

March | 2018

Other Post-Employment Benefit Liabilities, 2017

The continuing need for OPEB reform

Other Post-Employment Benefit Liabilities, 2017 surveys the more than 100 state-administered post-employment benefit plans, such as health insurance, Medicare advantage, life insurance, and other non-pension benefits. This report, like *Unaccountable* and *Unaffordable*, normalizes discount rates across plans using a risk-free rate. The report details the assets, assumptions, and risk-free liabilities, illuminating both the risks that states face and potential reforms they can take to avert a crisis.

Other Post-Employment Benefit Liabilities, 2017

Unfunded State Other Post-Employment Benefits near \$1 trillion dollars

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Background

After the 2008 recession revealed the instability of state and local financial positions, policymakers and researchers began to add more scrutiny to state and local financial reports. The Governmental Accounting Standards Board (GASB) issued a series of new recommendations designed to reveal hidden liabilities. One of these recommendations was GASB Statement 45, which revealed an estimated \$1.5 trillion in state and local other post-employment benefit (OPEB) liabilities.ⁱ However, OPEB liabilities were small relative to pension liabilities, and thus received less attention over the past decade. While some states have enacted reforms, many others have continued to promise future benefits without a plan to fund them.

In 2011, the American Legislative Exchange Council, Center for State Fiscal Reform issued a report on OPEB liabilities, *Public Employee “Other Post Employment Benefit” Plans, A Case for Shifting to a Defined-Contribution Approach*.ⁱⁱ The study surveyed 25 states, comparing their unfunded liabilities, funding ratios, annually required contributions (ARC), and the percent ARC paid. At the time, few states generated detailed OPEB valuations, limiting the research team’s ability to collect relevant data from all states. This problem persists as some states have not released an updated OPEB valuation since 2014, and only one state had issued a 2017 valuation at time of data collection for this report. Of the states that had reported their OPEB valuations between 2008 and 2009, the results were staggering: Only one state, Arizona, had successfully prefunded their OPEB plan.

Given the history of pension mismanagement and the mismanagement replicated in OPEB plans, the research team recommended that states adopt “defined contribution” OPEB plans. Rather than promising a future healthcare benefit, states could offer healthcare access funded in the present through higher premiums, ending the explicit state subsidy. *Other Post-Employment Benefit Liabilities, 2017* builds on the previous report, increasing the sample size to all 50 states, including new variables and levels of analysis, and parsing explicit and implicit healthcare subsidizes.

Do not let problems grow into crises

Over the past seven years, states have begun to reform their public pension systems to mitigate damage from decades of mismanagement. However, the practices that created the pension crisis are still being applied to OPEB, such as dental, life, health insurance, and Medicare supplemental plans. From 2016 to 2017, the unfunded liability for these plans grew by \$54 billion to \$894 billion—an increase of 6.4 percent. Nationally, unfunded OPEB liabilities will double every 11 years if this rate of growth continues.

Pension reforms began in the late 1980s and early 1990s, when states began to pre-fund their pension benefits through irrevocable trusts in the hopes of blunting the projected unfunded liabilities. However, in the majority of cases, states have neither created trusts nor otherwise pre-

funded OPEB. Because of this failure to set aside assets for future OPEB costs of current employees, these plans accrue billions of dollars in unfunded liabilities annually. The “pay-as-you-go” method of providing retiree benefits is risky and requires regular and frequent adjustments to each plan’s actuarial assumptions. The majority of the growth in unfunded OPEB liabilities can be attributed to “pay-as-you-go” plans. Nearly half of all state administered OPEB plans—47 of the 105—operate as pay-as-you-go, as defined as being less than 1 percent funded.

The current cost—the current year’s OPEB expense provided for current retirees—tends to only represent 20 to 40 percent of the ARC, by the states’ own calculations—the amount necessary to cover current costs plus the amortization of unfunded liabilities within a given time frame, typically 30 years. Between prefunding and pay-as-you-go plans, states last year only set aside 39 percent of the ARC for 2017. The failure to fund the other 61 percent of the ARC (the portion necessary to prepare for future OPEB expenses) is partially responsible for the \$54 billion increase in the unfunded liability.

This persistent failure by most states to even attempt to fund future OPEB liabilities has resulted in an aggregate funding ratio of all OPEB plans of an alarming 2.63 percent. In other words, for every \$100 that should be invested in order to pay for future benefits, states have not even invested \$3.00. Even troubled state pension plans are funded overall at 33.7 percent.ⁱⁱⁱ The health of future retirees—many presently employed by state government—and the financial well-being of taxpayers are placed at risk. Changes in demographics, healthcare laws, and medical innovations increase the risk of OPEB liabilities rapidly changing. Wyoming, for example, experienced a 160 percent surge in unfunded OPEB liabilities in a between their two most recently reported years.

Keeping the promise to retirees and safeguarding stakeholders against large and sudden tax and contribution increases requires changes such as prefunding OPEB plans and/or adopting reforms similar to those implemented in Nebraska, South Dakota, and Kansas.

Unrealistic actuarial assumptions mask extent of the problem

Of the 10 OPEB plans with the largest growth in unfunded liabilities per capita, none exceeded a funded ratio of 3.1 percent. The lag between matching existing assumptions with reality significantly drives up unfunded liabilities.

For example, pay-as-you-go plans base their assumed rate of return on historical money market returns. The resulting average discount rate of 4.3 percent dwarfs the current available national money market rate of 0.12 percent over the past 3 years.^{iv} The difference between the assumed rate of return and the actual rate causes plan managers to underestimate their liabilities in a major way.

Prefunded plans do not fare much better in terms of assumed rates of return for 2017. The 52 plans which had long-term investments assumed an average rate of return of 6.1 percent, far

exceeding their realized return of just 2 percent. Again, an approximate 4 percentage point gap lies between assumed and actual returns. For prefunded plans, overly optimistic assumptions impact future stakeholders in addition to creating havoc on the current year's budget. Underestimating the ARC results in lower annual contributions and thus a lower "real" funding ratio.

Many plans assume rates of return far higher than can be consistently expected of today's market, even under direction of the best asset managers. These decisions generate substantial perverse incentives for pension administrators and investment managers, often inviting politicized decision-making and risky fund allocations. To estimate the unfunded liabilities and funding ratios of the 105 state-administered OPEB plans, ALEC uses a more prudent rate of return based on the equivalent of a hypothetical 15-year U.S. Treasury bond yield. Since this is not presently offered as an investment instrument, the number is derived from an average of the 10- and 20-year bond yields. This year's number is averaged from the 12 months spanning April 2016 to March 2017. The resulting rate is 2.142 percent. This discount rate is rate applied to future liabilities to estimate their present value.

Pay-as-you-go plans, which represent nearly half of all state OPEB plans, are the major drivers of unfunded liability growth. This is particularly problematic given that pay-as-you-go plans typically have regular adjustments to their assumptions, contributions, and liabilities as economic, demographic, and policy changes occur.

Total unfunded state OPEB liabilities approach \$1 trillion

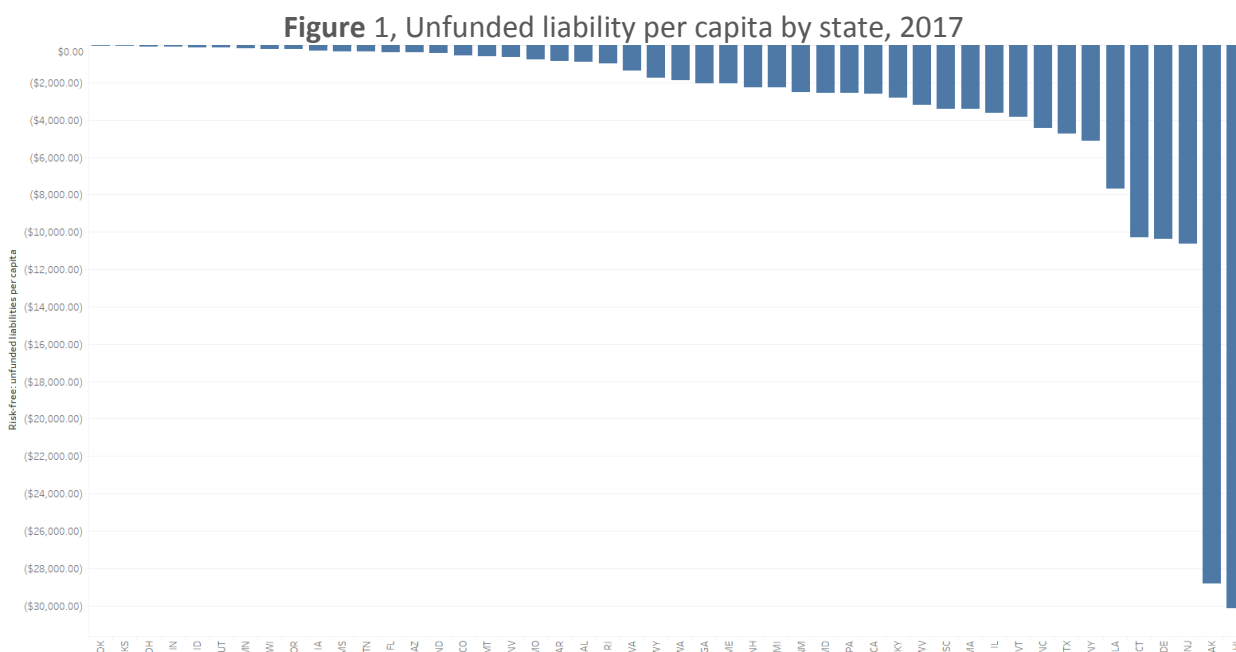
Using a risk-free discount rate for prefunded plans, the total OPEB liability stands at \$894 billion. The fiscal condition of individual states varies greatly. In fact, five states account for half the total unfunded liabilities: Texas, New York, California, New Jersey, and Illinois. Furthermore, five states also account for half the total unfunded liability per capita: Hawaii, Alaska, New Jersey, Delaware, and Connecticut. Alternatively, three states have effectively eliminated their liabilities entirely: Nebraska, South Dakota, and Kansas.

Kansas eliminated \$210 billion in unfunded liabilities—nearly all the state's liabilities—in 2015 through reform. In many states, modest changes to cost sharing or premium increases could eliminate the state's liability. However, if OPEB liabilities continue to grow at the current rate, required changes for current employees and retirees may soon become far less manageable.

Total unfunded state OPEB liabilities per capita average \$2,762

The \$894 billion unfunded OPEB liability amounts to an average of \$2,762 for every resident in the United States—a \$282 per capita increase over the prior year. This liability alone dwarfs the savings of the vast majority of Americans, 69 percent of whom have less than \$1,000 in savings. Politicians are making promises that taxpayers will struggle to honor^v.

Notably, the severity of the problem varies widely between the states. In 22 states, unfunded OPEB liabilities are less than \$1,000 per capita. In these states, prudent actions (such as adopting Nebraska’s defined contribution model) can immediately resolve the problems. On the other hand, some states face more troubling numbers. Hawaii and Alaska have accrued \$30,000 and \$28,000, respectively, of unfunded OPEB liability for every state resident.

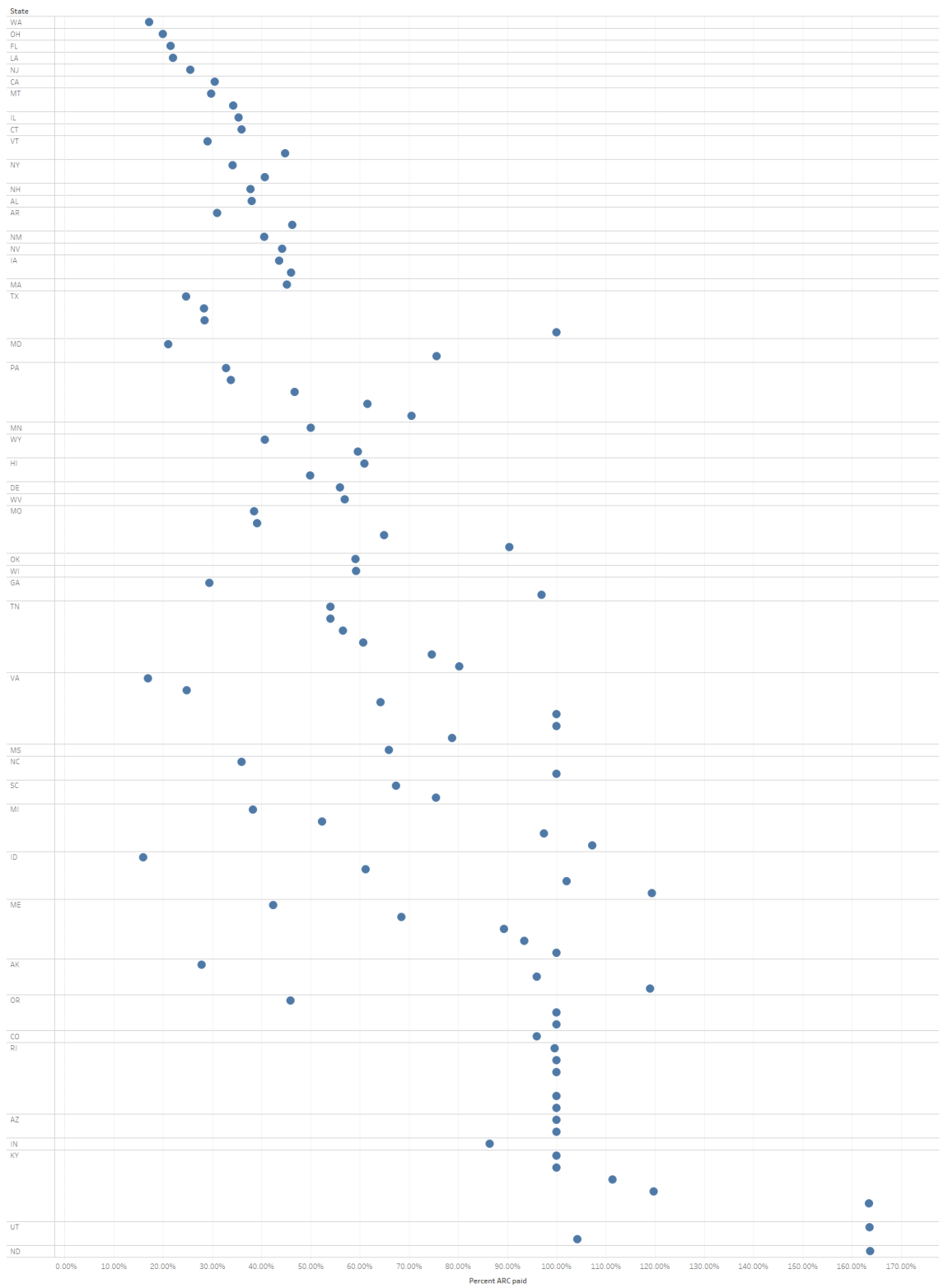


Failure to meet the ARC is the primary driver of unfunded liabilities

The primary source of the yearly growth in unfunded OPEB liabilities is the lack of consistency in fully making the ARC. The ARC consists of two components: the cost of current retirees and the cost of amortizing the unfunded liability accrued through promised benefits to future retirees. ARCs are often projected over 30 years with periodic re-amortizations, a practice called “rolling amortization.” Rolling amortization delays the point in time when a fund is projected to reach full funding. Between failing to pay the ARC, rolling amortization, and miscalculating future costs, many states find it impossible to reach full funding. Unfortunately, the majority of states do not even try to pay their ARC. Instead, they cover only current costs and allow future costs to accumulate year after year.

Among OPEB plans, those containing only pay-as-you-go plans pay between 20 and 40 percent of the ARC while those containing only prefunding plans pay 80 to 100 percent. Some trusts aggregate their obligations from both types of plans, reporting a blended ARC that, as expected, tends to fall between 40 and 80 percent. The contribution level differences between prefunded and pay-as-you-go plans are clearly observed (see Figure 2 below). The plans on the left end of the spectrum represent those which are not attempting to amortize their future liabilities; accordingly, these plans are responsible for most of the growth in unfunded liabilities.

Figure 2, Distribution of ARC paid, 2017



Only 36 of the 105 plans in 2017 paid 80 percent or more of their ARC; had these plans used a risk-free rate to estimate their liabilities, even fewer states would have met this threshold. The

remaining OPEB plans covered current costs and only a portion of the future costs, adding this contribution gap to the accumulated unfunded liability.

The states paying 80 percent or more of their ARC accrued \$63 per capita of unfunded liabilities. Contrast this with the states paying less of their ARC; these states accrued \$211 per capita, on average.^{vi} The first step to increase fiscal responsibility and security would be for these states to prefund their plans, or to switch to a defined contribution model if their accrued liabilities are low enough. Many state OPEB managers are already aware of these solutions, but they are unlikely to heed the advice without legislative direction. As the Pew Charitable Trust explains,

“States that pre-fund can use a higher discount rate—a measure used to convert future benefit payments into current dollars— than states with pay-go policies. As a result, governments that adopt pre-funding policies can expect decreases in their reported OPEB liabilities. Despite these benefits, some states indicated they may shy away from pre-funding to avoid recognizing the OPEB liability, on the assumption that creating a trust might limit the state’s flexibility to change benefits in the future.”^{vii}

Essentially, when states create a trust for their OPEB benefits, the state may lose the ability to deny or renegotiate benefits in the future—this is a double-edged sword. On one hand, not having a trust reduces the legal barrier to reforms. On the other, it increases the moral hazard of lawmakers to do nothing. The knowledge that a future policy maker can enact reforms relatively easily in the future may incentivize current officials to engage in reform paralysis.

Because of these mismatched political incentives, state employee unions and lawmakers effectively gamble with future OPEB benefits during benefit negotiations. This is unfair to future taxpayers and future retirees. Unfunded liabilities should not be haphazardly accrued by legislators unlikely to suffer the potential political consequences. Instead, states should pay their ARC in full and, if the cost of doing so is too high, implement reforms to prevent an avoidable crisis. Failure to prefund—pay 100 percent or more of the ARC—is the primary driver of unfunded liabilities; underestimating the ARC through unreasonable investment return assumptions is the secondary driver.

The funding ratio

The funding ratio is the most important measure of a defined-benefit plan, be it a pension or OPEB plan. Applying the estimated risk-free discount rate to the actuarial liabilities reported by pension plans generates a more realistic estimate of each state’s funded ratio.

For defined-benefit pensions, an 80 percent or higher funded ratio has historically been considered stable. The same logic applies to OPEB plans as a relatively higher funded ratio enables an OPEB trust to better withstand periodic economic shocks, reducing risk to future benefits and taxpayers. Adequate asset accumulation allows trust managers to smooth year-to-year fluctuations in the economy, investment return, and demographics changes.

Nearly half the states have funding ratio of less than 1 percent, applying a risk-free rate of return. Of important note, this study does not normalize plan assumptions of mortality, demographics, and health care costs. Because plan assumptions typically underestimate longevity, overestimate employee growth, and underestimate future health care costs, OPEB liabilities are likely even higher than this study's estimates. While fewer legal protections for OPEB plans exist relative to pensions, it is fiscally irresponsible to promise a subsidy without developing a trust to maintain that promise. In the future, states will either need to address these costs—either through higher taxes, fewer services, or higher state employee salaries necessary to cover contribution hikes or eliminate the benefit for new employees in favor of benefits experienced in the present, such as higher salaries.

As with most state liability management, the incentive to properly manage OPEB obligations is often outweighed by other, competing incentives. Nebraska, South Dakota, and most recently Kansas have solved this dilemma by recognizing the cost of OPEB in the present, like how the cost of a 401k benefit is experienced by the state. Some states will likely have to create a trust to efficiently cover the cost of already promised benefits before transitioning to a defined contribution model; however, most states should be able to enact reforms to eliminate their unfunded liability without this intermediate step.

Methodology

In this study, we examine 105 state-administered OPEB plans. Data are drawn from most current Comprehensive Annual Financial Reports (CAFRs) and Actuarial Valuation Reports available at the time of research, as provided by each plan or by state administrators. We collect state reported figures for the following nine variables related to each state's OPEB, when made available.

- Actuarial value of assets
- Actuarial accrued liability
- Annual required contribution
- Annual required contribution paid
- Percent of annual required contribution paid
- Assumed rate of return (discount rate)
- Actual investment rate of return

The reported actuarial value of assets (AVA) and actuarial accrued liability (AAL) is the starting point for calculation of each plan's unfunded liabilities. Several assumptions are made about the structure of state liabilities and the quality of the state's actuarial assumptions to create a more realistic estimate of each state's liabilities. For instance, because states are not required to report annual projections of their future liabilities, we must assume the midpoint of the state's liabilities

to recalculate using a different discount rate. In this publication, we use a 15-year midpoint. Other actuarial assumptions provided by state plans, such as mortality rates, are assumed to be accurate.

Other actuarial assumptions are assumed accurate not due to their historical accuracy or being a minor factor in calculating state liabilities. In fact, OPEB liabilities are more difficult to estimate than pension liabilities because there are more variables involved in calculating the future benefit. Whereas pensions will payout a set amount, augmented by cost of living adjustments, the future cost of healthcare is unpredictable. Our study likely underestimates state OPEB liabilities as states often use out-of-date mortality tables and underestimate the growth of healthcare costs.^{viiiix} However, without more detailed financial disclosures, accounting for these other assumptions is difficult to do with any precision.

As the Society of Actuaries' Blue Ribbon Panel on Public Pension Plan Funding recommends, "The rate of return assumption should be based primarily on the current risk-free rate plus explicit risk premium or on other similar forward-looking techniques."^x Because federal government bonds are insured with the full faith and credit of the United States government, the rate of return for these bonds is the best proxy for a risk-free rate. Put simply, the discount rate should reflect a state's inability to default on its obligations, not the states historical return on investments. A valuation of liabilities based on a risk-free rate contrasts sharply with the optimistic assumptions used in nearly all post-employment benefit plans.

The appropriate risk-free rate of the 105 OPEB plans reviewed in this study should vary due to the more than 50 plans that report zero assets. The accurate risk-free rate for plans without assets would be that of money market funds, around 0.13 percent, as state general funds are typically held in these short-term investments. Using anything higher would result in underestimating the full magnitude of state OPEB liabilities. However, we assume a pre-funded rate for all plans, as that is the most efficient and secure way to offer retiree healthcare subsidies and thus states that wish to offer retirees a subsidy should prefund. Furthermore, states often blend their pay-as-you go and prefunding plans and therefore cannot be subjected to two different discount rates.

Many plans assume rates of return far higher than can consistently be expected in today's market. For example, the average discount rate of plans in this year's edition is 5.2 percent, with some plans assuming up to an 8 percent annual return. We use a more prudent rate of return, based on the equivalent of a hypothetical 15-year U.S. Treasury Bond yield calculated as the average of the 10-year and 20-year bond yields. This publication year's rate is averaged from the 12 months spanning April 2016 to March 2017, resulting in a risk-free rate of 2.142 percent. Not

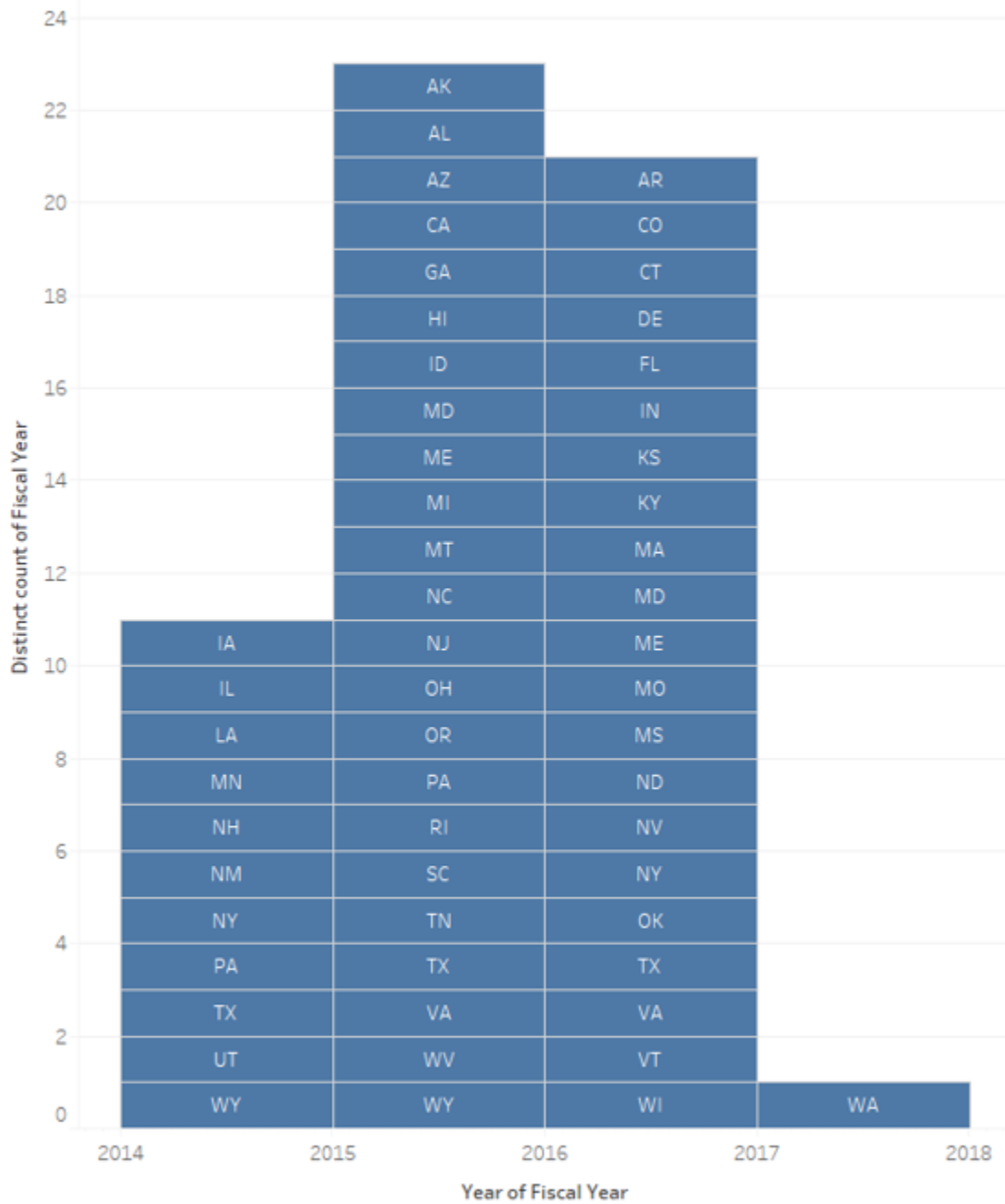
only are the plans' assumed rates of return highly unrealistic, they create perverse incentives for investment managers to pursue risky fund allocations and politicized decision-making, which can negatively impact return on investment. The application of a 15-year midpoint is based on the midpoint of the average pension plan, as the beneficiaries of OPEB and pensions tend to overlap. However, pension plans are more uniform in structure relative to OPEB plans, and thus the average OPEB plan's midpoint likely varies more from 15 years than the average pension plan. Barring states disclosing their liability projections, as we and the Blue Ribbon Panel on Public Pension Plan Funding recommends, a more accurate estimate cannot be made.

The formula for calculating a more realistic present value for a liability requires first finding the future value of the liability. That formula, in which "i" represents a plan's assumed interest rate, is $FV = AAL \times (1+i)^{15}$. The second step is to discount the future value to arrive at the present value of the more reasonably valued liability. That formula is $PV = FV / (1+i)^{15}$, in which "i" represents the risk-free interest rate. Using a more reasonable valuation ensures state officials cannot overestimate their asset performance and thus underestimate their required contributions.

For other post-employment benefit plans that report assets, we collect the rate of return earned on those assets. Some smaller OPEB plans do not report their returns on investment, and in these cases, we use the rate of return reported for that state's pension plan as a proxy. In cases where states claim that their assets do not meet the Governmental Accounting Standards Board's definition of an asset, we assume that plan, or state, has no assets. For plans without assets, we assume a rate of return equal to the money market for large deposits, as they are not reported but likely close to the assumed return.

The annual nature of this report necessitates the formulation of estimated figures for some years, as state reported data is often released on a biannual or even less frequent basis. To overcome this challenge, we derive off-year figures by taking an average of the reported year figures, as liabilities tend to grow in a linear fashion. For example, to find the odd-year liabilities of a plan that reports in even years only, we would average the even years to arrive at a synthetic figure for the unreported year. The lag in data reporting creates an additional challenge both in terms of measurement and clarity. Our first priority is collecting data in one-year intervals to measure year-over-year change, thus matching fiscal years across all plans is a secondary priority. The 2017 edition of other post-employment benefits report contains fiscal year data ranging from 2014 to 2017, visualized in Figure 3 below. For these reason, we track liabilities by both ALEC publication year and by fiscal year. Ideally, states will report their pension liabilities annually—and in a timely manner—so recent changes can be measured.

Figure 3, distribution of fiscal years for publication year 2017



Key Assumptions

This study controls for differences in discount rates and applies a more realistic discount rate to create an accurate picture of state OPEB liabilities. A discount rate is rate applied to future liabilities to estimate their present value. The rate is often used interchangeably with assumed rates of return on assets. As articulated earlier, many plans assume rates of return far higher than can be consistently expected of today's market, even under direction of the best asset managers. These decisions generate substantial perverse incentives for pension administrators and investment managers, often inviting politicized decision-making and risky fund allocations. To estimate the unfunded liabilities and funding ratios of the 105 state-administered OPEB plans, ALEC uses a more prudent rate of return based on the equivalent of a hypothetical 15-year U.S. Treasury bond yield. One challenge is that prefunded and pay-as-you-go plans assume different discount rates. Prefunded plans invest their assets into long-term securities and equities. Pay-as-you-go plans, because they do not have assets, invest almost exclusively in short-term money markets, offering far lower yields than long-term investments. Logically, pay-as-you-go plans should use a lower discount rate—though they often fail to do so.

Ideally, a study would apply different risk-free rates depending on whether a plan operates as prefunded or pay-as-you-go. But many state reports aggregated OPEB liabilities and do not differentiate between plan types. This combined reporting makes applying different discount rates difficult, if not impossible. As this study suggests, states should prefund plans through a dedicated trust, or pursue the Nebraska model. For this reason, we use the higher Treasury bond-based risk-free rate—used for prefunded plans—for all plans. One side effect of using this rate is that it underestimates the total risk-free unfunded liability for pay-as-you-go plans invested in lower yielding money market accounts. Despite its limitations, risk-free rates based on Treasury bond returns provide a more realistic estimate of state liabilities compared to the optimistic discount rates assumed by the states—this is true for both pay-as-you-go and prefunded plans.

Overly optimistic discount rates are the primary contributor to unfunded liability growth, second only to the growth attributed to the failure to make ARC payments. This growth occurs because a plan's discount rate is used to estimate the present value of future benefit costs, which in turn determines the ARC payment for amortizing the unfunded liability. Consequently, the larger the gap between the assumed discount rate and the actual rate of return, the faster unfunded liabilities will grow.

In the most recent year of data available, OPEB trusts that were more than 1 percent funded assumed an average 6.1 percent discount rate while experiencing an average 1.69 percent actual return on investment. Over a 30 year period, that difference would produce a 71 percent gap between assumed and actual returns.

The 53 plans with assets less than 1 percent of liabilities (pay-as-you-go plans) do not even attempt to pay future costs, and significantly underestimate their actuarially accrued liabilities. Managers of pay-as-you-go plans, on average, assume a 4.4 percent rate of return. However, post-recession federal monetary policy has reduced money market returns to less than 0.13

percent on average since 2013.^{xi} By prefunding, the rate of return on assets would be far higher, and thus the cost of plan lower—even using the risk-free rate of return.

Our analysis shows that 95 percent of plans fell short of their expected rate of return, and 80 percent were below the risk-free prefunded discount rate relative to the previous year. The left column of Figure 4 ranks states by the difference between their assumed and actual rates of return for 2017. In the right column, states’ assumed rates are compared to a risk-free rate, assuming prefunding. These return shortfalls are particularly concerning for pay-as-you-go plans, given that they should assume a lower rate than prefunding plans.

Figure 4, discount rates relative to estimated realized rates of return, 2017

State	Average discount rate	Estimated realized rate of return	Difference	State	Average discount rate	Estimated realized rate of return	Difference
AK	8.00%	-0.36%	-8.36%	MS	4.50%	0.13%	-4.37%
AL	5.00%	-0.09%	-5.09%	MT	4.25%	0.13%	-4.12%
AR	3.60%	0.13%	-3.47%	NC	5.00%	2.25%	-2.75%
AZ	8.00%	0.29%	-7.71%	ND	8.00%	0.72%	-7.28%
CA	4.25%	1.60%	-2.65%	NE	N/A	N/A	N/A
CO	7.25%	7.30%	0.05%	NH	4.50%	0.13%	-4.37%
CT	5.70%	0.23%	-5.47%	NJ	4.50%	0.13%	-4.37%
DE	3.75%	1.41%	-2.34%	NM	5.00%	1.90%	-3.10%
FL	2.85%	0.13%	-2.72%	NV	4.00%	2.30%	-1.70%
GA	4.50%	3.70%	-0.80%	NY	3.13%	0.13%	-3.00%
HI	7.00%	2.41%	-4.59%	OH	7.75%	-0.03%	-7.78%
IA	4.50%	0.13%	-4.37%	OK	4.00%	0.13%	-3.87%
ID	4.38%	1.09%	-3.29%	OR	6.17%	1.31%	-4.86%
IL	4.50%	0.13%	-4.37%	PA	5.25%	1.29%	-3.96%
IN	4.50%	1.20%	-3.30%	RI	5.00%	-0.30%	-5.30%
KS	8.00%	0.13%	-7.87%	SC	5.75%	2.12%	-3.63%
KY	7.21%	-0.52%	-7.73%	SD	N/A	N/A	N/A
LA	3.75%	16.80%	13.05%	TN	3.75%	0.13%	-3.62%
MA	4.50%	1.79%	-2.71%	TX	5.91%	1.95%	-3.97%
MD	3.88%	0.82%	-3.06%	UT	4.50%	7.94%	3.44%
ME	5.15%	0.11%	-5.04%	VA	5.72%	1.07%	-4.65%
MI	6.00%	2.13%	-3.87%	VT	4.00%	1.29%	-2.71%
MN	4.10%	0.13%	-3.97%	WA	3.75%	0.13%	-3.62%
MO	4.45%	0.11%	-4.35%	WI	3.56%	0.13%	-3.43%
MS	4.50%	0.13%	-4.37%	WV	6.70%	2.85%	-3.85%
MT	4.25%	0.13%	-4.12%	WY	4.25%	0.13%	-4.12%

Many states did not report their rates of return or could not produce their rates of return in the form of an official document, such as a valuation or annual report; as such, these rankings are approximations. States reporting their rate of return on their OPEB assets are represented by the

figures above. States which had 1 percent or greater funding ratios but not reporting their rate of return were assumed to have blended their OPEB and pension assets to reduce administrative costs—a common practice. When no assets were reported, we use the money market rate for large deposits. The lack or incomplete state reporting of investment returns on OPEB assets is deeply concerning.

Overly optimistic discount rates are particularly widespread in public finance. A number of key stakeholders —lawmakers, fund managers, and unions have little interest in recognizing the full liability of their state employee benefit plans.

From the perspective of politicians, an unrealistically high discount rate is politically beneficial because it reduces the ARC paid from the general fund. Revenue dedicated to fixed costs—bonds, pensions, OPEB, and other obligations—cannot be applied to politically beneficial endeavors such as bridges, metro stations, and social programs. Recognition of OPEB liabilities directly conflicts with the aspirations of many politicians.

Union leaders are similarly encumbered by skewed incentives. The discount rate determines the present value of future benefits; the lower the discount rate, the lower the projected cost. By using an unrealistically high discount rate, union leaders can negotiate more generous benefit packages for their members, as the cost of the benefit is underestimated. In the short term, this gives current union leaders the appearance of a successful tenure. Unfortunately, the long-run reveals it as a gamble for union members and retirees, as future solvency crises are likely to precipitate reductions in benefits, increases in contribution rates, tax increases for residents, or a combination thereof.

Trust and plan managers have an incentive to underestimate their liabilities because larger unfunded liabilities (poorer funded ratios), reflect negatively on their job performance. If trust and plan managers were to adopt bond and money market risk-free rates, respectively, their recognized liabilities would sharply increase. This would appear to be mismanagement on the part of the current overseer when the opposite is true. The sudden shock associated with adopting more reasonable liability management assumptions, as Minnesota experienced in 2017, is a correction—an improvement—to previous perceptions.^{xii}

In short, each stakeholder has an interest in underestimating the liability and is not likely to suffer the consequences for that error. The stakeholder most likely to pay the price of mismanagement—the taxpayer—is not well-represented at the negotiation table.

Fortunately, Nebraska, and more recently South Dakota and Kansas, have entirely removed the underestimation incentive by removing their liabilities. They solved this dilemma by recognizing the cost of OPEB in the present, like how the cost of a 401k benefit is experienced annually by the state. The structure of these states' plans now requires current employees and retirees to share costs of OPEB, as expenses are incurred each year. This is not to suggest the retirees receive no

benefits. They can purchase the state plan as part of a pool of younger and healthier people than they would otherwise be pooled with. Particularly those states with large unfunded liabilities should aim to transition to this model to recognize the cost of OPEB in the present as opposed to estimating their cost decades from now.

Government transparency is vital for democracy

Transparency allows voters, taxpayers, and all stakeholders to access, research, and understand the operations of the government and hold officials accountable for their actions. Further, it allows the public to identify issues with government and shift it in a direction more aligned with their interests.

Historically, state and local governments have resisted improving their public financial reports on grounds that the additional costs associated with printing, storing, and distributing reports would come at the expense of services. With the dawn of 21st century technology—such as PDFs, email, and other digital document-sharing methods—state and local governments have few valid reasons to avoid disclosing key financial information like that required of publicly-traded corporations.

Government transparency is especially important as it relates to its long-term liabilities, as these represent future increased fixed costs. If these liabilities are not well-managed, future taxpayers will bear the costs of decisions made decades prior, either in the form of higher taxes or reduced state services. If these liabilities are inaccurately estimated, incompletely disclosed, or inaccessible to the public, the ability of the public to advocate for themselves is lost and mismanagement becomes inevitable.

For more than a decade, ALEC has called on state and local governments to put their budgets online, in an accessible format for all taxpayers to see.^{xiii} Unfortunately, state reporting of OPEB liabilities is often less comprehensive and of lower clarity than most budget reports – and even of lower quality than most pension valuations. For 13 states, their most recent and accessible valuation at the time of data collection for this report was in 2014, and most required two or more sources to collect basic financials on OPEB liabilities and assets. States that issued their OPEB liabilities in a comprehensive, easily accessible format were the exception rather than the rule. This section of the report highlights their best practices in hopes that other states will adopt their methodology and become more transparent in the years to come.

Case Studies—A cut above the rest

Indiana, Washington, New Hampshire, and Maryland produce and report OPEB valuations in an accessible, timely, and comprehensive manner. Most states reported minimal statistics and did so a year or later. Without clear and comprehensive reporting, mismanagement can continue unabated and grow into a crisis.

Indiana provides a superior framework other states can emulate. GASB Statement 45 prepared for Indiana provides a clear record of several crucial variables, including the following: assets, liabilities, year-over-year changes, and drivers of these changes. These plans are reported by plan and by year. The report also provides a detailed account of the assumptions and demographics used to make estimates of future liabilities. Analysts provide all of this information in a clear and concise format with a series of tables.

Figure 5, Valuation Results for Fiscal Year Ending June 30, 2016

Discount Rate	4.50%		4.50%		4.50%	
Required Supplementary Information	Total	State Personnel	Legislature	ISP	CEP	
Actuarial Accrued Liability as of June 30, 2016	\$ 476,354,390	\$ 40,883,680	\$ 9,541,164	\$ 380,528,754	\$ 45,400,792	
Actuarial Value of Assets as of June 30, 2016	(137,007,125)	(44,320,907)	0	(79,798,509)	(12,887,709)	
Unfunded Actuarial Accrued Liability (UAAL)	\$ 339,347,265	\$ (3,437,227)	\$ 9,541,164	\$ 300,730,245	\$ 32,513,083	
Funded Ratio	28.8%	108.4%	0.0%	21.0%	28.4%	
Annual Required Contribution	Total	State Personnel	Legislature	ISP	CEP	
Normal cost	\$ 14,414,885	\$ 1,694,076	\$ 93,397	\$ 11,391,569 ²	\$ 1,235,843	
Amortization of the UAAL over 30-year period	20,188,155	(222,758)	557,423	17,919,256	1,934,234	
Total normal cost and amortization payment	\$ 34,603,040	\$ 1,471,318	\$ 650,820	\$ 29,310,825	\$ 3,170,077	
Interest to end of year	1,557,137	66,209	29,287	1,318,987	142,654	
Total Annual Required Contribution (ARC)	\$ 36,160,177	\$ 1,537,527	\$ 680,107	\$ 30,629,812	\$ 3,312,731	
Annual OPEB Cost and Net OPEB Obligation	Total	State Personnel	Legislature	ISP	CEP	
ARC for fiscal year 2015/16	\$ 36,160,177	\$ 1,537,527	\$ 680,107	\$ 30,629,812	\$ 3,312,731	
Interest on Net OPEB Obligation (NOO) to end of year	4,643,890	(1,511,173)	87,054	5,600,957	467,052	
Amortization adjustment to the ARC for BOY NOO	(6,335,458)	2,061,627	(118,765)	(7,641,142)	(637,178)	
Annual OPEB cost	\$ 34,468,609	\$ 2,087,981	\$ 648,396	\$ 28,589,627	\$ 3,142,605	
Annual employer contribution for pay-go cost in 2015/16	(4,643,603)	(2,977,166)	(461,554)		(1,204,883)	
Annual employer contribution for pre-funding in 2015/16	(37,232,512)			(34,862,363)	(2,370,149)	
Change in NOO for fiscal year 2015/16	\$ (7,407,506)	\$ (889,185)	\$ 186,842	\$ (6,272,736)	\$ (432,427)	
NOO as of July 1, 2015	103,197,565	(33,581,619)	1,934,549	124,465,706	10,378,929	
NOO as of June 30, 2016	\$ 95,790,059	\$ (34,470,804)	\$ 2,121,391	\$ 118,192,970	\$ 9,946,502	

Source: GASB 45 Actuarial Valuation, Fiscal Year Ending June 30, 2016, State of Indiana

Indiana reports the total and component liabilities along with a detailed account of the year-to-year changes in costs, employee and employer contributions, and the discount rates used per component. Without this information, identification of a specific OPEB plan as the driver of large changes in liabilities is difficult.

If other states reported their liabilities with Indiana's degree of detail, unfunded liabilities could be more accurately estimated. Our study likely underestimates the quantity of pay-as-you-go plans to be conservative by broadly defining prefunding as having more than 1 percent funded and many states aggregate their OPEB liabilities, obscuring how many plans they have, and which plans have no assets. As seen with Indiana's detailed reporting, one of the four plans operate as pay-as-you-go, a fact that would have been lost if reported in aggregate.

Figure 6, Schedule of Employer Contributions

<i>FYE</i>	<i>Employer Contributions</i>	<i>Annual Required Contribution (ARC)</i>	<i>% of ARC Contributed</i>
	<i>A</i>	<i>B</i>	<i>C = A / B</i>
June 30, 2016			
State Personnel	\$ 2,977,166	\$ 1,537,527	193.6%
Legislature	\$ 461,554	\$ 680,107	67.9%
ISP	\$ 34,862,363	\$ 30,629,812	113.8%
CEP	\$ 3,575,032	\$ 3,312,731	107.9%
Total	\$ 41,876,115	\$ 36,160,177	115.8%
June 30, 2015			
State Personnel	\$ 3,567,257	\$ 1,838,675	194.0%
Legislature	\$ 553,984	\$ 841,639	65.8%
ISP	\$ 25,319,778	\$ 29,604,071	85.5%
CEP	\$ 2,436,777	\$ 3,123,622	78.0%
Total	\$ 31,877,796	\$ 35,408,007	90.0%
June 30, 2014			
State Personnel	\$ 3,200,158	\$ 1,009,935	316.9%
Legislature	\$ 508,242	\$ 809,687	62.8%
ISP	\$ 24,834,550	\$ 26,029,514	95.4%
CEP	\$ 2,482,148	\$ 2,821,614	88.0%
Total	\$ 31,025,098	\$ 30,670,750	101.2%

Source: GASB 45 Actuarial Valuation, Fiscal Year Ending June 30, 2016, State of Indiana

The percentage ARC paid is a primary measure of fiscal responsibility going forward, whereas the funded ratio is a primary measure of past fiscal responsibility. Indiana provides both measures for the current and prior three years. Although it is relatively common for states to report their ARC and percent ARC paid, few states provide such detail across years in a single report.

Figure 7, Asset Information for FY 2014/15

Summary of Assets	State Personnel		ISP		Conservation		Excise		All Groups	
General investments										
Cash and cash equivalents	\$	630,195	\$	22,393,839 ⁵	\$	684,209	\$	690,494	\$	24,398,737
Fixed income / debt securities		43,600,873		57,273,671		8,995,143		2,501,435		112,371,122
Accrued interest receivable		89,840		106,255		13,627		2,800		212,522
Contributions receivable				27,744						24,744
Net assets	\$	44,320,907	\$	79,798,509	\$	9,692,979	\$	3,194,729	\$	137,007,125
Reconciliation of Assets										
Income										
Contributions received										
Employer	\$	0	\$	34,862,363	\$	1,758,188	\$	611,961	\$	37,232,512
Employee				899,866						899,866
Investment earnings										
Net appreciation in investment		12,965		71,282		1,693		1,193		87,133
Interest from investment		173,258		268,881		34,965		15,478		492,582
Securities lending income		8,928		5,757				2		14,686
Total income	\$	195,151	\$	36,108,149	\$	1,794,845	\$	628,634	\$	38,726,779
Disbursements										
Benefit payments to retirees	\$	0	\$	(10,196,138)	\$	0	\$	0	\$	(10,196,138)
Professional services fees				(17,106)						(17,106)
Securities lending expense		(7,435)		(5,053)				(1)		(12,489)
Total disbursements	\$	(7,435)	\$	(10,218,297)	\$	0	\$	(1)	\$	(10,225,733)
Net income	\$	187,716	\$	25,889,852	\$	1,749,845	\$	628,633	\$	28,501,046
Net asset at beginning of year		44,133,191		53,908,657		7,898,134		2,566,097		108,506,079
Net asset at end of year	\$	44,320,907	\$	79,798,509	\$	9,692,979	\$	3,194,730	\$	137,007,125

Source: GASB 45 Actuarial Valuation, Fiscal Year Ending June 30, 2016, State of Indiana

By reporting the change in net position by asset type, Indiana allows interested parties to accurately measure their asset performance against assumptions. States typically report actuarial assets and liabilities by year, sometimes biannually, without parsing various contributions, fixed income securities, or returns on assets. In these situations, estimates and proxies, such as the blended trust and money market assumption, must be employed to estimate investment returns.

Figure 8, Actuarially estimated employer-paid contributions for retiree health benefits for the next ten years by group

FYE	State Personnel			Legislature			Indiana State Police		
	Current Retirees	Future Retirees ⁷	Total	Current Retirees	Future Retirees ⁷	Total	Current Retirees	Future Retirees ⁷	Total
2016	\$ 2,462,768	\$ 514,398	\$ 2,977,166	\$ 431,982	\$ 29,572	\$ 461,554	\$ 6,761,561	\$ 473,242	\$ 7,234,803
2017	\$ 2,684,417	\$ 560,694	\$ 3,245,111	\$ 470,861	\$ 32,234	\$ 503,095	\$ 7,370,103	\$ 515,834	\$ 7,885,937
2018	\$ 2,926,014	\$ 611,156	\$ 3,537,170	\$ 513,238	\$ 35,135	\$ 548,373	\$ 8,033,412	\$ 562,259	\$ 8,595,671
2019	\$ 2,308,226	\$ 1,210,281	\$ 3,518,507	\$ 512,454	\$ 46,326	\$ 558,780	\$ 8,573,629	\$ 1,098,304	\$ 9,671,933
2020	\$ 1,914,513	\$ 1,819,889	\$ 3,734,402	\$ 512,996	\$ 52,733	\$ 565,729	\$ 9,103,214	\$ 1,739,758	\$ 10,842,972
2021	\$ 1,347,951	\$ 2,334,917	\$ 3,682,868	\$ 520,556	\$ 64,448	\$ 585,004	\$ 9,497,114	\$ 2,450,784	\$ 11,947,898
2022	\$ 1,014,065	\$ 2,798,693	\$ 3,812,758	\$ 508,477	\$ 76,660	\$ 585,137	\$ 10,095,563	\$ 3,268,841	\$ 13,364,404
2023	\$ 772,317	\$ 3,209,961	\$ 3,982,278	\$ 515,943	\$ 82,164	\$ 598,107	\$ 10,612,328	\$ 4,215,003	\$ 14,827,331
2024	\$ 485,549	\$ 3,432,600	\$ 3,918,149	\$ 527,261	\$ 95,170	\$ 622,431	\$ 11,096,722	\$ 5,205,714	\$ 16,302,436
2025	\$ 276,127	\$ 3,722,001	\$ 3,998,128	\$ 517,490	\$ 103,497	\$ 620,987	\$ 11,505,265	\$ 6,215,307	\$ 17,720,572

FYE	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs	Estimated Claims Costs	Retiree Contributions	Net Employer-Paid Costs
2016	\$ 9,508,299	\$ 6,531,133	\$ 2,977,166	\$ 573,129	\$ 111,575	\$ 461,554	\$ 11,310,056	\$ 4,075,253	\$ 7,234,803
2017	\$ 10,364,046	\$ 7,118,935	\$ 3,245,111	\$ 624,712	\$ 121,617	\$ 503,095	\$ 12,327,963	\$ 4,442,026	\$ 7,885,937
2018	\$ 11,296,809	\$ 7,759,639	\$ 3,537,170	\$ 680,936	\$ 132,563	\$ 548,373	\$ 13,437,479	\$ 4,841,808	\$ 8,595,671
2019	\$ 12,200,002	\$ 8,681,495	\$ 3,518,507	\$ 705,493	\$ 146,713	\$ 558,780	\$ 15,150,527	\$ 5,478,594	\$ 9,671,933
2020	\$ 13,771,040	\$ 10,036,638	\$ 3,734,402	\$ 727,018	\$ 161,289	\$ 565,729	\$ 16,990,735	\$ 6,147,763	\$ 10,842,972
2021	\$ 14,656,704	\$ 10,973,836	\$ 3,682,868	\$ 753,186	\$ 168,182	\$ 585,004	\$ 18,746,573	\$ 6,798,675	\$ 11,947,898
2022	\$ 15,638,422	\$ 11,825,664	\$ 3,812,758	\$ 767,661	\$ 182,524	\$ 585,137	\$ 20,932,845	\$ 7,568,441	\$ 13,364,404
2023	\$ 16,668,747	\$ 12,686,469	\$ 3,982,278	\$ 787,762	\$ 189,655	\$ 598,107	\$ 23,152,968	\$ 8,325,637	\$ 14,827,331
2024	\$ 17,022,389	\$ 13,104,240	\$ 3,918,149	\$ 834,211	\$ 211,780	\$ 622,431	\$ 25,430,741	\$ 9,128,305	\$ 16,302,436
2025	\$ 17,613,284	\$ 13,615,156	\$ 3,998,128	\$ 838,490	\$ 217,503	\$ 620,987	\$ 27,571,148	\$ 9,850,576	\$ 17,720,572

Source: GASB 45 Actuarial Valuation, Fiscal Year Ending June 30, 2016, State of Indiana

Indiana provides 10-year cost projections for their OPEB obligations, both in aggregate and by plan for current and future retirees. The projections include the estimated net cost and the cost relative to retiree contributions, highlighting the differences in cost sharing between plans. For example, the Indianan legislature contributes about one-quarter toward the cost of their healthcare while the state police contribute nearly one-third. This section of the report is a very uncommon disclosure and one which all state OPEB reports should have.

Figure 10, Comparison of Participant Demographic Information,

	As of June 30, 2014				As of June 30, 2016			
	State Personnel	Legislature	ISP	CEP	State Personnel	Legislature	ISP	CEP
Active Participants ¹³	24,364	134	1,624	201	24,287	118	1,713	256
Retired Participants ¹⁴	1,145	45	1,097	167	830	33	1,115	186
Averages for Active								
Age	46.5	57.4	42.5	43.0	45.7	58.0	42.5	39.6
Service	11.9	11.4	14.8	17.9	11.0	10.9	14.2	14.5
Averages for Inactive								
Age	62.4	68.9	69.2	66.5	62.0	71.3	70.3	67.1

Source: GASB 45 Actuarial Valuation, Fiscal Year Ending June 30, 2016, State of Indiana

Indiana provides detailed demographic data about its current employees and retirees—a surprisingly uncommon feature. At the outset, this report intended to include crucial participant demographics—a ratio of retirees to active employees—but the lack of reporting by a large portion of states forced our research team to drop the variable from this study. When contacted, a few states provided the figures in an email without citing a report and were therefore unverifiable. By providing these figures, Indiana allows us to understand how many active employees support the current retirees through annual contributions as well as the distribution across component plans and gives us some insight as to the future retiree ratio.

Indiana, Washington, and Maryland provide their valuations on separate state websites. The reports are relatively easy to discover using keyword searches, such as “Indiana GASB 45 2016 other post-employment benefits.” Transparency can be further improved by adopting Massachusetts’ practice of including a hyperlink to their GASB 45 OPEB valuations in their state comprehensive annual financial report (CAFR). The state CAFR is often the first document voters, stakeholders, and watchdog groups inspect when studying the state’s finances. Hyperlinking to more comprehensive valuations of trusts improves the ability to inspect state finances in detail.

Unfortunately, the vast majority of states do not report their finances in nearly as complete or concise a manner as the three highlighted states. In compiling this study’s dataset, ALEC researchers called numerous offices seeking basic information excluded from state CAFR fiscal notes or for access to their most recent OPEB valuations, many of which were not online. Some of these requests required public servants to do considerable legwork, taking as long as two weeks to complete—and others could not be completed at all. One state informed this report’s research team that their most recent percentage of ARC paid data is only reported in their bond issuances.

As one off-the-record comptroller bluntly stated, “[States] don’t have to report that until next year.” Over the next year, newly effective GASB rules should improve state financial disclosures. However, GASB, as a private sector entity, lacks the enforcement mechanisms necessary to ensure compliance with its standards. States should aim to adopt annual reporting of GASB Statements 45 or 75 in the style of Indiana’s reports as soon as possible.

State-administered OPEB plans represent nearly \$1 trillion of unfunded promised benefits. Transparency would enhance the capacity of taxpayers and public workers to hold politicians and investment managers accountable for keeping promises, while simultaneously safeguarding taxpayers from undue risk. All such stakeholders deserve comprehensible, navigable, and accessible information.

Year in Review

Most of the trends in state OPEB liabilities signal troubling times ahead. Chief among these trends is the rate at which liabilities are growing. Across the country, the average growth rate for OPEB liabilities is 6.4 percent, meaning in fewer than 12 years OPEB liabilities are set to double from their current levels. Fortunately for taxpayers and retirees in three states, policymakers have

solved their OPEB liability problem. The remaining 47 states should follow the example of the three reformers, especially the states in which OPEB liability growth is outpacing the national average.

Fastest growing state liabilities

From reporting year 2016 to reporting year 2017, 10 states experienced growth in risk-free unfunded liabilities more than twice that of the national average. These 10 states – Wyoming, North Dakota, Maryland, North Carolina, Arkansas, Delaware, Georgia, Arizona, Ohio, and Pennsylvania – must act quickly to reduce the rapid growth of their unfunded liabilities, as seen in Figure 6.

Figure 11, Change in risk-free unfunded liability relative to previous year

State	Change in risk-free unfunded liability
WY	159.69%
ND	55.48%
MD	28.29%
NC	25.14%
AR	24.68%
DE	22.85%
GA	15.39%
AZ	14.76%
OH	14.33%
PA	12.26%

Wyoming currently outpaces all other states' growth in liabilities by an alarming margin. From fiscal year 2014 to fiscal year 2015 (the two most recent reporting years), Wyoming's Retiree Health Insurance Plan's actuarial accrued liabilities of increased from \$252 million to \$666 million. RHIP has no reported assets, and the actuarial valuation reports provide little information for the cause of such significant growth in liabilities. The rapid rate of growth and the lack of transparency as to the cause of the growth is concerning. Had Wyoming reported their OPEB

valuation using Indiana's format discerning the driver behind the massive change over the past year may have been possible.

While no other state comes close to Wyoming's unfunded liability growth rate, several are still increasing at a substantial clip. Unfunded liabilities in North Dakota grew by 55 percent over the reporting period, largely from an increase in retirees receiving benefits—nearly doubling from 5,212 to 10,320. While the state has more than fully paid its ARC over this time horizon, the state calculates the ARC using an unrealistic 8 percent assumed rate of return. This scheme, similar to the underfunding of pensions, creates an unsustainable path forward.

Three states solve the OPEB problem

Fortunately, three states have eliminated their OPEB unfunded liabilities. These three states—Nebraska, South Dakota, and Kansas—have halted their unfunded liabilities from ballooning by transitioning to a system in which retirees pay for their own healthcare. These defined contribution plans can end state subsidies, thus protecting all hardworking taxpayers, while still providing cost savings to retirees.

A state employee health care supplement typically consists of a direct subsidy and indirect subsidy. The direct subsidy usually comes from states paying a portion of the retiree's premium or in the form of a healthcare stipend. The indirect subsidy comes from allowing retirees to share an insurance plan with active employees.

The state insurance pool (the number of beneficiaries of the state plan) tends to be healthier than pools in the individual market. The individual market unfortunately suffers from adverse selection due to several federal tax and healthcare policy decisions. The healthier the insurance pool, the lower the cost of the plan to retirees.

Retired employees who are older, particularly those who worked physically strenuous vocations, tend to cost more to insure than younger, active employees. States provide varying degrees of cost-sharing between active employees and retirees through differences in premiums. The closer the retiree plan's premiums are to the average, the higher the implicit subsidy. The subsidy appears to come from younger state workers, but this is an accounting illusion. If the net compensation, salary, and benefits of younger employees is reduced below the market equilibrium, the state will have to increase compensation for younger employees to fill positions.

Defined contribution plans allow retired state employees who are not yet eligible for Medicare to purchase the state plan. In defined contribution plans, the primary benefit is access to the state

employee healthcare plan and, in many cases, the implicit subsidy of cost sharing with younger employees. However, defined contribution plans do not have a direct subsidy component. When states switch to defined contribution plans, they add an additional layer of protection against future taxpayer bailouts, but do not eliminate the risk entirely. Sudden demographic shifts, as seen in Wyoming, can decrease current employee compensation and justify salary increases.

Nebraska, South Dakota, and Kansas took the final step in protecting taxpayers by eliminating the implicit subsidy of their insurance plans. Under their plans, retirees before the age of 65 have access to the state employee plan but must internalize their additional costs through higher premiums. This leaves them better off than they would be in the individual market, but worse off than under an implicit subsidy plan.

Taxpayers benefit most from the elimination of long-term liabilities but also from the other cost savings inherent with these defined contribution plans. Risk shifts away from the taxpayer as negotiations between the state and unions must proceed without reliance on a future bailout. Lawmakers are thereby incentivized to spend within existing fiscal constraints. By eliminating the ability and incentive to accumulate unfunded liabilities by not paying the ARC, defined contribution plans protect taxpayers and retirees by reducing imprudent risk-taking.

The states of South Dakota and Nebraska both report zero OPEB liabilities. Nebraska is unique in that instead of offering a subsidy for state employees, they allow retirees to buy the state plan themselves. This setup—the ideal model for state retiree healthcare plans—has enabled retirees to access lower-cost healthcare while preventing the state from incurring liabilities. Similarly, in 2014 the state of South Dakota moved away from a model that implicitly subsidizes rates. South Dakota adopted a model in which the retiree health plan premiums fully support their projected costs. This has eliminated South Dakota’s entire OPEB liability, protecting hardworking taxpayers from bearing the cost of unfunded promises in future years.

In June 2016, the Kansas Health Care Commission voted to transition to a defined contribution health care plan, thus ending the state subsidy of non-Medicare eligible retirees, such as people under the age of 65. This change, effective in 2017, has caused unfunded liabilities to fall from a risk-adjusted \$479.4 million to \$13.1 million and will eventually lead to an elimination of all OPEB liabilities. Under this new system, retirees make payments to the state and the state then negotiates health care benefits on behalf of employees. The pooling together of retirees results in cost savings, while also preventing the state from incurring liability. Like South Dakota and Nebraska, this model creates a win-win-win situation for state employees, taxpayers, and retirees.

Ideally, all states will move toward more transparent and responsible funding models for other post-employment benefits or adopt a plan which does not generate unfunded liabilities. The models exemplified in Nebraska, South Dakota, and now Kansas, demonstrate a system where retirees can access benefits without putting taxpayers at risk for unsustainable growth in unfunded liabilities. States which have accumulated massive unfunded liabilities, such as California and Alaska, would be well-served to consider developing a trust as well as the Nebraska model. Rather than allow these unfunded liabilities to balloon out of control, as is the status quo, states should take steps to reduce the burden on taxpayers while still enabling retirees to receive the health care benefits they need.

State Rankings

Total Risk-free unfunded liabilities										
Rank		State	Risk-Free Unfunded Liabilities		Rank		State	Risk-Free Unfunded Liabilities		
2017	2016		2016	2017	2017	2016		2016	2017	
36	37	Alaska	-\$21,772,532,048.00	-\$21,263,179,095.00	7	8	Montana	-\$619,657,883.00	-\$623,192,817.00	
24	24	Alabama	-\$4,947,206,038.00	-\$4,313,301,577.00	43	43	North Carolina	-\$35,774,401,797.00	-\$44,768,123,864.00	
19	16	Arkansas	-\$2,037,251,614.00	-\$2,540,091,460.00	4	3	North Dakota	-\$199,452,916.00	-\$310,102,562.00	
20	18	Arizona	-\$2,393,078,096.00	-\$2,746,276,510.00	N/A	N/A	Nebraska	N/A	N/A	
46	47	California	-\$94,674,326,871.00	-\$100,767,017,002.00	23	21	New Hampshire	-\$2,730,855,065.00	-\$3,012,738,650.00	
22	22	Colorado	-\$2,967,375,102.00	-\$2,968,702,247.00	45	45	New Jersey	-\$88,927,031,161.00	-\$95,121,093,135.00	
41	42	Connecticut	-\$35,729,167,907.00	-\$36,758,531,474.00	26	26	New Mexico	-\$5,319,177,834.00	-\$5,284,826,372.00	
29	27	Delaware	-\$8,024,565,280.00	-\$9,858,067,327.00	16	15	Nevada	-\$1,815,938,577.00	-\$1,895,701,061.00	
28	28	Florida	-\$8,397,050,384.00	-\$7,540,025,100.00	47	46	New York	-\$92,582,513,525.00	-\$101,170,831,498.00	
35	34	Georgia	-\$18,046,264,575.00	-\$20,824,392,354.00	9	9	Ohio	-\$711,452,850.00	-\$813,398,757.00	
42	36	Hawaii	-\$20,333,599,309.00	-\$42,936,300,557.00	1	1	Oklahoma	-\$6,128,360.00	-\$6,838,546.00	
11	40	Iowa	-\$24,447,304,264.00	-\$888,039,241.00	8	10	Oregon	-\$828,954,436.00	-\$808,222,171.00	
3	2	Idaho	-\$186,096,101.00	-\$186,040,163.00	39	41	Pennsylvania	-\$29,032,606,176.00	-\$32,591,823,061.00	
44	44	Illinois	-\$47,149,918,204.00	-\$46,573,840,840.00	14	13	Rhode Island	-\$1,045,736,701.00	-\$1,048,063,858.00	
6	7	Indiana	-\$492,045,696.00	-\$534,242,305.00	34	33	South Carolina	-\$15,198,266,394.00	-\$16,652,669,428.00	
2	6	Kansas	-\$479,412,927.00	-\$13,066,279.00	N/A	N/A	South Dakota	N/A	/NA	
31	31	Kentucky	-\$11,954,836,919.00	-\$12,508,949,309.00	17	17	Tennessee	-\$2,266,992,436.00	-\$2,215,820,588.00	
40	35	Louisiana	-\$18,165,774,881.00	-\$35,630,798,746.00	48	48	Texas	-\$128,641,269,320.00	-\$131,567,319,479.00	
38	38	Massachusetts	-\$21,951,579,460.00	-\$23,311,776,376.00	5	4	Utah	-\$377,277,408.00	-\$348,203,827.00	
33	30	Maryland	-\$11,938,647,028.00	-\$15,316,413,820.00	30	29	Virginia	-\$10,892,452,263.00	-\$11,444,185,362.00	
21	19	Maine	-\$2,544,947,525.00	-\$2,750,156,787.00	18	20	Vermont	-\$2,669,556,830.00	-\$2,389,807,852.00	
37	39	Michigan	-\$22,108,859,340.00	-\$22,612,520,679.00	32	32	Washington	-\$13,961,132,212.00	-\$14,000,089,638.00	
10	11	Minnesota	-\$934,194,578.00	-\$886,870,910.00	15	14	Wisconsin	-\$1,167,376,810.00	-\$1,159,539,831.00	
25	25	Missouri	-\$5,087,119,769.00	-\$4,803,622,518.00	27	23	West Virginia	-\$3,424,602,888.00	-\$5,876,112,997.00	
12	12	Mississippi	-\$1,000,917,510.00	-\$999,187,878.00	13	5	Wyoming	-\$399,754,382.00	-\$1,038,140,607.00	

Risk-free unfunded liabilities per capita

Rank		State	Risk-Free Unfunded Liabilities per capita		Rank		State	Risk-Free Unfunded Liabilities per capita	
2017	2016		2016	2017	2017	2016		2016	2017
47	48	Alaska	-\$29,554.00	-\$28,823.00	17	16	Montana	-\$606.00	-\$604.00
21	22	Alabama	-\$1,021.00	-\$889.00	40	37	North Carolina	-\$3,601.00	-\$4,461.00
20	18	Arkansas	-\$684.00	-\$850.00	15	10	North Dakota	-\$264.00	-\$409.00
14	13	Arizona	-\$356.00	-\$403.00	N/A	N/A	Nebraska	N/A	N/A
33	32	California	-\$2,448.00	-\$2,584.00	28	29	New Hampshire	-\$2,065.00	-\$2,267.00
16	15	Colorado	-\$545.00	-\$536.00	46	45	New Jersey	-\$9,964.00	-\$10,645.00
44	46	Connecticut	-\$9,967.00	-\$10,278.00	30	33	New Mexico	-\$2,551.00	-\$2,537.00
45	44	Delaware	-\$8,500.00	-\$10,354.00	18	17	Nevada	-\$630.00	-\$645.00
13	14	Florida	-\$415.00	-\$366.00	42	41	New York	-\$4,691.00	-\$5,125.00
26	24	Georgia	-\$1,789.00	-\$2,042.00	3	2	Ohio	-\$61.00	-\$70.00
48	47	Hawaii	-\$14,356.00	-\$30,127.00	1	1	Oklahoma	-\$2.00	-\$2.00
10	43	Iowa	-\$7,907.00	-\$286.00	9	9	Oregon	-\$209.00	-\$201.00
5	4	Idaho	-\$114.00	-\$113.00	32	31	Pennsylvania	-\$2,270.00	-\$2,548.00
38	38	Illinois	-\$3,661.00	-\$3,622.00	22	21	Rhode Island	-\$992.00	-\$993.00
4	3	Indiana	-\$74.00	-\$81.00	36	35	South Carolina	-\$3,148.00	-\$3,402.00
2	6	Kansas	-\$165.00	-\$4.00	N/A	N/A	South Dakota	N/A	N/A
34	34	Kentucky	-\$2,702.00	-\$2,819.00	12	12	Tennessee	-\$346.00	-\$336.00
43	39	Louisiana	-\$3,927.00	-\$7,666.00	41	42	Texas	-\$4,732.00	-\$4,759.00
37	36	Massachusetts	-\$3,236.00	-\$3,422.00	6	5	Utah	-\$130.00	-\$118.00
31	28	Maryland	-\$1,992.00	-\$2,546.00	23	23	Virginia	-\$1,310.00	-\$1,368.00
27	26	Maine	-\$1,913.00	-\$2,066.00	39	40	Vermont	-\$4,264.00	-\$3,826.00
29	30	Michigan	-\$2,230.00	-\$2,280.00	25	27	Washington	-\$1,916.00	-\$1,896.00
7	7	Minnesota	-\$172.00	-\$163.00	8	8	Wisconsin	-\$202.00	-\$201.00
19	20	Missouri	-\$837.00	-\$788.00	35	25	West Virginia	-\$1,853.00	-\$3,192.00
11	11	Mississippi	-\$335.00	-\$334.00	24	19	Wyoming	-\$685.00	-\$1,770.00

Percent ARC paid										
Rank		State	Percent ARC paid			Rank		State	Percent ARC paid	
2017	2016		2016	2017		2017	2016		2016	2017
41	29	Alaska	46%	29%		39	47	Montana	19%	31%
32	32	Alabama	39%	38%		35	37	North Carolina	38%	38%
38	41	Arkansas	30%	32%		1	1	North Dakota	178%	164%
4	5	Arizona	100%	100%		N/A	N/A	Nebraska	N/A	N/A
40	40	California	31%	31%		34	33	New Hampshire	39%	38%
7	7	Colorado	91%	96%		43	42	New Jersey	29%	26%
36	39	Connecticut	34%	36%		30	36	New Mexico	38%	41%
23	23	Delaware	51%	56%		29	34	Nevada	39%	44%
45	44	Florida	23%	22%		31	25	New York	49%	40%
24	30	Georgia	41%	55%		46	46	Ohio	20%	20%
22	31	Hawaii	41%	56%		18	17	Oklahoma	61%	59%
28	24	Iowa	50%	45%		10	9	Oregon	81%	76%
13	14	Idaho	68%	68%		15	15	Pennsylvania	68%	63%
37	35	Illinois	39%	35%		5	6	Rhode Island	100%	100%
8	8	Indiana	90%	86%		11	18	South Carolina	61%	75%
48	11	Kansas	70%	-10%		N/A	N/A	South Dakota	N/A	N/A
2	2	Kentucky	127%	136%		16	19	Tennessee	61%	62%
44	45	Louisiana	22%	22%		42	43	Texas	29%	28%
27	28	Massachusetts	47%	45%		3	4	Utah	102%	107%
12	13	Maryland	69%	70%		26	26	Virginia	48%	48%
9	12	Maine	69%	83%		33	38	Vermont	37%	38%
6	3	Michigan	108%	100%		47	48	Washington	16%	17%
25	22	Minnesota	57%	50%		17	20	Wisconsin	60%	59%
19	27	Missouri	48%	59%		20	10	West Virginia	81%	57%
14	16	Mississippi	65%	66%		21	21	Wyoming	58%	57%

Funding ratio										
Rank		State	Funding ratio			Rank		State	Funding ratio	
2017	2016		2016	2017		2017	2016		2016	2017
4	5	Alaska	24%	26%		33	33	Montana	0%	0%
18	20	Alabama	3%	3%		17	22	North Carolina	4%	3%
33	33	Arkansas	0%	0%		4	5	North Dakota	31%	24%
1	1	Arizona	41%	38%		N/A	N/A	Nebraska	N/A	N/A
30	30	California	0%	0%		33	33	New Hampshire	0%	0%
14	13	Colorado	9%	8%		33	33	New Jersey	0%	0%
27	27	Connecticut	0%	1%		14	15	New Mexico	5%	7%
21	18	Delaware	4%	3%		29	31	Nevada	0%	0%
33	33	Florida	0%	0%		33	33	New York	0%	0%
29	31	Georgia	0%	0%		9	11	Ohio	13%	12%
23	24	Hawaii	1%	2%		33	33	Oklahoma	0%	0%
33	33	Iowa	0%	0%		3	3	Oregon	33%	35%
8	8	Idaho	14%	14%		26	26	Pennsylvania	1%	1%
33	33	Illinois	0%	0%		11	10	Rhode Island	9%	12%
6	6	Indiana	18%	20%		15	17	South Carolina	5%	6%
33	33	Kansas	0%	0%		N/A	N/A	South Dakota	N/A	N/A
7	7	Kentucky	15%	16%		33	33	Tennessee	0%	0%
25	32	Louisiana	0%	1%		25	28	Texas	1%	0%
19	21	Massachusetts	3%	3%		2	2	Utah	33%	38%
24	22	Maryland	2%	2%		10	9	Virginia	12%	13%
13	12	Maine	9%	9%		28	32	Vermont	0%	0%
16	16	Michigan	5%	6%		33	33	Washington	0%	0%
33	33	Minnesota	0%	0%		33	33	Wisconsin	0%	0%
20	19	Missouri	3%	3%		23	12	West Virginia	2%	11%
33	33	Mississippi	0%	0%		33	33	Wyoming	0%	0%

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