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4th Edition

STATE BONDED OBLIGATIONS

STATE
BONDED
OBLIGATIONS
EXCEED
$1.23 TRILLION

ALEC American Legislative Exchange Council
LIMITED GOVERNMENT • FREE MARKETS • FEDERALISM

State Bonded Obligations, 4th Edition
State Bonded Obligations Exceed $1.23 Trillion

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Acknowledgements and Disclaimers

The authors wish to thank ALEC CEO Lisa B. Nelson and the professional staff at ALEC for their valuable assistance with this project. The authors would also like to thank Lindsay Keiser for her assistance collecting data.

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Table of Contents

Introduction

Although state governments cannot print their own money, they rely heavily on funding from the federal government. As an ever-increasing federal debt crowds out tax revenue for state funding, state governments (with their own massive debt burdens) will be faced with difficult choices: make spending cuts, raise taxes, take on more debt or some combination of the three.

If states choose to take on more debt, it will not be a free lunch. As Nobel Prize-Winning Economist James M. Buchanan explained, government debt represents a tax burden on future generations.[1] That valuable lesson is more important than ever.

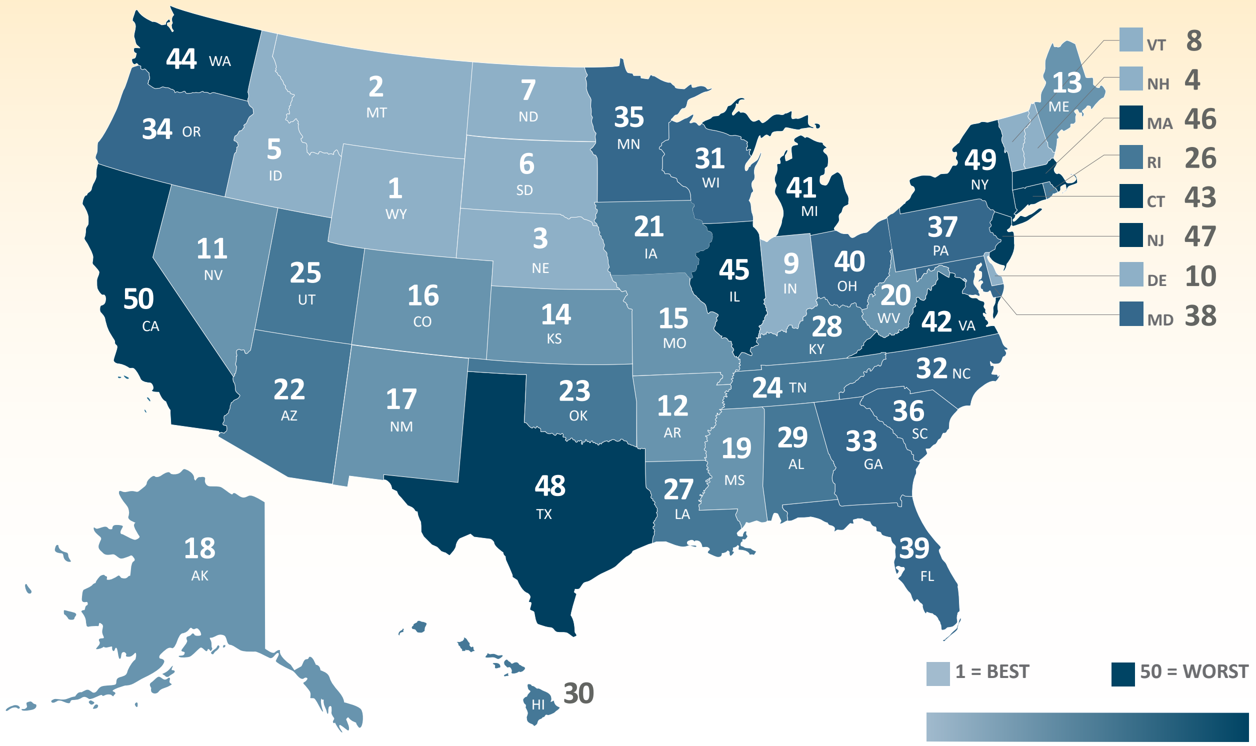
At the root of the government debt problem is a government spending problem. State leaders can make the necessary changes, such as implementing priority-based budgeting and tax and expenditure limits, to ensure the future financial wellbeing of their states.

State governments borrow for a myriad of reasons and issue various types of bonded obligations. Today, their total bonded liabilities reach $1.23 trillion, representing just under $3,700 per person nationally. *State Bonded Obligations* surveys the financial documents for state bonds of all 50 states. This report analyzes the types of bonds issued, debt payment schedules as well as total liabilities and liabilities per capita. This report uses data as recent as December of 2020. The differences between states offer important insights into state approaches to managing these obligations.

It is important to note that total bonded obligations slightly declined over the past year. This is in part because states received billions of dollars from the federal government for COVID assistance and beat revenue expectations in calendar year 2020. This will be further explored in Section 2.

Section I: Key Findings

FIGURE 1, TABLE 1 | **Total Bonded Obligations**



In total, states and their component units have issued $1.23 trillion of bonded obligations. About 34% of this debt is General Obligation bonds, or bonds backed by the "full faith and credit" of the state. Another 37% of this debt consists of revenue bonds issued by states and repaid through specific revenue sources. The remaining 29% is issued by state component units.

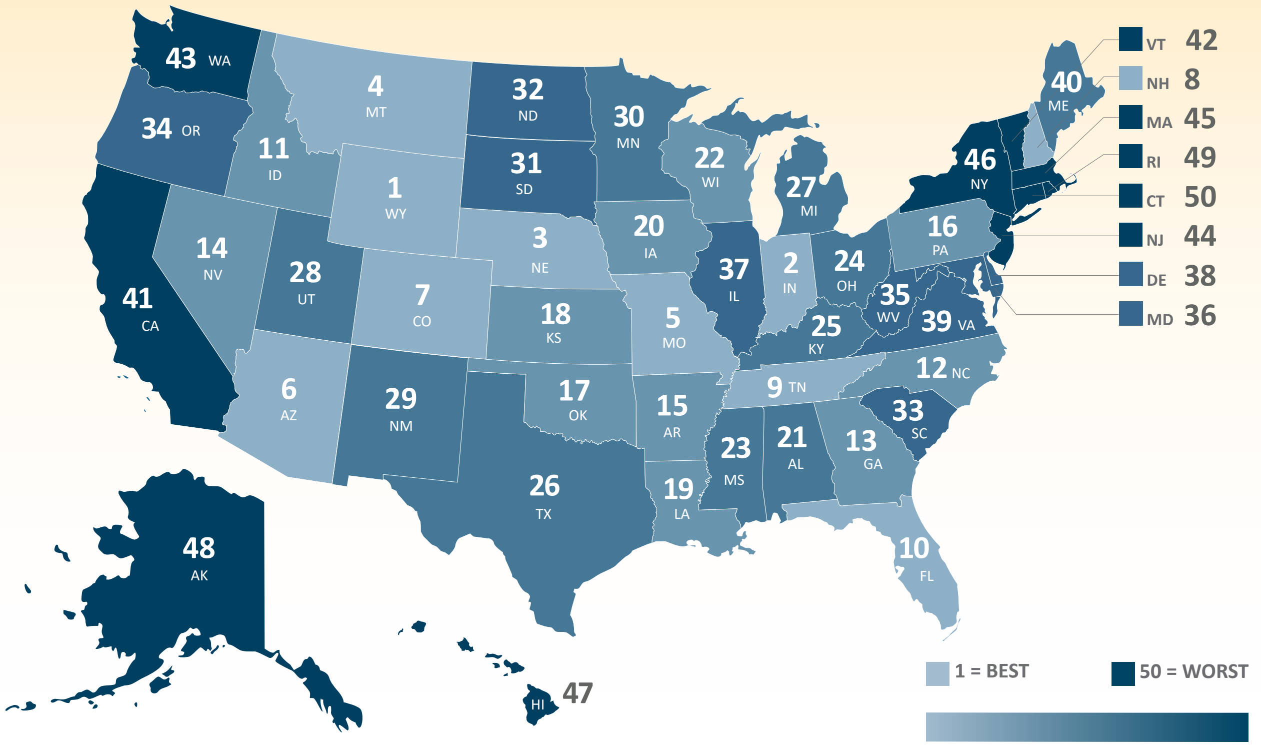
The 10 states with the largest bonded liabilities make up 66% (over $810 billion) of the total bonded liabilities. These states are California, New York, Texas, New Jersey, Massachusetts, Illinois, Washington, Connecticut, Virginia and Michigan.

Source: Data are based on ALEC Center for State Fiscal Reform calculations. See the Methodology section for a full description of the data.

State	Total Bonded Obligations	Rank
Wyoming	$32,215,741	1
Montana	$1,150,303,000	2
Nebraska	$1,501,513,000	3
New Hampshire	$1,780,734,250	4
Idaho	$2,743,915,000	5
South Dakota	$3,148,255,000	6
North Dakota	$3,249,870,000	7
Vermont	$3,390,062,639	8
Indiana	$4,115,252,279	9
Delaware	$4,526,545,000	10
Nevada	$5,141,697,000	11
Arkansas	$5,231,791,000	12
Maine	$6,777,893,375	13
Kansas	$6,798,026,000	14
Missouri	$6,876,345,000	15
Colorado	$7,212,316,000	16
New Mexico	$7,457,519,375	17
Alaska	$7,537,100,000	18
Mississippi	$7,577,116,000	19
West Virginia	$7,827,127,000	20
Iowa	$7,969,738,800	21
Arizona	$8,230,050,000	22
Oklahoma	$8,284,108,800	23
Tennessee	$9,309,748,202	24
Utah	$10,968,258,000	25

State	Total Bonded Obligations	Rank
Rhode Island	$11,283,952,465	26
Louisiana	$11,579,698,000	27
Kentucky	$12,540,402,000	28
Alabama	$12,677,085,000	29
Hawaii	$12,731,995,000	30
Wisconsin	$15,039,397,000	31
North Carolina	$15,953,079,000	32
Georgia	$17,487,465,000	33
Oregon	$17,992,888,000	34
Minnesota	$20,116,813,743	35
South Carolina	$21,733,607,979	36
Pennsylvania	$23,509,355,436	37
Maryland	$27,725,138,999	38
Florida	$30,218,950,000	39
Ohio	$30,266,138,000	40
Michigan	$33,766,900,000	41
Virginia	$41,336,432,435	42
Connecticut	$44,143,470,000	43
Washington	$47,689,565,833	44
Illinois	$57,955,393,000	45
Massachusetts	$60,448,510,000	46
New Jersey	$63,337,800,000	47
Texas	$85,747,157,000	48
New York	$174,689,288,250	49
California	$201,446,351,589	50

FIGURE 2, TABLE 2 | **Total Bonded Obligations Per Capita**



Total bonded obligations per capita shows each resident's share of their state's bonded liabilities. This is an indicator of potential tax burden taxpayers must bear to pay off these bonded obligations.

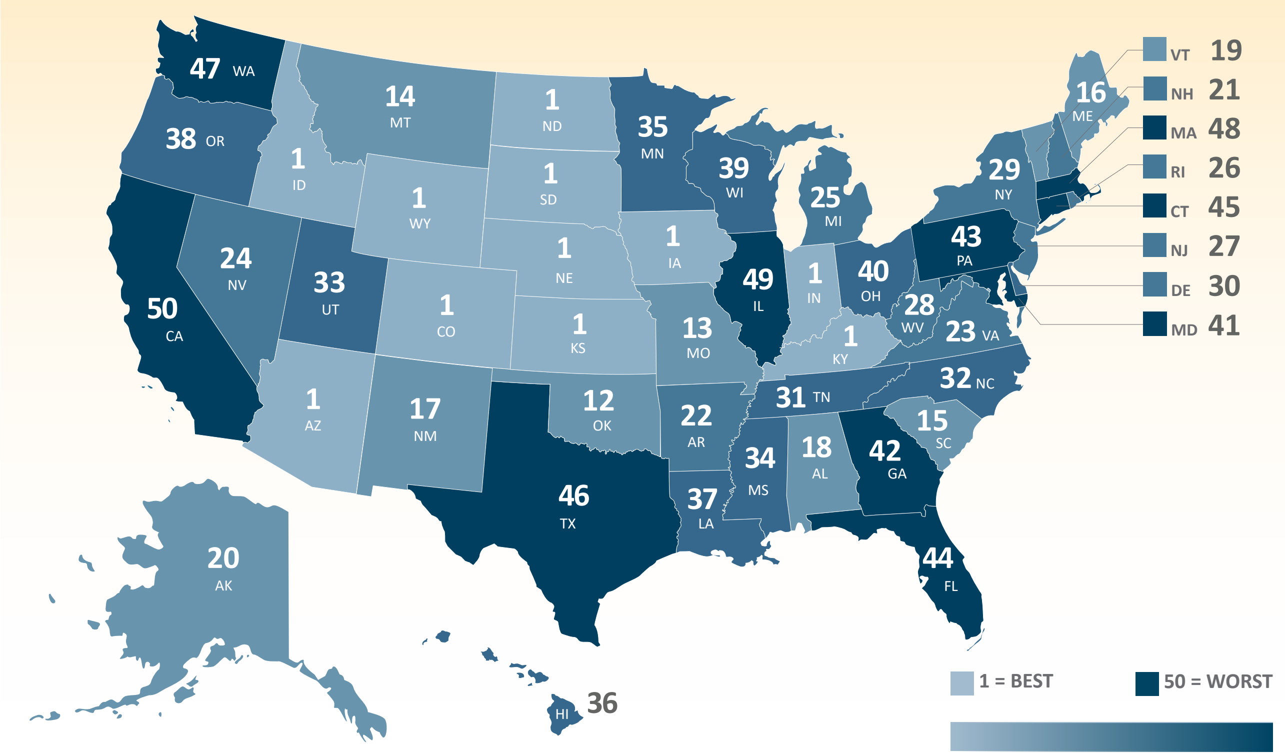
Although Alaska has the third highest total bonded obligations per capita, the state's $79.678 billion (an increase from $65 billion last year) "Permanent Fund" is the largest budget stabilization fund in the nation (over $108,600 per capita). This increase is from large investment returns during Q3 and Q4 of 2020 and early 2021. Alaska's relatively healthy credit rating (AA/Aa3) reflects this.

Source: Data are based on ALEC Center for State Fiscal Reform calculations. See the Methodology section for a full description of the data.

State	Total Per Capita	Rank
Wyoming	$56	1
Indiana	$606	2
Nebraska	$765	3
Montana	$1,061	4
Missouri	$1,117	5
Arizona	$1,151	6
Colorado	$1,249	7
New Hampshire	$1,293	8
Tennessee	$1,347	9
Florida	$1,403	10
Idaho	$1,492	11
North Carolina	$1,528	12
Georgia	$1,633	13
Nevada	$1,656	14
Arkansas	$1,737	15
Pennsylvania	$1,808	16
Oklahoma	$2,092	17
Kansas	$2,314	18
Louisiana	$2,486	19
Iowa	$2,498	20
Alabama	$2,523	21
Wisconsin	$2,552	22
Mississippi	$2,559	23
Ohio	$2,565	24
Kentucky	$2,783	25

State	Total Per Capita	Rank
Texas	$2,942	26
Michigan	$3,351	27
Utah	$3,353	28
New Mexico	$3,522	29
Minnesota	$3,525	30
South Dakota	$3,551	31
North Dakota	$4,171	32
South Carolina	$4,246.15	33
Oregon	$4,246.35	34
West Virginia	$4,364	35
Maryland	$4,488	36
Illinois	$4,523	37
Delaware	$4,573	38
Virginia	$4,789	39
Maine	$4,975	40
California	$5,095	41
Vermont	$5,272	42
Washington	$6,189	43
New Jersey	$6,819	44
Massachusetts	$8,599	45
New York	$8,647	46
Hawaii	$8,749	47
Alaska	$10,277	48
Rhode Island	$10,283	49
Connecticut	$12,242	50

FIGURE 3, TABLE 3 | **General Obligation Bond Liabilities**



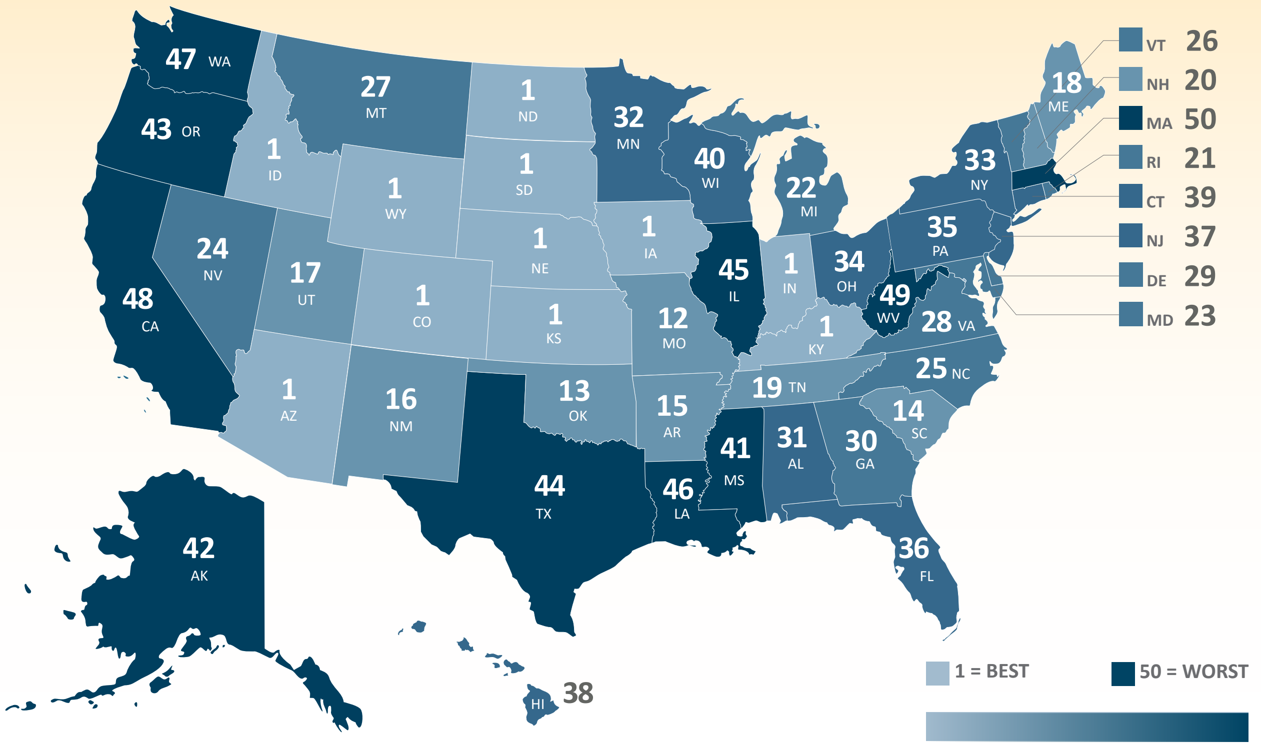
General obligation bonds are bonds "backed by the full faith and credit of the state," meaning that states cannot default on these obligations. Consequently, general obligation bonds are considered the most secure type of bond issued. These bonds total $420.29 billion (just over 34% of all state bonded obligations). It is important to note states that do not issue general obligation bonds still accumulate debt through other types of bonds issued. The 10 states with the largest general obligation bond debt make up 69% of the total general obligation bonded debt in the U.S.

Source: Data are based on ALEC Center for State Fiscal Reform calculations. See the Methodology section for a full description of the data.

State	Total General Obligation Bonds	Rank
Arizona	$0	1
Colorado	$0	1
Idaho	$0	1
Indiana	$0	1
Iowa	$0	1
Kansas	$0	1
Kentucky	$0	1
Nebraska	$0	1
North Dakota	$0	1
South Dakota	$0	1
Wyoming	$0	1
Oklahoma	$32,149,000	12
Missouri	$47,462,000	13
Montana	$114,027,000	14
South Carolina	$360,665,000	15
Maine	$691,216,000	16
New Mexico	$692,096,375	17
Alabama	$765,830,000	18
Vermont	$773,177,461	19
Alaska	$870,700,000	20
New Hampshire	$904,183,250	21
Arkansas	$1,308,088,000	22
Virginia	$1,413,873,000	23
Nevada	$1,566,202,000	24
Michigan	$1,683,300,000	25

State	Total General Obligation Bonds	Rank
Rhode Island	$1,865,552,465	26
New Jersey	$2,128,700,000	27
West Virginia	$2,537,842,000	28
New York	$2,780,000,000	29
Delaware	$2,800,052,000	30
Tennessee	$2,887,530,418	31
North Carolina	$3,257,564,000	32
Utah	$3,351,212,000	33
Mississippi	$5,720,918,000	34
Minnesota	$8,237,313,000	35
Hawaii	$8,610,930,000	36
Louisiana	$8,993,304,000	37
Oregon	$8,995,920,000	38
Wisconsin	$9,430,435,000	39
Ohio	$11,203,085,000	40
Maryland	$12,149,305,000	41
Georgia	$12,190,289,000	42
Pennsylvania	$14,185,352,000	43
Florida	$15,855,365,000	44
Connecticut	$24,602,519,000	45
Texas	$25,257,499,000	46
Washington	$30,071,013,000	47
Massachusetts	$32,644,979,000	48
Illinois	$39,085,117,000	49
California	$120,228,608,589	50

FIGURE 4, TABLE 4 | **Interest Costs as a Percent of General Obligation Bonds**



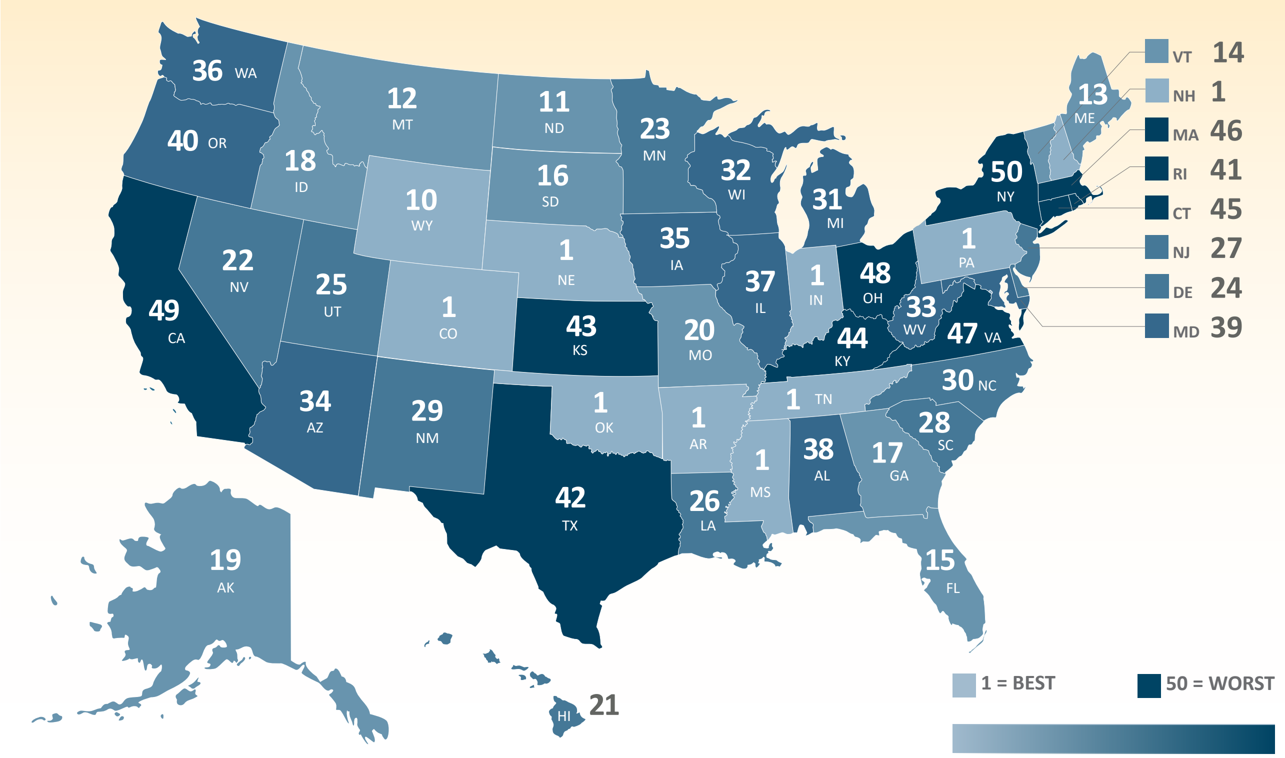
This measurement examines how much interest payments make up of total general obligation bond payments. This ranking focuses on general obligation bonds because it represents the debt that the state has promised to pay back with "full faith and credit." Interest costs and credit ratings can vary among bond types in the same state. The greater the interest cost of a general obligation bond, the less likely a project funded by a general obligation bond will generate positive value. Higher interest costs reduce the number of projects capable of producing a net benefit for a state. Interest costs are influenced by a variety of factors. States with the highest interest costs tend to have amortization schedules longer than 20 years, increasing the amount of interest paid over the term of the bond per each dollar of bond issued. The state history, outstanding liabilities and the outlook on the source of repayment also affect interest costs. Massachusetts remains at 50th in this year's report due to accumulating debt and longer amortization periods that extend to 2049.

Source: Data are based on ALEC Center for State Fiscal Reform calculations. See the Methodology section for full description of the data.

State	Interest Costs	Rank
Arizona	0.00%	1
Colorado	0.00%	1
Idaho	0.00%	1
Indiana	0.00%	1
Iowa	0.00%	1
Kansas	0.00%	1
Kentucky	0.00%	1
Nebraska	0.00%	1
North Dakota	0.00%	1
South Dakota	0.00%	1
Wyoming	0.00%	1
Missouri	6.18%	12
Oklahoma	6.68%	13
South Carolina	9.36%	14
Arkansas	13.96%	15
New Mexico	14.84%	16
Utah	15.82%	17
Maine	17.15%	18
Tennessee	17.93%	19
New Hampshire	18.43%	20
Rhode Island	18.62%	21
Michigan	18.72%	22
Maryland	19.56%	23
Nevada	19.78%	24
North Carolina	20.02%	25

State	Interest Costs	Rank
Vermont	20.72%	26
Montana	20.85%	27
Virginia	21.07%	28
Delaware	21.94%	29
Georgia	22.57%	30
Alabama	22.81%	31
Minnesota	23.05%	32
New York	23.35%	33
Ohio	23.86%	34
Pennsylvania	24.18%	35
Florida	24.41%	36
New Jersey	24.90%	37
Hawaii	25.64%	38
Connecticut	25.65%	39
Wisconsin	26.65%	40
Mississippi	26.66%	41
Alaska	28.23%	42
Oregon	28.41%	43
Texas	28.96%	44
Illinois	29.32%	45
Louisiana	30.32%	46
Washington	34.18%	47
California	37.11%	48
West Virginia	39.17%	49
Massachusetts	41.53%	50

FIGURE 5, TABLE 5 | Governmental Activity Revenue Bonds Liabilities



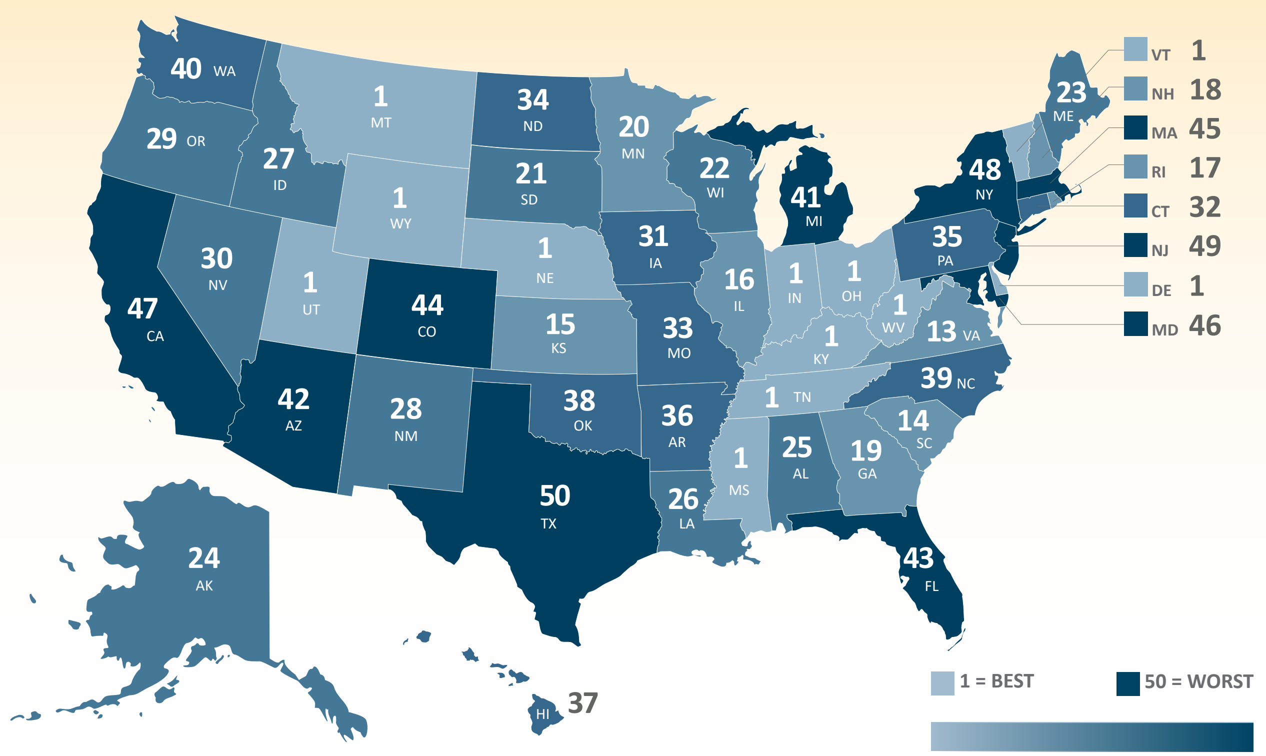
Governmental activity bonds are a type of revenue bond used to fund projects such as roads and other capital projects. They are often paid for with a combination of general revenue funds and dedicated taxes, such as a gas tax. These bonds total $217 billion (just under 19% of all state bonded obligations). The top nine with the inclusion of MS states do not issue governmental activity bonds. The 10 states with the largest governmental activity bond debt make up 82.6% of the total governmental activity bond debt in the U.S.

Note that Mississippi, ranked 19th last year, is now tied for 1st place. This is because the revenue bonds are issued through component units and are better categorized as component unit bonds.

Source: Data are based on ALEC Center for State Fiscal Reform calculations. See the Methodology section for a full description of the data.

State	Total Government Activity Bonds	Rank
Arkansas	$0	1
Colorado	$0	1
Indiana	$0	1
Mississippi	$0	1
Nebraska	$0	1
New Hampshire	$0	1
Oklahoma	$0	1
Pennsylvania	$0	1
Tennessee	$0	1
Wyoming	$14,362,644	10
North Dakota	$20,115,000	11
Montana	$21,979,000	12
Maine	$24,105,000	13
Vermont	$28,850,075	14
Florida	$162,983,000	15
South Dakota	$178,322,000	16
Georgia	$229,417,000	17
Idaho	$579,817,000	18
Alaska	$680,800,000	19
Missouri	$736,682,000	20
Hawaii	$756,249,000	21
Nevada	$956,544,000	22
Minnesota	$1,295,776,000	23
Delaware	$1,420,835,000	24
Utah	$1,492,263,000	25
Louisiana	$1,879,876,000	26
New Jersey	$2,089,200,000	27
South Carolina	$2,119,908,000	28
New Mexico	$2,161,166,000	29
North Carolina	$2,256,408,000	30
Michigan	$2,510,400,000	31
Wisconsin	$2,577,886,000	32
West Virginia	$2,605,741,000	33
Arizona	$2,626,360,000	34
Iowa	$2,639,059,000	35
Washington	$3,061,694,000	36
Illinois	$3,760,466,000	37
Alabama	$4,285,257,000	38
Maryland	$4,569,359,000	39
Oregon	$4,842,842,000	40
Rhode Island	$5,041,392,000	41
Texas	$5,161,569,000	42
Kansas	$5,730,299,000	43
Kentucky	$7,000,669,000	44
Connecticut	$9,204,833,000	45
Massachusetts	$9,946,234,000	46
Virginia	$10,508,013,945	47
Ohio	$11,179,070,000	48
California	$25,231,060,000	49
New York	$90,257,000,000	50

FIGURE 6, TABLE 6 | Business-Type Activity Bonds Liabilities



Business-type activity bonds are a type of revenue bond issued by entities of the state. These include toll roads. The bonds are considered "self-supporting" because they do not have a dedicated revenue fund like governmental activity bonds. The taxpayers are still responsible, however, for the "self-supporting" bonds if they do not generate sufficient revenue.

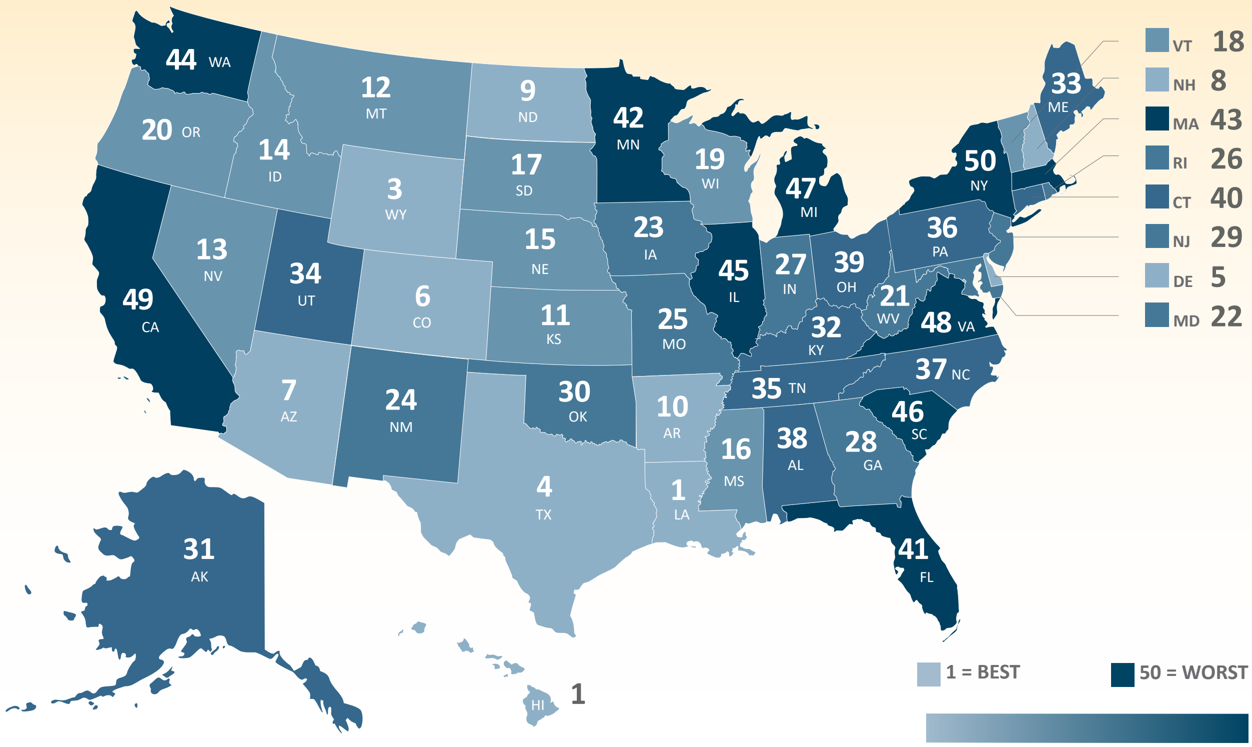
These bonds total over $225 billion (just under 18% of all state bonded obligations). The top 12 states do not issue business-type activity bonds. The 10 states with the largest business-type activity bond debt make up 82.78% of the total business-type activity bond debt in the U.S.

Source: Data are based on ALEC Center for State Fiscal Reform calculations. See the Methodology section for a full description of the data.

State	Total Business-Type Activity Bonds	Rank
Delaware	$0	1
Indiana	$0	1
Kentucky	$0	1
Mississippi	$0	1
Montana	$0	1
Nebraska	$0	1
Ohio	$0	1
Tennessee	$0	1
Utah	$0	1
Vermont	$0	1
West Virginia	$0	1
Wyoming	$0	1
Virginia	$3,224,183	13
South Carolina	$16,931,000	14
Kansas	$135,258,000	15
Illinois	$178,003,000	16
Rhode Island	$279,819,000	17
New Hampshire	$295,930,000	18
Georgia	$373,114,000	19
Minnesota	$391,131,000	20
South Dakota	$428,882,000	21
Wisconsin	$432,674,000	22
Maine	$463,806,388	23
Alaska	$466,500,000	24
Alabama	$487,647,000	25

State	Total Business-Type Activity Bonds	Rank
Louisiana	$706,518,000	26
Idaho	$715,669,000	27
New Mexico	$1,139,687,000	28
Oregon	$1,510,164,000	29
Nevada	$1,543,991,000	30
Iowa	$2,246,699,800	31
Connecticut	$2,260,090,000	32
Missouri	$2,336,240,000	33
North Dakota	$2,489,087,000	34
Pennsylvania	$2,793,886,436	35
Arkansas	$3,080,662,000	36
Hawaii	$3,364,816,000	37
Oklahoma	$3,384,184,000	38
North Carolina	$3,616,972,000	39
Washington	$3,664,641,000	40
Michigan	$4,594,000,000	41
Arizona	$5,125,228,000	42
Florida	$5,597,286,000	43
Colorado	$6,799,032,000	44
Massachusetts	$7,043,299,000	45
Maryland	$8,108,274,000	46
California	$15,204,757,000	47
New York	$24,531,000,000	48
New Jersey	$54,298,800,000	49
Texas	$55,234,207,000	50

FIGURE 7, TABLE 7 | **Component Unit Bond Liabilities**



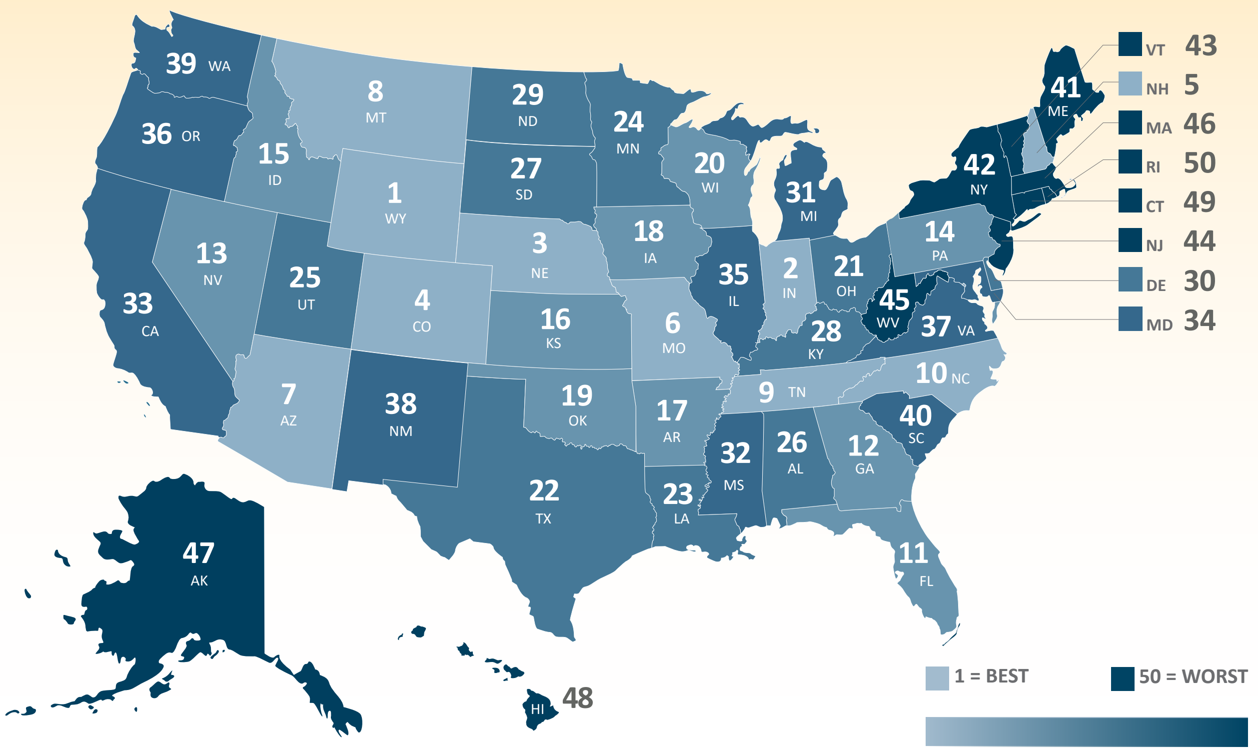
Component Units are entities created by a state government that are legally separate and can go bankrupt. These bonds total over $352 billion (just over 28% of all state bonded obligations). Bonds issued by component units are like business-type activity bonds in that they are funded by fees, fines, leases and other service fees. While component units are legally separate entities, some states are still financially accountable for these component units. The Metropolitan Transportation Authority in New York is such a case.

However, many states do not report bonds issued by the component units directly in the state CAFR because component units are legally separate entities. These data were pieced together through access to the Electronic Municipal Market Access (EMMA), state financial documents and financial documents provided by component units.

Source: Data are based on ALEC Center for State Fiscal Reform Calculations. See the Methodology section for full description of the data.

State	Total Component Unit Bond Liabilities	Rank
Hawaii	$0	1
Louisiana	$0	1
Wyoming	$17,853,097	3
Texas	$93,882,000	4
Delaware	$305,658,000	5
Colorado	$413,284,000	6
Arizona	$478,462,000	7
New Hampshire	$580,621,000	8
North Dakota	$740,668,000	9
Arkansas	$843,041,000	10
Kansas	$932,469,000	11
Montana	$1,014,297,000	12
Nevada	$1,074,960,000	13
Idaho	$1,448,429,000	14
Nebraska	$1,501,513,000	15
Mississippi	$1,856,198,000	16
South Dakota	$2,541,051,000	17
Vermont	$2,588,035,103	18
Wisconsin	$2,598,402,000	19
Oregon	$2,643,962,000	20
West Virginia	$2,683,544,000	21
Maryland	$2,898,200,999	22
Iowa	$3,083,980,000	23
New Mexico	$3,464,570,000	24
Missouri	$3,755,961,000	25
Rhode Island	$4,097,189,000	26
Indiana	$4,115,252,279	27
Georgia	$4,694,645,000	28
New Jersey	$4,821,100,000	29
Oklahoma	$4,867,775,800	30
Alaska	$5,519,100,000	31
Kentucky	$5,539,733,000	32
Maine	$5,598,765,987	33
Utah	$6,124,783,000	34
Tennessee	$6,422,217,784	35
Pennsylvania	$6,530,117,000	36
North Carolina	$6,822,135,000	37
Alabama	$7,138,351,000	38
Ohio	$7,883,983,000	39
Connecticut	$8,076,028,000	40
Florida	$8,603,316,000	41
Minnesota	$10,192,593,743	42
Massachusetts	$10,813,998,000	43
Washington	$10,892,217,833	44
Illinois	$14,931,807,000	45
South Carolina	$19,236,103,979	46
Michigan	$24,979,200,000	47
Virginia	$29,411,321,307	48
California	$40,781,926,000	49
New York	$57,121,288,250	50

FIGURE 8, TABLE 8 | **Bonded Debt as a Percentage of Gross State Product**



This measurement examines the ratio of total bonded obligations to gross state product (GSP.) These percentages appear small, but as debt to GDP ratios increase, so does the negative impact of debt on economic growth. As economic growth lags, the more difficult it will be to grow the economy out of debt. These percentages only consider bonded obligations and do not include debt from pensions and other post-employment benefits, (OPEB.)

Take Illinois for example. Although a 6.75% bonded debt-to-GDP ratio may seem small, the poor credit rating (BBB-) reflects many lenders, beliefs that the Land of Lincoln does not have a credible commitment to pay back its debt. Taken in combination with hundreds of millions of dollars in unfunded pension and OPEB liabilities, as well as a shrinking tax base from residents leaving the state, Illinois is dangerously close to defaulting on its debt.

Source: Data are based on ALEC Center for State Fiscal Reform Calculations. See the Methodology section for full description of the data.

State	Debt to GSP Ratio	Rank
Wyoming	0.09%	1
Indiana	1.10%	2
Nebraska	1.13%	3
Colorado	1.89%	4
New Hampshire	2.03%	5
Missouri	2.09%	6
Arizona	2.20%	7
Montana	2.23%	8
Tennessee	2.52%	9
North Carolina	2.70%	10
Florida	2.73%	11
Georgia	2.81%	12
Nevada	3.01%	13
Pennsylvania	3.05%	14
Idaho	3.27%	15
Kansas	3.88%	16
Arkansas	4.00%	17
Iowa	4.10%	18
Oklahoma	4.41%	19
Wisconsin	4.45%	20
Ohio	4.47%	21
Texas	4.83%	22
Louisiana	4.92%	23
Minnesota	5.38%	24
Utah	5.55%	25

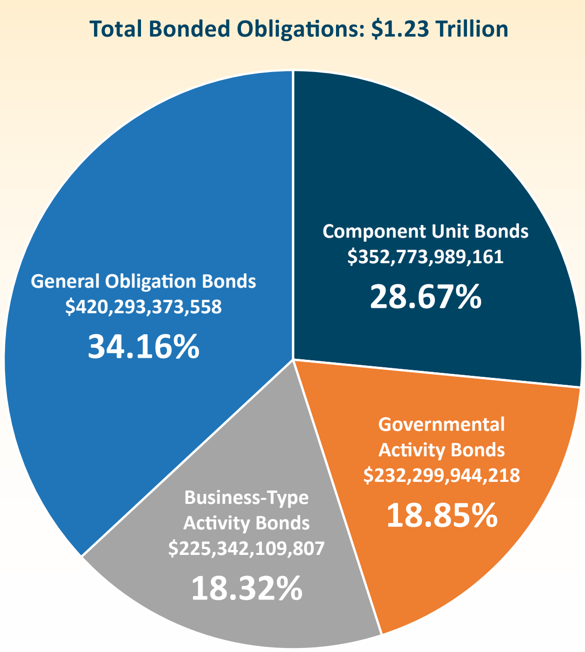
State	Debt to GSP Ratio	Rank
Alabama	5.59%	26
South Dakota	5.75%	27
Kentucky	5.90%	28
North Dakota	5.92%	29
Delaware	5.97%	30
Michigan	6.56%	31
Mississippi	6.66%	32
California	6.70%	33
Maryland	6.75%	34
Illinois	6.75%	35
Oregon	7.38%	36
Virginia	7.52%	37
New Mexico	7.57%	38
Washington	7.89%	39
South Carolina	8.88%	40
Maine	9.78%	41
New York	10.13%	42
Vermont	10.14%	43
New Jersey	10.24%	44
West Virginia	10.32%	45
Massachusetts	10.38%	46
Alaska	15.13%	47
Hawaii	15.36%	48
Connecticut	15.97%	49
Rhode Island	18.63%	50

Section II: Background

Obligation Types

States issue bonds using a variety of revenue sources, obligations, term lengths and structures to address their financial challenges. However, most states cluster their bonded obligations into three broad categories: general obligation bonds, revenue bonds (broken down into governmental activity and business-type activity bonds) and component unit bonds. Figure 9 shows these categories and corresponding total liabilities.

FIGURE 9 | **Bonded Obligations by Type**



Source: Electronic Municipal Market Access (EMMA) and state comprehensive annual financial reports.

Bond classifications can vary from state to state. Some state bonds do not clearly fall into any one category, but the type of revenues and obligations roughly reflect each category. The authors of this report classify bonds based on how they are classified in the state comprehensive annual financial reports (CAFRs). Certain indicators help identify bonds of a certain category.

For example, general obligation bonds are debt obligations "backed by the full faith and credit" of the state, which is always mentioned in the bond description. That pledge is the key distinguishing feature from other bond categories. The pledge of the full faith and credit of the state means the state expresses commitment to repay the bonds from all legally available funds, including a good faith commitment to use its legal powers to raise revenues to pay the bond costs.[2]

Generally, these bonds are considered the most secure type of state bond and tend to have lower interest costs than other forms of state obligations. These bonds are usually supported with state tax revenue but are sometimes "double-barreled," where fees and leases pay for the bond and the general fund supports shortfalls.[3] General obligation bonds are used in a variety of functions including building schools and roads. Some governments also irresponsibly use general obligation bonds to cover current deficits, giving the appearance of a balanced budget. Using debt to make up for budget deficits increases costs on future taxpayers, without adequately addressing the revenue shortfall, or overspending.

The second category is revenue bonds.[4] Revenue bonds rely on specific funds or revenue sources, such as service fees, to pay bond holders—not the "full faith and credit of the state." Revenue bonds include two subcategories: governmental-type activity bonds and business-type activity bonds.

Governmental-type activity bonds vary from state to state but are generally issued for transportation infrastructure and capital projects. They are often funded by legislative appropriations and dedicated tax revenue sources, like fuel taxes.

Business-type activity bonds are largely self-supporting. For example, universities or toll roads, which generate revenue through fees, lease agreements, tolls, investment returns and other non-tax revenues to pay these bonded obligations.

The third category, component units, are created by state government entities, such as an economic development authority, mass transit agency or state university, with the authority to issue bonds. Component units are legally separate from the state, but, in some cases, state governments are financially accountable for them.[5] Sometimes, component units depend directly on the state for revenue.[6]

Bonds issued by component units are often considered more flexible for the state because they can have a longer debt service period than general obligation bonds. Component units can make smaller debt service payments over longer periods of time compared to general obligation bonds. Also, component unit bonds are not subject to the "full faith and credit" pledge of the state.

General obligation bonds are typically issued for shorter maturity lengths with most of the debt being paid off sooner than component unit bonds. This allows a more versatile management of obligations in times of economic recession. A component unit's greater flexibility and the ability to go bankrupt often prompts bond investors to demand higher interest payments on component unit bonds than general obligation bonds.

Bonds issued by a component unit are like business-type activity bonds because they can be funded through fees, fines, leases and other use-based revenue. Unlike business-type activity bonds, however, component units can file for bankruptcy whereas states cannot. All states consider component units legally separate entities, but the degree to which states are financially accountable to a component unit can depend on the component unit within the state.

For example, the State of New York is "financially accountable [for] and may be affected by [the] financial well-being" of its component units.[7] Alternatively, the University of Minnesota, a component unit of the State of Minnesota, states in its bond disclosures that "the bonds are not an indebtedness or other obligation of the State of Minnesota."[8]

The Government Budget Constraint

Now that the types of debt have been discussed, this section will examine an important question: Can governments issue as much debt as they want?

The short answer is a resounding "no." Governments, like households, have budget constraints. If a state or local government wants to spend an amount, it has two main sources of revenue: collecting taxes and issuing debt.

Debt, remember, is just a promise to pay taxes in the future. Deferring taxes does not reduce their drag on the economy in the long-term. Furthermore, government debt represents an "opportunity cost" for taxpayer money that citizens could use elsewhere.[9] Government debt used to pay for current government spending represents the current consumption of what could have been productive funds for taxpayers in the future, but instead that money will go toward taxes which pay down this debt. As James M. Buchanan put it, financing current spending with debt is, "in effect, chopping up the apple trees for firewood, thereby reducing the yield of the orchard forever."[10] By taking capital out of the private sector, you get less investment in the state, the economy grows less and future generations are stuck with a high tax burden.

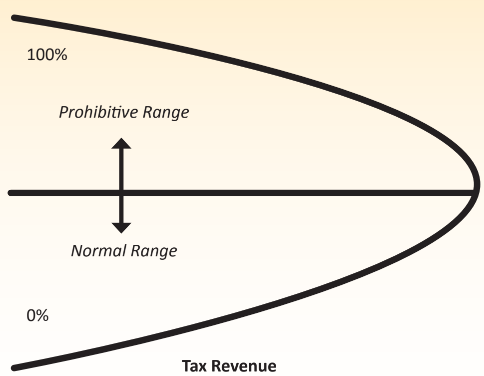
There is also a political incentive problem of government debt. Different types of government debt have different maturity schedules. Municipal bonds are issued in maturities that often take, on average, 20 years to mature.[11] Some bonds mature more quickly while others, often revenue bonds and debt issued by component units, have longer maturity schedules. An extreme example of this is the University of California revenue bonds that do not fully mature until the year 2115.[12] Given that many bonds take so long to mature, most elected officials who advocate for the use of debt-financed spending are long out of office before the debt fully matures.

The Limits of Government Debt

This section will answer another important question: How much debt is "too much" debt? To answer this, consider the Laffer Curve. In addition to facing a Laffer Curve for taxes, state policymakers also face a similar curve for issuing debt.

Readers of ALEC research, especially Rich States, Poor States, are familiar with the Laffer Curve, the relationship between tax revenue and tax rates. The Laffer Curve is recreated in Figure 10.

FIGURE 10 | **The Laffer Curve**



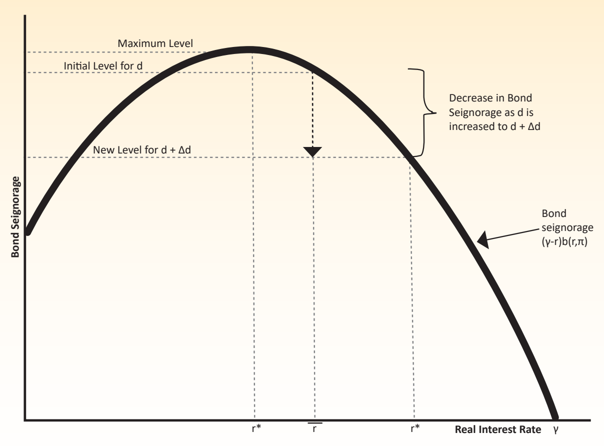
Source: Laffer Associates

The Laffer Curve demonstrates that at a certain point (depending on time and place), tax rates become prohibitive and affect the behavior of businesses and individuals. Just as there is a point at which taxation becomes prohibitive, there is also a point at which debt becomes prohibitive. How will we know when we get to that point?

This chart comes from an article by economist Preston J. Miller and Nobel Prize-Winning Economist Thomas Sargent.[13] This Miller and Sargent Curve also explores the relationship between rate and revenue. Instead of taxes, the curve looks at the relationship between the revenue a government earns from selling bonds, also known as bond seignorage, and the real, or inflation-adjusted, interest rate.

This curve, recreated in Figure 11, demonstrates that as the real interest rate increases, seignorage increases until it reaches r*, the point at which seignorage is maximized. Issuing any more bonds will cause the revenue from the bonds to decrease.

FIGURE 11 | **The Miller and Sargent Curve**



Source: Miller and Sargent, "A Reply to Darby," Federal Reserve Bank of Minneapolis Quarterly Review Spring 1984. P. 24

Another important indicator that the state government has taken on too much debt is the debt to GDP ratio. A typical nation in the EU or North America, rolls over about one-third of its debt each year. If roll-over interest rate on the debt exceeds the economy's growth rate, the government debt will outgrow GDP even if there is no annual deficit. As debt to GDP ratio grows with no credible commitment to reverse it, a state government's creditworthiness declines further.

As creditworthiness declines further, borrowing rates rise, and debt growth outpaces GDP growth at an even faster pace, increasing the likelihood of default. These warnings ring just as true for the 50 states.

As shown in Figure 7, Table 7 in Section 1, debt to GSP ratios for the states may appear relatively low compared to the drastic levels of debt to GDP ratio for the federal government. There is still cause for concern. Government debt has a negative impact on economic growth by diverting private capital toward public projects, decreasing private investment and creating a tax burden on future generations.[14,15]

The drag of government debt, however, gets worse as the stock of debt increases. As the stock of debt increases, increasing the debt to GDP ratio, the more difficult it becomes for the economy to "grow out" of the debt.[16]

Bankruptcy? Default? What's the Difference?

Article I, Section 8 of the United States Constitution authorizes Congress to enact "uniform Laws on the subject of Bankruptcies."[17] The most recent iteration of this was enacted under the Bankruptcy Code of 1978.[18] The Bankruptcy Code, which is codified as Title 11 of the United States Code, has been amended several times since its enactment. It is the uniform federal law that governs all bankruptcy cases. The U.S. Courts note, "A fundamental goal of the federal bankruptcy laws enacted by Congress is to give debtors a financial 'fresh start' from burdensome debts."[19]

While Chapter 9 of the U.S. Bankruptcy Code covers municipal bankruptcy, as seen with Detroit bankruptcy of 2013, this chapter does not extend to states.[20] There has been much debate over whether that should change, but currently, states cannot access the U.S. bankruptcy code.[21]

While state governments cannot technically "go bankrupt," they can go into default. In other words, they can fail to pay back their debt in full when the debt is due. The last state to default on its debt was Arkansas in 1933.[22]

In the early twentieth century, the State of Arkansas began issuing revenue bonds to fund highways in anticipation of the growing automobile industry. State leaders expected these highway bonds to pay for themselves, as they would promote growth and larger government revenues. They were wrong.[23] After the market crash in 1929, revenue to pay the debt service on these bonds plummeted. As the Great Depression worsened in the early 1930s, the State of Arkansas defaulted on the highway revenue bonds.[24]

State defaults have occurred throughout American history. The next section will explore an instance in early American history where numerous states defaulted on debt and asked the federal government for a bailout.

State Defaults in the 1840s: A Case Study in State Debt

In his 2011 Nobel Lecture, "The United States Then, Europe Now," economist Thomas Sargent compared the debt crisis in Europe in the early 2010s to the debt crisis in the United States in the early 1800s. Sargent discussed how many state governments in the early 1800s took on massive amounts of debt for public works projects and expected a federal bailout but did not get one. He then discussed how the effects of the fiscal crisis pushed states to adopt balanced budget amendments.[25]

The first bailout of the states in American History occurred on August 4, 1790 when Congress accepted Alexander Hamilton's proposal to assume state debts. In the years that followed, Sargent summarizes, citizens debated whether the federal government could or should finance public infrastructure projects.

In response to several presidential vetoes of public works appropriations, state governments took on public works projects themselves.[26] States issued bonds and ran large government deficits to finance many public and private infrastructure projects. "People advanced the theory," Sargent stated, "that those bonds would be self-financing because ultimately they would promote growth and larger state government tax receipts in the forms of fees or taxes on increased land values."[27] Advocates of these bonds claimed the debt would pay for itself.

Unfortunately, this was not true. During a recession at the end of the 1830s, many states defaulted on those infrastructure bonds. As states began to default on their promises, they looked to the federal government to bail them out, just as the federal government had done in 1790. In the end, Congress refused because the circumstances were drastically different. In 1790, the states had accumulated debt to help finance the American Revolution, fighting for the existence of the United States. In the 1830s, states were asking for a bailout from some poor financial decisions.

This decision temporarily hurt the United States. The bonds states issued were purchased by European investors, who also had the expectations that the federal government would backstop spending if the states could not pay their debts.[28] At the time, international bond markets did not have the technology or information to distinguish between federal government and state government creditworthiness. Credit ratings for the United States at all levels suffered greatly in Europe because of the inability to distinguish debt issued by states in crisis, states not in crisis, and debt issued by the U.S. Treasury.[29]

Sargent argued that this short-term pain was worth the price. In response to the federal government refusing to bailout the states, more than half of the states at the time amended their state constitutions to require year-by-year balanced budgets. It also set a new precedent for federalism. After the state defaults of the 1840s, states that spent extravagantly could no longer expect to be bailed out by the federal government.[30]

State Debt After 2020

The call for a federal bailout of the states in 2020 resembled the call for a federal bailout of the states in the 1840s. Prior to 2020, state governments took on billions of dollars in debt with expectations that they could grow their economies faster than the debt would grow. When an unexpected economic downturn occurred, governors and legislators from several states asked Congress and President Trump for a bailout, "no strings attached." Even after the Coronavirus Aid, Relief and Economic Security (CARES) Act had been enacted, Governor Andrew Cuomo (NY) and Governor Larry Hogan(MD) asked for an additional $500 billion of "unrestricted fiscal support."[31]

This was a fiscally irresponsible approach. In two open letters to the federal government, one in May 2020 and the other in February 2021, ALEC along with 1,500 state legislators, leaders and activists from across the country wrote to address the policy idea of a federal bailout of the states.[32,33] Writing for Newsweek, ALEC Executive Vice President of Policy and Chief Economist Jonathan Williams and ALEC Vice President of Policy Lee Schalk succinctly described the concerns of the signers:

> *Rather than another bailout from the federal government, states need to take the difficult but necessary actions to govern. President Ronald Reagan reminded us that the federal government did not create the states; the states created the federal government. To preserve state autonomy and our system of competitive federalism across the "50 laboratories of democracy," states need to retain the ultimate responsibility for their taxing and spending decisions—even when it is difficult to do so.*[34]

Policymakers in Washington rejected the initial proposal from Governors Cuomo and Hogan in 2020 but did not hold out for long. The spending programs under the American Rescue Plan (ARPA) provided $350 billion to state and local governments despite the fact that total state and local revenues actually increased in calendar year 2020.[35]

While the calls for a bailout from Governors Cuomo and Hogan were not answered, there were some dangerous precedents set by the record spending under COVID-19 relief bills. First, state governments did not need the extra unrestricted money. As mentioned in the introduction, state bonded obligations decreased slightly over the past year. This was partially because of the trillions of dollars in federal aid provided during the past year of various COVID-19 spending programs.[36] The Committee for a Responsible Federal Budget finds that, as of October 2021, $9.1 trillion have been disbursed or committed from the various COVID-19 spending programs.[37]

Nearly $722 billion of the $9.1 trillion went directly to state, local and tribal governments. Of that $722 billion, $244 billion disbursed directly to state and local government entities could be used for "public health measures; economic relief for businesses and individuals; hazard (or premium pay) to essential workers; to invest in water, sewer and broadband infrastructure; for public safety and violent crime mitigation measures (as of June 23, 2021); and to replace revenue lost as a result of the pandemic."[38] The remainder went to education, Medicaid matching funds increases, transit grants, state infrastructure grants, additional funds for local and tribal governments, election security grants and coronavirus relief.

First, as shown in *State Bonded Obligations, 2020*, states took on large amounts of debt in anticipation of revenue shortfalls in 2020.[39] While state tax collections overall did decline 5.5%, during fiscal year 2020, these losses were far less than previously expected.[40] In addition, many states concluded FY 2021 with substantially more revenue than anticipated, even when excluding federal transfers from COVID-19 relief.[41] This was attributed to the growth of taxable income, partly due to time-limited federal transfers.[42] As noted in *State Tax Cut Roundup, 2020*, states providing relief through tax deadline extensions and conforming state tax codes with federal Internal Revenue Code (IRC) changes.[43]

Second, these spending backstops created a moral hazard, especially the Municipal Liquidity Facility (MLF) created under the Federal Reserve Emergency Lending Facilities by the CARES Act. As discussed in *State Bonded Obligations, 2020*, the MLF purchased municipal bonds and loaned to state and local entities at below-market interest rates, with the most favorable borrowing rates going to the governments with the worst credit ratings. The State of Illinois and the New York Metropolitan Transportation Authority (MTA), both with hundreds of billions of dollars in debt, each received $3 billion in loans from this facility, and if the loans are not paid back by 2023, the U.S. Treasury will cover the Fed's losses.[44] This was essentially a bailout with no strings attached. As of October 2021, the State of Illinois had just over $1 billion in outstanding principal and interest to pay back while the MTA has $3.3 billion in outstanding principal and interest to pay back.[45]

Although the MLF stopped purchasing bonds on December 31, 2020, this set the precedent for future Federal Reserve interventions in the municipal bond market. States can take large risks with pension and OPEB funds, issue debt to fund infrastructure projects or just paper over deficits and, if the risk does not pay off, they may turn to Congress and the Federal Reserve to bail them out.

Third, as economist Alexander Salter points out, loans from the MLF, as well as other federal spending packages, directly harm federalism.[46] As state legislators know well, there are always strings attached to federal spending. The more states rely on transfer payments from the federal government to cover budget expenses, the more state leaders pay attention to policymakers in D.C. and stop listening to the citizens they represent.[47]

It is uncertain how the federal government and the federal reserve will react to the next economic downturn, but when that time comes, there may be renewed calls for a bailout of the states. In addition to the $1.23 trillion in bonded obligations, states also have more than $9 trillion in unfunded pension and OPEB liabilities. These massive debt burdens place many state governments at risk for default.

This warning is not just intended for states with the largest stocks of debt. States with pro-growth policies must heed these warnings as well. For example, Tennessee, which was in the top 10 for lowest total bonded obligations in the 2020 edition of this report, has fallen to 23rd. That is because the State of Tennessee sold $658 million in general obligation bonds, the largest general obligation bond sale in the state's history.[48] Despite Tennessee's relatively good economic health, large stocks of debt, if left unchecked, will undoubtedly harm taxpayers.

There is a way forward. Section 3 will highlight ways states can make the necessary changes to avoid the pitfalls of debt and federal bailouts.

Section III: Policy Recommendations

Enacting Priority-Based Budgeting

The root of unsustainable government debt is unsustainable spending. By re-prioritizing spending to the core functions of government, states will find they can borrow less, especially to fund current spending.

The best solution for state revenue shortfalls is to re-prioritize spending.[49] Policymakers have a responsibility to make the most effective use of taxpayer money. After the market downturn in 2001, Washington state lawmakers from both parties worked with then-Democratic Governor Gary Locke and used priority-based budgeting to trim waste in 2002. This bipartisan approach to budgeting allowed Washington legislators to close a $1.5 billion ($2.4 billion adjusted for inflation) budget gap without raising taxes in 2004.[50] Priority-based budgeting, as outlined in the ALEC *State Budget Reform Toolkit* examines these key questions for policymakers:[51]

- What is the role of government?
- What are the essential services government must provide to fulfill its purpose?
- How will we know if government is doing a good job?
- What should all this cost?
- When cuts must be made, how will they be properly prioritized?

This process takes longer than the current method of automatic increases, but it is worth it. Better fiscal management means that state policymakers will be more prepared to weather unexpected economic downturns. By focusing on the core functions of government and the respective costs, state policymakers will find they do not need to take on billions of dollars in debt to finance current spending.

Balanced Budget Requirements in Practice: The ALEC State Budget Reform Toolkit

The ALEC *State Budget Reform Toolkit* provides a guide to reforming state budgets and keeping spending accountable to taxpayers.[52] While nearly all states have balanced budget requirements, state legislators often push expenses to future budgets by issuing unsustainable bond programs and other fiscal manipulations. The ALEC Balanced Budget Certification Act model policy, provides guidance on a strong balanced budget amendment and is based on the State of Indiana's constitutional balanced budget amendment.[53,54]

The balanced budget requirement must be carefully structured to include all funds and, ideally, adopt the "98-2-60" rule. This rule requires states spend no more than 98% of forecasted revenue, put 2% in reserves and require a 60% supermajority to override this rule.[55]

When looking at the possibility of a balanced budget amendment for the federal government, Buchanan wrote, "Restoration [of a balanced-budget rule] will require a constitutional rule that will become legally as well as morally binding, a rule that is explicitly written into the constitutional document of the United States."[56] With rising bonded debt obligations, the need for effective state balanced budget requirements has never been greater.[57]

The Importance of an Effective Spending Limit

Several states have attempted to curtail spending growth with mixed results. The ALEC *State Budget Reform Toolkit* outlines the importance of spending limits and rainy-day funds to help smooth out expenditures over the business cycle and avoid the dangerous boom-and-bust cycle of budgeting.[58]

The purpose of the spending limit is to provide the fiscal discipline necessary during strong periods of revenue growth, and to avoid creating a structural deficit by overspending. This two-pronged policy would make state budgets more resilient in the face of unanticipated expenses.[59]

When properly designed and implemented, tax and expenditure limitations (TELs) have proven to be effective in constraining the growth of government spending and stabilizing budgets over the business cycle. The ALEC Tax and Expenditure Limitation Act model policy incorporates features that make TELs effective and successful.[60] The strongest TELs in the country are the Taxpayer's

Bill of Rights (TABOR) in Colorado, the Hancock Amendment in Missouri and the Headlee Amendment in Michigan.[61] All three TELs are constitutional amendments. TABOR in Colorado restricts both spending and revenue to inflation plus population growth, applying to local governments as well. The Hancock Amendment in Missouri limits state and local revenue growth to personal income growth. The Headlee Amendment in Michigan requires voter approval to create new taxes or increase current tax rates at the state and local levels.[62]

TELs are much more effective when incorporated into state constitutions rather than in easily evaded or ignored statutes. The most effective TELs also limit the rate of growth of revenue and/or expenditures to the sum of inflation plus population growth. If states link TELs to a measure of aggregate economic activity, like personal income, it will be less effective in constraining growth of spending and stabilizing the budget. This is because measures of aggregate economic activity, such as GDP and personal income, can grow despite burdensome taxes and spending, allowing government to grow its spending as these aggregates grow. Finally, the most effective TELs apply to a broad measure of revenue and/or expenditure, exempting only federally funded expenditures.

Budget Stabilization Fund Management

State readiness for the next recession can be measured by the amount of reserve cash a state has on hand. During a recession, a well-prepared state can fill budget gaps with these reserve funds instead of increasing taxes or cutting essential services.

Without reserve cash on hand, budget crises can spur states to irresponsibly issue bonds, such as pension obligation bonds, to cover budget deficits. Pension obligation bonds, specifically, are a serious gamble that has failed in every state that has issued these bonds.[63]

States that rely primarily on sales taxes may require a smaller reserve fund compared to states that rely heavily on more volatile sources of revenue, like income taxes.[64] In addition, stabilization funds vary from state to state. Generally, states with smaller workforces will also need a smaller rainy-day fund.[65] Ultimately, the government that spends less will require less cash on hand to weather a recession.

Bond Caps and Prohibiting Debt

States can adopt caps to limit the amount of bonds issued when effectively applied across all bonds. Putting a cap on only one type of bond may incentivize issuing other types of bonds instead. A general obligation bond cap could result in issuing more revenue bonds. Although revenue bonds rely on use-based revenue, tax-supported revenue bonds can create pressure on the state budget or lead to higher tax rates. It is possible that states have bonded for more than they can afford as tax revenues decline.[66] Effective bond caps will incentivize legislators to reconsider taking on larger amounts of debt and deferring it for too long.

In addition, states such as Indiana and Nebraska place constitutional prohibitions on the government incurring debt.[67,68] As mentioned in Section 2, Indiana has an outright ban on the government incurring debt but use the Indiana Finance Authority, a component unit of Indiana, to issue bonds for infrastructure projects.[69] Despite the use of this loophole, the constitutional prohibition on debt has kept government debt levels in Indiana some of the lowest in the country. The Constitution of the State of Nebraska prohibits the state from incurring debt greater than $100,000, with exceptions made for repelling invasion, suppressing insurrection and defending the state in war.[70] Strict limits on debt have kept bonded obligations relatively low compared to other states. Both Indiana and Nebraska's debt is entirely in component unit bonds. Issuing debt through a legally separate component unit provides a way for the state to get around their respective constitutional amendments, but for now the amendments still keep debt limits in Indiana and Nebraska relatively low. Issuing a relatively low amount of component unit debt and prohibiting other forms of bonded obligations have not negatively impacted the credit ratings of either state. Currently Indiana and Nebraska both have AAA credit ratings.[71]

Section IV: Conclusion

At the root of state debt problems lies a government spending problem. Many states use bonds to increase spending today while passing the future costs on to future generations. States should enact priority-based budgeting, tax and expenditure limits and effective bond caps to help curb the growth of spending and debt. States that do not get spending and debt under control today will see taxpayers leave for states with less burdensome tax and fiscal policies in the near future.

Appendix: Methodology

Data Collection

Debt service requirements to maturity were collected between July 1 and October 10, 2021, from official bond statements listed on the Electronic Municipal Market Access (EMMA) website and then cross-referenced with the state's FY 2020 CAFR.[72] The one exception to this was California, which had not published a FY 2020 CAFR as of November 3, 2021. In this case, official 2020 bond statements from EMMA were cross-referenced with information on bond categories and outstanding bonded obligations from the FY 2018 and FY 2019 CAFR.

Component Unit Reporting

The debt service payment schedules for all states were available on the EMMA website and in state CAFRs. Several states, citing the fact that component units are separate entities from the state, deferred reporting their component units' bonded obligations, instead referring readers to the financial reports prepared by the component unit. In other cases, bonds issued by component units were aggregated with state issued bonds of their respective type. These states were Hawaii, Louisiana and New Jersey.

Omitted Liability Instruments

Notes, certificates of participation, lease agreements and other non-bonded obligations were omitted from this study whenever possible. Most states reported their certificates of participation, notes and lease agreements as distinct liabilities with their own section in the state CAFR. However, some states aggregated smaller liability instruments into their bonded obligation sections. These notes are assumed to be immaterial relative to the error introduced by deviating from state CAFRs.

Present Value of Liabilities

One of the primary limitations of this study is that time value of money is not accounted for. However, applying a standardized discount rate across the great diversity of bonds would imply that each bond has the same risk prima and duration.

Unlike pensions or OPEB, a risk-free rate may not be applicable to a component unit or even some types of revenue bond. In past reports, an assumed inflation rate could be reasonably applied, about 2%. Recent changes to the Federal Reserve's inflation target increases, however, create uncertainty about inflation in the future.[73] For this reason, our figures overestimate the liabilities of bonds as the maturities lengthen.

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