nevada	8%	7%	7%	0%	3%	5%	6%	7%	2%	0%
New Hampshire	2%	5%	0%	1%	1%	1%	5%	7%	6%	1%
New Jersey	4%	3%	0%	0%	1%	1%	2%	2%	2%	0%
New Mexico	0%	0%	0%	0%	10%	15%	15%	11%	12%	6%
New York	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%
North Carolina	0%	1%	0%	1%	2%	2%	4%	4%	4%	1%
North Dakota	0%	5%	3%	1%	0%	11%	10%	20%	17%	26%
Ohio	5%	5%	2%	1%	1%	2%	4%	4%	4%	0%
Oklahoma	3%	7%	1%	0%	4%	9%	9%	9%	9%	9%
Oregon	0%	0%	0%	0%	0%	0%	0%	0%	9%	2%
Pennsylvania	6%	6%	0%	0%	1%	1%	2%	3%	3%	3%
Rhode Island	3%	3%	3%	3%	3%	3%	3%	2%	3%	3%
South Carolina	3%	1%	0%	0%	1%	1%	3%	3%	1%	0%
South Dakota	5%	14%	14%	12%	18%	14%	13%	12%	9%	9%
Tennessee	3%	3%	2%	2%	3%	3%	4%	6%	7%	5%
Texas	0%	1%	3%	2%	1%	0%	1%	4%	11%	15%
Utah	3%	3%	1%	1%	2%	4%	6%	6%	7%	9%
Vermont	5%	5%	1%	3%	5%	4%	5%	5%	5%	5%
Virginia	5%	6%	4%	2%	3%	3%	7%	7%	6%	4%
Washington	7%	4%	1%	0%	0%	0%	0%	2%	2%	0%
West Virginia	3%	3%	2%	2%	2%	2%	10%	14%	15%	12%
Wisconsin	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Wyoming	7%	9%	9%	31%	55%	34%	36%	16%	16%	23%
TOTAL	6.0%	4.3%	2.1%	1.6%	2.3%	4.5%	5.3%	4.7%	4.8%	4.4%
MEDIAN	4.1%	4.4%	1.7%	0.7%	1.8%	2.5%	4.3%	4.6%	4.8%	2.6%

APPENDIX C: Rainy Day Fund Balances as a Percentage of General Fund Expenditures, 2000–19

STATE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Alabama	0%	0%	0%	0%	0%	5%	7%	9%	9%	10%
Alaska	157%	238%	226%	210%	213%	174%	130%	103%	57%	43%
Arizona	0%	0%	3%	5%	5%	5%	5%	5%	5%	4%
Arkansas	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
California	0%	0%	0%	2%	5%	4%	6%	9%	13%	11%
Colorado	2%	2%	4%	5%	5%	7%	5%	6%	11%	8%
Connecticut	0%	0%	0%	1%	3%	2%	1%	1%	6%	8%
Delaware	6%	6%	5%	5%	5%	6%	5%	5%	6%	5%
Florida	1%	1%	2%	3%	3%	4%	5%	5%	4%	4%
Georgia	1%	2%	2%	4%	5%	7%	9%	10%	N/A	N/A
Hawaii	1%	0%	0%	0%	1%	1%	1%	4%	5%	5%
Idaho	1%	0%	1%	5%	6%	8%	9%	13%	11%	11%
Illinois	0%	0%	0%	0%	1%	1%	1%	0%	0%	0%
Indiana	0%	0%	3%	4%	7%	8%	10%	10%	9%	8%
Iowa	8%	8%	10%	10%	10%	10%	10%	8%	9%	10%
Kansas	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Kentucky	0%	0%	1%	1%	1%	1%	2%	1%	1%	1%
Louisiana	7%	8%	5%	5%	5%	5%	4%	3%	3%	3%
Maine	0%	0%	1%	2%	3%	4%	4%	6%	8%	8%
Maryland	5%	5%	4%	5%	5%	5%	5%	5%	5%	5%
Massachusetts	2%	4%	5%	5%	3%	3%	3%	3%	4%	5%
Michigan	0%	0%	4%	6%	4%	5%	6%	7%	10%	10%
Minnesota	0%	0%	4%	4%	3%	5%	10%	9%	9%	9%
Mississippi	6%	4%	2%	1%	2%	7%	6%	5%	5%	6%
Missouri	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Montana	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%
Nebraska	14%	9%	12%	11%	19%	18%	17%	16%	8%	7%
Nevada	0%	0%	1%	3%	1%	0%	0%	4%	5%	7%
New Hampshire	1%	1%	1%	1%	1%	2%	7%	7%	7%	7%
New Jersey	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
New Mexico	5%	9%	13%	11%	11%	10%	2%	0%	7%	23%
New York	2%	2%	2%	2%	2%	3%	3%	3%	3%	2%
North Carolina	1%	2%	2%	3%	3%	4%	7%	8%	8%	8%
North Dakota	21%	23%	17%	25%	18%	18%	19%	2%	5%	10%
Ohio	0%	0%	1%	2%	5%	5%	6%	6%	6%	8%
Oklahoma	5%	5%	10%	9%	8%	6%	4%	2%	7%	N/A
Oregon	3%	0%	2%	1%	2%	5%	6%	8%	10%	12%
Pennsylvania	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rhode Island	4%	4%	5%	5%	5%	5%	5%	5%	5%	5%
South Carolina	2%	14%	5%	6%	6%	7%	6%	6%	6%	7%
South Dakota	9%	9%	11%	10%	10%	11%	10%	10%	10%	11%
Tennessee	5%	3%	3%	3%	4%	4%	4%	5%	6%	6%
Texas	19%	13%	14%	15%	14%	17%	18%	19%	19%	23%
Utah	5%	5%	6%	8%	8%	8%	8%	8%	8%	8%
Vermont	5%	5%	5%	6%	5%	5%	5%	7%	8%	16%
Virginia	2%	2%	2%	3%	4%	3%	1%	3%	2%	2%
Washington	1%	0%	1%	2%	3%	3%	3%	8%	7%	5%
West Virginia	15%	17%	21%	21%	23%	21%	19%	15%	17%	16%
Wisconsin	0%	0%	1%	2%	2%	2%	2%	2%	2%	N/A
Wyoming	23%	48%	48%	52%	52%	86%	110%	101%	101%	91%
TOTAL	4.3%	4.5%	5.5%	6.0%	6.6%	6.3%	6.6%	6.9%	7.5%	7.6%
MEDIAN	1.6%	1.8%	2.4%	3.5%	4.1%	4.9%	5.1%	5.3%	6.4%	7.3%

SOURCE National Association of State Budget Officers. **NOTE** N/A: Not available.

ACKNOWLEDGMENTS

THE RESEARCH FOR THIS WORKING PAPER was made possible in part by grants from Arnold Ventures and the Peter G. Peterson Foundation. The statements made and views expressed are solely the responsibility of the authors. We acknowledge the considerable support provided by Paul A. Volcker, the Volcker Alliance's founder and chairman. We thank the following individuals who helped us deepen our understanding on the structures and policies for state rainy day funds:

David Blatt, executive director, Oklahoma Policy Institute

Arlene Bohner, head of state and local government ratings for US public finance,
Fitch Ratings Inc.

Geoffrey Buswick, managing director and sector leader, S&P Global Ratings Inc.

Donald Boyd, principal, Boyd Research LLC

Lucy Dadayan, senior research associate, Urban Institute

Matt Fabian, partner, Municipal Market Analytics Inc.

Savannah Gilmore, policy associate, National Conference of State Legislatures

Bill Greeney, assistant director, Governor's Office of Strategic Planning and
Budgeting, state of Arizona

Hai Guo, associate professor, public administration, Steven J. Green School of
International and Public Affairs, Florida International University

John Hicks, executive director, National Association of State Budget Officers

Chris Hoene, executive director, California Budget and Policy Center

Kil Huh, vice president, government performance, The Pew Charitable Trusts

Dawn Iglesias, economist, Legislative Finance Committee, state of New Mexico

Richard Keevey, senior policy fellow, Edward J. Bloustein School of Planning and
Public Policy, Rutgers University

Eric Kim, senior director, Fitch Ratings Inc.

Karen Krop, senior director, Fitch Ratings Inc.

Baye Larsen, vice president and senior credit officer, Moody's Investors Service Inc.

Erica MacKellar, senior policy specialist, National Conference of State Legislatures

Stacey Mazer, senior staff associate, National Association of State Budget Officers

Scott Olsen, chief of strategic communications, Office of the Comptroller,

Commonwealth of Massachusetts

Rute Pinho, chief analyst, Office of Legislative Research, state of Connecticut

Kim Rueben, director, State and Local Finance Initiative, Urban Institute

Brian Sigriz, director of state fiscal studies, National Association of State Budget Officers

Ismael Torres, fiscal analyst, Legislative Finance Committee, state of New Mexico

John Turcotte, director, program evaluation division, North Carolina General Assembly

Lisa Washburn, managing director, Municipal Market Analytics Inc.

Kathryn Vesey White, director of budget process studies, National Association of State Budget Officers

The following Volcker Alliance staff members made invaluable contributions to this report:

Naomi Major, administrative associate

Maureen C. McCarthy, executive assistant to the president

Sara Mogulescu, executive vice president

Sarah Morningred, communications assistant

Thomas W. Ross, president

Neilia Stephens, director of communications

None of these individuals has responsibility for the data used in this report or for its conclusions and recommendations.

Some research for this report was conducted on the Bloomberg terminal.

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THE VOLCKER ALLIANCE advances effective management of government to achieve results that matter to citizens. The nonpartisan Alliance works toward that objective by partnering with other organizations – academic, business, governmental, and public interest – to strengthen professional education for public service, conduct needed research on government performance, and improve the efficiency and accountability of governmental organization at the federal, state, and local levels.

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