



# Hidden Penalties:

## How States Shortchange Early-Career Teachers

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Chad Aldeman  
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### About the Authors

Chad Aldeman is an Associate Partner on the Policy and Thought Leadership team at Bellwether Education Partners. He can be reached at [chad.aldeman@bellwethereducation.org](mailto:chad.aldeman@bellwethereducation.org).



### About TeacherPensions.org

Teacherpensions.org provides high-quality information and analysis to help stakeholders—especially teachers and policymakers—understand the teacher pension issue and the trade-offs among various options for reform. We believe there is a need for additional analysis of and communication about teacher pensions—an issue that has not yet gained sufficient traction nationally, despite its seriousness and immediacy. We aim to make the issues around teacher pensions more accessible and relevant to the general public, more compelling to policymakers, and more understandable for current teachers.

Teacherpensions.org focuses on questions affecting public policy choices; it is not personal or institutional investment advice. You should consult a qualified financial professional before making consequential financial decisions.



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Teacherpensions.org is a project of Bellwether Education Partners, a nonprofit dedicated to helping education organizations—in the public, private, and nonprofit sectors—become more effective in their work and achieve dramatic results, especially for high-need students. To do this, we provide a unique combination of exceptional thinking, talent, and hands-on strategic support.

## Introduction

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Each fall, without fail, media outlets report stories of local teachers who spend money out of their own pockets to buy materials for their classrooms. According to a widely cited study by a school supply firm, teachers on average spend \$485 a year of their own money on classroom supplies.<sup>1</sup> The federal tax code allows teachers who paid for classroom supplies to claim up to \$250 and deduct additional items as a business expense.

While classroom materials are no trivial matter, teachers face much bigger expenses that go comparatively unnoticed—retirement savings penalties. Half of today's new teachers will not stay in a single pension system long enough to meet even the minimum service requirements to qualify for a pension when they retire. Just one in five will earn a full pension.<sup>2</sup> Instead, the majority of teachers, many of whom are just beginning to save for retirement, face thousands of dollars in lost compensation in the form of forfeited employer contributions. Nationwide, approximately 80,000 new teachers face these penalties each year.

As an example, take a typical beginning teacher in Pennsylvania. She earns \$41,192 a year, and her school district puts a sum equal to 23.8 percent of her salary (\$9,804) on her behalf into the state's pension fund. But due to the state's vesting requirements, she must forfeit all of this money if she leaves before 10 years. She would forfeit the full \$9,804 for every year she worked, plus

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State policymakers have enacted rules and penalties that diminish the retirement savings of public school teachers.

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the significant interest or investment returns she could have earned on that money. Pennsylvania's own pension actuaries estimate that three-fourths of new teachers will fail to meet this vesting threshold. Accounting for compound interest, a Pennsylvania teacher who leaves the profession at age 30 after five years could forfeit nearly \$300,000 in potential retirement wealth.<sup>3</sup>

Policymakers should be concerned about the retirement security of *all* teachers, not just the one in five who teach in schools covered by one pension plan for their entire career. Instead, states are enacting harmful rules and penalties as a way to diminish state pension debts. This puts teacher retirement into a dangerous downward spiral: When state pension plans face funding shortfalls, they cut benefits and depend more heavily on the contributions of new workers. This will make the pension fund slightly more solvent in the short term, but it leads to worse retirement plans for teachers. Trying to address underfunded plans by making them stingier for new workers ignores the main purpose of retirement plans: to offer all teachers a path to an attractive and secure retirement.

## What Are Retirement Savings Penalties?

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Retirement savings penalties can arise anytime an employee fails to qualify for retirement benefits worth less than their own contributions, the contributions of their employer, and the interest accrued on those contributions. This brief focuses on the retirement losses of one particular group—new teachers who don't teach long enough in one place to qualify for even a minimum pension. These teachers may leave to teach somewhere else by choice or life circumstances, take a break from teaching for personal reasons and not return, or may choose to leave teaching altogether for a different profession. This large group is important in its own right—it constitutes about half of all new teachers, and teachers are our largest class of college-educated workers in the United States. But these teachers are not the only ones affected by poorly structured retirement plans. Current pension plans also don't work well for other groups of teachers. Teacher pension plans often provide only modest benefits to those who stay for 10, 15, or even 20 years. A recent Urban Institute study found that, in the median state, teachers must wait at least 24 years before their pension would finally be worth more than their own contributions plus interest.<sup>4</sup>

In fact, the popular perception that public-sector retirement plans are better than those offered in the private sector applies only to the small fraction of teachers who remain in one state or municipal pension plan for 25, 30, or 35 years. Contrary to conventional wisdom, shorter-term teachers can actually be worse off than their peers in the private sector, because teachers are often asked to wait longer to qualify for a share of their employer's retirement contributions than is allowed in the private sector under federal law.

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**The popular perception that public-sector retirement plans are better than those offered in the private sector applies only to a small fraction of teachers.**

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Retirement plans set “vesting periods” that require a worker to remain for a certain number of years before becoming eligible for all or part of their employer’s retirement contributions. For all pension plans, including those offered to 90 percent of teachers but also to other private-sector workers, vesting gives an employee the rights to a guaranteed, monthly stream of income upon retirement.

Retirement savings penalties can arise in the private and public sectors, but they tend to be more extreme in the public sector. Private-sector workers are commonly offered a retirement plan called a defined contribution (DC) plan, in which employers communicate in advance what percentage of an employee’s salary they will contribute to his or her retirement account. (They’re often referred to as “401(k)” plans in reference to the tax code that established them.)

In the private sector, a federal law known as the Employee Retirement Income Security Act (ERISA) governs how employers can determine vesting rules. Under ERISA, private employers must follow one of two vesting styles. They can offer “cliff vesting,” where the employee must meet the full service requirement to qualify, or “graduated vesting,” where workers qualify for a rising portion of the employer’s contributions each year they work. For private-sector defined pension plans with cliff vesting, the maximum length of waiting time can be no more than five years. For graduated vesting, employees must be fully vested within no more than seven years.<sup>5</sup> Although 401(k) plans are often assumed to be worse for workers than pensions, federal law requires earlier vesting periods for 401(k) plans—within three years for cliff vesting or six years for graduated vesting—than for defined benefit pensions.

States, on the other hand, do not have to follow ERISA and can set longer vesting periods. Table 1 illustrates how teacher pension plans compare with retirement benefits in the private sector. Today, nearly every state makes teachers wait longer to qualify for their pension than private-sector workers wait for employer benefits from 401(k) plans. Alaska is the only state to automatically place all teachers in a portable defined contribution plan similar to a 401(k), although five states—Florida, Michigan, Ohio, South Carolina, and Utah—now offer teachers a choice between plans.<sup>6</sup>

In state pension plans, only one state, Arizona, has a shorter vesting period in its defined benefit pension plan than what’s required of private-sector 401(k) plans.<sup>7</sup> Four states require three- or four-year vesting periods, about the same as the private sector. Twenty-six states and the District



**Table 1** Teachers Face Longer Vesting Periods In State Pension Plans Than Do Workers in the Private Sector

Type of retirement plan	Private-sector		
	401(k) plans	Defined benefit pension plans	Defined benefit plans for teachers
<b>Graduated vesting</b>	<p>Employees must be at least:</p> <ul style="list-style-type: none"> <li>• 20% vested after 2 years</li> <li>• 40% after 3 years</li> <li>• 60% after 4 years</li> <li>• 80% after 5 years</li> <li>• 100% after 6 years</li> </ul>	<p>Employees must be at least:</p> <ul style="list-style-type: none"> <li>• 20% vested after 3 years</li> <li>• 40% after 4 years</li> <li>• 60% after 5 years</li> <li>• 80% after 6 years</li> <li>• 100% at 7 years of service</li> </ul>	N/A: No state offers its teachers graduated vesting
<b>Cliff vesting</b>	<p>Employees must be fully vested within 3 years</p>	<p>Employees must be fully vested within 5 years</p>	<p>States offer a range of vesting periods:</p> <ul style="list-style-type: none"> <li>• 1 state (Arizona) has immediate vesting</li> <li>• 4 states have 3- or 4-year vesting periods</li> <li>• 26 states and the District of Columbia have 5-year vesting requirements</li> <li>• 4 states require 7- or 8-year vesting periods</li> <li>• 15 states have 10-year vesting requirements</li> </ul>

of Columbia require teachers to stay in the state pension plan for at least five years before vesting, equivalent to the federal rules on private pension plans. But four states require seven- or eight-year vesting requirements and 15 states, including populous ones like Illinois, Maryland, New Jersey, and New York, withhold all employer contributions for teachers until 10 years of service<sup>8</sup>, a practice that would be illegal in the private sector.

Public- and private-sector retirement benefits are also moving in opposite directions. Congress has gradually lowered the vesting requirements under ERISA to ensure early-career and mobile

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**15 states, including populous ones like Illinois, Maryland, New Jersey, and New York, withhold all employer contributions for teachers until 10 years of service, a practice that would be illegal in the private sector.**

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workers have access to better retirement benefits. ERISA's original rules required private-sector plans to make a portion of employer contributions available to employees within at least 10 years, with the full employer contribution available within 15 years. Congress has tightened those rules several times so that employees are now eligible for employer contributions sooner.

Retirement benefits for state and local government workers, including public school teachers, are going in reverse. During the recent recession, 12 states lengthened their vesting period, making it harder for new teachers to

acquire retirement benefits. States also created less-generous plans for new employees. New York, for example, has six tiers in its defined benefit pension plan. The most experienced teachers are in Tier I. They have the most generous benefits. Teachers hired in Tier II are slightly worse off, and so on, until Tier VI, the plan offered to new teachers today. For example, older teachers can retire earlier with fewer years of experience and larger pensions than teachers hired today.<sup>9</sup> Nearly every state has its own tiers, like New York's, in which new workers subsidize the costs of more expensive retirement plans for retirees and older workers.

## How Big Are the Penalties?

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Public-sector workers such as teachers trade lower salaries for higher job security and more generous benefits. But that trade only works well for teachers who actually stick around until retirement. Most teachers get the worst of both worlds—they earn lower salaries while they work and they forfeit retirement savings when they leave.

The trade begins with lower base salaries and a larger share of compensation coming in the form of employer retirement contributions. Nationwide, from 2004 to 2013, school districts increased their spending on retirement costs from 11.9 percent to 19.2 percent of teacher salaries.<sup>10</sup> That compares to only 11.4 percent for similarly educated workers in the private sector. Those contributions don't show up on teacher paychecks, but they're real.

Teachers who leave before vesting forfeit these contributions. Table 2 calculates how much they forfeit depending on which state they live in. It uses the average beginning teacher salary (which ranges from \$26,734 a year in Montana to \$51,539 in the District of Columbia) and each state pension plan's employer contribution rates.

Penalties vary depending on salary amount, the number of years a teacher teaches, and the employer contribution amount. Arizona, with no vesting requirement, does not impose a penalty on teachers. In states with vesting requirements, teachers who teach for only one year face smaller penalties, while teachers who teach for several years and leave right before vesting face the

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Most teachers get the worst of both worlds—they earn lower salaries while they work and they forfeit retirement savings when they leave.

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steepest penalties. Higher employer contribution rates turn into larger amounts of money that an unvested teacher gives up when she leaves. South Dakota, the only state that gives non-vested teachers the option to withdraw a share of their employer's pension contributions, imposes lower penalties than any other state.

On the other end, states with longer vesting requirements mean more years that teachers are missing out on employer contributions. In the median state, teachers forfeit close to \$5,000 for every year they teach without vesting. A state like Illinois, which has a high employer contribution (33.6 percent) combined with a high vesting period (10 years), will impose an extremely high penalty (\$110,787) on teachers who stay for exactly nine years. That's money that could be going into Illinois teacher paychecks but is instead being used to pay for the state's long history of mismanaging its pension fund.

Teachers who do remain long enough to vest into their state pension plan avoid the steepest retirement savings penalties, but vesting alone does not guarantee a sufficient pension. Due to the structure of current pension plans, workers who do not spend their entire career in a single system often receive a benefit worth only a fraction of what their employer contributed to their retirement. Although the penalties are the most severe for teachers who just miss out on a pension, even a mid-career teacher is guaranteed only a minimum pension—often worth less than her own contributions plus interest.

Table 2 Short-Term Teachers Forfeit Large Pension Contributions

	Beginning Teacher Salary	Employer Contribution (% of Salary)	Annual Employer Contribution (\$)	Vesting Requirement	Maximum Years Worked Without Employer Benefit	Maximum Savings Penalty
Alabama	\$36,201	11.1%	\$4,018	10	9	\$36,165
Alaska	\$42,928	49.7%	\$21,335	N/A*	2*	N/A*
Arizona	\$31,689	11.5%	\$3,644	0	0	\$0
Arkansas	\$32,478	16.2%	\$5,261	5	4	\$21,046
California	\$41,131	24.9%	\$10,242	5	4	\$40,966
Colorado	\$32,095	21.9%	\$7,029	5	4	\$28,115*
Connecticut	\$42,450	24.1%	\$10,230	10	9	\$92,074
Delaware	\$39,099	9.6%	\$3,754	10	9	\$33,782
District of Columbia	\$51,539	10.4%	\$5,360	5	4	\$21,440
Florida	\$35,236	6.1%	\$2,149	8	7	\$15,046
Georgia	\$33,673	13.2%	\$4,445	10	9	\$40,004
Hawaii	\$38,479	17.6%	\$6,772	10	9	\$60,951
Idaho	\$29,915	11.3%	\$3,380	5	4	\$13,522
Illinois	\$36,636	33.6%	\$12,310	10	9	\$110,787
Indiana	\$33,574	6.5%	\$2,182	10	9	\$19,641
Iowa	\$32,895	8.9%	\$2,928	7	6	\$17,566
Kansas	\$32,964	16.0%	\$5,274	5	4	\$21,097
Kentucky	\$35,075	29.2%	\$10,242	5	4	\$40,968
Louisiana	\$38,655	27.7%	\$10,707	5	4	\$42,830
Maine	\$31,580	13.9%	\$4,390	5	4	\$17,558
Maryland	\$43,003	17.4%	\$7,483	10	9	\$67,343
Massachusetts	\$40,462	28.9%	\$11,694	10	9	\$105,242
Michigan	\$34,724	22.3%	\$7,743	10	9	\$69,691
Minnesota	\$34,025	19.4%	\$6,601	3	2	\$13,202
Mississippi	\$31,187	15.8%	\$4,928	8	7	\$34,493
Missouri	\$29,857	14.6%	\$4,359	5	4	\$17,436
Montana	\$26,734	11.0%	\$2,941	5	4	\$11,763
Nebraska	\$30,086	11.9%	\$3,580	5	4	\$14,321

**Table 2 Short-Term Teachers Forfeit Large Pension Contributions (continued)**

	<b>Beginning Teacher Salary</b>	<b>Employer Contribution (% of Salary)</b>	<b>Annual Employer Contribution (\$)</b>	<b>Vesting Requirement</b>	<b>Maximum Years Worked Without Employer Benefit</b>	<b>Maximum Savings Penalty</b>
<b>Nevada</b>	\$35,449	13.4%	\$4,750	5	4	\$19,001
<b>New Hampshire</b>	\$33,871	17.9%	\$6,063	10	9	\$54,566
<b>New Jersey</b>	\$48,101	23.0%	\$11,063	10	9	\$99,569
<b>New Mexico</b>	\$32,092	17.5%	\$5,616	5	4	\$22,464
<b>New York</b>	\$44,370	17.5%	\$7,765	10	9	\$69,883
<b>North Carolina</b>	\$30,779	8.8%	\$2,709	5	4	\$10,834
<b>North Dakota</b>	\$31,065	10.3%	\$3,200	5	4	\$12,799
<b>Ohio</b>	\$33,035	14.0%	\$4,625	5	4	\$18,500
<b>Oklahoma</b>	\$31,600	14.6%	\$4,614	5	4	\$18,454
<b>Oregon</b>	\$33,241	18.9%	\$6,283	5	4	\$25,130
<b>Pennsylvania</b>	\$41,192	23.8%	\$9,804	10	9	\$88,233
<b>Rhode Island</b>	\$39,006	23.1%	\$9,010	5	4	\$36,042
<b>South Carolina</b>	\$31,685	10.9%	\$3,454	8	7	\$24,176
<b>South Dakota</b>	\$29,308	6.2%	\$1,817	3	2	\$1,817*
<b>Tennessee</b>	\$33,287	9.0%	\$2,996	5	4	\$11,983
<b>Texas</b>	\$34,234	8.7%	\$2,978	5	4	\$11,913
<b>Utah</b>	\$33,268	17.6%	\$5,855	4	3	\$17,566
<b>Vermont</b>	\$34,709	12.5%	\$4,339	5	4	\$17,355
<b>Virginia</b>	\$36,737	15.0%	\$5,511	5	4	\$22,042
<b>Washington</b>	\$36,474	10.7%	\$3,903	10	9	\$35,124
<b>West Virginia</b>	\$32,435	29.9%	\$9,698	5	4	\$38,792
<b>Wisconsin</b>	\$33,170	6.8%	\$2,256	5	4	\$9,022
<b>Wyoming</b>	\$43,053	8.9%	\$3,832	4	3	\$11,495
<b>Median</b>	\$33,871	14.6%	\$4,928	5	4	\$22,042

Source: Average beginning teacher salaries come from the National Education Association's "State Affiliates" page, accessed July 9, 2014: <http://www.nea.org/home/49809.htm>. Employer contribution rates and vesting periods come from Kathryn M. Doherty, Sandi Jacobs, and Martin F. Lueken, "Doing the Math on Teacher Pensions: How to Protect Teachers and Taxpayers" (Washington, DC: National Council on Teacher Quality, January 2015). Contribution rates include total state and local contributions for normal and legacy costs.

\*Notes: Alaska's new teachers are automatically placed into a defined contribution plan where members gradually become vested over five years. However, their employers are still contributing to the state's defined benefit pension plan that was closed in 2006. Teachers since then are not eligible for any portion of those contributions, so teachers forfeit the entire employer contribution, equal to 49.7 percent of their salary, for every year they work. Colorado offers all teachers a share of their employer's contributions, but only if they keep their money in the plan until age 65. Since many non-vested teachers would have to wait years for this match and may be better off pulling their contributions, this table assumes they choose not to wait. South Dakota's defined benefit plan grants non-vested teachers 50 percent of the employer contribution plus interest.

## How Many Teachers Are Affected?

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Long vesting periods adversely affect all workers, but they're particularly poorly suited to positions with high turnover rates like those in the teaching profession. Nationally, the teaching profession has become less experienced and more mobile. The most common level of teacher experience has fallen in the last 25 years from 15 to five years.<sup>11</sup>

The percentage of teachers who vest in their state's pension plan varies widely depending on the length of the vesting requirement and the state's turnover rate. Using each state's actuarial "withdrawal" tables that estimate how many teachers will leave in a given year, we found that in the median state, only 44.5 percent of new teachers will stay long enough to qualify for even a minimum pension.<sup>12</sup>

Within the teaching profession, certain groups with higher turnover rates—such as urban teachers, younger teachers, special education teachers, and public charter school teachers—have higher turnover rates, leaving them particularly vulnerable to long vesting periods. For example, special education teachers are about three times more likely to leave within a given year than art teachers.<sup>13</sup> Due to differences in turnover rates, long vesting periods, and back-loaded pension formulas, state pension plans will systematically favor art teachers over special education teachers.

To put this in perspective: American schools hire roughly 150,000 new teachers every year. If only 44.5 percent of them qualify for a pension, that leaves 83,250 teachers who will face at least some retirement savings penalty. This pattern repeats itself year after year. These teachers will forfeit thousands of dollars in retirement savings as a penalty for serving as a teacher in our nation's public schools.

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Teachers will forfeit thousands of dollars in retirement savings as a penalty for serving as a teacher in our nation's public schools.

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Table 3 shows the state-by-state results. It uses state withdrawal rate assumptions to estimate the percentage of teachers who face some retirement savings penalty in each state. Unless otherwise stated, the data are based on each state's defined benefit plan component offered to teachers who began their teaching experience on or after August 1, 2013. In Iowa, 58 percent of teachers lose out on anywhere from \$2,928 to \$17,566 in retirement savings. Hawaii, on the other hand, has a long vesting

period (10 years) and relatively high employer contributions (17.6 percent), resulting in costly losses for teachers who leave before seeing any benefits of that money. The Aloha State also has remarkably high turnover, in which three out of four Hawaii teachers lose out on at least \$6,772 or as much as \$60,951.

Worse, about 40 percent of American teachers do not participate in Social Security and face an even steeper path to retirement security. Teachers in states without Social Security coverage are wholly dependent on their state's pension plan. Not only do many of these teachers miss out on benefits from their state's pension system, but once they transition to other jobs, they will also have fewer years of earnings from which to draw a Social Security benefit. In states with no Social Security and 10-year vesting requirements—Connecticut, Georgia, Illinois, Massachusetts, and Rhode Island—teachers could work up to nine years without any form of employer-provided retirement savings, pension, or Social Security.



**Table 3** More Than Half of All New Teachers Face Some Amount of Retirement Savings Penalty

	Percentage of New Teachers Who Face a Penalty (Do Not Vest)		Percentage of New Teachers Who Face a Penalty (Do Not Vest)
<b>Alabama</b>	60.6	<b>Montana</b>	64.7
<b>Alaska</b>	100.0*	<b>Nebraska</b>	68.3
<b>Arizona</b>	0.0	<b>Nevada</b>	44.7
<b>Arkansas</b>	43.4	<b>New Hampshire</b>	74.9
<b>California</b>	30.9	<b>New Jersey</b>	45.0
<b>Colorado</b>	64.1	<b>New Mexico</b>	66.5
<b>Connecticut</b>	45.2	<b>New York</b>	59.7
<b>Delaware</b>	64.7	<b>North Carolina</b>	53.4
<b>District of Columbia</b>	81.2	<b>North Dakota</b>	54.4
<b>Florida</b>	71.4	<b>Ohio</b>	66.4
<b>Georgia</b>	65.5	<b>Oklahoma</b>	50.0
<b>Hawaii</b>	74.5	<b>Oregon</b>	43.5
<b>Idaho</b>	29.7	<b>Pennsylvania</b>	75.2
<b>Illinois</b>	62.0	<b>Rhode Island</b>	30.2
<b>Indiana</b>	68.0	<b>South Carolina</b>	66.7
<b>Iowa</b>	57.9	<b>South Dakota</b>	47.4
<b>Kansas</b>	55.5	<b>Tennessee</b>	44.0
<b>Kentucky</b>	32.7	<b>Texas</b>	54.9
<b>Louisiana</b>	44.4	<b>Utah</b>	47.8
<b>Maine</b>	86.1	<b>Vermont</b>	64.8
<b>Maryland</b>	57.1	<b>Virginia</b>	50.5
<b>Massachusetts</b>	64.4	<b>Washington</b>	44.1
<b>Michigan</b>	56.6	<b>West Virginia</b>	44.0
<b>Minnesota</b>	50.3	<b>Wisconsin</b>	36.3
<b>Mississippi</b>	76.1	<b>Wyoming</b>	58.5
<b>Missouri</b>	42.3	<b>Median</b>	55.5

\*Note: Alaska's new teachers are automatically placed into a defined contribution plan, but their employers are still contributing to the state's defined benefit pension plan that was closed in 2006. Teachers since then are not eligible for any portion of those contributions.

## How Do Unfunded Pension Liabilities Hurt Teachers?

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The public discussion of teacher pension plans often focuses on mind-bogglingly large financial numbers. While it's not easy for individual teachers to understand what the numbers mean for them—nationally, the gap between what states have saved for and what they have promised to teachers totals \$499 billion<sup>14</sup>—those costs do trickle down. And ultimately, individual teachers suffer the consequences.

In most states, the current underfunding problems took years to manifest. Poor investment returns, unrealistic investment assumptions, badly timed or ill-considered benefit enhancements, the failure of elected officials to make the financial contributions they committed to, and other causes contributed to the current funding status.

States responded by cutting benefits and increasing employee and employer contribution rates. Employer contributions consist of two buckets: the contributions needed to fund benefits earned by the employee in that year (called the “normal cost”); and the amount needed to pay down any unfunded liability (the “legacy cost”). States take on higher amounts of pension debt when they fail to make adequate payments or when their investments fail to meet their expectations. When times are good, states pay artificially low payments. But when economic conditions sour, pension payments balloon.

In the aftermath of the 2007-2009 financial crisis, many states reduced their normal costs (meaning they cut benefits) while they dealt with rapidly rising legacy costs. Today, the legacy costs of teacher pensions are more than twice as high as the normal costs of benefits. Nationwide, for every \$1 that states and school districts contribute to teacher pension plans, 70 cents goes toward paying down the pension debt and only 30 cents goes toward actual benefits for teachers.<sup>15</sup>

In calculating teacher retirement savings penalties up to this point, I made a deliberate choice to include the full employer contribution, including the normal cost and the legacy cost. Regardless of other spending priorities, states, school districts, and individual schools must squeeze other areas of their budgets to pay for rising pension payments.<sup>16</sup> They must consider the full cost, not just the normal cost, when making tough budget decisions.

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All teachers are affected by the high and unpredictable cost of pension contributions, regardless of whether those teachers ever reap any real pension benefits.

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One way employers have responded and will continue to respond to rising pension costs is to cut back on other things. Rising pension costs force districts to choose between reducing staffing levels, freezing salaries, increasing class sizes, and cutting spending on other programs like music, libraries, or foreign languages. Unbeknownst to them, teachers earn lower salaries while a significant portion of their compensation must be siphoned off for the pension fund. In other words, all teachers are

affected by the high and unpredictable cost of pension contributions, regardless of whether those teachers ever reap any real pension benefits.

If and when state teacher pension funds are able to reduce their unfunded liabilities and legacy costs begin to fall, employer contributions will also decline. In a world where all pension plans were fully funded, short-term teachers would only face penalties from the loss of their employer's normal cost of providing benefits.

Table 4 illustrates what this might look like. It essentially replicates Table 2 with one key difference: Instead of using the total employer cost, it considers only the normal cost that states and districts pay toward the actual cost of providing benefits. Given that 70 percent of teacher pension costs are currently going toward paying down unfunded liabilities, the figures in Table 4 are much lower than those in Table 2.

The numbers still vary considerably by state, in part reflecting the fact that some states offer more generous benefits than others. Normal cost calculations also vary depending on state assumptions. Because normal costs are an estimate of how much money a state needs to put away

today in order to pay pension benefits in the future, state assumptions around investment returns, longevity, and salary growth matter tremendously. If a state consistently underestimated how much benefits would cost in the future—which happens in some places—its normal costs would appear artificially low.<sup>17</sup>

When looking only at normal costs, a teacher in the median state faces the prospect of forfeiting from \$1,825 for one year of work up to a maximum of \$8,343. New teachers in Alaska and Arizona would not face any pension penalty, because Alaska has enrolled all new teachers since 2006 in the state’s defined contribution plan and Arizona allows all teachers to qualify for a pension immediately. Four states—Maine, New York, Ohio, and Wisconsin—do not identify what portion of employer contributions go toward legacy costs. At the high end, teachers in Maryland, Delaware, Illinois, New Hampshire, and Pennsylvania all face maximum savings penalties of more than \$20,000. Each of these states requires teachers to stay a full 10 years before qualifying for any share of their employer’s contributions.

**Table 4** Teachers Would Forfeit Smaller Pension Contributions If State Plans Were Fully Funded

	<b>Beginning Teacher Salary</b>	<b>Employer Contribution for Normal Cost Only (% of Salary)</b>	<b>Annual Employer Contribution for Normal Cost Only (\$)</b>	<b>Vesting Requirement</b>	<b>Maximum Years Worked Without Employer Benefit</b>	<b>Maximum Retirement Savings Penalty From Normal Cost Only</b>
<b>Alabama</b>	\$36,201	11.1%	\$446	10	9	\$4,014
<b>Alaska</b>	\$42,928	0.0%*	\$0	N/A*	2*	\$0*
<b>Arizona</b>	\$31,689	11.5%	\$627	0	0	\$0*
<b>Arkansas</b>	\$32,478	16.2%	\$2,236	5	4	\$8,944
<b>California</b>	\$41,131	24.9%	\$4,230	5	4	\$16,919
<b>Colorado</b>	\$32,095	21.9%	\$1,167	5	4	\$4,667
<b>Connecticut</b>	\$42,450	24.1%	\$1,586	10	9	\$14,271
<b>Delaware</b>	\$39,099	9.6%	\$2,748	10	9	\$24,728
<b>District of Columbia</b>	\$51,539	10.4%	\$3,243	5	4	\$12,971
<b>Florida</b>	\$35,236	6.1%	\$1,251	8	7	\$8,757
<b>Georgia</b>	\$33,673	13.2%	\$2,076	10	9	\$18,682
<b>Hawaii</b>	\$38,479	17.6%	\$2,127	10	9	\$19,139
<b>Idaho</b>	\$29,915	11.3%	\$2,170	5	4	\$8,681
<b>Illinois</b>	\$36,636	33.6%	\$2,942	10	9	\$26,478
<b>Indiana</b>	\$33,574	6.5%	\$1,903	10	9	\$17,127
<b>Iowa</b>	\$32,895	8.9%	\$1,473	7	6	\$8,836
<b>Kansas</b>	\$32,964	16.0%	\$765	5	4	\$3,059
<b>Kentucky</b>	\$35,075	29.2%	\$2,356	5	4	\$9,423
<b>Louisiana</b>	\$38,655	27.7%	\$1,949	5	4	\$7,795
<b>Maine</b>	\$31,580	13.9%	N/A	5	4	N/A <sup>†</sup>
<b>Maryland</b>	\$43,003	17.4%	\$2,424	10	9	\$21,819
<b>Massachusetts</b>	\$40,462	28.9%	\$842	10	9	\$7,577
<b>Michigan</b>	\$34,724	22.3%	\$1,564	10	9	\$14,078
<b>Minnesota</b>	\$34,025	19.4%	\$2,937	3	2	\$5,875
<b>Mississippi</b>	\$31,187	15.8%	\$646	8	7	\$4,519
<b>Missouri</b>	\$29,857	14.6%	\$2,842	5	4	\$11,369
<b>Montana</b>	\$26,734	11.0%	\$282	5	4	\$1,129
<b>Nebraska</b>	\$30,086	11.9%	\$627	5	4	\$2,506
<b>Nevada</b>	\$35,449	13.4%	\$2,323	5	4	\$9,291
<b>New Hampshire</b>	\$33,871	17.9%	\$3,104	10	9	\$27,938
<b>New Jersey</b>	\$48,101	23.0%	\$1,825	10	9	\$16,429

**Table 4** Teachers Would Forfeit Smaller Pension Contributions If State Plans Were Fully Funded (continued)

	Beginning Teacher Salary	Employer Contribution for Normal Cost Only (% of Salary)	Annual Employer Contribution for Normal Cost Only (\$)	Vesting Requirement	Maximum Years Worked Without Employer Benefit	Maximum Retirement Savings Penalty From Normal Cost Only
<b>New Mexico</b>	\$32,092	17.5%	\$983	5	4	\$3,931
<b>New York</b>	\$44,370	17.5%	N/A	10	9	N/A <sup>†</sup>
<b>North Carolina</b>	\$30,779	8.8%	\$1,593	5	4	\$6,371
<b>North Dakota</b>	\$31,065	10.3%	\$128	5	4	\$512
<b>Ohio</b>	\$33,035	14.0%	N/A	5	4	N/A <sup>†</sup>
<b>Oklahoma</b>	\$31,600	14.6%	\$3,096	5	4	\$12,383
<b>Oregon</b>	\$33,241	18.9%	\$2,086	5	4	\$8,343
<b>Pennsylvania</b>	\$41,192	23.8%	\$3,529	10	9	\$31,764
<b>Rhode Island</b>	\$39,006	23.1%	\$1,802	5	4	\$7,208
<b>South Carolina</b>	\$31,685	10.9%	\$649	8	7	\$4,545
<b>South Dakota</b>	\$29,308	6.2%	\$1,081	3	2	\$1,081*
<b>Tennessee</b>	\$33,287	9.0%	\$1,863	5	4	\$7,454
<b>Texas</b>	\$34,234	8.7%	\$563	5	4	\$2,252
<b>Utah</b>	\$33,268	17.6%	\$2,055	4	3	\$6,165
<b>Vermont</b>	\$34,709	12.5%	\$655	5	4	\$2,621
<b>Virginia</b>	\$36,737	15.0%	\$2,403	5	4	\$9,610
<b>Washington</b>	\$36,474	10.7%	\$2,092	10	9	\$18,827
<b>West Virginia</b>	\$32,435	29.9%	\$1,426	5	4	\$5,702
<b>Wisconsin</b>	\$33,170	6.8%	N/A	5	4	N/A <sup>†</sup>
<b>Wyoming</b>	\$43,053	8.9%	\$1,789	4	3	\$5,368
<b>Median</b>	\$33,871	14.6%	\$1,825	5	4	\$8,757

Source: National Education Association "State Affiliates," accessed July 9, 2014, <http://www.nea.org/home/49809.htm>. Kathryn M. Doherty, Sandi Jacobs, and Martin F. Lueken, "Doing the Math on Teacher Pensions: How to Protect Teachers and Taxpayers," National Council on Teacher Quality, January 2015. Contribution rates include total state and local contributions for normal and legacy costs.

\* Notes: Alaska is paying off a large legacy cost from the state's defined benefit pension plan that was closed in 2006. All of its pension expenses come in the form of legacy costs, so its teachers do not face a normal cost penalty. Colorado offers all teachers a share of their employer's contributions, but only if they keep their money in the plan until age 65. Since many non-vested teachers would have to wait years for this match and may be better off pulling their contributions, this table assumes they choose not to wait. South Dakota's defined benefit plan grants non-vested teachers 50 percent of the employer contribution plus interest.

† Additional Notes: Four states—Maine, New York, Ohio, and Wisconsin—do not identify what portion of employer contributions go toward legacy costs and are given an "N/A" in the table.

## Reducing or Eliminating Retirement Savings Penalties

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There's no ideal solution to these problems, and every remedy carries trade-offs. Yet well-designed 401(k)-like plans, hybrid plans that combine traditional pension plans with a 401(k)-like component, or alternative models called cash balance plans, which guarantee a moderate interest rate, could all provide sufficient savings while giving teachers greater job flexibility. At a minimum, states should ensure that teachers can take with them their own contributions, a share of the interest those contributions accrued, and some share of the employer contributions made on their behalf.

From an employer's perspective, it may make sense to impose at least a small penalty on mobile workers. After all, teachers do tend to improve dramatically in their first few years on the job, and districts have a strong interest in retaining their employees. In theory, retirement savings penalties could act as incentives for retention and longevity, but in order to succeed, employers must communicate the consequences clearly and the employee must view the alternative—staying until vesting—as feasible and even preferable. As currently constructed, even state pension plans themselves do not assume that teachers change their behavior in response to vesting requirements.<sup>18</sup> So while it's possible retirement plans could act as a retention incentive for teachers, the structure of today's pension plans prevents that from happening.

The sheer size of today's penalties and all-or-nothing vesting policies place many teachers on an insecure retirement path. States could improve their plans by reducing their vesting periods to more closely track those in the private sector. Or they could shift to graduated vesting schedules that give teachers a little bit more retirement savings (and thus a little bit more inducement to stay) for each year of service.

In the long run, states should also reverse the trend of rising pension costs at the expense of salaries. That would put more money directly into teachers' pockets. Many teachers are unaware that a large portion of their compensation comes in the form of employer retirement contributions, the majority of which is going toward paying down pension debts. Shifting more of those costs to teachers themselves would put those contributions in a visible spot on their paychecks and provide greater transparency about what's being done on their behalf. While it may sound counterintuitive or even punitive, shifting contributions from school districts to teachers would actually benefit teachers. That's because in every state, employees who leave the pension system are entitled to their own contributions. If a greater share of the contributions came directly from teachers, they'd at least be able to get their money back when they left.





These measures would only lessen the penalties imposed on teachers. To eliminate them entirely, states must spread the burden of unfunded pension debts to a broad tax base and not attempt to pay them off solely through teacher and school district contributions. States must also avoid adding to their future pension debt by placing new workers into alternative models in which employees earn retirement benefits in a smooth, predictable path that creates the same incentive for every year they work. Until states make such changes, they will continue to impose large retirement savings penalties on significant portions of their teaching workforce.



## Endnotes

- <sup>1</sup> See, for example, Rebecca Klein, "These Teachers Are Spending Big Money On Back-To-School, And They're Not Alone," *The Huffington Post*, August 14, 2014.
- <sup>2</sup> Chad Aldeman and Andrew J. Rotherham, "Friends without Benefits," Bellwether Education Partners, 2014, <http://www.teacherpensions.org/resource/friends-without-benefits>.
- <sup>3</sup> After five years at current salaries and contribution rates, Pennsylvania school districts would have contributed \$49,020 on this teacher's behalf. Allowed to grow for 35 years at 5 percent interest, the money would be worth \$270,395 by the time she's ready to retire.
- <sup>4</sup> Richard W. Johnson, Barbara Butrica, Owen Haaga, Benjamin G. Southgate, "How Long Must State and Local Employees Work to Accumulate Pension Benefits?," *Urban Institute*, 2014.
- <sup>5</sup> U.S. Department of Labor, "What You Should Know About Your Retirement Plan," <http://www.dol.gov/ebsa/publications/wyskapr.html>.
- <sup>6</sup> Kathryn M. Doherty, Sandi Jacobs, and Martin F. Lueken, "Doing the Math on Teacher Pensions: How to Protect Teachers and Taxpayers," National Council on Teacher Quality, January 2015.
- <sup>7</sup> For states that offer hybrid plans or a choice between a defined benefit and a defined contribution plan, this brief focuses only on the defined benefit component.
- <sup>8</sup> Chad Aldeman and Andrew J. Rotherham, "Friends without Benefits," *Bellwether Education Partners*, 2014, <http://www.teacherpensions.org/resource/friends-without-benefits>.
- <sup>9</sup> New York State Teachers' Retirement System, "Active Members' Handbook," 2014, <https://www.nystrs.org/main/library/handbook/handbook.pdf#page=24>.
- <sup>10</sup> Robert Costrell and Michael Podgursky, "Teacher Retirement Benefits," *Education Next*, 2009, <http://www.uaedreform.org/downloads/2013/12/quarterly-employer-contribution-chart-update.pdf>. For methodology, see Robert M. Costrell and Michael Podgursky, "Teacher Pension Costs: High, Rising, and Out of Control," *Education Next*, June 2013.
- <sup>11</sup> David Perda, "Transitions Into and Out of Teaching: A Longitudinal Analysis of Early Career Teacher Turnover" (PhD diss., University of Pennsylvania, 2013).
- <sup>12</sup> Chad Aldeman and Andrew J. Rotherham, "Friends without Benefits," *Bellwether Education Partners*, 2014, <http://www.teacherpensions.org/resource/friends-without-benefits>.
- <sup>13</sup> Ashley Keigher, "Teacher Attrition and Mobility: Results From the 2008–09 Teacher Follow-up Survey (NCES 2010-353), U.S. Department of Education (Washington, DC: National Center for Education Statistics).
- <sup>14</sup> Kathryn M. Doherty, Sandi Jacobs, and Martin F. Lueken, "Doing the Math on Teacher Pensions: How to Protect Teachers and Taxpayers," National Council on Teacher Quality, January 2015.
- <sup>15</sup> Kathryn M. Doherty, Sandi Jacobs, and Martin F. Lueken, "Doing the Math on Teacher Pensions: How to Protect Teachers and Taxpayers," January 2015.
- <sup>16</sup> Some states pay all or part of the employer contribution rather than forcing districts to pay. Regardless of who pays, high pension contribution rates narrow the possibilities for other uses of the funds.
- <sup>17</sup> Michael J. Sabin, "Backtested Pension Math: An Empirical Look at the Causes of CalPERS Underfunding," *The Journal of Retirement* 2, no. 3 (2015):40-54, <http://ssrn.com/abstract=2558377>.
- <sup>18</sup> Chad Aldeman, "Teacher Pensions, Recruitment, and Retention," *TeacherPensions.org Blog*, 2014, <http://www.teacherpensions.org/blog/teacher-pensions-recruitment-and-retention>.

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