

Mr. Chairman and members of the committee,

Thank you for giving us the opportunity to provide non-partisan research and analysis on the important issue of public pension reform. My name is Jonathan Williams and I am the Vice President for the Center for State Fiscal Reform at the American Legislative Exchange Council. The American Legislative Exchange Council works to advance the fundamental principles of free-markets, private enterprise, limited government, and federalism at the state level through a nonpartisan public-private partnership of America's state legislators, members of the private sector, and the general public.

While we are not here to take a position on the pending legislation, I am pleased to share with you the non-partisan research and analysis results from our recent study, [*Keeping the Promise: State Solutions for Government Pension Reform*](#). The study is designed as a handbook for state legislators looking to gain a deep understanding of state public pension systems, common flaws associated with public pension plans, and steps to reform and secure public pensions so that workers can have faith that they will receive the benefits they have been promised and the public can avoid higher taxes or inadequate government services due to growing legacy costs. I will review some of the general conclusions of the study, share case studies from various states, and conclude with some principles of sound pension reform. Drawing on our recent study, I will be outlining the key shortcomings of defined benefit plans and why a move to a defined contribution system would be a major benefit to taxpayers and public employees alike.

In considering pension reforms, it's worth reexamining the short-comings of defined benefit plans and why defined contribution plans serve as an able solution to these pension problems.

As a brief refresher on the types of pension systems, I will outline the details of three types briefly: defined benefit, defined contribution, and cash balance. The traditional definition of a "pension" is a defined benefit plan, in which the employer obligates itself to pay the employee in retirement. In a defined contribution plan, the employer makes certain payments into an employee's account during that employee's tenure on the job. However, once the employee leaves the job, the employer's obligation ends. In a defined benefit plan, the employer is obligated to make a series of payments to the retired worker, regardless of how small the investment returns. In a defined benefit plan, the employer decides how to invest retirement funds; in a defined contribution plan, the employee usually decides.

The third major type of an employer-sponsored retirement account, the cash balance plan, has qualities of both defined benefit and defined contribution plans. As with a defined contribution plan, the money a person has for retirement in a cash balance plan is tied to how much was contributed during his or her time on the job. Even so, cash balance plans are, on the whole, more like defined benefit plans than not. The most significant similarity is that both plans obligate the employer to make monthly payments to the retired worker. Also, with both cash balance and defined benefit plans, the employer decides how much money to contribute and how it is invested. Table 1 below from our recent study details some relevant differences.

Table 1: Overview of Retirement Plans

Comparing the features of defined-benefit, defined-contribution, and cash-balance plans

Feature	DB Defined-Benefit	DC Defined-Contribution	CB Cash-Balance
When does the employer's obligation to make payments end?	Lifetime of the employee, and perhaps a survivor	Worker's tenure on the job	Worker's tenure on the job
Does the retiree receive a COLA?	Often	No	Maybe
What does the employee receive upon retirement?	Promise of a fixed monthly payment	A lump sum that may be converted to an annuity or drawn down, as with an IRA	Promise of a fixed monthly payment
Who selects the investments?	Employer or designee	Employer, or employee acting within limits set by the employer	Employer
How is the benefit calculated?	Years of service, service credit (percentage of salary), average high salary	Percentage of salary deposited over time, with earnings and (perhaps) matching funds	Percentage of salary credited to a "hypothetical account," plus an interest rate set by the employer
Does it reward longevity or mobility?	Longevity (generally)	Mobility (generally)	Either
Can the employee supplement money contributed by the employer?	No (generally)	Yes	No (generally)
Who bears investment risk and reward?	Employer	Employee	Employer
Does the employee have a legal claim on employers who do not make annual contributions?	No	Yes (if the plan calls for the employer to make contributions)	Yes

Source: [Keeping the Promise: State Solutions for Government Pension Reform](#)

The key issue related to public pension plans is the cost to taxpayers and there are two relevant types of costs: the normal cost and the cost of unfunded liabilities associated with the plan. The normal costs are those outlays associated with funding employee retirement plans every year in order to later pay benefits out to retirees. The unfunded liability costs are the pension plan debt that is the result of defined benefit plans that have been underfunded, contained assumptions about investment growth that are overly optimistic, or otherwise compromised with fiscally imprudent decisions. It is worth noting that across the country the cost of unfunded liabilities is large and has been growing in many states.

Today, I will focus extensively on the accrual and cost of unfunded liabilities. To quote our study's author, former Utah Senator Dan Liljenquist:

"The political facts of life mean that defined benefit plans are prone to "improvements" that weaken their finances. A legislator who pushes through an increase in the service credit gets a

political boost today from public employees. The cost of that improvement, however, may not be felt until long after that person leaves office—a fiscal time bomb that other legislators, holding office years or decades later, must defuse. Given the increasing longevity of the American workforce, an act passed today to increase the value of a pension promise may have consequences that last 50, 60, or even 70 years. Defined benefit plans have a key shortfall: Their long-term health is subject to manipulation for short-term political gain. In addition, employers can never be sure of their long-term obligations under defined benefit plans that require payments for a lifetime or two.”

It is important to make one point clear: though reforms can often improve the standing of defined benefit plans, there is no reform short of closing off defined benefit plans and moving to a defined contribution system that will remove these political incentives that result in large unfunded liabilities.

It only takes a few years of pension underfunding, overly-generous cost of living adjustments, pension contribution holidays, or pension plan investment returns below the overly-optimistic assumed rates of return, to accrue large pension debt. Though debt that has already accumulated cannot be shed, what can be done is the prevention of future pension debt accrual. That objective is best accomplished by a system that eliminates the dynamics that create pension debt and ensure that pensions are fully funded in a secure system irrespective of what leaders administer that system. Defined contribution systems ensure that 100 percent of pension funding must take place each and every year and eliminate the possibility of economic swings damaging a seemingly well-funded pension system.

Defined contribution plans keep government honest. When a worker earns a dollar, he is paid by the employer for that dollar. But in a defined benefit plan that is improperly funded, when an employee earns a dollar, taxpayer’s grandchildren pay the dollar. This arrangement is irresponsible to public servants and future taxpayers. Defined contribution plans ensure responsible public finances with respect to retirement benefits.

As our study details, many states have taken this exact step by closing their defined benefit plans and moving new employees to a defined contribution plan, or even freezing defined benefit plans and moving all employees over to a defined contribution plan. Michigan was one of the first states to shift over to a defined contribution plan in 1997, enrolling all new employees into a defined contribution system. Michigan has been a model of pension reform for the entire nation in the wake of its late 1990s reform of pension plans for state employees. Michigan’s decision to move from a defined benefit plan to a defined contribution plan for new workers was a common-sense, pragmatic solution at a time that the state was facing large, unfunded pension liabilities. In 2011, pension expert Richard Dreyfuss calculated that Michigan had saved \$167 million in normal costs and between \$2.3 and \$4.3 billion in additional accrued unfunded liabilities [1]. Most importantly, the Michigan pension reform secured the retirement income of thousands of employees in a fiscally responsible manner.

Alaska followed Michigan’s lead in 2006, with new employees being placed into a defined contribution plan. In 2011 Utah, led by our study’s author, State Senator Dan Liljenquist, gave

new employees the option of a defined contribution plan or a hybrid system heavily leaning on a defined contribution plan. Rhode Island in 2011 moved many employees over to a hybrid plan and implemented strong reforms to the defined benefit portion of the hybrid plan. In 2012 Kansas reformed their defined benefit system by converting it into a cash balance system with strong constraints on fiscally irresponsible practices. More recently, in 2014 Oklahoma passed legislation to put all new state employees into a defined contribution plan.

The non-profit fiscal policy watchdog, State Budget Solutions, has calculated total unfunded state and local pension liabilities across the nation at \$4.7 trillion. [2] In the face of this mounting debt, the previously mentioned states have reformed their pension system and many more are considering reforms.

I would like to reiterate our research shows that moving to a defined contribution plan is the strongest and most responsible reform that a state can implement. I would also like to briefly address one common criticism of a move to a defined contribution plan. Many critics suggest that so-called “transition costs” make moves to defined contribution plans fiscally irresponsible. As ALEC’s recent pension study and a recent paper by the Laura and John Arnold Foundation both point out, transition costs are largely a mirage. [3] These are not costs in the sense that they are new financial obligations, but instead an optional recalculation of already incurred pension debt. This is debt that is the result of past underfunding and not the result of moving to a defined contribution plan. Pension debt must be paid eventually. Closing a defined benefit plan addresses this debt in a transparent manner.

In closing, I would like to highlight the importance of pension reform for two groups: employees and taxpayers. For taxpayers, reforming pensions stops costly unfunded liabilities from accruing in the future, allowing taxes to be kept low and preventing public services from being crowded out in the future. As Governor Gina Raimondo, a Democrat and state treasurer during Rhode Island’s recent pension reform, answered in response to a disgruntled public employee challenging the morality of pension reform, “I would ask you, is it morally right to do nothing [on pension reform], and not provide services to the state’s most vulnerable citizens? Yes, sir, I think this reform is moral.”

Moreover, reforming pensions to a more sustainable system allows the state to make credible retirement promises to public employees that their retirement will be there as promised and not cut due to bankruptcy. Public servants deserve to have predictable retirement systems and defined contribution plans allow them to have just that. A move to a defined contribution system does not cut or eliminate their benefits: it saves them from irresponsible funding practices.

Once again, thank you for the opportunity to provide our research and analysis on this very important topic.

Footnotes

[1] Richard Dreyfuss, Mackinac Center for Public Policy. "Estimated Savings From Michigan's 1997 State Employees Pension Plan Reform."

<http://www.mackinac.org/archives/2011/2011-03PensionFINALweb.pdf>

[2] Joe Luppino-Esposito, State Budget Solutions. "Promises Made, Promises Broken – The Betrayal of Pensioners and Taxpayers."

<http://www.statebudgetsolutions.org/publications/detail/promises-made-promises-broken-2014-unfunded-liabilities-hit-47-trillion>

[3] Josh B. McGee, Laura and John Arnold Foundation. "The Transition Cost Mirage – False Arguments Distract from Real Pension Reform Debates."

<http://www.arnoldfoundation.org/resources/transition-cost-mirage-%E2%80%93-false-arguments-distract-real-pension-reform-debates>

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KEEPING THE PROMISE: STATE SOLUTIONS FOR GOVERNMENT PENSION REFORM

By Senator Dan Liljenquist



CENTER FOR STATE FISCAL REFORM
TAX AND BUDGET SOLUTIONS FOR ECONOMIC GROWTH

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About the American Legislative Exchange Council

Keeping the Promise: State Solutions for Government Pension Reform has been published by the American Legislative Exchange Council (ALEC) as part of its mission to discuss, develop, and disseminate public policies, which expand free markets, promote economic growth, limit the size of government, and preserve individual liberty. ALEC is the nation's largest nonpartisan, voluntary membership organization of state legislators, with more than 2,000 members across the nation. ALEC is governed by a Board of Directors of state legislators. ALEC is classified by the Internal Revenue Service as a 501(c)(3) nonprofit, public policy and educational organization. Individuals, philanthropic foundations, businesses, and associations are eligible to support ALEC's work through tax-deductible gifts.

About ALEC's Center for State Fiscal Reform

ALEC's Center for State Fiscal Reform strives to educate our legislative members as well as our center-right allies throughout the states who share a commitment to our principles and shared goals. We also strive to educate our legislative members on how to achieve greater economic prosperity by outlining which policies work and which ones fail. This is done by personalized research, policy briefings in the states, and by releasing nonpartisan policy publications for distribution such as *Rich States, Poor States* and the *State Budget Reform Toolkit*.

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Contact Information:**American Legislative Exchange Council**

2900 Crystal Drive, Suite 600

Arlington, VA 22202

Tel: 703.373.0933

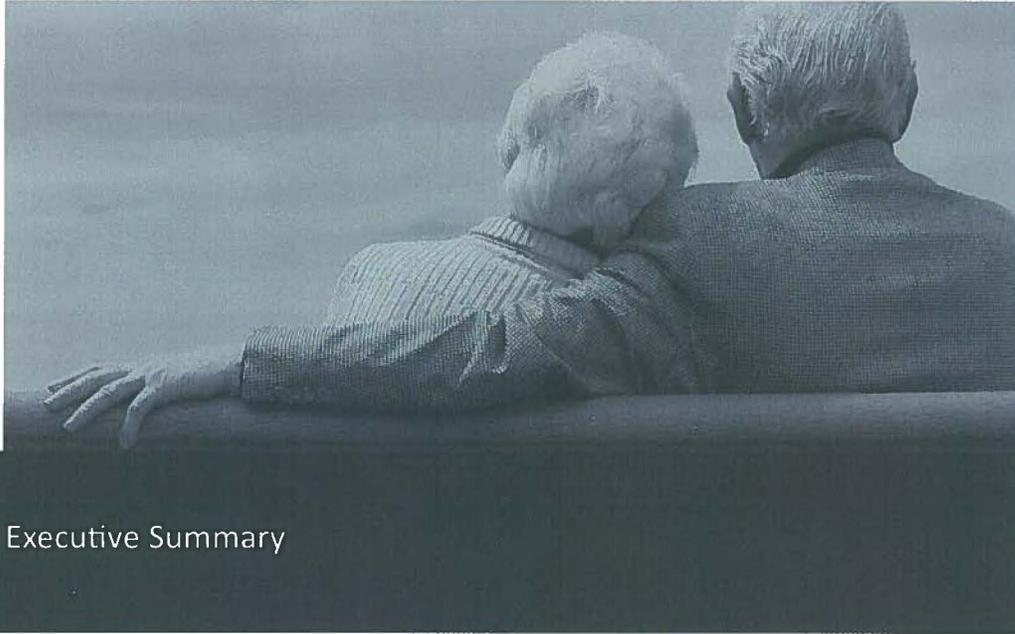
Fax: 703.373.0927

www.alec.org

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Executive Summary

State governments face many obvious problems, including stagnant school performance, soaring Medicaid budgets, and gridlock on urban roads. Their ability to fund improvements to services is challenged by a topic that seldom sees the light of day: Pensions for state and local government employees. This report describes the variety of pension plans that governments use today and the advantages and disadvantages of each plan. It also provides several tools that legislators can use to ensure that governments can affordably fund retirement benefits for their employees while still budgeting for ongoing programs. These tools include model policy from the American Legislative Exchange Council (ALEC), information on research organizations that specialize in pension matters, and a series of responses to the question, “Is the problem overblown?”

In most situations, retired public sector employees have a legal right to their pension checks. Ironically, they have no guarantee during their working years that legislators will put away enough money to pay for

those checks. The sad fact is that political calculations give legislators strong incentives to promise generous benefits and few, if any, incentives to make good on those promises. “Unfunded liabilities” is the term used to describe these promises that lawmakers have made but cannot keep. Estimating the size of those liabilities is a difficult task, but they range anywhere from \$750 billion to more than \$4 trillion—enough to cover a \$60,000 salary and benefits package for 625,000 to 1.2 million new elementary school teachers for 20 years.

In the most extreme cases of fiscal distress induced by poorly managed pensions, some cities have had to go to court to seek bankruptcy protection and restructuring. States do not have that option. Even so, unfunded pension liabilities can get so out of hand that legislators lose much of their discretionary authority.

While employers in the private sector have experienced their own problems, most have moved away from the defined-benefit model that dominates public employment to other designs. Most notable are “de-

defined-contribution” and “cash-balance” plans. Though these two types of plans differ from each other and come in many versions, they share a fundamental difference from the defined-benefit plan: They offer increased predictability for the employer and an increased likelihood for the employee that the money promised will actually be set aside.

“[L]egislators should move defined-benefit systems to properly designed alternatives, such as defined-contribution, cash balance, and hybrid plans.”

As overseers of both the public treasury and the public workforce, legislators, regardless of ideological stripes or policy goals, need to review the health of government pensions in their states. In many cases, they will need to look for both short-term patches and long-term cures. Before looking in the toolbox, though, they should establish some principles for reform. These should include eliminating the possibility that the state will go functionally bankrupt from pension-related costs, meeting the obligations that the state has incurred in the past, and making future obligations predictable and sustainable. Other principles include ensuring that the public does not bear all the risk of retirement systems and shielding employees

from unsystematic risk—risk inherent in individual decisions, such as making a big bet on one stock—rather than risk inherent to investing, such as a decline in the overall stock or bond market.

Once they establish principles for reform, legislators can choose from a menu of options. Tinkering with existing plans is the most obvious, and sometimes the easiest. These steps include raising the retirement age, eliminating pension spiking (the practice of an employee cashing in sick leave or working large amounts of overtime in the final year of employment), and making cost-of-living adjustment (COLA) payments contingent on the financial health of the pension plan. Rhode Island is the most notable example of a state that has taken this path.

But these inside-the-box changes may not be enough to restore financial health to a pension plan. Worse, they do not eliminate the threat of functional bankruptcy. There is ample evidence to suggest that legislators should move from defined-benefit systems to properly designed alternatives, such as defined-contribution, cash-balance, or hybrid plans. Several states have moved in these directions, including Michigan (defined-contribution), Kansas (cash-balance), and Utah (hybrid).

Sound ideas are important for making state governments fiscally strong. But equally important are reformers who embrace sound communication skills, as well as basic courtesy in the way they communicate their messages. Effective advocates for reform must listen to a wide range of people, treat them with respect, and stress math rather than ideology.

The Fiscal Meltdown of Public Pensions Threatens States

At every turn, elected leaders in state and local governments face demands for funding. They also must oversee the public workforce. As part of that responsibility, they are the final stewards of pension plans that governments offer to their employees. Unfortunately for today's legislators, their work is made harder because, in some cases, their predecessors have obligated governments—and taxpayers—to shoulder pension expenses without providing adequate funding. Through a combination of factors, state and local pension plans are underfunded. How large is the problem? The Center for Retirement Research at Boston College maintains the Public Plans Database, which represents more than 85 percent of the assets held by state and local governments. It reports that as of 2010, these plans had only 79 percent of the funds they needed to meet their obligations over the long term, a measurement called the "funding ratio."¹ Of course, some plans are in better condition than others. Of the 126 major state and local plans tracked, 76 had funding ratios of below 80 percent, a widely accepted standard of plan health.²

The health of public pension funds varies from fund to fund, but in some cases, unfunded pension liabilities have afflicted governments with fiscal headaches, downgraded bond ratings, and even bankruptcy. This report will help legislators understand the problems faced by public pensions and offer some solutions, so that they can pursue important priorities.

The private sector has seen a revolution in thinking about retirement, and this transformation is slowly making its way through the public sector. Millions of Americans, mostly private sector workers, but also

some public sector workers, have an individual retirement account (IRA), a 401(k), or a similar account. These individuals own their accounts. The Pew Center on the States reports that states faced a pension gap of \$757 billion in fiscal year 2010.³ Others say it is worse than that.

Harvard University researchers Thomas J. Healey, Carl Hess, and Kevin Nicholson note that over the last decade, estimates have ranged from \$730 billion to \$4.4 trillion. They add, "[M]any financial economists believe that the true size of the total unfunded liability lies closer to the larger estimates than it does to the smaller."⁴ The range reflects different opinions on the best way to calculate the complex, yet fundamental, questions of risk, reward, and the role of retirement plans in attracting and maintaining a qualified workforce.

Even if experts disagree on the numbers, everyone has a stake in the problem. Workers and retirees have a stake. People who pay high taxes are affected, as are people who pay nothing at all. The problem touches all Americans, including the politically active and the apathetic, Democrats as well as Republicans, and anyone who pays taxes or uses a government service. Why? Money that is obligated to pay for pensions cannot be used to reduce tax rates or fund public programs.

More than anyone else, though, public retirees suffer from ill-funded plans. For example, in August 2011, the city of Central Falls, RI, filed for bankruptcy protection and went into receivership. As a result, some retirees saw their monthly payments cut in half.⁵ But they did better than retirees of another town. In October 2000, a U.S. bankruptcy court ordered the pension board of Prichard, AL, to cut pension benefits by 8.5 percent. In September 2009, the pension board ceased making payments entirely, and the city re-entered bankruptcy court the next month. Retirees did not receive any payments for another 19 months. Under an agreement between the city and retirees, the retirees then

started to receive payments of about one-third of the obligated amount.⁶ In the interim, at least 11 retirees, including the former fire marshal, died without having received any more of the checks due to them.⁷

Pension obligations also affect everyone else by crowding out widely popular government spending priorities. The Rhode Island Legislature observed that “[p]ension reform is critical to ensuring that the resources are there to educate our children, repair our roads, invest in economic development, and ensure a viable safety net...”⁸ Gina Raimondo, the state’s treasurer and a Democrat, led pension reform in the state and defended it as a moral imperative. After declaring that Rhode Island had to choose between maintaining the pension system as it was and reducing other spending priorities, she said to a disgruntled public employee, “I would ask you, is it morally right to do nothing [on pension reform], and not provide services to the state’s most vulnerable citizens? Yes, sir, I think this [reform] is moral.”⁹

Richard Riordan, a former mayor of Los Angeles, recently warned that unless the City of Angels gets a grip on its pension payouts, there will not be much money left for trash collection, parks, or libraries.¹⁰ Rahm Emanuel, the mayor of Chicago, has said that without pension reform, taxpayers will be forced to “choose between pensions and police officers, pensions or paved streets or pensions and public health.” He also warned that “without pension reform, we’ll be forced to mortgage our children’s future to pay for our past,” predicting that the size of classes in Chicago public schools might have to increase to 55 students.¹¹

Residents who live in cities that cut services as a result of bankruptcy also lose an element of self-governance. Key decisions about the city are made not by mayors or council members, but by court-appointed receivers, emergency financial managers, and bankruptcy courts. As Andy Kopplin, the chief administrative officer of New Orleans, said after looking at his

city’s financial state, “We might as well hand over the keys to the city.”¹²

“[I]s it morally right to do nothing [on pension reform], and not provide services to the state’s most vulnerable citizens? Yes, sir, I think this [reform] is moral.”

—Gina Raimondo

Fixing the problem of unfunded pension liabilities can be a difficult task. It requires legislators to overcome both technical and political challenges. They must negotiate with unions, understand arcane financial concepts, and respond to statutory law, case law, and even constitutional limits. They also must wade through competing moral claims from public employees, retirees, taxpayers, and the population at large. In short, the question of pensions is not just an obscure topic of interest to actuaries and accountants. It is, rather, an issue with widespread consequences.

Unpacking the Major Types of Retirement Plans: DB, DC, and CB

Before going any further, let us review the different ways that employment-based retirement plans can be structured. Employers use them as a tool to attract employees, and employees use them to accumulate funds to support themselves after they stop working. Employment-based plans come in three flavors: “defined-benefit” (DB), “defined-contribution” (DC), and “cash-balance” (CB). Each plan offers tax advantages for the employer and the employee and involves setting aside and investing money for the employee to

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Comparing the features of defined-benefit, defined-contribution, and cash-balance plans

Feature	DB Defined-Benefit	DC Defined-Contribution	CB Cash-Balance
When does the employer's obligation to make payments end?	Lifetime of the employee, and perhaps a survivor	Worker's tenure on the job	Worker's tenure on the job
Does the retiree receive a COLA?	Often	No	Maybe
What does the employee receive upon retirement?	Promise of a fixed monthly payment	A lump sum that may be converted to an annuity or drawn down, as with an IRA	Promise of a fixed monthly payment
Who selects the investments?	Employer or designee	Employer, or employee acting within limits set by the employer	Employer
How is the benefit calculated?	Years of service, service credit (percentage of salary), average high salary	Percentage of salary deposited over time, with earnings and (perhaps) matching funds	Percentage of salary credited to a "hypothetical account," plus an interest rate set by the employer
Does it reward longevity or mobility?	Longevity (generally)	Mobility (generally)	Either
Can the employee supplement money contributed by the employer?	No (generally)	Yes	No (generally)
Who bears investment risk and reward?	Employer	Employee	Employer
Does the employee have a legal claim on employers who do not make annual contributions?	No	Yes (if the plan calls for the employer to make contributions)	Yes

Source: Author's summary

use later. Each plan involves the employer in some way.¹³ Yet they differ in some important ways.

The traditional definition of a "pension" is a DB plan, in which the employer obligates itself to pay the employee in retirement. In a DC plan, the employer makes certain payments into an employee's account during that person's tenure on the job; the employer's obli-

gation ends, however, once the employee leaves the job. In a DB plan, the employer is obligated to make a series of payments to the retired worker, regardless of how small the investment returns were. In a DC plan, the employer makes no promises as to the amount of money the retiree will have. In a DB plan, the employer decides how to invest retirement funds; in a DC plan, the employee usually decides. In some DC plans,

the employee can invest in specific stocks (unsystematic risk) or borrow against the account. In a DB plan, the employee is not allowed to take such risks. In both the DB and DC plan, the employer assumes certain responsibilities for the proper management of the plan.

A DB plan, as the name suggests, defines the amount of a worker's benefit according to a formula. The formula typically involves three numbers:

- A percentage (such as 1, 2, or 3 percent), called a "service credit."
- The number of years an employee has worked for the organization.
- A "final average salary" representing the average of the worker's pay for the last three to five years of employment.

For example, if the service credit is 2 percent and an employee works for an employer for 25 years, he will earn the right to be paid, in retirement, 50 percent of his salary every year for the rest of his life. In many cases, the plan will continue to pay some portion of that pension to his survivor(s). In this example, if an employee earned \$58,000, \$60,000, and \$62,000 during the three highest-paid years on the job, his annual pension would be \$30,000.¹⁴ According to the most recent numbers, 67 percent of state and local pension plans used a service credit of 2 percent or higher, and 22 percent used a credit of 2.5 percent or higher. On the other hand, 34 percent used a service credit of less than 2 percent.¹⁵

In a DB plan, employers are supposed to save (and then invest) money to make good on the pension promise once an employee retires. Often—though not always—the employee makes a contribution to the fund as well.

Changes in the formula can get employers into financial trouble. In the previous example, changing the service credit from 2 percent to 3 percent would increase the

value of the pension—and the employer's obligation—by 50 percent. Other changes, such as letting employees buy service time at a rate that does not reflect actuarial projections, can impair a plan's health as well.

The political facts of life mean that DB plans are prone to "improvements" that weaken their finances. A legislator who pushes through an increase in the service credit gets a political boost today from public employees. The cost of that improvement, however, may not be felt until long after that person leaves office—a fiscal time bomb that other legislators, holding office years or decades later, must defuse. Given the increasing longevity of the American workforce, an act passed today to increase the value of a pension promise may have consequences that last 50, 60, or even 70 years. DB plans have a key shortfall: Their long-term health is subject to manipulation for short-term political gain. In addition, employers can never be sure of their long-term obligations under DB plans that require payments for a lifetime or two.

The logic of a DC plan is different. For one thing, the employee is more involved. The employer establishes an account—usually one for each employee—but after that, many decisions fall to the employee. These decisions include how much money to put into the account and how to invest it. Employers do set some boundaries on these choices, deciding, for example, which universe of investments an employee can choose from, and whether to contribute matching funds. Unlike the DB plan, which obligates the employer for decades, the financial responsibility of the employer under a DC plan ends once it makes its contribution to the account. This certainty and predictability is one reason private sector employers are moving from DB to DC plans. But the switch is not a zero-sum game, with no advantage to the employee. In a DB plan, a worker has no legal claim on an employer who fails in a given year to make the contributions that actuaries call for. That same worker, though, does have a legal claim on the employer who fails to make

a payment called for under a DC plan. The third major type of an employer-sponsored retirement account, the CB plan, has qualities of both DB and DC plans.

As with a DC plan, the money a person has for retirement in a CB plan is tied to how much was contributed during his or her time on the job, not a formula.

Even so, CB plans are, on the whole, more like DB plans than not. The most significant similarity is that both plans obligate the employer to make monthly payments to the retired worker. Also, with both CB and DB plans, the employer decides how much money to contribute and how it is invested.

Under a CB plan, the employer pays a percentage of the worker's pay ("pay credit") into a fund. It also pays in an "interest credit" based on the targeted rate of return. Generally, the credit is about the rate of an average corporate bond.¹⁶ The employee in a CB plan can track the balance of an account, though the balance is "phantom" or "hypothetical," since it will not be paid out until it is transformed into an annuity upon the employee's retirement. Until the worker retires or leaves the workplace, the money belongs to the employer. Compared with a DB plan, the employer's long-term obligation is lower, since "the minimum crediting-rate guarantee of the cash balance plan is far lower than the discount rate typically used for traditional defined benefit-pension plans."¹⁷

Girard Miller, a columnist for *Governing*, said, "Just think of where the world would be today if public pension plans had been converted to cash balance structures in 1999–2000, instead of awarding employees massive retroactive benefits increases and pension contribution holidays for politicians. (Answer: Taxpayers would now be better off by a half-trillion dollars.)"¹⁸

Even so, there is nothing in the CB idea itself that reduces the employer's liability compared to a DB plan.

The devil is in the details. The interest credit, or rate of return, assumed by the plan can make the difference between a plan that is sustainable and one that is not.

There is one other important point that tends to distinguish the various types of retirement plans from each other. The benefits in a DB plan accumulate at a higher rate the longer a person is on the job, so they encourage employee retention. Benefits accrue more evenly in a DC plan, which means it does not punish the employees who leave mid-career. The logic of a DB plan usually requires a worker to stay on the job for a long time (perhaps longer than the employee or employer would like) in order to receive the greatest benefit. These are prevailing patterns, although executives who oversee any of these plans could, if they wish, tilt them to reward mobility or longevity, or be neutral towards either.

Understanding the Scope of the Pension Problem is a Difficult Task

Anyone who wants to understand the pension problems of a state has a difficult task, for a variety of reasons.

The problem is largely invisible. When a school district lays off teachers, it makes news. When a pension plan increases its long-term obligations by 20 percent, but there is no plan to increase funding by 20 percent, few people notice.

The problem of underfunding is compounded over time, making quick fixes hard to come by; it usually takes a long time for fixes to have an effect. The relentless logic of pension math—decisions now are reflected in results decades later—makes it easy to focus on the short term. If the pension fund's investments have an exceptionally good year, that is noticeable. If lawmakers make a larger than expected contribution

to the fund for a given year, it is easy for them to think that the problem is being addressed. But usually, a pension fund gets into trouble over a long period of time, which means that it also takes years to get out of it.

“Data smoothing, combined with the delay inherent in assembling data from every one of the 50 states, means that we do not yet have a full understanding of the depths of the pension problem.”

Most states have more than one pension plan, which makes it harder to see the global problem. A state may have one plan for white collar state employees and another for blue collar employees, one for public safety officers, and another for teachers. Large counties and cities may have their own plans. The Public Plan Database compiled by the Center for Retirement Research at Boston College shows that California has seven DB plans, as do Texas and Washington. Minnesota and Missouri are close behind, with six. Colorado, Illinois, and New York have five. The database is comprehensive but not exhaustive, so the situation is likely more complex in most states than these numbers suggest.¹⁹ A legislator who is concerned about making pensions work may have to master the details of several plans.

Pension math is complex, arcane, and unappealing to most people. Discussions about pensions can leave legislators and citizens reaching for the caffeine or aspirin when they encounter terms such as “unfunded actuarial accrued liability.” Furthermore, interested

citizens and lawmakers must be willing to overcome an understandable desire to defer to experts on complex matters.

Pension math can understate the problem. The very means of reporting pension obligations can lull legislators into complacency. For example, most plans use a statistical technique known as “smoothing,” or averaging the reported investment results over five years. Smoothing makes results, both positive and negative, appear to be less volatile than they are. Given that pensions are long-term obligations, there is some logic in this practice. But it also understates the magnitude of the problem. For example, the latest report from the Pew Center on the States—a common reference in pension matters—relies on data from 2010.²⁰ Under current reporting practices, any national report published before 2015 will not fully incorporate the effects of the 2008 market crash. Data smoothing, combined with the delay inherent in assembling data from every one of the 50 states, means that we do not yet have a full understanding of the depths of the pension problem. Moody’s Investors Service, a leading credit rating firm, has proposed ignoring the practice in its reports. “Where possible,” the company said in a 2012 press release, “asset smoothing will be eliminated in favor of market or fair value as of the actuarial reporting date.”²¹ The company’s proposal is part of a broader package of reforms to reporting and analyzing pension data.

Because of compounding, problems are actually larger than they appear. It is not unusual for investments to underperform their targets in a year, or even lose money. But investment math, particularly compounding, means that problems are more serious than they first appear. To offer a real world case, consider what happened in Utah. The state’s pension fund lost 22 percent of its value in 2008. It made a 13 percent return in 2009. Public employee unions cited the 2009 returns as evidence that the state was more than halfway out of its trouble. After all, 13 is more than half of 22. But

the 22 percent loss actually led to a 30 percent gap between where the fund should have been and where it was. It was expected to have earned 7.75 percent in 2008. Instead, it ended 2008 far behind where its managers had called for—29.75 percent down, to be precise. To make up for loss, the pension fund would have had to generate a 68 percent return in 2009. Reformers had to explain to legislators over and over that of the 13 percent return in 2009, 7.75 percent was already assumed, and the remaining 5.25 percent barely covered the interest the state expected to earn on the money that was not there because of the 2008 losses. In effect, the state treaded water in 2009.

Several Factors Affect the Shape and Health of a Defined-Benefit Plan

Since most state and local government employees still have DB plans, it is worth reviewing a few of the factors that shape the management and oversight of such plans:

- The target investment return, called the “discount rate.”²²
- The desired funding ratio, or the extent to which the plan has assets to pay expected obligations. (If a plan needs to pay out \$10 billion and it has \$10 billion on hand, its funding ratio is 100 percent.)
- Whether the plan has COLA increases, and, if so, when and how they are granted.
- The age and number of years required for full or partial benefits.
- The specifics of the benefit formula—in particular, the service credit multiplier.

The discount rate determines how aggressive the plan’s investment strategy will be, and it is a double-edged sword. If the plan consistently hits a higher target, the employer and its employees will not have

to put in as much money to attain the desired outcome. For example, a plan that consistently earns 8 percent requires fewer contributions than one that consistently earns 4 percent. Legislators who oversee public plans could then spend more elsewhere, or decrease tax rates. Employees, for their part, might enjoy higher wages.

“Of the 126 DB plans tracked by Boston College, 119 used a discount rate of 8 percent or higher—much higher than recommended by economic theory.”

There are several major problems with setting the investment target too high. For one thing, it will lead to a riskier investment portfolio. Recent research by Aleksander Andonov and Rob Bauer, from Maastricht University, and Martijn Cremers, of the University of Notre Dame, suggests that public pension plans in America take on above average risks. That is, they take on more risk than their counterparts in the private sector, and also their counterparts in other wealthy nations. They state that “over the last 20 years U.S. public funds uniquely increased their allocation to riskier investment strategies in order to maintain high discount rates and present lower liabilities.”²³ Of the 126 DB plans tracked by Boston College, 119 used a discount rate of 8 percent or higher—much higher than recommended by economic theory. Given today’s environment of low interest rates on bonds, managers of public plans face increased incentives to take on riskier investments. If those risks do not pan out, the fund accrues even more unfunded liabilities.

Table 2: Defined-Benefit Public Pension Plans (U.S.) by Assumed Annual Rate of Return 2009

Assumed rate of return	Number of plans
Greater than 8.5 percent	15
8 percent	104
Less than 8 percent	7

Source: Center for Retirement Research at Boston College, Center for State and Local Government Excellence ²⁴

In addition to setting the discount rate, the leaders of a pension plan must decide on a targeted funding ratio. As with the discount rate, setting the target has consequences. A lower target gives today's leaders more leeway, because it reduces the amount of money that must go into the fund. But a lower funding ratio today may mean greater problems down the road. The Governmental Accounting Standards Board (GASB) recommends that pension funds have money on hand to meet 80 percent of their obligations. Many do not.

Finally, COLAs can have a significant effect on the financial health of a plan. According to the most recent data, 99 percent of all state and local pension plans offer a COLA of some sort. Nearly one-fourth of them (23 percent) are given as a percentage of payouts, regardless of inflation or investment performance. Nearly half (47 percent) are linked to inflation (the consumer price index). One in five plans (19 percent) receive COLAs on an ad hoc basis by legislatures. And 10 percent of all plans bump up COLAs if investment returns are good.²⁵ Regardless of the form they take, COLAs usually ratchet up a fund's obligations. Once a COLA is implemented, it is hard to cancel it.

Unfulfilled Promises + Market Crash + Richer Benefits = Large Liabilities

A successful DB plan pays out benefits as promised and is financially sustainable. To be successful, the employer and employee must make adequate annual contributions, the plan must meet its investment targets, and the plan must have a sustainable set of features.

The "normal cost" is the amount of money required in a given year to pay for benefits down the road. Usually it is expressed as a percentage of the payroll.²⁶ However, that does not account for shortfalls in years past, which is where a gap called the unfunded actuarial accrued liability (UAAL) comes in. Plans usually amortize (spread out) the UAAL over a number of years (often 30), so that only a portion of the UAAL is (theoretically) due each year. The UAAL, combined with the normal cost, defines a plan's "annual required contribution" (ARC).

In a perfect world, a plan would receive its ARC each year. The real world can be very different, as it is common for governments not to make their "required" contributions. In 2009, only 60 percent of all state and local public plans received these payments.²⁷ The most technical explanation is that the actuaries may have made inaccurate assumptions about the future of the workforce. Every pension plan is based on predictions about the workforce, such as how long the average worker will stay on the job, how much money he or she will make, and how long that person will live in retirement. For example, roughly one-fifth of the funding gap faced by one retirement plan in Kentucky can be traced to incorrect assumptions about the workforce.²⁸

Another factor in underfunding is that in the competition for public dollars, it is easy to neglect pension

contributions. This is especially true of economic slumps, when demands for public services go up and tax collections go down.

“Instead of putting away enough money, leaders counted on returns that never came.”

Increasing plan benefits without increasing plan revenues can also lead to funding gaps. For example, one common practice has been to increase payments to retirees through COLAs. Leaders across the nation have also increased pension obligations by lowering the age or numbers of years of service required to earn a pension. That is great for current workers, but it can put everyone else in a bind. When pension funds enjoyed outsized returns during the 1990s, some political leaders and fund managers gave out bonuses or declared contribution holidays. Higher than expected investment returns could have been used to stockpile money for the next inevitable downturn. Instead, governments (and taxpayers) assumed the risks inherent in a traditional pension plan, and did not enjoy the benefits of market upturns. In fact, decisions that permanently bumped up retiree paychecks obligated taxpayers to even larger sums.

Unrealistically high investment targets, as previously mentioned, have also caused problems. Instead of putting away enough money, leaders counted on returns that never came.

Partly as a result of not putting away enough money, many pension funds now suffer with funding ratios below the widely accepted standard of 80 percent. As

Reasons a Plan may be Underfunded

- Incorrect assumptions about workforce demographics.
- Competing funding priorities divert money to other purposes.
- Policymakers add benefits (increase COLAs, lower retirement age, add unused sick time to calculations of an employee’s years of service, etc.) without requiring or making extra contributions.
- Expecting too much from investment returns.
- Exceptionally bad investment returns.
- Giving away the better than expected returns of good years in increased benefits, such as bonus checks, rather than stockpiling them for down years.

of 2010, 74 of the 124 (or approximately three out of every five) major state and local plans for which Boston College had data failed to meet that standard.

The pension systems with a funding ratio under 60 percent included teachers’ plans in Alaska, Illinois,

Table 3: Distribution of Pension Plans by Funded Ratio (FY 2010)

Funding ratio	Number of funds	Grade
Under 60	15	F
60–69	30	D
70–79	29	C
80–89	30	B
90+	20	A

Source: Author’s calculations, based on the Public Plan Database, Center for Retirement Research at Boston College²⁹

Indiana, Louisiana, Oklahoma, and West Virginia, as well as state employees' plans in Illinois, Kentucky, New Hampshire, and Rhode Island. While inadequate contributions are a problem, pensions have also been hit by poor investment returns. In 2008, many plans lost more than 20 percent of their funds. Not only did their assets decline, they still had to pay for current obligations out of those shrinking assets. The national investment downturn was so severe that it damaged even funds that had been fully or nearly fully funded. Between 1997 and 2007, for example, Utah's funding ratio averaged 95 percent, and the state had always contributed to the Utah Retirement System the amount recommended by its actuaries. In 2007, the state enjoyed a funding ratio of 100.8 percent. Then the 2008 drop occurred, and the state's pension funds lost 22.3 percent of their value.³⁰

“The national investment downturn was so severe that it damaged even funds that had been nearly or fully funded.”

Underlying all these possible explanations for pension underfunding is that the short-term nature of competitive politics makes it hard to do the right thing, even when the right thing becomes obvious. As Ray Long, a journalist for the *Chicago Tribune*, described, political considerations have made it nearly impossible for Illinois to address its problems: “With an election coming up, and of course we’ve realigned all of the legislative districts, so the lawmakers are running in new territory, nobody wants to take a tough vote that means cutting back on pensions before an election.”³¹

Leaders Must Commit to Permanently Fixing the Problems

In the case of a severely underfunded pension plan, the problems caused by making too many promises and not contributing enough money will not go away on their own. Neither an economic recovery nor improved investment returns can cure the deficiencies of a severely underfunded plan. The mathematics of pension obligations will not let that happen. The longer a plan goes without making structural reform, the more its liabilities accumulate. Public pension managers who tinker at the edges, much like an individual who continues to make minimal payments on a credit card, will see the problem grow larger, not smaller. Some local governments have resorted to bankruptcy, and others could follow. States are barred by federal law from using bankruptcy, but in continuing to run structural deficits, they will become functionally bankrupt, unable to engage in fundamental reforms to improve their services.

Limiting changes to new employees within today's plans—while more politically feasible—may not be enough. California's recent reforms, for example, included capping pension payouts for new employees and making them pay more into their pensions. These changes, however, will take decades to make any sort of difference and even then will only fix, at most, 25 percent of the problem.³² The remaining 75 percent of the problem will continue to grow.

Cutting or even suspending COLAs may be the easiest thing to do. Since 2009, 19 states have limited them in some ways: five have put in limits for new hires, five have done so for current retirees, and 11 have limited the benefits that are due to today's employees. Each one of these states, except Kansas, applied its limits to only one of these three employee groups. Kansas recently enacted limits that apply to all three.³³

Even so, these are part-way measures. In 2011, Robert Novy-Marx of the University of Rochester and Joshua D. Rauh of Northwestern University looked at 116 state-sponsored pension plans in the country, each with more than \$1 billion in assets. They calculated that reducing COLAs by 1 percentage point would reduce liabilities by 9 to 11 percent. Reducing them entirely would reduce liabilities by 22 to 26 percent—still leaving a gap of \$1.5 to \$3.3 trillion, depending on the accounting assumptions used. But the legality of changing COLAs is being tested in the courts, so reducing COLAs may not be an available option for public plans in some cases. According to the analysis by Novy-Marx and Rauh, even using the most dramatic changes within the current system—including raising the retirement age to 67 (the “Social Security scenario”)—will not be enough. There will still be a collective unfunded liability of \$1.5 trillion, which “suggests that taxpayers will bear the lion’s share of the costs associated with the legacy liabilities of state DB pension plans.”³⁴

“Policymakers must understand the scope of the problems facing them before they devise solutions.”

As a first step, policy leaders need to cap the existing liabilities of underfunded DB plans by closing them to new hires, freezing the amount accrued by current employees and retirees, and moving toward a more sustainable approach. In Utah, the effects of the 2008 market crash were akin to a chemical spill, requiring a two-step response. First, contain the situation. Second, work overtime to clean things up. That is not a message anyone welcomes, but it is one that citizens, public employees, and policymakers had to come to grips with in Utah.

Figure out the Scope of the Problem

Policymakers must understand the scope of the problems facing them before they devise solutions. They must know which statewide, municipal, or school district plans they are responsible for. Once they identify all the relevant plans, legislators must ask questions about each plan. Appendix A contains these questions, which address each plan’s benefits, history, and financial condition.

Understand the Constitutional and Legal Constraints to Changing Existing Plans

Under the Employee Retirement Income Security Act (ERISA), the federal law that governs private sector pensions, employers may not change benefits already accrued, although they are free to alter those not yet earned. For legislators, the legal challenge to changing pension systems will be based on state constitutional law, statutes, and case law. Depending on the state, the legal challenges to changing pensions may be based on contract theory or a claim that pension payments are property that cannot be taken without due process. Generally, there are three legal questions involved to changes such as reducing COLAs: Do the plan participants have a property right? Does the reform substantially impair that right? Was the change reasonable and necessary?

Major changes to a state’s pension plan will almost certainly face legal challenges. According to the Arnold Foundation, employee advocates filed lawsuits in 12 states in 2012, seeking to overturn pension reforms such as requiring participants to contribute more to their pension plans, reducing COLAs, freezing the pay levels used to determine the final average salary, and placing new employees into a DC plan.³⁵

According to Alicia H. Munnell, a pension expert at the Brookings Institution, some legal provisions regarding contracts may set “a high bar” for reducing future pension benefits for current workers.³⁶ Constitutional language and court rulings in Alaska, Arizona, Illinois, and New York, she writes, make it “virtually impossible” to change benefits for current employees without first changing the state constitution. Courts in Hawaii, Louisiana, and Michigan have given explicit protections to benefits already accrued—though not to those yet to be earned.

Courts in Minnesota, New Jersey, and South Dakota have ruled that reductions to COLAs are permissible. A district court in Colorado has ruled that a reduction to COLAs is permissible.³⁷ The Colorado Court of Appeals, however, concluded that “the plaintiffs have a contractual right, but that the [district] court must still determine whether any impairment of the right is substantial and, if so, whether the reduction was reasonable and necessary to achieve a significant and legitimate public purpose.”³⁸

The prospect of lawsuits should not keep reform at bay. Few significant changes to public policy are enacted without legal challenges.

Establish Principles for Reform

Before getting into the particulars of reforming existing plans or designing new ones, it is important to step back and consider the principles that should govern a public pension system. Legislators are in a prime position to articulate ideas that will guide the discussions among all stakeholders, including leaders in the executive branch, rank and file employ-

ees, members of the public, and union leaders. Acting on the following principles will help ensure that these various groups will be well served.

Pension Reform Must Remove the Risk that a State will “Go Bankrupt” Due to Pension Obligations

Bankruptcy protection allows a person or company to shed obligations under the supervision of a judge. Local governments can use bankruptcy, too. In all these cases, people who depended on payments from the bankruptcy petitioner suffer losses. (To be more precise, they lose a legal claim on certain payments, which, in actuality, they may have never received anyway.) Federal law does not allow states to receive bankruptcy protection, although some federal officials of both major parties have floated the idea of giving states that option.³⁹

Even without formal bankruptcy, though, states may enter what might be called “functional bankruptcy.” That is, they can run out of money, default on their commitments, and greatly reduce public services, including education and public safety. Legislators should make sure that this will not happen in their states.

Pension Reform Should Ensure, as Far as is Possible, that Obligations Already Incurred are Fulfilled

The simple idea of fairness, not to mention federal and state law, suggests that benefits already accrued should be paid. Protecting today’s retirees is insufficient. Plans in dire financial straits must be put on sound footing so that today’s employees can be paid when they enter retirement.

The Pension Obligations of Public Employers Should be Predictable and Defined

Under a DB system, employers give up much of their control over how much money the retirement plan will cost. Given the size and scope of state budgets, this is not a wise approach. For their part, employees are not served when their employers cannot be counted on to follow through with their commitments.

For Public Employees, Pensions Should be Secure and Safe from Unsystematic Risk

Should a public pension plan allow participants to take out loans against the value of their funds? The question arises in the 401(k) plans of the private sector. A strong free market perspective says yes: "After all, the money in your 401(k) is yours. It shouldn't matter if it's in a brokerage account, gold bars in the basement, or invested in your own business. You've earned this money and have every right to invest, spend, or save it however you choose."⁴⁰ In addition, borrowing against retirement funds can be financially advantageous compared with the alternatives.⁴¹

Despite these factors, legislators who establish 401(k)-like plans for public employees may wish to prohibit loans against employer contributions altogether or place limits on their size in relation to fund balances. They may also wish to limit unsystematic risk or risks that come from inadequate diversification of investments. For example, foreign currency trading can be highly rewarding, but it also carries high risks—just like making large investments in a single stock that fails (think of Enron). Even a collection of individually picked stocks can give subpar performance.

There are three possible justifications for imposing limits on investment options or loans. First, pension fund managers already operate under limits. Putting limits on individual options would simply extend this practice. Second, putting some limits in place may be required to improve the viability of reform. Finally, limits today may eliminate or greatly reduce the call years down the road for a taxpayer bailout of retirees who did not pay back loans to their own accounts or who lost money on highly speculative investments. Legislators need to protect themselves and taxpayers from these scenarios. Experience from Utah and other states suggests that there will be no significant employee opposition to putting these safeguards in place.

No Pension Plan Should be Exempt from Scrutiny and Reform

Pension reformers face a hard choice: Should they include public safety employees in their reforms? The political strategist might say no. Public safety, especially policing, is a fundamental responsibility of government, and the public properly looks sympathetically upon police officers and firefighters. Even so, there are several reasons why public safety employees should not be exempt from pension reform. The first is financial: Many public safety employees can retire as early as age 50, so the financial challenges posed by their plans are even more substantial than those of other public employees. Second, exempting these employees may place reforms in legal jeopardy. As Ed Fallon, a law professor at Marquette University, wrote concerning Wisconsin's reforms, "There is no constitutional requirement that the state government bargain with public employee unions at all. However, once the state government decides to bargain, it may not do so under rules that penalize membership in particular unions."⁴² Even in states without public

sector unions, treating one group of employees differently from another may open the door to legal challenges that could unravel pension reform. Finally, citizens' sympathy for public safety workers exists side by side with a concern about the sustainability of pensions. As *The Wall Street Journal* stated, "Today, public sentiment toward the men and women in uniform has widely shifted, as many locals are up in arms over escalating pension costs for public safety employees."⁴³

more active role in planning their retirement strategy. Finally, the designs of some DB plans can lead to an ineffective mix of employees. As Robert Costrell of the University of Arkansas and Michael Podgursky of the University of Missouri state, "Ineffective teachers are encouraged to stay too long and effective teachers to leave too soon."⁴⁵ Although their analysis is specifically of DB systems for teachers, a similar problem can afflict other occupations.

Retirement Plans Should Not Lock Employees into the Public Sector

The conventional wisdom about public employment is that government jobs are so specialized and important to society that retirement plans ought to reward longevity over personal control of assets. Nearly all full-time public sector employees (87 percent) participate in a DB plan. Usually, the bulk of benefits earned in a DB plan is accrued only after many years on the job; in this way, DB plans discourage new workers from leaving.⁴⁴

"Nearly all full-time public sector employees (87 percent) participate in a DB plan."

While this thinking has some logic behind it, it also has some severe drawbacks. It tends to deny public employers an infusion of mid-career professionals from the private sector or talented but young workers who wish to commit only a few years to public service. It discourages job candidates who may wish to have a

The Public Should Not Bear All the Risk of Pension Plans

Public employment offers job candidates several benefits over the private sector, including civil service protection and decreased risk of unemployment. Therefore, it is reasonable for public employees to incur some of the retirement-based risks described below.

Longevity risk is the risk that the retiree will outlive his or her money. This risk is most obvious in a DC system, although a retiree can with near certainty eliminate it by using the money in the plan to buy a lifetime annuity.

Employer survivor risk is the risk that the employer fails to adequately fund a DB plan and enters bankruptcy without a means to make good on its promises. Workers in the steel industry, among others, have suffered when their employers have gone out of business. Even the protections offered by the federal Pension Benefit Guarantee Corporation (PBGC) do not always cover projected benefits. According to one account by *The Wall Street Journal's MarketWatch*, "About 16 percent of pension beneficiaries whose plans get taken over by the PBGC find their benefits are reduced, by an average of 28 percent."⁴⁶

Inflation risk is the risk that the value of the accrued benefits will be eroded by inflation. Both DB and DC plans face this risk.

Investment risk is the risk that the investments chosen by the employee or plan administrator will not produce the money required to fund an individual's retirement needs (DC) or the obligations of the plan to a group of retirees (DB). This risk within DC plans, as mentioned earlier, can be reduced through limiting the options an employer chooses to give to an employee.

“[R]isks are inherent in thinking about retirement, and DB plans are not immune from risk.”

Funding risk is the risk that the individual (DC) or the employer (DB) does not put away enough money to adequately fund the needs of an individual or a group. As mentioned earlier, some governments using DB plans have a history of not making “required” contributions on a yearly basis.

Long-term funding risk is the risk that contribution rates will have to rise to an unacceptable rate over a long period of time to meet projected goals.

Short-term funding risk is the risk that contribution rates will have to rise to an unacceptable rate over a short period of time to meet projected goals.

Some criticize DC plans as passing the risk from employer to employee. Yet as the previous list shows, risks are inherent in thinking about retirement, and DB plans are not immune from risks.

What Should Lawmakers Do Moving Forward?

Once lawmakers have concluded that the pension problem is serious, will not go away on its own, and must be addressed with a set of principles, they need to look at the universe of possible options.

Look at the Range of Financial Instruments and Options Available

For employers, a DC or CB plan has several advantages over a DB plan, including a more predictable and affordable cost structure.

401(k)-Based Plans

Some government plans, notably the federal government's Thrift Savings Plan (TSP), operate much like the 401(k) of the private sector.

These DC plans should have the following features:

- A modest, automatic employer contribution, with matching funds capped at a fixed percentage.
- Mandatory employee contributions.
- A modest variety of investment options for each worker's season of life and risk preference.
- Index funds to minimize transaction costs and discourage highly speculative investments.
- Restrictions on borrowing from funds, or alternatively, limitations on the size and duration of the loan.
- A requirement that upon retirement, the funds be used to purchase a life or life-and-survivor annuity.

The Michigan Defined-Contribution Plan

Michigan set an early example transitioning to a DC plan. As of March 31, 1997, new state employees in the Michigan State Employees' Retirement System (MSERS) are placed into a DC system. The state automatically contributes 4 percent of an employee's salary into a 401(k)-like account. It also matches employee contributions up to a maximum of 3 percent. The state currently uses the financial firm ING to manage the accounts.

"[Michigan] received real but unquantifiable benefits from eliminating the political incentives that the legislature faces to enhance pension plans without coming up with the money to pay for the enhancements."

—Richard Dreyfuss

An analysis of the system, conducted in 2011 by Richard C. Dreyfuss, an actuary and adjunct scholar with the Mackinac Center for Public Policy, concluded that Michigan had saved at least \$2.4 billion over the first 13 years of the plan's existence.⁴⁷ According to the report, the savings came largely by reducing unfunded liabilities by \$2.3 billion to \$4.3 billion. Dreyfuss also estimated that the normal costs were reduced by \$167 million. Finally, he pointed out that the state also received real but unquantifiable benefits from eliminating the political incentives that the legislature faces to enhance pension plans without coming up with the money to pay for the enhancements.⁴⁸

The state has benefited from having the DC plan in another way as well. It used the structure of the DC plan to

reform the way it pays for health insurance for retirees. Prior to the reforms enacted in early 2012, the state obligated itself to pay for retiree health care but set aside no money for it. Under the reforms, the state makes lump sum contributions to health reimbursement accounts and provides a match for employee contributions.

The Alaska Variant of a Defined-Contribution Plan

State and school employers hired on or after July 1, 2006, are in the "Defined-Contribution Retirement" (DCR) plan, which is a 401(a) plan under the Internal Revenue Code.⁴⁹ It has the following features:

- Employers make an 8 percent pre-tax contribution to each worker's personal accounts, state employees contribute 5 percent, and school employees contribute 7 percent.
- By default, the funds are invested in an age-based target fund.
- Employees may opt to have their funds rebalanced each quarter, based on the advice of independent professionals.
- Employees may also receive investment advice and then make their own decisions.
- Retired employees may take a lump sum distribution, rollover, or annuity.
- Employees may not make hardship withdrawals or take out loans against their accounts.

State and school employees in the DCR plans also have health reimbursement arrangements. Employers pay into the fund based on 3 percent of the average annual compensation of all employees in the state systems.

Cash-Balance Plans

A DC plan is not the only alternative to the DB plan. A CB plan can offer the state many of the same benefits.

In 2012, Kansas enacted a number of steps to shore up its existing DB systems. It also created a new system based on a CB approach.⁵⁰

The state lifted the existing cap on employer contributions in the DB plans by 4.2 percent. The contribution rates for Tier 1 (the longest-serving employees) will go from 4 percent to 6 percent. Also, the service multiplier was increased from 1.75 percent to 1.85 percent. Employees in Tier 2 (hired since July 1, 2009) lost their COLAs as of July 1, 2012, but their multiplier increased from 1.75 percent to 1.85 percent. Although the changes for Tier 1 apply only to future earnings, the changes to Tier 2 apply to past earnings as well.

The legislature created a third group of employees, Tier 3, who will participate in a CB plan. No one will enter this tier until 2015. It will feature:

- A 6 percent employee contribution.
- Employer-paid credits for each employee (3 percent for new hires, moving up to 6 percent for employees with more than 24 years of service).
- A guaranteed return of 5.25 percent on accounts, with extra funding (0 to 4 percent) contingent on funding levels and investment returns.

Each employee's balance will be converted into an annuity upon his or her retirement. Employees who do not take an early retirement may take 30 percent of their balance as a lump sum payout.

Louisiana also enacted CB changes in 2012. Here is what will happen for employees who are hired on or after July 1, 2013:⁵¹

- Employees will contribute 8 percent.
- Employers will contribute 4 percent.
- Employees may receive additional credit, depending on investment returns.

TIAA-CREF Annuity Plans

Both DB and CB plans promise retirees a steady stream of monthly payments, while DC plans present retirees with a stock of money that can be converted to a guaranteed stream through an annuity.

The security of any annuity depends on several factors. The most significant factor is the expertise of the firm issuing the annuity. Although many financial companies offer annuities, TIAA-CREF, a private nonprofit firm, was founded in 1918 to manage retirement plans for college faculty. Over the years, it has expanded its business to serve other employees in nonprofit organizations. Today, it offers 401(k)s to corporations and their equivalents and 403(b)s for nonprofits, as well as IRAs, mutual funds, and other investment vehicles. Some of their services are open to the general public, while others are still limited to nonprofit employers and their employees.

The TIAA-CREF option suggested here is, in brief a CB-like plan managed by TIAA-CREF or a similar company. This approach helps taxpayers, because they are responsible only for payments during the employee's career, not for decades afterward. It is also good for employees. In DC and CB plans, employers must, under the law, make contributions to retirement plans each year. This is not the case with DB plans: Although employers are obligated to make payments to retirees according to the formula the plan sets out, they are not legally required to set aside money in any particular year during a worker's career. This makes a misnomer of the term "annually required contributions." The requirement is an actuarial one, not a legal one.

As an employee enters retirement, TIAA-CREF provides a guaranteed return that is insured against risk by third parties. As a testament to the organization's strength, no TIAA-CREF plan has ever reverted back to

a taxpayer DB program. The TIAA-CREF option may, in fact, be the best example of an arrangement that combines the advantages of a DC plan with those of a DB plan.

Hybrid Plans with Contributions Defined by Statute

Legislators may also choose a hybrid option that involves using DC and DB approaches for the same group of employees. A hybrid plan can be good or bad for employers, employees, and taxpayers. It all depends on how the plan is structured.

The Utah Reform

Facing serious financial troubles from the 2008 market meltdown, Utah enacted major reforms for its new employees. As a result, employees who were hired prior to July 1, 2011, enter one of six Tier 1 plans.⁵² Anyone hired on or after July 1, 2011, participates in either the Tier 2 Hybrid Retirement System or the Tier 2 Defined-Contribution plan. Employees have one year after being hired to choose which plan they will enroll in, and anyone who does not make a choice automatically enters the hybrid plan. Public safety employees have a similar arrangement, although with richer benefits.⁵³

The Tier 2 Defined Contribution plan includes the following features:

- Employers contribute 10 percent of a worker's pay, which employees are free to supplement (for public safety employees, the contribution is 12 percent).
- Employees enjoy immediate vesting of their contributions, with a four-year vesting requirement for employer contributions.
- Employees may not borrow against money that the

employer puts into the fund, although they can borrow against their own contributions.⁵⁴

The Tier 2 Hybrid Retirement System includes the following features:

- A DB pension defined by a service credit of 1.5 percent multiplied by years of service credit and the salary average of the five highest-paid years of employment.
- A limit on COLAs of 2.5 percent.
- A modest contribution from the employer to a 401(k) plan. It is a sum equal to 10 percent of a person's salary, less whatever contribution rate is required to keep the DB plan on track. The sum will vary, but it is in the low single digits. Employees may contribute more on a pre-tax basis if they wish.
- Taxpayers are protected against having to make extra contributions to the DB plan. If in any given year the plan requires additional funding to receive its "certified contribution rate," employees, not taxpayers, must make up the deficiency. This requirement makes certain that the DB plan is fully funded. It does carry a risk, however, that the state will be subject to pension-related lobbying from groups calling for the taxpayers to make up the deficiency.

"Facing serious financial troubles from the 2008 market meltdown, Utah enacted major reforms for its new employees."

Another backstop for taxpayers is that the law allows future legislatures to make adjustments should the ARC increase year after year. In that case, they are free to

reduce the benefits for all retirees and employees. Finally, the hybrid plan is made more affordable than the previous DB plan through a longer minimum service requirement, a lower service credit, and lower COLAs.

The Rhode Island Example

Rhode Island has gained both notoriety and praise for its pension reforms. Although some legislators launch study groups or hold hearings but do not change anything, Rhode Island made some significant changes in just 11 months.⁵⁵ The Rhode Island Retirement Security Act of 2011 made a number of changes to state pension programs, particularly affecting COLAs:

- The act restricts COLAs to once every five years, until the aggregate funding ratio of three plans identified in the law is 80 percent or more. (The three plans cover state employees, judges, and state police.)
- Only the first \$25,000 of a pension will be eligible for a COLA. (The number is indexed for inflation.)
- COLA payments will be limited to no more than 4 percent, depending on investment returns. The amount will be calculated as the difference between 5.5 percent and the five-year smoothed average of investment returns, although it will never be negative.

Rhode Island also moved several groups of employees to a hybrid plan. The plan covers teachers, state employees, and municipal employees in state-administered plans. These employees keep the benefits they accrued before July 1, 2012.

Among the key features of the DB component of the hybrid plan are the following:

- Service credit multipliers will be 1 percent.
- Five years will be used to calculate the final average salary.

- Employee contributions are reduced from 8.75 percent (state employees) or 9.5 percent (teachers) to 3.75 percent.
- A higher retirement age for full benefits is phased in.
- For employees in state-administered municipal plans, five years, rather than three, will be included in the calculation of final average salary.

The new DC structure applies to teachers, state employees, and municipal employees in state-administered plans. The key features include:

- A 6 percent contribution rate, with employees contributing 5 of the 6 percent.
- Teachers who do not have to pay Social Security taxes contribute another 2 percent to the hybrid plan, and their employers will pay an extra 2 percent as well.

While most employees will have a DC plan, corrections officers, state police, judges, and public safety employees in state-administered municipal plans will not. The public safety employees are made responsible for increased contributions to their existing DB plans, as are some judges.

In addition to the changes mentioned previously, the state reset its amortization schedule for unfunded liabilities, increasing the age from 19 years to 25. The effect is much like extending a mortgage from 15 years to 30: It reduces ongoing expenses and increases long-term obligations.

As a result of all the changes, the state expects to reduce its unfunded liability by 42 percent. They forecast this for two reasons. The first is that the pension funds set the assumed rate of return—not the legislators. Right now that is more than 7 percent, which suggests the plans could easily stumble. The second reason is that the law left intact all the existing structure of the DB approach—the plans, the formulas, and

other important features. If future legislatures want to easily and quietly increase the state's pension obligations, they could do so by tinkering with the formula or undoing the restrictions on COLAs. In addition to all this, the state did not move public safety employees to hybrid plans, which means maintaining some further exposure to bankruptcy risk.

Transition Costs Can be Addressed in Several Ways

Just as governments usually do not fall behind on the payments in a single year, neither do they make good on them in one year. Instead, they (should) spread those catch-up payments over a period of time (an amortization period). GASB recommends that governments record their amortization schedule one way if a DB plan is open (accepting new employees) and another way if it is closed, which would be the case if new employees are placed into a DC plan.⁵⁶ This change in recommendations results in the so-called transition costs problem.

While legislators should think through how to address transition costs, they should not forget that GASB rules are simply recommendations for financial reports; they do not force legislators to appropriate any specific sum. Obligations incurred in the past are still obligations, regardless of how they are recorded in the books.

How, though, do governments make good on those already incurred obligations? The Mackinac Center for Public Policy suggests five options:⁵⁷

- Reduce state spending on “other post-employment benefits” (OPEB), including retiree health or life insurance. Use the money saved to start making good on shortfalls in pension funds. Usually, policy makers have more leeway, legally speaking, with OPEB than they do with pensions.
- Employees retain the benefits they have accrued to date, but the employer freezes one or more parts of the formula. In a “soft freeze,” the worker with 10 years of experience, for example, will always have 10 years in his or her benefit formula. On the other hand, the employee’s final average may increase. In a “hard freeze,” the final average salary used in the formula is frozen as well. (At the same time, the employee would be eligible for funds earned in a new system.) Rhode Island has been the only state to come close to imposing a hard freeze. Whether it has the legal right to do so is under litigation.
- Commit to paying off the unfunded liability. In other words, start putting in extra money each year. Starting that process now means lower costs later. Governments can report this effort using either a level-dollar or level-percentage approach, both of which are allowed under GASB reporting rules. The former would mean higher costs reported up front, but also lower costs over the long run.
- Pay something less than the annually required contributions or, as many states would call it, “the way we’ve been doing things.” The advantage is that it avoids having to divert money from other spending priorities. The disadvantage is that it simply moves the problem down the road. This approach could weaken a state’s credit rating, thus increasing the interest rates it has to pay.
- Assess the amortization cost not only on employees within the old DB plan but also on new hires in the new hybrid or DC plan. The most obvious advantage is that this taps another revenue stream that can be used to close the gap of the closed fund. The disadvantage is that it may harm morale among new employees, who will be paying extra for benefits that they will never receive. When Utah undertook its reform, legislators were determined to pay the full ARC each year, so they had an incentive to take this approach.

Consider the Options for Changes Within the Current Plans

Given the difficulties of making fundamental reforms, a number of states have made modest changes to their existing plans. The degree to which these changes have improved the condition of pension funds varies across states. Many have been applied only to new employees and exclude public safety employees.

Reduce the Assumed Rate of Return to Encourage Wise Investment Planning

The appropriate way to set the assumed rate of return for pension plans is to assess the likelihood that the fund's sponsor will go out of business. In the case of government plans, especially state plans, that likelihood is negligible. The appropriate rate, then, should be closer to the interest rate on U.S. Treasury bills.⁵⁸ Instead, many plans use an assumed rate of 7, 8, or even 8.5 percent. That is, they base their assumptions on what they expect to earn through investments. This sets them up for trouble in two ways. First, if they fail to meet the investment goals, the fund suffers. Second, assuming a high rate of return encourages employers and employees to make inadequate deposits to the plans. When a plan uses a high investment target and also does not make its annually required contributions, it effectively takes out a high interest loan to take on risky investments.⁵⁹

Reducing the discount rate, by contrast, will encourage more careful investments. Reducing the investment target will also make the need for reform more evident. Gary Sasse was the chief of administration for Donald Carcieri, the former governor of Rhode Island. Looking at the situation in the Ocean State, he said, "There would not have been comprehensive pension reform if that assumption had not been changed."⁶⁰

Modify the Features of Today's Plans for Tomorrow's Employees—and Today's Employees, When Possible

In addition to changing the discount rate, legislators can alter other features of existing DB plans. Here are some of the fixes they could implement:

Increase the contribution requirements.

- Raise the employee contribution requirement.
- Raise the employer contribution requirement.
- Make employee contribution rates dependent on salary, so higher-paid employees pay more. New York, for example, has added this requirement for its newest (Tier VI) employees.

Change the calculation of final average salary.

- Increase the number of years included in the average, for example, from three to five.
- Place a cap on the salary that is included in the calculation of average salary.
- Enact a limit to prevent the income from a final year of employment (elevated by, say, an unusually high level of overtime) from having an outsized influence on the average salary.

Increase age and service requirements.

- Increase the age for full or reduced retirement benefits.
- Increase the number of years of service required for benefits.
- Increase both the age and years of service required for full benefits.
- Eliminate eligibility requirements that are based on years of service alone, regardless of age. Alabama, for example, recently eliminated the 25-years-and-out rule for new hires. South Carolina replaced a 28-and-out rule with one that requires employees to wait until age 65, with eight years of service (or retirement under the rule of 90).⁶¹

Decrease the multiplier.

- Alabama's and Wyoming's existing employees earn service credit at a rate of 2.0125 percent and 2.125 percent per year, respectively. The rate for new employees will be 1.65 percent and 2 percent.

Place a hard cap on pension payouts.

- Limit the percentage of an employee's salary that a pension will replace. For example, Alabama's new pension plan will cap benefits at 80 percent of final average salary.

Limit COLAs.

- Impose a hard cap. South Carolina caps future COLAs at \$500 per year.
- Limit COLAs to a certain percentage. Virginia, for example, has capped its COLA at 5 percent (itself a rather high figure).
- Make a COLA payments contingent on the investment performance of a fund.
- Limit COLAs to a given amount of an employee's pension, such as the first \$25,000.
- Restrict or limit the granting of COLAs until the fund achieves a funding goal. The Wyoming Legislature has instructed the trustees of the state retirement system to grant no COLAs until it is fully funded. Maine canceled its COLA for three years. Rhode Island has taken similar measures.⁶²

Stop double dipping and spiking.

- Under the practice of double dipping, employees can retire, start collecting a pension, and then return to the job. In states that have implemented DC (with an employer match) for new employees, this may mean that the state is paying benefits out of a DB plan, making contributions to a DC plan, and writing a paycheck. In addition to being fiscally dangerous for states, it often means that public employees get a better deal than the people who pay them.
- In spiking, employees may increase their pension payouts by working a lot of overtime during their

final years of employment, or by having unused sick time used in pension calculations.

Ideas for Implementing Pension Reform

Fixing pensions requires understanding the scope of the problem, establishing some principles for a new approach, and considering alternative approaches. Pension reform requires more than good ideas. It also requires communication and leadership skills.

Assess the Climate for Fundamental Reform

Policymakers seeking to address pensions must understand the realities of their states or local units of government. Public employee groups, naturally, will advance the interests of their members, which may mean that they prefer tax increases on "other people" over changes to the retirement system. The relative strength of these groups may limit what reform-minded legislators can do. Reformers will need to identify key players, as well as their strengths and concerns.

Develop a Message that Will Advance Reform

Leaders who would reform (and thus save) pensions for public employees must build a communications plan. One way to communicate the scope of these problems is to translate the abstract numbers (funding ratios) or large numbers (\$5 billion in unfunded liabilities) into terms that people can understand. This requires knowing two things. The first is the total unfunded liabilities of a particular pension plan that needs to be shored up or reformed. The second is the cost of a highly visible public service, which represents the opportunity cost

of not fixing the problem. Two examples of highly visible numbers are the average compensation of a first-year public school teacher and the average per-mile cost of building a state highway. In Utah, for example, the market crash in 2008 cost the state the equivalent of 8,000 teachers over a 25-year period.

Rhode Island State Treasurer Gina Raimondo believes that making these sorts of calculations is a key part of getting people to understand the problem: “People don’t really want to hear about the \$3 trillion [in unfunded liabilities nationally, according to some estimates].” She continued, “They want to hear, your property taxes are going up, the bus you take to work is going to be cut, your kid’s school is going to be underfunded. That got people calling the State House.”⁶³

Talk with Public Employee Groups

Individual state employees respond to incentives in the law. For decades, legislators from both major political parties have contributed to the problem by inflating benefits now and letting someone else worry about sustainability down the road.

When she started to look at Rhode Island’s pension situation, Raimondo was asked by the teachers’ union to leave their pension plan alone. She told them, “I will be honest, and I will talk to you all along the way,” but she did not promise to protect specific elements of their plan. Legislators would be wise to follow this example. Raimondo was eventually rewarded for her hard work. She found that a number of people who work in or depend on government, including disability advocates and young teachers, were receptive to her efforts.

In Utah, reformers talked with union leaders early on, even before legislative language was drafted. As a result, union leaders and members knew what was

going to be discussed. There were no “gotchas” in the legislation.

“The numbers of today’s pension plans do not add up, and observers on the right, on the left, and in the center agree on this point.”

Any reform effort should remind public employees of two facts. The first is that the reform effort is meant to ensure that there will be a retirement plan for them. The second, which will be true in most cases, is that even if the terms of their plans change going forward, they will retain the rights to benefits they have accrued to date.

Stress Math, Not Ideology

In an age of 24/7 political debate, it is easy to think that pensions are an ideological problem. But the pension problem need not be a political debate over the size or scope of government; it is a problem of math. The numbers of today’s pension plans do not add up, and observers on the right, on the left, and in the center agree on this point.⁶⁴ Providing public employees with a more secure retirement system will not in itself reduce or expand the size of government.

Convey the Fact that We Cannot Grow Our Way Out of the Problem

For the sake of both taxpayers and employees, political leaders, public employers, and public employees must find a way to make the numbers add up. They

cannot simply hope that superior investment returns will let pension systems grow out of the problem. Extraordinary growth may make a modest contribution to solving the problem, but policy should be based on what can be reasonably expected, not what a miracle might deliver.

Remind People: We Cannot Do Nothing

When states let their pension plans go unreformed, they keep racking up liabilities. Legislators who wish to advance reform must express this fact and remind people of the ongoing nature of the problem. For example, when actuarial firm Gabriel, Roeder, Smith & Company reported back on the state of Utah's retirement plans, the news was bleak. To make good on contribution rates required by the actuarial tables, contribution rates would have to increase from 13 percent to 23 percent—and then stay there for decades. Another way to look at it is that the state would have to earmark 10 percent of its general fund for the next 25 years simply to make up for the losses of 2008.

Doing nothing, on the other hand, would mean eventual hardship for retirees. If investment returns were anywhere between 6 and 7.5 percent indefinitely, the leading retirement plan in the state would run out of money in thirty to forty years. Recall that Utah had a fully funded plan as recently as 2007. Other states were not as well prepared, so they face a situation that is even more urgent.

Stress to Public Employees that Pension Reform Will Increase Take Home Pay and Benefits

Without reform, making the increases required to keep DB plans solvent can deprive employees of money that could be used for increased pay, insurance

benefits, or COLAs. In this way, pension reform might be considered a “wage liberation act.”

Build a Broad Base of Support

A large range of groups have an interest in pension reform. They include businesses, business groups, taxpayer advocacy groups, people who use government services, public employees—and if approached with respect and truthfulness—public employee unions. Thought leaders such as traditional media outlets and good government groups have an interest, too. A broader coalition is better than a smaller one if the elements of reform can be maintained.

Know What is Up for Negotiation and What is Not

In advancing pension reform, it is important to separate essential, non-negotiable items from non-essential goals. Two non-negotiable goals are:

- 1) Meet the commitments we had made to current employees and retirees.
- 2) Reduce and eliminate the pension-related bankruptcy risk by capping the liabilities, closing off the existing system to new enrollees, and implementing a new system with statutorily established employer contributions.

On the other hand, a negotiable item may be the amount of the employer match, or the addition or augmentation of other benefits, such as disability insurance.

Be Deliberate

If the financial situation of the state allows, spreading

the reform effort over two legislative sessions may not only be politically necessary but can also be a good thing on policy grounds. This is especially true if the reforms include creating new retirement systems. There is some value in taking time to evaluate the possibilities and vet proposals, so that unforeseen administrative glitches do not cause the reforms to stumble.

Expect Plan Administrators to be Between a Rock and a Hard Place

Plan administrators are naturally seen as the experts on the plans they oversee. Yet they face incentives to soft-pedal the need for changes. If they speak with the wrong tone, or are too blunt about the financial state of a plan, they risk being inundated with phone calls and letters from anxious employees. If possible, secure the most accurate and precise assessment from the current administrators. It may also be useful to obtain an outside assessment from people who are not currently involved in the pension plans.

sions will require high increases in tax rates or uncomfortable pullbacks in public services.

“In addition to basic equity, DB plans place important public priorities at risk.”

State and local governments vary in the degree of their exposure to pension-related financial troubles, but policymakers everywhere need to find out the extent of that exposure. It is likely that the exposure is understated, because of overly optimistic expectations about investment returns.

The private sector has seen a shift away from DB plans, and there are good reasons for the public sector to follow. In addition to basic equity, DB plans place important public priorities at risk. Legislators and others who consider public pensions can choose from a variety of plan options, including options within DC plans, CB plans, and hybrid approaches.

Conclusion

The logic of DB plans gives legislators incentives to over promise benefits and under deliver the annual payments needed to make them sustainable over the long run. In extreme cases, local governments have entered bankruptcy as a way of dealing with their unfunded liabilities. Although federal law does not allow states to use bankruptcy, states may find that, absent reform, making good on their pen-

There are several goals, however, that policymakers everywhere should pursue. They should reduce the discount rate to reflect the risk-free nature (for employees) of public pensions. They also should make sure that, from now on, pension expenses are predictable and transparent. Reforms within existing systems, such as eliminating double dipping or raising retirement ages, can also be considered. Most importantly, state and local governments must be aware of the risks associated with DB plans.

Appendix A: Questions for Legislators to Ask Retirement System Officials and Actuaries

A

Bob Williams, president of State Budget Solutions, has assembled a series of questions that legislators should ask about every public pension plan. We reprint these with the permission of State Budget Solutions.⁶⁵

1. Do you require plan sponsors of state or local government employee pension benefit plans to put on a public website an annual report providing the following:
 - An actuarial valuation report, with 10-year benefit, contribution, unfunded liability, key assumptions, projections in it.
 - The discount rate used to calculate pension liabilities and the value of those liabilities if the Treasury discount rate was used.
 - Ask for pension stress tests (an actuarially determined impact of the current assumed rate of return and a 7.5 percent, 5 percent, and 3 percent investment return assumption).
 - A statement of the actuarial assumptions used for the plan year including the assumed rate of return on invested plan assets for the planned year; the last five years and the last ten years.
 - A statement of the number of plan participants who are retired or separated from service and are either receiving benefits or are entitled to future benefits and those who are active under the plan.
 - A statement of the degree to which unfunded liabilities are expected to be eliminated.
 - A statement of the amount of pension obligation bonds outstanding.
 2. Is pay-to-play, the practice of investment managers making contributions to officials with influence over public pension fund decisions, addressed by state law or by pension fund rules? Are pension agents and lobbyists allowed to influence investments?
 3. Is there an external body providing oversight to the body administering the pension funds? Is there an external review or audit fund practices?
 4. Do you require the State Auditor or State Treasurer to evaluate the report and submit an opinion of it to the legislature?
- Here are some other questions that legislators might ask:
- How often has the plan received its annually required contributions over the last five and ten years?
 - How often has the plan met its investment objective in the last five and ten years?
 - If the plan enjoys investment returns above its discount rate, does the plan pay out bonuses to retirees, or does it retain the money for a rainy day?
 - Does the plan pay COLAs? If so, under what conditions? How much? Do they apply only to people who are retired at the time the COLA is implemented or to everyone going forward? Can they be suspended under certain conditions?
 - Does the plan allow part-time employees to earn credit at the same rate as full-time employees?
 - Does it allow the person who works part-time to earn the right to treatment as a lifelong full-time worker by working full-time for a few years near retirement age?
 - What is the multiplier or service credit used to calculate pension benefits?

- How many years' worth of salary are averaged in calculating the pension benefit?
- Of every dollar coming into the fund, how much is used to fund previously promised benefits, and how much is used to save and invest for future needs?
- Which features of the plan, if any, have been modified for new employees?
- Is "double dipping" allowed? If so, what effect does it have on plan finances?
- What will happen if the plan had another year like 2008?
- What will happen if the state maintains current contribution rates? Increases them?
- What will happen if the state increases the retirement age or number of years of service required, or reduces the service credit?
- What happens to the plan's finances if COLAs are reduced, maintained, or increased?
- What will happen to contribution rates required to achieve and maintain a fully funded pension fund?

Legislators also need to think through possible scenarios for the future.

Appendix B: ALEC Model Policies

B

ALEC offers several pieces of model policy, as well as a statement of principles, that states can reference as they refine their policies toward providing retirement plans for state and local workers. These documents have the goals of: increasing understanding of public pension plans and suggesting ideas for reforming those plans. To save space, only summaries of the legislation are printed here; the full text can be obtained online from ALEC's Tax and Fiscal Policy Task Force.

Promoting a Better Understanding of Each Pension's Financial Status

The **Promoting Transparency in State Unfunded Liabilities** statement of principles says that each retirement plan should report, in full, both its obligations and assets. It says, in part, "It is clear that citizens are demanding greater transparency in accounting for the costs of state and local government. Given the large and growing unfunded liabilities in pension and other post-employment benefit plans, it is crucial for state and local governments to meet accounting standards for these plans established by the Governmental Accounting Standards Board (GASB)."

The **Unfunded Pension Liabilities Accounting and Transparency Act** would require state retirement boards or other responsible entities to issue reports to the legislature on the funds they oversee. The reports would give the legislature several different ways of understanding the liabilities of each fund, including the outcomes of several "what if" scenarios. The act's summary statement declares the following: "The legislature finds that the

future liabilities of the state's several post-retirement pension and benefits plans may exceed the ability of these plans to fully pay future claims, possibly requiring taxpayers to make unforeseen future contributions to ensure the solvency of these plans or the reduction or elimination of benefits to future and current retirees. Believing both of these alternatives to be unacceptable, the legislature seeks to identify the extent to which the several pension plans lack the necessary capital to pay all future obligations."

Reforming the Leadership and Shape of Public Pension Plans

The **CAFR Accounting Responsibility Act** holds the key executive branch officials in a state to the same standard that the federal government applies to key executives in private companies. The summary statement declares that, "In order to provide accountability in state retirement systems, the act applies standards similar to Sarbanes-Oxley to the principal executive and financial officers of the state. Officers are charged with certifying that the Comprehensive Annual Financial Report (CAFR) is, to the best of their knowledge, accurate. They are further required to establish effective internal controls for monitoring state retirement systems.

The **Pension Funding and Fairness Act** creates a rainy day fund as well as a fund for repaying state debts, and establishes a spending limit on state government. It excludes payments to and from pension funds from the spending limit, thus allowing those funds to receive and distribute money as required to fulfill their obligations. The act "combines a traditional spending limit with debt paydown, rainy day fund, and taxpayer refund provisions. First, the act establishes a spending growth index of inflation plus population growth, which is used as a limit on state spending each year. Second, the act requires remaining general funds to be used to pay down past due debt through a Past Due Paydown Fund."

The **Defined-Contribution Pension Reform Act** lays out specific examples of how a state would set up a DC system for all employees. It declares, in part, "The Legislature finds that the defined-benefit model of retirement benefits for state and municipal employees is not fiscally sustainable. It is the intent of the legislature, therefore, to direct the [state retirement board] to create and maintain a defined-contribution program in which all state and municipal employees hired on or after [date], will automatically enroll after [X] months of employment to become eligible to accrue retirement benefits."

ALEC's Statement of Principles on Fixing State and Local Government Defined-Benefit Plans says, in part, "To solve the funding crises in state and local defined-benefit plans for public employees, the American Legislative Exchange Council recommends that defined-benefit plans be replaced by defined-contribution plans." It also suggests 15 reforms for defined-benefit plans, grouped into three categories. "Primary reforms" include calls for state and local governments to "cap employer cost to a maximum amount of salary state will pay toward employee benefits" and "require the full ARC (or Normal Cost) of the plan to be paid each calendar year." The section on "closing loopholes" calls on governments to end the practice of pension spiking and double dipping. Under "secondary reforms," the statement calls for governments to "increase employee contributions, retirement age, and vesting period as necessary to make pension systems sustainable."

Appendix C: Glossary of Terms

C

The following is a brief, non technical description of some of the terms used in this report. Readers who desire a more precise, technical explanation should consult the Governmental Accounting Standards Board (GASB) or their state's retirement systems.

- Actuarial, actuary** – An actuary is a person who uses mathematical analysis to predict a number of things of interest to a financial institution. Actuarial science is the application and use of that analysis.
- Actuarial Accrued Liability (AAL)** – The money that a plan should have on hand now to pay, sometime in the future, for the retirement benefits that an employee has earned to date.
- Amortize, amortization period** – To “amortize” something is to buy it over time. Traditionally, for example, consumers amortize the cost of buying a house over 30 years. As used in this report, pension plans amortize (catch up) their balances over an amortization period.
- Annually Required Contribution (ARC)** – The amount of money an employer should deposit into a defined-benefit plan for a given year. It has two parts: the normal cost and an amount needed to amortize unfunded liabilities.
- Annuity** – A contract between an individual and a financial company. The individual makes a payment to the company. In return, the company agrees to make payments to the individual for a certain amount of time, either a set number of years or a lifetime.
- Annuitize** – To purchase an annuity with the funds in a retirement account.
- Cash-balance (CB) plan** – One of the three major approaches that employers use to offer retirement plans to their employees. A retiree's benefits are determined by the amount of money the employer (and perhaps employee) places into the plan, plus any earnings on that money. (See also “defined-contribution plan” and “defined-benefit plan.”)
- Cost-of-living adjustment (COLA)** – An increase in the payment that a retirement plan makes to a retiree, to account for inflation.
- Defined-benefit (DB) plan** – One of the three major approaches that employers use to offer retirement plans to their employees. A retiree's benefits are determined by a formula involving salary, a percentage of that salary, and the number of years the employee was on the job. (See also “cash-balance plan” and “defined-contribution plan.”)
- Defined-contribution (DC) plan** – One of the three major approaches that employers use to offer retirement plans to their employees. A retiree's benefits are determined by the amount of money in an account, owned by the employee, at the time he or she retires. The employer, employee, or both deposit money into the account during the worker's tenure. (See also “cash-balance plan” and “defined-benefit plan.”)

Discount rate – An investment return, expressed as a percentage, that the retirement plan’s managers hope to achieve. It may be tied to the yield of U.S. Treasury bills, a stock market index, or other measure.

Final Average Salary (FAS) – A defined-benefit pension uses a formula to determine how much a retiree will receive in monthly payments. One factor is a person’s work history, expressed as the highest annual salary, last salary, or the average of several years’ pay (FAS). Typically, the formula uses the three or five highest salaries during a person’s career with the employer.

Funding ratio – A percentage that reflects how much money a retirement plan has to meet its obligations over the long term.

Generally Accepted Accounting Principles (GAAP) – A set of rules, standards, and procedures that publicly traded companies use in their accounting and reporting of financial data. Financial Accounting Standards Board (FASB) creates and maintains GAAP.

Governmental Accounting Standards Board (GASB) – An organization that establishes and recommends standards for governments to use in their accounting and financial reports.

Hybrid plan – A retirement plan that combines elements of a defined-benefit plan and a defined-contribution plan.

Interest credit – An amount that an employer will use to increase the value of a person’s cash-balance account.

Normal cost – Every year, an employee creates an obligation on a retirement plan that the plan must meet later on; the normal cost is that amount.

Pension – Generally, a retirement-savings plan managed or arranged by an employer. Traditionally, it has

referred to defined-benefit plans, although it may also refer to a defined-contribution or cash-balance plan.

Pension spiking – An employee may (legally) engage in pension spiking by acting during the last year or so of employment, in ways that will boost the money earned under a defined-benefit plan. Examples of pension spiking include working a large amount of overtime or converting unused sick time into service time that is used to calculate a pension.

Rule of 90 – A provision of an employer’s retirement plan that allows a worker to retire with full benefits if his or her age and years of service add up to 90. In place of 90, employers may use other numbers.

401(k) – A retirement account, named after a section of the U.S. tax code, that allows people to save for retirement. It is a tax-advantaged account; the federal government does not impose income taxes on the money placed into the account, nor are capital gains, interest, or dividend income taxed until distribution. A 401(k) is one of several types of defined-contribution accounts. Others include a 403(b) for employees of nonprofit organizations or public schools, and 457 plans, which are for some employees of local governments.

Risk – The possibility of a loss; there are many risks associated with investing and retirement planning. These include the possibility that a person’s money may run out, that inflation will weaken the value of an investment or account, or that the organization paying a monthly series of payments will stop doing so.

Service credit – Defined-benefit pension plans use a formula to determine an employee’s retirement benefits. One factor, in addition to final average salary and years of service, is a “service credit,” or percentage. For example, an individual might get a service credit of 2 percent for each year of service. After 30 years of service at 2 percent per year, an individual retiring would

receive 60 percent in service credit, or 60 percent of his or her final average salary.

Smoothing – Smoothing is a process used to adjust, in financial reporting, for volatility in pension fund investment returns from year to year. Most pension funds use a five-year smoothing window. For example, a fund may have a bad year, losing 10 percent of its value. On the other hand, its five-year average may be 7 percent. The rationale for smoothing is that it is more consistent with the long-term focus of retirement investing than looking only at year-to-year numbers.

Systematic risk – All investments have risks. A systematic risk is the risk of a particular class of investments. A mutual fund that specializes in corporate bonds, for example, faces the risk that an increase in interest rates will decrease the value of its bonds. Compare systematic risk to unsystematic risk.

Unsystematic risk – While systematic risk refers to the risks of investing in a broad class of assets, unsystematic risk might be thought of as idiosyncratic risk. A pension fund that is composed of a broad index of the U.S. stock market faces the systematic risk that the whole stock market will lose value. A pension fund that heavily invests in one sector of the economy is engaging in unsystematic risk, as is an individual investor who buys a specific stock.

Unfunded Actuarial Accrued Liability (UAAL) – The money that a retirement account is obligated to pay out in the future, but does not and will not have the money for, under existing conditions. (Roughly speaking, this is the difference over time between assets and liabilities.) There are many reasons why a plan may have an unfunded liability, including insufficient payroll deposits or investment earnings.

Appendix D: Is the Problem Overblown?

D

Despite the problems facing public pension plans, DB pensions have their defenders. For example, the National Association of State Retirement Administrators and the National Council on Teacher Retirement sponsor a Web site, *Pension Dialog*, edited by Ady Dewey. What follows are a few claims made on the site, with responses.

Pension payouts offer states economic benefits. This is a classic case of ignoring the economic reality of opportunity costs. While pension checks can indeed be used to purchase goods and services, the money could have been spent by private sector actors or by government itself on different priorities. Instead, pensions pay for services that were delivered in the past—sometimes decades ago.

Public pensions are not obligations that must be paid out all at once. While it is true that no government is

forced to make a lump sum payment for its entire pension obligations, the obligations represent real claims on the public treasury. The question is not whether a plan can make good on all its payments today, but whether it has a sustainable basis for paying them over time. Too many do not.

Public pensions have been harmed by recent economic events; over history, their investment returns have generally matched the targets set by plan officials. This may be true of some plans, but it is not an excuse for refusing to restructure retirement plans to reflect today's increasingly mobile workforce.

States can increase their ability to make payments through adjusting DB plans, not closing them. The site suggests that states can shore up plans by "increasing employee contributions, reducing benefits, limiting or eliminating cost of living adjustments (COLAs), increasing retirement ages, furloughing or laying off

employees, and reducing hiring."⁶⁶ Again, some plans have more breathing room than others, but the principles of minimizing risk to the public calls for fundamental pension reform.

Finally, the site defends the relatively high investment returns assumed by many public plans and argues that questioning a high rate of return "reflects either a lack of understanding of how these plans work or a separate agenda."⁶⁷ That position, however, reflects a lack of understanding of basic economic principles.

Some pension plans are in better shape than others, but the problem of moral hazard remains. Elected officials who oversee public pensions, face incentives to over promise benefits and underfund the plans. For this reason, among others, public officials must turn open-ended obligations (that are not met) into more clearly delineated obligations that are met on an ongoing basis.

Appendix E: Resources for Further Information

E

The following organizations may be of interest to legislators. They are offered for informational purposes only. The list should not be seen as an endorsement by ALEC or the author of this report.

Resources on Public Pensions

Center for Retirement Research at Boston College
<http://crr.bc.edu>

Pew Center on the States
www.pewstates.org/issues/pensions-328311

Pensions and Investments
www.pionline.com

State Budget Solutions

www.statebudgetsolutions.org/issues/detail/pensions

American Enterprise Institute

www.aei.org/policy/economics/retirement/pensions/

Mercatus Center at George Mason University

www.mercatus.org/research/public-sector-pensions

Manhattan Institute

www.PublicSectorInc.org

About the Author

Dan Liljenquist is nationally renowned for his work on major entitlement reform and his expertise in fiscal policy. He is a highly sought after speaker and consultant, especially in the area of pension reform. Elected to the Utah Senate in 2008, he was assigned to chair the Retirement Committee. After surveying the damage the Great Recession did to the Utah Retirement System, he undertook a campaign to reform the system. As a result of his work, the state closed its existing defined-benefit plan to new employees and offered them new options, as well as ending the practice of



double dipping by state employees. He received multiple awards for his work, including being named one of *Governing* magazine's 2011 Public Officials of the Year. Liljenquist resigned from the Utah Senate in December 2011 to mount a campaign for the U.S. Senate. He is now the founder and president of Liljenquist Strategies, a business consulting firm specializing in helping clients achieve transformational change in their companies. A father of six, Liljenquist holds an undergraduate degree in economics from Brigham Young University and a juris doctorate from The University of Chicago Law School.

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