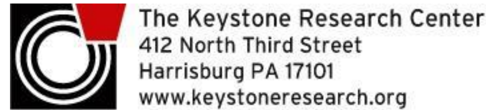

Oklahoma Pension Plans: A House Finally in Order

By Ross Eisenbrey and Stephen Herzenberg[1]

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Executive Summary

Oklahoma's pensions move towards financial sustainability: Oklahoma's state pension funds, including its biggest plan covering Oklahoma teachers, have historically been among the less well-funded in the nation. In the difficult financial circumstances since 2001, however, Oklahoma's pensions have turned a corner, substantially outperforming typical state pension plans.

This progress relative to other state pension plans reflects the steps that Oklahoma's legislature has taken over the past decade to ensure the long-run sustainability of the state's pensions:

- In 2006 and 2007, the state increased employer contributions to the Teachers' Retirement System and enacted legislation that made it much more difficult to improve pension benefits.
- After a history of ad-hoc cost-of-living adjustments (COLAs), the state in 2010 enacted a requirement that future COLAs be fully funded at the time of authorization, preventing the cost of COLAs being absorbed by the plans, and slashing nearly a third from their aggregate unfunded liabilities.
- Other changes provided additional dedicated revenue to the teachers' pension plan, raised the normal retirement age for most new employees from 62 to 65, and increased employee contributions and reduced benefits for firefighters.

Many of these changes have required significant sacrifices by public servants – including current workers and retirees – such as the firefighters and police who put themselves on the line to make other Oklahomans safe, and the teachers who sacrifice higher private-sector salaries for college educated workers out of their love for teaching and for Oklahoma's children. For example, with COLAs ruled out for the foreseeable future, Oklahoma public employees who do not participate in Social Security – including many firefighters and police, and some rural teachers – no longer have any inflation protection in their retirement income. This makes these groups more vulnerable to inflation eating away their retirement income than the vast majority of other U.S. retirees, private and public. (Most U.S. workers enjoy full protection against inflation in at least the Social Security portion of their retirement income.)

The progress made on funding of state pensions is well recognized within Oklahoma, including by elected officials such as state Rep. Randy McDaniel and Senate Finance Committee Chair Mike Mazzei.

Oklahoma's pension plans have now adopted best practices and have a cost for additional benefits earned each year (a "normal cost") that equals only a small percentage of payroll. As a result of recent reforms, Oklahoma's pension plans now exhibit the characteristics of best-practice public pension plans

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highlighted recently by the National Institute on Retirement Security because they remained well funded through the financial market storms of the last decade. The best-practice public pension plan features now in place in Oklahoma include

- making actuarially required contributions, as Oklahoma's plans began to do in 2011-12;
- cost-sharing between employees and employers – Oklahoma employees contribute more to their state pensions, on average, than workers in most states;
- not improving benefits or providing cost-of-living adjustments without paying for them in advance; and
- strong "anti-spiking" protections, which ensure that the "final average salaries" used to compute pension benefits are not artificially inflated by promotions or overtime in workers' final years before retirement.

By making Oklahoma's defined benefit pension plans more financially sustainable, recent sacrifices by public sector workers have enabled the state to preserve the basic structure of defined benefit pensions. These pensions provide guaranteed benefits tied to final salaries and years of service, ensuring retirement security for long-term career public servants. These pensions also have low costs, because they benefit from economies of scale, and high returns – for example, the state's teachers' pension plan has delivered investment returns of over 9%, on average since inception in 1943 and has been among the best performing plans in the nation in recent years.

Recent success stabilizing Oklahoma 's pension plans raises the bar for future reform proposals: given the low cost of Oklahoma pensions to taxpayers going forward and a credible path to full funding, it will be difficult for reform proposals to improve on the status quo.

401(k)-type pensions: billions in transition costs plus "less bang for the buck." The most prominent alternative pension approach under discussion would establish 401(k)-style individual accounts for new employees, closing the existing defined benefit plans to new members. In place of defined benefits tied to final salary and years of service, employees would be guaranteed only the level of "contributions" made by employees and employers each year.

Research shows that defined contribution (DC) 401(k)-type retirement plans earn lower investment returns than defined benefit plans, have higher fees, and also have high costs because of the high price for individuals to convert accumulated savings into a defined benefit (or "annuity") until death.

Taking into account all the inefficiencies of defined contribution retirement plans, the plans cost 57% to 83% more in employee and taxpayer contributions to deliver the same level of retirement security.

A switch to individual defined contribution accounts for new employees would also lead to big **increases** in the unfunded liabilities of Oklahoma's current pension plans, because it would lower investment returns on the assets of the current pensions. This happens because, gradually, those left in the existing pensions all retire or approach retirement. Lacking a balance between young, mid-career, and retired workers, pension managers can no longer invest for the long term and also have to keep a larger share of pension assets in liquid form, ready to convert into pension checks. The shift to a more conservative investment strategy leads to lower investment returns. If investment returns now pay for less of pension debt, taxpayers have to pay more. In sum, a switch to defined contributions plans would increase the cost of paying off the existing defined benefit plans debt, currently estimated at $11.6 billion.

Cash balance: a new fad but less retirement security and potentially higher costs. A new pension favorite, now being promoted by the Pew Trust and the Arnold Foundation, is a "cash balance" (CB) pension. Similar to defined contribution plans, cash balance pensions do not guarantee a specific benefit tied to years of service. Instead they guarantee contributions from employees and employers each year plus at least a minimum annual interest rate on benefits (e.g., 4%).

- Although their impact depends on the specific features of the plan, cash balance plans would likely reduce benefits on average and even more deeply slash benefits for career employees who retire from public service.
- Since cash balance plans reduce the pension incentive to stay in public service but increase pensions for those who leave mid-career, these plans could increase turnover among teachers, nurses, and other public servants. This could erode the quality of public services, and potentially requiring wage increases to increase retention.
- Cash balance plans risk lower investment returns – hence higher costs to achieve a given level of retirement security – because plan managers may choose to target only the interest rate guaranteed employees (e.g., 4% instead of the up-to-8% now targeted by Oklahoma's pensions).

Hybrid pensions: mixing and matching flawed options. So-called "hybrid" pension plans usually combine two types of pensions – the current design and a defined contribution or cash balance plan, or a mix of DC and cash balance plans. Given the almost limitless variations possible, detailed analysis of hybrid pensions is only possible once a specific proposal has been made. Nonetheless, to the extent that they include defined contribution or cash balance components they likely bring with them the limitations of these plan designs.

Oklahoma Pensions are not overgenerous and public employees earn less than comparable private workers. In the two biggest Oklahoma pension plans, pension benefits average about $19,000 and $18,000. These modest pensions compensate somewhat for public sector salaries that are substantially *below* private sector salaries for comparable employees (with the same level of education, experience, and other characteristics that impact salaries). In Oklahoma, moreover, teachers' salaries trail those of equivalent private workers by even more than in the rest of the country. Thus today's modest pensions are a critical offset against low salaries for the 78% female K-12 teachers that hold Oklahoma schools together. If these pensions are further eroded, what incentive do teachers have to give their lives to educating Oklahoma's children?

Don't throw the Oklahoma pension house back into disorder. Given the progress made by Oklahoma pension plans over the past seven years, and the risks of defined contribution and cash balance plans, Oklahoma would be ill advised to shift its basic pension plan design.

Oklahoma Pension Funds – Holding Their Own in a Difficult Financial Climate

Oklahoma currently administers seven pension systems, the four biggest of which are profiled in Table 1. The largest plan covers Oklahoma teachers and accounts for nearly half the assets and 72% of the unfunded liabilities. The next two biggest plans, covering state workers and firefighters, account for about 30% of total assets and about a quarter of the unfunded liabilities. The police pension plan accounts for 8% of total assets but only 2% of the unfunded liabilities.[3] Thus we focus our discussion primarily on the three biggest plans and especially the Oklahoma Teachers' Retirement System (OTRS).

As Table 1 shows there is significant variation in the "funded ratio" of Oklahoma's pension plans. While 100% is "fully funded," pension experts generally consider 80% financially healthy. Two of Oklahoma's four biggest pension plans are at or above the 80% threshold. The teachers plan and the third largest plan, covering firefighters, have lower funded ratios.[4]

Table 1. Oklahoma Pension Funds as of Fiscal Year Ending June 30, 2012

Plan	*Active Mem-bers*	*Retired Mem-bers*	*Employee Cont-ribution*	*Employer Cont-ribution*	*Average Benefit*	*Actuarial Value of Assets* (millions)	*Unfunded Liabilities* (millions)	*Funded Ratio*
OTRS-Teachers	87,778	52,716	7%	9.5%[1]	$18,660	$10,190	$8,398	54.8%
OPERS-State Workers	42,569	30,263	3.5%	16.5%	$16,435	$4,682	$1,653	80.2%
OPPRS-Police		2,368	8%	13%[2]	$30,742	$1,759	$200	90.2%
OFPRS-Firefighters[3]	11,809	9,021	9%	14%[1]		$1,834	$1,127	60.9%
TOTAL						**$21,468**	**$11,604**	**64.9%**

[1]The state also contributes 5% of tax and lottery revenue

[2]The state contributes 14% of insurance premium tax and a % of special tax credit fund

[3]Membership includes volunteer and paid actives

[4]The state also contributes 36% of insurance premium tax and 1.2% of drives license tax

Source: Oklahoma State Pension Commission, *Summary of Actuarial Reports* (NEPC: February 20, 2013), http://www.state.ok.us/~ok-pension/reports/actuarial/2012_02_15_actuarial_summary_ok_pen.pdf; and individual Comprehensive Annual Financial Reports for each plan.

The long history of Oklahoma pension plans is distinct, a story of halting progress, going at least back to 1980 in some cases. The OTRS, for example, was only 34% funded in 1980 and total contributions (from employees and employers) remained only about 4% to 5% through the end of the 1980s.[5] Beginning in about 1990, the first steps towards financial sustainability took place. Employee contributions increased

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[3] The remaining three plans account for less than 5% of total assets and 2% of unfunded liabilities. They are the law enforcement plan, the judges' pension plan, and the Oklahoma wildlife pension.

[4]Table 1 displays information from Comprehensive Annual Financial Reports covering the fiscal year that ended June 30, 2012. Recent press reports indicate that the aggregate funded ratio of Oklahoma's pensions recovered back to 66.5% in the fiscal year that ended June 30, 2012. Authors' calculations based on funded ratios reported for the six biggest plans in Randy Ellis, "By the Numbers: Oklahoma Pension Funds," online at http://newsok.com/by-the-numbers-oklahoma-pension-funds/article/3900690.

[5] David Blatt, *Oklahoma's Pension Systems: Tomorrow's Problem Requires Attention Today*, Community Action Project Issue Brief, January 2007.

to 7% of salary which, combined with employer contributions of 7.05%, put the systems' combined contribution rate above the national average (14.05% versus 12.1% as of the mid-2000s). The state also dedicated a portion of state income, sales, and tax collections to OTRS (currently 5%).

Oklahoma Public Employee Retirement System (OPERs), covering state workers, was better funded in the late 1980s, over 80%. In 1998, however, the legislature increased retirement benefits (by removing a salary cap in the retirement formula). In 1999, the legislature lowered employer contributions by a fifth (from 12.5% to 10%). These changes coupled with the bursting of the stock market tech bubble from 2000 to 2003 plunged the funded ratio from 84% in 2000 to 72% in 2005.

The Oklahoma Firefighters Pension and Retirement System (OFPRS) was established in 1981 by the consolidation of municipal pension funds for firefighters. While some of the consolidate municipal funds had no real system for pre-funding pensions and were barely funded at all, the state put in place a foundation for sustainable funding: it established employer and employee contributions and also earmarked 32% of funds from the insurance premium tax to OFPRS. OFPRS climbed to 80% funded in 2000 but then plunged to 60% funded by 2005, in part because insurance companies used an expanding transferrable tax credit program to reduce their insurance premium tax payments.

In the dozen years, despite extremely difficult financial market circumstances, Oklahoma pension funds have performed well on a relative basis, climbing up from the bottom of the national funded ratio rankings. In 2001 in aggregate, Oklahoma's pension funds were much less well-funded than most public sector plans – 67.4% versus 100.8% for an aggregate of public pension funds (based on the Survey of Public (Pension) Funds conducted by the National Association of State Retirement Administrators (NASRA).[6]

- From 2001 to 2010, a period including the Great Recession, Oklahoma's pension plans funded ratio fell 11.5 percentage points to 55.9%. This decline, however, was only about half that of NASRA Aggregate funding level, which fell 23.8 percentage points to 77%.
- The reforms enacted in 2011 slashed the Oklahoma pension plans' unfunded liability by a third (Table 2). This <u>increased</u> the funded ratio of the Oklahoma plans by 10.8 percentage points, back up to 66.7%, with the NASRA Aggregate for 2011 fell slightly again, to 75.8%.
- In sum, over the past 11 years for which we have comparable data, the funded ratio of the Oklahoma pension funds barely changed, remaining about 67%. while the aggregate of all public pension funds fell by a quarter (from 100.8% to 75.8%).

The good recent financial performance of Oklahoma's Teachers' Retirement System, relative to other state plans, especially since 2006, partly reflects SB 357, passed by the Oklahoma legislature in 2007. This phase in an in increase in employer contributions from 7.85% of payroll to 9.5% for schools (and to 8.55% for Oklahoma State University and Oklahoma State University).

Beginning in 2006 (with SB 1894) and culminating in 2011, the legislature also established new procedures that make it more difficult to enact pension benefit improvements, in part by requiring actuarial studies. The 2011 changes in HB 2132 had the practical effect of ending a prior practice of ad-hoc COLA adjustments in alternate years. With system actuaries no longer assuming COLAs in the future

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[6] Funded ratios for the Oklahoma pensions and for the NASRA Aggregate from its Public Funds Survey from Don Stracke, Mark Cintolo, and Mario Tate, "Oklahoma State Pension Commission summary of Actuarial Report, February 20, 2013, p. 6, online at http://www.state.ok.us/~ok-pension/reports/actuarial/2013%2002%2020%20Actuarial%20Summary.pdf

that would be absorbed by the plans, unfunded liabilities for all the plans fell $5 billion.[7] The legislature also raised the normal retirement age for new employees from 62 to 65. This will reduce the normal cost of pensions for new employees although it did not impact the unfunded liability.

Table 2. The Drop in the Unfunded Liability of Oklahoma Pension Funds in 2011		
	2010	*2011*
OTRS-Teachers	$10.4 billion	$7.6 billion
OPERS-State Workers	$3.3 billion	$1.6 billion
OPPRS-Police	$1.5 billion	$1.0 billion
OFPRS-Firefighters	$587 million	$137 million
Total for Seven Plans	**$16.1 billion**	**$10.6 billion**
Source. Rep. Randy McDaniel, "Pension Reform in Oklahoma," PPT, no date, p. 6.		

In 2013, the legislature made major changes to firefighters' pensions in House Bill 2078. This increased employee contributions from 8% to 9% of salary and employer contributions from municipalities to 14% (from 13%). The share of the state insurance premium tax dedicated to OFPRS increased from 34% to 36%. Other changes increased retirement ages, vesting periods, and years of service requirements. Also in 2013, the legislature passed SB 847, which allocates future revenue surpluses above the cap on the Rainy Day Fund to a new Pension Stabilization Fund that will pay down unfunded pension liabilities.

Box 1. Eliminating COLAs: More Pension Fund Sustainability but a Risk to Retirement Security

While acknowledging that eliminating COLAs for the foreseeable future will increase Oklahoma pension plans' financial sustainability, it must be acknowledged that this is a major sacrifice for public sector retirees. If inflation equals 3% annually, 24 years after public employees retire their pension check have only half the buying power as when they first left public service.

For Oklahoma firefighters, police, and (some rural) teachers that do not participate in Social Security, eliminating COLAs particularly threatens retirement security. Virtually all private workers and a large majority of public sector workers across the country now do participate in Social Security. They therefore enjoy full protection against inflation in their Social Security check, annual increases in which are tied to the Consumer Price Index. Thus the minority of Oklahoma public sector workers who do not participate in Social Security now have worse inflation protection in their retirement income – i.e., none – than all but a few other U.S. retirees.[8]

The progress that Oklahoma has made on pension funding is well recognized within Oklahoma. Rep. Randy McDaniel told *The Oklahoman* in 2011, "At a time when…other states in our country struggle to

[7] Actuarial changes in 2005 also shaved 2.2 percentage point off the OTRS unfunded liability. (See Oklahoma Teachers' Retirement System of Oklahoma*, Actuarial Valuation as of June 30, 2005",* October 2005, online at http://www.ok.gov/TRS/documents/2005%20CAFR.pdf; cited in Blatt, *Oklahoma's Pension Systems*, p. 4.) In 2011, retirement ages also increased for future workers: while this lowers the (normal) cost of pensions for future workers, it did not reduce the unfunded liability.

[8] A recent study found that 13 of 19 state pension plans covering workers excluded from Security had inflation protection better than annual adjustments equal to half the increase in the CPI. This is much better inflation protection than now exists for Oklahoma public pensions. See Stephen Herzenberg and Howard Wial, *An Unbalanced Pension Proposal*, University of Illinois-Chicago Center for Urban Economic Development and Keystone Research Center, Appendix A, online at http://keystoneresearch.org/illinois-pensions.

even address their structural debt problems, Oklahoma's financial condition is already exhibiting remarkable improvement."[9]

In a letter to his colleagues, Senator Mike Mazzei, a professional financial planner, wrote in May 2013, "We have made great strides over the last eight years…We have a law in place now that prevents new benefits from being proposed without thorough analysis – cost of living adjustments must now be paid for. The teacher system is finally on a path to fiscal stability and just this year we passed reforms which do the same for the firefighters system."

Oklahoma Pension Funds – Financially Sustainable for the Long Term

The recent performance of Oklahoma's pension funds is no accident: as a result of reforms enacted over the past seven years, Oklahoma's pension plans now exhibit the characteristics of well-funded pension plans identified by a recent National Institute on Retirement Security study.[10] Table 3 lists each best-practice characteristic and how it compares with the current practices of Oklahoma's pension systems.

Table 3. Oklahoma Pension Plans Now Mirror National Best Practices

Characteristics of Well-Funded Public Pensions	Oklahoma Consistency With Each Best Practice
1. Employer pension contributions that pay the full annual required contribution (ARC), and maintain stability in contribution rates over time	In aggregate, the seven OK plans contributed 104% of their ARC for the fiscal year 2011-12[11]
2. Employee contributions to help share in the cost of the plan	Employee contributions in Oklahoma's pension plans equal 9% of salary for OFPR, 8% for four of the seven plans, 7% for OTRS for the Wildlife plan, and 3.5% for OPERS. These contribution rates compare with 5% for the median public pension plan in FY2011[12]
3. Benefit improvements that are actuarially valued before adoption, and funded upon adoption	As a result of 2006 reforms, Oklahoma's pension plans are now subject to this requirement
4. Cost of living adjustments (COLAs) that are granted responsibly	Oklahoma's pension plans are now subject to strong (arguably too strong) version of this requirement
5. Anti-spiking measures that ensure actuarial integrity and transparency in pension benefit determination	Final average salary used to computer pension benefits must be based on "regular annual compensation," with artificially inflated salaries not "pensionable"
6. Economic actuarial assumptions, including discount and inflation rates which can reasonably be expected to be achieved long term.	Investment return assumptions are now 8% for OTRS, and 7.5% for the other large plans –in line with other public funds (the median for public plans was 7.8% in 2011)

Note. Left-hand column is based on Jun Peng and Ilana Bolvie, *Lessons from Well-Funded Public Pensions: An Analysis of Six Plans that Weathered the Financial Storm*, National Institute on Retirement Security, Washington, D.C., June 2011.

[9] Michael McNutt, "New Oklahoma Laws Credited With Improving State Pensions' Fiscal Shape," *The Oklahoman*, November 11, 2011; online at http://newsok.com/new-oklahoma-laws-credited-with-improving-state-pensions-fiscal-shape/article/3622054

[10] Jun Peng and Ilana Bolvie, *Lessons from Well-Funded Public Pensions: An Analysis of Six Plans that Weathered the Financial Storm*, National Institute on Retirement Security, Washington, D.C., June 2011, online at http://www.nirsonline.org/index.php?option=com_content&task=view&id=613&Itemid=48.

[11] Stracke, Cintola, and Tate, "Summary of Actuarial Reports," p. 11.

[12] Public Fund Survey Summary Findings for FY 2011, NASRA, November 2012; as cited in Stracke, Cintola, and Tate, "Summary of Actuarial Reports," p. 12. Insert data on Oklahoma employee contributions relative to other states from Census data for 2001-2011.

Another gauge of the financial sustainability of Oklahoma pension funds after the reforms of the past seven years is the current "employer normal cost" – i.e., the projected cost to employers of the additional benefits earned by current employees each year now that there have been significant cuts in benefits and increases in employee contributions. Based on the actuarial report for the year ending June 30, 2012 (after the 2011 reforms), the state's biggest pension plan, the Teachers' Retirement System, now has an employer normal cost for employees of only 2.81%.[13] The state workers' pension plan now has an employer normal cost of 6.56%.[14] Since the OTRS is about three times as big as the OPERS system across these two systems, the composite normal cost the two systems is about 3.75%.

Yet another gauge of the financial sustainability of Oklahoma's pension plans is their long-run investment-return performance. The OTRS has a 9.05% composite return (gross of fees) since inception in 1943.[15] In the last 20 years, its (market-rate) composite investment performance has been 8.5% annually. [16]

<u>The Limitation of Pew's Static Perspective</u>: Much recent concern about state public sector pensions has been fueled by two recent publications by the Pew Family Trust, each of which provides a single point-in-time snapshot of state pension funding.[17] In a state such as Oklahoma, in which the funded status of state pensions remained below average in the most recent report (released two years ago), the Pew rankings report fails to capture the longer-term improvement resulting from policymaker actions over the past seven years. More generally, Pew's 50-state summary of financial information on public pensions by state unavoidably lacks state-specific context and detail and thus is a blunt instrument for guiding state-specific policy actions.

By contrast, our detailed review of the history of Oklahoma pensions sets the stage for a more thorough consideration of pension policies going forward. The progress Oklahoma policymakers have made improving the financial sustainability of the current defined benefit pensions raises the bar for proposals to eliminate the current pensions in favor of alternative pension designs.

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[13] The total normal cost rate is 9.81% and the employee contribute rate is 7% so the normal cost left for the employer to pay is 2.81%. Oklahoma Teachers' Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ending June 30, 2012*, p. 85, online at http://www.ok.gov/TRS/documents/2012%20CAFR.pdf.

[14] The total normal cost rate in this case is 10.67% and the average employee contribution is 4.11% so that the differences is 6.56%. Oklahoma Public Employees' Retirement System, *Comprehensive Annual Financial Report for the Fiscal Year Ending June 30, 2012*, p. 57; online at http://www.opers.ok.gov/publications.

[15] OTRS, *CAFR for the FY Ending June 30, 2012*, p. 57.

[16] OTRS, *CAFR for the FY Ending June 30, 2012*, p. 98.

[17] The Pew Center on the States, *The Widening Gap: the Great Recession's Impact on State Pension and Retiree Health Care Costs*, April 2011, on line at http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/State_policy/State_Pensions_Health_Care_Retiree_Benefits.pdf. See also Pew Center on the States, *The Widening Gap Update*, June 2012, online at http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/Pew_Pensions_Update.pdf.

401(k)-Type Individual Accounts: Inefficient Retirement Plans and More Pension Debt

Two main alternatives to existing pensions are currently being promoted in states across the country. The most prominent proposed replacements for traditional defined benefit pensions are 401(k)-style individual accounts, also known as “defined contribution” (DC) plans. From the perspective of taxpayers – leaving aside the impact on public employees – the defined contribution approach to retirement savings has two fundamental flaws, each one independently fatal and sufficient to warrant policymakers retaining the state’s current defined benefit pensions.

Less Cost-Effective Pensions. Research evidence shows that defined contribution pensions are much less “efficient” or cost-effective than defined benefit pensions. Defined contribution plans are less cost-effective for a number of reasons:[18]

- They have higher administrative costs because of the need to manage individual accounts and higher marketing (or educational) costs incurred to educate plan participants about their investment options;
- They have higher financial management and trading fees – Wall Street firms get more money but Main Street retirees get less; and
- They deliver lower investment returns because individuals making investment choices do not match the returns of investment experts who manage defined benefit pooled funds;
- They do not pool “longevity risk.” When individuals convert their accumulated savings into an “annuity” – a fixed payment until they die – their annuity payment is lower because the provider of the annuity knows there is a reasonable chance that the individual may live much longer than average. Since defined benefit plans do pool longevity risk – across tens of thousands of plan members – they know that plan participants, *on average*, will live exactly the expected number of years. Thus, annual benefit payments don’t need to be pared back to insure against a longer drawdown of benefits.

Taken together, defined contribution retirement plans cost 57% to 83% more in employee plus taxpayer contributions to deliver the same level of retirement security.[19] This is a BIG difference.

A Higher Unfunded Liability – Digging a Deeper Pension Hole. A switch to defined contribution plans for new employees closes the existing pension plans to new members. Actuaries project that this would lower investment returns on the current pension plans’ assets, leading to big **increases** in unfunded liabilities – hence billions of dollars of additional costs for Oklahoma taxpayers.

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[18] Beth Almeida and William B. Fornia, *A Better Bang for the Buck*, National Institute on Retirement Security, August 2008, online at http://www.nirsonline.org/index.php?option=com_content&task=view&id=121&Itemid=48. William B. Fornia, *Better Bang for NYC’s Buck: An Efficiency Comparison of Defined Benefit and Defined Contribution Retirement Savings Plans*, New York City Comptroller’s Office, Budget & Policy Bureau, October 2011, Table 6, p. 23. See also Mark Olleman, “Public Plan DB/DC Choices,” *PERiSCOPE,* January 2009, Milliman, online at http://publications.milliman.com/periodicals/peri/pdfs/PERi-01-01-09.pdf; and Robert Hiltonsmith, *The Retirement Savings Drain: The Hidden and Excessive Costs of 401(k)*, Demos, New York, New York; online at http://www.demos.org/sites/default/files/publications/TheRetirementSavingsDrain-Final.pdf.

[19] Almeida and Fornia, *A Better Bang for the Buck*, August 2008; *and* Fornia, *Better Bang for NYC’s Buck*, October 2011, Table 6, p. 23.

Investment returns are the most important source of revenues for paying pension benefits, typically accounting for twice as much of plan assets as employer and employee contributions combined. By reducing the investment returns on Oklahoma's defined benefit pension assets, closing the existing defined benefit pensions would drive up the amount that public employers—hence taxpayers—must pay to cover current pension commitments.

Many policymakers recognize that switching to a defined contribution plan for all future employees will not make Oklahoma's unfunded pension liabilities vanish: the state and other public employers will still be responsible for the pension benefits of current and retired employees. Few policymakers recognize, however, that transitioning new employees into defined contribution plans will increase costs for taxpayers by reducing investment earnings on defined benefit plan assets. Here are the main reasons why.

A shorter investment horizon.[20] A defined benefit plan that continues to take in new employees has a balanced mix of young, middle-age, and retired members. This balance gives such plans the ability to diversify their portfolios over a long investment horizon, including large amounts of high-risk, high-return investments (such as stocks or private equities), as well as some low-risk investments (such as bonds) that have lower returns. In defined benefit plans that no longer take in new employees, remaining plan participants gradually age and the plans' investment horizons shorten. As a result, investment managers must shift plan assets from higher-return to safer assets – just as individual investors approaching retirement shift savings away from risky assets to protect themselves against sudden market drops shortly before withdrawal of the money. The shift of pension funds to lower-return assets reduces investment earnings. In Oklahoma, lower investment earnings will force the state and other public employers to make additional contributions to cover defined pension benefits already promised to retiring employees.

A need for more liquid assets. If they are closed to new employees, an increasing share of remaining participants in the Oklahoma defined benefit pension plans will gradually age and retire. As this happens, remaining funds in the plans must be removed from illiquid assets, such as private equities, and invested in more liquid assets which are easy to convert into pension checks for retirees. This shift to more liquid assets will also lower the rate of return, increasing the taxpayer contributions needed to honor existing defined pension obligations.

Reduced contributions from employees and employers to the defined benefit asset pool. If new employees have their own individual accounts, none of their contributions for their own retirement will go into the defined benefit plan asset pool. Since this lowers the flow of new contributions into the defined benefit assets pools, it will lower investment earnings and require larger employer contributions to meet existing pension obligations.

Given the importance of investment earnings to growing pension assets over time, even a modest decline in investment earnings – e.g., 1% – can result in a large increase in the cost to taxpayers of meeting existing pension commitments. Studies in 13 states that have considered a switch to defined contribution plans have reached an actuarial consensus that closing a defined benefit plan lowers

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[20] For the arguments in this and the next paragraph, see, for example, California Public Employees Retirement System, *The Impact of Closing the Defined Benefit Plan at CalPERS*, March 2011, online at http://www.calpers.ca.gov/eip-docs/closing-impact.pdf.

investment returns and thus *increases* unfunded liabilities.[21] These studies indicate that modifying defined benefit pension plans to lower long-term costs and increase employee contributions – as Oklahoma has since 2006 – is a more cost-efficient way to reduce taxpayer costs and any unfunded liabilities. Some highlights from this literature.[22]

- In Pennsylvania, three different actuaries concluded that closing the state's defined benefit pensions to new employees would gradually erode investment returns leading to a $40 billion increase in unfunded liabilities.[23]
- In California, the state Legislative Analyst's Office acknowledged that closing defined benefit plans to new employees would require changes in investment asset mix, increasing expenses in the short and medium term. A study for the California Public Employees' Retirement System also concluded that closing the defined benefit plan to new employees would lower investment returns of plan assets due to a shrinking investment time horizon and the need for more liquid assets.
- In Kansas, an actuarial study concluded that closing the defined benefit plan would lead to a change in asset mix to "produce a greater degree of liquidity, reflect a shorter time horizon for investment, and the resulting lower risk tolerance level…The System's need to hold more cash equivalents to meet outgoing cash flows would also reduce the total return of the investment portfolio…The lower investment return would result in higher contributions needed to provide the same benefits."
- In Minnesota, a 2011 study estimated a transition to a defined contribution plan would cost the state $2.8 billion.
- The New Hampshire Retirement System in 2012 found that closing its defined benefit plan to new hires would likely lead to more conservative investments and lower returns, and would increase the unfunded liability by an additional $1.2 billion.
- In New Mexico, an analysis for the state legislature found that, when a defined benefit plan is closed to new hires, "…a growing portion of assets will likely be held in short-term securities, thereby reducing investment returns."
- In Texas, the Employee Retirement System of Texas (ERS) in 2012 concluded that it made sense to "modify the existing plan design instead of switching all employees to an alternative plan structure." A study by the Texas Teacher Retirement System (TRS) concluded that freezing the defined benefit pension could cause the liability to grow by an estimated $11.7 billion – 49% higher than the current liability – due to lower investment returns from shifting to more liquid assets.

The idea that switching to a defined contribution plan will increase costs to taxpayers is not just theory. It is the experience of the three states that have closed off their defined benefit plans and put all new hires in 401(k)-type plans: West Virginia (1991), Michigan for its state employees (1997), and Alaska (2006).

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[21] Nari Rhee and Diane Oakley, *Issue Brief: On the Right Track? Public Pension Reforms in the Wake of the Financial Crisis,* National Institute on Retirement Security, p. 12; online at http://www.nirsonline.org/index.php?option=com_content&task=view&id=734&Itemid=49

[22] For an annotated bibliography that summarizes many of the recent studies (and contains complete source notes), see Appendix B to KRC pension primer #1 online at www.keystoneresearch.org/pensions.

[23] Reference KRC pension primer on this and also reference the original actuaries for SERS, PSERS, and PERC.

Michigan: Michigan began enrolling all new state employees in a 401(k)-type plan in 1997. Since then, the system's unfunded liabilities have skyrocketed from $697 million in 1997 to $4.078 billion in 2010.[24] This increase partly reflects inadequate employer contributions to pay for the unfunded liability. (Michigan has not made its annual required contributions suggested by the Governmental Accounting Standards Board (GASB) in nine of the last 10 years.)

Alaska: Alaska adopted a 401(k)-type plan for both new state and public school employees that became effective in 2006. Although sold as a way to reduce the employer contribution rates, these rates have increased. For state employees, the actuarially determined employer contribution rate required to pay off the unfunded liabilities increased from 12.39% of salary in 2006 to 22.48% in 2012. For teachers, this rate increased from 24.57% to 36.04%. Across the two plans, the unfunded liabilities associated with the closed defined benefit plans have increased from $3.8 billion in 2006 to $7 billion in 2011 (the latest year for which data are available).[25]

West Virginia: West Virginia adopted a 401(k)-type plan in 1991, but reversed course in 2006, reopening its defined benefit plan to all new hires in 2005 and allowing the members of the 401(k)-type plan to switch into the defined benefit plan. There were several reasons cited for the switch back, including a study done by West Virginia's Consolidated Public Retirement Board. The study found that the average investment return for employees with individual accounts equaled 3.39% from 2001 to 2006, compared to 6.13% from the teachers' defined benefit retirement system. In addition, for five out of six members over age 60 with individual accounts, the average account equaled $23,193. With many individual accounts not on track to generate adequate retirement income, the defined contribution plan was perceived to be driving up taxpayer costs for means-tested public programs.[26]

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[24] Data for 2001 to 2010 from Michigan State Employees Retirement System (MSERS), *Comprehensive Annual Financial Report (CAFR) for the Fiscal Year Ended September 30, 2011*, p. 43, online at http://www.michigan.gov/documents/orsstatedb/State_Employees-2011_CAFR_375807_7.pdf; data for 1997 to 2000 from MSERS, *CAFR for the FY Ended September 30, 2007*, p. 43, online at http://www.michigan.gov/documents/orsstatedb/CAFR_StateEmployees_221902_7.pdf. There are two estimates for the Michigan unfunded liability in the 2000 CAFR, the second showing that the defined benefit fund had a *surplus* of $733 million when the fund was closed to new employees (not a deficit of $697 million).

[25] The analysis in this paragraph is based on data in Alaska Department of Administration (ADA), Division of Retirement and Benefits (DRB), Public Employees' Retirement System (PERS), *Comprehensive Annual Fiscal Report for the Fiscal Year Ended June 30, 2012*, pp. 117-118, online at http://doa.alaska.gov/drb/pdf/pers/cafr/2012PersCafr.pdf; and ADA/DRB/PERS, *Teachers' Retirement System Comprehensive Annual Financial Report For the Fiscal Year Ended June 30, 2012*, pp. 110-11, online at http://doa.alaska.gov/drb/pdf/trs/cafr/2012TrsCafr.pdf. There is a three-year lag in Alaska between the actuarial determination of required employer contribution rates and their application. It could therefore be argued that rather than comparing the 2012 and 2006 rates, we should compare the 2014 (which is based on 2011 financial data) and 2009 rates (based on 2006 financial data when Alaska switched to defined contribution plans). During this alternate period, the employer contribution rate for unfunded pension liabilities has increased from 21.5% to 24.19% for state workers; for teachers the rate has increased from 34.8% to 43.51%. Thus, the qualitative finding remains that employer contribution rates to pay off the unfunded liabilities have increased since the switch to a defined contribution rate. (Note also that employer contributions to pay off the unfunded liabilities in Alaska continue to be imposed on total salaries, including those of new employees.)

[26] West Virginia Consolidated Public Retirement Board, "TDC Membership, Balance and Return Analysis For Experience July 1, 2005 thru June 30, 2006, " presented to the Joint Standing Committee on Pensions and Retirement, July 28, 2007

Today's Fad – Cash Balance: Less Retirement Security, Potentially Higher Costs

A new pension favorite, now being promoted by the Pew Trust and the Arnold Foundation, is a "cash balance" pension. Unlike traditional defined benefit pensions, but similar to defined contribution plans, cash balance pensions do not guarantee a specific benefit tied to years of service.[27] Instead they guarantee contributions from employees and employers each year (as with a DC plan) plus a minimum annual return (or "interest crediting rate") on benefits. This guaranteed return could be a fixed amount (such as 4%) or a fixed minimum plus some fraction of investment returns above the minimum.

Cash balance plans do have some advantages over 401(k)-type individual accounts. In particular, funds are still pooled and professionally managed, potentially eliminating the inefficiencies of defined contribution plans relative to traditional pensions. In addition, funds for new employee cash balance accounts can be pooled with existing pension plans – with the cash balance plan becoming a new "tier" within the existing pension plans. This should eliminate the mechanisms by which closing defined benefit plans leads to lower investment returns and high transition costs. Cash balance plans can also be designed in a way that increases pension portability (although that advantage depends on plan design). A last benefit of some cash balance plans is that they tend to increase benefits for employees in government service early in their career and then employed in the private sector for 20 years.

Unfortunately, however, cash balance plans have important disadvantages. To start with, they are much less "transparent" than traditional pensions, so workers don't really know what their retirement benefits will be. They are also virtually untested in the public sector. Third, they transfer significant financial market risk to employees, although not as much as defined contribution plans. The biggest potential downsides to cash balance plans are that they could (1) substantially erode retirement security for long-term career employees, (2) lead to much higher turnover among mid-career professionals (eroding the quality of public service and potentially requiring offsetting wage increases), and (3) lower investment returns leading to higher costs to taxpayers.

(1) Although their impact depends on the specific features of the plan, cash balance plans would likely reduce benefits on average as well as deeply slash benefits for career employees who retire from public service. For example, actuarial studies of two Pennsylvania cash balance proposals introduced in the 2011-12 legislative session found that average pension benefits across a sample of typical employee careers would be 40% lower than with the existing Pennsylvania defined benefit pensions.[28] These actuarial studies – and other research – indicate that career public employees who retire from government service can suffer benefit cuts relative to existing defined benefit plans of two-thirds or more. The intuition behind why cash balance plans tend to cut benefits is straightforward: cash balance plans are usually introduced by proponents that want to limit the risk to the public sector of future unfunded liabilities and to pay down an existing pension debt. These goals can be accomplished by lowering the interest rate guaranteed workers on their cash balance account and by giving workers a low or no share of investment earnings above the guaranteed level. But if the interest rates employees are given on their individual cash balance accounts is low – especially relative to the 7.5% or 8% typically projected within the current defined benefit plans – then benefits will be eroded.

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[27] Legally, cash balance plans are considered defined benefit plans.

[28] For details and references to the actuarial studies, see Stephen Herzenberg, *Cash Balance Plans Could Hurt Public Employees and Taxpayers*, Keystone Research Center, online at http://keystoneresearch.org/publications/research/cash-balance-pension-plan-could-hurt-public-employees-and-taxpayers.

In the private sector, conversions in the 1990s from traditional defined benefit pension plans to cash balance plans usually reduced the pension benefits of workers, regardless of age. Older workers whose pensions were converted experienced a greater loss of expected benefits than younger workers.[29]

As noted, cash balance plans could provide better benefits for employees who work for the public sector when young but then leave government service mid-career. For example, if someone works for the public sector for 20 years until age 45 and then works in the private sector for 20 years, their defined benefit will not grow – in fact it might shrink by nearly half because of inflation. By contrast, a cash balance account would continue to grow and would increase in real ("inflation-adjusted") terms as long as the interest crediting rate exceeds inflation.

(2) Cash balance plans could sharply increase turnover among teachers, nurses, and other public servants because they reduce the pension incentive to stay in public service while increasing pensions for those who leave mid-career, higher turnover that results from deep benefit cuts will erode the quality of education and other public services, while also increasing human resource management costs and potentially requiring compensating wage increases to increase retention. One of the actuarial studies of a Pennsylvania cash balance proposal noted the potential negative impact on retention: "One unintended effect of the bill may be to decrease the attractiveness of public school employment. The General Assembly and the Governor must determine whether the benefit provisions of the bill are consistent with the long-term personnel management goals of school and Commonwealth employers."[30] The Pennsylvania Public Employee Retirement Commission (PERC) also noted, in transmitting this actuarial note, said "…if the pension benefits are reduced, there may be pressure to increase other compensation to provide for the same total compensation as before." [31]

(3) Cash balance plans risk lower investment returns because plan managers may choose to target only the interest rate guaranteed employees (e.g., 4% instead of the up to 8% currently projected for Oklahoma's pensions). Consistent with this concern, a Pennsylvania actuary analyzing a cash balance proposal that would have provided a fixed 4% rate of return (i.e., with no sharing of returns above 4%) recommended that pension fund managers consider investing more conservatively once most employees participate in the cash balance plan: "Lastly, once active membership in PSERS [the Pennsylvania State Education Retirement System] has significantly become cash balance members with a guaranteed investment return and PSERS continues to have a sizable population of retired members, the System should consider revising their [sic] investment policy. The System may be inclined to invest assets in a more conservative manner…"[32] Lower investment returns would increase any remaining unfunded liability. They would also translate into less efficient – and more expensive – retirement benefits, with more contributions from taxpayers and employees required to achieve any given benefit.

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[29] United States Government Accountability Office, *Private Pensions: Information on Cash Balance Pension Plans*, online at http://www.gpo.gov/fdsys/pkg/GAOREPORTS-GAO-06-42/pdf/GAOREPORTS-GAO-06-42.pdf.

[30] Nugent and Warren, letter to PERC Executive Director James McAneny containing Milliman (PERC actuary) actuarial note on House Bill 1677, p. 7.

[31] PERC Actuarial Note Transmittal on HB 1677, August 4, 2011, p. 13, online at https://ctcoas02.state.pa.us/pls/public/rlws.download?p_file=F12034/House%20Bill%201677,%20PN%202124.pdf

[32] Timothy J. Nugent and Katherine A. Warren letter to PERC Executive Director James McAneny containing Milliman (PERC actuary) actuarial note on House Bill 1677, p. 7, attached to PERC Actuarial Note Transmittal on HB 1677, August 4, 2011, online at https://ctcoas02.state.pa.us/pls/public/rlws.download?p_file=F12034/House%20Bill%201677,%20PN%202124.pdf

Oklahoma Public Pensions Are Modest and Overall Wages Plus Benefits Are Lower in the Public Sector

Table 1 underscored how modest are Oklahoma pension benefits – less than $20,000 annually for the two largest pension plans that account for about 85% of total members. In fact, according to the Executive Director of the Oklahoma pension plan for state workers, OPERS has the lowest average benefit of any state worker pension plan in the nation.[33] Moreover, average benefits for Oklahoma teachers are not much higher, still below $19,000.

The modesty of Oklahoma pension benefits should also be considered in light of the evidence that salaries for public sector workers are substantially lower than for comparable private sector workers with similar levels of education, experience, and other attributes that impact wages. [34] This is especially true for college educated workers – a majority of public sector workers. Keefe finds that that the average compensation (wages plus benefits) of state and local public-sector workers with a bachelor's degree trails the private sector by 25%.[35] Moreover, Oklahoma public sector workers – or at least teachers – are particularly poorly paid, both relative to other teachers across the country and, it is likely, compared to private sector workers in Oklahoma. Oklahoma teachers earn 20% less on average than teachers nationally – about $44,000 rather than about $55,000 (see Table 4). In the overall labor market, dominated by the numerically much larger private sector, Oklahoma wages are only 12% below the national average.

Given the compensation gap, and the even larger salary gap (i.e., the gap before taking benefits into account), good pension benefits in the public sector play a critical role in attracting and retaining high-quality and experienced college-educated workers.

Table 4. Education Funding, Teacher Salaries, and Overall Wages: Oklahoma and the United States

	Average Teacher Salaries	Current Expenditures for K-12 Public Schools, 2009-10 (per pupil)	Median Wage (2012)	Average Wage (2012)
Oklahoma	$44,261	$7,771	$15.22	$ 16.85
United States	$55,241	$10,462	$16.28	$ 19.06
OK as % of US	80%	74%	88%	88%
Oklahoma Rank	48	48	36	42

Sources. Average teacher salary and expenditure data from NEA Research, *Rankings of the States 2011 and Estimates of School Statistics 2012*, December 2011, p. 18; online at http://www.nea.org/assets/docs/NEA_Rankings_And_Estimates_FINAL_20120209.pdf. Wage data from Economic Policy Institute (EPI) wage file based on the Current Population Survey (CPS).

[33] Tom Spencer, Executive Director of the Oklahoma Public Employees Retirement System (OPERS), to the Senate interim study committee on pension improvement on October 16, 2013.

[34] Jeffrey Keefe, *Debunking the Myth of the Overcompensated Public Employee: The Evidence*, Economic Policy Institute, September 15, 2010, Table 2, online at http://www.epi.org/files/page/-/pdf/bp276.pdf. Keefe has also done a number of state-specific studies, but has not done one for Oklahoma. See also Keith A. Bender and John S. Heywood, *Out of Balance: Compare Public and Private Compensation Over 20 Years*, National Institute on Retirement Security, April 2010, online at http://www.nirsonline.org/index.php?Itemid=48&id=395&option=com_content&task=view.

[35] Keefe, *Debunking the Myth of the Overcompensated Public Employee*, Table 2, p. 6.

Don’t Throw the Oklahoma Pension House Back Into Disorder

Given the progress made by Oklahoma pension plans over the past seven years, and the risks of DC or CB plans, Oklahoma would be ill advised to shift its basic pension plan design. Sen. Mike Mazzei said earlier this year, when addressing the issue of pension plan consolidation, “We need to let some time pass so participants of these systems can monitor the progress and begin to feel more and more confident about the financial stability of their individual pension plans.” This observation applies even more strongly to the idea of replacing all or part of Oklahoma’s pension with a new DC or cash balance plan design. In sum, it would be strange indeed at a time when Oklahoma has finally got its pension house in order, for the state to roll the dice with a radically new pension design.