

August | 2018

# State Bonded Obligations, 2018

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## A snapshot of outstanding state bonded obligations

States issue a diverse array of bonded obligations, with a range of obligation strength, revenue sources, debt service schedules, and other factors. This study collects and analyzes the bonded obligations reported by each state in their respective Comprehensive Annual Financial Report. States and their component units issued \$863 and \$260 billion of bonds as of 2015, \$1.1 trillion in total. The differences between states offer important insights into the ways that states manage these obligations.

## **State Bonded Obligations, 2018**

State Bonded Obligations total to more than \$1.1 trillion dollars

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### **Managing Editors:**

#### **Jonathan Williams**

ALEC Chief Economist  
Vice President, Center for State Fiscal Reform  
American Legislative Exchange Council

#### **Joel Griffith**

Director, Center for State Fiscal Reform  
American Legislative Exchange Council

### **Author:**

#### **Thurston Powers**

Research Analyst, Center for State Fiscal Reform  
American Legislative Exchange Council

### **Acknowledgments and Disclaimers**

The authors wish to thank Lisa B. Nelson, Christine Phipps, and the professional staff at ALEC for their valuable assistance with this project. A special thanks to Marc Joffe, senior analyst at the Reason Foundation for his assistance in designing our methodology.

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## Introduction

The issuance of long-term bonded obligations enables states to finance large capital projects, such as bridges, buildings, and highways. Rather than use cash on hand to commence construction, government entities instead pledge future revenues, either from taxes or fees for services, to ensure payment of the principal and interest on these newly issued bonds.

Bonds serve an important purpose when used to finance vital projects, such as infrastructure that is vital to economic activity. The benefit to taxpayers of deferring upfront payment combined with the economic benefit of the completed projects should exceed the cost of accumulated interest costs plus bond repayment. This is like a household purchasing real estate with a mortgage or a business purchasing manufacturing equipment with a loan.

Unfortunately, states sometimes issue bonds for fiscally irresponsible purposes, such as papering over structural deficits. Others gamble by transferring borrowed funds into underfunded pension plans, hoping to generate investment returns greater than the interest on their bonded obligation, arbitrage. These actions are akin to a family carrying debt for living expenses such as rent or groceries on a credit card or investing proceeds from a cash advance in the stock market.

Individual states borrow for a multitude of purposes and via a spectrum of debt instruments. With this in mind, *State Bonded Liabilities, 2018* surveys the state Comprehensive Annual Financial Reports (CAFRs) of all 50 states and analyzes the liability structure along with total liabilities and liabilities per capita by type of bond. In total, states and their component units have issued \$1.1 trillion of bonded obligations, the equivalent of 62 percent of total state government expenditures in 2016.<sup>i</sup>

## **Chapter 1: Key Findings**

### **Do not let problems grow into crises**

Between Q4 2007 to Q2 2009, most states discovered that their budget stabilization funds were insufficient for managing a financial crisis so deep and prolonged as the Great Recession. To compound matters, from 2003 and 2010, bonded obligations as a share of state personal income increased by 21 percent, from 3.3 percent to 4.0 percent of state personal income.<sup>ii</sup> Since 2010, state bonded obligations have declined mildly while state pension system liabilities have ballooned in most states, along with Other Post-Employment Benefit (OPEB) liabilities in some states. With states taking on more overall debt throughout the 2009 to present recovery, only a dozen or so states are well prepared for the next recession.<sup>iii</sup>

Most states make a considerable effort to manage their obligations efficiently and responsibly. However, a bare majority (27) of states publish debt affordability studies, of which only nine can be considered high quality.<sup>iv</sup> Seven of the 10 states with the highest bonded obligations per capita produce these reports.

### **Obligation types**

States issue bonds using a variety of revenue sources, obligations, term length, and structures to address their financial challenges. However, most states cluster their bonded obligations into four categories, general obligation bonds, governmental activity bonds, business-type activity bonds, and component unit bonds. The definition of each category varies slightly from state to state. Furthermore, some states use entirely different methods of categorization, usually reflecting a different approach to state finance. The type of revenues and obligations that support the bonds is reflected, roughly, by each category.

Only a portion of state issued bonds are “debt.” These bonds are commonly referred to as “general obligation bonds,” meaning that they are backed with the faith and credit of the state. General obligation bonds are considered the most secure type of state bond and thus tend to have lower interest rates than other types of state obligations. These bonds are usually supported with state taxes but are sometimes “double-barreled,” where fees and leases pay for the bond, but shortfalls are supported by the general fund. General obligation bonds can be used for many functions, from building schools and roads to covering budget deficits.

States typically issue two types of revenue bonds: “governmental activity bonds” and “business-type activity bonds.” Governmental activity bonds are often supported or double-barreled with appropriations approved by the legislature or dedicated tax revenues, such as the gas tax. While the definition of governmental activity varies from state to state, most states consider bonds issued for transportation infrastructure and capital projects as governmental activity. State agencies that are largely self-supporting tend to issue “business-type activity bonds,” such as state universities or toll roads. These entities generate revenue

through fees, lease agreements, tolls, investment returns, and other non-tax revenues to pay their bonded obligations. Most revenue bonds represent a less distortive form of bonded obligation due to their reliance on user fees and other use-based revenues and thus adhere more closely to the benefit principle.

If a state were to issue a series of general obligation bonds and then experience a recession, the higher fixed cost of the general obligation debt service would either crowd out core services as a percentage of revenue or the state would raise general revenues through new or higher taxes, usually income or sales taxes. These taxes are not closely aligned with the demand for any particular project or program.

On the other hand, a revenue bond issued to reconstruct a highway and supported by gas tax or toll revenue would more closely link the willingness to pay for a given service with the revenue collected.<sup>v</sup> This creates a weak form of market signal, where the revenues that back revenue bonds impact demand for additional bonds. If the revenue grows stronger, a state may be able to issue transportation bonds at a lower interest rate and thus afford to initiate more projects at a lower cost, leading to a more efficient use of the state's credit. However, new types of obligations such as the "tax revenue bond" may weaken the relationship between revenue bonds and market signals.<sup>vi</sup> Broad based taxes differ from fees for service in that the revenue from a broad-based tax may not correlate with the demand for a given service.

Finally, states can create "component units," such as an economic development authorities or banks, which may be able to issue bonds. Bonds issued by component units are not usually considered obligations of the state, but some states extend the faith and credit of the state to their component unit bonds. Furthermore, some states, such as Connecticut, have created debt service funds that component units can draw from and that the state may be statutorily responsible to maintain.<sup>vii</sup>

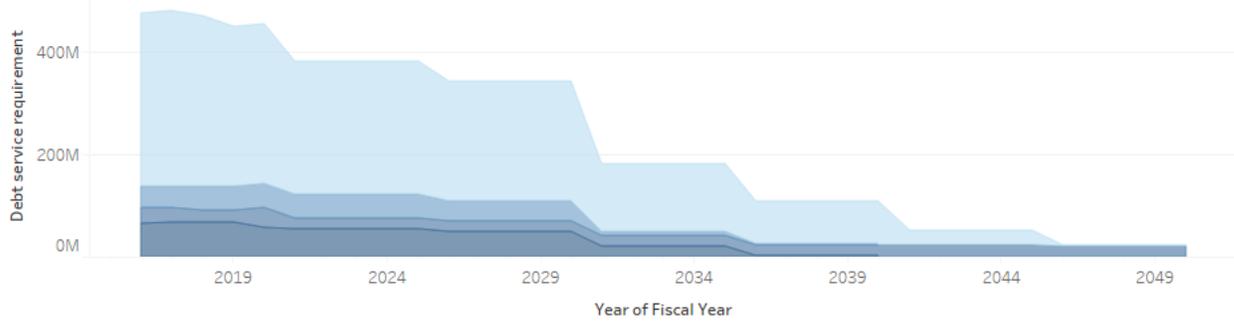
Component unit revenue bonds are similar to state business-type activity bonds, in that they are usually funded by fees, fines, leases, and other service fees but differ in that component units can file for bankruptcy. Component units are similar to municipalities in that they are creations of the state and can therefore engage in a similar debt restructuring process as municipalities, depending on how independent the component unit is from the state.<sup>viii</sup> All other things being equal, bond investors usually demand higher interest rates to compensate for this additional flexibility. As a result, borrowing cost efficiency of these component unit revenue bonds tend to be lower relative to state general obligation bonds. Some states provide credit enhancement programs for component units or municipalities to reduce this cost.

Because the four broad categorizations used in this study are "fuzzy," some bonded obligations do not clearly fall into any one particular category. For example, Minnesota

issues general obligation component unit bonds. This study classifies these as general obligation bonds. Furthermore, although state revenue bonds—particularly business-type—could be considered self-liquidating, these are often backed up with either an appropriation or taxes as a double-barrel mechanism. Additionally, even without explicit protection in a bond covenant, states generally find a path to restructuring the revenue bonds at risk of default in a way agreeable to bondholders to protect a state’s credit rating.

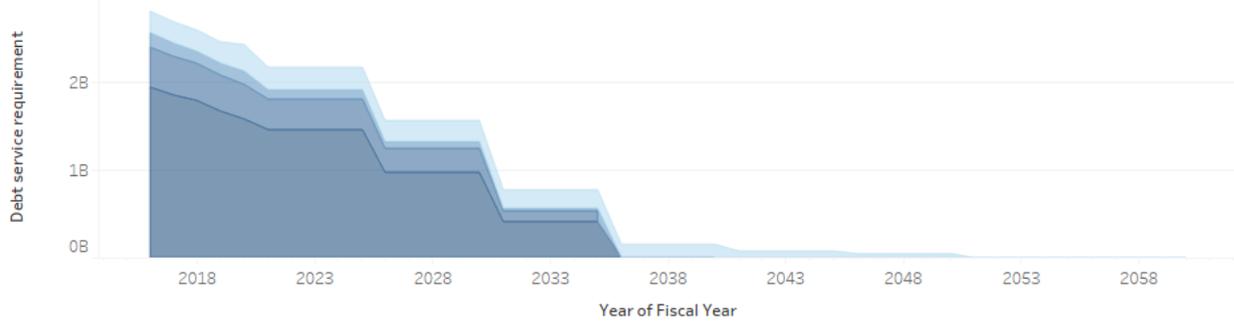
States vary widely in terms of the degree of utilization of each kind of bond obligation. For example, the two states with the highest bonded obligations per capita (Alaska and Connecticut) structure their obligation types in nearly opposite manners. Component unit obligations comprise 87 percent of Alaska’s total bonded obligations contrasted with just 17 percent of Connecticut’s total obligations, as seen in Chart 1. All other things being equal, Alaska’s intensive use of component units places the state in a better position to restructure their bonded obligations relative to Connecticut. However, if Connecticut were to follow Alaska’s example, average interest rates on their bonds would likely be much higher.

**Chart 1: Alaska debt service to maturity requirement**



- Variable
- component rb
  - state RB BT
  - state RB GT
  - state go

**Chart 2: Connecticut debt service to maturity requirement**



- Variable
- component rb
  - state RB BT
  - state RB GT
  - state go

**Table 1: National Bonded Obligations**

**National figures**

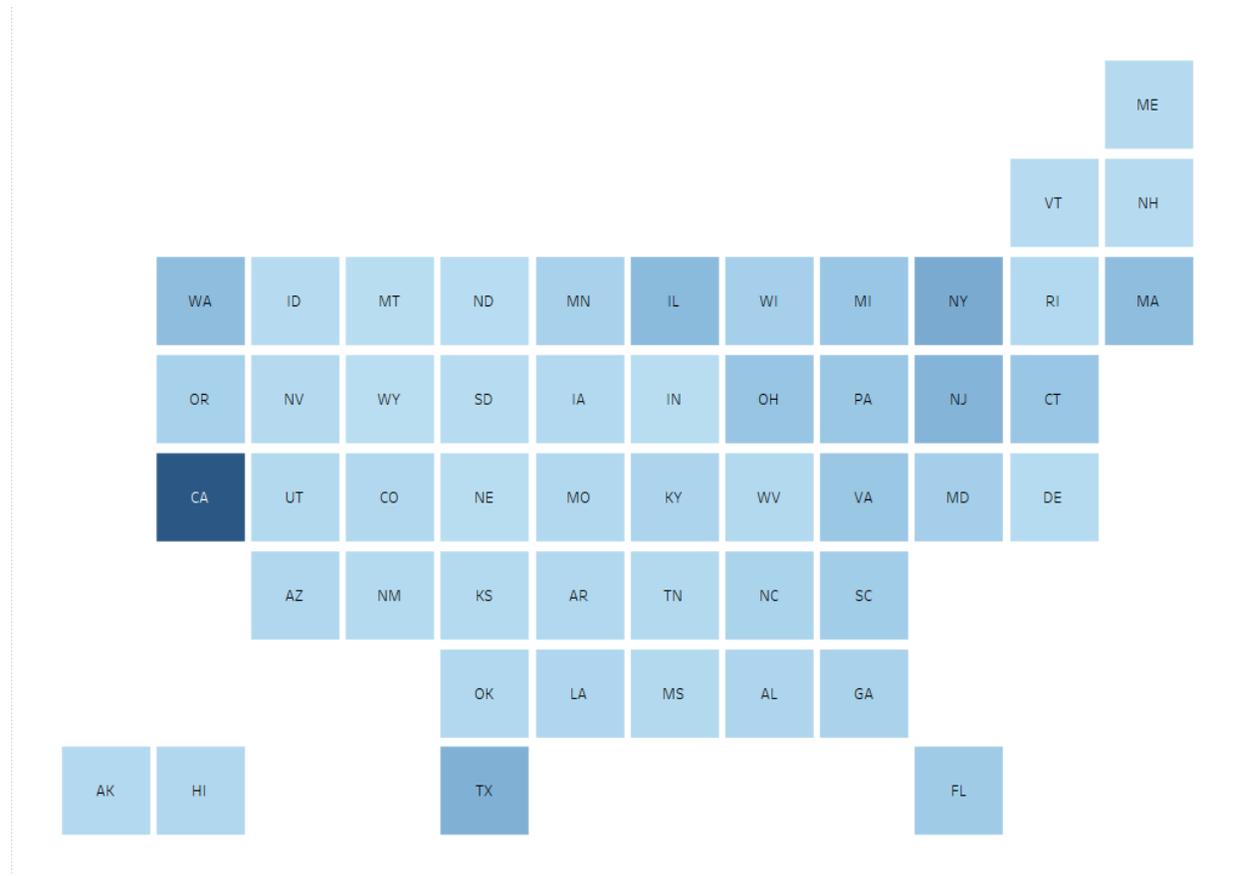
General obligation bond liability	\$437,683,723,686
Governmental activity bond liability	\$278,052,454,313
Business-type activity bond liability	\$147,081,189,093
Component unit bond liability	\$259,813,041,094
All bonded obligations	\$1,122,630,408,186
All bonded obligations per capita	\$3,506

**Total bonded obligations**

In total, states and their component units have issued more than \$1.1 trillion of bonded obligations. About 39 percent of this \$1.1 trillion is debt, meaning that the bonds are backed with general taxing power. The remaining 61 percent of bonds are issued with varying degrees of securitization, ranging from statutory requirements to moral obligations. Statutory requirements are theoretically stronger than moral obligations, as a moral obligation is simply a pledge to pay the creditor. One third of the remaining bonds are “component unit” bonds, meaning that they are issued by entities created by but separate from the state and can enter structured default, depending on their financial relationship with the state. For example, the New York Metropolitan Transport Authority is a component unit of the state of New York.

States vary from high liability states, such as California (with more than \$209 billion in bonded obligations), to liability averse states, such as Wyoming (with just \$65 million in bonded obligations). Just seven states account for half the total bonded obligations; California, New York, Texas, New Jersey, Illinois, Massachusetts, and Washington. However, the bottom 7 states account for a mere 1 percent of total bonded obligations: Idaho, South Dakota, North Dakota, Indiana, Montana, Nebraska, and Wyoming, in descending order.

### Map 1: Total Bonded Obligations <sup>ix</sup>



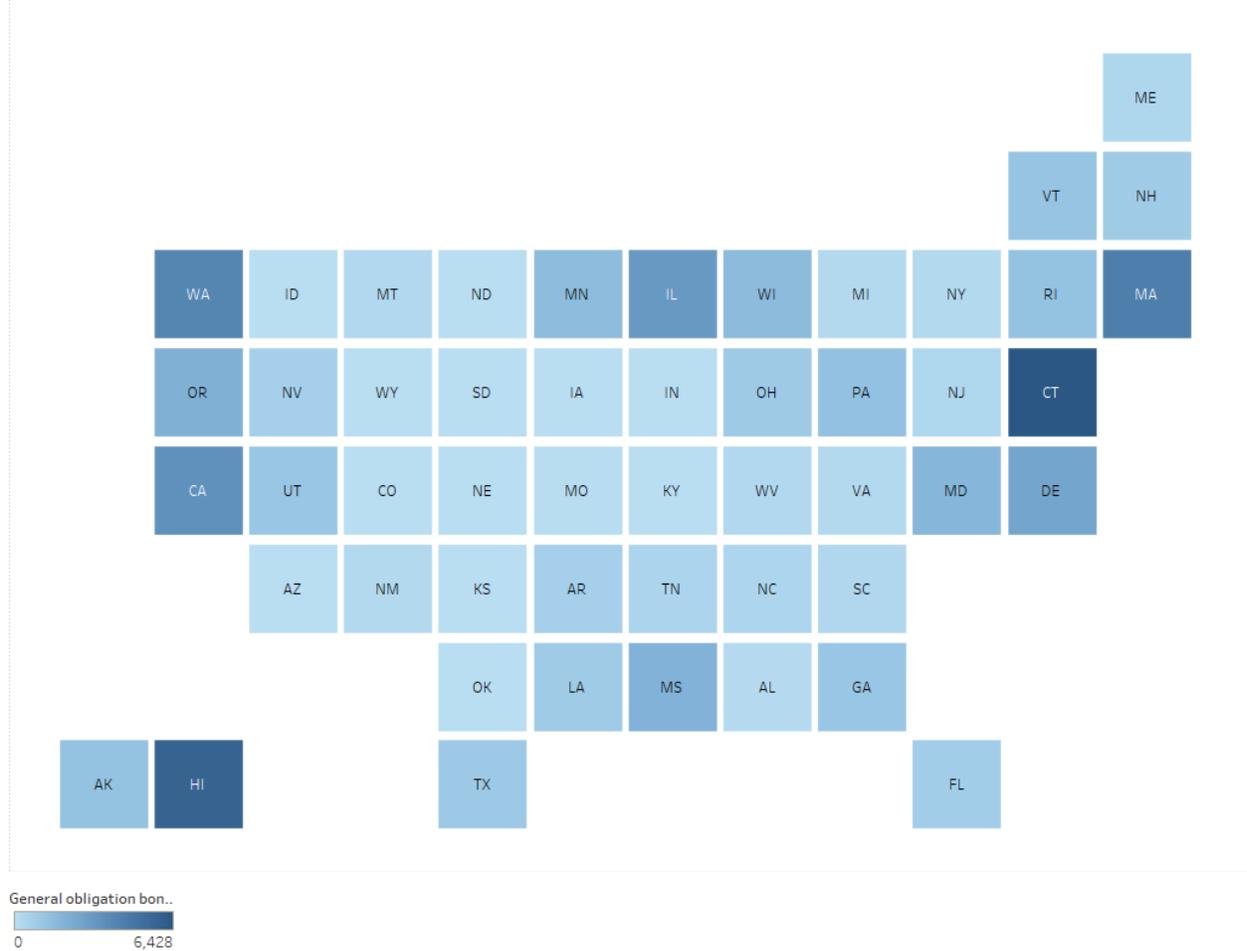
**Table 2: Table Total Bonded Obligations**

State	Rank	Value, dollars in thousands	State	Rank	Value, dollars in thousands
California	50	209,051,881	Arkansas	25	9,364,837
New York	49	77,629,000	Oklahoma	24	9,055,340
Texas	48	67,430,738	Missouri	23	8,643,287
New Jersey	47	62,504,239	Colorado	22	8,141,067
Illinois	46	54,298,039	Rhode Island	21	8,009,018
Massachusetts	45	50,204,759	Iowa	20	7,831,274
Washington	44	49,053,984	Alaska	19	7,801,800
Ohio	43	38,242,785	Mississippi	18	7,715,211
Connecticut	42	36,957,068	West Virginia	17	7,322,744
Michigan	41	36,377,600	Utah	16	6,955,368
Pennsylvania	40	35,488,482	Tennessee	15	6,799,371
Virginia	39	35,466,426	Kansas	14	6,247,978
Florida	38	28,641,586	New Mexico	13	6,057,932
South Carolina	37	25,620,409	Nevada	12	5,217,833
Maryland	36	24,153,131	Maine	11	5,023,212
Wisconsin	35	22,635,075	Delaware	10	4,544,873
Minnesota	34	19,807,135	Vermont	9	3,776,873
Oregon	33	19,076,187	New Hampshire	8	3,600,298
Georgia	32	18,702,772	Idaho	7	3,370,171
North Carolina	31	16,659,174	South Dakota	6	2,888,329
Kentucky	30	14,829,194	North Dakota	5	1,940,367
Alabama	29	13,145,936	Indiana	4	1,611,354
Louisiana	28	11,369,789	Montana	3	1,540,606
Arizona	27	10,275,410	Nebraska	2	1,224,056
Hawaii	26	10,260,758	Wyoming	1	65,653

### Total bonded obligations per capita

The \$1.1 trillion of bonded obligations amounts to about \$3,500 per capita nationally. This burden varies widely from state to state. Bonded obligations per capita are less than \$2,000 in 12 states and less than \$3,000 in half of all states. At the other end of the spectrum, this debt burden exceeds \$5,000 per capita in 10 states and \$7,000 in five. Connecticut and Alaska break away from all others with more than \$10,000 per capita of outstanding bonded obligations. Although Alaska has the highest total bonded obligations (the majority of which are component units), the state’s nearly \$65 billion “Permanent Fund” is the largest budget stabilization fund in the nation, equal to nearly \$88,000 per capita.<sup>x</sup> Alaska’s the relatively healthy credit rating reflects their lower leverage and better restructuring capability relative to Connecticut.

**Map 2: Per Capita Bonded Obligations**



**Table 3: Per Capita Bonded Obligations**

State	Rank	Value, in dollars	State	Rank	Value, in dollars
Alaska	50	10,576	New Mexico	25	2,912
Connecticut	49	10,310	Pennsylvania	24	2,774
Rhode Island	48	7,587	Alabama	23	2,708
Massachusetts	47	7,400	New Hampshire	22	2,697
Hawaii	46	7,200	Mississippi	21	2,581
New Jersey	45	6,995	North Dakota	20	2,564
Washington	44	6,851	Iowa	19	2,508
Vermont	43	6,032	Texas	18	2,458
California	42	5,361	Louisiana	17	2,435
South Carolina	41	5,234	Utah	16	2,326
Delaware	40	4,814	Oklahoma	15	2,317
Oregon	39	4,740	Kansas	14	2,149
Virginia	38	4,239	Idaho	13	2,039
Illinois	37	4,229	Georgia	12	1,834
Maryland	36	4,029	Nevada	11	1,809
West Virginia	35	3,977	North Carolina	10	1,660
New York	34	3,931	Arizona	9	1,507
Wisconsin	33	3,924	Colorado	8	1,494
Maine	32	3,778	Montana	7	1,493
Michigan	31	3,668	Missouri	6	1,422
Minnesota	30	3,613	Florida	5	1,415
South Dakota	29	3,367	Tennessee	4	1,031
Kentucky	28	3,352	Nebraska	3	646
Ohio	27	3,295	Indiana	2	244
Arkansas	26	3,145	Wyoming	1	112

**Debt structure**

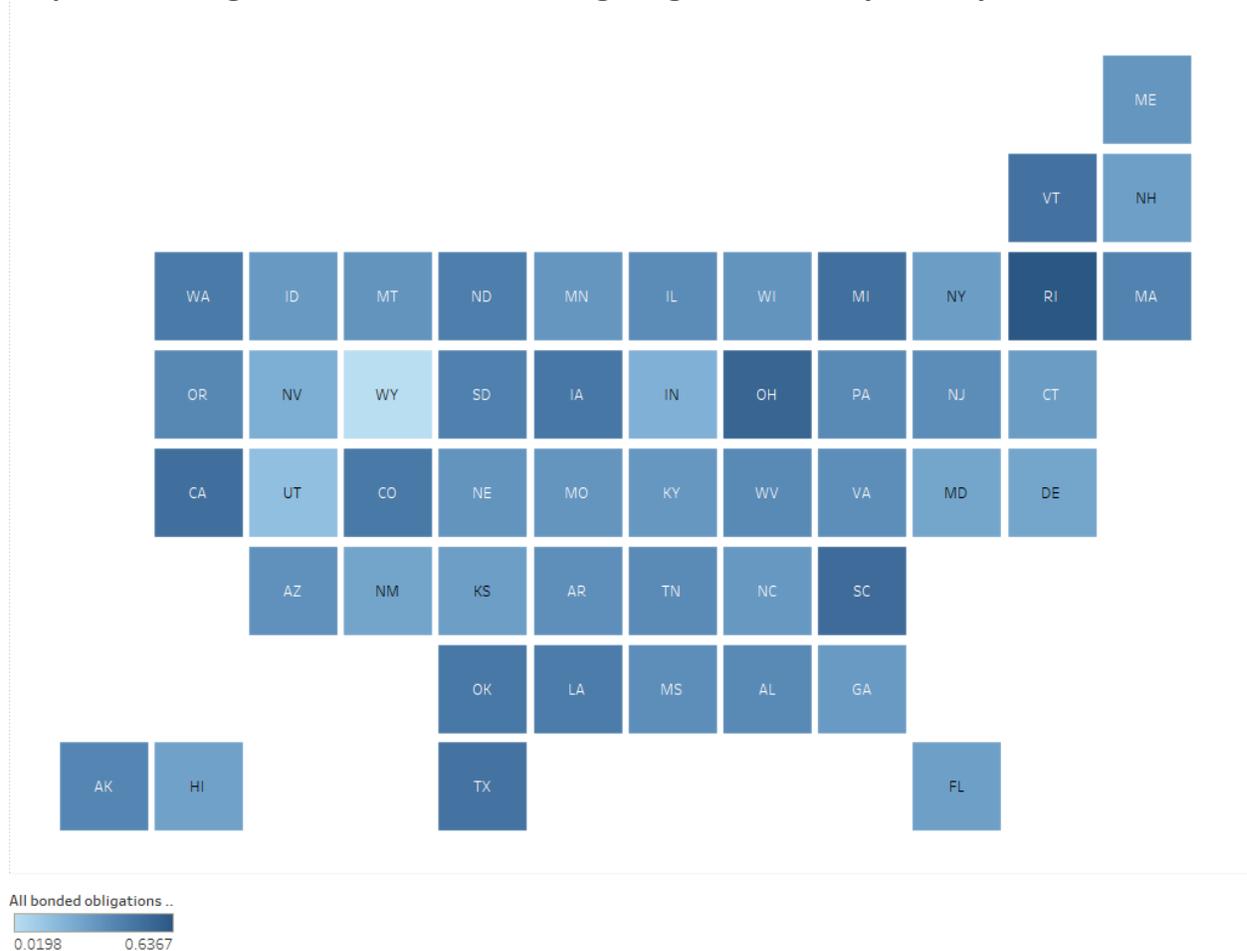
Debt structure determines the repayment period of the bonded obligations. An extended repayment period may result in lower costs initially. However, much higher interest costs will accrue over the term of the bond as repayment of principal is delayed. The proportion of total debt servicing costs (interest plus repayment) due beyond 10 years on existing debt is a rough estimate of how deferred or accelerated the nature of the debt structure.

On an equal-weighted basis of all 50 states, an average of 37 percent total bonded obligations, both interest and principal payments, are scheduled to mature beyond 10 years. This amount varies widely from state to state. Just two percent of Wyoming’s bonded

obligations mature beyond 10 years, contrasted with 64 percent of Rhode Island’s. While component units typically issued the bonds with the most extended maturities, many general obligation bonds have long maturities as well. This holds true with 52 percent of California’s general obligation bond liabilities.

States with a larger percentage of debt service beyond 10 years also tend to have large capital appreciation bonds outstanding. The principal and accrued interest of capital appreciation bonds are both due at maturity. No interest or capital payments are made during the life of the bond. Despite their murky reputation in recent years, this type of financing is a valuable tool when properly used.<sup>xi</sup> Of course, being hit with a “balloon” payment of the entire principal plus interest when the bond matures can be crippling if the entity is not adequately prepared. States have largely mitigated the risk associated with large “balloon” payments by issuing these bonds through component units, such as economic development authorities.

**Map 3: Percentage of debt service on existing obligations due beyond 10 years**



**Table 4: Percentage of debt service on existing obligations due beyond 10 years**

State	Rank	Percent	State	Rank	Percent
Rhode Island	50	64%	Arkansas	25	37%
Ohio	49	57%	Arizona	24	36%
South Carolina	48	54%	Nebraska	23	35%
California	47	52%	Wisconsin	22	35%
Michigan	46	51%	Montana	21	35%
Vermont	45	51%	Missouri	20	34%
Texas	44	50%	Maine	19	34%
Iowa	43	48%	Minnesota	18	34%
Oklahoma	42	48%	Kentucky	17	34%
Colorado	41	47%	North Carolina	16	33%
Washington	40	47%	Idaho	15	33%
Louisiana	39	46%	Georgia	14	32%
North Dakota	38	45%	Connecticut	13	31%
South Dakota	37	44%	New York	12	31%
Massachusetts	36	42%	Kansas	11	30%
Alaska	35	41%	Florida	10	30%
Oregon	34	40%	New Hampshire	9	30%
Alabama	33	39%	Hawaii	8	29%
Pennsylvania	32	39%	New Mexico	7	28%
West Virginia	31	39%	Maryland	6	27%
Tennessee	30	39%	Delaware	5	27%
Illinois	29	38%	Nevada	4	23%
New Jersey	28	38%	Indiana	3	22%
Mississippi	27	38%	Utah	2	16%
Virginia	26	38%	Wyoming	1	2%

**Interest costs over time compared to debt issued**

A higher cost of borrowing erodes the net benefit of capital projects. Interest rates and length of bond repayment determine total interest costs relative to bond issuance proceeds. The longer the amortization period, the greater the proportion of servicing costs going towards interest payments relative to principal repayment. This increases the amount of interest paid over the term of the bond per each dollar of bond issued. Dividing total annual interest payments by the total of annual interest costs plus principal repayment serves as an indicator of how much value is eroded by interest charges.

The interest rate on a bond is impacted by a variety of factors. One of the most important factors is the type of obligation (general obligation, specific purpose, etc.) Other factors include the source of repayment, the outlook on the source of repayment, the history of the state, outstanding liabilities, the order of who receives payments, and other contractual agreements detailed in the covenant. In order to achieve as clear a picture as possible of the interest cost differential between the states, this report compares interest costs across general obligation bonds only. Of course, absent from this comparison are the 11 states which do not issue general obligation bonds.

California, Alaska, Washington, Texas, and Illinois have the highest total interest cost as a percent of total general obligation bond debt servicing costs (interest cost plus principal payments). California stands alone in having more than 40 percent of its total general obligation bond liability consist of interest payments. California also suffers from a less than stellar credit rating, being only one of six states with AA- or lower credit rating in 2015, resulting in an additional risk premium for its bonds.<sup>xii</sup>



**Table 5: Interest costs as a percentage of total general obligation bond debt servicing**

State	Interest cost	Rank		State	Interest cost	Rank
California	43.33%	50		West Virginia	23.63%	25
Alaska	37.59%	49		Arkansas	23.63%	24
Washington	35.97%	48		New Hampshire	22.37%	23
Texas	35.94%	47		New Jersey	21.92%	22
Illinois	34.16%	46		North Carolina	20.65%	21
Oregon	33.13%	45		Maryland	20.42%	20
Massachusetts	32.82%	44		Michigan	19.96%	19
Florida	32.40%	43		Montana	18.59%	18
New York	29.27%	42		South Carolina	18.00%	17
Mississippi	29.25%	41		Utah	16.62%	16
Connecticut	29.23%	40		Maine	14.96%	15
Tennessee	29.20%	39		New Mexico	14.94%	14
Pennsylvania	28.89%	38		Missouri	11.02%	13
Wisconsin	28.58%	37		Oklahoma	10.72%	12
Hawaii	28.15%	36		Arizona	N/A	1
Louisiana	27.90%	35		Colorado	N/A	1
Rhode Island	27.68%	34		Idaho	N/A	1
Virginia	25.87%	33		Indiana	N/A	1
Delaware	24.45%	32		Iowa	N/A	1
Minnesota	24.29%	31		Kansas	N/A	1
Nevada	24.16%	30		Kentucky	N/A	1
Vermont	24.05%	29		Nebraska	N/A	1
Ohio	23.96%	28		North Dakota	N/A	1
Alabama	23.92%	27		South Dakota	N/A	1
Georgia	23.91%	26		Wyoming	N/A	1

**Maximum Time to Maturity of Newly Issued Bonded Obligations**

States issue bonds of varying maturities based on the time value of money, flexibility of a particular bond, and risk of funded projects. On average, general obligation bonds—the least flexible type of liability—have the shortest maturities. Meanwhile, the longest maturities belong to component units thanks to their myriad of liability restructuring options.

According to the debt service to maturity tables contained in state comprehensive annual financial reports (CAFRs) as of 2015, 15 states do not have obligations extending beyond 30 years while 4 states have obligations maturing 45 years or greater. Connecticut and

Maryland both issued bonds due in 2060. In 2015, California and Ohio both issued new “century bonds” from their component units.

The century bond issued by the University of California system illustrates the challenges associated with extremely long-term bonded obligations. This will be discussed more later. Historical performance, current fiscal conditions, and statistical predictions may all fail to completely account for potential risks when dealing with bonds extending past 30 years.

**Table 6: Maximum Time to Maturity of Bonded Obligations**

State	Years	Rank		State	Years	Rank
California	100	49		South Dakota	35	22
Ohio	100	49		Utah	35	22
Connecticut	45	47		Virginia	35	22
Maryland	45	47		West Virginia	35	22
Arkansas	40	36		Arizona	34	20
Colorado	40	36		New Mexico	34	20
Illinois	40	36		Louisiana	32	19
Michigan	40	36		Iowa	31	16
Minnesota	40	36		Nebraska	31	16
Missouri	40	36		New Hampshire	31	16
Oregon	40	36		Alabama	30	7
Rhode Island	40	36		Idaho	30	7
Texas	40	36		Kansas	30	7
Washington	40	36		Maine	30	7
Wisconsin	40	36		Mississippi	30	7
South Carolina	39	35		Montana	30	7
Kentucky	38	34		New York	30	7
Alaska	35	22		North Carolina	30	7
Delaware	35	22		Vermont	30	7
Georgia	35	22		Florida	29	4
Massachusetts	35	22		New Jersey	29	4
Nevada	35	22		Tennessee	29	4
North Dakota	35	22		Hawaii	26	3
Oklahoma	35	22		Indiana	25	2
Pennsylvania	35	22		Wyoming	15	1

## **Chapter 2: Background**

### **History of state default**

Despite their position as the most secure of state bonds, states historically have defaulted on general obligation bonds. The series of state defaults in the 1840s and Arkansas's default in the 1930s shaped modern state fiscal policy and offer insight into how future state defaults may be resolved.

After the success of the Erie Canal in 1825, states across the country sought to replicate New York's endeavor by issuing \$125 million of bonded liabilities for capital construction projects, about \$3.3 billion in current dollars.<sup>xiii</sup> Unfortunately, most of these projects proved inefficient. Compounding the problem, a financial crisis in 1837 caused deflation in the following years. Instead of inflation diminishing the "real" value of principal owed, deflation caused the real value of the debt to increase over time.

By 1844, states had defaulted on nearly half the newly issued state capital project bonds. Louisiana, Arkansas, Michigan, Mississippi and Florida outright repudiated their debt whereas Maryland, Illinois, Pennsylvania, and Indiana made late payments.<sup>xiv</sup> These state defaults triggered a subsequent string of state fiscal reforms aimed at preventing future crises and earning back the trust of banks and investors such as bonding caps, barriers to cronyism, and standards on debt issuance. Eventually, states regained their status in the market and were able to borrow again. Investors and taxpayers benefited from newly enacted state constitutional restrictions to reduce fiscal mismanagement.

In the 1920s, Arkansas made a similar mistake as the "canal boom" states in the previous century by attempting to develop an extensive system of roads in anticipation of the automotive age.<sup>xv</sup> The state launched the initiative at the municipal level, allowing towns to bond and develop roads individually. However, this effort created a disjointed network of roads and massive municipal debt. The state consolidated the municipal debt onto the state's ledger to ease their debt burden.

Illustrating the danger of debt leverage and unexpected risks, the Mississippi River flooded Arkansas in 1927. The flood ravaged industry and infrastructure, degrading the state's capital assets and undermining the state's revenue. Two years later, the stock market collapsed, heralding the Great Depression. By 1933, Arkansas was broke. Ultimately, Arkansas resolved its obligations through higher taxes—primarily an extremely high gas tax—and reduced social program spending.

Presently, states are not able to file bankruptcy under the federal bankruptcy code. However, inability to declare bankruptcy does not preclude default. Upon entering default, a largely ad hoc negotiation process ensues or, possibly, a settlement through lawsuits filed by the bondholders. The Puerto Rico default provides a more recent example of what a modern default would look like. Decades of fiscal mismanagement resulted in default on its general

obligation bonds in 2015.<sup>xvi</sup> In a period of chaos amplified by Hurricane Maria in 2017, the territory is yet to resolve its dispute with bondholders.

Legislatures of states with exorbitant liabilities, such as Illinois, Connecticut, and California, are closely watching Puerto Rico's default process. Although Puerto Rico is a territory rather than a state, the restructuring of its liabilities may serve as a blueprint or a warning to states considering it.

### **Debt Structures**

Debt structures can be categorized into three clusters: accelerated, level, and deferred. These are exemplified respectively by the debt service requirements of Nevada, Massachusetts, and Rhode Island. These states have similar final maturity dates, but different structures. These structures carry different risks and opportunity costs.

The state of Nevada's debt structure is 5<sup>th</sup> most accelerated nationally, with 77 percent of their total outstanding liabilities maturing between 2016 and 2026. Considering that Nevada has the 11th lowest total bonded obligations per capita, Nevada may be underutilizing the credit terms of its bonded obligations.<sup>xvii</sup>

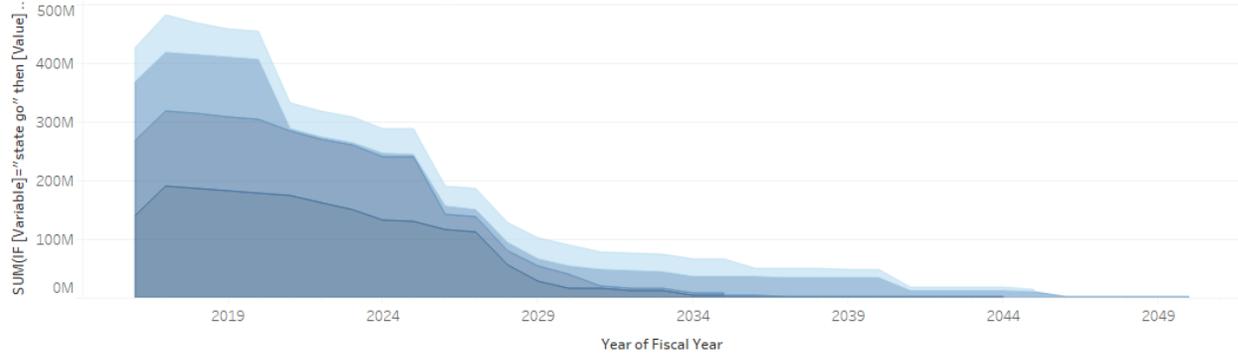
Efficiency and future coverage ratios are not the only considerations states should make when deciding whether to finance new projects. Debt and obligations "fragilize" an entity by dedicating a large portion of its revenue to fixed costs, limiting their ability to adapt to crises.<sup>xviii</sup> This goes beyond countercyclical stimulus or five-year smoothing in response to macro-economic trends; an environmental tragedy or the unexpected collapse of a major infrastructure asset can also significantly add stress to a state budget. An accelerated structure may be relatively less efficient, but this is offset by far greater flexibility, all else being equal.

In terms of annual debt service, Rhode Island and Nevada have similarly high rates, with Nevada devoting 9 percent of its revenues to debt service and Rhode Island devoting 11.2 percent.<sup>xix</sup> However, Rhode Island, relative to Nevada, likely has less flexibility in the future. In theory, most of Rhode Island's inflexibility comes from securitizing their tobacco settlement with a capital appreciation bond (CAB) which will expire in 2052.<sup>xxi</sup> In a CAB, interest accrued is not paid out at regular intervals throughout the life of the bond. Instead, this interest accrues and grows at an agreed upon compound interest rate (See Chart 5). The interest payable compounds for decades. Once payable, the debt service on the CAB is nearly the total debt service of 2015. Of course, it will not be paid in a single lump sum but, instead, refinanced even further out into the future. Decades from now, Rhode Island will have to wrestle with refinancing the CAB and subsequent debt service payments.

Deferred structures (backloading liabilities) also incur additional interest costs higher interest rates and extended compounding periods, usually semiannual applications of the interest

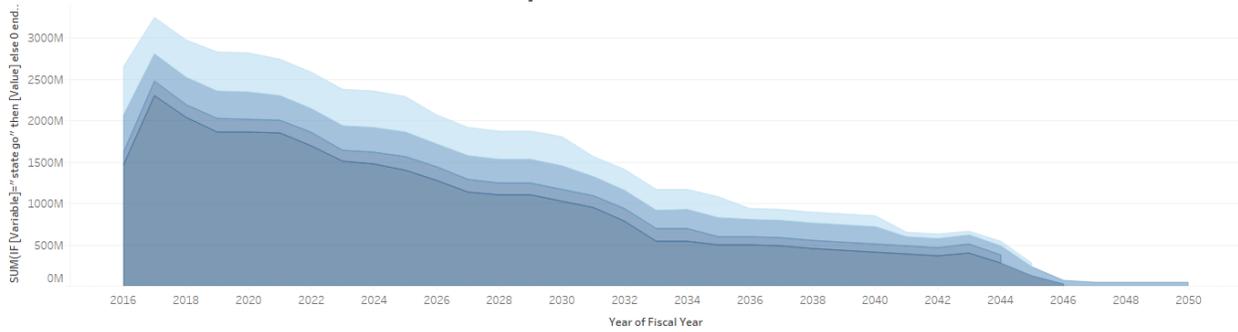
rate. Because the benefit derived from the borrowed funds must equal or exceed the costs of borrowing, each additional dollar of obligation or year of deferment becomes more difficult to justify than the last.

**Chart 3: Nevada's debt service requirements**



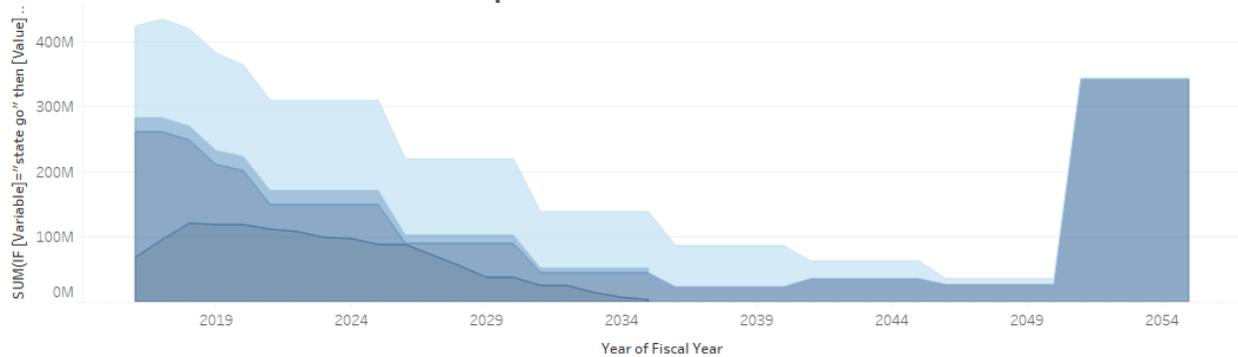
Variable  
 component rb  
 state RB BT  
 state RB GT  
 state go

**Chart 4: Massachusetts' debt service requirements**



Variable  
 component rb  
 state RB BT  
 state RB GT  
 state go

**Chart 5: Rhode Island debt service requirement**



Variable  
 component rb  
 state RB BT  
 state RB GT  
 state go

Economic shifts or interest rate changes can cause states to deviate from a debt management philosophy or prior long-term financial planning. For instance, recessionary budget deficits may induce bond issuance by states to mitigate revenue shortfalls, deficit bonding. The Federal Reserve may also decrease interest rates to spark economic growth, spurring states eager to take advantage of lower borrowing costs to issue new debt at lower interest rates to repay debt issued at higher rates (refunding bonds) or to initiate projects forgone during a recession. As a case in point, the Federal Reserve was already attempting to increase liquidity by decreasing short term lending rates in 2007 even before the depth of the economic crisis was not yet fully understood.<sup>xxii</sup> These actions can create a more deferred structure.

Additionally, poor economic outlook for states—such as Connecticut and Illinois—may be independent of national macroeconomic trends.<sup>xxiii</sup> In these localized environments, future tax revenues may be weaker, reducing investor appetite for bonds even as additional debt financing is sought. This may increase borrowing costs and accelerate the debt structure as newer issuances are forgone.

Sudden reductions in short term lending rates—exemplified by the financial crises of 2007 through 2009— can dramatically reduce the cost of capital investments and, unfortunately, incentivize deficit bonding. Furthermore, the likelihood of debt arbitrage with other liabilities—such as state pension plans—increases. Arbitrage involves investing borrowed funds in the hopes of investment returns exceeding interest costs.

If the expectation that the Federal Reserve will continue to increase interest rate targets, the currently low borrowing costs may prove temporary. This window of relatively low rates can be used prudently to refinance existing liabilities at lower rates. However, states may also feel pressured to expand their debt load without adjusting their medium-term debt service ratios. This results in a deferred liability structure that will present a challenge to future taxpayers as their representatives attempt to refinance the liabilities or face a large spike in debt service.

As an example, Rhode Island’s 2007 tobacco settlement CAB has some of these elements. In 1998, tobacco companies agreed to transmit \$100 billion to state governments over a 25 year period as part of massive legal settlement. 17 states sold bonds to investors with interest payments on the debt “secured” by the annual proceeds due the states from the tobacco companies to access a lump sum.<sup>xxiv</sup> The proportion of the 25-year stream of settlement proceeds bonded in this manner varied from state to state.

With the drop in interest rates, Rhode Island saw an opportunity to refinance their existing tobacco bonds in addition to bonding out a greater portion of the future settlement stream by issuing a larger tobacco settlement fund CAB.<sup>xxvxxvi</sup> The revenue crunch of the Great Recession compounded this desire. The proceeds of the sale were devoted to otherwise

delayed capital investments.<sup>xxvii</sup> In theory, refinancing the 2002 bond and the remainder of the tobacco settlement fund payments offered a lower than normal borrowing cost. In addition, this enabled the state to fully shed the risk of tobacco companies defaulting on their obligations, inverting to other countries, or paying less than expected amounts due to lower than expected consumption. The concern was validated as tobacco consumption projections turned out to be overly optimistic and thus the payments are lower than expected.<sup>xxviii</sup><sup>xxix</sup>

Despite their potential as a valuable financial tool, CABs can be destructive when poorly designed or too large relative to a state’s economic base.<sup>xxx</sup> The 2007 tobacco settlement bond requires a payment of nearly \$3 billion at maturity in 2052. If Rhode Island’s 2018 budget of \$3.8 billion grows 2.5 percent annually until 2052, this CAB payoff could represent more than one third of the state’s \$8.8 billion general fund budget in 2052.<sup>xxxi</sup> Of course, several factors could diminish the threat of a future budget crisis; inflation could increase (decreasing the real value of the debt), tax revenue could increase, and Rhode Island might restructure their liabilities again at a lower rate.<sup>xxxii</sup> Regardless, current Rhode Islanders have assumed risks ultimately shifted in large part to future taxpayers through no choice of their own.

### **Rationale Behind Maximum Time to Maturity of Bonded Obligations**

Maturity lengths of bonded obligations typically vary by type of obligation, with general obligation bonds having the shortest lifespan and component units having the longest. The decision to issue component unit bonds with longer life spans stems from a desire to take advantage of historically low interest rates, the ability of component units to file for bankruptcy, and the time value of money. We will briefly explain each factor below.

#### **Historically Low Rates**

In the wake of the Great Recession, the Federal Reserve dramatically lowered the federal funds target rate. “Federal funds” are overnight loans made by one bank to another in order for the borrowing bank to meet the reserve requirements set by the Federal Reserve. Individual banks determine the rate they will actually charge for these federal funds, but the Federal Reserve takes measures to influence this “price” of money. In order to spur this decline in rate, the Federal Reserve purchased trillions of dollars of government treasury bonds from banks. In effect, cash was infused into the banking system. Total “assets” held by the Federal Reserve—mostly consisting of government bonds purchased from banks—soared from under \$900 billion in 2008 to more \$4.4 trillion by the end of 2013.<sup>xxxiii</sup>

As a result of this and other reasons, the effective federal funds rate plummeted from 5.25 percent prior to the Great Recession to just 0.07 percent in the aftermath.<sup>xxxiv</sup> Likewise, the discount rate (the rate at which the Federal Reserve lends funds directly to banks in need of reserve capital) plunged from 6.25 percent in August 2007 to a record low 0.50 percent in January 2009, rates stayed under 1 percent until February 2016.<sup>xxxv</sup> Overall, long-term

interest rates plunged to levels unseen in more than 50 years. Quality corporate bond yields reflected this, dropping from 6.8 percent in October 2008 to just 3.48 percent in August 2012—the lowest since 1956.<sup>xxxvi</sup>

Many state governments chose to take advantage of these historically low interest rates, especially since these levels would likely prove temporary. Indeed, the Federal Reserve began increasing rates in 2016. By April 2018, the effective federal funds rate stood at 1.69 percent, the highest level in nearly 10 years. The current 2 percent target may rise in the future to perhaps as high as 5 percent.<sup>xxxvii</sup>

### **Risks for default build over longer time frames**

States that have longer term liabilities are generally taking on more risk but tend to do so in a savvy way. Time is an element of risk. Circumstances creating a default may be extremely rare in any given year; however, with sufficient time and variability in the occurrence of risk factors, the probability for default over long periods of time is far greater. The cumulative default over time in AAA corporate bonds illustrate this.<sup>xxxviii</sup>

To balance the risk associated with time, states have used component units to issue bonds. Agreeing to make interest payments for up to a century involves making long term assumptions about the coming century that are uncertain, even for institutions as historically stable as universities. The university can take on these liabilities because, in part, they have a path to restructuring as a component unit of the state. If an alternative university system was to arise in response to the student debt crisis, universities, that are component units, would be able to file for bankruptcy and renegotiate the century bonds, if needed. If the component unit becomes insolvent, taxpayers are not liable to backstop the obligations with general tax revenue.

### **Time value of money**

The present value of a dollar declines with the passage of time combined with inflation. Although inflation is an enemy of savers, inflation benefits the borrower. For instance, a promise today to pay someone \$1 million in the future is worth just \$667,608 in current dollars in 20 years, \$364,170 in 50 years, and \$13,262 in 100 years with 2 percent annual inflation. Why is this? Each year, \$1 million buys less than the year before as inflation erodes the value of each dollar. In certain instances, longer-term debt structures take advantage of this fact. In effect, inflation makes a future principal payment worth less in current terms than it's worth today. Despite this fact, interest rates on longer term bonds are typically too high relative to shorter term bonds to justify the issuance of long term obligations solely for eroding the future value of principal repayment. The higher interest rate charged for the ability to repay the debt at a date further into the future mitigates the advantage of inflation erosion of the future value in real terms of that debt.

### Other factors

Investor demand for a particular maturity length can influence the decisions related to bond issuance. Heightened demand means that an issuer can offer a lower interest rate and still attract the desired amount of financing. Issuers may also choose to increase the amount of the bond offering given that increased demands may result in a desired interest rate on a larger amount of obligations than previously thought possible. Demand for long maturity bonds is intense but niche because institutional investors such as pension funds and insurance companies match long term liabilities with investments in long term bonds.

The 2012 University of California century bonds exemplify the balancing act between risk, time value, and flexibility. The state treasurer sold a \$860 million interest-only bond with principal payment due at maturity in 2112 at a 4.9 percent interest rate.<sup>xxxixxi</sup> The proceeds of the bond were directed toward capital improvement, such as catching up on deferred maintenance and new projects across ten campuses. The California treasurer originally intended to sell \$500 million of University of California century bonds but ended up expanding the offering to \$860 million thanks to heightened demand from institutional investors.

### Interest costs

The price of money (interest) is determined by a complex system of information processed by the marketplace, albeit nudged by the Federal Reserve's short-term lending rate. Interest costs generally rise with credit risk and length of time until maturity.<sup>xli</sup> Generally speaking, the more deferred the structure of debt service, the greater the total interest costs. Under most circumstances, bonding far into the future exposes the state to the risk of high fixed costs during a recession or some other tragedy and high total interest costs.

Decisions made on the state level directly influence the interest rate on state bonds. Factors include the type of obligation issued, the credit rating of the issuer, the source of repayment, the trend of both the credit rating and reliability of the source of repayment, outstanding liabilities, the waterfall of payments, and other details of the bond covenant.

Given this multitude of variables, cost of borrowing comparisons across bonds must be made cautiously.

A key price determinant is whether a bond instrument is general obligation or a revenue bond, particularly a component unit revenue bond. As discussed earlier, a general obligation secures a bond with the full faith, credit, and taxing power of the state to repay the bond. A component unit bond is secured only by a revenue flow related to the component. For example, consider two states (A and B) seeking to construct new highways. State A has a poor credit rating and issues a general obligation bond with debt servicing to be paid with gas tax revenue and backed with appropriations, if needed. State B has a good credit rating

but chooses to issue the bond through a component unit with an identical credit rating that will operate the highway as a toll road, the proceeds of which will pay debt servicing costs. Despite State A's elevated credit risk, interest rates on both bonds may be similar. The credit rating differential placing State A at a relative disadvantage may be cancelled out by the risk premium related to State B's use of a component unit with its structured default option.

In recognition of the particular interest rate differentials inherent between general obligations and component unit obligations, this study limits all comparisons of interest costs to the general obligation bonds issued by 39 states.

Furthermore, as interest costs increase, the likelihood that a capital project—or anything else funded by bonds— will produce an economic or social utility more than its cost decreases. For example, a highway may produce \$120 of utility per capita and cost \$100 dollars to build in construction costs, resulting in \$20 of net utility per capita. However, borrowing costs will reduce this net utility value. Once interest costs exceed \$20 per capita, construction of the highway no longer produces a net benefit. Higher interest costs reduce the number of projects capable of producing a net benefit for a state.

#### **Budget stabilization funds alleviate bonded obligation credit risks**

Assets, such as budget stabilization or “rainy day” funds, can alleviate bonded obligation credit risks. These funds can help states weather economic downturns, reduce the need for deficit bonding, and reduce the likelihood of default on bonded obligations.

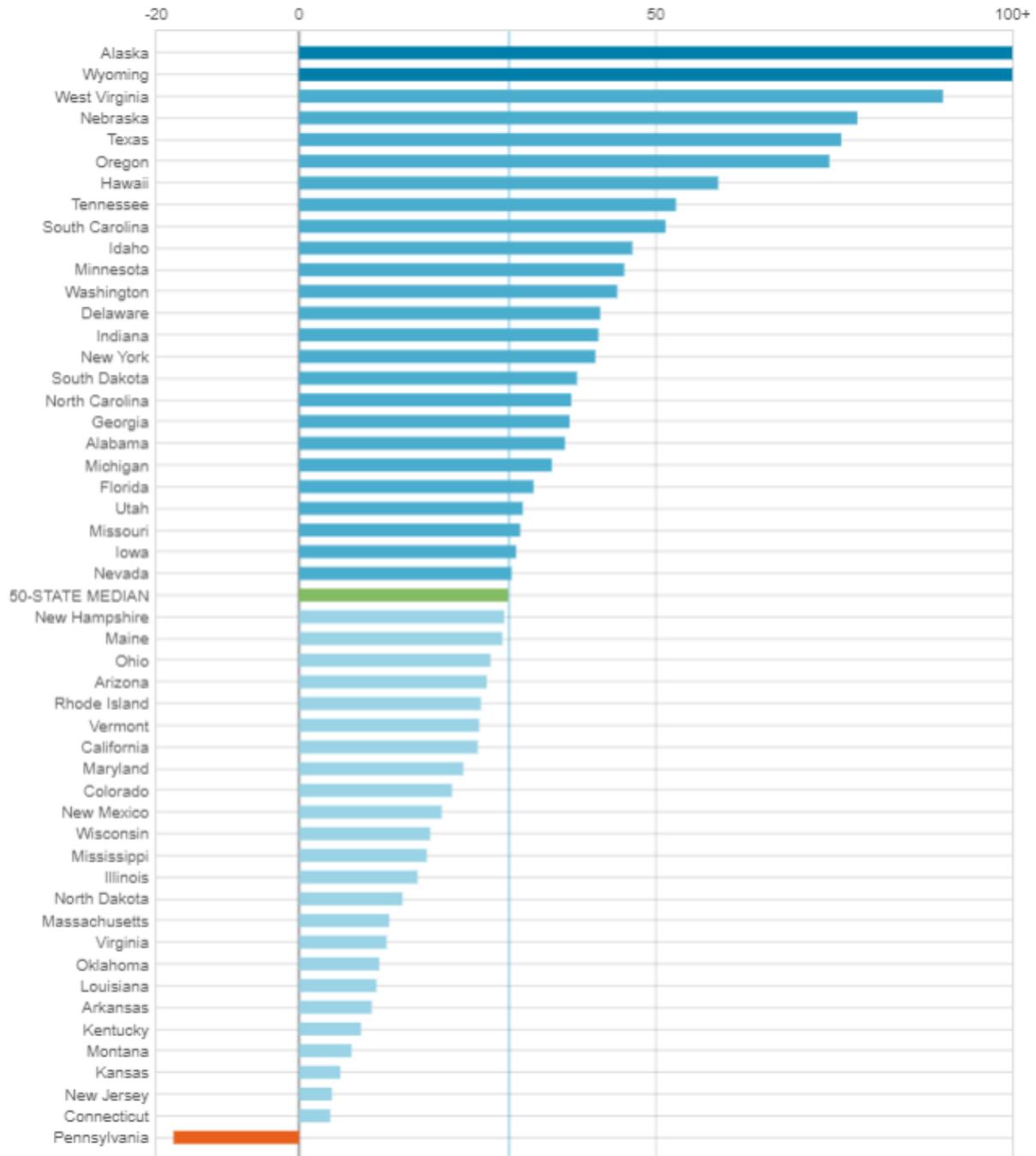
States could run on rainy days funds for a median of 20 days in 2017, an improvement from recent years.<sup>xiii</sup> Budget stabilization provisions vary widely. For example, Georgia did not report having a fund in 2017 while Alaska's could fund state government operations for 383 days.

**Chart 6: Days Each State Could Run on Total Balances**  
**Days Each State Could Run on Total Balances, FY 2017**

SORT BY:

Ranking ↓ A-Z ↓

None reported Less than 0 0 to 29 29 to 100 More than 100



(Source: Pew Charitable Trust, Fiscal 50)

Budget stabilization funds significantly impact state credit ratings. Consider the states with the two highest total bonded obligations, Connecticut and Alaska. Despite Connecticut's immense wealth and proximity to New York City and Boston, Alaska's general obligation bonds had a AAA S&P bond rating while Connecticut had a AA rating, two notches lower in the year studied, 2015.<sup>xliii</sup> Alaska's credit rating is due in large part to its massive reserve fund. Connecticut had a rainy-day fund of just \$59 per capita in 2017, contrasted with Alaska's robust \$6,353 per capita.<sup>xliiv</sup> Of course, Alaska also maintains a Permanent Fund worth nearly \$65 billion, nearly \$88,000 for every Alaska resident. Even after the fall of oil prices and subsequent collapse of Alaskan state revenues, Alaska still maintains a higher bond rating than Connecticut in 2017.<sup>xliv</sup>

Maintenance of a healthy rainy-day fund signals fiscal responsibility to investors and credit rating agencies. After all, this surplus revenue could easily have been spent on programs likely to improve the political fortunes of politicians. Although rainy day funds can prevent fiscal mismanagement, channeling resources into these reserves and protecting these reserves from premature drawdown often proves politically difficult. Automating deposits and placing restrictions on withdrawals can resolve these issues.

Since the Great Recession, many states have reevaluated and improved their rainy-day fund management. For example, in 2017 five states linked rainy day funds to revenue volatility, capturing surplus years to offset future downturns before lawmakers can be tempted to expand state programs.<sup>xlvi</sup> In this regard, volatility caps have a similar function to TABOR, a Taxpayers Bill of Rights. Both Colorado's TABOR and the American Legislative Exchange Council's model policy based on Colorado's TABOR require that excess revenue growth is deposited into a rainy-day fund. However, whereas TABOR aims to limit the growth of state government, a volatility cap only limits the growth of the state in that it prevents legislatures from echoing the business cycle.

### **Incentive challenges associated with long-term obligation management**

Policymakers must contend with several incentive challenges to long-term obligation management. Legislators and treasurers are typically able to manage state finance for several years, and yet the bonds that they issue or authorize can mature decades after they leave office. An example of this is the 2007 tobacco settlement refunding bond issued by Rhode Island described in the Debt Structure section of this report. Objectively evaluating whether to issue debt is especially difficult when the need is clear and the risk to taxpayers is hypothetical.

The lack of a path to structured default causes some investors to perceive a state's bonded obligations as safer than warranted. This increases demand for the debt, pushing rates lower than and thus incentivizing more borrowing. A recent example of this is Puerto Rico. Investors bought \$70 billion of Puerto Rican debt, primarily over the past 15 years, or

\$20,000 per capita, about twice the total bonded liability per capita of Connecticut or Alaska.<sup>xlvii</sup> The rising debt service ratio failed to deter both the state and investors from deepening the state's debt.<sup>xlviii</sup>

In 2016, Puerto Rico defaulted on their general obligation bonds, beginning a chaotic restructuring process that is yet to be resolved.<sup>xlix</sup> While Puerto Rico is not a state, it also lacks a path to structured default.<sup>l</sup> Initially, then-President Obama and both parties in congress intervened by blocking investor lawsuits and providing a temporary framework for default. However, the temporary framework lapsed, triggering a series of lawsuits by bond holders against Puerto Rico, including claims of unconstitutional seizing of private property.<sup>li</sup> Three years later, negotiations over the territory's debt continue.<sup>lii</sup> While bondholders were not surprised when Puerto Rico defaulted on the bonds, it's doubtful they were expecting the restructuring process to be this protracted and expensive.

However unlikely, the ambiguity of state default, along with other tax-based market distortions, appears to create a form of moral hazard, where states issue and investors purchase more debt than sensible.

### **Chapter 3: Methodology**

This study collected the debt service requirements to maturity for bonds by type of bond primarily from state comprehensive annual financial reports (CAFRs) for fiscal year 2015. The bonded obligation categories were selected based on the most common form of sorting used by states in their CAFRs. Categorizations in states not using the more common forms were reaggregated, when possible, to approximate comparisons. The data was then analyzed by state in total, per capita, over time, and interest costs relative to total.

#### **Data collection**

Debt service requirements to maturity were collected between January 1 and February 1, 2018, from state CAFRs or alternative sources for all states. The fiscal year was selected based on the most recent state CAFR of the state that had the least up-to-date CAFR, which was, at the time of collection, Alabama. Some states either did not report their debt service requirements by year to maturity or reported their debt service to maturity in aggregates less detailed than normal. For these states, an official bond statement from a bond issued toward the end of the 2015 fiscal year was used in its place; the financial disclosure section of official statements usually has a detailed debt service to maturity table. Official statements were retrieved from the Electronic Municipal Market Access (EMMA) website.<sup>liii</sup> However, three states required an additional step of contacting the state treasurer's office for a more detailed description and division of state bonded obligations.

The use of a uniform starting year is a deviation from our other state liability studies, *Unaccountable and Unaffordable, 2017* and *Other Post-Employment Benefits, 2017*. These studies use *the* most recent year and most recent year minus one. CAFRs are more regular in

frequency than pension or other post-employment valuations. As such, regular, annual tracking is more possible for bonded obligations than liabilities requiring actuarial valuations.

Most states organized their bonds into general obligation bonds, governmental activity bonds, business-type activity bonds, and component unit bonds. However, many states organized their bonded obligations in variations from this format, some to a slight degree and others omitted the bonded obligation section of their CAFR entirely in favor of a debt report. Some of these differences rendered the debt service tables in the CAFR unusable. For example, Image 1, below, is a debt service table from the Arizona state CAFR which aggregates general and special obligation bonds. As specified in the CAFR, special obligations bonds are “payable solely from gross pledged revenues and are not general obligations of the State.” These special obligation bonds are used for highway construction and other capital projects that most states would call “governmental activities.” Because our study does not aggregate general obligation and governmental activity bonds, a financial disclosure from an official bond statement was used in place of a state CAFR.

The Nevada state CAFR highlights another challenge with re-aggregating into the four more common categories: states may not be ascribing identical meanings to identical financial terms. For example, a capital project bond issued by a state university, paid for by leasing fees, may be considered a business-type activity bond in one state and a component unit bond in another. Presumably, these differences reflect a relatively closer financial relationship to the state in the former case. Regardless, states with similar bonds, and potentially similar financial obligations, may have the appearance of significantly different liability structures because of differences in how they report their finances.

**Image 1: Example from Nevada State Comprehensive Annual Financial Report, 2015**

General obligation bonds and special obligation bonds of the primary government outstanding at June 30, 2015 are comprised of the following (expressed in thousands):

	Interest Rates	Original Amount	Principal Outstanding
<b>Governmental activities:</b>			
<b>General obligation bonds:</b>			
Subject to Constitutional Debt Limitation	.25-7.0%	\$ 1,616,210	\$ 1,123,490
Exempt from Constitutional Debt Limitation	2.0-6.0%	740,940	484,440
<b>Special obligation bonds:</b>			
Exempt from Constitutional Debt Limitation- Highway Improvement Revenue Bonds	2.5-5.0%	797,900	486,140
Subtotal		<u>3,155,050</u>	<u>2,094,070</u>
<b>Issuance premiums (discounts)</b>			
Governmental activities bonds payable		<u>273,009</u>	<u>176,725</u>
		<u>3,428,059</u>	<u>2,270,795</u>
<b>Business-type activities:</b>			
<b>General obligation bonds:</b>			
Exempt from Constitutional Debt Limitation	1.75-5.1%	103,755	73,370
<b>Special obligation bonds:</b>			
Unemployment Compensation Bonds	2.0-5.0%	548,900	410,310
Housing Bonds	*.20-6.95%	815,870	598,548
Subtotal		<u>1,468,525</u>	<u>1,082,228</u>
<b>Issuance premiums (discounts)</b>			
Business-type activities bonds payable		<u>67,435</u>	<u>42,691</u>
		<u>1,535,960</u>	<u>1,124,919</u>
<b>Total bonds payable</b>		<u><b>\$ 4,964,019</b></u>	<u><b>\$ 3,395,714</b></u>

\*Many Housing bonds have variable rates of interest. The tax exempt bonds track the SIFMA Index while the federally taxable debt tracks the one-month LIBOR Index.

Debt service requirements (principal and interest) for all long-term bonds and notes outstanding at June 30, 2015, of the primary government are summarized in the table following (expressed in thousands):

Year Ending June 30	Governmental Activities		Business-Type Activities	
	Principal	Interest	Principal	Interest
2016	\$ 318,515	\$ 87,526	\$ 160,861	\$ 35,851
2017	157,920	81,012	179,224	28,867
2018	166,800	75,681	145,852	20,413
2019	156,065	65,697	18,883	15,110
2020	164,460	59,584	18,798	61,381
2021-2025	749,915	180,142	92,267	60,401
2026-2030	346,620	31,258	97,963	42,813
2031-2035	33,035	1,940	144,556	28,997
2036-2040	740	12	157,930	14,160
2041-2045	-	-	55,752	3,830
2046-2050	-	-	10,142	566
<b>Total</b>	<u><b>\$ 2,094,070</b></u>	<u><b>\$ 582,852</b></u>	<u><b>\$ 1,082,228</b></u>	<u><b>\$ 312,389</b></u>

Source: Nevada State Comprehensive Annual Financial Report, 2015

Two states—Florida and New Jersey—prepared annual debt reports in lieu of long-term obligation notes in their state CAFRs and had less than descriptive official bond financial disclosures. These reports are detailed breakdowns of the state and component unit liabilities. In both cases, the ALEC Center for State Fiscal Reform research team reached out to the treasurer’s office. Florida referred the team to the Division of Bond Finance where staff quickly compiled a spreadsheet of the state liabilities and provided information about

the type of bonds and obligations of each issuer. New Jersey's various budget, finance, and treasurer's offices were unable to decide between them who should respond to the team's request. Eventually, the treasurer's office responded, claiming that "the State cannot provide you with the underlying data from the visualizations as it would be providing asymmetric information to you that is not publicly available to the rest of the financial community." For this reason, New Jersey's debt service requirement to maturity table is less descriptive than any other state.

Depending on the state and the source of the data, the first five years of debt service requirements are annual figures and reported every five years in aggregate thereafter. In our visualizations, the five year lump sums are smoothed over the five years they represent. Figures from official bond statements tended to be reported annually to the final maturity. Some states used "Thereafter" and aggregated the remainder of their bonded obligations. In CAFRs that used "Thereafter", the time period between the last five-year increment and the date of the last bond to mature were used to average the "thereafter" lump sum. The smoothing approach misrepresents balloon payments, dividing the payment over five years, or the thereafter period, as opposed to the single year it is due. However, using more detailed debt service tables found in official bond statements would cause the starting point, 2015, to vary more as some states did not issue bonds in 2015, or even the years leading up to 2015.

### **Component unit reporting**

While the vast majority of state general, governmental, and business type revenue bonds were accessible from the state CAFR, 44 of the 50 states, component unit reporting varied to a greater degree. 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. The quality of the component unit financial reports tended to be below that of the state CAFRs, and thus the component units' most recent bond issued before 2016 was often pulled from EMMA and used for calculating the component units' debt service requirement. Component units that did not have comprehensive financial reports or outstanding bonds on EMMA were assumed not have bonded obligations.

The assumption that component units that do not have readily accessible financial reports or bonds on EMMA do not have outstanding bonds that are material to the component unit, or potentially the state, underlines a challenge in measuring state liabilities and encouraging greater transparency. A state with excellent financial transparency may appear worse than a state that has poor financial transparency when the truth may be the complete opposite.

### **Omitted liability instruments**

Notes, certificates of participation, lease agreements, and other non-bonded obligations were omitted from this study wherever possible. Most of 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 such notes into their bonded obligation sections. These notes are assumed to be immaterial relative to the error introduced by deviating from state CAFRs. Ideally, states would not aggregate different types of obligations or instruments in the CAFRs.

### **Time value of money**

One of the primary limitations of this study is that the 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 premium. Unlike most state employee pensions, a risk-free rate may not be applicable to a component unit or even some types of revenue bond. At most, an assumed inflation rate could be reasonably applied to general obligation bonds, about 2 percent, but even the Federal Reserve's target inflation rate may change soon.<sup>liv</sup> For this reason, our figures overestimate the liabilities of bonds as the maturities lengthen.

## **Chapter 4: Policy recommendations**

This study recommends the following three, tiered policy proposals: improve budget stabilization fund management, create or extend bond caps for tax supported bonds (including gas taxes), and that congress should explore eliminating the ambiguity surrounding state defaults by creating a path to structured default.

### **Budget stabilization fund management<sup>lv</sup>**

Improving budget stabilization funds is the most politically feasible recommendation. Rebuilding financial buffers stronger than maintained before should be one of the states' highest priorities, especially considering the fiscal calamity experienced during the Great Recession. Without adequate stabilization funds, budget crises remain likely to spur the worst types of bonding, such as deficit bonding, pension obligation bonding, and other more deferred structures.

States deposit revenue into stabilization funds based on a variety of rules, see Image 2, below. However, the stabilization fund goals of most states do not accurately account for the volatility risks associated with each of their revenue streams.<sup>lvi</sup> In short, states reliant primarily on sales and property taxes will need a smaller fund relative to states more reliant on volatile income taxes.

**Image 2**  
**States Grouped by Deposit Rules**  
Definitions of categories and number of states using each

Tied to Volatility?	Category	Conditions for deposit	Number of states
Yes	Linked to economic growth	Personal income in the state exceeds a threshold or a level based on past performance	3
Yes	Linked to specific revenue growth	Revenue from a specific source (such as capital gains taxes, severance taxes, or settlements) exceeds a threshold or a level based on past performance	5
Yes	Linked to total revenue growth	Current revenue exceeds a threshold or a level based on past performance	4
No	Based on surpluses	Revenue exceeds expenditures, resulting in a surplus or unappropriated fund balance	21
No	Revenue forecast error	Actual revenue exceeds forecast	5
No	Static deposits	A set amount each year	1
No	Required static balance	To keep the fund at a set level	4
No	By appropriation	At the legislature's discretion	3
No	State has no fund	There is no fund that functions as a true budget stabilization fund.	4

Source: The Pew Charitable Trust, “Building State Rainy Day Funds”

In addition to reforming deposit conditions, states should also re-examine their withdrawal conditions.<sup>lvii</sup> Stabilization fund purposes vary from state to state. When withdrawal conditions are too loose, structural deficits can gradually erode a budget stabilization fund. On the other hand, overly restrictive withdrawal conditions may prevent the state from

utilizing the fund during a recession. Limitation of withdrawals to shifts in macroeconomic conditions may be prudent to prevent drawdowns due to typical revenue volatility or state and local economic and demographic shifts.

For example, Alaska’s heightened tax revenue volatility may require large, regular withdrawals and deposits independent of national economic trends. For most other states, declines in revenue independent of national trends may signal structural fiscal problems. In those instances, reliance on a budget stabilization fund will exacerbate, rather than resolve, the underlying problems.

Better managed and larger budget stabilization funds can reduce the likelihood of poor financial choices during economic downturns, increase the confidence of credit rating agencies in the state's ability to manage its finances, lower the costs of bonding, and increase the number of financially feasible capital projects.

### **Bonding caps and revenue bonds**

Bonding caps for various types of obligations prevent financial mismanagement. Caps on general obligation bonds are the most common. In fact, some states prohibit or dramatically limit the issuance of general obligation bonds; Arizona, Colorado, Idaho, Indiana, Iowa, Kansas, Kentucky, Nebraska, North Dakota, South Dakota, Wyoming.

#### **General obligation bond caps**

Although well-intended, caps on general obligation bonds may simply result in increased issuance of revenue bonds. Revenue bonds can be backed by taxes and fees for core services, such as the gas tax or highway tolls, which have a direct impact on the cost of living for a state.

As a case study, consider Connecticut. In the decade prior to 2017, Connecticut’s fiscal outlook dramatically deteriorated, earning the state multiple credit downgrades.<sup>lviii</sup> In 2011 and 2015, the state responded to falling revenues by increasing taxes. However, this only accelerated the erosion of the state’s tax base.<sup>lix</sup> Entering the 2017 legislative session, state legislators were faced with projected deficits for the current and following two years.<sup>lx</sup> This paired with massive unfunded pension, other post-employment benefit liabilities, and outstanding general obligation bonds, earned Connecticut a “F” financial ranking from Truth in Accounting.<sup>lxi</sup>

In 2017, Connecticut’s state budget was four months late, but it included a state bonding cap for general obligation bonds. The goal of the cap was to prevent the state from taking on future debt by capping authorization to \$2 billion, starting in 2017 and adjusted for inflation thereafter.<sup>lxii</sup> However, the cap only protects against the over-issuance of general obligation bonds, meaning that the state could simply issue more revenue bonds or revenue bonds out

of component units. Connecticut highlights both the benefits and limitations of a general obligation bond cap.<sup>lxiii</sup><sup>lxiv</sup>

### **Tax revenue bonds**

Tax supported revenue bonds can create pressure on the budget or increase the probability of new and higher taxes. The most common tax supported revenue bonds are gas tax supported revenue bonds for capital projects, such as bridges and roads. Mismanagement of these bonds can create large, financial burdens that must be shored up with additional, future revenues. Nationally, the states have accrued \$86 billion of critical, yet deferred, infrastructure maintenance. States have likely bonded for and built more infrastructure projects than they can afford to maintain, especially as gas tax revenues decline.<sup>lxv</sup>

A bonding cap should extend to governmental activity revenue bonds to reduce this likelihood of infrastructure overextension, the resulting degradation of existing infrastructure, and a rise in the cost of living due to a higher tax burden.

### **Business type activity bonds**

On the other hand, business type activity revenue bonds should not be capped, as an increase in their total bond liability is largely dependent on an increase in actual demand for the entities services. Business type revenue bonds are best applied to collective action problems while governmental activity bonds are often used for subsidization.

Take two, hypothetical capital projects, a bridge connecting two low income areas and a bridge connecting two high income areas. Let us assume a need for both bridges due to congestion on existing routes. Tolls could be set high enough on the first bridge to cover the cost of the project and maintenance. However, ridership would not be sufficient at the same toll level to cover the costs of the second bridge. For the first bridge, a business-type revenue bond backed by toll revenue makes the most sense. In the latter situation, a governmental activity bond that is double barreled with toll revenue and gas tax appropriations when necessary would be more fitting.

In moderation, this sort of double barreling can allow the state to pursue projects that operate at a loss but have social benefits. But in excess, capital project bonds can lead a state to extend its transportation infrastructure beyond what it can maintain on gas tax revenues, leading to desperate budget maneuvers like borrowing income tax revenue from the next fiscal year to cover the current fiscal year's transportation fund deficit.<sup>lxvi</sup>

Effective bonding caps can incentivize the legislature to consider the potential challenges associated with more deferred debt structures and to maintain a certain debt service ratio over time. Bonding caps can shift the debate from what can be passed to what is most urgent to fund.

### Structured vs. chaotic default

Both historically and relative to other industrialized countries, states are managing their bonded obligations well. However, concern still exists because this debt is far from being the only component of total state liabilities. Bonded obligations are unlikely to be a leading cause of defaults on a state level, but this matters little in the event a state's overall debt load becomes unbearable.<sup>lxvii</sup> In recent years, the primary driver of total state debt service has been state pension obligations. Although several states have enacted substantive reforms (including Utah, Oklahoma, Michigan, and Pennsylvania), unfunded public pension liabilities still exceed \$6 trillion when valued using a risk-free rate of return.<sup>lxviii</sup> Arkansas' default in the 20th century and Puerto Rico's default on constitutionally guaranteed debt recently bear testament of the risks inherent to state debt. Unlike the federal government, states do not have the capacity to monetize the debt by issuing more currency. If the fiscal conditions in a given state deteriorate, state debt default is certainly a possibility.

A path to structured default could prevent chaos and federal bailouts in the event of such a crisis. Although the risk of default is already implied by the spread of yields demanded by investors on state general obligation bonds relative to U.S. Treasury bonds with similar maturities, lack of a defined process for restructuring state liabilities in the event of default impedes the ability investors to accurately gauge the risk of purchasing additional state debt. Interest rates which fail to reflect actual risk may act as a perverse incentive for state governments to take on more debt and for investors to lend the funds at bargain rates. For example, Puerto Rico bonds more fully reflective of associated risks would have discouraged the territory from additional borrowing and deterred investors from lending additional funds. Lack of a clear process in the event of default could cause similar—albeit much larger—problems in states nationwide.

Clearly defined parameters and processes for state default would transform the risk from a known-unknown to a known-known. Investors could better ascertain and calculate the risks of default and possible recovery rates. Once the rules of default are established, pricing of state debt will become more precise as more information has been added to the market. Depending on how loose or strict the rules of state default are set, the spreads would widen or tighten, respectively. States could institute limits related to total debt issued relative to state GDP or interest obligations relative to total revenue to ensure to minimize default risks. Bond covenants could specify that breach of these limits constitute a technical default (a lesser offense), even if actual default has not occurred.

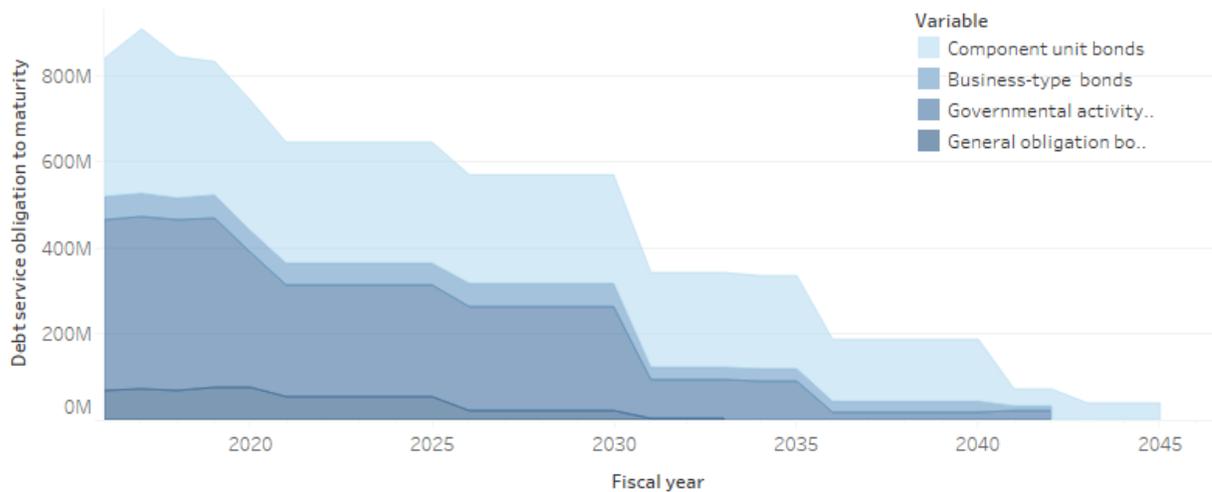
A path to structured default could also eliminate the moral hazard stemming from a potential for federal bailouts of state governments. For example, the prospect of a federal bailout may be delaying meaningful fiscal and pension reform in Illinois. Some political factions perceive a federal bailout as a viable, or even preferable, alternative to state-level

reforms.<sup>lxix</sup> Even a single bailout in one state on a small amount of debt would set the precedent for broad state bailouts on a massive level nationally. The American Legislative Exchange Council has taken a clear stance against federal bailouts of states, issuing a model resolution opposing federal intervention in January 2017.<sup>lxx</sup> A path to restructure state liabilities through bankruptcy proceedings would eliminate expectations of federal bailouts.

## **Conclusion**

There is no “one-size-fits-all” policy for bonded liability management. Evaluating the decision to issue a bond requires an understanding of existing liabilities, the quantitative and qualitative aspects of the liabilities, the future fiscal health of the state, and a balance between efficient utilization of credit and future flexibility to manage unexpected challenges. This paper recommends that state policymakers err on the side of caution by developing and maintaining assets commensurate with their revenue volatility, limiting obligations that are dependent on general taxation, and for the federal government to remove the ambiguity surrounding state default, thereby increasing information in the market and allowing it to price state debt more precisely. These policy recommendations would, in tandem, decrease the likelihood of state default.

## Alabama



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Alabama	\$152.45	14	\$739,981,000.00	18

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Alabama	\$1,029.09	15	\$4,995,054,000.00	39

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Alabama	\$219.57	24	\$1,065,748,000.00	30

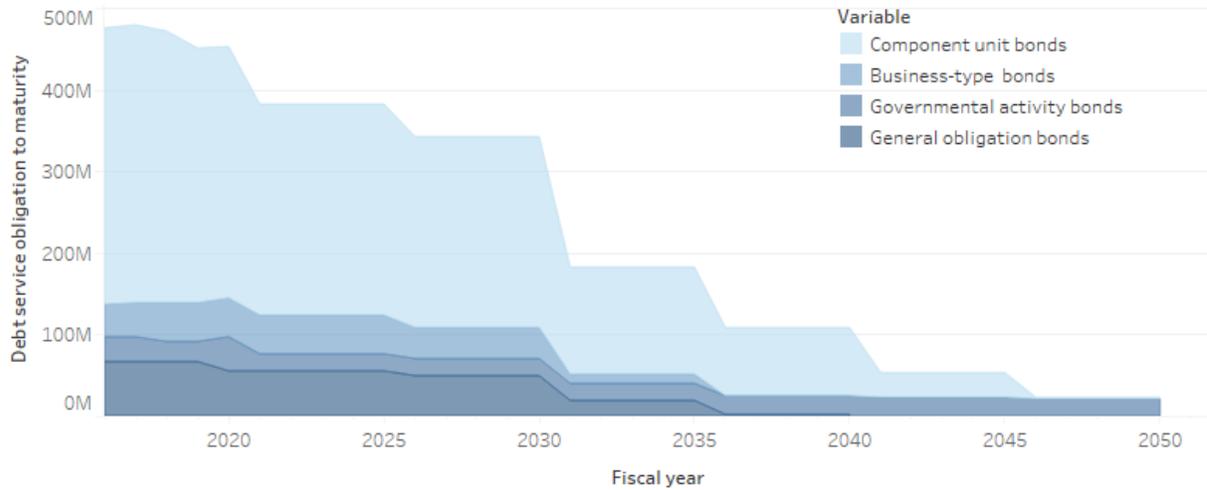
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Alabama	\$1,307.23	34	\$6,345,153,000.00	37

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Alabama	\$2,708.34	23	\$13,145,936,000.00	29

## Alaska



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Alaska	\$1,300.24	36	\$959,200,000.00	20

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Alaska	\$1,060.58	14	\$782,400,000.00	18

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Alaska	\$952.68	42	\$702,800,000.00	23

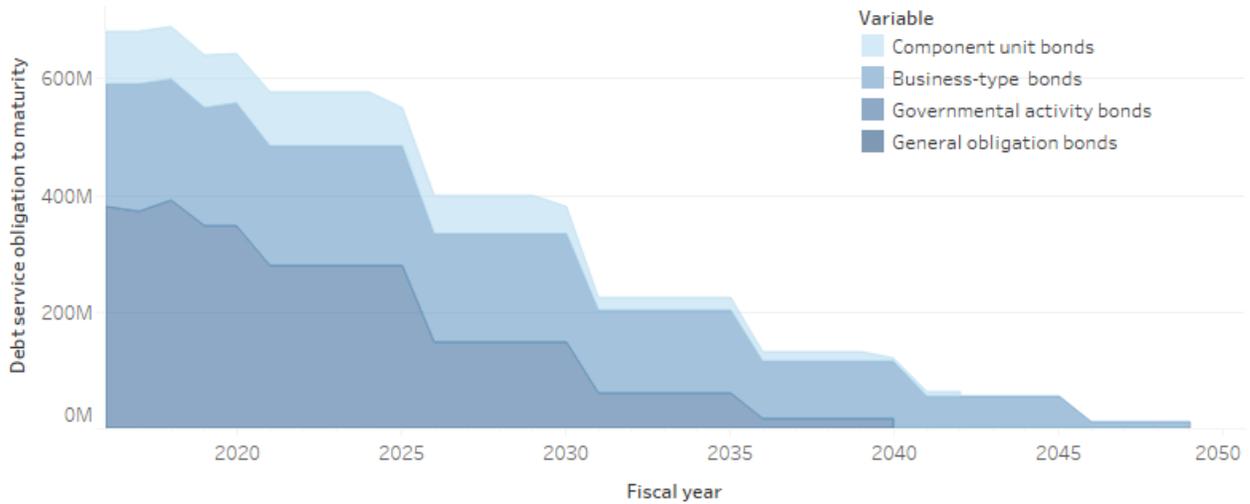
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Alaska	\$7,262.21	50	\$5,357,400,000.00	35

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Alaska	\$10,575.71	50	\$7,801,800,000.00	19

## Arizona



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Arizona	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Arizona	\$636.50	20	\$4,339,382,000.00	37

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Arizona	\$665.94	39	\$4,540,119,000.00	42

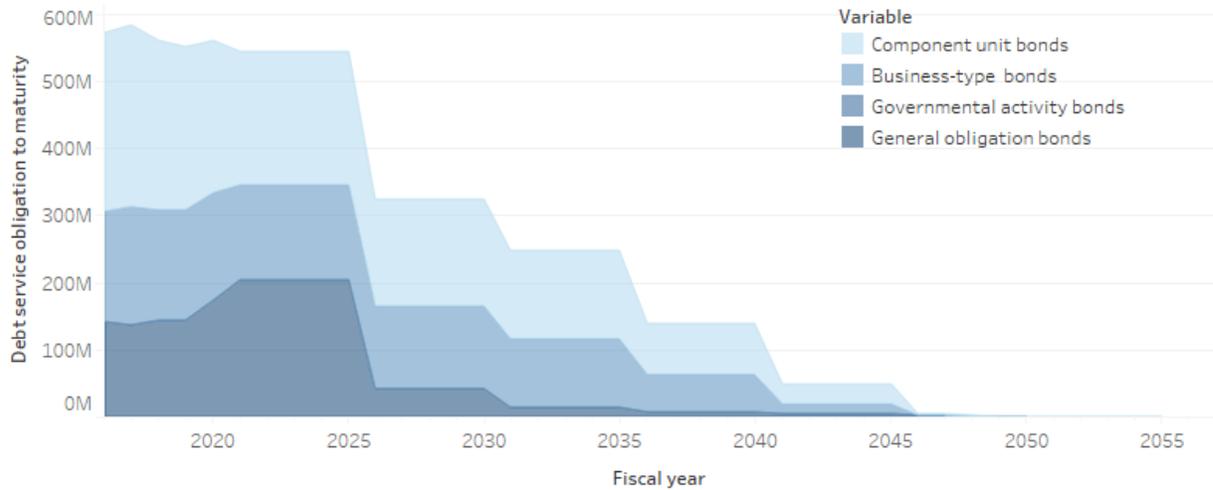
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Arizona	\$204.75	8	\$1,395,909,000.00	15

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Arizona	\$1,507.20	9	\$10,275,410,000.00	27

## Arkansas



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Arkansas	\$700.03	27	\$2,084,586,000.00	26

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Arkansas	\$0.00	45.00	\$0.00	1.00

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Arkansas	\$1,013.85	43	\$3,019,088,000.00	39

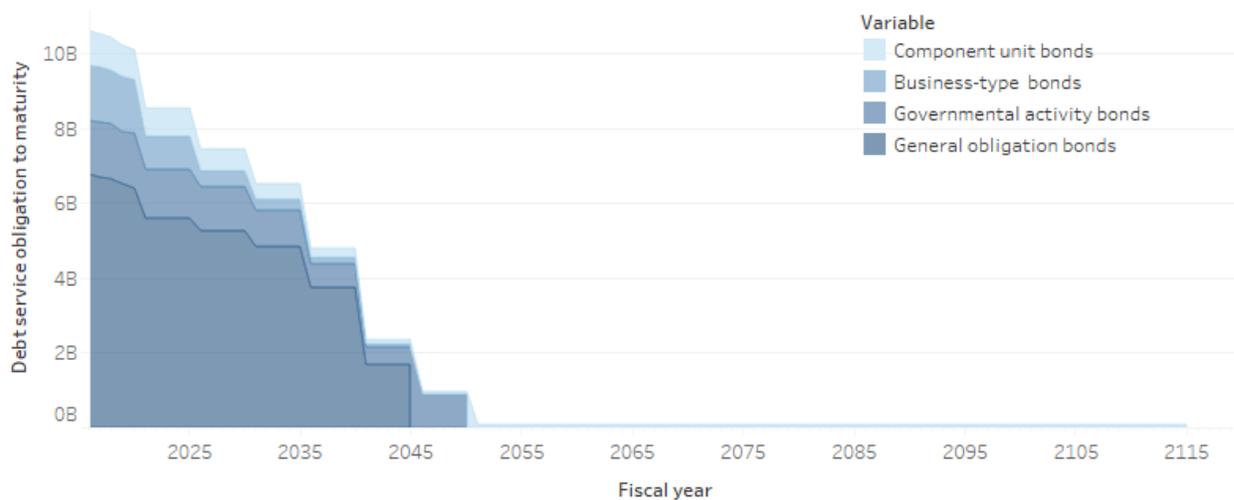
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Arkansas	\$1,430.95	1	\$4,261,163,000.00	1

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Arkansas	\$3,144.83	26	\$9,364,837,000.00	25

## California



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
California	\$3,553.34	1	\$138,558,774,250.00	1

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
California	\$877.75	1	\$34,227,116,000.00	1

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
California	\$424.20	1	\$16,541,142,000.00	1

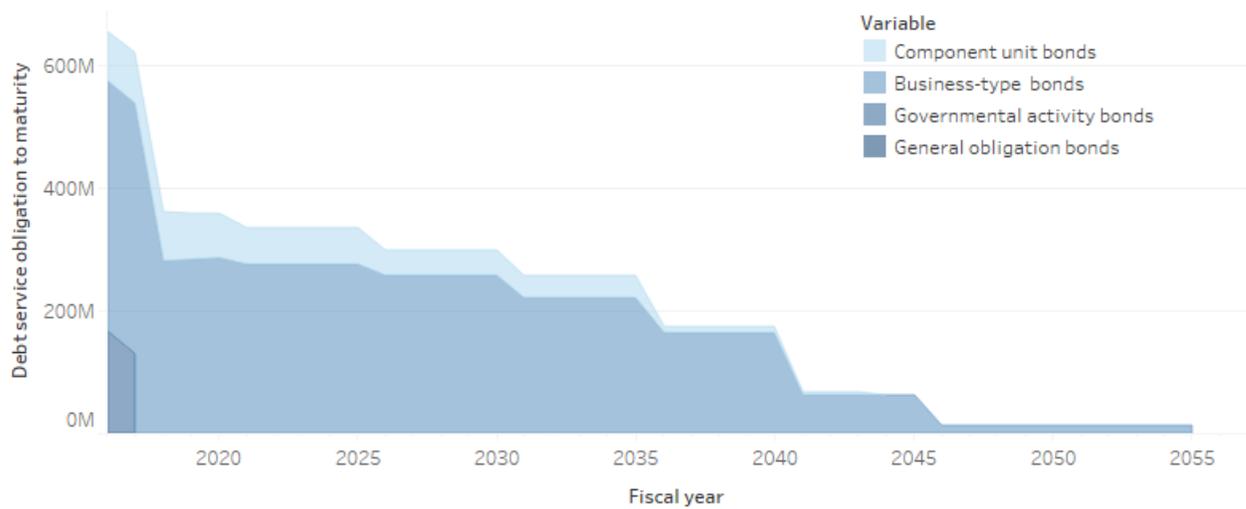
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
California	\$505.84	17	\$19,724,849,000.00	47

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
California	\$5,361.14	42	\$209,051,881,250.00	50

## Colorado



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Colorado	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Colorado	\$54.37	40	\$296,267,000.00	15

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Colorado	\$1,227.06	46	\$6,686,003,000.00	45

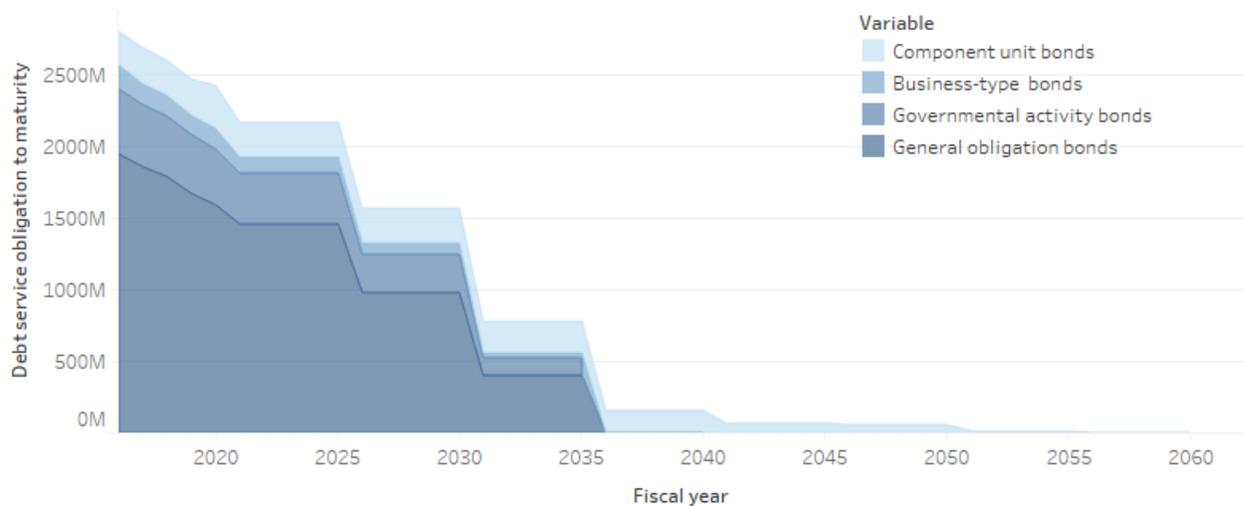
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Colorado	\$212.67	9	\$1,158,797,000.00	13

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Colorado	\$1,494.10	8	\$8,141,067,000.00	22

## Connecticut



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Connecticut	\$6,428.20	50	\$23,043,358,000.00	45

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Connecticut	\$1,632.12	6	\$5,850,698,000.00	42

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Connecticut	\$520.56	37	\$1,866,056,000.00	34

### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Connecticut	\$1,728.71	39	\$6,196,956,000.00	36

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Connecticut	\$10,309.58	49	\$36,957,068,000.00	42

## Delaware



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Delaware	\$2,629.20	44	\$2,482,167,000.00	28

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Delaware	\$1,273.03	11	\$1,201,836,000.00	19

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Delaware	\$0.00	1.000	\$0.00	1.000

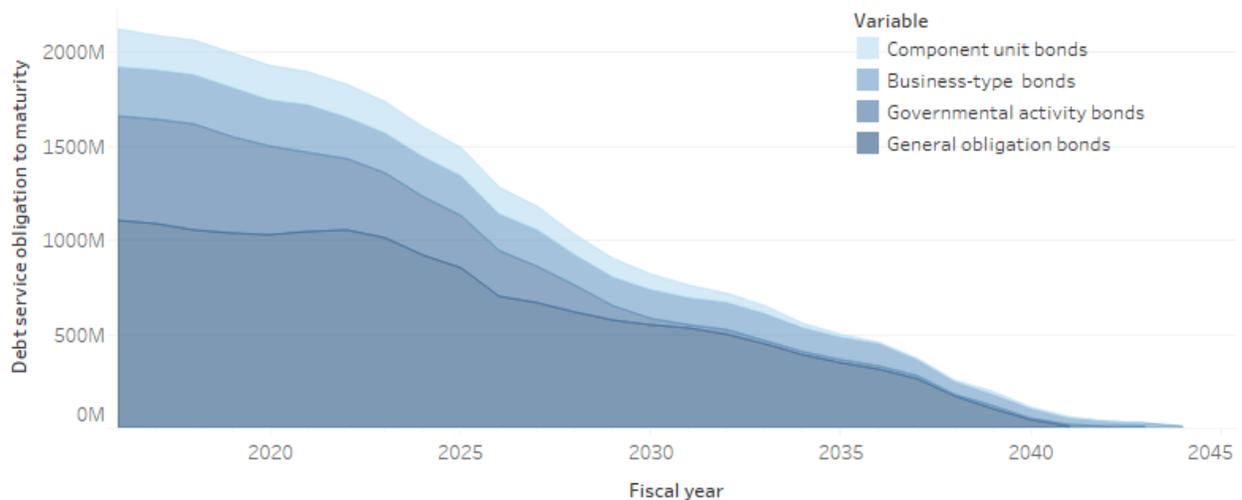
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Delaware	\$911.87	28	\$860,870,000.00	9

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Delaware	\$4,814.10	40	\$4,544,873,000.00	10

## Florida



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Florida	\$809.55	28	\$16,389,206,450.00	43

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Florida	\$259.72	30	\$5,258,056,886.00	41

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Florida	\$215.61	23	\$4,364,926,850.00	41

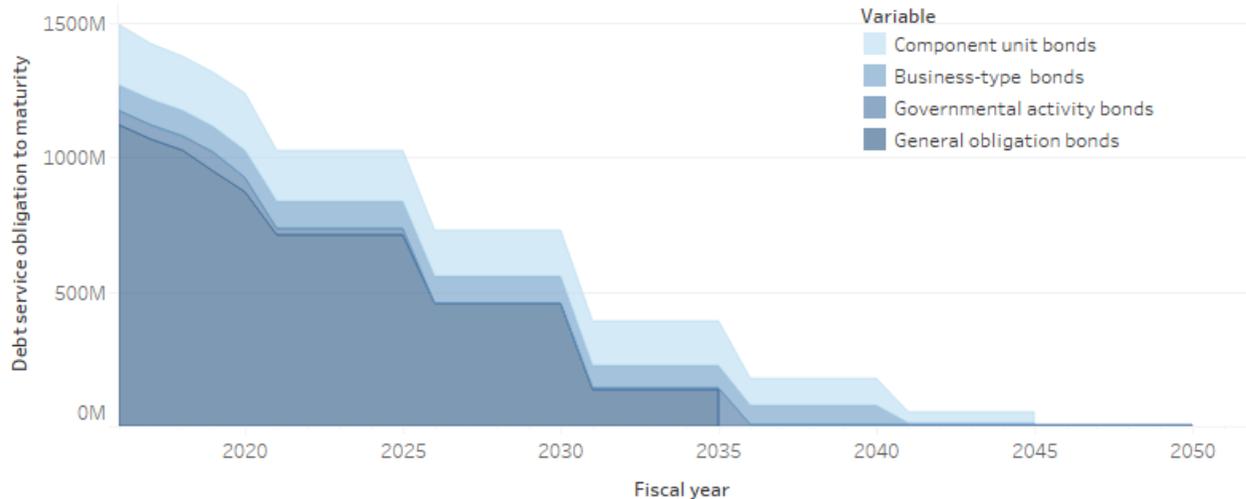
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Florida	\$129.88	7	\$2,629,395,893.00	24

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Florida	\$1,414.75	5	\$28,641,586,079.00	38

## Georgia



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Georgia	\$1,130.17	33	\$11,527,043,000.00	42

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Georgia	\$50.44	42	\$514,469,000.00	16

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Georgia	\$224.09	26	\$2,285,624,000.00	37

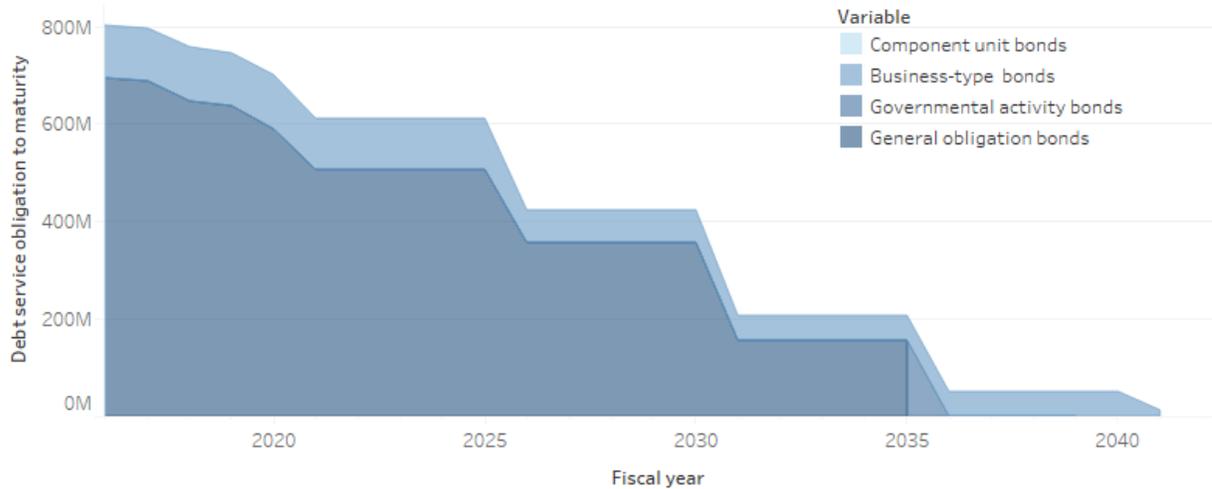
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Georgia	\$429.01	15	\$4,375,636,000.00	34

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Georgia	\$1,833.71	12	\$18,702,772,000.00	32

## Hawaii



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Hawaii	\$5,852.94	49	\$8,341,365,000.00	37

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Hawaii	\$0.57	44	\$807,694.00	7

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Hawaii	\$1,346.23	48	\$1,918,585,000.00	35

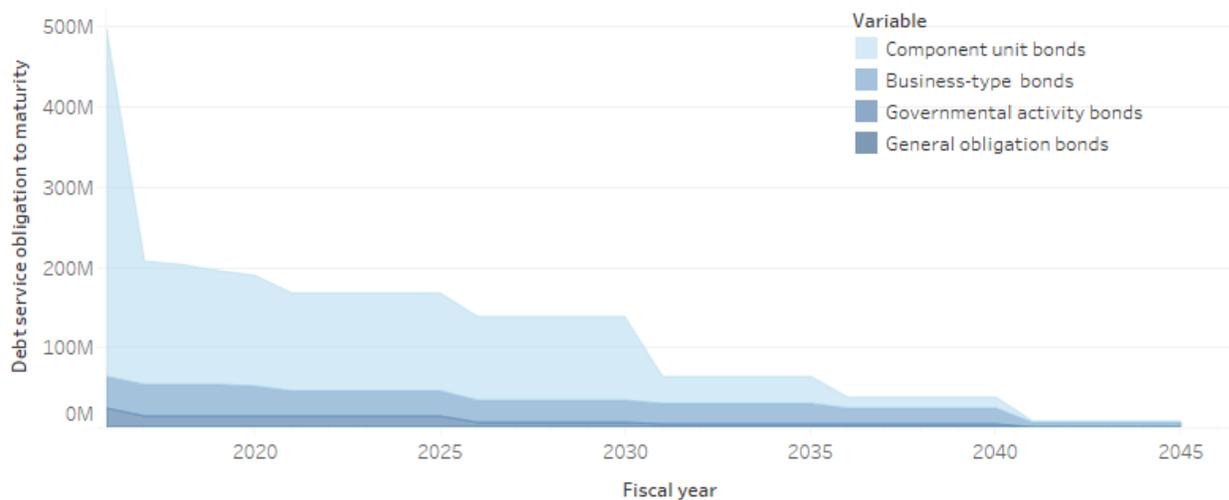
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Hawaii	\$0.00	1.000	\$0.00	1.000

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Hawaii	\$7,199.74	46	\$10,260,757,694.00	26

## Idaho



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Idaho	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Idaho	\$130.72	37	\$216,051,000.00	13

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Idaho	\$451.32	35	\$745,960,000.00	24

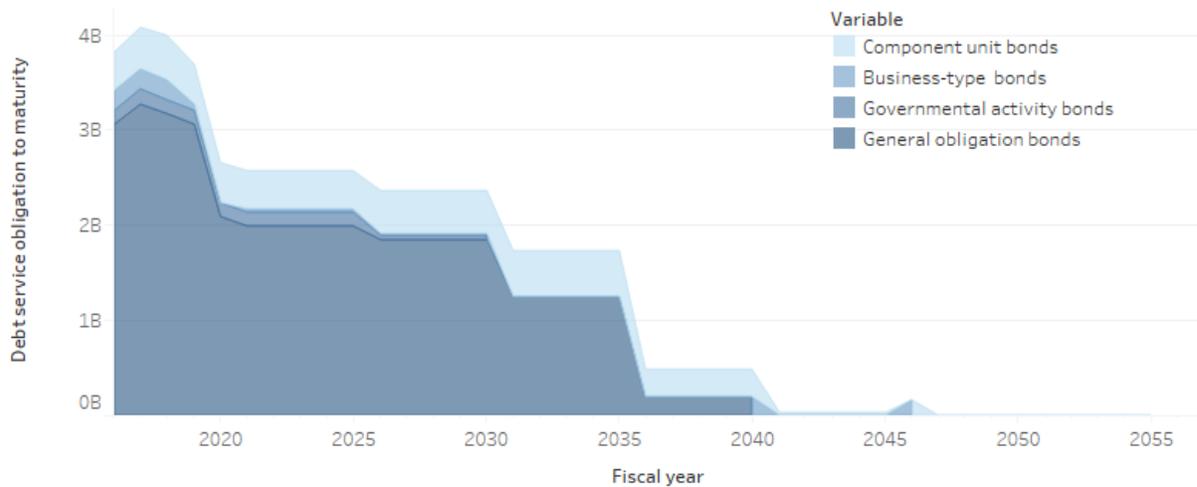
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Idaho	\$1,456.99	36	\$2,408,160,000.00	22

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Idaho	\$2,039.03	13	\$3,370,171,000.00	7

## Illinois



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Illinois	\$3,192.25	45	\$40,985,384,000.00	49

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Illinois	\$134.66	36	\$1,728,860,000.00	23

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Illinois	\$79.73	18	\$1,023,663,000.00	27

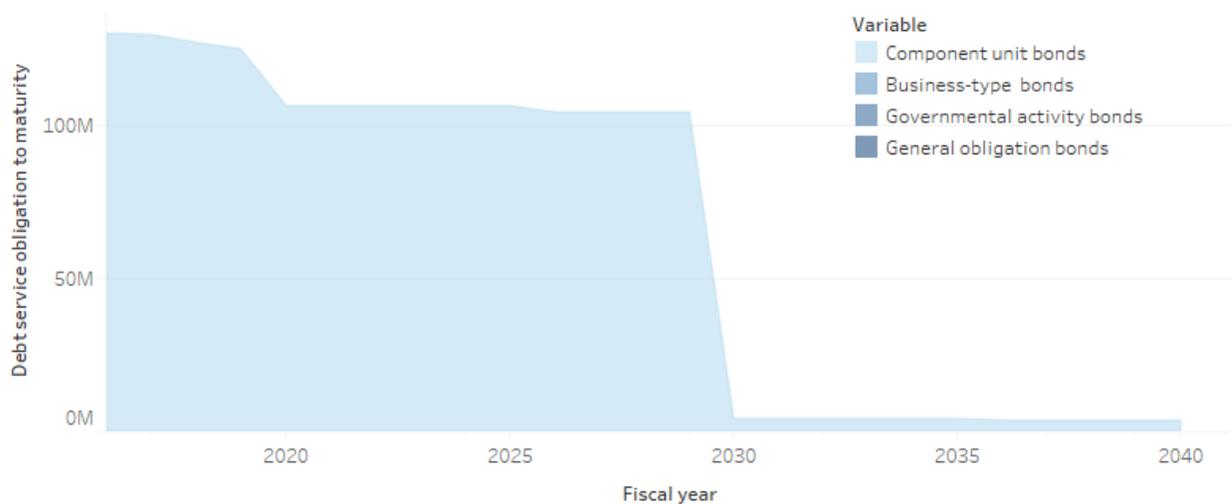
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Illinois	\$822.50	27	\$10,560,132,000.00	44

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Illinois	\$4,229.13	37	\$54,298,039,000.00	46

## Indiana



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Indiana	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Indiana	\$0.00	45.00	\$0.00	1.00

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Indiana	\$0.00	1.000	\$0.00	1.000

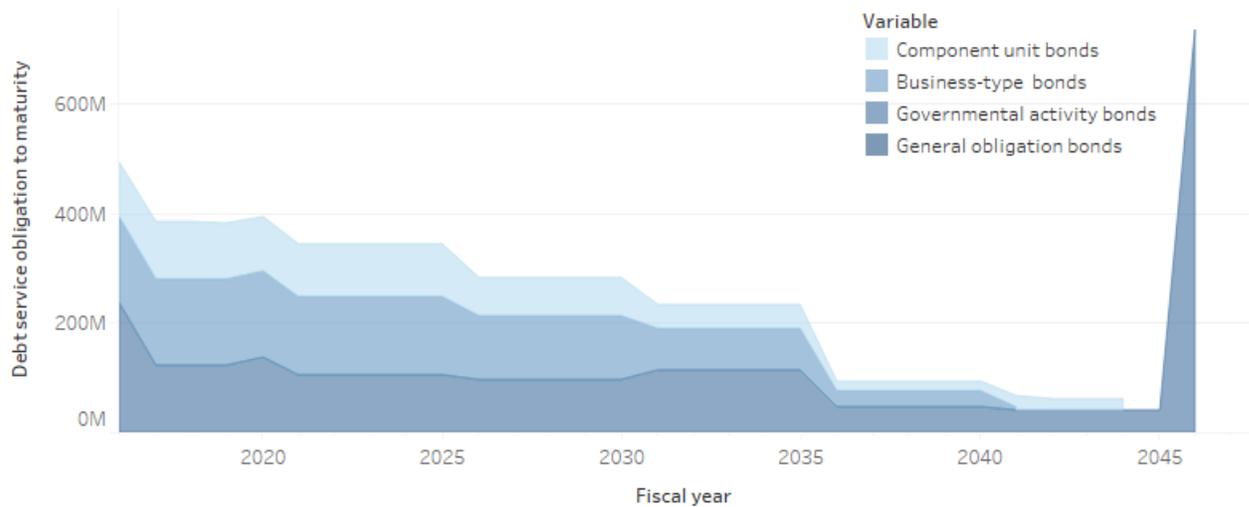
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Indiana	\$243.67	10	\$1,611,353,730.00	17

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Indiana	\$243.67	2	\$1,611,353,730.00	4

## Iowa



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Iowa	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Iowa	\$1,117.18	13	\$3,487,834,000.00	31

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Iowa	\$834.59	41	\$2,605,582,000.00	38

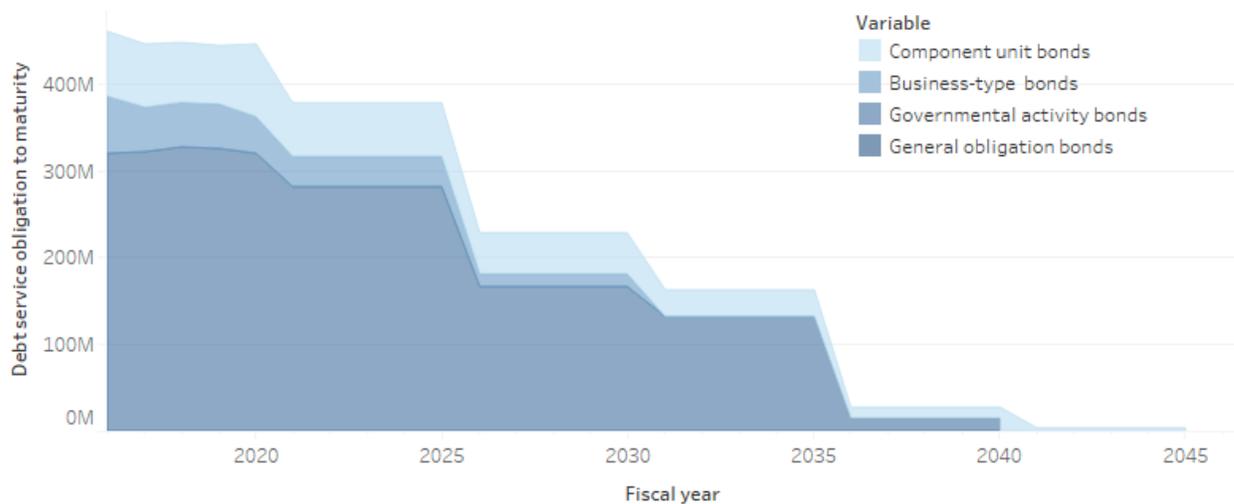
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Iowa	\$556.65	20	\$1,737,858,000.00	19

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Iowa	\$2,508.42	19	\$7,831,274,000.00	20

## Kansas



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Kansas	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Kansas	\$1,574.79	7	\$4,577,469,000.00	38

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Kansas	\$176.17	21	\$512,072,000.00	21

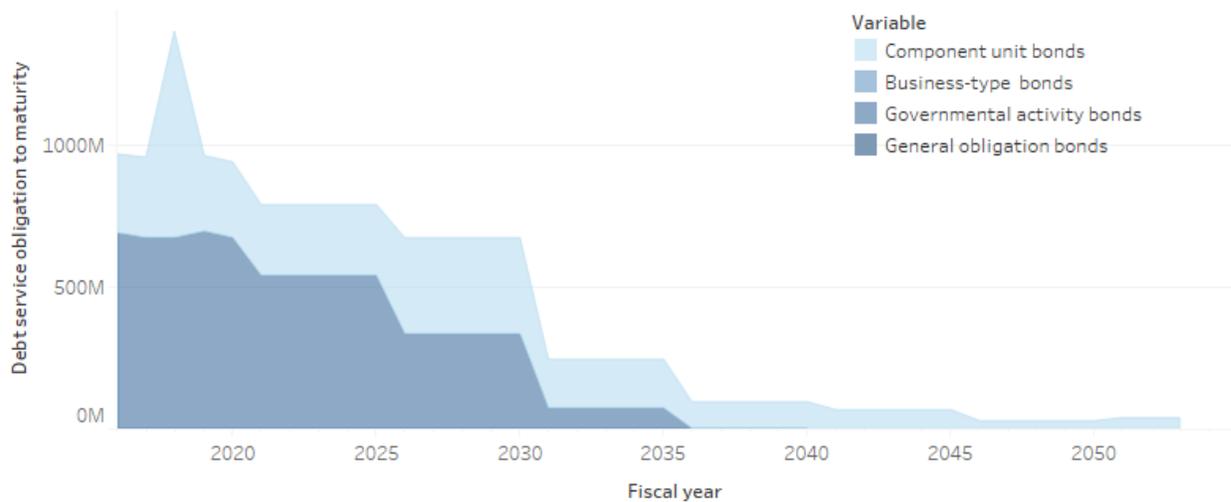
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Kansas	\$398.54	14	\$1,158,437,000.00	12

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Kansas	\$2,149.49	14	\$6,247,978,000.00	14

## Kentucky



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Kentucky	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Kentucky	\$1,839.42	4	\$8,138,698,000.00	45

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Kentucky	\$0.00	1.000	\$0.00	1.000

### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Kentucky	\$1,512.11	37	\$6,690,496,000.00	40

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Kentucky	\$3,351.52	28	\$14,829,194,000.00	30

## Louisiana



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Louisiana	\$898.79	30	\$4,196,405,000.00	32

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Louisiana	\$1,529.22	9	\$7,139,864,000.00	44

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Louisiana	\$0.01	14	\$64,331.00	14

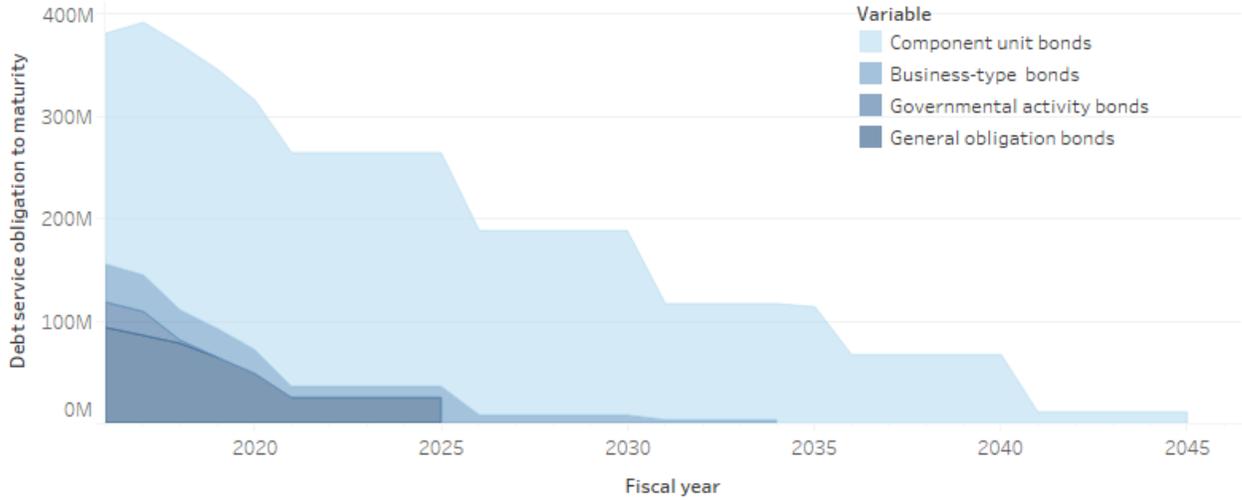
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Louisiana	\$7.17	5	\$33,455,879.00	4

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Louisiana	\$2,435.19	17	\$11,369,789,210.00	28

## Maine



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Maine	\$372.21	23	\$494,836,000.00	17

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Maine	\$38.40	43	\$51,053,000.00	10

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Maine	\$192.11	22	\$255,398,000.00	17

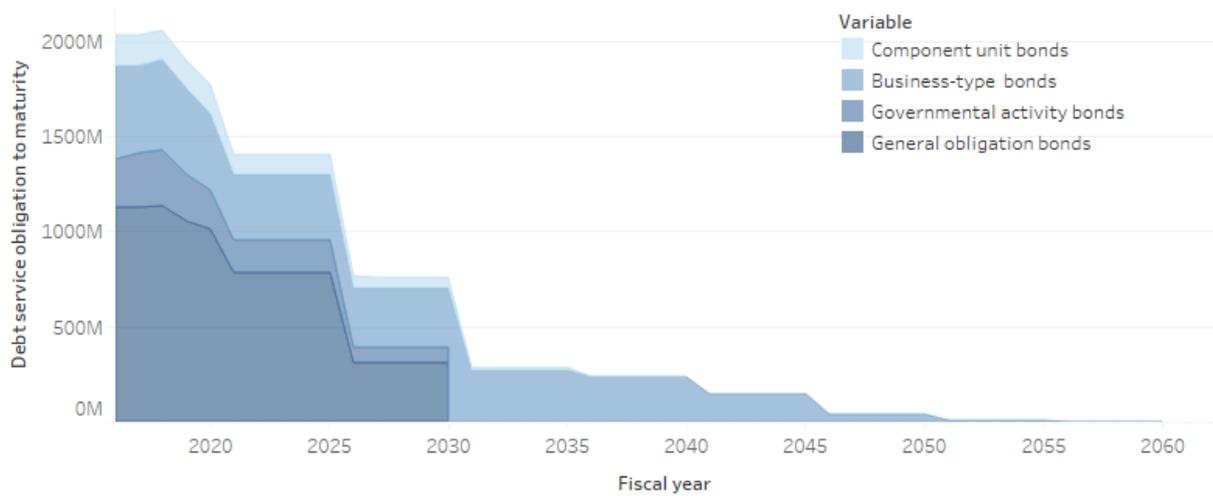
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Maine	\$3,175.69	46	\$4,221,925,000.00	32

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Maine	\$3,778.41	32	\$5,023,212,000.00	11

## Maryland



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Maryland	\$1,818.84	41	\$10,903,944,000.00	40

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Maryland	\$426.15	27	\$2,554,768,000.00	27

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Maryland	\$1,498.86	49	\$8,985,617,000.00	47

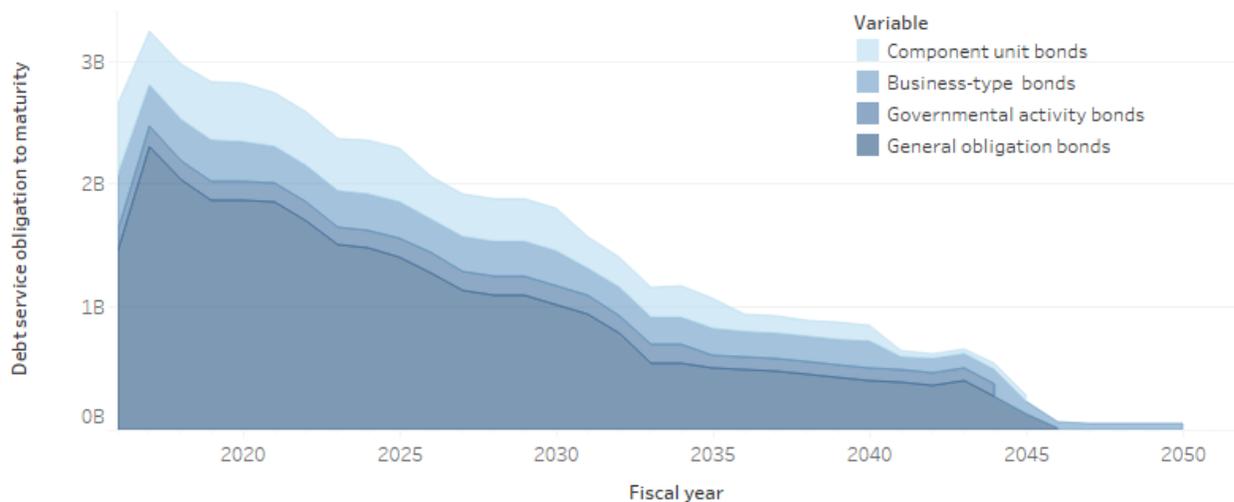
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Maryland	\$285.04	11	\$1,708,802,000.00	18

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Maryland	\$4,028.89	36	\$24,153,131,000.00	36

## Massachusetts



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Massachusetts	\$4,447.13	48	\$30,170,370,000.00	48

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Massachusetts	\$582.03	22	\$3,948,637,000.00	34

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Massachusetts	\$1,118.36	45	\$7,587,255,000.00	46

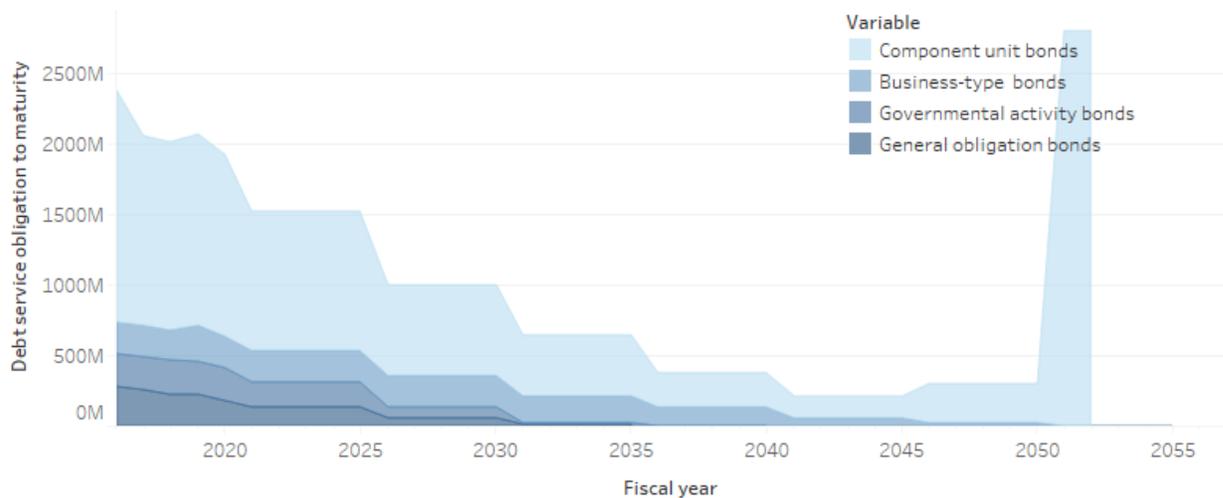
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Massachusetts	\$1,252.68	32	\$8,498,497,000.00	42

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Massachusetts	\$7,400.20	47	\$50,204,759,000.00	45

## Michigan



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Michigan	\$220.54	17	\$2,187,300,000.00	27

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Michigan	\$253.35	32	\$2,512,700,000.00	26

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Michigan	\$540.03	38	\$5,355,900,000.00	43

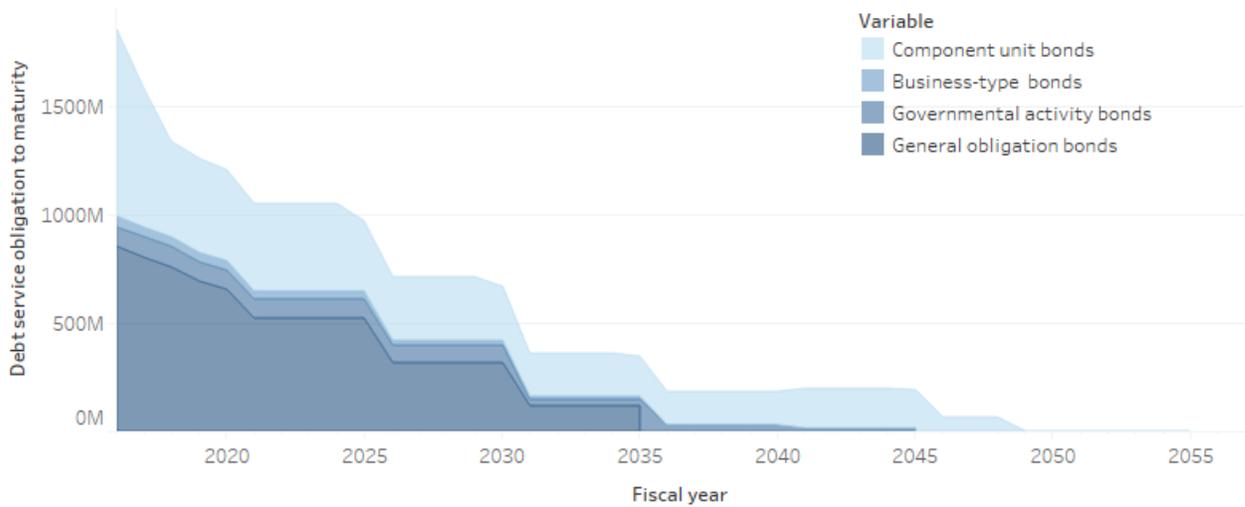
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Michigan	\$2,654.01	43	\$26,321,700,000.00	49

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Michigan	\$3,667.94	31	\$36,377,600,000.00	41

# Minnesota



## General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Minnesota	\$1,551.19	39	\$8,504,319,000.00	38

## Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Minnesota	\$314.88	29	\$1,726,316,000.00	22

## Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Minnesota	\$107.10	19	\$587,157,000.00	22

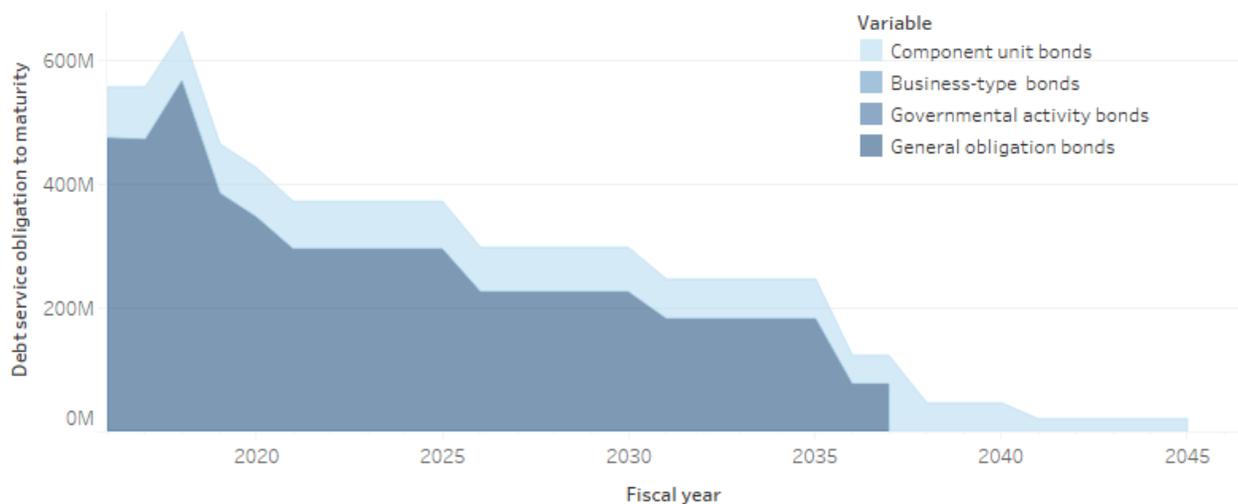
## Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Minnesota	\$1,639.66	38	\$8,989,343,000.00	43

## Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Minnesota	\$3,612.84	30	\$19,807,135,000.00	34

## Mississippi



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Mississippi	\$1,978.69	42	\$5,915,079,000.00	35

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Mississippi	\$0.00	45.00	\$0.00	1.00

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Mississippi	\$0.00	1.000	\$0.00	1.000

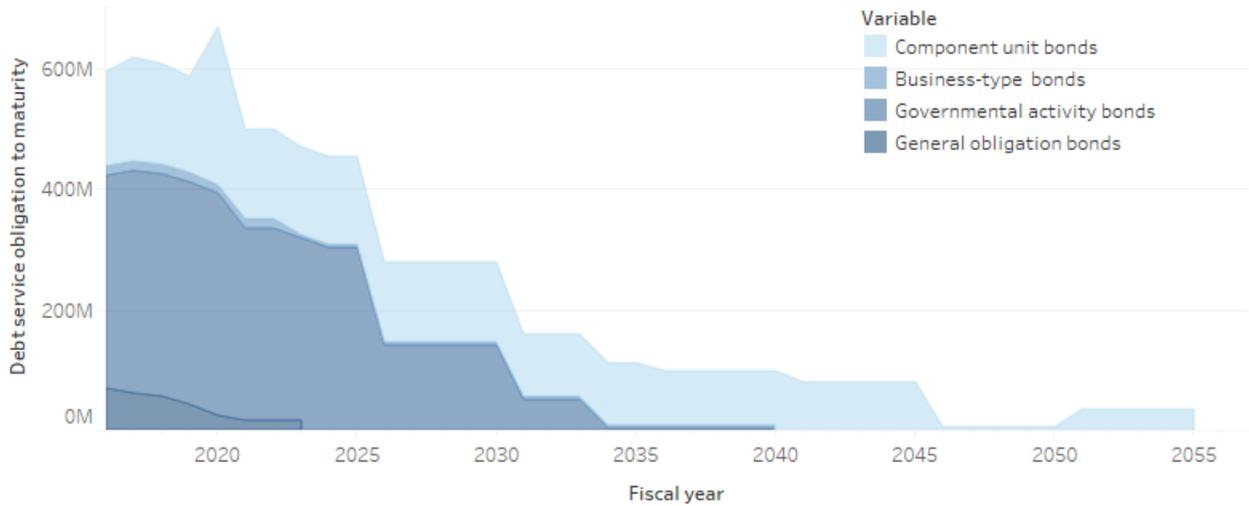
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Mississippi	\$602.17	22	\$1,800,132,000.00	20

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Mississippi	\$2,580.86	21	\$7,715,211,000.00	18

## Missouri



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Missouri	\$49.25	13	\$299,252,000.01	13

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Missouri	\$697.04	18	\$4,235,345,000.00	36

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Missouri	\$34.58	16	\$210,090,000.00	16

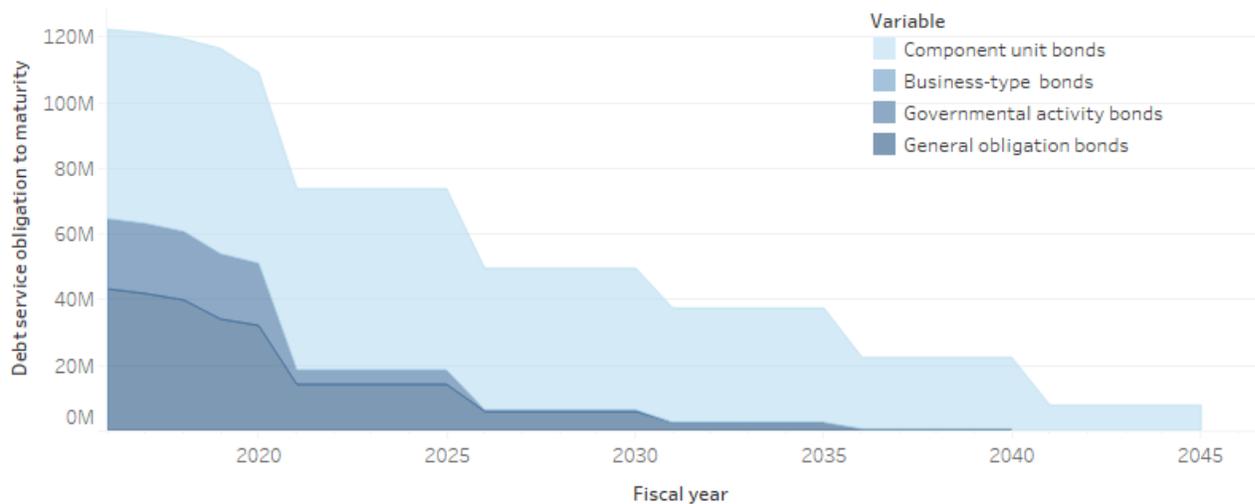
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Missouri	\$641.62	25	\$3,898,600,000.00	29

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Missouri	\$1,422.48	6	\$8,643,287,000.01	23

## Montana



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Montana	\$292.50	20	\$301,880,000.00	14

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Montana	\$124.54	38	\$128,534,000.00	12

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Montana	\$0.00	1.000	\$0.00	1.000

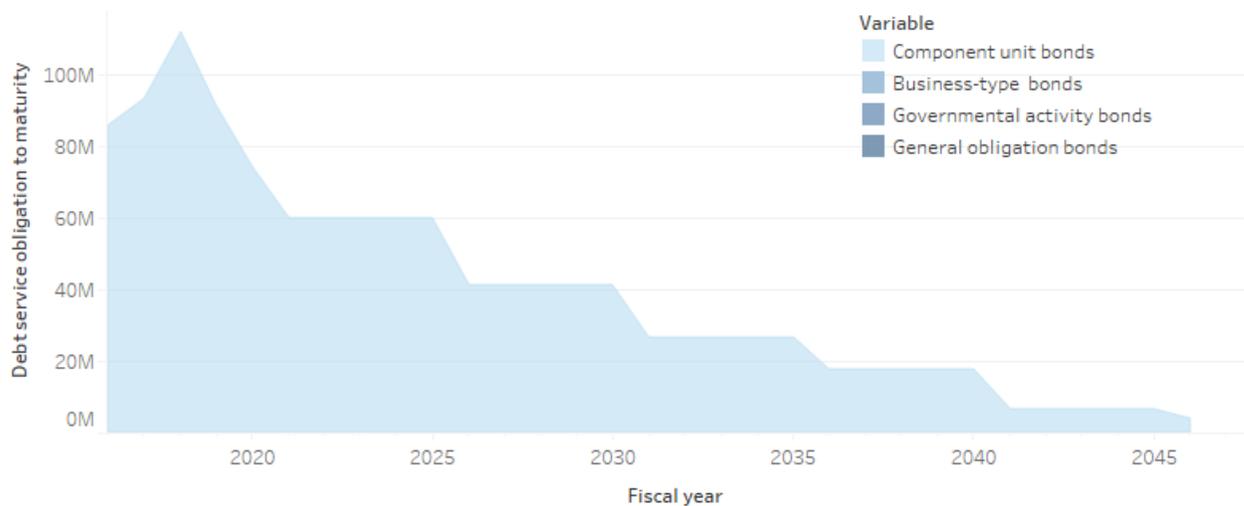
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Montana	\$1,075.69	31	\$1,110,192,000.00	11

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Montana	\$1,492.73	7	\$1,540,606,000.00	3

## Nebraska



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Nebraska	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Nebraska	\$0.00	45.00	\$0.00	1.00

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Nebraska	\$0.00	1.000	\$0.00	1.000

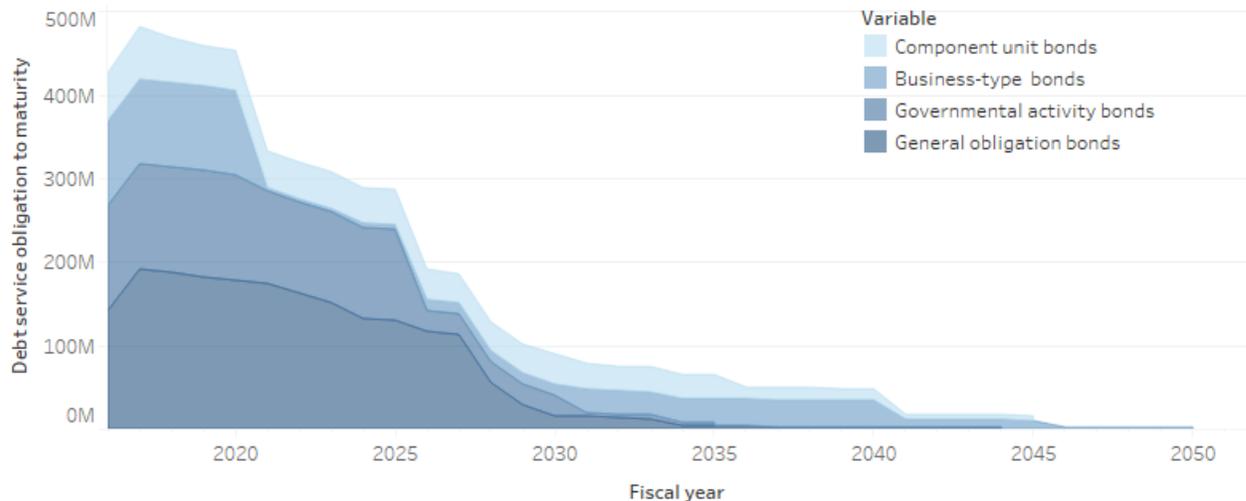
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Nebraska	\$646.36	26	\$1,224,056,000.00	14

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Nebraska	\$646.36	3	\$1,224,056,000.00	2

## Nevada



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Nevada	\$699.91	26	\$2,018,371,462.00	25

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Nevada	\$459.80	26	\$1,325,966,268.00	20

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Nevada	\$332.62	29	\$959,207,307.00	26

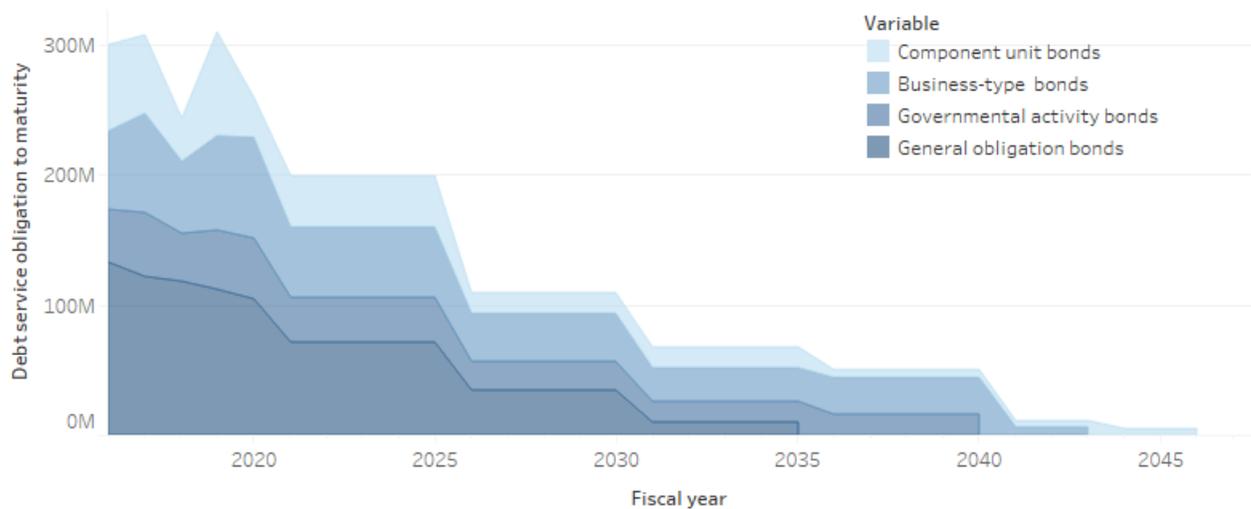
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Nevada	\$317.05	12	\$914,288,000.00	10

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Nevada	\$1,809.39	11	\$5,217,833,037.00	12

## New Hampshire



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
New Hampshire	\$874.77	29	\$1,167,634,050.00	21

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
New Hampshire	\$492.48	24	\$657,355,649.00	17

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
New Hampshire	\$813.25	40	\$1,085,520,649.00	31

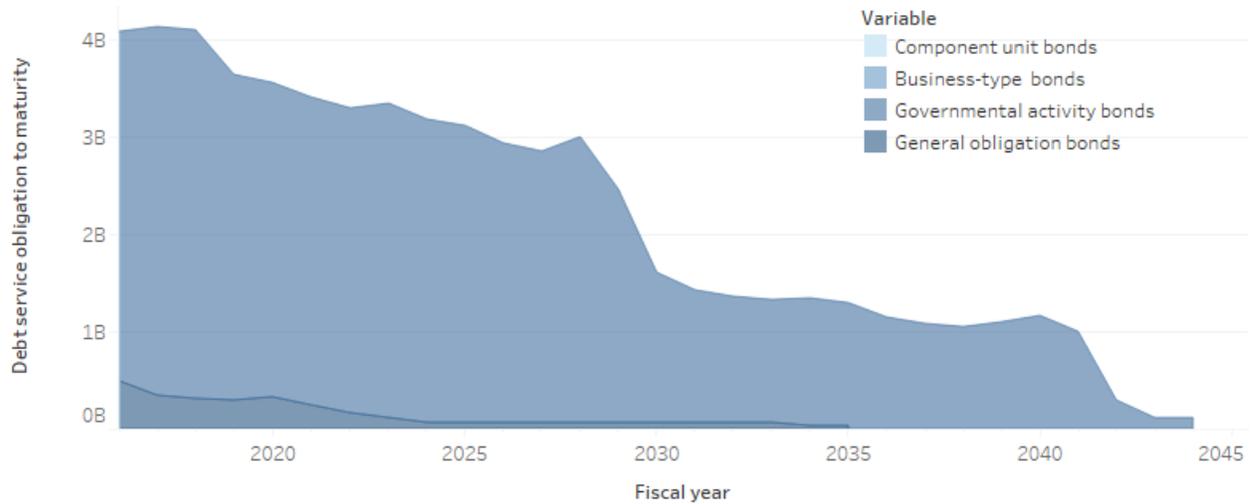
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
New Hampshire	\$516.77	18	\$689,788,000.00	8

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
New Hampshire	\$2,697.27	22	\$3,600,298,348.00	8

## New Jersey



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
New Jersey	\$340.10	22	\$3,038,895,647.00	30

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
New Jersey	\$6,655.01	1	\$59,465,343,329.00	50

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
New Jersey	\$0.00	1.000	\$0.00	1.000

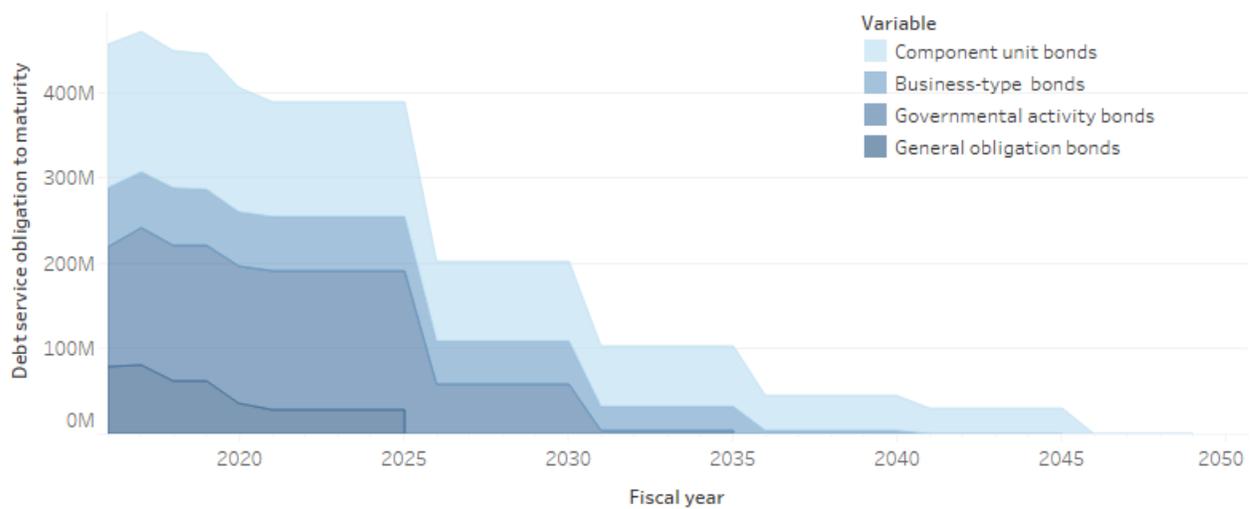
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
New Jersey	\$0.00	1.000	\$0.00	1.000

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
New Jersey	\$6,995.11	45	\$62,504,238,976.00	47

## New Mexico



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
New Mexico	\$219.99	16	\$457,647,000.00	15

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
New Mexico	\$909.68	16	\$1,892,426,000.00	24

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
New Mexico	\$510.93	36	\$1,062,908,000.00	29

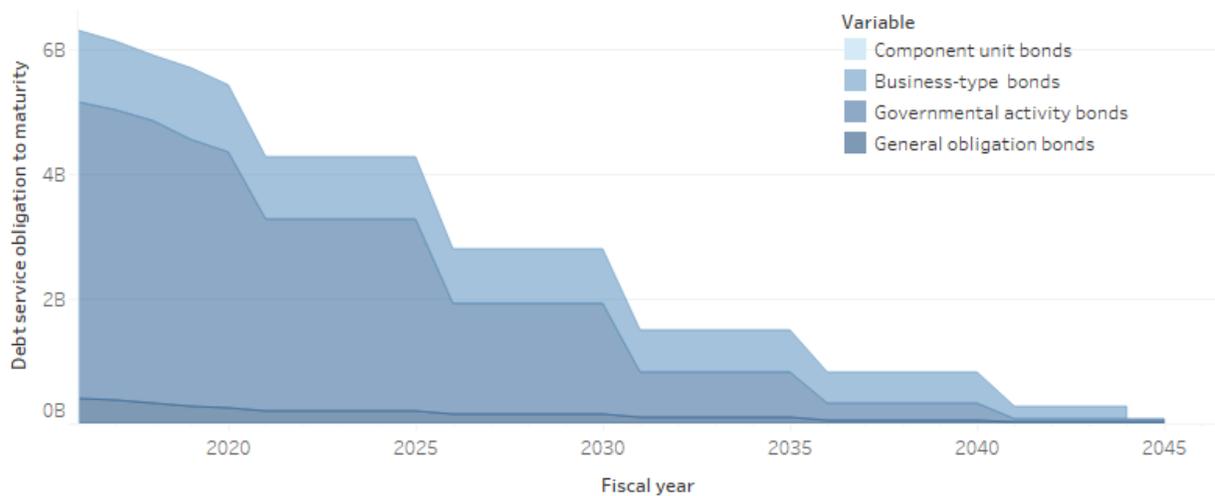
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
New Mexico	\$1,271.41	33	\$2,644,951,000.00	25

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
New Mexico	\$2,912.01	25	\$6,057,932,000.00	13

## New York



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
New York	\$216.08	15	\$4,267,000,000.00	33

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
New York	\$2,626.65	3	\$51,869,000,000.00	49

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
New York	\$1,088.41	44	\$21,493,000,000.00	49

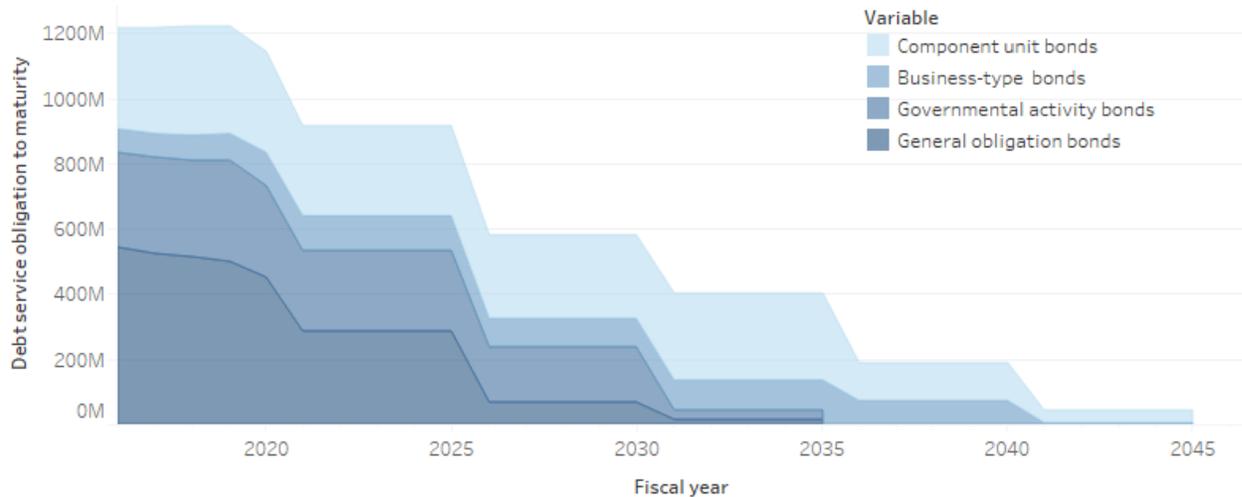
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
New York	\$0.00	1.000	\$0.00	1.000

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
New York	\$3,931.14	34	\$77,629,000,000.00	49

## North Carolina



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
North Carolina	\$435.69	24	\$4,372,199,000.00	34

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
North Carolina	\$368.06	28	\$3,693,600,000.00	33

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
North Carolina	\$223.71	25	\$2,244,955,000.00	36

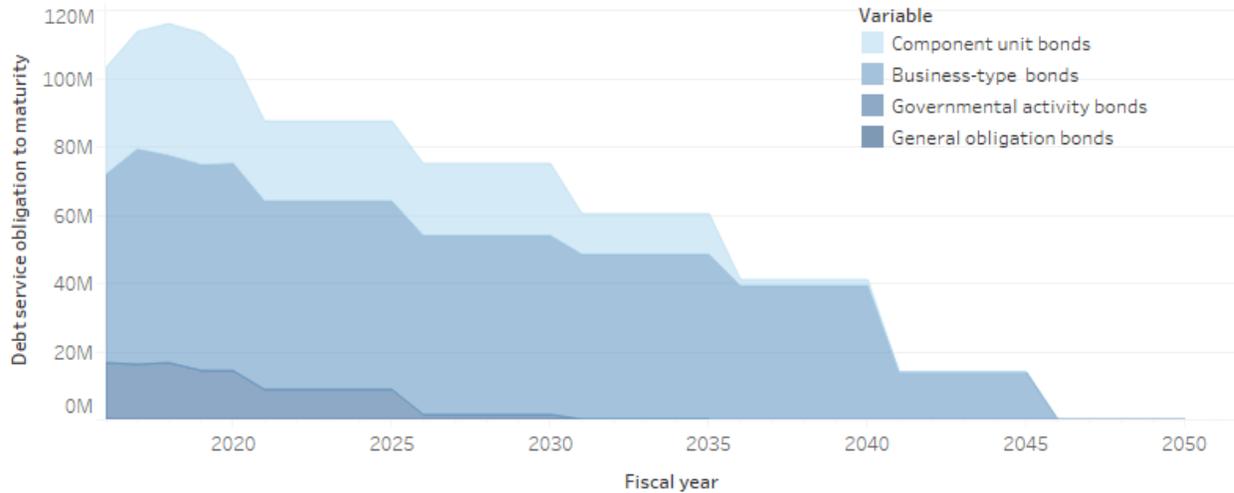
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
North Carolina	\$632.62	24	\$6,348,420,000.00	38

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
North Carolina	\$1,660.08	10	\$16,659,174,000.00	31

## North Dakota



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
North Dakota	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
North Dakota	\$166.43	35	\$125,960,000.00	11

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
North Dakota	\$1,779.84	50	\$1,347,043,000.00	32

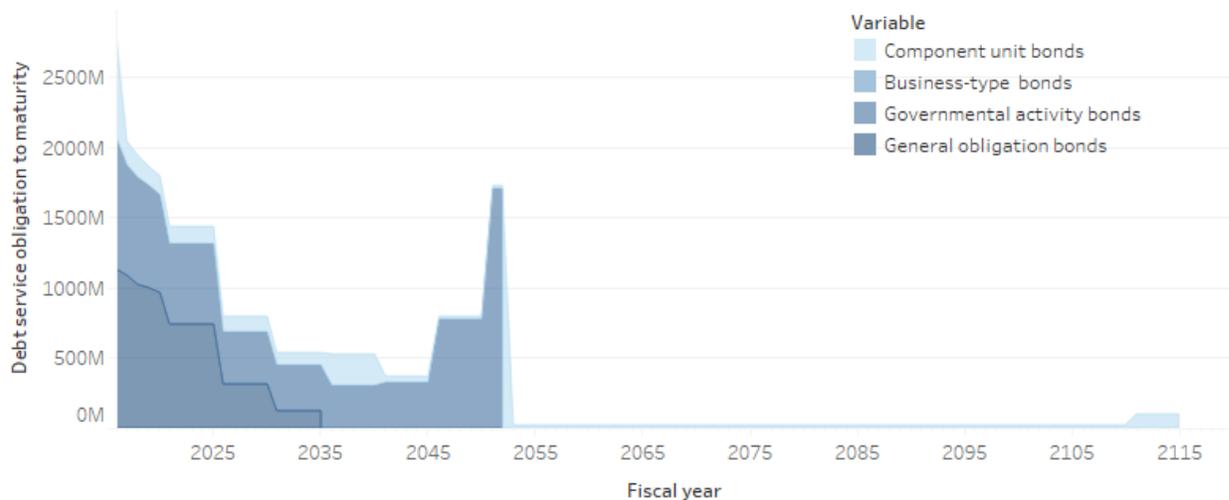
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
North Dakota	\$617.52	23	\$467,364,000.00	7

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
North Dakota	\$2,563.79	20	\$1,940,367,000.00	5

## Ohio



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Ohio	\$956.07	31	\$11,095,333,000.00	41

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Ohio	\$1,785.90	5	\$20,725,507,000.00	47

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Ohio	\$0.00	1.000	\$0.00	1.000

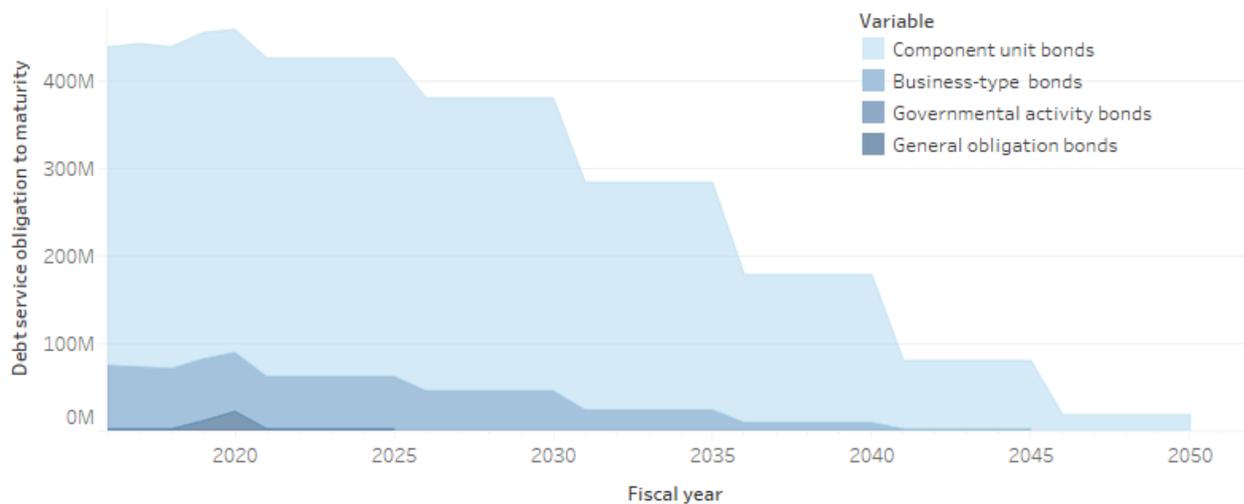
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Ohio	\$553.37	19	\$6,421,945,000.00	39

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Ohio	\$3,295.35	27	\$38,242,785,000.00	43

## Oklahoma



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Oklahoma	\$12.87	12	\$50,275,000.00	12

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Oklahoma	\$0.00	45.00	\$0.00	1.00

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Oklahoma	\$270.15	27	\$1,055,575,000.00	28

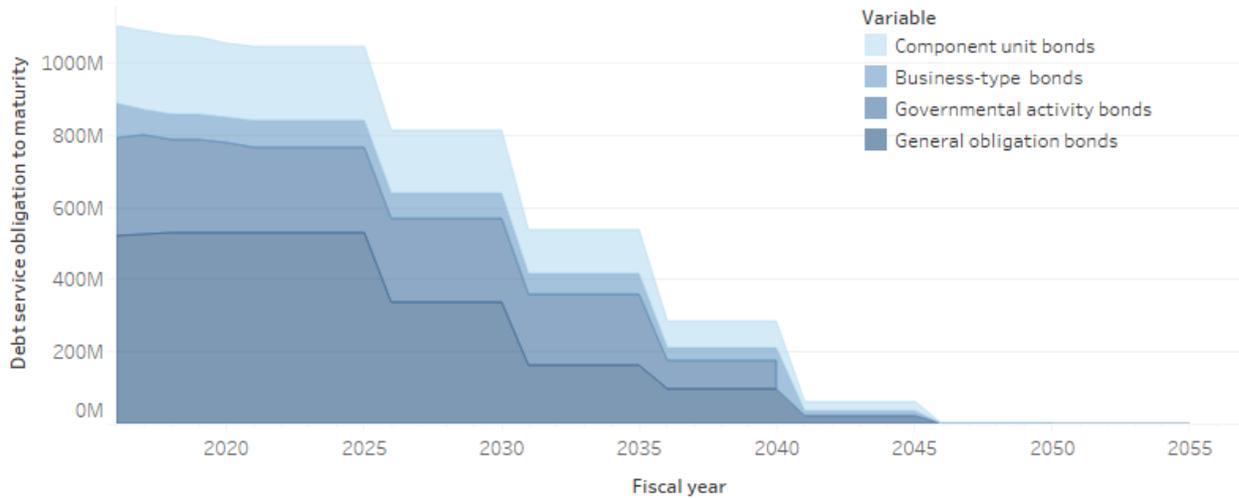
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Oklahoma	\$2,034.46	41	\$7,949,490,000.00	41

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Oklahoma	\$2,317.48	15	\$9,055,340,000.00	24

## Oregon



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Oregon	\$2,072.32	43	\$8,340,312,000.00	36

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Oregon	\$1,242.91	12	\$5,002,261,000.00	40

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Oregon	\$410.30	31	\$1,651,327,000.00	33

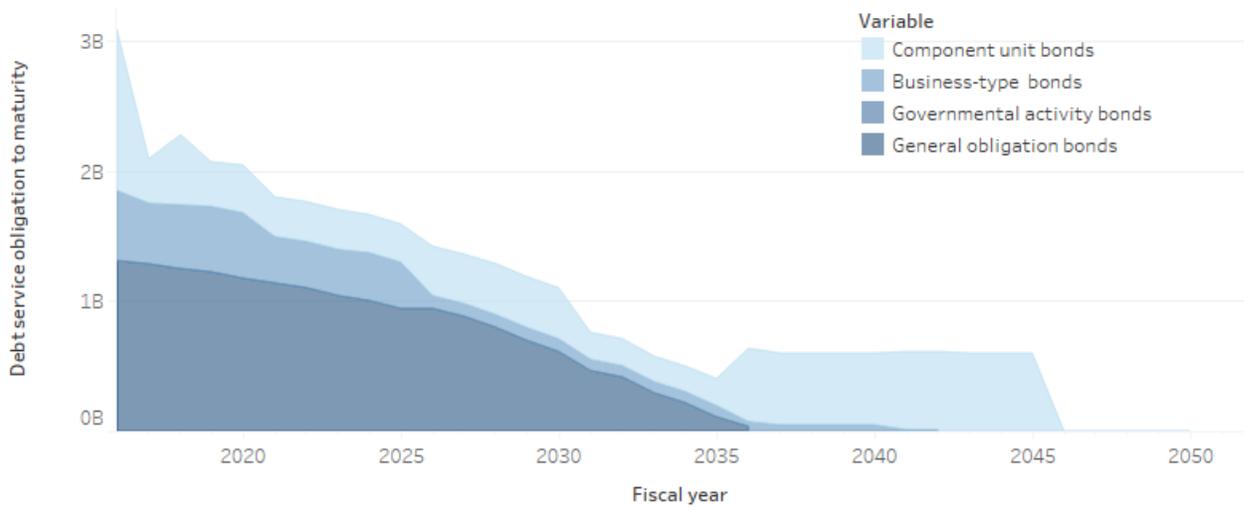
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Oregon	\$1,014.33	29	\$4,082,287,000.00	30

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Oregon	\$4,739.86	39	\$19,076,187,000.00	33

## Pennsylvania



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Pennsylvania	\$1,328.65	38	\$16,995,981,000.00	44

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Pennsylvania	\$0.00	45.00	\$0.00	1.00

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Pennsylvania	\$422.68	32	\$5,406,858,000.00	44

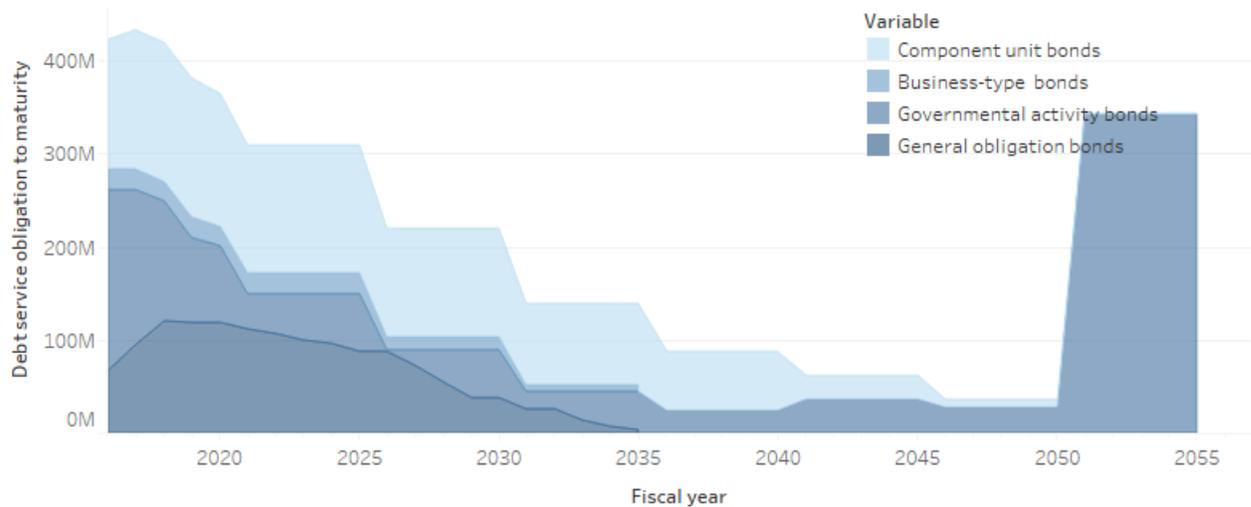
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Pennsylvania	\$1,022.96	30	\$13,085,643,000.00	46

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Pennsylvania	\$2,774.29	24	\$35,488,482,000.00	40

## Rhode Island



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Rhode Island	\$1,320.33	37	\$1,393,745,822.00	22

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Rhode Island	\$3,171.17	2	\$3,347,512,618.00	30

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Rhode Island	\$307.29	28	\$324,379,000.00	18

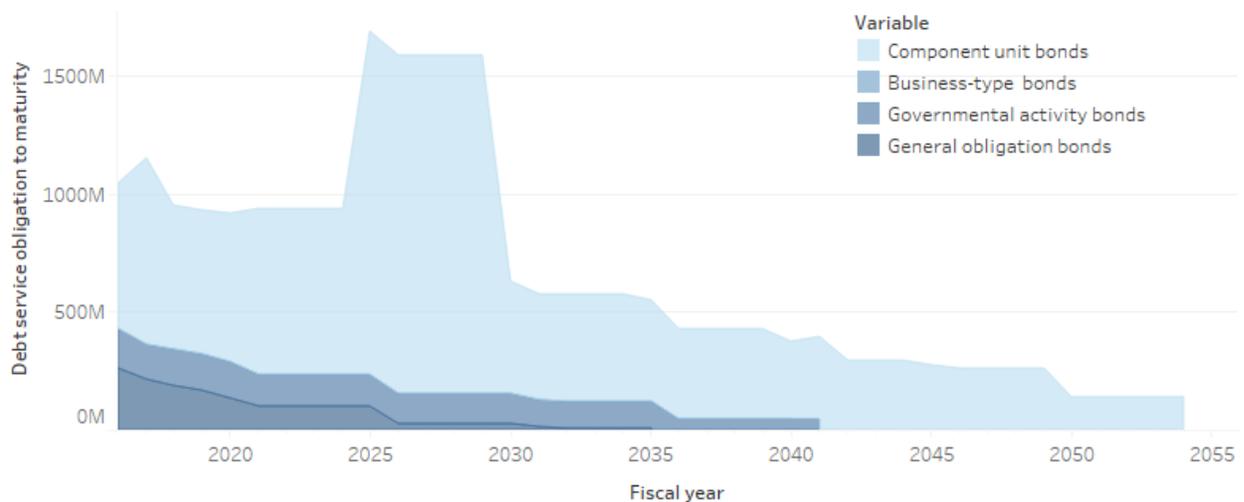
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Rhode Island	\$2,788.33	45	\$2,943,381,000.00	26

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Rhode Island	\$7,587.12	48	\$8,009,018,440.00	21

## South Carolina



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
South Carolina	\$334.91	21	\$1,639,315,000.00	23

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
South Carolina	\$595.25	21	\$2,913,630,000.00	29

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
South Carolina	\$1.26	15	\$6,180,000.00	15

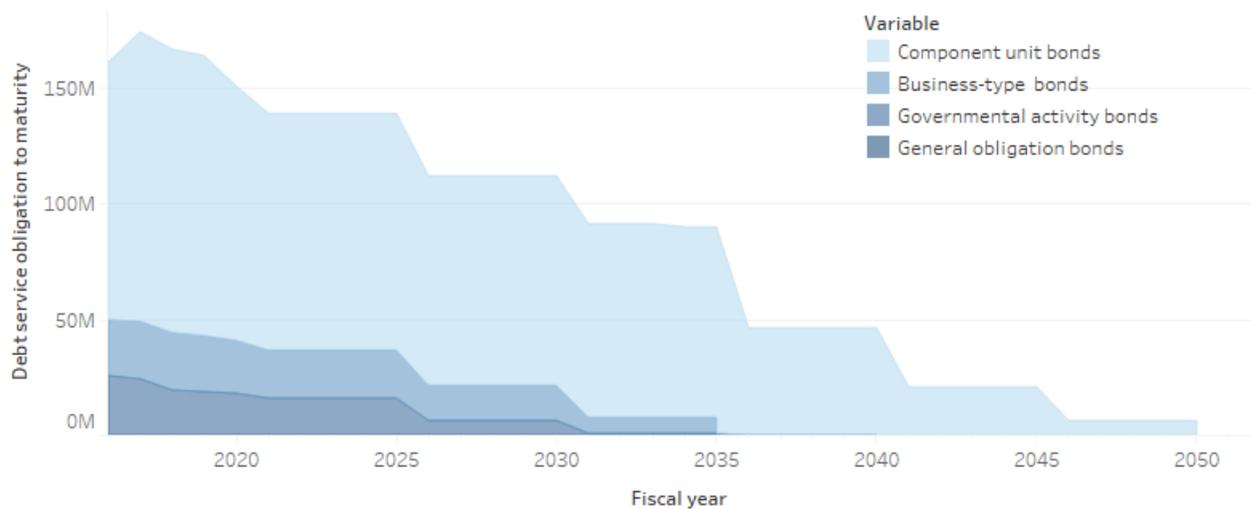
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
South Carolina	\$4,302.76	48	\$21,061,283,500.00	48

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
South Carolina	\$5,234.17	41	\$25,620,408,500.00	37

## South Dakota



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
South Dakota	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
South Dakota	\$256.80	31	\$220,314,000.00	14

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
South Dakota	\$390.38	30	\$334,916,000.00	19

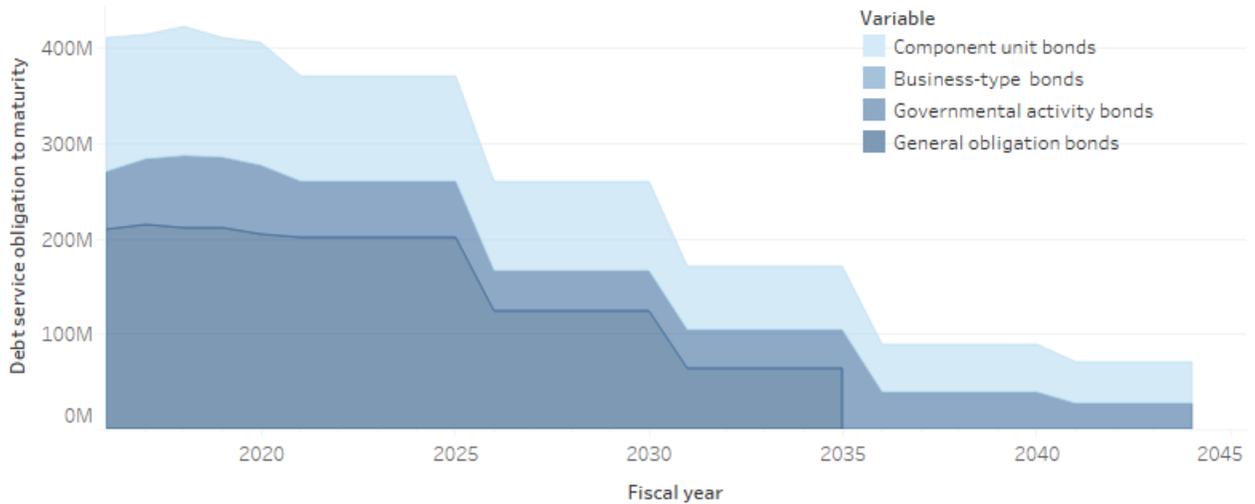
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
South Dakota	\$2,719.49	44	\$2,333,099,000.01	21

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
South Dakota	\$3,366.67	29	\$2,888,329,000.01	6

## Tennessee



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Tennessee	\$454.91	25	\$3,000,153,863.00	29

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Tennessee	\$204.34	34	\$1,347,613,255.00	21

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Tennessee	\$0.00	1.000	\$0.00	1.000

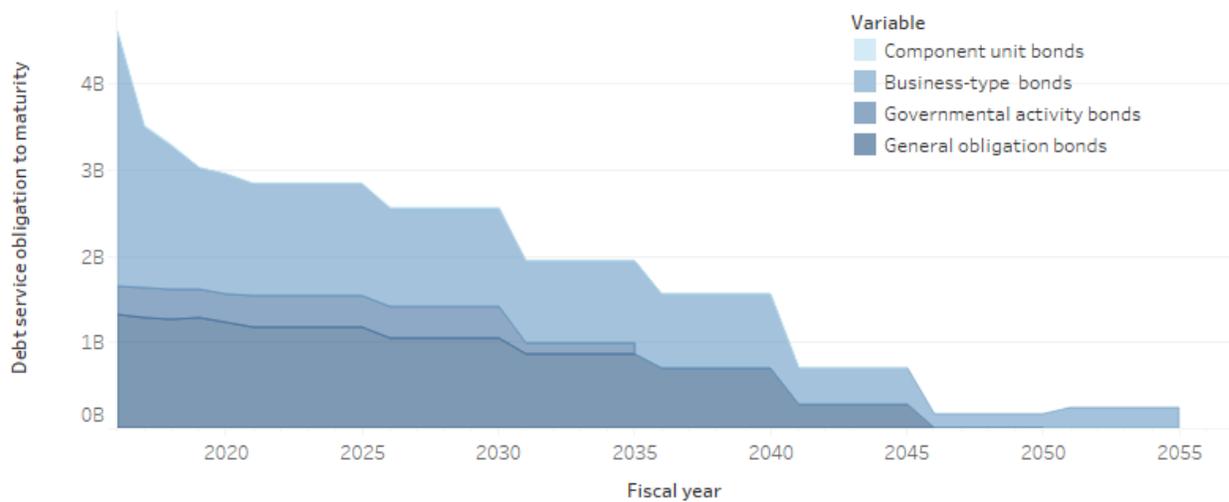
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Tennessee	\$371.73	13	\$2,451,603,849.00	23

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Tennessee	\$1,030.98	4	\$6,799,370,967.00	15

## Texas



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Texas	\$966.56	32	\$26,512,462,000.00	46

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Texas	\$222.61	33	\$6,106,033,000.00	43

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Texas	\$1,263.14	47	\$34,647,359,000.00	50

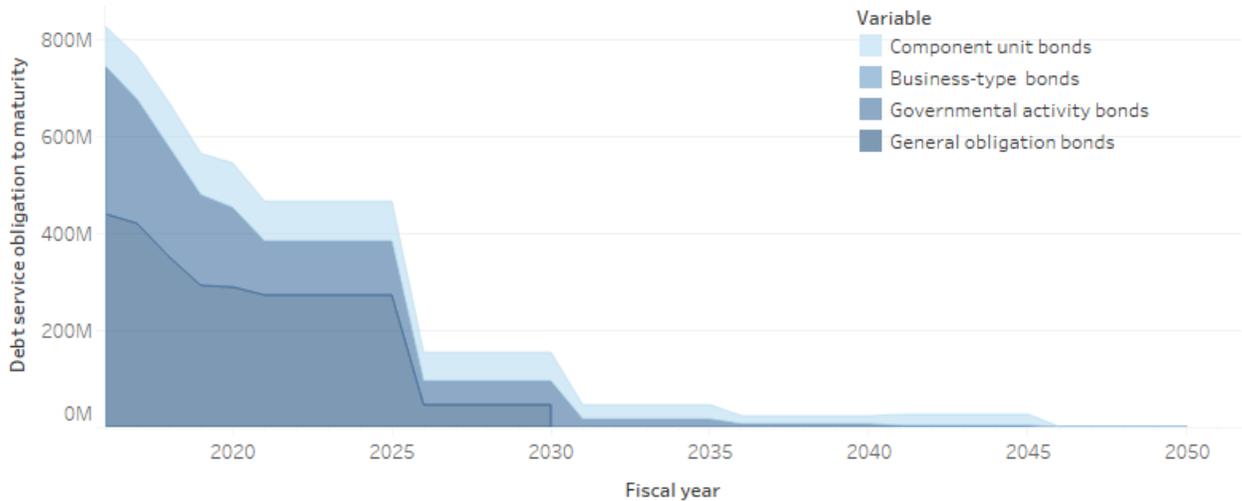
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Texas	\$6.01	4	\$164,884,000.00	6

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Texas	\$2,458.32	18	\$67,430,738,000.00	48

## Utah



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Utah	\$1,134.94	34	\$3,394,200,000.00	31

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Utah	\$685.45	19	\$2,049,915,000.00	25

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Utah	\$0.00	1.000	\$0.00	1.000

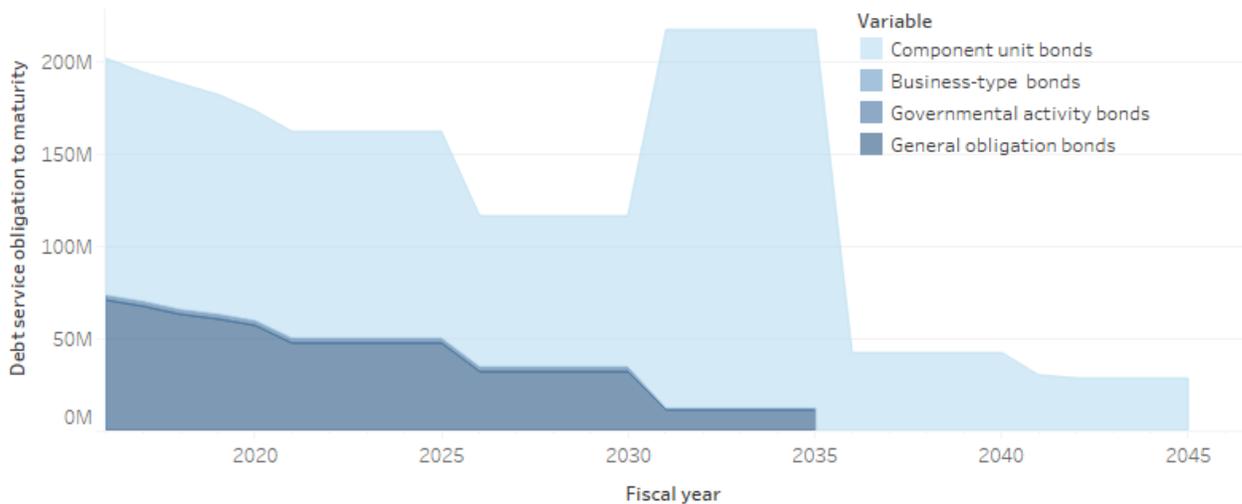
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Utah	\$505.33	16	\$1,511,253,000.00	16

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Utah	\$2,325.72	16	\$6,955,368,000.00	16

## Vermont



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Vermont	\$1,230.64	35	\$770,490,142.00	19

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Vermont	\$66.06	39	\$41,362,488.00	9

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Vermont	\$0.00	1.000	\$0.00	1.000

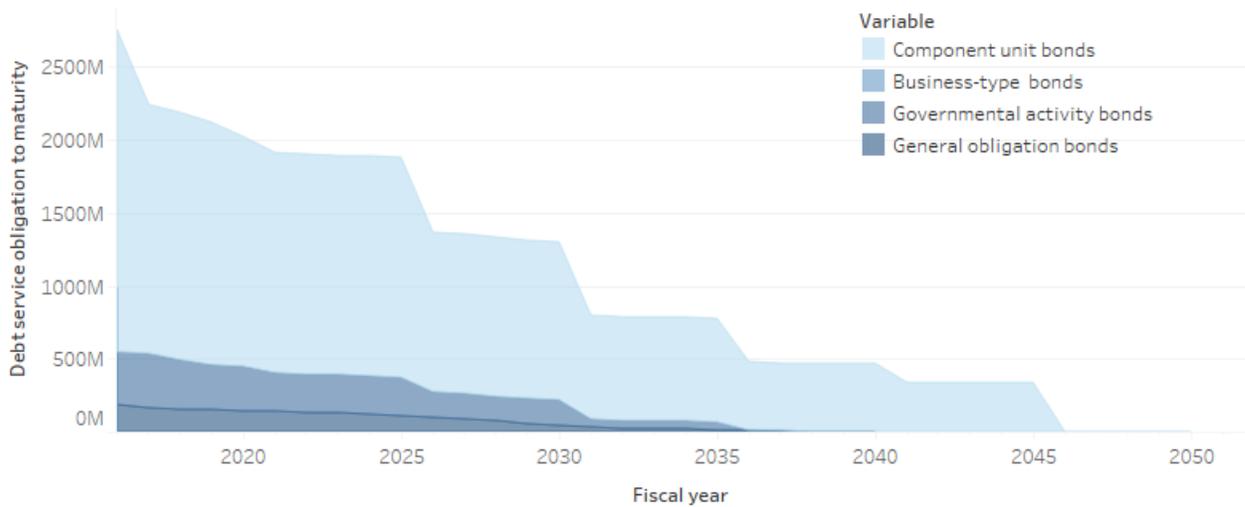
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Vermont	\$4,735.79	49	\$2,965,020,199.80	27

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Vermont	\$6,032.50	43	\$3,776,872,829.80	9

## Virginia



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Virginia	\$233.92	18	\$1,957,381,000.00	24

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Virginia	\$492.77	23	\$4,123,299,645.00	35

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Virginia	\$53.99	17	\$451,727,956.00	20

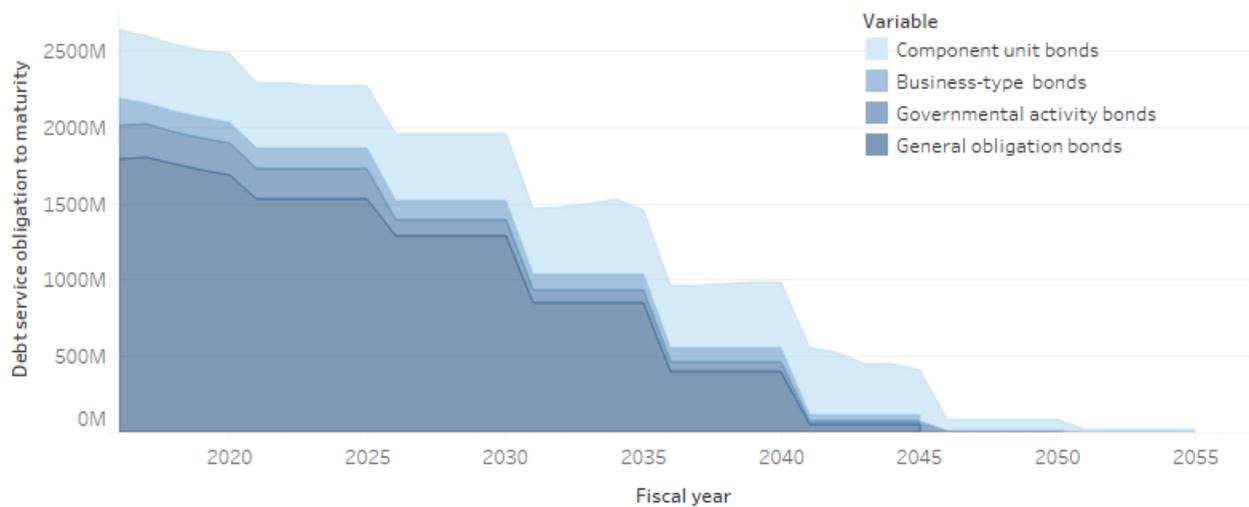
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Virginia	\$3,457.87	47	\$28,934,017,234.00	50

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Virginia	\$4,238.55	38	\$35,466,425,835.00	39

## Washington



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Washington	\$4,093.23	47	\$29,308,700,000.00	47

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Washington	\$492.12	25	\$3,523,756,000.00	32

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Washington	\$446.26	34	\$3,195,360,000.00	40

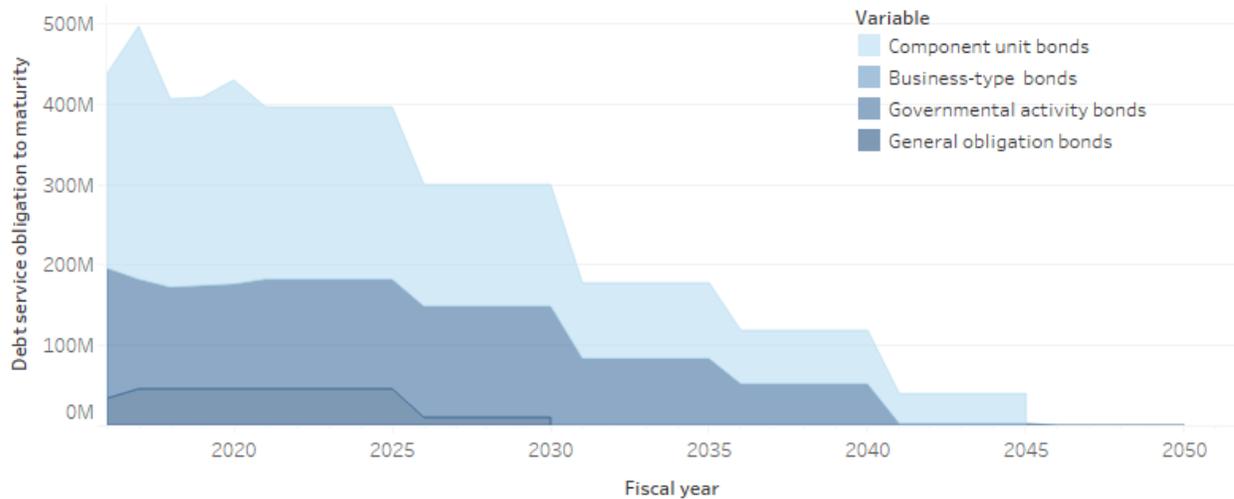
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Washington	\$1,819.22	40	\$13,026,167,651.00	45

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Washington	\$6,850.84	44	\$49,053,983,651.00	44

## West Virginia



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
West Virginia	\$263.03	19	\$484,253,000.00	16

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
West Virginia	\$1,485.55	10	\$2,734,973,000.00	28

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
West Virginia	\$0.00	1.000	\$0.00	1.000

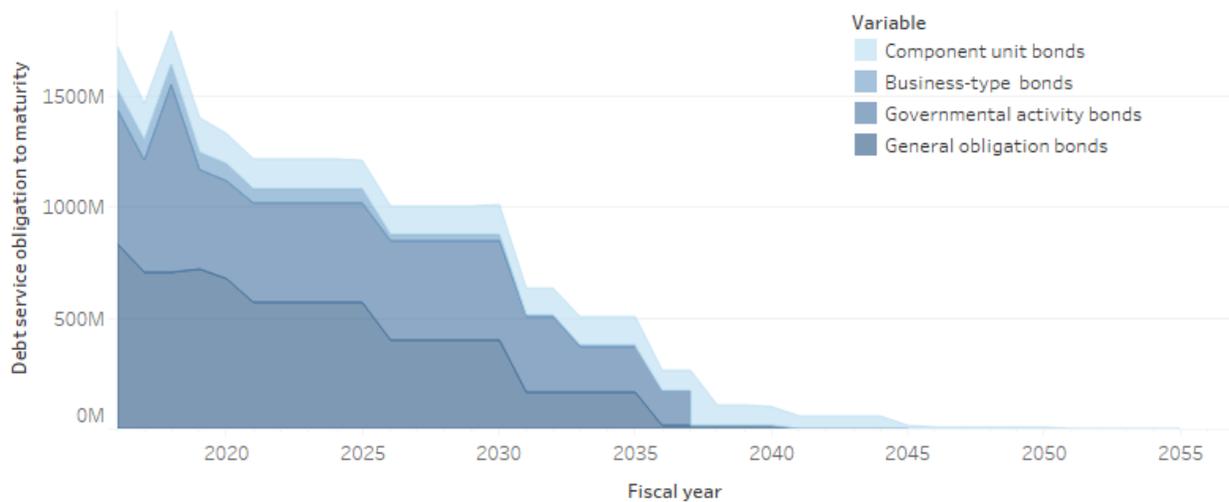
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
West Virginia	\$2,228.90	42	\$4,103,518,000.00	31

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
West Virginia	\$3,977.48	35	\$7,322,744,000.00	17

## Wisconsin



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Wisconsin	\$1,618.43	40	\$9,334,925,000.00	39

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Wisconsin	\$1,550.44	8	\$8,942,751,000.00	46

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Wisconsin	\$165.75	20	\$956,023,000.00	25

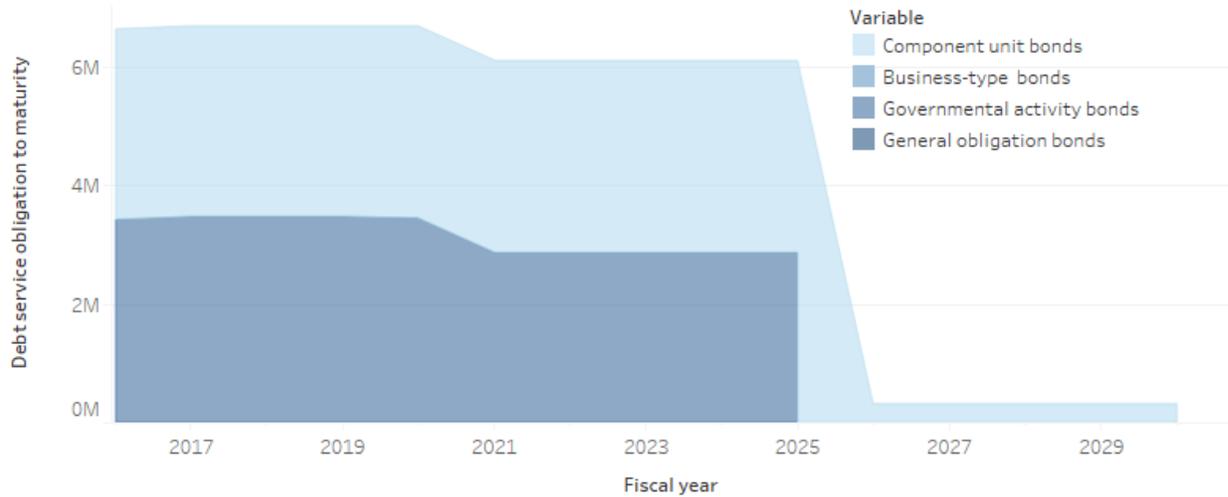
### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Wisconsin	\$589.71	21	\$3,401,376,000.00	28

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Wisconsin	\$3,924.32	33	\$22,635,075,000.00	35

## Wyoming



### General obligation bond liabilities

State	General obligation bond liability per capita	Rank of General obligation bond liability per capita along State	General obligation bond liability	Rank of General obligation bond liability along State
Wyoming	\$0.00	1.000	\$0.00	1.000

### Governmental activity bond liabilities

State	Governmental activity bond liability per capita	Rank of Governmental activity bond liability per capita along State	Governmental activity bond liability	Rank of Governmental activity bond liability along State
Wyoming	\$53.98	41	\$31,659,481.00	8

### Business-type activity bond liabilities

State	Business-type activity bond liability per capita	Rank of Business-type activity bond liability per capita along State	Business-type activity bond liability	Rank of Business-type activity bond liability along State
Wyoming	\$0.00	1.000	\$0.00	1.000

### Component unit bond liabilities

State	Component unit bond liability per capita	Rank of Component unit bond liability per capita along State	Component unit bond liability	Rank of Component unit bond liability along State
Wyoming	\$57.95	6	\$33,993,158.00	5

### Total bonded liabilities

State	All bonded obligations per capita	Rank of All bonded obligations per capita along State	All bonded obligations	Rank of All bonded obligations along State
Wyoming	\$111.93	1	\$65,652,639.00	1

## References

- <sup>i</sup> “State government total expenditures.” Federal Reserve Bank of St. Louis Economic Research. 2017, October 17. Retrieved from website: <https://fred.stlouisfed.org/series/W765RC1A027NBEA>
- <sup>ii</sup> *Fiscal 50: State trends and analysis*. The Pew Charitable Trust. 2016, May 17. Retrieved from website: <http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/fiscal-50#ind4>
- <sup>iii</sup> Elder, E. M. “Weathering the next recession: How prepared are the 50 states?” Mercatus Center. 2016, January 6. Retrieved from website: <https://www.mercatus.org/publication/weathering-next-recession-how-prepared-are-50-states>
- <sup>iv</sup> “Strategies for managing state debt.” The Pew Charitable Trust. 2017, June 6. Retrieved from website: <http://www.pewtrusts.org/en/research-and-analysis/reports/2017/06/strategies-for-managing-state-debt>
- <sup>v</sup> Drenkard, S. “State gasoline tax rates in 2017.” Tax Foundation. 2017, January 27. Retrieved from website: <https://taxfoundation.org/state-gasoline-tax-rates-2017/>
- <sup>vi</sup> Fitch, M. E. (2018, December 12). Connecticut to issue a new type of bond for a new economic reality. Retrieved from Yankee Institute for Public Policy website: <http://www.yankeeinstitute.org/2017/12/connecticut-to-issue-a-new-type-of-bond-for-a-new-economic-reality/>
- <sup>vii</sup> Connecticut annual report of the state comptroller. (2015). Retrieved from Office of the State Comptroller website: <http://www.osc.ct.gov/2015annual/pdf/Budgetary%20Report%202015.pdf>
- <sup>viii</sup> Guide to implementation of GASB statement 14 on the financial reporting entity. (1994, June). Retrieved from Governmental Accounting Standards Board website: <http://www.gasb.org/cs/BlobServer?blobkey=id&blobnocache=true&blobwhere=1175827486307&blobheader=application/pdf&blobcol=urldata&blobtable=MungoBlobs>
- <sup>ix</sup> See Methodology section for definitions and data collection method.
- <sup>x</sup> Our performance. (n.d.). Retrieved from Alaska Permanent Fund Corporation website: <https://apfc.org/our-performance>
- <sup>xi</sup> Gonzales, R. (2012, December 7). School district owes \$1 billion on \$100 million loan. Retrieved from NPR website: <https://www.npr.org/2012/12/07/166745290/school-district-owes-1-billion-on-100-million-loan>
- <sup>xii</sup> State credit ratings. (n.d.). Retrieved from Ballotpedia website: [https://ballotpedia.org/State\\_credit\\_ratings](https://ballotpedia.org/State_credit_ratings)
- <sup>xiii</sup> Hummel, J. R. (2012, January). Some possible consequences of a U.S. government default. Retrieved from Mercatus Center website: <https://www.mercatus.org/publication/us-sovereign-debt-crisis-tipping-point-scenarios-and-crash-dynamics/some-possible>
- <sup>xiv</sup> Hummel, J. R. (2012, January). Some possible consequences of a U.S. government default. Retrieved from Mercatus Center website: <https://www.mercatus.org/publication/us-sovereign-debt-crisis-tipping-point-scenarios-and-crash-dynamics/some-possible>
- <sup>xv</sup> Davey, M. (2011, January 22). The state that went bust. Retrieved from New York Times website: <https://www.nytimes.com/2011/01/23/weekinreview/23davey.html>
- <sup>xvi</sup> Gillespie, P. (2015, August 3). Puerto Rico just defaulted for the first time. Retrieved from CNN Money website: <http://money.cnn.com/2015/08/03/investing/puerto-rico-default/index.html>
- <sup>xvii</sup> Williams, J., Laffer, A. B., & Moore, S. (2018). Nevada economic outlook rank. Retrieved from Rich State Poor States website: <http://www.richstatespoorstates.org/states/NV/>
- <sup>xviii</sup> Taleb, N. N. (2014). *Antifragile: Things that gain from disorder*. Random House Trade Paperbacks.
- <sup>xix</sup> State of Nevada comprehensive annual financial report. (2015). Retrieved from [http://controller.nv.gov/FinancialReports/CAFR\\_pdf\\_files/FY15All.pdf](http://controller.nv.gov/FinancialReports/CAFR_pdf_files/FY15All.pdf)
- <sup>xx</sup> State of Rhode Island comprehensive annual financial report. (2015). Retrieved from State of Rhode Island Office of Accounts and Control website:

[http://controller.admin.ri.gov/documents/Financial%20Reports//117\\_Comprehensive%20Annual%20Financial%20Report\\_06-30-2015.pdf](http://controller.admin.ri.gov/documents/Financial%20Reports//117_Comprehensive%20Annual%20Financial%20Report_06-30-2015.pdf)

<sup>xxi</sup> Tobacco settlement financing corporation. (2007). Retrieved from Municipal Securities Rulemaking Board website: <https://emma.msrb.org/MS261006-MS236314-MD461028.pdf>

<sup>xxii</sup> La Monica, P. R. (n.d.). Fed cuts discount rate. Retrieved from CNN Money website: [http://money.cnn.com/2007/08/17/news/economy/fed\\_rates/](http://money.cnn.com/2007/08/17/news/economy/fed_rates/)

<sup>xxiii</sup> Williams, J., Laffer, A. B., & Moore, S. (n.d.). Rich States, Poor States. Retrieved from Rich States, Poor States website: <http://www.richstatespoorstates.org/>

<sup>xxiv</sup> Hammer, D. (2015, July). Municipal tobacco settlement bonds: Seeking value in the ashes. Retrieved from PIMCO website: <https://www.pimco.com/en-us/insights/viewpoints/municipal-tobacco-settlement-bonds-seeking-value-in-the-ashes/>

<sup>xxv</sup> Tobacco settlement financing corporation. (2002). Retrieved from Municipal Securities Rulemaking Board website: <https://emma.msrb.org/MS194219-MS169527-MD328316.pdf>

<sup>xxvi</sup> Budget at a glance. (2008). Retrieved from State of Rhode Island General Assembly website: <http://webserver.rilin.state.ri.us/HouseFinance/hold/budgetglance.pdf>

<sup>xxvii</sup> FY 2008 capital budget. (n.d.). Retrieved from Rhode Island Office of Management and Budget website: [http://www.omb.ri.gov/documents/Prior%20Year%20Budgets/Operating%20Budget%202008/900\\_FY%202008%20Capital%20Budget.pdf](http://www.omb.ri.gov/documents/Prior%20Year%20Budgets/Operating%20Budget%202008/900_FY%202008%20Capital%20Budget.pdf)

<sup>xxviii</sup> Craft, M. C. (2014, August 14). Commentary: ProPublica throws the kitchen sink at tobacco bond issuers. Retrieved from The Bond Buyer website: <https://www.bondbuyer.com/opinion/commentary-propublica-throws-the-kitchen-sink-at-tobacco-bond-issuers>

<sup>xxix</sup> Kim, J. (2016, April 15). As cigarette sales shrink, so do tobacco settlement payouts to states. Retrieved from Marketplace website: <https://www.marketplace.org/2016/04/14/life/fewer-smokers-means-looming-defaults-state-bonds>

<sup>xxx</sup> Fudge, M. K. (n.d.). A poor decision made worse? The use of capital appreciation bonds by school districts. Retrieved from PA Times website: <https://patimes.org/poor-decision-worse-capital-appreciation-bonds-school-districts/>

<sup>xxxi</sup> State of Rhode Island and Providence Plantations FY 2018 budget. (2018). Retrieved from State of Rhode Island Office of Management and Budget website: [http://www.omb.ri.gov/documents/Prior%20Year%20Budgets/Operating%20Budget%202018/ExecutiveSummary/0\\_Complete%20FY%202018%20Executive%20Summary.pdf](http://www.omb.ri.gov/documents/Prior%20Year%20Budgets/Operating%20Budget%202018/ExecutiveSummary/0_Complete%20FY%202018%20Executive%20Summary.pdf)

<sup>xxxii</sup> DeBord, M. (2012, December 17). Why capital appreciation bonds aren't as bad as they sound. Retrieved from 89.3 KPCC website: <http://www.scpr.org/blogs/economy/2012/12/17/11593/why-capital-appreciation-bonds-arent-bad-they-sound/>

<sup>xxxiii</sup> All federal reserve banks: Total assets. (2018, June 21). Retrieved from Federal Reserve Bank of St. Louis website: <https://fred.stlouisfed.org/series/WALCL>

<sup>xxxiv</sup> Effective federal funds rate. (2018, June 1). Retrieved from Federal Reserve Bank of St. Louis website: <https://fred.stlouisfed.org/series/FEDFUNDS>

<sup>xxxv</sup> Interest rates, discount rate for United States. (2017, June 1). Retrieved from Federal Reserve Bank of St. Louis website: <https://fred.stlouisfed.org/series/INTDSRUSM193N>

<sup>xxxvi</sup> Moody's seasonal AAA corporate bond yield. (2018, June 1). Retrieved from Federal Reserve Bank of St. Louis website: <https://fred.stlouisfed.org/series/AAA>

<sup>xxxvii</sup> Miller, R. (2018, February 2). Is the Fed's inflation target kaput? Retrieved from Bloomberg Businessweek website: <https://www.bloomberg.com/news/articles/2018-02-02/is-the-fed-s-inflation-target-kaput>

<sup>xxxviii</sup> Measuring corporate default rates. (2006, November). Retrieved from Moody's Investors Services website: <https://www.moody.com/sites/products/DefaultResearch/2006200000425249.pdf>

<sup>xxxix</sup> Nolan, K., & McGee, P. (2012, February 22). 2112: A rush for bonds from University of California system. Retrieved from Wall Street Journal website: <https://www.wsj.com/articles/SB10001424052970203918304577239564073447788>

- <sup>xl</sup> Smith, C. (2018, June 26). California state treasury sells \$860 million worth of UC bonds. Retrieved from The Daily Californian website: <http://www.dailycal.org/2012/02/23/california-state-treasury-sells-860-million-worth-of-uc-bonds/>
- <sup>xli</sup> Daily treasury yield curve rates. (n.d.). In U.S Department of the Treasury. Retrieved from <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldYear&year=2015>
- <sup>xlii</sup> State rainy day funds grow even as total balances lag. (2018, January 25). Retrieved from The Pew Charitable Trust website: <http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/fiscal-50#ind5>
- <sup>xliii</sup> State credit ratings. (n.d.). Retrieved from Ballotpedia website: [https://ballotpedia.org/State\\_credit\\_ratings](https://ballotpedia.org/State_credit_ratings)
- <sup>xliv</sup> State rainy day funds grow even as total balances lag. (2018, January 25). Retrieved from The Pew Charitable Trust website: <http://www.pewtrusts.org/en/multimedia/data-visualizations/2014/fiscal-50#ind5>
- <sup>xlv</sup> Rating action: Moody's downgrades Alaska to Aa3; Outlook remains negative. (2017, July 13). Retrieved from Moody's Investors Service website: [https://www.moodys.com/research/Moodys-Downgrades-Alaska-to-Aa3-Outlook-Remains-Negative--PR\\_904114077?WT.mc\\_id=AM~RmluYW56ZW4ubmV0X1JTQl9SYXRpbmdzX05ld3NfTm9fVHJhbnNsYXRpb25z~20170713\\_PR\\_904114077](https://www.moodys.com/research/Moodys-Downgrades-Alaska-to-Aa3-Outlook-Remains-Negative--PR_904114077?WT.mc_id=AM~RmluYW56ZW4ubmV0X1JTQl9SYXRpbmdzX05ld3NfTm9fVHJhbnNsYXRpb25z~20170713_PR_904114077)
- <sup>xlvi</sup> State rainy day funds in 2017. (2017, July 18). Retrieved from The Pew Charitable Trust website: <http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2017/07/state-rainy-day-funds-in-2017>
- <sup>xlvii</sup> Rose-Smith, I. (2015, November 4). Puerto Rico seeks a brighter economic future. Tourists welcome. Retrieved from Institutional Investor website: <https://www.institutionalinvestor.com/article/b14z9yl1jgz772/puerto-rico-seeks-a-brighter-economic-future-tourists-welcome>
- <sup>xlviii</sup> Pollock, A. J. (n.d.). Let's get rid of Puerto Rico's triple-tax exemption. Retrieved from R Street website: <http://www.rstreet.org/2017/05/05/lets-get-rid-of-puerto-ricos-triple-tax-exemption/>
- <sup>xlix</sup> Long, H. (2016, July 1). Puerto Rico makes historic default. Retrieved from CNN Money website: <http://money.cnn.com/2016/07/01/investing/puerto-rico-defaults-general-obligation-bonds/index.html>
- <sup>l</sup> Coy, P. (2016, January 21). The case for allowing U.S. states to declare bankruptcy. Retrieved from Bloomberg Businessweek website: <https://www.bloomberg.com/news/articles/2016-01-21/the-case-for-allowing-u-s-states-to-declare-bankruptcy>
- <sup>li</sup> Scurria, A. (2017, July 20). Puerto Rico's bondholders file first suit against Uncle Sam. Retrieved from Wall Street Journal website: <https://www.wsj.com/articles/puerto-ricos-bondholders-file-first-suit-against-uncle-sam-1500587205>
- <sup>lii</sup> Wirz, M. (2018, March 15). Why Puerto Rico is proving to be 2018's top bond investment. Retrieved from Wall Street Journal website: <https://www.wsj.com/articles/puerto-rico-bonds-are-a-surprise-star-performer-as-economy-starts-to-mend-1521115200>
- <sup>liii</sup> EMMA. (n.d.). Retrieved from Municipal Securities Rulemaking Board website: <https://emma.msrb.org/>
- <sup>liv</sup> Should the Fed stick with the 2 percent inflation target or rethink it? (2018, January 8). Retrieved from Brookings Institute website: <https://www.brookings.edu/events/should-the-fed-stick-with-the-2-percent-inflation-target-or-rethink-it/>
- <sup>lv</sup> Note: On the topic of budget stabilization funds and recommendations for better budget stabilization fund management, this study pulls heavily from the work of the Pew Charitable Trust. For a more detailed analysis, see their collection of reports on the subject.
- <sup>lvi</sup> Building state rainy day funds. (2014, June). Retrieved from The Pew Charitable Trust website: [http://www.pewtrusts.org/~media/assets/2014/07/sfh\\_rainy-day-fund-deposit-rules-report\\_artready\\_v9.pdf](http://www.pewtrusts.org/~media/assets/2014/07/sfh_rainy-day-fund-deposit-rules-report_artready_v9.pdf)
- <sup>lvii</sup> When to use state rainy day funds. (2017, April). Retrieved from The Pew Charitable Trust website: <http://www.pewtrusts.org/~media/assets/2017/04/when-to-use-state-rainy-day-funds.pdf>
- <sup>lviii</sup> Phaneuf, K. M. (2018, April 13). S&P lowers CT's bond rating citing hefty debt. Retrieved from The CT Mirror website: <https://ctmirror.org/2018/04/13/sp-lowers-cts-bond-rating-citing-hefty-debt/>
- <sup>lix</sup> Menton, F. (2017, May 3). Connecticut discovers the Laffer Curve the hard way. Retrieved from Manhattan Contrarian website: <https://www.manhattancontrarian.com/blog/2017/5/3/connecticut-discovers-the-laffer-curve-the-hard-way>

- <sup>lx</sup> Connecticut's 2017 deficit on track for \$107.2 million. (2017, July 3). Retrieved from US News Best States website: <https://www.usnews.com/news/best-states/connecticut/articles/2017-07-03/connecticuts-2017-deficit-on-track-for-1072-million>
- <sup>lxi</sup> Connecticut. (2018, May). Retrieved from State Data Lab website: [https://www.statedatalab.org/state\\_data\\_and\\_comparisons/detail/connecticut](https://www.statedatalab.org/state_data_and_comparisons/detail/connecticut)
- <sup>lxii</sup> Connecticut's state bonding process & restrictions. (2018, January 22). Retrieved from Connecticut's Finances website: <http://ctstatefinance.org/assets/uploads/images/CTs-Bonding-Process-Restrictions.pdf>
- <sup>lxiii</sup> Connecticut's state bonding process & restrictions. (2018, January 22). Retrieved from Connecticut's Finances website: <http://ctstatefinance.org/assets/uploads/images/CTs-Bonding-Process-Restrictions.pdf>
- <sup>lxiv</sup> Burton, P. (2017, April 25). Connecticut treasurer's plan would bond against income tax revenue. Retrieved from The Bond Buyer website: <https://www.bondbuyer.com/news/connecticut-treasurers-plan-would-bond-against-income-tax-revenue>
- <sup>lxv</sup> Povich, E. S. (2017, May 5). Amid gas-tax revenue decline, new fees on fuel-efficient cars. Retrieved from The Pew Charitable Trust website: <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/05/05/amid-gas-tax-revenue-decline-new-fees-on-fuel-efficient-cars>
- <sup>lxvi</sup> Phaneuf, K. M. (2018, April 19). Speaker: CT may need to tap surging April income tax receipts. Retrieved from The CT Mirror website: <https://ctmirror.org/2018/04/19/speaker-ct-may-need-tap-surging-april-income-tax-receipts/>
- <sup>lxvii</sup> Joffe, M. (2012, May 29). The safety of state bonds: A historical perspective. Retrieved from Expected[ed] Loss website: <http://expectedloss.blogspot.com/2012/05/safety-of-state-bonds-historical.html>
- <sup>lxviii</sup> Powers, T., York, E., Young, E., & Williams, B. (2017). Unaccountable and Unaffordable. Retrieved from ALEC website: [https://www.alec.org/app/uploads/2017/12/2017-Unaccountable-and-Unaffordable-FINAL\\_DEC\\_WEB.pdf](https://www.alec.org/app/uploads/2017/12/2017-Unaccountable-and-Unaffordable-FINAL_DEC_WEB.pdf)
- <sup>lxix</sup> Crown, J. (2016, January 27). Illinois pension crisis: Ripe for Fed rescue? Retrieved from Better Government Association website: <https://www.bettergov.org/news/illinois-pension-crisis-ripe-for-fed-rescue>
- <sup>lxx</sup> Resolution in opposing state bailouts by the federal government. (2017, January 12). Retrieved from ALEC website: <https://www.alec.org/model-policy/resolution-in-opposing-state-bailouts-by-the-federal-government/>