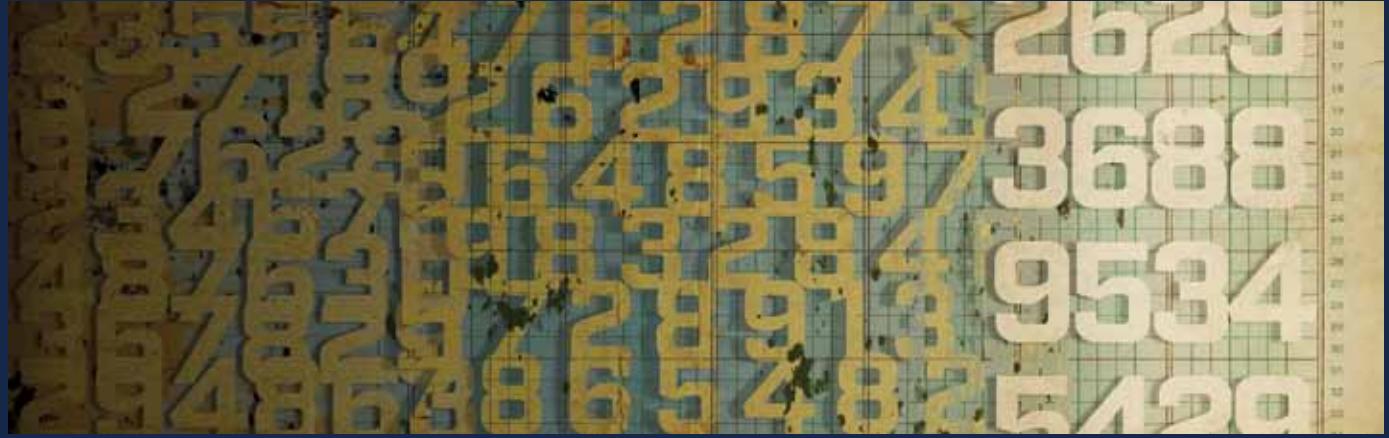




THE VOLCKER ALLIANCE
Working for Effective Government



Truth and Integrity in State Budgeting

**PREVENTING THE NEXT
FISCAL CRISIS**



Truth and Integrity in State Budgeting

**PREVENTING THE NEXT
FISCAL CRISIS**

NEW YORK • 2018



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Don Besom, art director; Michele Arboit, copy editor; Anthony Freda, cover illustration.

FOREWORD

THIS REPORT MARKS the Volcker Alliance's second annual assessment of US state budget practices. Covering the fiscal years 2016, 2017, and 2018, the study grades states' success in pursuing transparent and fiscally sustainable procedures as they estimate their revenues and expenditures and attempt to keep them in balance not only at the start of the fiscal year but as it progresses.

Because the US federal system is composed of fifty sovereign states, it is essential to assess and compare the quality of their budget practices against a common set of standards. As we did in the 2017 report, we gave states grades of A to D-minus, the lowest possible mark, for their practices in five areas that are the building blocks of budgeting nationwide:

- budget forecasting, in which we evaluate how and whether states estimate revenues and expenditures for the coming fiscal year and the long term;
- budget maneuvers, in which we gauge dependence on one-time actions to offset recurring expenditures;
- legacy costs, in which we assess how well states are funding promises made to public employees to cover retirement costs, including pensions and retiree health care;
- reserve funds, in which we examine the condition of general fund reserves as well as rainy day funds and rules governing their use and replenishment; and
- budget transparency, in which we scrutinize disclosure of budget information, including debts, tax expenditures, and the estimated cost of deferred infrastructure maintenance.

In this report, we also compared states' budgetary grades to marks given the year before and offer best practices in each of the five budget categories.

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INTRODUCTION

MORE THAN NINE YEARS AFTER the end of the deepest US recession since the 1930s, states are finally reaping the benefits of the third-longest recovery in America's record books, with thirty-four reporting that revenues had rebounded to pre-recession levels after adjusting for inflation.¹ Even amid the economic boom, though, many states still face a struggle to balance budgets in the face of mounting obligations for health care, infrastructure, education, and public employee retirement costs. While some progress has been made since our publication in 2017 of *Truth and Integrity in State Budgeting: What Is the Reality?*,² these fiscal challenges continue to vex policymakers and taxpayers alike.

Forty-nine states require balanced budgets by law; Vermont follows the example of its peers by tradition.³ Yet scrutiny of budgetary practices is vital, because states can achieve balance in various ways—some more desirable than others. As we did in 2017, we have graded states in five areas critical to their ability to maintain balanced and sustainable budgets. We ranked states on a scale of A to D-minus. (There is no F grade—even the most fiscally challenged states have some good budget practices.) The grading period for this report spans fiscal 2016, 2017, and 2018, and evaluates these areas:

- **Budget forecasting**—how and whether states estimate revenues and expenditures for the coming fiscal year and the long term. In fiscal 2016 through 2018, three-year average grades in this category increased from the previous year for two states and were unchanged for forty-eight.
- **Budget maneuvers**—primarily how much states depend on one-time actions to offset recurring expenditures. Three-year average grades increased for three states, declined for three, and were unchanged for forty-four.
- **Legacy costs**—how well states are funding promises made to public employees to cover retirement costs, including pensions and retiree health care. Three-year average grades increased for three states, declined for three, and were unchanged for forty-four.
- **Reserve funds**—both the health of general fund reserves and rainy day funds and whether governments have clear rules governing their use, replenishment, and relationship to historic revenue volatility. Three-year average grades increased for four states, declined for two, and were unchanged for forty-four.
- **Budget transparency**—how completely states are disclosing budget information, including debts, tax expenditures, and the estimated cost of deferred infrastructure main-

tenance. Three-year average grades increased for three states and were unchanged for forty-seven.

State fiscal sustainability is of no small concern to the US economy or the federal government. As Volcker Alliance Chairman Paul A. Volcker stated in 2017, “The purposes and manner in which public funds are spent are matters basic to our well-being as a nation.”⁴ Indeed, states generate \$2.1 trillion in annual revenue,⁵ equivalent to 10.3 percent of the nation’s gross domestic product.⁶ State and local governments—the latter heavily dependent on state budget funding—employ almost twenty million people.⁷

This year’s three-year average grades in each category are unchanged from those in our 2017 report. (Last year’s grades were adjusted for revisions in our research methodology; see Appendix C for an explanation.) And as was the case in 2017, the latest grades show that meeting promised public employee pension and other retirement costs remains perhaps the most formidable challenge facing many states. Six states received the lowest possible average grade of D-minus in legacy costs, and over twice as many scored only a D. Just eight states were awarded the top grade of A in the category. South Dakota was the single state with an overfunded pension plan, meaning it maintains a cushion that protects its ability to pay for scheduled retirement benefits. The only other state with a 100 percent funded pension was Wisconsin.

In total, states have accrued \$1.35 trillion in unfunded public worker pension liabilities and \$692 million in unfunded obligations for other postemployment benefits (OPEB), largely retiree health care.⁸ With retirement costs restricting spending in other areas, it is probably not a coincidence that a number of states with D or D minus in legacy costs—Illinois, Massachusetts, New Jersey, and Pennsylvania, for example—were also among those receiving a D or D minus for budget-balancing maneuvers.

Grades for budget forecasting also indicate that states have considerable room for improvement, with twenty-three receiving grades of C or lower and only ten awarded As. Seventeen states received an A for fiscal reserves, a likely result of economic recovery. But only three were given the top grade for budgetary transparency, with common deficiencies being incomplete or nonexistent disclosure of deferred infrastructure maintenance and tax expenditure costs.

The grades and findings in this report are based on publicly available state budget documents and financial reports. Research for the study was conducted by teams of public finance professors and graduate students at City University of New York; Florida International University; Georgia State University; University of California, Berkeley; University of Kentucky; the

Chicago and Springfield campuses of University of Illinois; and University of Utah. The schools' efforts were augmented by Volcker Alliance staff, data consultants at the research firm Municipal Market Analytics, and special project consultants Katherine Barrett and Richard Greene.

Grades awarded to states this year did not follow geographic patterns, and larger and smaller states were equally likely to score well or badly. Of the five smallest states by population, Alaska won an average A in transparency, South Dakota and Vermont received Bs, and North Dakota and Wyoming posted Cs. Grades also varied across categories within individual states. Hawaii, for example, received a D-minus in the legacy costs category, which covers pensions and other postemployment benefits, while earning an A for its work in budget forecasting.

Wide variations in population and tax and funding practices make it difficult to compare one state's budget numbers against another. That is why we have chosen to focus on well-accepted best practices in the five key categories. The grades in this study are less an effort to fault states with low marks than one to provide them with policies that have been successfully used by others and can be applied nationwide.

The prolonged economic recovery that has followed the steep US recession has given states additional resources to pursue best practices. But the fiscal pressures felt keenly in the immediate wake of the last recession have not disappeared. To mitigate the impact of an economic downturn and help ward off budgetary crises, states should create more sustainable policies in flush times rather than wait until the next downturn forces them to struggle to stay afloat.

CONCLUSIONS

WHILE FORTY-NINE OF THE FIFTY STATES mandate balanced budgets, that does not mean their budgeting always follows best practices. Nor does it mean that a budget will remain balanced from enactment through the entire fiscal year or that officials fully disclose the techniques used to eliminate any shortfalls.

Many of the best practices cited in this report might be followed automatically if states were to adopt an accrual-style form of accounting instead of cash-based methods. Cash-based accounting, widely used by state governments, allows expenditures to be recognized only when bills are paid.⁹ This permits a government to commit to significant spending in one year but not reflect that decision until future years, when the payments are actually made.

A technique called modified accrual accounting is already required by the Governmental Accounting Standards Board for municipal financial statements including comprehensive annual financial reports.¹⁰ The method is designed to recognize future costs when a financial commitment is established.¹¹

GASB is the standard-setter for the generally accepted accounting principles (GAAP) used by state and local governments. To be in conformity with GAAP, governments must follow the board's standards, which require the use of modified accrual basis of accounting in their comprehensive annual financial reports. Following its near-bankruptcy in 1975, New York City was also legally required to construct budgets using GAAP.¹² In the forty-three years since adopting the method, the nation's most populous city has avoided the fiscal crises that have beset many other municipalities and states.¹³

Absent a transition to modified accrual accounting for budgets, the best practices enumerated in this report and reflected in state grades can help policymakers in their quest for sustainable and transparent fiscal policies.

Following are examples of states that rely on some of the best practices laid out in this report and its two predecessors, *Truth and Integrity in State Budgeting: What Is the Reality?* (2017)¹⁴ and *Truth and Integrity in State Budgeting: Lessons from Three States* (2015).¹⁵

Budget Forecasting

As we recommended in 2017, states should use a consensus approach to establish single, binding estimates for revenues and expenditures. In addition, for a budget to be of genuine help as a planning tool, it is important that it make predictions of revenues and expenditures

FIGURE I The Top-Graded States (2016–2018 Average)

BUDGET FORECASTING

STATE	GRADE
Connecticut	A
Florida	A
Hawaii	A
Maryland	A
New York	A
North Carolina	A
Rhode Island	A
South Carolina	A
Virginia	A
Washington	A

BUDGET MANEUVERS

STATE	GRADE
Arkansas	A
California	A
Delaware	A
Georgia	A
Idaho	A
Indiana	A
Iowa	A
Minnesota	A
Missouri	A
Nebraska	A
New Hampshire	A
Oregon	A
South Carolina	A
Tennessee	A
Utah	A
Vermont	A

LEGACY COSTS

STATE	GRADE
Idaho	A
Iowa	A
Nebraska	A
Oklahoma	A
Oregon	A
South Dakota	A
Utah	A
Wisconsin	A

RESERVE FUNDS

STATE	GRADE
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

TRANSPARENCY

STATE	GRADE
Alaska	A
California	A
Tennessee	A

for more than the following fiscal year. A one-year estimate does little to reveal structural deficits or built-in gaps between estimated revenues and anticipated expenditures that may return in budget after budget.

Utah is one state that has recently addressed this concern. Because of the absence of revenue or expenditure estimates beyond the current and upcoming fiscal year, it received a three-year average grade of C in budget forecasting for fiscal 2016 through 2018. But after the Volcker Alliance's fiscal 2018 research cutoff date of October 31, 2017, the state improved its forecasting policies. A statute signed into law on March 19, 2018, obliges Utah's Office of the Legislative Fiscal Analyst to produce a long-term budget every three years for programs appropriated from major funds and taxes. The law also requires the publication every three years, on a rotating basis, of analyses of revenue volatility and of stress tests of estimated revenue under various economic scenarios.¹⁶

Budget Maneuvers

States should pay for expenditures in the same year they are accrued. Yet forty states used at least one type of budget-balancing maneuver from 2016 to 2018 to cover shortfalls. The maneuvers often were repeated from year to year, a sign of a structural imbalance between revenues and spending.

Michigan has been weaning itself from budget maneuvers since 2015, when it received a C in this category. It scored Bs in the next two years and got an A in 2018. The two areas in which it received no credit in 2015 were use of revenue and cost shifting, and funding recurring expenditures with debt.

Thanks to an improving economy, Michigan was not pushed to use either practice in the fiscal year that ended September 30. With revenue outpacing estimates, both the Senate Fiscal Agency and the House Fiscal Agency projected a surplus of \$278.5 million to \$347.9 million in fiscal 2018,¹⁷ which minimized the need for budget maneuvers.

Legacy Costs

States should consistently make the contributions that actuaries determine to be necessary. This presents a conundrum for states with severely underfunded pension systems. They need to maintain essential public services while salting away sums to cover current workers' retirement needs and simultaneously paying down debt from past years in which actuarially recommended contributions were not made. These debts compound at the pen-

sions' assumed annual return rate, which averaged 7.5 percent in 2017,¹⁸ more than double the yield on long-term Treasury securities.¹⁹

The burden can be so great for states with large unfunded liabilities that it may take another two to five decades to retire today's pension debt—even if they religiously make the full actuarial contribution every year. Yet some states are assuming that commitment. Take Kentucky, which received a D for legacy costs in 2016. Though it still had the worst-funded state pension system, it began making a turnaround in 2017 that led to a three-year average grade of C for legacy costs. That compares with an average of D in last year's report.

Kentucky's multiple retirement plans had a funding ratio of 33.9 percent in 2017.²⁰

FIGURE 2 The Lowest-Graded States (2016–2018 Average)

BUDGET FORECASTING

STATE	GRADE
Alabama	D
Missouri	D
North Dakota	D

BUDGET MANEUVERS

STATE	GRADE
Pennsylvania	D

LEGACY COSTS

STATE	GRADE
Hawaii	D
Illinois	D
Massachusetts	D
New Jersey	D
Texas	D
Wyoming	D

RESERVE FUNDS

STATE	GRADE
Illinois	D
Kansas	D

TRANSPARENCY

STATE	GRADE
Arkansas	D

After declining to fully fund its actuarially determined contribution (ADC) for many years, the state was required by a 2013 law to begin paying the full amount into the five plans that make up the Kentucky Retirement System.²¹ The state teacher fund was not included in the law, and Kentucky continued to fall short in its annual contribution in 2016. However, in 2017 and 2018, Kentucky came close to the full annual contribution while exceeding the ADC for the five plans that make up the Kentucky Retirement System.²²

The contribution in the biennium that began July 1, 2016, was nearly \$1.3 billion for state employees in nonhazardous occupations. That pension plan is the worst-funded of the five. Kentucky's contribution includes funding for pension benefits earned in the current year, as well as a large payment to make up past funding shortfalls. The state contribution for the nonhazardous worker plan amounts to over 40 percent of payroll for those

employees in both 2017 and 2018.²³

Future annual contributions will need to be even greater if the Kentucky retirement system is to achieve full funding within its thirty-year amortization period. There is no guarantee that this goal will be reached. Just making the full contribution in the last biennium required special fund transfers and multiple cuts to state services and higher education.²⁴

Reserve Funds

States should enact clear policies for withdrawals from rainy day and other fiscal reserves. Without controls on withdrawals, spending decisions can be left to the whims of legislators or governors and result in increases in recurring costs rather than short-term infusions of cash for natural disasters or economic reversals. Without rules for replenishing rainy day funds, it can be too easy for legislatures to leave them empty or with minimal assets.

Montana is an example of a state that came up with answers to both challenges by creating a rules-based rainy day fund. The state depends heavily on volatile oil, natural gas, and coal production revenues; it also faces the constant risk of unexpected spending on wildfires and other natural emergencies. In 2017, it enacted legislation establishing a budget stabilization reserve fund to be used during a revenue shortfall.²⁵ The first deposit of \$45.7 million was planned for fiscal 2019.²⁶ In the future, if general fund revenues exceed estimates by at least \$15 million in a

FIGURE 3 Budget Forecasting Grade Changes

STATE	3-YEAR AVG (2015-17)	3-YEAR AVG (2016-18)
IMPROVED		
South Dakota	C	B
Texas	D	C

FIGURE 4 Budget Maneuvers Grade Changes

STATE	3-YEAR AVG (2015-17)	3-YEAR AVG (2016-18)
IMPROVED		
Vermont	B	A
Virginia	D	C
West Virginia	C	B
DECLINED		
Hawaii	A	B
Pennsylvania	D	D-
South Dakota	A	B

FIGURE 5 Legacy Costs Grade Changes

STATE	3-YEAR AVG (2015-17)	3-YEAR AVG (2016-18)
IMPROVED		
Oregon	B	A
Pennsylvania	D-	D
Virginia	D-	D
DECLINED		
Arizona	C	D
California	C	D
New Mexico	C	D

FIGURE 6 Transparency Grade Changes

STATE	3-YEAR AVG (2015-17)	3-YEAR AVG (2016-18)
IMPROVED		
Alabama	C	B
Hawaii	C	B
Tennessee	B	A

FIGURE 7 Fiscal Reserve Funds Grade Changes

STATE	3-YEAR AVG (2015-17)	3-YEAR AVG (2016-18)
IMPROVED		
Montana	D	C
North Carolina	C	B
Oklahoma	B	A
Wyoming	D	C
DECLINED		
Illinois	C	D
Pennsylvania	B	C

while every state discloses budgetary information on websites, gaps remain, especially in the costs of deferred infrastructure maintenance and of tax expenditures. The latter, worth tens of billions of dollars or more every year, include the tax exemptions, abatements, and credits handed out for job creation, film production, research and development, and general subsidies such as eliminating levies on food and clothing sales. While the Governmental Accounting Standards Board in 2015 began requiring all states and localities to show the cost of economic development incentives in their comprehensive annual financial reports,²⁸ states should also report the value of these and all other tax breaks in budgets, as they are an expenditure of public resources. Yet the quality and quantity of disclosure varies from state to state.

Indiana is one of the states providing useful tax expenditure information that can aid in budget preparation and the evaluation of economic development programs. Under a law passed in 2015, the state's Legislative Services Agency (LSA) is required to publish a detailed report on sales, income, and corporate tax expenditures in the fall of even-numbered years.²⁹

given fiscal year, half of the excess will be transferred into the rainy day fund on or before August 15 of the next fiscal period.²⁷

Prior to the new budget stabilization law, Montana had attempted to maintain a financial cushion with its year-end budgetary balances. But that did not provide the help the state needed in smoothing out volatile revenues. The creation of a rainy day fund, tying it to revenue volatility, and following best practices for its use and replenishment lifted Montana's annual grade in this category to an A in 2018 from a D in fiscal 2016 and 2017. Its three-year average rose to a C.

Transparency

States should provide the data that public officials, advocacy groups, and citizens need to thoroughly understand budgets. But

The report published in late 2016 provided explanations of each tax expenditure, its history, and an estimate of its cost for each fiscal year of the upcoming budget.³⁰

A separate law passed in 2015 requires Indiana's State Budget Agency to include a list of income and corporate tax expenditures in the report it submits to the legislative Budget Committee, also in the fall of even-numbered years, prior to debate over the upcoming biennial budget.³¹ That report, which uses data from both the LSA and the Department of Revenue, contains less explanatory detail but provides estimates for four years: the previous fiscal year, the current one, and both years of the upcoming biennium.³² The reports are intended to be complementary, with the much shorter budget agency publication geared for use in budget preparation and the legislative services report providing more detail on individual tax expenditures.

The addition of these reports raised Indiana's 2018 transparency grade to B from a C in 2016 and 2017, though its three-year average remains a C.

When states adopt best practices such as these, we should not assume they adhere to them indefinitely. In difficult fiscal times, legislators and governors can be tempted to forgo best practices and sacrifice fiscal stability for short-term fixes to maintain as many government services as possible. Yet states may find that long-term commitments to improved budget processes, especially in the areas highlighted in this study, will leave them better able to deal with the natural disasters and fiscal crises that inevitably occur.

FIGURE 8 State Grades Table

	BUDGET FORECASTING			BUDGET MANEUVERS			LEGACY COSTS			RESERVE FUNDS			TRANSPARENCY		
	US 3-YR. AVERAGE (GRADE TREND)	C	↗	B	↘	C	↗	B	↗	B	↗	B	↗	B	↗
STATE	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
Alabama	D-	D-	D-	B	C	B	D	C	C	B	B	B	C	B	B
Alaska	B	B	B	C	C	C	B	B	B	A	A	A	A	A	A
Arizona	B	B	B	C	C	C	D	D	D	A	A	A	B	B	B
Arkansas	D	D	D	A	B	A	C	C	C	C	C	C	D	D	D
California	B	B	B	A	A	A	C	D	D-	A	A	A	A	A	A
Colorado	C	C	C	C	C	B	D	D	D	B	B	B	B	B	B
Connecticut	A	A	A	C	C	D	D	D	D	B	B	B	B	B	B
Delaware	B	B	B	A	A	A	C	C	C	B	B	B	B	B	B
Florida	A	A	A	B	B	B	C	C	C	B	B	B	B	B	B
Georgia	C	C	C	A	A	A	C	A	A	B	B	B	B	B	B
Hawaii	A	A	A	A	B	B	D-	D-	D-	A	A	A	C	B	A
Idaho	D	D	D	A	A	A	A	A	A	A	A	A	B	B	B
Illinois	D-	D-	B	D	D	D-	D-	D-	D-	C	D	D	B	B	B
Indiana	C	C	C	A	B	A	B	B	B	A	A	A	C	C	B
Iowa	C	C	C	A	B	A	A	A	A	B	B	B	C	C	C
Kansas	D	D	D	D	D	C	D	D	D	D	D	D	B	B	B
Kentucky	B	B	B	C	C	C	D	B	B	C	C	C	B	B	B
Louisiana	B	B	B	D	D	C	D	D	D	A	A	A	B	B	B
Maine	B	B	B	B	B	B	C	A	A	B	B	B	B	B	B
Maryland	A	A	A	C	C	D	D	D	D	C	C	C	B	B	B
Massachusetts	C	C	C	C	D	D	D-	D-	D-	A	A	A	B	B	B
Michigan	B	B	B	B	B	A	D	B	B	A	A	A	B	B	B
Minnesota	B	B	B	A	A	A	D	D	D	A	A	A	B	B	B
Mississippi	C	C	C	B	B	A	B	B	B	B	B	B	B	B	B
Missouri	D	D-	D-	A	A	A	C	C	C	B	B	B	C	C	C

	BUDGET FORECASTING			BUDGET MANEUVERS			LEGACY COSTS			RESERVE FUNDS			TRANSPARENCY		
US 3-YR. AVERAGE (GRADE TREND)	C	↗	B	↘	C	↗	B	↗	B	↗	B	↗	B	↗	
STATE	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018	2016	2017	2018
Montana	D	D	D	B	B	B	C	C	C	D	D	A	B	B	B
Nebraska	B	B	B	A	A	B	A	A	A	C	C	C	B	B	B
Nevada	C	C	C	B	B	B	C	C	C	B	B	B	B	B	B
New Hampshire	D	D	D	A	A	A	D	D	D	B	B	B	B	B	B
New Jersey	D	D	D	D	D	C	D	D	D	B	B	B	B	B	B
New Mexico	B	B	B	B	D	D	D	D	D	B	B	B	B	B	B
New York	A	A	A	D	D	D	B	B	B	B	B	B	B	B	B
North Carolina	A	A	A	B	A	B	C	B	B	C	C	A	B	B	B
North Dakota	D	D	D	B	B	B	D	D	D	A	A	A	C	C	C
Ohio	D	D	D	B	B	B	C	C	C	C	C	C	B	B	B
Oklahoma	B	B	B	B	B	B	A	A	A	B	A	A	B	B	B
Oregon	C	C	C	A	B	A	A	A	A	B	B	B	B	B	B
Pennsylvania	B	B	B	D	D	D	D	D	D	B	C	C	B	B	B
Rhode Island	A	A	A	C	C	C	B	B	B	B	B	B	B	B	B
South Carolina	A	A	A	A	A	A	D	D	D	B	B	B	C	C	C
South Dakota	B	B	B	A	B	B	A	A	A	B	B	B	B	B	B
Tennessee	C	C	C	A	A	A	B	B	B	A	A	A	B	A	A
Texas	D	D	B	B	B	C	D	D	D	A	A	A	B	B	B
Utah	C	C	C	A	A	A	A	A	A	A	A	A	C	C	C
Vermont	B	B	B	A	B	A	D	D	D	B	B	B	B	B	B
Virginia	A	A	A	D	C	C	D	D	C	A	A	A	C	C	C
Washington	A	A	A	C	B	B	D	D	D	A	A	A	B	B	B
West Virginia	B	B	B	B	C	B	C	C	C	B	B	B	B	B	B
Wisconsin	D	D	D	B	B	B	A	A	A	B	B	B	B	B	B
Wyoming	B	B	B	B	B	B	D	D	D	D	C	C	C	C	C

AREAS OF ANALYSIS



Budget Forecasting

A state budget is as much a planning document as it is a financial one. The budget is intended to help a government remain fiscally sound and sustain its capacity to deliver services to the public. These goals may be unachievable if appropriate attention is not paid to estimating the possible future course of revenues and expenditures.

The use of a consensus method to estimate revenue is one of the best budget forecasting practices identified by the Volcker Alliance. The method attempts to avoid politically driven predictions by considering inputs from the executive and legislative branches and, sometimes, outside experts. Other best practices include providing a clear rationale to support forecasts and producing multiyear revenue and expenditure forecasts that can help policymakers spot and address long-term fiscal deficits. Yet only ten states received top average A grades in the budget forecasting category for fiscal 2016 through 2018, illustrating that most have considerable room to improve.

Among the findings:

- In 2018, nineteen states did not publish multiyear revenue forecasts in budget and planning documents covering at least three full fiscal years. That period is long enough to give policymakers a reasonable idea of potential fiscal trends.
- Twenty-seven states failed to present expenditure projections for the same period.
- Seventeen states had no multiyear forecasts for revenues or expenditures.
- Twenty-two states failed to use a consensus revenue estimate in the most recent year.
- Eight states did not provide a clear rationale to support their projections of revenue growth in the budget.

A few states are moving to improve their estimation processes, however. Utah, which received a three-year average of C in budget forecasting, passed legislation in 2018 requiring the Office of the Legislative Fiscal Analyst to prepare long-term budgets for programs appropriated from major funds and tax types. The law also requires regular stress tests showing how revenues and expenditures might be affected under different economic scenarios.³³ Previously, the state produced no public long-term revenue or expenditure estimates. While the improvements were not enacted in time to raise the state's 2018 grade, they point to an upward trend.

BUDGET FORECASTING BASICS When assessing a state's budget forecasting procedures, Volcker Alliance researchers considered these questions:

RESEARCH QUESTIONS	WHY IT'S IMPORTANT
Does the state utilize a consensus revenue estimate for the forthcoming fiscal year or biennium in budget and planning documents?	Consensus revenue estimates are a projection of revenues developed in agreement between the executive and legislative branches, sometimes with input from outside economists or business groups. While this method may not be more accurate than ones produced solely by the governor's office, it reduces the risk of revenue forecasts being politically manipulated; indicate focuses budgeting on a single, agreed-upon revenue figure; and helps policymakers concentrate on spending decisions.
Does the state provide a reasonable, detailed rationale to support revenue growth projections at time of the initial budget?	To help determine the validity of revenue estimates, it is important for states to disclose the methodology used in calculating the figures. For example, without knowing that estimates in energy-producing states such as Wyoming largely depend on severance taxes, the reasoning behind the forecasts is lost.
Does the state utilize multiyear revenue forecasts for at least three full fiscal years in budget and planning documents?	Revenues come mainly from taxes, fees, federal aid, fines and legal settlements, and returns on investment. It is only through a multiyear forecast that a budget can show users how stable the state's revenues are. Such a forecast will show gaps that may appear when the current year's budget is based on temporary revenue sources. A multiyear forecast will also reveal the impact of changes in tax law.
Does the state utilize multiyear expenditure forecasts for at least three full fiscal years in budget and planning documents?	States should carefully examine possible contributors to expanding or declining expenditures in future years. A long-term estimate, for example, might consider evidence that a slowing economy could lead to increases in Medicaid caseloads and strain a state's fiscal stability. Such a scenario might suggest a need for spending cuts or tax increases to close future budget deficits.

Meanwhile, Pennsylvania and New Jersey are considering adopting consensus revenue forecasts to replace the current ones, which are produced solely by the executive branch. But such reforms are not universal. In fact, twelve states scored D or lower, on average, over the three-year study period, with three—Alabama, Missouri, and North Dakota—receiving a D-minus, the lowest possible grade. North Dakota, for example, gives the governor exclusive authority for revenue forecasting.³⁴ However, the legislature can change the number in the budget.³⁵

Some states use consensus forecasting yet fall short in other areas. For instance, Massachusetts relies by statute on consensus revenue estimates yet earned only an average C grade. On or before January 15, the state's secretary of administration and finance must meet with the House and Senate Ways and Means committees to develop a consensus forecast of tax receipts for the next fiscal year's budget.³⁶ Massachusetts also provides a reasonable, detailed rationale to support revenue growth projections at the time of the initial budget. However, the state's budgetary revenue and expenditure projections do not extend beyond the current fiscal year.

By contrast, Georgia, another C-graded state, produces both expenditure and revenue projections that extend three years past the current fiscal year, but it does not have a consensus estimating process. The governor's office is responsible for producing the revenue estimate used in the proposed budget. The state does not disclose any rationale for the estimate, and

any underlying assumptions for the estimate are not released publicly.

While most states need to improve aspects of their forecasting, some stand out for their exemplary procedures. One is Florida, the third-most-populous state and one of the ten with an average A grade. It has a consensus revenue estimating process that includes the Executive Office of the Governor, the Office of Economic and Demographic Research, and the Senate and House of Representatives.³⁷ The estimation effort begins with a national economic forecast that is adjusted to a state outlook. Economists consider a variety of taxes, including the sales tax, which made up 63 percent of state tax collections in fiscal 2017,³⁸ as well as other revenue sources, such as the corporate income levy, lottery and slot machine revenues, transportation revenues, and communications services taxes. Estimates are periodically revised with explanations of how and why revenues may be diverging from projections. Florida also holds estimating conferences that focus on demographic changes and spending categories, including criminal justice, education, social services, and the public employee retirement system.³⁹ This level of transparency makes it difficult for the state to use one-time budgetary measures without, at a minimum, some form of public disclosure.

The consensus process for revenues and spending is intended to help the state meet its constitutional balanced budget requirement. Florida's detailed, three-year consensus revenue forecast also comprises expenditure estimates that reflect budget baseline spending. In addition, a 2006 constitutional amendment requires the Legislative Budget Commission to produce a long-range financial outlook. In addition to providing projections, it considers critical needs, risks to forecast accuracy, and key budget drivers. The one that was released on September 14, 2018, covered fiscal 2019 through 2022.⁴⁰

Even states with severe fiscal challenges sometimes maintain forecasting practices that rank with the best. With the lowest general obligation bond rating of any state,⁴¹ Illinois has become synonymous with a "broken budget process," failing even to pass a budget in 2016 and 2017. Nonetheless, the state has statutory requirements for both the Governor's Office of Management and Budget and the legislature's Commission on Government Forecasting and Accountability to produce multiyear revenue and expenditure forecasts designed to help the legislature and governor know which future budget issues they may need to confront.⁴² The governor's annual Economic and Fiscal Policy Report published in October 2017 includes national and state economic outlooks and provides projections of revenues, expenditures, deficits, surpluses, and liabilities through fiscal 2023.⁴³

Budgeting is not an exact science, and even states that score relatively well in the fore-

casting category can see forecasts miss the mark because of unanticipated events, errors, or changes in state law. Arizona, with a B average, publishes the rationale behind its revenue estimates, yet in 2017, the final year of a multiyear corporate tax reform plan, the state overestimated the amount of revenue the levy would produce. Starting in 2015, Arizona's corporate tax rate was lowered in steps to 4.9 percent from 6.5 percent.⁴⁴ But the 2017 receipts were about a third less than what had been estimated and budgeted.⁴⁵

Given the difficulty in making dramatic changes in budgetary practices, it is no surprise that most states retained similar annual grades from 2016 to 2018. But there were some exceptions. Texas saw its forecasting grade rise to B in 2018 from D in 2016 and 2017. This improvement followed a decision by the state legislature to experiment with long-term revenue and expenditure estimates. The General Appropriations Act for the 2018–19 biennial budget required the Legislative Budget Board to produce a report for the 2019 legislative session analyzing the impact of economic and demographic growth on state finances for ten fiscal years, starting in September 2019 and continuing through August 2029. The legislature will then evaluate the process.⁴⁶

While there are multiple best practices that contribute to a state's quest for excellence in its budgeting, efforts to forecast future expenditures and revenues are particularly critical. If a state is far off on its expenditure or revenue projections, the very idea of a balanced budget becomes ever more elusive.

BUDGET FORECASTING

When States Make Midyear Budget Adjustments

STATES SOMETIMES ADJUST their enacted budgets after the beginning of the fiscal year following an economic shock, such as a collapse in the housing market or drop in oil prices. Other times, however, midyear budgetary adjustments may be more a symptom of flaws in forecasting.

Though our 2017 report on state budgeting practices included the use of midyear budget adjustments in states' annual forecasting grades, the 2018 report does not, as they usually show that policymakers are doing what is necessary to eliminate a shortfall. In fiscal 2017, sixteen states made such changes: California, Connecticut, Illinois, Iowa, Louisiana, Mississippi, Mis-

souri, Nebraska, New Jersey, New Mexico, North Dakota, Oregon, South Dakota, Virginia, West Virginia, and Wyoming.

From July through October 2017 (the first four months of the fiscal year and the cutoff date for our 2018 report), only six states required midyear budget adjustments: Connecticut, Mississippi, Missouri, Montana, Nebraska, and Oklahoma. That number may not be a harbinger of the total number of states making adjustments in the fiscal year's final eight months. Fiscal 2018 ended on June 30, 2018, for forty-six states.⁴⁷ A final evaluation of budgetary processes covering the remainder of the fiscal year is scheduled to be published in 2019.

Mississippi, for example, with a three-year average of C in forecasting, made midyear budget adjustments in 2016, 2017, and 2018. In the first eight months of fiscal 2017, the state had a three-round series of cuts totaling \$151 million.⁴⁸ Part of this resulted from a \$169 million overestimate of revenues⁴⁹ and an accounting error made by legislators when writing the state spending plan.⁵⁰ Among the agencies worst hit were the Mental Health and Health departments and the Mississippi Adequate Education Program.⁵¹

California, meanwhile, did not require midyear budget adjustments in fiscal 2015 or 2016, or during the first four months of 2018. But a shortfall of \$1.7 billion in general fund revenues in fiscal 2016 and 2017, stemming from overestimates of sales and corporation taxes, led to changes in the latter year. The shortfall was partly offset by upward revisions for personal income taxes.⁵²

Midyear budget adjustments may signal that projections were inaccurate, but they are not a bad practice in and of themselves. The frequent alternative is to resort to budget maneuvers, which have the effect of pushing shortfalls into future years, thus breaking a cardinal rule of good budgeting: matching a fiscal year's revenues with expenditures in the same year.

Midyear adjustments may be necessary to avoid deficits and preserve bond ratings. But states should make them with care to avoid damaging effective programs.

BUDGET FORECASTING

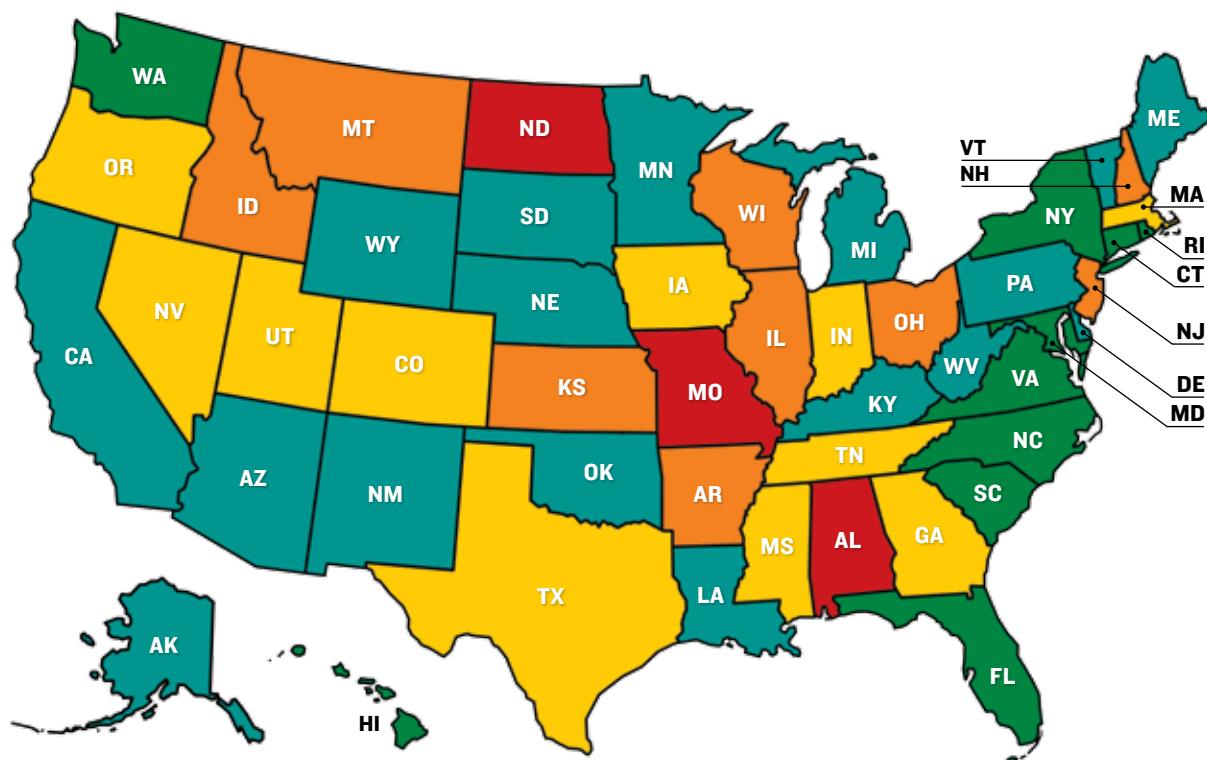


This table contains assessments of the scope and quality of states' budgetary forecasting for fiscal 2016 through 2018. States are graded on a scale of A to D-minus, the lowest possible, on whether they used consensus revenue estimates for the coming year or biennium in budget documents; provided a reasonable, detailed rationale to support revenue growth projections at the time of the initial budget; utilized multiyear revenue forecasts for at least three full fiscal years in budget and planning documents; and utilized multiyear expenditure forecasts

for at least three full fiscal years in budget and planning documents.

KEY

GRADE (3-Year Average)		TREND
A	Scored 81%-100%	
B	Scored 61%-80%	
C	Scored 40%-60%	
D	Scored 20%-39%	
D-	Scored 0%-19%	



BUDGET FORECASTING

STATE	GRADE	TREND
Connecticut	A	—
Florida	A	—
Hawaii	A	—
Maryland	A	—
New York	A	—
North Carolina	A	—
Rhode Island	A	—
South Carolina	A	—
Virginia	A	—
Washington	A	—
Alaska	B	—
Arizona	B	—
California	B	—
Delaware	B	—
Kentucky	B	—
Louisiana	B	—
Maine	B	—
Michigan	B	—
Minnesota	B	—
Nebraska	B	—
New Mexico	B	—
Oklahoma	B	—
Pennsylvania	B	—
South Dakota	B	—
Vermont	B	—
West Virginia	B	—

STATE	GRADE	TREND
Wyoming	B	—
Colorado	C	—
Georgia	C	—
Indiana	C	—
Iowa	C	—
Massachusetts	C	—
Mississippi	C	—
Nevada	C	—
Oregon	C	—
Tennessee	C	—
Texas	C	↗
Utah	C	—
Arkansas	D	—
Idaho	D	—
Illinois	D	↗
Kansas	D	—
Montana	D	—
New Hampshire	D	↘
New Jersey	D	—
Ohio	D	—
Wisconsin	D	—
Alabama	D-	—
Missouri	D-	↘
North Dakota	D-	—
US AVERAGE	C	↗



Budget Maneuvers

Fiscal sustainability is key to successful budgeting. Using one-time actions to balance a budget will produce shortfalls in future years unless recurring revenues are increased or expenditures reduced. Similarly, deferring payment of planned expenditures to a future fiscal year can prompt a state to use maneuvers to pay for past-due bills.

In the 2018 evaluation, about the same number of states have had improvement in the budget maneuvers category as have had their grades decline.

We asked nine questions to determine how states should be graded in their use of budget maneuvers, or one-time actions, to offset continuing expenditures. They fall into five groups of activities: deferring recurring expenditures; shifting revenues to the current year from the future; moving costs from the general fund to other public entities or raiding special funds to prop up the general fund; funding recurring expenses with debt; and selling long-lasting assets to pay the current year's bills. Three-year average state grades were widely spread. Sixteen scored an A; eighteen got a B; nine were given C; six received a D; and only one, Pennsylvania, got the lowest grade possible, a D-minus.

One budget maneuver that contributed to Pennsylvania's low grade was a decision to use \$1.5 billion in proceeds from the issuance of bonds secured by 1998 Tobacco Master Settlement Agreement—a legal settlement between cigarette producers and forty-six states, the District of Columbia, and several territories—to help offset a negative general fund balance at the end of 2017.⁵³ Massachusetts earned an average grade of D, the second-lowest mark. It has relied heavily on maneuvers to offset a long-term disconnect between revenues and expenditures: It passed tax cuts in 2000 without sufficiently reducing spending enough or growing its economy to close the resulting gap.⁵⁴ When revenue forecasts are higher than actual receipts or expenditures are higher than original estimates, states may turn to one-time actions to address budgetary shortfalls.

The use of budget maneuvers accelerates in times of economic stress and tends to decrease when the economy is improving. Although it finished fiscal 2017 with a budget surplus, Louisiana dealt with a revenue shortfall during the year by moving money from its rainy day fund and other special funds to the general fund to pay for ongoing expenditures. The state also used cash generated from a bond refinancing to cover operating costs in fiscal 2017, although less than it did in 2016.⁵⁵ Further, \$61 million in planned Medicaid spending deferred in 2016 was deferred again to fiscal 2019.⁵⁶ Nonetheless, the state's grade in the category rose to C in

BUDGET MANEUVERS BASICS When assessing a state's budget maneuvers, Volcker Alliance researchers considered these questions:

RESEARCH QUESTIONS	WHY IT'S IMPORTANT
Did the state successfully avoid deferring recurring expenditures, excluding those for capital projects, into future fiscal years from the current year?	The high costs of bridges, buildings, and other capital projects suggest that their expense should be spread over assets' useful life by financing them with long-term bonds. But putting off recurring operating expenditures to a future year will only shift them to future budgets, making them ever more difficult to balance.
Did the state successfully avoid utilizing one-time transfers into the general fund from special funds to pay for recurring expenditures?	Paying for ongoing costs by accelerating revenues or using similar techniques can stress future budgets. One-time transfers into the general fund from special funds may be impossible to sustain, especially if the special funds are drained; temporarily shifting costs from the general fund to other governments or agencies balances the budget but still leaves taxpayers footing the bill.
Did the state successfully avoid temporarily shifting costs to counties, municipalities, school districts, or other governments or agencies?	
Did the state successfully avoid utilizing the proceeds of borrowing to pay for recurring expenditures? Are such proceeds counted as revenue for balancing the budget?	States should avoid using bond premiums, a form of borrowed money, for the general fund, or using bonds to make pension payments. Other practices, hazardous for the same reasons, include using upfront funds derived from refinancings to balance current budgets or pushing debt costs into the future to free up revenues to pay current bills.
Did the state successfully avoid refinancings to raise funds for any current expenditures, including debt service?	
Did the state successfully avoid diverting bond premiums into the general fund or other general revenue account?	
Did the state successfully avoid utilizing pension bond proceeds to make the annual required or actuarially determined contribution to any pension?	
Did the state successfully avoid utilizing proceeds from material, nonrecurring asset sales to fund recurring expenditures?	While assets can be sold to pay for recurring expenditures, there is no assurance that other assets will be available for such spending in future years. For example, government buildings that are sold may have to be leased back at taxpayer expense, or tolls may be raised if roads are sold through privatization.
Did the state successfully avoid utilizing upfront proceeds or deferral of upfront costs on financial transactions to fund recurring expenditures?	

2018 from D in 2016 and 2017, though its average is still D.

Other budget maneuver findings for fiscal 2016 through 2018 include:

- Forty-five states avoided funding recurring expenses with debt in 2018. The five states that used the technique were Alabama, Connecticut, Illinois, New Mexico, and Pennsylvania. Each of those states also used debt for recurring expenses in 2017, as did Louisiana and Rhode Island.
- No state issued bonds to make actuarially determined contributions to public employee pensions.
- Only two states—New Jersey and Illinois—projected asset sales to support recurring expenditures and help keep their budgets in balance in 2018. Illinois added \$300 million to its budget from the proposed sale of the Thompson Center,⁵⁷ a Chicago complex that houses state offices, stores, and restaurants, although the sale plan was later shelved.

The New Jersey budget relied on \$325 million in asset sales,⁵⁸ including \$321 million from the sale of excess broadband capacity.⁵⁹

Five states that achieved a three-year A average did so with improvements from 2017 to 2018: Arkansas, Indiana, Iowa, Oregon, and Vermont. Revenue shortfalls led Iowa to use \$25.1 million in interfund transfers to shore up the general fund in fiscal 2017⁶⁰— one action not needed in 2018. Vermont deferred spending by delaying until fiscal 2018 the outlay of \$16.3 million of corporate refunds expected to be paid in fiscal 2017.⁶¹ This technique brought its overall grade in budget maneuvers to a B in 2017. The state didn’t use similar shifts in fiscal 2018, however, which elevated its grade to an A.

Still, twenty-nine states transferred cash to their general fund from special funds in 2018, including Illinois, New York, Ohio, Pennsylvania, and Texas.

Among states deferring recurring expenditures into future fiscal years from the current one was New York, which borrowed \$215 million from the New York Power Authority in March 2009 and was supposed to repay the loan by September 30, 2017. But in fiscal 2017, an amendment to the memorandum of understanding extended the payment plan until fiscal 2023. In fiscal 2018 it paid back \$22 million, leaving \$193 million deferred to the following five years. The state also borrowed \$103 million from the authority in September 2009, which was to be repaid by September 30, 2014. But that payment had been similarly extended to a series of installments between fiscal 2015 and 2019.⁶²

Maneuvers often receive little attention in budget discussions. Governors and legislators frequently talk about streamlining and efficiency as the cure for expenditures that outstrip revenues. But while the latest plan to restructure government is debated, states often turn to one-time actions for short-term fixes that actually may need to be repeated again and again.

BUDGET MANEUVERS

The Fund Transfer Trap

WHEN VOLCKER ALLIANCE RESEARCHERS scrutinized states' use of maneuvers to balance their budgets, the most widely used technique was making one-time transfers to the general fund from special funds to pay for recurring expenditures. Twenty-nine states engaged in this practice in fiscal 2018. While this indicates that these states are most likely caching spare cash in numerous places beside their official rainy day fund reserves, it poses a threat to the use of funds earmarked for specific purposes—say, clean energy retrofits or transportation. Additionally, reliance on fund transfers to balance budgets may not be repeatable indefinitely if the special funds are drained until they run dry.

Of the ten largest states by population, only California, Georgia, and Michigan eschewed such transfers in fiscal 2018. And while California and Georgia also avoided transfers in 2016 and 2017, Michigan broke ranks after the state Senate passed a bill permitting a one-time transfer to the general fund from the unemployment contingency fund,⁶³ which is made up primarily of penalties and interest paid to the state because of fraud.

California has not always had such a clean record; it still carries liabilities from engaging in maneuvers in previous years. The state Department of Finance estimated that the balance of general fund liabilities to special funds was about \$1.4 billion as of June 30, 2017.⁶⁴

Transfers involve significant sums in some states. New Jersey's D average in budget maneuvers is largely due to its consistent use of this technique for all three years studied. In its fiscal 2018 budget, the state continued its longtime use of clean energy funds for general fund purposes, with the transfer of \$161 million.⁶⁵ There was a similar transfer of funds—totaling \$204 million in the year—from the New Jersey Turnpike Authority to the general fund to help cover the operating expenses of New Jersey Transit, the state-owned commuter rail and bus system.⁶⁶

Similarly, Kansas shifted \$198.4 million and \$118.8 million in fiscal 2017 and 2018, respectively, to the general fund from the Pooled Money Investment Portfolio, which is made up of money from state agencies, local governments, and school districts and is invested by a state board. The funds are scheduled to be repaid over six years.⁶⁷ With a three-year average of D in the category, Kansas has also made regular transfers of highway funds to the general fund,

ranging from \$173.5 million in 2015 to \$288.3 million in fiscal 2018.⁶⁸ The state may be able to lessen dependence on transfers and other budget maneuvers following a 2017 restoration of tax rates to the pre-2013 level.⁶⁹

In fiscal 2018, the New Mexico Senate raised recurring general fund expenditures by \$90.1 million, using \$81.4 million in transfers to cover most of that increase. Among the transfers, \$71 million came from money that would have gone to the severance tax permanent fund, and \$10.4 million came from the suspension of a severance tax bond distribution to the state water project fund.⁷⁰

Transfers from special funds are a particularly seductive approach to balancing a budget. They are nearly invisible without an exacting analysis of the budget and do not frequently show up in headlines. Still, they cannot go on indefinitely and may ultimately leave a state confronting a shortfall that can't be fixed so quietly.

BUDGET MANEUVERS

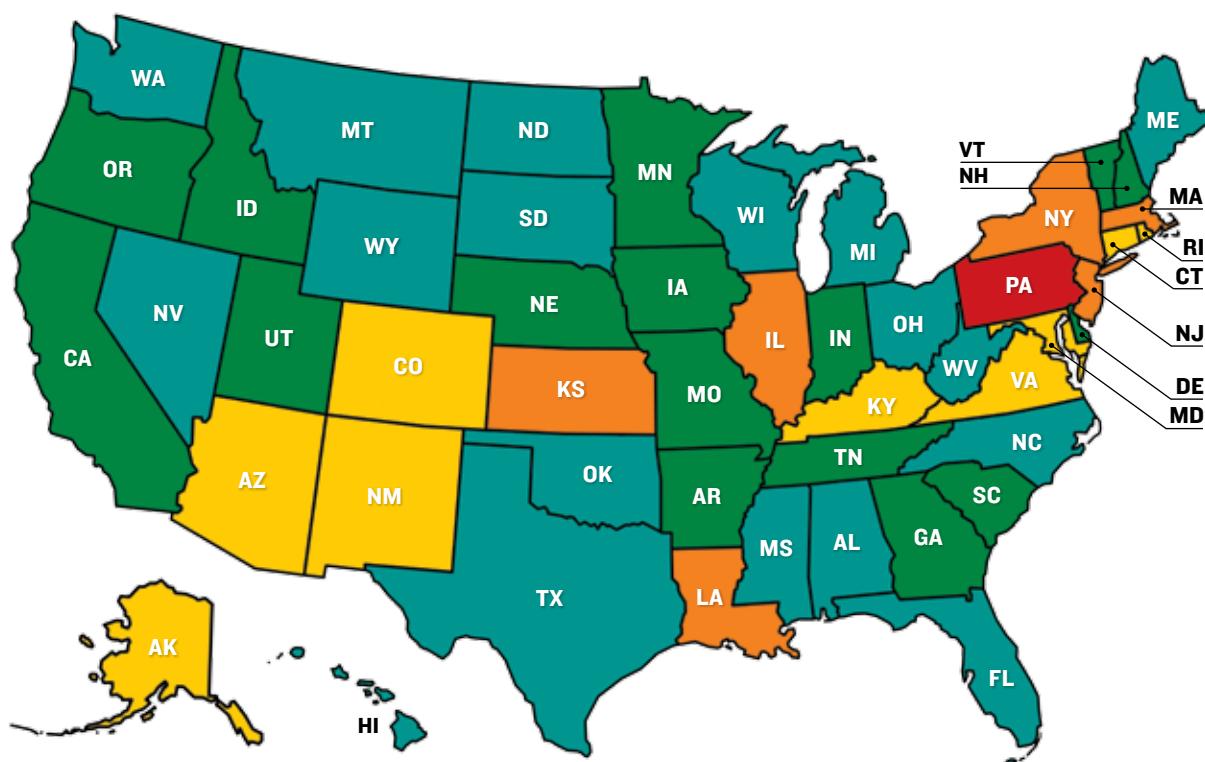


This table contains assessment of states' use of a range of one-time actions to balance budgets in fiscal 2016 through 2018. States are graded on a scale of A to D-minus, the lowest possible, on their successful avoidance of such techniques. They include using proceeds of borrowings, "scoop and toss" refinancings, asset sales, or transfers from special funds to the general fund to cover recurring expenditures; diverting bond premiums or other upfront cash flows from financial transactions to the general fund or similar accounts; using bonds to make

pension contributions; deferring recurring expenditures (excluding those for capital projects) into future fiscal years; and temporarily shifting costs to other governments or agencies, or upstreaming cash from such entities that is not part of a regular process.

KEY

GRADE (3-Year Average)		TREND
A	Scored 81%-100%	
B	Scored 61%-80%	
C	Scored 40%-60%	
D	Scored 20%-39%	
D-	Scored 0%-19%	



BUDGET MANEUVERS

STATE	GRADE	TREND
Arkansas	A	—
California	A	—
Delaware	A	—
Georgia	A	—
Idaho	A	—
Indiana	A	—
Iowa	A	—
Minnesota	A	—
Missouri	A	—
Nebraska	A	⬇️
New Hampshire	A	—
Oregon	A	—
South Carolina	A	—
Tennessee	A	—
Utah	A	—
Vermont	A	—
Alabama	B	—
Florida	B	—
Hawaii	B	⬇️
Maine	B	—
Michigan	B	⬆️
Mississippi	B	⬆️
Montana	B	—
Nevada	B	—
North Carolina	B	—
North Dakota	B	—

STATE	GRADE	TREND
Ohio	B	—
Oklahoma	B	—
South Dakota	B	⬇️
Texas	B	⬇️
Washington	B	⬆️
West Virginia	B	—
Wisconsin	B	—
Wyoming	B	—
Alaska	C	—
Arizona	C	—
Colorado	C	⬆️
Connecticut	C	⬇️
Kentucky	C	—
Maryland	C	⬇️
New Mexico	C	⬇️
Rhode Island	C	—
Virginia	C	⬆️
Illinois	D	⬇️
Kansas	D	⬆️
Louisiana	D	⬆️
Massachusetts	D	⬇️
New Jersey	D	⬆️
New York	D	—
Pennsylvania	D-	⬇️
US AVERAGE	B	⬇️



Legacy Costs

Trillions of dollars in unfunded liabilities for state public worker pensions and other postemployment benefits (OPEB), largely retiree health care, represent unpaid costs for services that governments delivered in the past. Efforts to cover these legacy costs present many states with challenges

that often elude easy solutions, and the costs increasingly threaten to crowd out spending on education, infrastructure, and other critical needs.

While a 19 percent gain for the Standard & Poor's 500 Index in 2017⁷¹ helped state pension funds reduce their deficit by a small amount from the previous year, they still had a \$1.35 trillion gap, according to data compiled by Bloomberg. This deficit was 6.5 percent larger than it was in 2015. Put another way, states in 2017 had set aside only \$2.95 trillion to cover pension obligations totaling \$4.23 trillion. On top of their pension obligations, states posted OPEB liabilities of \$692 billion in 2016, the most recent year for which data are available, while amassing just \$46 billion in assets.⁷² Perhaps it is not unexpected that in the legacy costs category, only eight states received average A grades for 2016 through 2018, while twenty-two were graded D or worse.

When calculating annual grades for legacy costs, we consider a state's demonstrated willingness to meet pension obligations and OPEB. Thirty percent of the overall category grade is determined by a state's making its actuarially required or determined contribution (ARC or ADC) for OPEB. Seventy percent of the grade was based on whether the state had made, its public employee pension ARC or ADC and on its pension funding ratio—the amount of assets available to cover promised benefits—as of 2017.

The eight states receiving an average of A in legacy costs were Idaho, Iowa, Nebraska, Oklahoma, Oregon, South Dakota, Utah, and Wisconsin. Six states received the lowest possible grade of D-minus: Hawaii, Illinois, Massachusetts, New Jersey, Texas, and Wyoming. Each of these states failed to make their full ARC or ADC for both pension and OPEB in either 2017 or 2018.

With the US economy in its ninth year of recovery from the Great Recession, states generally did better on making their full annual pension contribution in 2017 and 2018 than in previous years. In 2015, sixteen states failed to make the full contribution, versus fifteen in 2016 and twelve each in 2017 and 2018. Pennsylvania's D-minus grade in 2015 and 2016 rose to a D in 2017 and 2018. In those two years, the state made its full annual contribution to its two major pension systems. Still, the many years that Pennsylvania skimped on its contribu-

LEGACY COST BASICS When assessing a state's legacy costs, Volcker Alliance researchers considered these questions:

RESEARCH QUESTIONS	WHY IT'S IMPORTANT
Was the contribution to public employee pension funds effectively 100 percent of the actuarially required or determined (ARC or ADC) amount?	State pension actuaries determine how much each government employer needs to set aside every year to ensure that sufficient assets are available to cover future pension benefits. If a state deposits less than the amount actuaries recommend, future government contributions are likely to rise, limiting states' capacity to pay for essential services.
Was the contribution to public employee other postemployment benefits (OPEB) effectively 100 percent of the ARC or ADC amount?	States have about \$700 million in unfunded OPEB retirement liabilities. These largely stem from promised health care benefits for retired public workers. While states are required to report OPEB liabilities, most pay for retiree health costs, when coverage is offered, on a pay-as-you-go basis. The result is that unfunded liabilities will grow along with the ranks of retired workers.
Was the state's pension funded ratio above 90 percent (for full credit) or above 70 (for half credit)?	Even though states may be making the ARC or ADC for pensions, many still have large unfunded liabilities built up from past years. A large accrued debt necessitates spending more on amortization each year.

tions left it with a funding level of 55.3 percent in its most recent actuarial valuation, down from 127 percent in 2000.⁷³

Kentucky, the state with the lowest pension funding ratio in 2017 (33.9 percent), also saw its grade improve from a three-year D average in last year's report to a C average, largely because it fully funded its annual employer pension contribution in fiscal 2017 and 2018. This was not the case in 2015 or 2016 because of state underfunding of the annual contribution for the teacher pension.

Several other states that are now making 100 percent of their actuarially determined annual pension payments are still less than 70 percent funded because of past contribution shortfalls, market losses, or both. Connecticut is an example. On an annual basis, its pension fund contributions were 98.3 percent of the ADC in 2017, but its pension funding level was only 43.8 percent. Coupled with its neglect of actuarially required annual funding for OPEB, this resulted in a D for the state in legacy costs. The same was true for New Hampshire, which made its full annual pension contribution each year of the evaluation but did not provide full annual funding for OPEB and had a pension system that was only 62.6 percent funded.

Thirty-eight states got credit for making their full annual pension contribution, while only twenty did similarly for OPEB. This number included some states, including Indiana, Nebraska, Iowa, and Oklahoma, with minimal OPEB benefits. As a result, they do not face fiscally draining long-term costs in this area. (Some states received credit for pension or OPEB funding if the unfunded portion of the ARC or ADC was under \$50 million and less than 0.5 percent of the budget.)

The long-term liability is significant for states providing substantial direct subsidies for

retiree health care. New York, for example, had a \$72.8 billion unfunded actuarial accrued OPEB liability in 2016. To fully fund that obligation over time, including the amount necessary to cover the cost of benefits earned in the current year and to amortize the unfunded liability, the state would have needed to pay \$3.2 billion in fiscal 2017. It contributed only 44 percent of that amount, \$1.4 billion, which covered the current-year costs for retirees. By failing to fund OPEB as actuaries recommended in 2017, New York added \$1.8 billion to its long-term liability.⁷⁴

One state that improved its OPEB funding practices in this year's evaluation was Georgia, which received an annual grade of C in 2015 and 2016 and A in 2017 and 2018. Georgia's 2015 evaluation showed minimal assets for the state or school OPEB funds, leaving it with an unfunded liability of nearly \$14 billion.⁷⁵ The state began to prefund OPEB in fiscal 2016, and the following year it made sufficient contributions to its state and school plans to match actuarially determined amounts. By May 1, 2018, the state's OPEB fund had assets of \$1.2 billion, which put its funding ratio at 25.1 percent. While this indicates progress, the state has not instituted statutory policies committing it to continue contributing at levels that will lead in the long term to a fully funded OPEB trust.⁷⁶

Courts, interpreting state constitutions or statutes, have typically made it easier to alter OPEB benefits than pensions. For instance, in 2018 an appellate court permitted New York to increase the contributions that New York State Thruway Authority retirees contribute for health care.⁷⁷

Pensions are more generally regarded as binding contractual or even constitutional obligations and have been far more difficult to alter for current employees. And while pension obligation bonds, such as those previously used by Kansas, Illinois, and New Jersey, can raise money to lower unfunded liabilities, they merely shift debt from one arm of government to another. For states such as these, devising a durable strategy to cover retirement promises made to public workers while continuing to provide essential services is a truly arduous task.

FIGURE 9 The State of State Pensions

STATE	UNFUNDED LIABILITY (MILLIONS)*	PENSION FUNDED RATIO 2017
Alabama	\$15,251	70.9%
Alaska	7,243	66.6
Arizona[†]	26,397	62.7
Arkansas	8,131	76.3
California[†]	247,406	66.5
Colorado	54,596	47.1
Connecticut	35,560	43.8
Delaware	1,962	82.8
Florida	40,858	79.1
Georgia	22,910	79.2
Hawaii	12,950	54.8
Idaho	1,507	91.3
Illinois	136,882	38.4
Indiana	17,302	65.0
Iowa	6,840	82.1
Kansas	9,129	67.1
Kentucky	42,916	33.9
Louisiana	18,411	65.6
Maine	2,996	81.9
Maryland	22,593	68.6
Massachusetts	35,710	59.9
Michigan	32,438	65.1
Minnesota	37,199	63.3
Mississippi[†]	17,130	61.1
Missouri	15,773	77.9
Montana	4,091	72.9
Nebraska	\$1,480	90.2%
Nevada	13,319	74.4
New Hampshire	4,965	62.6
New Jersey	142,288	35.8
New Mexico	16,485	62.5
New York	11,469	94.5
North Carolina	9,632	90.7
North Dakota	2,987	63.8
Ohio	51,808	78.5
Oklahoma	8,548	77.9
Oregon	13,480	83.1
Pennsylvania	66,680	55.3
Rhode Island	5,531	54.6
South Carolina	25,482	54.3
South Dakota	-9	100.1
Tennessee[†]	1,730	96.2
Texas	55,146	76.1
Utah	3,420	90.3
Vermont	2,284	64.3
Virginia	21,480	77.2
Washington	9,883	89.6
West Virginia	3,919	79.2
Wisconsin[†]	17	100.0
Wyoming	2,701	75.9
US TOTAL	\$1,348,906	68.6%

*Net pension liability, 2017.

[†]Pension funded ratio is based on Governmental Accounting Standards Board (GASB) Statement No. 25; those not noted are based on GASB Statement No. 67.

SOURCE Bloomberg

LEGACY COSTS

How States Created Today's Pension Funding Gaps

STATE PENSION SYSTEM shortfalls are often the result of decisions made years or decades ago.

In 2017, twenty-one states had pensions that were less than 70 percent funded. That stands in contrast to 2000, when half of state plans were at least 100 percent funded.⁷⁸ Many states' pension plans saw funding levels drop when technology stocks declined dramatically in 2000.⁷⁹ The Great Recession had an even larger impact. Many states increased retirement benefits in the 1990s and early 2000s in lieu of salary increases, but not all of those raised government or worker contributions sufficiently to finance the additional largesse.

From 1997 to 2006, thirty-two states failed to make their full or nearly full, actuarially determined or recommended annual pension contribution in at least one year.⁸⁰ The shortfall left the underpayment to be addressed subsequently and the unpaid sums to compound at the funds' assumed rate of return—currently about 7.5 percent.⁸¹ From 2016 to 2018, the years covered by this study, sixteen states missed making the full contribution in at least one year.

Kentucky and New Jersey are extreme examples of a precipitous drop in pension funding ratios. Both were at least 100 percent funded at the end of the twentieth century, but as of June 30, 2017, the unfunded liability for Kentucky's pension systems was \$42.9 billion, while New Jersey's was \$142.3 billion. That translates into a funding ratio of 33.9 percent and 35.8 percent, respectively.

New Jersey began steadily losing ground in its Public Employees' Retirement System and the Teachers' Pension and Annuity Fund at the start of this century.⁸² But the state's problems began even before that, when Governor Christine Todd Whitman signed into law the final part of a 30 percent income tax cut in 1995.⁸³

To make up for the revenue decline, the governor reduced the amount of money contributed to the pension funds and in 1997 sold \$2.8 billion in pension obligation bonds at just under 8 percent interest.⁸⁴ A plunge in stock prices between 2000 and 2002 consumed part of the funds raised through the debt sale, and New Jersey will continue to pay about \$500 million annually in debt service costs for those bonds through 2029.⁸⁵

Despite the market losses, the state boosted pension benefits by 9 percent in 2001—with-

out any plans for covering the additional cost.⁸⁶ In fiscal 2018, New Jersey temporarily shifted ownership of the state lottery and its proceeds to the retirement funds for teachers, public employees, and police officers and firefighters.⁸⁷ The move made the pension system appear better funded but the net amount being injected by the state is not scheduled to reach the ARC level until fiscal 2023. The shortfall continues to deprive the pension system of any possible earnings on the sums that actuaries say should be contributed.

Kentucky has a similar story. In 2002, the Kentucky Retirement Systems, comprising five separate pension plans,⁸⁸ was 100 percent funded.⁸⁹ But starting in 2004 annual contributions ran consistently short of actuarial recommendations. The biggest problem was the state employee plan for those in nonhazardous jobs. At the height of the ARC underfunding, in fiscal 2012, the employer annual contribution for that plan fell short by \$226.3 million—half of the actuarial recommendation.⁹⁰ The legislature passed a bill in 2013 mandating full annual contributions for the Kentucky Retirement Systems. In the biennial budget that began July 1, 2016, and ended June 30, 2018, the state exceeded the recommended actuarial contribution.⁹¹

The state is still grappling with underfunding that stems from past actions, however they include using an accounting process that allowed the state to backload its ADC so that costs would grow over time, using assumptions that turned out to be overly optimistic, and providing annual cost-of-living increases to retirees for decades without adequate plans for funding them.⁹² This occurred most recently in 2011. Two years later, legislators eliminated cost-of-living adjustments (COLAs) except in years when the assets of the system are greater than its liabilities. Still, just between 2008 and 2011, unfunded COLAs added \$1.45 billion to the unfunded liability of the Kentucky Retirement Systems.⁹³

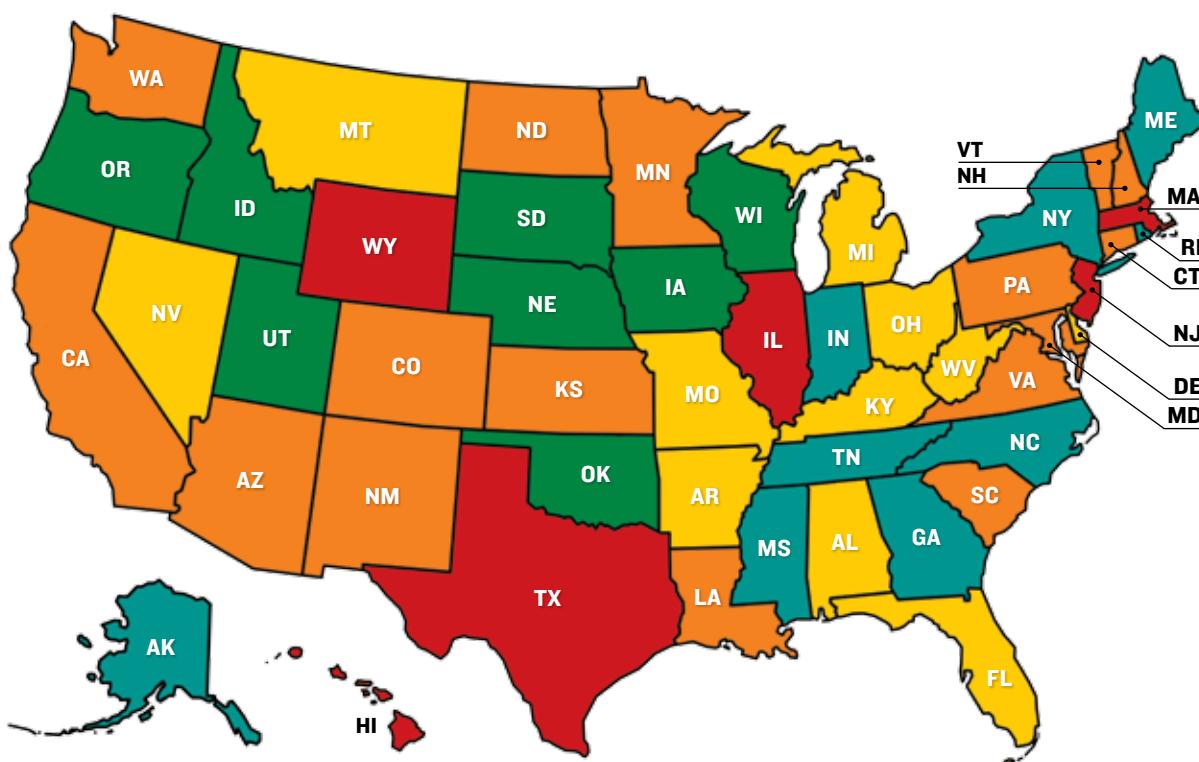
LEGACY COSTS



This table contains assessments of states' ability to meet promises made to public employees for pensions and other retirement costs for fiscal 2016 through 2018. States are graded on a scale of A to D-minus, the lowest possible, on whether their contributions to public employee pension funds were effectively 100 percent of the actuarially required or determined contributions (ARC or ADC), adjusted for any unfunded liabilities; and whether their contributions to any public employee other postemployment benefit (OPEB) plans were effectively 100 percent of the ARC or ADC.

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%	
D	Scored 20%-39%	
D-	Scored 0%-19%	↘ Score fell from fiscal 2016 through 2018



LEGACY COSTS

STATE	GRADE	TREND
Idaho	A	↗
Iowa	A	—
Nebraska	A	↗
Oklahoma	A	—
Oregon	A	—
South Dakota	A	—
Utah	A	↗
Wisconsin	A	—
Alaska	B	—
Georgia	B	↗
Indiana	B	—
Maine	B	↗
Mississippi	B	—
New York	B	—
North Carolina	B	↗
Rhode Island	B	—
Tennessee	B	—
Alabama	C	↗
Arkansas	C	—
Delaware	C	—
Florida	C	—
Kentucky	C	↗
Michigan	C	↗
Missouri	C	—
Montana	C	—
Nevada	C	—

STATE	GRADE	TREND
Ohio	C	—
West Virginia	C	—
Arizona	D	—
California	D	↘
Colorado	D	—
Connecticut	D	—
Kansas	D	—
Louisiana	D	—
Maryland	D	—
Minnesota	D	—
New Hampshire	D	—
New Mexico	D	—
North Dakota	D	—
Pennsylvania	D	↗
South Carolina	D	—
Vermont	D	—
Virginia	D	↗
Washington	D	↗
Hawaii	D-	—
Illinois	D-	—
Massachusetts	D-	—
New Jersey	D-	—
Texas	D-	—
Wyoming	D-	—
US AVERAGE	C	↗



Reserve Funds

Recessions, commodity price swings, and natural disasters can wreak havoc on state budgets. Because states lack the federal government's ability to print money, they try to maintain fiscal reserves, usually known as rainy day funds, as their bulwark against crisis-driven budget shortfalls.

Although a few states lack rainy day funds or have ones that are practically empty, the economic recovery that began in 2009 has helped most states restock their vaults with cash. At the end of fiscal 2018, the median state had reserves of 5.8 percent of general fund expenditures, the largest cash trove since rainy day funds hit a recent low of 1.9 percent in 2011, according to the National Association of State Budget Officers.⁹⁴

Destruction caused by Hurricane Florence in September 2018 demonstrates how critical rainy day funds can be for fiscal management. After the storm struck North Carolina, legislators authorized the drawdown of \$756.5 million from the state's \$2 billion savings reserve—as its rainy day fund is known—to help finance recovery. The total cleanup bill was estimated at \$850 million, or 3.6 percent of the fiscal 2019 general fund budget, according to Moody's Investors Service.⁹⁵

North Carolina, which received an A in the reserve category in 2018 and a three-year average of B, has reserves that have grown tenfold since the Great Recession.⁹⁶ In fact, with economies and revenues gaining, most states earned favorable grades in the broad category of reserves. Seventeen states had A grades for their three-year average; twenty-three received a B; eight were given a C; and two, Illinois and Kansas, trailed their peers, each with a D.

Forty-five states reported a positive balance in reserve funds in fiscal 2018. The five others, which have no or minimal reserves, were Illinois, Kansas, Montana, New Jersey, and Pennsylvania.

General fund reserves, which may be easier to tap than rainy day funds, also play a role in fiscal stability. Forty-one states had positive general fund balances on the first day of fiscal 2018. The only states without money in a rainy day fund and with a minimal or negative general fund balance at the beginning of fiscal 2018 were Illinois and Pennsylvania. Illinois got a D in the reserve fund category and Pennsylvania received a C.

Our assessments of state fiscal reserves include more than maintaining a rainy day fund or an equivalent. States need to have clear policies governing fund withdrawals. And while a drawdown of rainy day funds is a one-time revenue action, the impact of the maneuver can be mitigated if a state maintains a clear policy for fund replenishment. States should also

RAINY DAY FUNDS BASICS When assessing a state's rainy day funds and budgetary reserves, Volcker Alliance researchers considered these questions:

RESEARCH QUESTIONS	WHY IT'S IMPORTANT
Was the state general fund balance greater than zero on the first day of the fiscal year?	Particularly in economic downturns, raising taxes or cutting programs can be politically and economically painful. One alternative is to fill the gap temporarily with money retained in a general fund balance or rainy day fund. Doing so might allow a state to avoid even less sustainable one-time solutions.
Was the state rainy day fund balance greater than zero on the first day of the fiscal year?	
Does the state have a policy (set by constitution, referendum, statute, or other formal rule) for the use of rainy day funds?	Without a clear policy governing the use of reserves, they can turn into slush funds to be spent at legislators' whim. States should have policies governing when and how reserves can be tapped for natural disasters and when the economy slumps, tax revenues drop, and rising unemployment creates higher demand for state services.
Does the state have a policy (set by constitution, referendum, statute, or other formal rule) for the replenishment of rainy day funds?	If rainy day funds are used to help deal with emergencies, unexpected expenses, or revenue shortfalls, states need to follow guidelines to ensure that the cash is replaced. Without replenishment policies, states risk facing the next economic downturn with minimal financial cushion to help sustain operations.
Is the state rainy day fund balance (or contribution) specifically tied to a historical trend of revenue volatility?	States with less volatile revenues can sensibly establish smaller reserves than those in which revenue fluctuations are more frequent and more dramatic.

establish a formal connection between reserve fund levels and historical revenue volatility.

Pennsylvania's grade was lifted by its guidelines for the disbursement and replenishment of money from its reserve fund, even though the state had virtually no money in the kitty in fiscal 2017 and 2018. Illinois would have received a D-minus instead of a D save for the fact that it has policies for replenishing its rainy day fund. In years when revenues grow 4 percent or more, the state's Budget Stabilization Act limits the annual appropriation and requires a deposit to the reserve.⁹⁷ But in fiscal 2017 Illinois's rainy day fund would have covered the state's needs for only two hours, according to Comptroller Susana Mendoza.⁹⁸

Forty-three states got credit for maintaining disbursement policies for their rainy day funds, and all but two—Arkansas and Kansas—had replenishment policies in 2018.

New York, which got a three-year average of B in the reserves category, is among the states with specific guidelines for the appropriate use of reserve funds. That money can be used only during an economic downturn, which is defined as five consecutive months of decline in a composite index the state calculates. The fund can also be used in the case of a catastrophic event, such as a hurricane.⁹⁹

Ohio has been building its rainy day fund even though revenues have been below expectations. General fund tax revenues were 3.7 percent lower than anticipated, or \$849 million, for 2017.¹⁰⁰ The Ohio budget stabilization fund was 5.8 percent of general fund spending at the end of 2017, down slightly from the 2016 level but otherwise at its peak since 2010. At

the beginning of the current fiscal year, the fund had reached 8.5 percent of spending.¹⁰¹ Still, Ohio, with a three-year average grade of C, lacks fiscal reserve policies that consider revenue volatility. The state also only loosely specifies conditions for use of the rainy day fund.

Nineteen states maintain a formal tie between revenue volatility and reserves. They recognize that their tax structures and economies influence the amount of money they need to save; the more that revenues vary from year to year, the greater the reserve should be.

California, with a three-year average grade of A, exemplifies a state with volatile revenue, in large part because of the extreme progressivity of its income tax system, a concentration of high-income taxpayers, and strict educational spending mandates that limit overall spending flexibility. The state has attempted to cope with revenue volatility through a 2014 ballot measure requiring that a portion of capital gains tax revenue be deposited in the rainy day fund when income from the levy exceeds 8 percent of general revenue.¹⁰² This helps the state build up its reserve when financial markets are strong and prevents it from spending large influxes of capital gains dollars that won't be available when the economy weakens.

One of the most difficult challenges presented to state policymakers is to ensure that they are structuring finances to be countercyclical. Flush times should not provoke overspending, and hard times should not lead to reliance on gimmickry to avoid severe spending cuts. Rainy day funds and year-end general fund balances are two of the tools that help states keep their finances in order through the downward portion of economic cycles.

RESERVE FUNDS

Building Revenue Volatility into Rainy Day Fund Rules

SINCE THE LATE 1980S, many states have followed a general rule that rainy day fund reserves should equal about 5 percent of the general fund balance. While the origins of this rule remain uncertain, it has become clear that it makes little sense to hold all fifty states to the same fiscal reserve standard without considering their individual revenue structures.¹⁰³

Largely due to advocacy efforts by the Pew Charitable Trusts, a growing number of states have acknowledged this issue and are tying their rainy day fund goals to the volatility of their revenue streams. Nineteen states follow this practice, thanks in part to recent legislative momentum. In 2017, Hawaii, Maryland, Montana, New Mexico, North Carolina, and North Dakota changed rainy day fund policies to increase their consideration of revenue volatility.¹⁰⁴

States with more or greater swings in revenue are more likely to need larger reserves. The Great Recession clearly showed states that they were unprepared for the extreme drops in revenue that were in part attributable to a highly volatile revenue stream.

For example, in November 2016, Maryland's comptroller, and departments of Budget and Management and Legislative Services released a joint study looking at the state's volatile revenue structure and recommending changes to its reserve fund policies.¹⁰⁵ A bill passed in the 2017 legislative session that takes effect in 2020 will direct a portion of capital gains and other non-withholding income tax revenue to Maryland's rainy day fund and, when reserve fund caps are reached, to a newly created Fiscal Responsibility Fund.¹⁰⁶ The latter can be used for pay-as-you-go capital projects or allocated to state trust funds with unfunded liabilities.

One group of states with particularly fragile revenue streams are Western ones, including Alaska, Montana, North Dakota, and Wyoming, that rely on severance fees and taxes on the production of oil, gas, coal, or other natural resources to help pay for services. Understandably, all four states connect funding of reserves to revenue volatility. The North Dakota legislature changes the rate of contribution to its fund based on annual revenue collection, which is closely connected to oil prices.¹⁰⁷

Some states that tie their rainy day fund policies to revenue volatility also cap the amount they are allowed to contribute, a practice that may partially negate the purpose of the volatility

link. Virginia, for one, uses historic revenue growth in its major tax categories as an important factor in making decisions about its rainy day fund. This was a successful formula in the mid-2000s, driving large deposits during a time of economic expansion. But the state had a 10 percent cap on total deposits, a point it reached in fiscal 2006 and 2007. The reserve enabled the state to cover just 15 percent of the shortfalls that occurred between 2008 and 2010. Virginia voters in 2010 approved a measure raising the cap to 15 percent, which would have given it an additional \$594 million to face revenue losses and spending demands during and shortly after the Great Recession.¹⁰⁸

There is a good reason a growing number of states are tying the amounts held in rainy day funds to volatility rather than keeping a set percentage of general fund revenues on hand. The practice helps avoid salting away too much cash in states that have a less volatile tax structure or skimping on reserves in states likely to experience more revenue swings.

RESERVE FUNDS

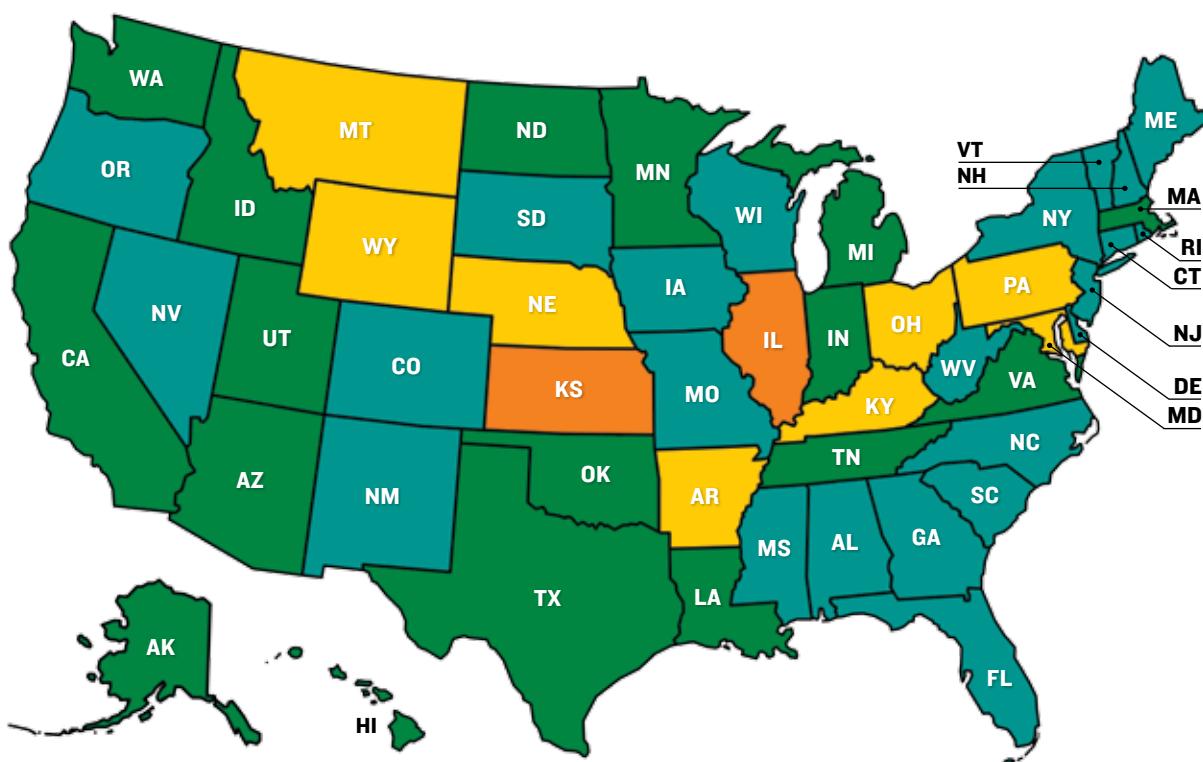


This table contains assessments of states' balances and policies for reserve funds for fiscal 2016 through 2018.

States are 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%	
D	Scored 20%-39%	
D-	Scored 0%-19%	↘ Score fell from fiscal 2016 through 2018



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	↗



Transparency

Budget information is worth little to elected officials, policy advocates, and the public if they can't find it. Yet only three states won top average A grades for fiscal 2016 through 2018 for budget transparency. The lack of comprehensive budgetary information on the cost of deferred infrastructure maintenance in forty-six states explains part of the result, but many states also trail in other critical areas.

In addition to the infrastructure disclosure, a state budget transparency strategy should include a consolidated website that provides easy access to budget procedures and timing. It is also important to post links to information needed to form spending plans, such as reports on unfunded liabilities for long-term pension or retiree health care, capital budgeting, economic forecasts, or fiscal reserves. To follow best practices, states should also produce clear, accessible, and detailed tables of outstanding debt and debt service costs, and an annual or biennial accounting of the cost of tax exemptions, credits, and abatements. The good news is that thirty-eight states received a B average for the three-year period, showing reasonable efforts at disclosure in these areas.

None earned the lowest mark of D-minus, and only Arkansas received a D. The state lacks a consolidated website that provides budget and other financial information essential in developing and analyzing its biennial spending plan. Like most other states, Arkansas does not disseminate any information about deferred infrastructure maintenance liabilities. It also does not publish a capital budget, although some information about capital expenditures can be obtained from individual appropriations bills or the state's transparency website.

While federal standards for reporting highway and bridge deferred maintenance costs are being upgraded, Hawaii, which received a grade of B, and the three states receiving top average scores of A—Alaska, California, and Tennessee—are the only ones making a clear effort to disclose these costs in budgetary or related documents.

Alaska's Legislative Finance Division reports the cost estimates by department and agency, estimating a \$1.9 billion deferred maintenance backlog for its 2,200 facilities as of January 2018.¹⁰⁹ California, meanwhile, produces the data in an annual five-year infrastructure plan as part of its budget documents. The state estimated \$78.1 billion in deferred maintenance costs in 2017.¹¹⁰ The Tennessee Advisory Commission on Intergovernmental Relations, created by statute in 1978,¹¹¹ handles that state's deferred maintenance cost disclosures. We gave Tennessee a three-year average of B in transparency in our 2017 report because of a lack of deferred infrastructure maintenance disclosure in budget documents. However, we have

KEYS TO BUDGET TRANSPARENCY When assessing a state's transparency, Volcker Alliance researchers considered these questions:

RESEARCH QUESTIONS	WHY IT'S IMPORTANT
Does the state have a consolidated website or set of related sites that provide budget and supplemental data?	Complete and useful information about a state's budget and budgetary processes is critical for policymakers, policy advocates, and citizens. Much of this information is now available on government websites.
Does the state provide tables listing outstanding debt and debt service costs, as well as provide information on any legal debt limits?	Clear disclosure of the amount of debt owed by a state is essential to understanding its fiscal health and the burden that borrowing may place on the budget. Excessive debt levels increase principal and interest payments, may lead to lower credit ratings, and squeeze the government's ability to spend on education, infrastructure, or other needs.
Is the estimated cost of the deferred infrastructure maintenance liability for all the state's capital assets disclosed in budget and planning documents?	Most states fail to disclose the estimated cost of deferred infrastructure maintenance. This is a liability like underfunded pension costs. While many governors have acknowledged the importance of spending more on infrastructure, it is difficult to persuade taxpayers and legislators that this is a critical issue as long as this basic cost data are not included in budgetary or related documents.
Does the state provide an annual or biennial tax expenditure budget (or similar description) of the cost of any tax exemptions, credits, and abatements?	Many states use tax exemptions, credits, and abatements to attract or retain economic development and jobs, harmonize state and federal tax codes, or lower the cost of food, clothing, or other basic consumer goods. A dearth of data on such expenditures makes it difficult for policymakers to consider their benefits versus their costs.

found that the commission's reports are equivalent to budgetary disclosures.

The absence of deferred maintenance cost information in most states is a critical shortcoming in a nation in which the word “infrastructure” is frequently preceded by “crumbling.” Unfunded infrastructure maintenance is akin to underfunded pensions; the total liability for each may grow every year that spending is short of what is required. A road needing only partial resurfacing in a given year may be costlier to repair—and result in congestion and higher car and truck maintenance expenses—if work is repeatedly put off. Similarly, the usefulness of buildings and other public assets declines, and long-term costs rise, if the state does not provide necessary upkeep.

Other transparency findings for fiscal 2016 through 2018 include:

- Eight states failed to provide an annual or biennial tax expenditure budget or equivalent report showing the cost of state-provided exemptions, credits, and abatements. But Indiana raised its 2018 transparency grade to B from C by requiring the Legislative Services and the State Budget agencies to produce complementary tax expenditure reports, with the shorter budget version to assist in biennial budget formation and the legislative report to delve into greater detail on each tax expenditure.¹¹² The first reports were produced at the end of 2016.¹¹³ (Since the reports were released following adoption of the 2016–17 biennial budget, the state received no credit for the document

in 2016 or 2017, leaving its three-year average unchanged at C.)

- All states provided tables listing outstanding debt and debt service costs, as well as information on any legal debt limits.

While most states have consolidated budget websites and were given credit for them in their evaluations, their content and usefulness vary.

On the Arizona Governor’s Office of Strategic Planning and Budgeting website—the state received a B average in transparency—it was a simple matter to find past budgets and supplemental information. It was also easy to locate budget briefs, which present summarized revenue and expenditure information with straightforward charts and explanations of how spending plans link to the governor’s priorities. The consolidated website helps users track monthly spending, provides links to five-year strategic plans, chronicles the impact of court cases on the state budget, and posts updates to revenue projections,¹¹⁴ such as a budget director memo from April 2018 noting that fiscal 2018 revenues were \$262 million over projections.¹¹⁵

In Ohio, which also scored a B average in the category, the Office of Management and Budget provides a web page with links to many standard features, including the operating and capital budgets, detail on the budget stabilization fund, and monthly financial reports.¹¹⁶ One feature, Ohio’s Interactive Budget, lets users click through a series of charts for more information derived from the state’s accounting system. Users can get levels of detail on such questions the breakdown of nontax and tax revenues, and the portion of the budget spent on various items, including debt service, personnel, and equipment.¹¹⁷

Other states that received credit for having a consolidated budget website may still scatter other information over different sites. Take Nevada, which earned a three-year average of B in transparency. The governor’s Finance Office website presents elements such as the executive budget, agency budget requests, information on performance-based budgeting, and an explanation of the Economic Forum, which produces the state’s consensus revenue estimate.¹¹⁸ Information on debt, however, appears in the annual report of the separately elected state treasurer, which includes a summary of the activities of the Debt Management division.¹¹⁹ A key debt capacity and debt service report for 2017 to 2019 is even more difficult to find and appears to be available only on the state Senate Finance Committee website, embedded in meeting notes.¹²⁰

Similarly, the quality of tax expenditure reports among the forty-two states that received credit for following this best practice varies. Some states that did not receive credit for producing such reports provided partial information but failed to include comprehensive reports

on a consistent basis. From 2007 to 2011, the Virginia legislature required the Department of Taxation to report the fiscal, economic, and policy impact of sales and use tax exemptions.¹²¹ The requirement was repealed in 2012.¹²² Though the legislature’s Joint Subcommittee to Evaluate Tax Preferences currently publishes updates on the topic on its website, disclosures are neither consistent nor complete¹²³—one of the reasons Virginia received only a C average for transparency.

Despite not capturing credit in this study for producing an annual or biennial tax expenditure document, Iowa has instituted processes that result in the regular production of reports designed to provide state officials with insight into forgone revenues. The state passed legislation in 2012 to increase the frequency of a formal tax expenditure report to annually from every five years.¹²⁴ While Iowa has not produced the tax report in recent years, it has provided information on the top twenty sales and use tax expenditures for fiscal 2017.¹²⁵

State and local governments are likely to continue to improve their tax expenditure disclosure to comply with Governmental Accounting Standards Board (GASB) Statement No. 77, which is effective for financial reports covering periods that started after December 15, 2015.¹²⁶ The state requires governments to disclose in their comprehensive annual financial reports (CAFR) any tax abatements granted to individuals or companies, generally for economic or real estate development. The disclosures include the amounts involved and any commitments made by companies receiving exemptions.

Because of timing issues, there are limits to the new rule’s usefulness in budgeting. In most states with annual budgets, fiscal 2018 budget preparation began in fall 2016, while the most recent CAFR covered fiscal 2015. In addition, GASB 77 covers only certain kinds of abatements—those that occur in exchange for agreeing to a specific action, such as creating a set number of jobs. Tax exemptions or credits that are more generally available, such as sales tax exclusions for groceries or property tax abatements for nonprofits, are not covered.¹²⁷

States can underestimate the importance of transparency. It can be a costly exercise, requiring frequent updates of websites and compilation of data. But making important fiscal judgements without easily available data contributes to weaknesses throughout the fiscal system.

TRANSPARENCY

The Ins and Outs of Tax Expenditures

FEDERAL, STATE, AND LOCAL GOVERNMENTS devote billions of dollars in public resources to tax expenditures. These include exemptions, deductions, credits, and other exclusions from levies that would otherwise be paid by individuals or businesses.

While many such expenditures by states are focused on economic development and jobs, they also may be aimed at reducing the cost of basic consumer necessities such as food and clothing, subsidizing low-income senior citizens or veterans, or bringing deductions in line with those in the federal tax code. While forty-two states provide at least some regularly updated information on tax expenditures, their reports vary in scope.

Tax expenditure reports should be used to measure the costs of the abatements against their benefits, thus helping government officials and policy advocates evaluate which programs should be curtailed, maintained, or expanded. They should be produced annually or biennially and be publicly available on budget websites, or easily accessible transparency or revenue department sites.

A useful state report includes comprehensive data pertaining to all major streams of tax revenue, including personal and corporate income taxes, sale and use taxes, real and personal property taxes, and excise and gross receipts taxes.

For example, Georgia, which has a three-year B average for transparency, has one of the more complete reports. Published annually, it is available on the website of the Governor's Office of Planning and Budget.¹²⁸ It does not provide the total value of tax expenditures but does show estimates for three fiscal years for hundreds of credits, exemptions, and deductions for individuals and companies. The comparative fiscal year data enable readers to see how the amounts involved change from year to year. For instance, the fiscal 2018 report shows that the film tax credit cost the state \$414 million, up 22 percent from 2016.¹²⁹

Ohio is another state winning a B. Its comprehensive tax expenditure report is published as Book Two of the biennial budget and can be found on the Office of Budget and Management website under Operating Budget.¹³⁰ The report for the 2018–19 biennium, released in November 2016, includes estimates for fiscal 2016 through fiscal 2019. It lists \$9.1 billion of tax expendi-

tures in fiscal 2018¹³¹ about 28 percent of general fund spending for that year. The state's earned income tax credit for those making less than \$10,000 annually, for example, cost the state \$3 million in fiscal 2018. A separate job creation credit for businesses cost \$113 million that year.¹³²

Although we gave credit to any state that issued comprehensive tax expenditure reports regularly, individual reports provide varying levels of detail. Ohio estimates credits for upcoming budget years, and Colorado has historical reports.¹³³ Maryland provides narrative descriptions for overall categories of tax expenditures rather than for individual ones,¹³⁴ while Arizona provides very detailed description of each provision.¹³⁵

Differences in how states compile tax expenditure reports make it difficult to compare them. But within each state, the reports provide crucial information on the expenditure of resources via tax breaks and on the individuals and industries that benefit. While the reports themselves do not generally provide information on whether tax expenditures achieve their statutory purpose—creating jobs is a common one—they provide an important tool for further analysis.

TRANSPARENCY

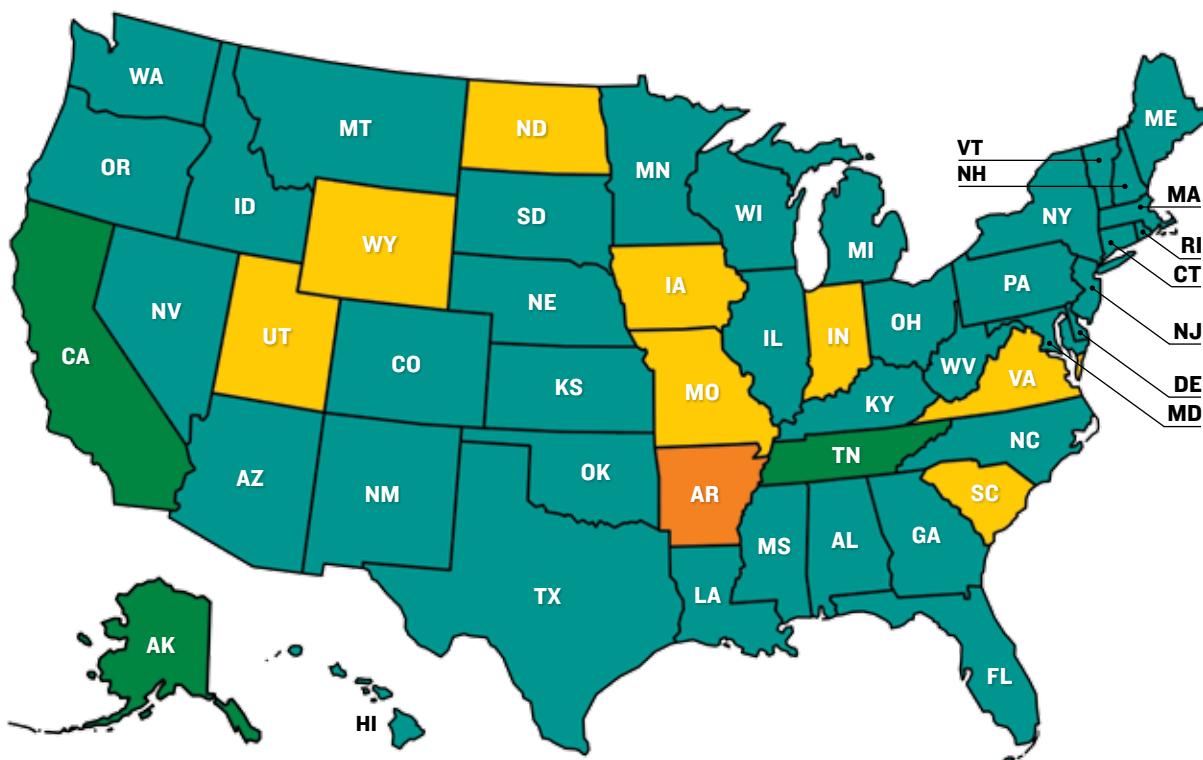


This table contains assessments of states' actions to promote greater transparency of their budget and related information for fiscal 2016 through 2018. States are graded on a scale of A to D-minus, the lowest possible, on whether they had a consolidated website or set of related sites providing budget and supplemental data; provided tables listing outstanding debt, debt service costs, and information on any legal debt limits; disclosed the estimated cost of the deferred infrastructure maintenance liability for all capital assets as part of budget and planning documents; and

provided an annual or biennial tax expenditure report in budget documents or through other agencies.

KEY

GRADE (3-Year Average)		TREND
A	Scored 81%-100%	
B	Scored 61%-80%	
C	Scored 40%-60%	
D	Scored 20%-39%	
D-	Scored 0%-19%	



TRANSPARENCY

STATE	GRADE	TREND
Alaska	A	—
California	A	—
Tennessee	A	↗
Alabama	B	↗
Arizona	B	—
Colorado	B	—
Connecticut	B	—
Delaware	B	—
Florida	B	—
Georgia	B	—
Hawaii	B	↗
Idaho	B	—
Illinois	B	—
Kansas	B	—
Kentucky	B	—
Louisiana	B	—
Maine	B	—
Maryland	B	—
Massachusetts	B	—
Michigan	B	—
Minnesota	B	—
Mississippi	B	—
Montana	B	—
Nebraska	B	—
Nevada	B	—
New Hampshire	B	—

STATE	GRADE	TREND
New Jersey	B	—
New Mexico	B	—
New York	B	—
North Carolina	B	—
Ohio	B	—
Oklahoma	B	—
Oregon	B	—
Pennsylvania	B	—
Rhode Island	B	—
South Dakota	B	—
Texas	B	—
Vermont	B	—
Washington	B	—
West Virginia	B	—
Wisconsin	B	—
Indiana	C	↗
Iowa	C	—
Missouri	C	—
North Dakota	C	—
South Carolina	C	—
Utah	C	—
Virginia	C	—
Wyoming	C	—
Arkansas	D	—
US AVERAGE	B	↗

APPENDIX A: Fifty State Report Cards
ALABAMA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	X	X	X
3-YEAR AVERAGE	D	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	C	B
	✓	✓	✓
	X	X	✓
	✓	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	C	C
	X	X	X
	✓	✓	✓
	67%	71%	71%
	3-YEAR AVERAGE	C	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	↗

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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ALASKA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	X	X	X
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	63%	67%	67%
	3-YEAR AVERAGE B	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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ARIZONA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	X	X	X
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	✓	✓	✓
	68%	63%	63%
	3-YEAR AVERAGE D	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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ARKANSAS Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE D	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	B	A
	✓	✓	✓
	✓	X	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	77%	76%	76%
	3-YEAR AVERAGE C	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	X
	3-YEAR AVERAGE C	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	✓	✓	✓
	X	X	X
	X	X	X
	3-YEAR AVERAGE D	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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CALIFORNIA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	X	X	X
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	D	D
	X	X	X
	✓	✓	X
	70%	67%	67%
	3-YEAR AVERAGE D	3-YEAR TREND ↘	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
KEY			
	Followed best practice		
	Did not follow best practice		

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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COLORADO Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	C	C	B
	X	X	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND ↗	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	✓	✓	✓
	X	X	X
	46%	47%	47%
	3-YEAR AVERAGE D	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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CONNECTICUT Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	C	C	D
	✓	✓	✓
	X	X	X
	X	X	X
	✓	✓	X
	3-YEAR AVERAGE C	3-YEAR TREND ↘	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	✓	✓	✓
	44%	44%	44%
	3-YEAR AVERAGE D	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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DELAWARE Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	81%	83%	83%
	3-YEAR AVERAGE	C	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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FLORIDA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	79%	79%	79%
	3-YEAR AVERAGE C	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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GEORGIA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE C	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	A	A
	X	✓	✓
	✓	✓	✓
	76%	79%	79%
	3-YEAR AVERAGE B	3-YEAR TREND ↑	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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HAWAII Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	B	B
	✓	✓	✓
	✓	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	↓
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	51%	55%	55%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	B	A
	✓	✓	✓
	✓	✓	✓
	X	✓	✓
	X	X	✓
3-YEAR AVERAGE	B	3-YEAR TREND	↗

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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IDAHO Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE D	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	88%	91%	91%
	3-YEAR AVERAGE A	3-YEAR TREND ↑	
			
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
			
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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ILLINOIS Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	B
	X	X	X
	X	X	✓
	X	X	✓
	X	X	✓
	3-YEAR AVERAGE D	3-YEAR TREND ↗	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	✓	✓	X
	3-YEAR AVERAGE D	3-YEAR TREND ↘	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	36%	38%	38%
	3-YEAR AVERAGE D	3-YEAR TREND —	
			
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	C	D	D
	✓	X	X
	X	X	X
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE D	3-YEAR TREND ↘	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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INDIANA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	B	A
	✓	✓	✓
	✓	✓	✓
	✓	X	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	63%	65%	65%
	3-YEAR AVERAGE B	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	C	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	✓
	3-YEAR AVERAGE C	3-YEAR TREND ↗	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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IOWA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	B	A
	✓	✓	✓
	✓	X	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	82%	82%	82%
	3-YEAR AVERAGE	A	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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KANSAS Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	✓	✓	✓
	X	X	X
	X	X	X
	X	X	X
	3-YEAR AVERAGE D	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	D	D	C
	X	X	✓
	X	X	X
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE D	3-YEAR TREND ↗	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	✓	✓	✓
	X	X	X
	65%	67%	67%
	3-YEAR AVERAGE D	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	✓	✓	✓
	X	X	X
	X	X	X
	X	X	X
	3-YEAR AVERAGE D	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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KENTUCKY Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	C	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	B	B
	✓	✓	✓
	X	✓	✓
	31%	34%	34%
	3-YEAR AVERAGE	C	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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LOUISIANA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	D	D	C
	X	X	X
	X	X	X
	X	X	✓
	✓	✓	✓
3-YEAR AVERAGE	D	3-YEAR TREND	↗
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	✓	✓	✓
	60%	66%	66%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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MAINE Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	A	A
	X	✓	✓
	✓	✓	✓
	77%	82%	82%
	3-YEAR AVERAGE	B	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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MARYLAND Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	C	C	D
	✓	✓	✗
	✗	✗	✗
	✗	✗	✗
	✓	✓	✓
3-YEAR AVERAGE	C	3-YEAR TREND	↓
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	✗	✗	✗
	✓	✓	✓
	65%	69%	69%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✗	✗	✗
	✓	✓	✓
	✗	✗	✗
3-YEAR AVERAGE	C	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✗	✗	✗
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
✗	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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MASSACHUSETTS Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	C	D	D
	X	X	X
	X	X	X
	✓	✓	✓
	✓	X	X
	3-YEAR AVERAGE D	3-YEAR TREND ↘	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	58%	60%	60%
	3-YEAR AVERAGE D	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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MICHIGAN Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	A
	✓	✓	✓
	✓	X	✓
	X	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND ↗	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	B	B
	✓	✓	✓
	X	✓	✓
	64%	65%	65%
	3-YEAR AVERAGE C	3-YEAR TREND ↗	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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MINNESOTA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	X	X	X
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	✓	✓	✓
	X	X	X
	53%	63%	63%
	3-YEAR AVERAGE D	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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MISSISSIPPI Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	A
	✓	✓	✓
	X	X	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND ↗	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	60%	61%	61%
	3-YEAR AVERAGE B	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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MISSOURI Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	✓	X	X
	X	X	X
	X	X	X
	X	X	X
3-YEAR AVERAGE	D	3-YEAR TREND	↓
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	77%	78%	78%
	3-YEAR AVERAGE	C	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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MONTANA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	D	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	71%	73%	73%
	3-YEAR AVERAGE	C	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	D	D	A
	✓	✓	✓
	X	X	✓
	X	X	✓
	X	X	✓
3-YEAR AVERAGE	C	3-YEAR TREND	↗
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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NEBRASKA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	B
	✓	✓	✓
	✓	✓	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	↓
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	89%	90%	90%
	3-YEAR AVERAGE	A	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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NEVADA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	72%	74%	74%
	3-YEAR AVERAGE C	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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NEW HAMPSHIRE Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	✓	✓	X
3-YEAR AVERAGE	D	3-YEAR TREND	↓
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	✓	✓	✓
	58%	63%	63%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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NEW JERSEY Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	D	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	D	D	C
	✓	X	✓
	X	X	X
	X	X	X
	X	✓	X
3-YEAR AVERAGE	D	3-YEAR TREND	↗
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	31%	36%	36%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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NEW MEXICO Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	D	D
	✓	✓	✓
	X	X	X
	✓	X	X
	✓	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	↓
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	✓	✓	✓
	65%	63%	63%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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NEW YORK Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	✓	✓	✗
	✗	✗	✗
	✗	✗	✗
	✗	✗	✓
	3-YEAR AVERAGE D	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✗	✗	✗
	✓	✓	✓
	91%	95%	95%
	3-YEAR AVERAGE B	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✗	✗	✗
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✗	✗	✗
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
✗	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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NORTH CAROLINA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	A	B
	✓	✓	✓
	X	✓	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	B	B
	X	X	X
	✓	✓	✓
	88%	91%	91%
	3-YEAR AVERAGE B	3-YEAR TREND ↗	
			
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	C	C	A
	✓	✓	✓
	X	X	✓
	✓	✓	✓
	X	X	✓
	3-YEAR AVERAGE B	3-YEAR TREND ↗	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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NORTH DAKOTA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	X	X	X
	3-YEAR AVERAGE D	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	✓	✓	✓
	X	X	X
	66%	64%	64%
	3-YEAR AVERAGE D	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	X
	3-YEAR AVERAGE C	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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OHIO Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE D	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	71%	78%	78%
	3-YEAR AVERAGE C	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE C	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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OKLAHOMA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	72%	78%	78%
	3-YEAR AVERAGE A	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND ↗	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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OREGON Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	B	A
	✓	✓	✓
	✓	X	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	81%	83%	83%
	3-YEAR AVERAGE A	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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PENNSYLVANIA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	X	X	X
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	✓	X	X
	X	X	X
	3-YEAR AVERAGE D	3-YEAR TREND ↘	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	✓	✓
	53%	55%	55%
	3-YEAR AVERAGE D	3-YEAR TREND ↑	
			
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	C	C
	✓	X	X
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE C	3-YEAR TREND ↘	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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RHODE ISLAND Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	X	X	✓
	✓	✓	X
	3-YEAR AVERAGE C	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	55%	55%	55%
	3-YEAR AVERAGE B	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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SOUTH CAROLINA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	✓	✓	✓
	54%	54%	54%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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SOUTH DAKOTA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	X	X	X
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	B	B
	✓	✓	✓
	✓	✓	X
	✓	✓	✓
	✓	X	✓
	3-YEAR AVERAGE B	3-YEAR TREND ↘	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	97%	100%	100%
	3-YEAR AVERAGE A	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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TENNESSEE Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	X	X	X
	✓	✓	✓
	96%	96%	96%
	3-YEAR AVERAGE B	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	A	A
	✓	✓	✓
	✓	✓	✓
	X	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND ↗	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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TEXAS Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	B
	X	X	X
	X	X	✓
	X	X	✓
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND ↗	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	C
	X	✓	✓
	✓	X	X
	✓	✓	✓
	✓	✓	X
	3-YEAR AVERAGE B	3-YEAR TREND ↘	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	73%	76%	76%
	3-YEAR AVERAGE D	3-YEAR TREND —	
			
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
			
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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UTAH Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE C	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	86%	90%	90%
	3-YEAR AVERAGE A	3-YEAR TREND ↑	
			
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
			
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	X
	3-YEAR AVERAGE C	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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VERMONT Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	A	B	A
	✓	X	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	✓	✓	✓
	64%	64%	64%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
3-YEAR AVERAGE	B	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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VIRGINIA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	D	C	C
	✓	✓	✓
	X	X	X
	X	✓	✓
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	↗
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	C
	X	X	X
	X	X	✓
	72%	77%	77%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	A	3-YEAR TREND	—
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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WASHINGTON Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	C	B	B
	X	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND ↗	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	84%	90%	90%
	3-YEAR AVERAGE D	3-YEAR TREND ↗	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE A	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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WEST VIRGINIA Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	X	X	X
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	C	B
	✓	✓	✓
	X	X	X
	✓	X	✓
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	X	X	X
	✓	✓	✓
	72%	79%	79%
	3-YEAR AVERAGE C	3-YEAR TREND —	
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

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WISCONSIN Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE D	3-YEAR TREND —	
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	A	A	A
	✓	✓	✓
	✓	✓	✓
	100%	100%	100%
	3-YEAR AVERAGE A	3-YEAR TREND —	
			
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	✓	✓	✓
	X	X	X
	3-YEAR AVERAGE B	3-YEAR TREND —	
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	✓	✓	✓
	X	X	X
	✓	✓	✓
	3-YEAR AVERAGE B	3-YEAR TREND —	

KEY

	Followed best practice
	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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WYOMING Budget Report Card

BUDGET FORECASTING			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
BUDGET MANEUVERS			
CATEGORY GRADE	2016	2017	2018
	B	B	B
	✓	✓	✓
	X	X	X
	✓	✓	✓
	✓	✓	✓
3-YEAR AVERAGE	B	3-YEAR TREND	—
LEGACY COSTS			
CATEGORY GRADE	2016	2017	2018
	D	D	D
	X	X	X
	X	X	X
	73%	76%	76%
	3-YEAR AVERAGE	D	3-YEAR TREND
RESERVE FUNDS			
CATEGORY GRADE	2016	2017	2018
	D	C	C
	✓	✓	✓
	X	X	X
	X	✓	✓
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	↗
TRANSPARENCY			
CATEGORY GRADE	2016	2017	2018
	C	C	C
	✓	✓	✓
	✓	✓	✓
	X	X	X
	X	X	X
3-YEAR AVERAGE	C	3-YEAR TREND	—

KEY

✓	Followed best practice
X	Did not follow best practice

BUDGET FORECASTING evaluates whether and how states estimated long-term revenue and expenditure trends. **BUDGET MANEUVERS** evaluates whether states used one-time revenues, borrowings, asset sales, and other measures to achieve short-term budgetary balance. **LEGACY COSTS** evaluates whether states provided adequate funding, as defined by retirement system actuaries, for pensions and other promised retirement benefits for public workers. **RESERVE FUNDS** evaluates states' rainy day funds and other fiscal reserves, as well as any policies governing their use and replenishment. **TRANSPARENCY** evaluates the accessibility to the public of states' budget practices.

* **SOURCE** Bloomberg; 2017 data also used for 2018.

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APPENDIX B: Glossary

THESE DEFINITIONS WERE BASED on Volcker Alliance research as well as glossaries and other explanatory documents published by Ballotpedia, the California Department of Finance, Center for Budget and Policy Priorities, Congressional Budget Office, Congressional Research Service, Governmental Accounting Standards Board, Investopedia, InvestingBonds.com, Lincoln Institute of Land Policy, Michigan State Budget Office, Municipal Securities Rulemaking Board, National Association of State Budget Officers, National Association of State Retirement Administrators, National Conference of State Legislatures, New Jersey Office of Management and Budget, New York State Division of the Budget, and Urban Institute.

Accrual budgeting A method of measuring a state’s performance and status by acknowledging the impact of revenues when they are earned and expenditures when they are incurred, regardless of when the funds actually enter or exit a state’s account. This method, sometimes referred to as “modified accrual” under generally accepted accounting principles (GAAP), is a more accurate means of measuring the economic status of a state than cash accounting, in which revenues are counted when they are received and expenditures when they are paid. New York City uses GAAP-based budgeting. It is not commonly deployed by state and local governments, largely because it is more complicated and labor intensive than the traditional cash (or fund) accounting method.

Actuarially required contribution (ARC) Sometimes used interchangeably with actuarially determined contribution (ADC). Both refer to the amount that a retirement system’s actuaries have determined will adequately fund promised pension or other postemployment benefits accruing to current employees in a given year, as well as the cost of amortizing unfunded liabilities from past years.

All-funds budget This overarching budget category includes the total of all funds used by a state, including general, special revenue, and capital accounts.

Asset sales A way of generating revenues by transferring ownership of public assets, such as buildings or highways, to another party, generally a private entity. Governments regularly

dispose of surplus items or land to bring in cash. But the sale of larger assets, generally in a one-time action, to fund continuing expenditures can present a challenge for fiscal sustainability.

Balanced budget A budget in which receipts are equal to or greater than outlays in a fiscal period. While forty-nine states require balanced budgets by statute or constitutional provisions, there is no single definition of the term. Vermont, the only state without a formal budget-balance requirement, follows the example of its peers.

Biennial budget A budget covering two fiscal years and used by twenty states, according to the Council of State Governments. The period is also known as a biennium.

Block grants A form of federal aid providing specific sums to state and local governments for a community development, social services, public health, and other purposes.

Bond premium The excess over par (or face) value that is paid to purchase a municipal bond when it is issued. Governments may use the proceeds of bond premiums to reduce public indebtedness or to help cover budget deficits.

Budget maneuvers One-time fiscal tactics used to create or maintain a balanced budget. They may include transfers of special funds, reserves, or windfalls from legal settlements into the general fund; bringing a future year's revenue into the current period; or pushing the cost of current expenditures into the future.

Capital budget Generally distinct from a state's operating budget, this document may include spending on land, buildings, structures, and equipment, often financed by issuing municipal bonds or other borrowings.

Capital spending Expenditures for land, buildings, roads, bridges, and other infrastructure, as well as to purchase the equipment necessary for construction or maintenance.

Cash accounting A common practice for state and local government budgets, which allows expenditures to be recognized when payments have been made. Similarly, cash accounting allows revenues to be recognized when they are anticipated. Most state and local budgets

use cash accounting. Under cash accounting, for example, a large contract to buy computer equipment in one year might not be recorded until the following year's budget, when the bill for the acquisition is finally paid.

Comprehensive annual financial report (CAFR) A report meeting Governmental Accounting Standards Board recommendations that includes a state or local government's audited financial statements for the fiscal year, as well as other information.

Consensus revenue forecast A projection of revenues, expenditures, or both developed in agreement between the executive and legislative branches, sometimes with input from outside economists or business groups.

Consolidated budget website A website or a series of linked websites that includes not only a government's latest proposed or enacted budget but also information such as budget processes, current and previous budgets, debt tables, or budget and economic forecasts.

Debt service Also known as debt service requirement, this is the total amount necessary to pay interest and principal on outstanding bonds.

Deficit According to generally accepted accounting principles, this reflects expenses outstripping revenues at the end of the year. It is not to be confused with a shortfall, which represents shortages in revenue that accumulate during the year and may be eliminated by spending cuts, tax or fee hikes, or one-time actions to avoid a year-end deficit.

Expenditures Funds that a government appropriates or budgets to provide public services.

Forecasts Estimates of future revenues and expenditures, used to help create and maintain a balanced budget.

Fund accounting A public sector accounting approach that separates cash in the state treasury into the general fund, used for most services, and any special funds, such as those for hurricane relief or debt service. The division of all government money into separate funds is primarily intended to improve transparency.

Generally accepted accounting principles (GAAP) Guidelines set forth by the Governmental Accounting Standards Board to govern preparation of year-end annual reports for governments. The guidelines reflect professional auditing standards set out by the American Institute of Certified Public Accountants. Governmental entities are not required by law to follow GAAP accounting, but credit rating agencies may reflect any lack of GAAP methods in their assessments of credit quality.

General fund The main fund for financing a state or locality's day-to-day operations. It excludes capital expenditures in many states. General fund receipts typically exclude federal grants; tuition at state colleges; or special-purpose levies, such as motor fuel taxes earmarked for highway maintenance.

Governmental Accounting Standards Board (GASB) The body that sets standards for financial accounting and reporting practices by states and localities.

Infrastructure maintenance liability The amount a state will need to provide to keep roads, bridges, and buildings in good working order. Although a number of states show the value of accumulated depreciation of assets in their annual reports, the scope and method of calculating the data can differ widely.

Legacy costs The present value of unfunded liabilities for future public employee pension and other postretirement employee benefits, including health care. Some experts include the estimated cost of deferred infrastructure maintenance liabilities. Not fully funding government services delivered in a particular year represents a shift of obligations from current citizens, who have already received the public services, to future generations.

Medicaid Health care program for low-income families and individuals jointly financed by the federal and state governments, although with various percentages of support from the two parties. States pay about 40 percent of Medicaid costs, on average, although some pay as little as 30 percent.

Midyear budget adjustment Adjustments made during the fiscal year or biennium to the originally enacted budgetary expenditures, usually resulting in reduced services, increased taxes

or fees, or the use of one-time revenue actions, such as transfers from special funds or asset sales, to cover any anticipated deficits.

Modified accrual basis accounting A method of accounting that recognizes revenues in the accounting period in which they become available and measurable.

Multiyear revenue and expenditure forecasts Estimates of amounts expected to be brought in or spent that extend beyond the current fiscal year or biennium. The Volcker Alliance recommends at least three years of such forecasts to qualify for designation as a multiyear forecast.

Municipal bonds Debt obligations used by states, cities, counties, and other government entities, primarily for capital expenses such as schools, highways, hospitals, and prisons. Interest on municipal bonds is generally exempt from federal taxes and often from state taxes, although governments may also issue taxable debt.

Municipal Securities Rulemaking Board (MSRB) A self-regulatory organization created under the Securities Act Amendments of 1975, it promulgates rules that protect investors in municipal bonds largely by regulating US broker-dealers and banks. The MSRB also provides current prices on trades of individual bonds and issuers' financial disclosure reports through its EMMA website.

One-time expenditures Expenses that are nonrecurring and generally appear in only one budget.

One-time revenues Nonrecurring receipts. They should not be used to pay for ongoing expenditures, such as pay raises or new programs.

Other postemployment benefits (OPEB) Future liabilities incurred by governmental entities for benefits other than pensions, such as health care, provided to retired public employees.

Pension bond A debt instrument whose proceeds are used to fund a pension.

Public debt Money owed by a government or an agency, such as municipal bonds used to pay for a new bridge or short-term notes or loans used to smooth cash flow until expected

tax receipts are collected.

Rainy day fund A fiscal reserve that governments can tap to balance the budget or respond to emergencies. Also known as budget stabilization fund or reserve fund.

Recurring expenditures Also known as continuous appropriations, these are expenses, such as legislative salaries, that are made annually under mandates set forth in statute or a state constitution. They continue without requiring further action, even if the actual amounts change.

Revenue volatility Fluctuations in state revenues that recur in multiple years, often because of the nature of the tax system.

Revenues Funds that come mainly from tax collection, licensing fees, federal aid, fines, legal settlements, and returns on investment. In some cases, debt or upfront proceeds on financial transactions may be counted as revenue.

Scoop and toss The practice of gaining budgetary relief by using the proceeds of a new bond issue to pay off maturing bonds while shifting debt service expenses to future years.

Special revenue funds Funds constrained by statute or other restriction to a particular spending area, such as workers' compensation. These funds can be financed with tax dollars, grants from the federal government or other governmental entities, or gifts from individuals or private organizations.

Surplus Budgeted funds that remain at the end of the fiscal year or biennium. Surpluses typically occur when revenue collections are higher than anticipated or appropriations go unspent.

Tax expenditure reports Disclosures of budget revenues forgone by states through the use of tax exemptions, credits, and abatements. The contents of tax expenditure reports and value of forgone revenues may differ from reporting of tax credits, exemptions, and abatements mandated by the GASB in CAFRs.

Transfers The shifting of resources from one fund to another, usually the general fund, often



driven by executive order or legislative action. Such transfers are considered one-time revenues when the resources are used to subsidize the general fund with special funds in a single fiscal period.

APPENDIX C: Research Methodology

WHEN THE VOLCKER ALLIANCE BEGAN examining state fiscal and financial reporting practices in 2014, we were driven by one fundamental question: What makes up a balanced budget? This year's analysis of the budget practices of the fifty US states is based on a revised questionnaire scrutinizing practices in five critical areas.

Determining how each state defines a balanced budget requires an appreciation of the US as a collection of fifty individual entities rather than one homogenous unit. Each state controls its budgetary accounting systems and reporting practices. This results in presentations of information that may not be directly comparable across borders, including which data are available, how states define what those data points mean, and the related underlying assumptions employed by states.

To pursue our research, the Volcker Alliance joined forces with professors and students in public finance and budgeting programs at eight universities. Their work was guided by a standardized set of research questions on budget procedures created by Volcker Alliance staff in coordination with data experts at Municipal Market Analytics (MMA), a municipal finance consulting firm based in Concord, Massachusetts; and Katherine Barrett and Richard Greene, special project consultants to the Alliance.

The considerable differences among states' budgetary procedures led us to examine behaviors and outcomes as much as numbers. University research network members were encouraged to seek out information from a variety of sources, conduct interviews with current and former state budget and financial officials, and examine budget documents as well as financial disclosure filings containing relevant supplemental data. Researchers' responses were then reviewed by faculty advisers at the participating universities and by MMA consultants, and revised, if necessary. MMA also performed a comprehensive review of responses across all states, normalizing the results to account for any discrepancies among researchers' findings. The focus on adherence to best practices, combined with the normalization process, resulted in a relatively high level of comparability among states' budgetary performance.

While we attempted to keep the scoring and grading systems as simple as possible, some variation among budget categories was necessary to most accurately reflect states' success in implementing budgetary best practices. Save for legacy costs, which was assessed on three factors, categories were scored on the adherence to best practices on four equally-weighted budget indicators, each measured by a research question or set of related questions. Here is

how we determined the grades:

- The Budget Forecasting category was graded on a state's use of a consensus revenue forecast; having a reasonable rationale for revenue growth projections (based on historical revenue and economic growth trends); producing multiyear revenue forecasts; and generating multiyear expenditure forecasts.
- The Budget Maneuvers category was graded on a state's use of one-time actions to create short-term budget fixes, often to the detriment of long-term budget sustainability. Research questions related to one-time actions were grouped into four types of budget maneuvers, and states received credit for each type they succeeded in avoiding. One-time actions included funding recurring expenses with debt; funding recurring expenses with the proceeds of asset sales or by tapping future revenues; deferring a current year's recurring expenditures; and covering general fund expenditures with transfers from other funds.
- The Legacy Costs category was graded on a state's willingness to meet public employee pension obligations and other postemployment benefit (OPEB) obligations. Thirty percent of a grade was determined by a state's actuarially required or determined (ARC or ADC) OPEB contribution. Thirty-five percent of the category grade was scored on whether the state made its public employee pension ARC or ADC. Thirty-five percent of the category grade was based on each state's pension funding ratio, which represents the amount of assets available to cover promised benefits. While it is best for states to make the full payment that actuaries determine is necessary every year, missing such a contribution is of greatest concern to states with high unfunded liabilities.
- The Reserve Funds category was graded on a state: having a reserve fund disbursement policy; having a reserve fund replenishment policy; tying reserves to historic trends in revenue volatility; and having a positive reserve or general fund balance at the beginning of each fiscal year.
- The Transparency category was graded on the extensiveness and usefulness of a state's financial disclosure practices. States received credit for having a consolidated budget website; disclosing outstanding debt and debt-service cost tables; providing information on deferred infrastructure maintenance costs; and providing cost estimates for tax expenditures.

All states received a letter grade ranging from A to D-minus, the lowest possible, for each budget category for fiscal 2016, 2017, and 2018. The annual marks were averaged to produce

the three-year letter grades. Additionally, sustained improvement or decline in a state's score over the course of the three fiscal years was used to identify trends in budgetary performance within each category, which are shown next to the average grades.

Insights gained throughout the first year of the Truth and Integrity in State Budgeting study allowed us to refine the research questions, method, and process. These changes improved the accuracy and cross-state comparability of the research results, but in some cases resulted in discrepancies between this report and the previous report, released in November 2017. A reexamination of fiscal 2017, which was only preliminarily studied in that report, allowed researchers to capture budgetary actions that had yet been taken and to use documents that were unavailable previously.

The research questions and the standards used to measure state budget practices were refined from the previous report to improve cross-state comparability. Scoring and grading methodology were revised to more accurately assess and compare states' adherence to best practices. More accurate and up-to-date public employee pension funding data were used in assessing the Legacy Costs category, which also included a change in Governmental Accounting Standards Board rules for state financial reporting. Pension funding ratios were compiled by Bloomberg as of the end of the fiscal year in question. The ratios were not available for fiscal 2018 as of our publication deadline, so fiscal 2017 data was used instead. Results released in this report—including for fiscal years covered in the previous one—reflect the updated assessment standards and methods. That allows for year-over-year comparisons of all fiscal years studied over the course of the Truth and Integrity in State Budgeting project.

ABOUT THE TRUTH AND INTEGRITY IN GOVERNMENT FINANCE TEAM

WILLIAM GLASGALL

SENIOR VICE PRESIDENT AND DIRECTOR, STATE AND LOCAL INITIATIVES

William Glasgall, the editor of this report, joined the Volcker Alliance in January 2014 as program director of State and Local Initiatives. He previously was managing editor at Bloomberg News, overseeing coverage of state and local government and financial news.

His career includes almost two decades at *Business Week* magazine, where he won two Overseas Press Club Awards for international reporting. Glasgall was also a vice president at Standard & Poor's, editorial director of *Investment Advisor* magazine, an editor and reporter at the Associated Press, and a featured panelist on the nationally syndicated *This Week in Business*, produced by public television station WETA in Washington, DC. He is a contributor to the *Bond Buyer* newspaper and frequent speaker at academic, government, and municipal finance industry forums.

Glasgall is a member of the National Federation of Municipal Analysts, the Municipal Analysts Group of New York, and the Municipal Fiscal Health Working Group of the Lincoln Institute of Land Policy; a governor of the Overseas Press Club Foundation; and a former member of the board of overseers of the Knight-Bagehot Fellowship in Economics and Business Journalism at Columbia University, where he was also a fellow.

A graduate of Boston University, Glasgall lives in New Jersey.

MELISSA AUSTIN

ASSOCIATE DIRECTOR

Melissa Austin joined the Volcker Alliance in 2015. As associate director, she organizes and implements the various facets of the Truth and Integrity in Government Finance project, while designing and executing operational controls and administrative procedures for the Alliance.

Austin previously served as a senior grants management specialist at the National Institutes of Health, where she negotiated, administered, reviewed, and awarded grants on complex and critical medical research projects. Before that, she was a senior management assistant to the business administrator of the City of Newark, New Jersey, leading and managing the legislative review team, coordinating park and open space redevelopment projects, and spearheading Newark's federal and state lobbying efforts.

Austin received a bachelor of science in business administration and a master of public

administration from the University of Delaware.

NOAH A. WINN-RITZENBERG

SENIOR ASSOCIATE

Noah Winn-Ritzenberg worked in the private sector before joining the Volcker Alliance as it was being launched in 2013 and has played various roles in its establishment and expansion. Responsible for developing and managing the Alliance's offices, systems, databases, and IT infrastructure, he also advised on strategic, operational, communications, and programmatic initiatives throughout its early years.

In his current position, Winn-Ritzenberg provides project management, research coordination, and communications development for initiatives including Truth and Integrity in Government Finance. He received a bachelor of science in economics, a certificate in environmental studies, and a master's degree in public affairs from the University of Wisconsin-Madison. Born and raised in Washington, DC, he lives in Hilo, Hawaii.

ROBERT CHISLETT

PROGRAM FELLOW

Robert Chislett joined the Volcker Alliance in 2018 as program fellow and currently supports the Truth and Integrity in Government Finance initiative.

A US Army veteran with over a decade of service in the Pacific, Europe, and the Middle East, Chislett was also a Deep-Dive Masters Associate at Ashoka Social Financial Services. There, he collaboratively developed an innovation brief on employee stock ownership plans that articulated how they can be scaled to serve as market-based solutions that support small business continuity and inclusive economic growth. He also completed a yearlong capstone consulting project for the United Nations Development Program in which he worked with the Kingdom of eSwatini's (formerly Swaziland) Ministry of Natural Resources and Energy to develop renewable energy policies and strategies.

Chislett holds a bachelor of science from the University of Maryland University College and a master of public administration from the New York University Robert F. Wagner Graduate School of Public Service.

KATHERINE BARRETT AND RICHARD GREENE

SPECIAL PROJECT CONSULTANTS

Katherine Barrett and Richard Greene, partners in Barrett and Greene Inc., are special project consultants for the Volcker Alliance and writers of the Alliance reports *Truth and Integrity in State Budgeting: Lessons from Three States; Beyond the Basics: Best Practices in State Budget Transparency; State Budget Sources: An Annotated Reference Guide to State Budgets, Financial Reports, and Fiscal Analyses*; and *Truth and Integrity in State Budgeting: What is the Reality?*.

They have done original research and writing in fields pertaining to state and local government and are columnists and correspondents for Governing magazine, where they founded the Government Performance Project. They are also senior fellows at the Governing institute, external advisers to the Government Finance Research Center, fellows at the National Academy of Public Administration and authors of a transition guide for new governors and their teams, published by the IBM Center for the Business of Government. Greene is also chair of the Center for Accountability and Performance at the American Society for Public Administration.

In addition, they have been contributors at the Pew Charitable Trusts; Council of State Governments; Fels Institute at the University of Pennsylvania; National League of Cities, Urban Institute, Governmental Accounting Standards Board; Association of Government Accountants; and National Association of State Chief Administrators.

MATT FABIAN

CONSULTANT

Matt Fabian is a partner at Municipal Market Analytics, where he heads market and credit research, and is the lead contributor to its weekly *Outlook* and biweekly *Default Trends* reports. Fabian was previously the lead US municipal research analyst for UBS Financial Services. Earlier in his career, Fabian was an underwriting analyst at Financial Security Assurance and a municipal rating analyst with Moody's Investors Service. He has served as chairman of the Municipal Analysts Group of New York and as a member of the board of governors of the National Federation of Municipal Analysts.

Fabian has an undergraduate degree from Penn State University and a master of public administration from the Maxwell School of Citizenship and Public Affairs at Syracuse University.

LISA WASHBURN

CONSULTANT

Lisa Washburn is a managing director at Municipal Market Analytics, where she leads the consulting practice. She is a regular contributor to the firm's *Outlook* and biweekly *Default Trends* publications and maintains its Credit Impairment Database with Matt Fabian. Washburn also heads the firm's credit surveillance bank business, where she is responsible for reviewing municipal holdings in bank investment portfolios using its Portfolio Credit Benchmark, which she co-developed with Fabian.

Washburn previously spent twenty years at Moody's Investors Service, where she was a managing director in the public finance group and led several ratings teams. She also headed several of Moody's high-profile initiatives related to municipal bond default analysis and ratings comparability, including the 2010 Municipal Rating Recalibration and its first published municipal default study.

A member of the National Federation of Municipal Analysts board of governors since 2008, Washburn served as chair in 2016. She led several initiatives to improve issuer financial disclosure, including an industry-wide effort to promote bank loan disclosure. She is currently co-chair of the organization's industry practices committee. Washburn is also a member of the Municipal Analysts Group of New York. She holds an undergraduate degree from Lehigh University and is a certified management accountant.

UNIVERSITY RESEARCH NETWORK

The following university institutes, departments, and schools of public administration and public policy are partners and associates with the Volcker Alliance in the Truth and Integrity in Government Finance project.

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Related Research Initiatives

The Volcker Alliance's Truth and Integrity in Government Finance project has encouraged academic research initiatives by partner schools and others that are complementary to this report and its predecessors. Recent research papers include:

Department of Public Policy and Administration, Steven J. Green School of International and Public Affairs, Florida International University

RELATED RESEARCH *Rainy Day Funds and Revenue Volatility*, by Daniel Castro, Howard Frank, and Hai (David) Guo; *The Naked Truth About State Governments' Budget Maneuvers*, by Merlene-Patrice Bourdeau-Quispe

Center for State and Local Finance, Andrew Young School of Policy Studies, Georgia State University

RELATED RESEARCH *Fiscal Transparency and Legacy Costs*, by Alex Hathaway; *Budget Maneuvers in the Southern States*, by Alex Hathaway and Jesseca Lightbourne; *Reserve Fund Policies in the Southern States*, by Bethel Habte, Alex Hathaway, and Jesseca Lightbourne; *OPEB Funding Challenges: The U.S. Postal Service*, by Alex Hathaway; *OPEB Funding in the Southern States*, by Alex Hathaway; *Revenue Forecasting Practices in the Southern States*, by Emily Franklin and Alex Hathaway; *Fiscal Transparency and Accessibility in the Southern States*, by Alex Hathaway and Anna Sexton; *Fiscal Transparency across the States: A Volcker Alliance Paper*, by Emily Franklin, Bethel Habte, Alex Hathaway, Bart Hildreth, and Jesseca Lightbourne

Rutgers Accounting Research Center and Continuous Auditing and Reporting Lab, Rutgers Business School, Rutgers University and Department of Accounting and Finance, Feliciano School of Business, Montclair State University

RELATED RESEARCH *Volcker Alliance's Survey Data: A Case Study*, by Zamil S. Alzamil, Deniz Appelbaum, and Miklos A. Vasarhelyi

Department of Public Administration, College of Urban Planning and Public Affairs, University of Illinois at Chicago

RELATED RESEARCH *Beyond Truth and Integrity in State Budgeting: Fiscal Stress Politics, and Institutional Arrangements. A Volcker Alliance Project Paper*, by Rebecca Hendrick and Xiaoyan Hu

Center for State Policy and Leadership, University of Illinois-Springfield

RELATED RESEARCH *Truth and Integrity in State Budgeting Project: A Closer Look at Illinois & Kansas*, by Beverly Bunch, Patricia Byrnes, and Ann Schneider; *An Analysis of the State of Illinois Budget and the Need for Reforms*, by Beverly Bunch, Patricia Byrnes, and Ann Schneider

Martin School of Public Policy and Administration, University of Kentucky

RELATED RESEARCH *State Debt & Legacy Policies: Do They Matter*, by Merl Hackbart and Rhonda Riherd Trautman

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ENDNOTES

- 1.** Pew Charitable Trusts, “Decade After Recession Began, Tax Revenue Higher in 34 States,” Updated May 2, 2018, <https://www.pewtrusts.org/en/research-and-analysis/data-visualizations/2014/fiscal-50#ind0>.
- 2.** The Volcker Alliance, *Truth and Integrity in State Budgeting: What is the Reality?* November 2017, https://www.volckeralliance.org/sites/default/files/TruthAndIntegrityInStateBudgetingWhatIsTheReality_0.pdf.
- 3.** National Conference of State Legislatures, *NCSL Fiscal Brief: State Balanced Budget Provisions*, October 2010, 3, <http://www.ncsl.org/documents/fiscal/StateBalancedBudgetProvisions2010.pdf>.
- 4.** *Truth and Integrity in State Budgeting: What is the Reality?* Preface.
- 5.** US Census Bureau, State Government Finances, 2016, American Factfinder, March 22, 2018, <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk#>.
- 6.** US Bureau of Economic Analysis, retrieved from Federal Reserve Economic Data, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/GDP>. As of October 26, 2018, GDP was about \$20.7 trillion.
- 7.** Governing magazine, “State and Local Government Employment: Monthly Data,” January 11, 2018 (most recent update), <http://www.governing.com/gov-data/public-workforce-sALARIES/monthly-government-employment-changes-totals.html>.
- 8.** Bloomberg data prepared for the Volcker Alliance, August 29, 2018.
- 9.** William Glasgall, “Six Principles of Better Budgeting,” Capitol Ideas, The Council of State Governments, March/April, 2017, 30, https://www.csg.org/pubs/capitolideas/2017_mar_apr/images/CI_Mar_Apr_2017_Website.pdf.
- 10.** The Governmental Accounting Standards Board (GASB) is recognized by the American Institute of Certified Public Accountants as the standard setter for the generally accepted accounting principles (GAAP) used by state and local governments. To be in conformity with GAAP, governments must follow GASB standards, which require the use of modified accrual basis of accounting in financial reports.
- 11.** Governmental Accounting Standards Board, *Interpretation No. 6 of the Governmental Accounting Standards Board: Recognition and Measurement of Certain Liabilities and Expenditures in Governmental Fund Financial Statements*, March 2000, 1-8.
- 12.** Dall W. Forsythe, “Cyclical Budget Management in New York City,” prepared for delivery at the Public Budgeting and Finance Section of the Western Social Science Association, April 30, 2006, 2-3, <https://wagner.nyu.edu/files/faculty/publications/forsytheCyclical.pdf>.
- 13.** Office of the New York City Comptroller, *Measuring New York City’s Budgetary Cushion: How Much is Needed to Weather the Next Fiscal Storm*, August 2015, 1, https://comptroller.nyc.gov/wp-content/uploads/documents/PARR_Report_Final.pdf.
- 14.** The Volcker Alliance, *Truth and Integrity in State Budgeting: What is the Reality?* November 2017, https://www.volckeralliance.org/sites/default/files/TruthAndIntegrityInStateBudgetingWhatIsTheReality_0.pdf.
- 15.** The Volcker Alliance, *Truth and Integrity in State Budgeting: Lessons from Three States*, 2015, <https://www.volckeralliance.org/sites/default/files/attachments/Truth%20and%20Integrity%20in%20State%20Budgeting%20-%20Lessons%20from%20Three%20States%20-%20The%20Volcker%20Alliance.pdf>.
- 16.** Utah State Legislature, Legislative Fiscal Analyst Amendments, March 19, 2018, <https://le.utah.gov/~2018/bills/static/HB0452.html>.
- 17.** Jonathan Oosting, “Projections: Michigan faces \$279M to \$348M surplus,” *Detroit News*, May 15, 2018, <https://www.detroitnews.com/story/news/politics/2018/05/15/michigan-revenue-boost/34941571/>.
- 18.** Rebecca A. Sielman, “2017 Public Pension Funding Study,” Milliman white paper, October 2017, 1, <http://www.milliman.com/uploaded-Files/insight/Periodicals/ppfs/2017-public-pension-funding-study.pdf>.
- 19.** US Department of the Treasury, Daily Treasury Long Term Rate Data, <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/TextView.aspx?data=longtermrate>.
- 20.** Bloomberg data prepared for the Volcker Alliance, August 29, 2018.
- 21.** Pew Charitable Trusts, *Kentucky’s Successful Pension Reform*, September 2013, 6, https://www.pewtrusts.org/-/media/legacy/uploaded-files/pcs_assets/2013/20130927kentucky pension reform brief pdf.pdf.
- 22.** Jason Bailey, “Understanding Pension Contributions in the Final Budget,” KY Policy Blog, Kentucky Center for Economic Policy, <https://kypolicy.org/understanding-pension-contributions-final-budget/>.

- 23.** Kentucky Retirement Systems, *Summary Annual Financial Report for the Fiscal Year Ending June 30, 2017*, 14, [https://kyret.ky.gov/Publications/Books/2017%20SAFR%20\(Summary%20Annual%20Financial%20Report\).pdf](https://kyret.ky.gov/Publications/Books/2017%20SAFR%20(Summary%20Annual%20Financial%20Report).pdf).
- 24.** Jason Bailey, Kentucky Center for Economic Policy.
- 25.** LegiScan, Montana SB 261, May 22, 2017, <https://legiscan.com/MT/text/SB261/id/1605159>.
- 26.** Montana Legislative Fiscal Division, *FY2018 Status Report*, March 12, 2018, 3, <https://leg.mt.gov/content/Committees/Interim/2017-2018/Revenue-and-Transportation/Meetings/Feb-2018/LFC-FY-2018-Budget-Report.pdf>.
- 27.** Montana SB 261.
- 28.** Governmental Accounting Standards Board, “What You Need to Know: Tax Abatement Disclosures.” <https://www.gasb.org/cs/ContentServer?c=Page&cid=1176166268596&d=&pagename=GASB%2FPage%2FGASBSectionPage>.
- 29.** An Act to Amend the Indiana Code Concerning Taxation, 119th Indiana General Assembly, Pub. L. No. 36-2015 (April 17, 2015), <http://iga.in.gov/static-documents/4/b/a/9/4ba9c579/2015%20ACTS.pdf>.
- 30.** Office of Fiscal and Management Analysis, Indiana Legislative Services Agency, *2016 Indiana Tax Expenditure Review*, http://iga.in.gov/static-documents/9/f/2/d/9f2d0d14/indiana_tax_expenditure_report_2016.pdf.
- 31.** An Act to Amend the Indiana Code Concerning State Offices and Administration and to Make an Appropriation, 119th Indiana General Assembly, Pub. L. 213-2015, (May 7, 2015), 2913, <http://iga.in.gov/static-documents/4/b/a/9/4ba9c579/2015%20ACTS.pdf>.
- 32.** Indiana State Budget Agency, *State of Indiana Tax Expenditure Study: Fiscal Years 2016–2019*, December 2016, https://www.in.gov/sba/files/Final_Tax_Expenditure_Report_FY_2016–2019.pdf.
- 33.** Utah State Legislature, Legislative Fiscal Analyst Amendments, March 19, 2018, <https://le.utah.gov/~2018/bills/static/HB0452.html>.
- 34.** North Dakota Legislative Council, *North Dakota’s Budgeting Process*, December 2016, <https://www.legis.nd.gov/files/fiscal/docs/budget-process.pdf>.
- 35.** Pam Sharp, director, North Dakota Office of Management and Budget, interview with University of Utah researcher Annette Harris, March 2018.
- 36.** The 190th General Court of the Commonwealth of Massachusetts. General Laws : Chapter 29, Section 5B, <https://malegislature.gov/Laws/GeneralLaws/PartI>TitleIII/Chapter29/Section5B>.
- 37.** Florida Office of Economic and Demographic Research, *Consensus Estimating Conference Process*, <http://edr.state.fl.us/Content/conferences/confprocess.pdf>.
- 38.** Federation of Tax Administrators, 2017 State Tax Collection by Source, <https://www.taxadmin.org/2017-state-tax-collection-by-source>.
- 39.** Florida Office of Economic and Demographic Research, Consensus Estimating Conferences, <http://edr.state.fl.us/Content/conferences/index.cfm>.
- 40.** State of Florida, *Long-Range Financial Outlook: Fiscal Years 2019–20 through 2021–22*, September 14, 2018, http://edr.state.fl.us/Content/long-range-financial-outlook/3-Year-Plan_Fall-2018_1920-2122.pdf.
- 41.** Ballotpedia, State credit ratings, 2004 to 2017, https://ballotpedia.org/State_credit_ratings.
- 42.** Illinois General Assembly, Governor’s Office of Management and Budget Act, Illinois Compiled Statutes, <http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=359&ChapterID=5>; Illinois General Assembly, Commission on Government Forecasting and Accounting Act, Illinois Compiled Statutes, <http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=462&ChapterID=6>.
- 43.** Illinois Governor’s Office of Management and Budget, *Illinois Economic and Fiscal Policy Report*, October 12, 2017, https://www2.illinois.gov/sites/budget/Documents/Economic%20and%20Fiscal%20Policy%20Reports/FY%202017/Economic_and_%20Fiscal_%20Policy_%20Report_10.12.17.pdf.
- 44.** Scott Drenkard, “Several States Will Start 2017 with Corporate Tax Reductions,” Tax Foundation, December 30, 2016, <https://taxfoundation.org/several-states-will-start-2017-corporate-tax-reductions/>.
- 45.** Arizona Joint Legislative Budget Committee, *Monthly Fiscal Highlights*, July 2017, 2, <https://www.azleg.gov/jlbc/mfh-july-17.pdf>.
- 46.** State of Texas, General Appropriations Act for the 2018-19 Biennium, “Text of Conference Committee Report on Senate Bill No. 1,” Eighty-fifth Texas Legislature, Regular Session 2017, Article X-3, http://www.lbb.state.tx.us/Documents/GAA/General_Appropriations_Act_2018-

2019.pdf.

47. National Association of State Budget Officers, States' Proposed & Enacted Budgets, Nasbo.org, <https://www.nasbo.org/mainsite/resources/proposed-enacted-budgets>.

48. Emily Wagster Pettus, "Mississippi governor orders another round of budget cuts," Associated Press, February 21, 2017, <https://www.washingtonpost.com/news/2017/feb/21/mississippi-governor-orders-another-round-of-budget-cuts/>.

49. Elizabeth McNichol and Samantha Waxman, "States Faced Revenue shortfalls in 2017 Despite Growing Economy," Center on Budget and Policy Priorities, October 4, 2017, Table 1, <https://www.cbpp.org/sites/default/files/atoms/files/3-30-17sfp.pdf>.

50. Pettus, Associated Press.

51. "State Budget Cuts Mean Dramatic Job Loss," Jackson Free Press, April 5, 2017, <http://www.jacksonfreepress.com/news/2017/apr/05/state-budget-cuts-mean-dramatic-job-loss/>.

52. California Legislative Analyst's Office, *The 2017-18 Budget: California's Fiscal Outlook*, November 16, 2016, 7–8, <https://lao.ca.gov/reports/2016/3507/Fiscal-outlook-111616.pdf>.

53. Commonwealth of Pennsylvania, *Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017*, 39, 180. <http://www.budget.pa.gov/PublicationsAndReports/AnnualFinancialReport/Documents/june-30-2017-cafr.pdf>.

54. Evan Horowitz, "Why doesn't Massachusetts have a budget surplus by now?" *The Boston Globe*, January 24, 2018, <https://www.bostonglobe.com/metro/2018/01/24/why-doesn-massachusetts-have-budget-surplus-now/OghO6v3LyofsvePSPcxkbM/story.html>.

55. State of Louisiana, General Obligation Refunding Bonds Series 2016-B and 2016-C, April 21, 2016, 2, <https://emma.msrb.org/EP929954-EP721984-EP1123824.pdf>.

56. Ternisa Hutchinson, deputy director, Louisiana Office of Planning and Budget, interview by Merl Hackbart, University of Kentucky, June 18, 2018.

57. Commission on Government Forecasting and Accountability, *State of Illinois Budget Summary Fiscal Year 2018*, September 5, 2017, 24. <http://cgfa.ilga.gov/Upload/FY2018BudgetSummary.pdf>.

58. State of New Jersey, Office of Management and Budget, *The Governor's FY 2018 Budget*, C-6, February 28, 2017, <https://www.state.nj.us/treasury/omb/publications/18budget/pdf/FY18BudgetBook.pdf>.

59. State of New Jersey, Department of the Treasury, NJPBA Announces Proceeds from FCC Spectrum Action, press release, April 13, 2017, <https://www.state.nj.us/treasury/news/2017/p4172017a.pdf>.

60. Iowa General Assembly, FY 2017 Budget Adjustment Act, Senate File 130, February 1, 2017, 1, <https://www.legis.iowa.gov/docs/publications/NOBA/856390.pdf>.

61. Vermont Joint Fiscal Office, FY 2018 New Revenue Forecasts, *The Fiscal Focus*, August 2017, <http://www.leg.state.vt.us/jfo/publications/2017-08%20Fiscal%20Focus.pdf>.

62. New York Power Authority, *Financial Report December 31, 2017 and 2016*, 18–19, <https://www.nypa.gov/-/media/nypa/documents/document-library/financials/2017-finance-report.pdf>.

63. State of Michigan, 98th Legislature, Act. No. 517, Public Acts of 2016, Enrolled Senate Bill No. 1008, January 9, 2017, 2, <http://www.legislature.mi.gov/documents/2015-2016/publicact/pdf/2016-PA-0517.pdf>.

64. Governor Edmund G. Brown Jr., State of California, *2017–18 May Revision*, 7, <http://www.ebudget.ca.gov/2017-18/pdf/Revised/Budget-Summary/Introduction.pdf>.

65. State of New Jersey, *FY18 Governor's Recommended Budget, Supplementary Information*, 70, https://www.nj.gov/treasury/omb/publications/18budget/pdf/Supplementary_Information.pdf.

66. New Jersey Office of Legislative Services, *Analysis of the New Jersey Budget: Transportation and Motor Vehicle Commission*, April 2017, 3, https://www.njleg.state.nj.us/legislativepub/budget_2018/DOT_analysis_2018.pdf.

67. Kansas Office of the Secretary of State, 2017 Session Laws of Kansas, Chapter 54, July 1, 2017, 346, http://www.sos.ks.gov/pubs/session-laws/2017/2017_Session_Laws_Volume_1.pdf.

68. State of Kansas, *Comparison Report, FY 2016 Governor's Budget Report with Legislative Authorizations*, September 2015, <https://budget.kansas.gov/wp-content/uploads/fy2016-comp-rpt-upd-2015-09-17.pdf>; *Comparison Report, FY 2018 Governor's Budget Report with Legisla-*



tive Authorizations, August 2017, <https://budget.kansas.gov/wp-content/uploads/fy2018-comp-rpt-2017-08-04.pdf>.

69. Howard Gleckman, “The Great Kansas Tax Cut Experiment Crashes and Burns,” *Forbes*, June 7, 2017, <https://www.forbes.com/sites/beltway/2017/06/07/the-great-kansas-tax-cut-experiment-crashes-and-burns/#138a71445508>.

70. New Mexico Legislative Finance Committee, *Report of the Legislative Finance Committee to the Fifty-Third Legislature for Fiscal Year 2018*, post-session review, May 2017, 20, https://www.nmlegis.gov/Entity/LFC/Documents/Session_Publications/Post_Session_Fiscal_Reviews/May%202017.pdf.

71. Matt Egan and Danielle Wiener-Bronner, “It was an epic year for stocks,” CNN Business, December 29, 2017, <https://money.cnn.com/2017/12/29/investing/stocks-2017-wall-street/index.html>.

72. Bloomberg pension and OPEB data prepared for the Volcker Alliance, August 29, 2018.

73. Pew Charitable Trusts. *Promises with a Price: Public Sector Retirement Benefits*, December 2007, 62, https://www.pewtrusts.org/-/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/state_policy/pension20reportpdf.pdf.

74. State of New York, Office of the Comptroller, *Comprehensive Annual Financial Report for Fiscal Year Ended March 31, 2017*, 116, <https://www.osc.state.ny.us/finance/finreports/cafr/2017cafr.pdf>.

75. Cavanaugh Macdonald Consulting, *Georgia State Employees Post-Employment Health Benefit Fund & Georgia School Personnel Post-Employment Health Benefit Fund*, June 30, 2015, prepared for the Georgia Department of Community Health, 10, 40, https://gsfc.georgia.gov/sites/gsfc.georgia.gov/files/related_files/site_page/OPEB%20Valuation%20Report_June%202015%202015%20.pdf.

76. State of Georgia, General Obligation Bonds 2018A and 2018B, June 20, 2018, A45-50, <https://emma.msrb.org/ER1292430.pdf>. Note: Funding ratio was updated by Georgia State University based on 2018 contributions.

77. Rick Carlin, “Court upholds insurance increase for Thruway retirees,” *Times Union*, March 8, 2018, <https://www.timesunion.com/news/article/Court-upholds-insurance-increase-for-Thruway-12739154.php>.

78. Pew Charitable Trusts, *Promises with a Price: Public Sector Retirement Benefits*, December 2007, 61–62, https://www.pewtrusts.org/-/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/state_policy/pension20reportpdf.pdf.

79. Ben Geier, “What Did We Learn from the Dotcom Stock Bubble of 2000?” *Time*, <http://time.com/3741681/2000-dotcom-stock-bust/>.

80. Pew, *Promises with a Price*, 63–64.

81. The discount rate for public pension plans declined from 8.1 percent in 2001 to 7.50 percent in 2017. See Alice H. Munnell and Jean-Pierre Aubry, “The Funding of State and Local Pensions: 2015–2020,” *Center for Retirement Research at Boston College*, No. 50, June 2016, 4, http://crr.bc.edu/wp-content/uploads/2016/06/slp_50.pdf; and Rebecca A. Sielman, “2017 Public Pension Funding Study,” Milliman white paper, October 2017, 1, <http://www.milliman.com/uploadedFiles/insight/Periodicals/ppfs/2017-public-pension-funding-study.pdf>.

82. State of New Jersey, Division of Pension and Benefits, *Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2005*, 88–89, <https://www.state.nj.us/treasury/pensions/documents/financial/annrpt2005/financialsection.pdf>.

83. “Whitman Signs Second Part of Cut in State Income Tax,” *New York Times*, July 5, 1995, <https://www.nytimes.com/1995/07/05/nyregion/whitman-signs-second-part-of-cut-in-state-income-tax.html>.

84. Brett Pulley, “Bond Issue In New Jersey Brings In \$2.8 billion,” June 26, 1997, *New York Times*, <https://www.nytimes.com/1997/06/26/nyregion/bond-issue-in-new-jersey-brings-in-2.8-billion.html>.

85. State of New Jersey, *Debt Report Fiscal Year 2017*, March 23, 2018, 40, https://www.nj.gov/treasury/public_finance/pdf/DebtReportFY2017.pdf.

86. Katie Brenner, “The public pension bomb,” *Fortune*, May 12, 2009, http://archive.fortune.com/2009/05/12/news/economy/benner_pension.fortune/index.htm.

87. New Jersey Department of the Treasury, “New Jersey Lottery Enterprise Transparency Page,” <https://www.state.nj.us/treasury/njletransparency.shtml>.

88. The five parts of the Kentucky Retirement Systems are the Kentucky Employee Retirement System (hazardous and nonhazardous), the County Employees Retirement System (hazardous and nonhazardous), and the State Police Retirement System. The nonhazardous employee plan had a funding ratio of only 13.6 percent at the end of fiscal 201, while the nonhazardous county plan had a funding ratio of 52.8 percent. See Kentucky Retirement Systems, *Summary Annual Financial Report for the Fiscal Year Ending June 30, 2017*, 12, [https://kyret.ky.gov/Publications/Books/2017%20SAFR%20\(Summary%20Annual%20Financial%20Report\).pdf](https://kyret.ky.gov/Publications/Books/2017%20SAFR%20(Summary%20Annual%20Financial%20Report).pdf).

- 89.** Commonwealth of Kentucky (in conjunction with PFM Asset Management, PRM Consulting Group, and Stites & Harbison), *Pension Performance and Best Practices Analysis, Interim Report #2: Historical and Current Assessment*, May 22, 2017, 56, <https://osbd.ky.gov/Documents/Pension%20Reform/2017%2005%2022%20-%20Report%202%20FINAL%205.22.17%20combined.pdf>.
- 90.** *Pension Performance and Best Practices Analysis*, 62–63.
- 91.** Jason Bailey, “Understanding Pension Contributions in the Final Budget,” *KY Policy Blog*, Kentucky Center for Economic Policy, <https://ky-policy.org/understanding-pension-contributions-final-budget/>.
- 92.** *Pension Performance and Best Practices Analysis*, 57–58.
- 93.** Kentucky Retirement Systems, *Cost of Living Adjustments*, <https://kyret.ky.gov/Retirees/Pages/Cost-of-Living-Adjustments.aspx>
- 94.** National Association of State Budget Officers, *Fiscal Survey of the States*, Spring 2018, 64, https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fc152d64c2/UploadedImages/Fiscal%20Survey/NASBO_Spring_2018_Fiscal_Survey_of_States-S.pdf.
- 95.** Moody’s Investors Service, *Hurricane Florence relief package taps North Carolina’s rainy day fund and benefits local governments and universities*, October 19, 2018. Note: Report is available only to Moody’s subscribers.
- 96.** North Carolina’s rainy day fund was \$150 million in 2009 and \$1.8 billion in 2018. See National Governors Association and the National Association of State Budget Officers, *Fiscal Survey of the States*, Fall 2010, 54, <https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fc152d64c2/UploadedImages/Fiscal%20Survey/Fall%202010%20Fiscal%20Survey%20of%20States%20-%20Final.pdf>; and NASBO *Fiscal Survey of the States*, Spring 2018, 69.
- 97.** Illinois General Assembly, Compiled Statutes, Finance (30 ILCS 122/10), Budget Stabilization Act, <http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=2543&ChapterID=7>.
- 98.** Office of the Illinois Comptroller, Susana Mendoza, *Consequences of Illinois’ 2015–2017 Budget Impasse and Fiscal Outlook*, 9, <https://illinoiscomptroller.gov/financial-data/find-a-report/special-fiscal/consequences-of-illinois-2015-2017-budget-impasse-and-fiscal-outlook/>. Note: The report states that in Fiscal 2017, Illinois could run 0.1 day on the assets in its rainy day fund, which translates to a little more than two hours, a figure Comptroller Mendoza cited at a Governing magazine Summit on Financial Leadership conference in New York in September 2018.
- 99.** New York State Senate, Laws of New York, State Finance Law: Article 6, Section 92–CC, 3a, <https://www.nysenate.gov/legislation/laws/STF/92-CC>.
- 100.** Ohio Office of Budget and Management, *Monthly Finance Report*, memo from Director Timothy S. Keen, 10, https://obm.ohio.gov/Budget/monthlyfinancial/doc/2017-07_mfr.pdf.
- 101.** John Charlton, communications director, Ohio Office of Budget and Management, e-mail to Katherine Barrett and Richard Greene, October 25, 2018.
- 102.** California Legislative Analyst’s Office, Proposition 2, State Reserve Policy, November 4, 2014, <https://lao.ca.gov/ballot/2014/prop-2-110414.aspx>.
- 103.** Philip G. Joyce, “What’s So Magical About Five Percent: A Nationwide Look at Factors that Influence the Optimal Size of Rainy Day Funds,” *Public Budgeting & Finance* 21, no. 2 (Summer 2001): 62–87, <http://onlinelibrary.wiley.com/doi/10.1111/0275-1100.00050/abstract>.
- 104.** Pew Charitable Trusts, *State Rainy Day Funds in 2017: How states are preparing the way they prepare for the next recession*, July 18, 2017, <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2017/07/state-rainy-day-funds-in-2017>.
- 105.** Maryland Department of Budget and Management, Comptroller of Maryland, and Department of Legislative Services, *Report on Revenue Volatility and Approaches to Reduce Risk to the State Budget*, November 2016, <http://mgaleg.maryland.gov/pubs/budgetfiscal/2016-revenue-volatility-report.pdf>.
- 106.** Maryland Department of Legislative Services, *90 Day Report: Review of the 2017 Legislative Session*, April 14, 2017, A-24, <http://mgaleg.maryland.gov/pubs/legislegal/2017rs-90-day-report.pdf>.
- 107.** North Dakota Century Code, Budget Stabilization Fund, Chapter 54, 27.2, <https://www.legis.nd.gov/cencode/t54c27-2.html>.
- 108.** Pew Charitable Trusts. *Building State Rainy Day Funds*, July 2014, 6, https://www.pewtrusts.org/-/media/assets/2014/07/sfh_rainy-day-fund-deposit-rules-report_artready_v9.pdf.
- 109.** Alaska Senate Finance Committee, *State of Alaska Deferred Maintenance Update*, January 26, 2018, 3–5, http://www.akleg.gov/basis/get_documents.asp?session=30&docid=38618.



- I10.** State of California, *2017 California Five-Year Infrastructure Plan*, 4, <http://www.ebudget.ca.gov/2017-Infrastructure-Plan.pdf>.
- III.** Tennessee Advisory Commission on Intergovernmental Relations, Building Tennessee's Tomorrow: Anticipating the State's Infrastructure Needs, *July 2016 through June 2021*, January 2018, <https://www.tn.gov/tacir/infrastructure/infrastructure-reports-/building-tennessee-s-tomorrow-2016-2021.html>.
- II2.** The requirement for the Legislative Services Agency to submit a report on tax expenditures was enacted by Pub. L. No. 36-2015; the requirement for the State Budget Agency to produce its report was enacted by Pub. L. 213-2015. Public laws from the 2015 regular session are at <http://iga.in.gov/static-documents/4/b/a/9/4ba9c579/2015%20ACTS.pdf>.
- II3.** Office of Fiscal and Management Analysis, Indiana Legislative Services Agency, *2016 Indiana Tax Expenditure Review*, http://iga.in.gov/static-documents/9/f/2/d/9f2dod14/indiana_tax_expenditure_report_2016.pdf; Indiana State Budget Agency, *State of Indiana Tax Expenditure Study: Fiscal Years 2016-2019*, December 2016, https://www.in.gov/sba/files/Final_Tax_Expenditure_Report_FY_2016-2019.pdf.
- II4.** Office of the Arizona Governor, Strategic Planning and Budgeting, <http://www.ospb.state.az.us/index.html>.
- II5.** Letter from Matt Gress, director, Governor's Office of Strategic Planning and Budgeting, to Kirk Adams, chief of staff of Governor Doug Ducey, April 16, 2018, <http://www.azospb.gov/Documents/2018/Executive%20Revenue%20Revision%20Justification,%20April%2016,%202018.pdf>.
- II6.** Ohio Office of Budget and Management, <https://www.obm.ohio.gov/default.aspx>.
- II7.** Ohio's Interactive Budget: A Comprehensive View of Ohio's Finances, <http://interactivebudget.ohio.gov/>.
- II8.** State of Nevada, Governor's Finance Office, <http://budget.nv.gov/>.
- II9.** Office of the Nevada State Treasurer, *Annual Report July 1, 2016–June 30, 2017*, 31, http://www.nevadatreasurer.gov/uploadedFiles/nevada-treasurergov/content/PublicInfo/Annual_Reports/2017FY_Annual_Report.pdf.
- I20.** Nevada Senate Finance Committee meetings, see first of five exhibits in the second February 17, 8 am meeting, <https://www.leg.state.nv.us/App/NELIS/REL/79th2017/Committee/166/Meetings>.
- I21.** Virginia's Legislative Information Services, Code of Virginia, 58.1-609.12. Reports to General Assembly on tax exemptions studies. Note: The requirement for tax expenditure reporting was originally passed in 2005, then amended in 2006 and 2009. <https://law.lis.virginia.gov/vacode/58.1-609.12/>.
- I22.** Virginia Tax, 2007-2011 Virginia Retail Sales and Use Tax Expenditure Study, <https://tax.virginia.gov/sales-and-use-tax-expenditure-study>.
- I23.** Commonwealth of Virginia, Division of Legislative Services, Joint Subcommittee to Evaluate Tax Preferences, Preference Reports, <http://dls.virginia.gov/commissions/tax.htm?x=rep>.
- I24.** Iowa Legislature, Iowa Code – 2012, Taxation Transparency and Disclosure, chapter 8G, 2-3, <https://www.legis.iowa.gov/law/iowaCode/chapters?title=I&year=2012>.
- I25.** State of Iowa. Top 20 Fiscal Year 2017 Sales and Use Tax Expenditures, data.iowa.gov, March 26, 2018, <https://data.iowa.gov/Government/Top-20-Fiscal-Year-2017-Sales-and-Use-Tax-Expendit/ymgg-2mr6>.
- I26.** Governmental Accounting Standards Board, "What You Need to Know: Tax Abatement Disclosures," <https://www.gasb.org/cs/ContentServer?c=Page&cid=1176166268596&d=&pagename=GASB%2FPage%2FGASBSectionPage>.
- I27.** Norton Francis, "GASB 77: Reporting Rules on Tax Abatements," State and Local Finance Initiative Brief, Urban Institute, October 2015, <https://www.urban.org/sites/default/files/2000474-gasb-77-reporting-rules-on-tax-abatements.pdf>.
- I28.** Georgia Governor's Office of Planning and Budget. *Tax Expenditure Reports*, <https://opb.georgia.gov/tax-expenditure-reports>.
- I29.** Fiscal Research Center of the Andrew Young School of Policy Studies at Georgia State University, *Georgia Tax Expenditure Report for FY2018*, December 2016, 22. Note: Georgia State University is one of the eight universities that contributed research and analysis for this report. https://opb.georgia.gov/sites/opb.georgia.gov/files/related_files/site_page/TER%202018%20FinalDeliverable%20-%2012-6-2016%20-%20FRC.pdf.
- I30.** Governor's Office of Budget and Management, *Tax Expenditure Report, The State of Ohio Executive Budget Fiscal Years 2018-2019*, November 25, 2016, https://www.obm.ohio.gov/Budget/operating/doc/fy-18-19/FY18-19_Tax_Expenditure_Report.pdf.
- I31.** Ohio Tax Expenditure Report, 11.



I32. Ohio Tax Expenditure Report, 8–9.

I33. Colorado Department of Revenue, *Colorado Tax Profile & Expenditure Report 2016*, <https://www.colorado.gov/pacific/sites/default/files/2016%20Tax%20Profile%20and%20Expenditure%20Report.pdf>.

I34. Maryland Department of Budget and Management, *Maryland Tax Expenditures Report Fiscal Year 2018*, June 2017, <https://dbm.maryland.gov/budget/Documents/operbudget/FiscalYear2018Tax%20ExpenditureReport.pdf>.

I35. Office of Economic Research and Analysis, Arizona Department of Revenue, *The Revenue Impact of Arizona's Tax Expenditures, Fiscal Year 2016/2017*, November 15, 2017, https://azdor.gov/sites/default/files/media/REPORTS_EXPENDITURES_2017_fy17-preliminary-tax-expenditure-report.pdf.

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