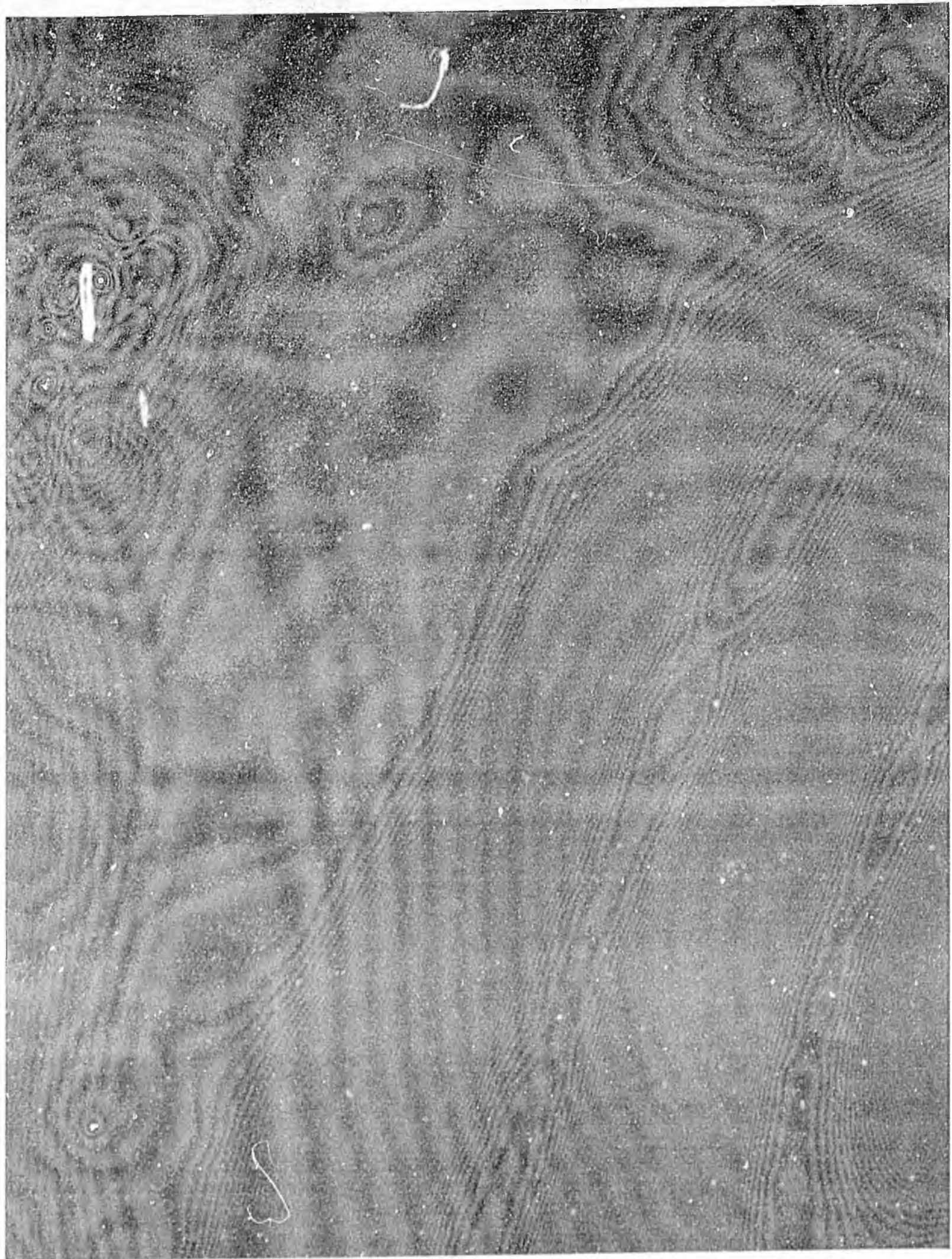


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Dear reader:

**\$2.73 trillion.** That is a conservative estimate of what states will spend on pensions, health care and other retirement benefits for their employees over the next 30 years. It is an enormous investment of taxpayer dollars—so the stakes are extraordinarily high. Across the country, state policy leaders are trying to strike the right balance between controlling costs and recruiting and retaining talent in the public sector.

This groundbreaking report, *Promises with a Price*, provides first-of-its-kind data about the long-term costs of public sector benefits. It highlights which states are prepared to pay the significant bill coming due, which are not, and why it matters to state lawmakers and citizens alike.

States' fiscal health depends greatly on policy makers' ability to wisely manage their bills coming due—and The Pew Charitable Trusts' Center on the States (PCS) is tracking their efforts across a range of issues. For instance, last year we published a report on states' efforts to rein in ballooning Medicaid costs while ensuring high-quality health care for citizens in need. This year we issued a 50-state assessment forecasting that, without data-driven policy reforms, many states will see significant growth in their prison populations and corrections spending in the next five years.

Equally important is whether states have the right policies in place to be competitive in a global, 21st-Century economy. In July, PCS and the National Governors Association joined forces to produce a governors' guide on states' research and development funds, aimed at stirring innovation and creating new jobs. In January 2008, PCS and *Governing* magazine will publish a report on whether states' tax structures encourage or impede states' economic vitality.

Finally, in March, our Government Performance Project will release a 50-state report card on how efficiently and effectively states are managing their budgets, employees, information and infrastructure—all critical to ensuring that state policies ultimately deliver the results lawmakers and taxpayers expect.

Researching emerging topics, developing 50-state comparisons, identifying innovative approaches among states to complex problems, and, when the facts are clear, advocating for nonpartisan, pragmatic solutions—these are the signature efforts of PCS.

The Pew Charitable Trusts applies the power of knowledge to solve today's most challenging problems, and PCS, a division of Pew, identifies and advances effective policy approaches to critical issues facing states. We hope all of our work, including this report, helps states make sound, data-driven policy choices on a wide range of issues.

To learn more about Pew and our Center on the States, please visit [www.pewcenteronthestates.org](http://www.pewcenteronthestates.org).

Sincerely,  
Susan Urahn  
Managing Director, Pew Center on the States

## Acknowledgments

The Pew Charitable Trusts applies the power of knowledge to solve today's most challenging problems. Our Pew Center on the States identifies and advances effective policy approaches to critical issues facing states.

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- Richard Keevey, director, Policy Research Institute for the Region, Woodrow Wilson School at Princeton University. Keevey previously was director of the New Jersey Office of Management and Budget, as well as state budget director and state comptroller.
- Girard Miller, commentator and consultant on public finance issues. Miller previously was president and chief operating officer of Janus Capital Group and president and CEO of ICMA Retirement Corporation.
- Parry Young, commentator and consultant on public finance issues, with a focus on pension and retiree health care benefits. Young previously was director of Standard & Poor's Ratings Services.

While these experts have screened the report for methodology and accuracy, neither they nor their current or former organizations necessarily endorse its findings or conclusions.

For additional information on Pew and our Center on the States, please visit [www.pewcenteronthestates.org](http://www.pewcenteronthestates.org).

# Executive Summary

FOR MANY AMERICANS, POST-RETIREMENT BENEFITS—principally pensions and health care—for state government employees is an obscure topic. But because of how they can affect state budgets, these benefits have become an issue of critical importance. Research by Pew's Center on the States shows states' retiree pensions and other benefits represent a bill coming due over the next few decades that can be conservatively estimated at \$2.73 trillion. That includes about \$2.35 trillion for a wide range of employee pensions, including those for teachers, and an additional \$381 billion for retiree health care and other non-pension benefits for state employees only, excluding those for teachers and a handful of other groups.

*The bill coming due over the next few decades can be conservatively estimated at \$2.73 trillion.*

the large obligations that many governments have incurred for retiree health care and other non-pension benefits.

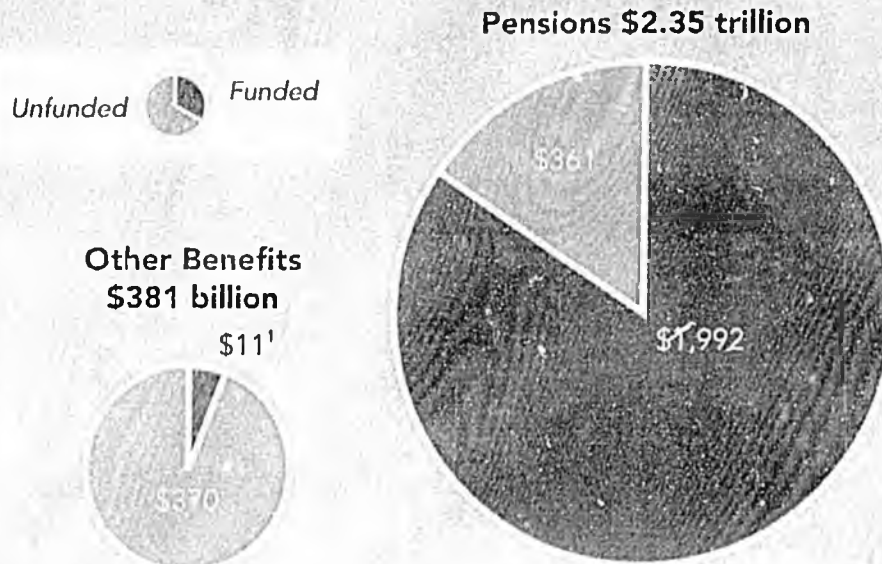
States' liabilities and their ability to cover those costs are affected by a variety of factors, including the strength of their economies, shifts in their populations and their tax capacity. But policy decisions are equally critical. In some states, retiree benefits have been vulnerable to a buy-now, pay-later mentality. In bad budget times, retirement benefits become easy substitutes for salary increases because states can put off the bills. In good times, feelings of legislative largesse can create new retirement benefit policies that have costly long-term price tags.

To their credit, states have socked away enough to cover about 85 percent of the pension bill. But there is very little put aside for non-pension benefits. All told, states face about \$731 billion in unfunded bills coming due. (See Exhibit 1-1.)

The way in which states provide retirement benefits, and at what levels, to their employees has become the subject of increasingly volatile debate. Several important developments have drawn attention to the issue, including the precipitous drop in public pension funding levels in the early years of the decade and new accounting rules that identify, for the first time,

Today, the need to intelligently control and manage the cost of post-retirement benefits is integral to states' capacity to fund competing needs, such as adequate roads, bridges, water systems and high-quality public education. But at a time when states are competing with the private sector and other nations for the best and the brightest, many fear that reducing benefits could make public sector employment less attractive. "Addressing this issue now is responsible public policy," said Robert N. Campbell III, vice chairman, Deloitte & Touche USA, LLP, which provides financial, human resource and technological services to business and government. "It is in the public interest to

The pension bill is much larger than that of other benefits, but it is 85 percent funded; the bill for other benefits is only 3 percent funded (in billions).



<sup>1</sup> This number is an estimate of assets for state employees only. According to actuarial valuations, which include cost-sharing plans, the assets total \$18 billion.

NOTES: Numbers are the totals of the states' 30-year obligations as calculated in 2006. Other benefit costs only include state employees. The "Other Benefits" number is based on actuarial valuations from the states, which include some cost-sharing plans (i.e., Arizona, North Carolina and Ohio).

SOURCE: Pew Center on the States; Based on States' Comprehensive Annual Financial Report and Actuarial Valuation Data

ensure that qualified, skilled and capable individuals continue to be attracted to careers in public service."

The issues surrounding retirement benefits are highly technical, involving complex calculations and arcane financial terms; in general, the public doesn't pay nearly as much attention to them as they do to education, health care and other topics. This lack of public awareness is part of the reason some states now find themselves in trouble. But the complexity of public sector retirement benefits belies their potential consequences for everyday citizens. Even seemingly modest changes can have significant impacts on public employees, taxpayers and states' fiscal health.

Given the amount of public funds invested, it is more important than ever that states be informed by the best available data, analysis and practices when making decisions about post-retirement benefits.

This report, by the Pew Center on the States (PCS), seeks to provide such information to state policy makers across the country. The report is divided into three sections. This executive summary highlights key findings of the report, describes current forces driving up costs in both pensions and other post-employment benefits (primarily health care), and explains why state budgets will be affected for years to come. The second section focuses on pensions, offering 50-state data illuminating different ways states have handled these

obligations and opportunities for states to control future costs. The last section examines other post-employment benefits, providing groundbreaking data on states' liabilities for retiree health care and profiling initial measures some states have taken to manage the issue.

PCS's analysis flows from an intensive review of data compiled and reported by the states—information that is publicly available but not always easily accessed by policy makers. To examine pension funding trends, PCS aggregated all the pension data that were available in states' comprehensive annual financial reports, including plans for teachers, state employees, law enforcement personnel,

elected officials, judges and, in some cases, municipal employees whose benefits are administered through state plans. To assess the impact of health care and other non-pension benefits, PCS collected actuarial valuations that have now been completed by most of the states and which calculate long-term costs of retiree health and other benefits that have previously been unknown. In this case, to offer a consistent comparison among states, information was collected for state employees only. Non-pension benefits for teachers will be the topic of a subsequent report. (For a more detailed explanation of our methodology, see page 17.)

## Key Findings

### Pensions

#### State of the States:

- From a national perspective, states' pension plans seem to be in reasonable shape. Looking at all pension plans covered in the states' financial reports, there were \$2.35 trillion in long-term liabilities at the end of fiscal year 2006, of which \$361 billion was unfunded. Data collected by PCS show that, in the aggregate, states' systems were 85 percent funded for fiscal year 2006.
- But the national perspective masks important variations across the states. Twenty states had less than 80 percent of the funds necessary to cover their long-term pension obligations—the level most experts consider to be healthy. Given shifts in funding levels caused by volatility in the stock market and other forces, underfunding could leave states in a very precarious position. And several states, including Connecticut, Illinois, Hawaii, Kentucky and New Hampshire, have experienced particularly troubling drops in their funding ratios.
- While the overall story about states' pension plans seems generally positive, policy makers should be cautious about this news. Past experience indicates that good times may become perilous for the long-term health of pension systems. In the late 1990s and early 2000s, when half the states' pension plans were fully funded, many states reacted by increasing benefits. In the years that followed, funding levels for state pension plans dropped substantially, some by as much as 30 to 40 percentage points.

- In the past 10 years, only about a third of the states have consistently contributed the full annual amount their own actuaries said was necessary. In 2006, 20 states contributed less than 95 percent of the amount their actuaries targeted to meet their annual contribution for pension funding, and 10 states contributed less than 80 percent. States that have consistently fallen short in recent years include Colorado, Illinois, Kansas, Michigan, New Jersey, Oklahoma and Washington.

### Promising Approaches:

- States should fully fund their liabilities each and every year. And they should be sure that any new benefits promised are genuinely affordable—once given, pension benefits are very difficult to take away. Both Georgia and Oklahoma require that any proposed benefit increase be accompanied by actuarial calculations of long-term affordability.
- A number of states are taking additional steps to reduce their long-term costs. At least five states now offer hybrid plans that

combine elements of both defined benefit and defined contribution plans. (The former promises recipients a set level of benefits; with the latter, the employer contributes a defined amount to the plan.) According to a September 2007 report by the U.S. Government Accountability Office (GAO),<sup>1</sup> Oregon officials estimate that a new hybrid program adopted by the state in 2003 contributed to \$400 million in pension reform savings.

- Some states are closing loopholes within pension systems that allow employees to increase the amount they collect after retirement, such as inflating the number of years counted toward retirement or final salary during the last years of employment.
- Some states are strengthening how they govern their pension systems so the funds will be better managed and less volatile. A number of states also are requiring faster, more accurate financial reporting so that policy makers will have the best and most up-to-date information when making decisions about pension plans.

## Other Post-Employment Benefits

In response to a 2004 rule from the Governmental Accounting Standards Board (GASB), most states have now completed their calculations of the long-term cost of the non-pension retiree benefits they offer to their own state employees. Of these benefits, the biggest by far is health care, but benefits can also include such coverage as dental care and life insurance.



## State of the States:

- The long-term price tag for retiree health care and other benefits for state employees alone is about \$381 billion, according to PCS's analysis. About 97 percent—\$370 billion—of that 30-year bill was unfunded at the end of fiscal year 2006. And this is a conservative estimate because it doesn't include obligations for teachers or local government workers.
- When it comes to states' total liabilities for employee retirement, pensions represent a far bigger portion than retiree health care and other non-pension benefits. But states are doing a far better job socking away money to cover pension costs. That means that non-pension liabilities make up a disproportionate share—more than half—of what states haven't yet funded.
- States differ tremendously in the kinds of non-pension benefits they offer to retirees. Half the states account for almost 94 percent of the liabilities—largely the result of decisions that governments have made about how large or small these retirement benefits should be and who should receive them. Per capita costs for other post-employment benefits range from less than \$200 in states like North Dakota, South Dakota and Wyoming to more than \$5,000 in Delaware, Hawaii and Connecticut.
- At the end of fiscal year 2006, just six states—Arizona, North Dakota, Ohio, Oregon, Utah and Wisconsin—were on track to have fully funded their non-pension obligations during the next 30 years. Of the five largest states—California, Texas, New York, Florida and Illinois—none had put aside money for non-pension benefits. Eleven states face long-term liabilities in

excess of \$10 billion, led by New York at \$50 billion, California at \$48 billion, and Connecticut and New Jersey at \$22 billion each. (Illinois does not have an official valuation yet, but estimates put its liability at \$48 billion.)

## Promising Approaches:

- At least 13 states have set up irrevocable trusts to pay for retirement benefits in years to come, ensuring that none of the funds are diverted to other purposes.
- States can cut their long-term costs substantially if they start fully funding their annual required contribution for other post-employment benefits. For example, Massachusetts would face \$13.3 billion in long-term costs if it didn't put aside funds for retiree health care and other non-pension benefits. If the state consistently funds its required contribution every year—as it is doing in 2008—the long-term costs will be reduced to \$7.6 billion. Why? Because the interest the state is likely to earn when it invests more money over the long term can be applied to paying down the bill.
- Many states owe so much that they may find it cost-prohibitive to fully fund their non-pension liabilities—the median annual contribution required is almost three times what they currently are paying. So a growing number of states are both setting aside some money and restructuring benefits to reduce costs. (In general, states have more flexibility to make changes to retiree health care than to pensions—although this subject is likely to be litigated as governments test their latitude for making changes.)

- States can reduce costs by raising the retirement age, increasing employee and retiree premiums and co-pays, increasing the number of years of employment required for lifetime or fully subsidized benefits, requiring new retirees to pay a percentage of their base salary at retirement for health care costs, and requiring retirees to join a Medicare advantage prescription drug plan.
- Some states also are reducing retiree health costs by promoting wellness programs and other preventive measures, and by managing their benefit plans more cost efficiently—for instance, by joining with localities to bundle their plans under a single administrative umbrella.
- States can, in fact, lower their long-term liabilities. For example, after setting up a trust fund for its other post-employment benefits and adopting several reforms, including increased co-pays and requirements for retirees to join a Medicare advantage prescription drug plan, West Virginia reduced its long-term liability by more than half, from an estimated \$7.8 billion at the end of June 2006 to \$3.4 billion in April 2007.

## Why It Matters

Today it is more important than ever that decision-makers—state policy leaders, boards of trustees, agency and union heads, and others—pay serious attention to decisions about post-employment benefits for public

sector employees and that they strike the right balance between managing costs and recruiting and retaining good talent. Five key forces significantly affect post-employment benefits and states' ability to pay for them.

### 1. Pension funding levels are volatile

Pension investment practices have shifted dramatically in the past 30 years. Federal Reserve Board data from June 2007 indicate that 70 percent of state and local pension investments are in equities, broadly defined, up from 62 percent in 2000 and 38 percent in 1990.<sup>2</sup> Because equity investment was a relatively new phenomenon for a lot of states in the 1990s, decision-makers may have ignored the idea that what goes up also comes down.

By 2000, about half the states' pension systems were fully funded, due to strong and sustained stock market growth. Legislatures responded in 1999 and 2000 by shortening

vesting periods, increasing the multipliers used in determining benefit amounts, decreasing the age at which employees could receive full retirement benefits and shortening the years of service needed to qualify. New York, New Jersey, Illinois, Pennsylvania, Kentucky, California, Colorado and other states increased benefits.<sup>3</sup> Some also decreased required employer contributions to the plans (see Exhibit A-2 in Appendix A).

But the rosy investment picture of the late 1990s was already starting to wilt in 2000, with the dot.com bust followed by the 9/11 attacks and weakening economy beginning in 2001.

Added benefits increased accrued liabilities while shortfalls in contributions ate into asset growth. In the early years of the decade, as poor investment returns caused funding levels to dip, it became even more difficult for states to make the employer contributions required to keep up. By 2006, only five states—Florida, New York,<sup>4</sup> North Carolina, Oregon and Wisconsin<sup>5</sup>—had pension funding ratios at a 100 percent or greater level. A handful of others—Delaware, Georgia, South Dakota, Tennessee and Utah—were moving close to that point.

This story provides a cautionary tale for policy makers today.

Most states employ a multiyear smoothing process, which evens out gains and losses over time, to calculate the value of their assets. For that reason, pension funding levels have continued to experience the effects of poor returns in fiscal years 2001 and 2002,<sup>6</sup> even

though investment returns have done well recently. States have responded to their lowered pension funding levels with caution, enacting relatively few benefit increases in the past several years. States such as Rhode Island, Kansas and Illinois have implemented reforms to try to reduce long-term costs.<sup>7</sup>

But in the next year, there is a chance that pension funding levels will start to rise again, as the bleak returns of the early 2000s are removed from the picture. The big question is whether state leaders will learn the lessons of the past decade or whether they will respond to rising funding levels as many did in the period between 1999 and 2001.

One basic fact significantly affects all retiree benefit equations: While funding levels may rise and fall with the economy, once given, a defined benefit is very difficult to take away.

## 2. Retiree health care costs are rising dramatically

Retiree health benefits have been offered to public sector employees for decades, but their long-term costs have received relatively little attention. That changed in 2004, when the Governmental Accounting Standards Board (GASB) adopted new standards that ask governments to calculate the long-term actuarial liabilities for non-pension benefits, called “other post-employment benefits” (OPEB), using an approach similar to the one they take for pensions.<sup>8</sup> For the largest governments, including all states, these numbers will be reported for the first time in fiscal year 2008 financial reports.<sup>9</sup>

In some states, the actuarial unfunded liability for non-pension benefits just for state employees is greater than the aggregate unfunded liability for all their pension plans. This is because states have long set aside money for future retirees in their pension systems, but most states have paid for other post-retirement benefits on a pay-as-you-go basis. Each year, as the number of retirees grows and medical costs go up, so does the bill that must be paid out of current revenues.

Exhibit 1-2 shows eight of the 15 states in which the unfunded actuarial accrued liability (UAAL) for retiree health and other post-employment benefits for state employees is greater than the aggregate unfunded actuarial liability for pensions.

| States      | OPEB UAAL    | Pension UAAL | States       | OPEB UAAL    | Pension UAAL |
|-------------|--------------|--------------|--------------|--------------|--------------|
| California  | \$47,878,000 | \$46,673,644 | Hawaii       | \$6,791,000  | \$5,132,028  |
| Connecticut | \$21,681,000 | \$14,914,600 | Maryland     | \$14,543,000 | \$7,634,087  |
| Delaware    | \$4,410,000  | \$207,635    | Pennsylvania | \$13,501,000 | \$12,223,300 |
| Georgia     | \$4,905,000  | \$2,503,741  | Tennessee    | \$2,305,000  | \$366,114    |

NOTE: PCS assembled these data from 2006 Comprehensive Annual Financial Reports for all 50 states, and their respective pension plans. Additional data were obtained from 2006 actuarial valuations of state pension systems and actuarial valuations of other post-employment benefits when available.

SOURCE: Pew Center on the States

### 3. The gap between private and public sector benefits is expanding

Private sector retiree benefits differ greatly, depending on the size of companies, the level of unionization and the industry.<sup>10</sup> But in general, the private sector never offered the level of benefits that have been traditionally available in the public sector. At its high point in 1980, only about 35 percent of private sector workers had defined benefit pension plans.<sup>11</sup> That number is expected to drop to 13 percent by 2016, according to Dallas Salisbury, chief executive officer of the Employee Benefit Research Institute (EBRI).

As Exhibit 1-3 shows, public sector employees are far more likely to receive retirement benefits—and the gulf between private and public sectors continues to grow. While there are signs that governments are instituting some reforms to scale back benefits, particularly for new employees, the pace of change is dramatically slower than in the business world.

In spring 2007, EBRI and Mercer Human Resource Consulting surveyed private sector defined benefit sponsors and found that more than 35 percent had made changes to their plan in the past two years. About a quarter had closed the plan to new hires, while nearly 13 percent had frozen their plans for all members.<sup>12</sup>

About a third of the organizations that had not changed their plans said they intended to do so in the next two years. And 19 percent said they were considering closing the plans to new hires. The vast majority of private sector companies that intend to shift away from defined benefit systems also say they will increase contributions to defined contribution plans.<sup>13</sup>

The same phenomenon has taken place with retiree health benefits. According to the Kaiser Family Foundation, only a third of big companies offer retiree health insurance. The number has been cut in half since 1988.<sup>14</sup> Of those that do offer benefits, they tend to be considerably less generous than those offered by state government. The Citizens Budget Commission in New York took a look at employers that offer retiree health coverage and found that 10 percent pay the full premium, compared with 32 percent in the states.<sup>15</sup>

The gap between public and private sector benefits fuels the political debate, as taxpayers notice that they are contributing to government employee retirement benefits that are increasingly unavailable in the private sector. This disparity—and resulting pension envy among private sector employees—has generated a wide variety of political reactions, with some calling for a reduction in government

benefits and others decrying the declining benefits in the private sector and citing the public sector as an example of how long-term employees should be treated. "The larger issue of what working people are entitled to in our society needs to be considered too," wrote Jon Shure, president of the New Jersey Policy

Perspective in a commentary in the New Jersey section of the *New York Times* on November 26, 2006. "Is one group getting plush benefits at the expense of the other? Or, rather, is it government's responsibility to set an example for what the private sector should do as well?"

## 4. The number of retirees increases every year

The number of retirees will continue to grow as the baby boomer generation reaches retirement age—a massive demographic shift that will affect government on all levels and across sectors. The number of Americans over age 65 increased eleven-fold from 1900 to 1997. Steady increases have continued since then, but the growth in the elderly population will accelerate even more with the aging of the baby boom generation, with a projected increase of 80 percent between 2010 and 2030.<sup>16</sup> By 2030, 71 million Americans—one of every five people—will be over 65, according to projections from the Social Security Administration.<sup>17</sup>

Meanwhile, the public sector will face an escalating number of retirements sooner than

the private sector because of the older average age of public employees. In Illinois, for example, the state comptroller reports that in fiscal year 2006, 65 percent of public employees were in their 40s and 50s—up from 41 percent in 1986.<sup>18</sup>

As the number of retirees multiplies, the enormous variation in states will become more pronounced. States with large unfunded actuarial liabilities either in health benefits or pensions will face increasingly large annual costs to provide benefits that were promised. California provides a telling example: The Center for Government Analysis reports the \$4 billion required to pay for California's annual state and local retiree health costs in 2006 will escalate to \$6 billion in 2009, almost \$10 billion in 2012 and \$27 billion by 2019.<sup>19</sup>

### 1-3 A PICTURE OF PRIVATE AND PUBLIC RETIREMENT BENEFITS

| Compensation/Benefit               | Private Sector Employees | Public Sector Employees |
|------------------------------------|--------------------------|-------------------------|
| Defined benefit plan               | 20% <sup>1</sup>         | 90% <sup>2</sup>        |
| Median pension in 2005             | \$7,692 <sup>3</sup>     | \$17,640 <sup>4</sup>   |
| Retiree health benefit of any kind | 33% <sup>5</sup>         | 82% <sup>6</sup>        |

1 Data from the U.S. Bureau of Labor Statistics, "National Compensation Survey: Employee Benefits in Private Industry in the United States", (March 2007) 7, <http://www.bls.gov/ncs/ebs/sp/ebsm0006.pdf>

2 Data from Employee Benefit Research Institute, "Fundamentals of Employee Benefit Programs, Part Five: Public Sector," 2005:16. <http://www.ebri.org/pdf/publications/books/fundamentals/Fnd05.Prt05.Chp40.pdf>

3 Data from Debra Whitman and Patrick Purcell, "Topics in Aging: Income and Poverty Among Older Americans in 2005," Congressional Research Service, September 21, 2006.

4 Ibid.

5 A little more than a fifth of large employers that offer retiree health pay no part of the premium, according to the Citizens Budget Commission in New York. New York's Citizen Budget Commission, "The Case for Redesigning Retirement Benefits for New York's Public Employees," April 29, 2005.

6 The 82 percent figure pertains to state and local governments that have more than 200 employees.

SOURCES: Defined benefit data from BLS/EBRI; median pension data from Congressional Research Service; and Retiree health data from Kaiser Family Foundation.

*California's annual state and local retiree health costs of \$4 billion in 2006 will escalate to \$6 billion in 2009, almost \$10 billion in 2012 and \$27 billion by 2019.*

## 5. People are living longer

Life expectancy has trended upward for the U.S. population, from 69.7 years in 1960 to a projected 79.2 years in 2015, according to the National Center for Health Statistics. Some of this change stems from a drop in infant mortality, but it also reflects improvements in health care for adults.<sup>11</sup>

Given the financial pressures that result from increased longevity, the Social Security Administration is gradually shifting its retirement age upward, based on birth year. For people born before 1943, full Social Security benefits will kick in at age 65, but the retirement age will escalate. For example, a person born in 1967 or later will have to wait until age 67 to qualify for full Social Security. Some observers predict that when Social Security is next reformed, the retirement age will go up even further.

Many private sector companies that offer retirement benefits conform their retirement ages to those provided by the federal government. But for states and localities, the eligibility age for receiving full benefits has traditionally been much lower. A December 2005 study from Wisconsin's Legislative Services Council noted that only Minnesota had conformed to Social Security's practice of

increasing retirement age over time. Of 87 plans studied across the 50 states, 85 allowed retirement with full benefits at age 62 or earlier for individuals with long service, and 57 provided retirement at age 62 or lower with only 10 years or fewer of service. Only two plans stipulated that it was necessary to reach age 65 to receive full benefits.<sup>12</sup>

In addition, some public sector employees (for example, police and corrections officers) who are in hazardous jobs or in jobs that require heightened physical strength or agility are eligible for full retirement benefits at even earlier ages. Offering benefits at an early age greatly affects health care costs because Medicare coverage has not yet kicked in. For this reason, it is generally much more expensive for governments to provide retirement benefits for pre-Medicare retirees.

The Wisconsin report noted that at the end of 2005, states were still moving toward earlier retirement ages; nine plans had reduced normal retirement provisions since 2000 and 10 had reduced the minimum age or years of service required for early retirement. Since 2005, however, some states, presumably preparing for the significant demographic shifts on the horizon, have started to reverse course.<sup>13</sup>

# Endnotes

- 1 United States Government Accountability Office, *State and Local Government Retiree Benefits: Current Status of Benefit Structures, Protections and Fiscal Outlook for Funding Future Costs*, report to the Committee on Finance, U.S. Senate (September 2007).
- 2 Total assets of retirement plan and their allocation are based on Federal Reserve Board, *Flow of Funds Accounts of the United States, Z1*, Release June 7, 2007.
- 3 A list of pension and retirement legislation for the 50 states for each of the last nine years is available at the National Conference of State Legislatures (NCSL) Web site at [http://www.ncsl.org/programs/fiscal/all\\_pensun.htm](http://www.ncsl.org/programs/fiscal/all_pensun.htm).
- 4 Up through 2006, New York has used a method of accounting for its pension benefits that doesn't yield a funding ratio. The Governmental Accounting Standards Board (GASB) has implemented a new standard that requires governments that use this aggregate cost method to employ the more common entry age normal method to provide funding information. New York officials say their internal calculations, based on an entry age normal approach, indicate that in 2006, their pension funds were more than 100 percent funded.
- 5 Wisconsin's pension system is funded at 99.57 percent, and rounded up for the purposes of this study.
- 6 Forty-six states use a fiscal year that starts July 1 and runs through June 30. Fiscal year 2001 refers to the year that ended June 30, 2001.
- 7 See NCSL Web site, "Pension and Retirement Plan Enactments," [http://www.ncsl.org/programs/fiscal/all\\_pensun.htm](http://www.ncsl.org/programs/fiscal/all_pensun.htm).
- 8 These standards are dubbed GASB 43 and GASB 45. GASB 43 addresses reporting on other post-employment benefit plan assets by a trustee or plan administrator, while GASB 45 addresses accounting and reporting of these benefits by the employers themselves—for example, the state governments. These benefits are dominated by retiree health care, but also may include life insurance, dental, disability or other non-pension benefits.
- 9 These standards have sparked considerable controversy and a small rebellion in Texas, where Governor Rick Perry signed a bill in spring 2007 that gives the state and local governments the option of accounting for OPEB using standards developed by its own comptroller in place of the GASB standards. The argument against GASB's approach, first articulated in Travis County, was that Texas governments offered retiree benefits on a year-to-year basis, that these benefits were entirely dependent on the current budget situation and that there was no implied promise of future benefits, according to Paul Maco, a partner with the law firm Vinson and Elkins, which was involved in the initial Travis County study of this issue.
- 10 Craig Copeland, "Employment-Based Retirement Plan Participation: Geographic Differences and Trends, 2005," *Employee Benefit Research Institute Issue Brief*, no. 299 (November 2006): 8-9.
- 11 Pension Benefit Guaranty Corporation, *Pension Insurance Data Book 2005*, no. 10 (Summer 2006): 60, <http://www.pbgc.gov/docs/2005databook.pdf>.
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- 22 William Ford, senior staff attorney for the Wisconsin Legislative Council, is currently working on the 2007 version of the Wisconsin report. In collecting the 2006 data, he said he is seeing "markedly fewer states that are reducing their normal retirement date requirements or early retirement ages."
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# Glossary

**ACTUARIAL ACCRUED LIABILITY (AAL)** – The total value of pension benefits owed to current and retired employees or dependents based on past years of service.

**AMORTIZATION PERIOD** – The span of time set to fully pay for actuarial accrued liabilities. To adhere to generally accepted accounting principles (GAAP), governments must use a period of 30 years or less to calculate their net pension or other post-employment benefits obligation and their expense on an annual basis. Some states, which are not in compliance with GAAP, choose longer periods for funding purposes to reduce current contributions.

**ANNUAL REQUIRED CONTRIBUTION or ACTUARIALLY REQUIRED CONTRIBUTION (ARC)** – The amount of money that actuaries calculate the employer needs to contribute to the plan during the current year for benefits to be fully funded by the end of the amortization period. (This calculation assumes the employer will continue contributing the ARC on a consistent basis.) The ARC is made up of “normal cost” (sometimes referred to as “service cost”)—the cost of benefits earned by employees in the current year—and an additional amount that will enable the government to reduce unfunded past service costs to zero by the end of the amortization period.

**ASSETS** – The amount of money that a pension fund has on hand to fund benefits. The assets (also known as plan assets) build up over time, generally from three sources: employee contributions, employer contributions and investment returns. Plan assets generally are expended to pay pension benefits when due, refund contributions of members who leave

the plan before qualifying for benefits and cover the plan’s administrative expenses.

**ASSUMPTIONS** – Estimates made by actuaries about the future behavior of various economic and demographic factors that will impact the amount of pension benefits owed over time. These estimates, of factors such as investment returns, inflation rates and retiree life spans, are used by actuaries to calculate the AAL and the ARC.

**DEFINED BENEFIT PLAN** – A plan that promises its recipients a set level of benefits, generally for life. In the case of pension benefits, it is based on a “defining” formula that usually includes the number of years served and an employee’s salary multiplied by a preset figure (e.g., 30 years x \$40,000 x 1.75). In the case of retiree health, the promised benefit is typically the payment of a portion of (or the entire) medical insurance premium. However, it can also be based on a defined formula much like a pension. In this case, a certain monthly income is promised that must be used for health expenses.

**DEFINED CONTRIBUTION PLAN** – A plan to which the employer, and often the employee, contributes a defined amount (e.g., 8 percent of salary) to an individual account in the employee’s name while the employee is in active service, but which does not guarantee any set benefit. The amount available for retirement is based solely on the amount of money that has been saved, along with investment income credited to the employee’s account. When these funds are used up by the retiree, the benefit is exhausted.

**NORMAL COST** – The cost of benefits earned by employees in any given year.

**OTHER POST-EMPLOYMENT BENEFITS (OPEB)** – Benefits other than pension benefits that an employer provides to former employees as a deferred form of compensation for their services. OPEB is defined by GASB as including (1) post-employment health care benefits and (2) other types of post-employment benefits—for example, life insurance—if provided separately from a pension plan.

**PAY-AS-YOU-GO** – A method of financing pension benefits or OPEB in which the amount contributed by the employers or employees each year is approximately the amount needed to pay the benefits currently due and payable to retirees (or the premiums currently due and payable to provide for health care coverage or other non-pension benefits for retirees for the current period). Under this method, the source of financing for current benefits often is the employer's current collections.

**SMOOTHING** – To counter the natural volatility of the stock market, the vast majority of states do not measure the funded status of pension benefits using the current market values of plan assets. Instead, most use methods of determining the actuarial value of plan assets that average out the effects of increases or decreases in market values each year over several years (generally four or five). The effect of this approach is to mute the immediate impact during a severe market drop or spike in growth and to spread it out over time.

**UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)** – The difference between the actuarial accrued liability and the actuarial value of plan assets on hand. This is the unfunded obligation for past service.



# The Basics of Funding

The following principles apply to both pensions and post-employment health care benefits, based on a general consensus of experts in the field:

- The long-term costs of retiree benefits are based on a passel of variables, the future values of which are unknown. Actuaries try to pin down these variables through the use of best or at least reasonable "assumptions" and a professional methodology developed to manage multiple uncertainties. If all the actuaries' projections were correct over time, governments funded benefits earned by employees every year and no new benefits were added, then pensions and retiree health benefits would be fully funded by the end of the amortization period.
  - When a state has an unfunded actuarial liability, it is often because over time those "ifs" did not happen. To pay for the unfunded liability, governments add another chunk of money to their annual contribution to spread the unpaid costs over the amortization period, which is usually 30 years. Generally, when funding ratios decline, employer contributions need to increase.
  - Overly optimistic assumptions, benefit increases and underfunded contributions all put greater demands on future government payments.
  - Inaccurate assumptions also can result in a situation where funding levels rise unexpectedly. This occurred in the late 1990s when most investments earned higher than anticipated returns, which prompted some governments to skip the ARC payment during a so-called funding holiday.
- However, as the recession in the early half of this decade demonstrated, bad years often follow good ones and the contribution holidays aggravated the impact of market losses.
- In a mature pension plan that is reasonably well funded, most of the total additions to plan assets each year will come from investment returns of assets that have been set aside over decades. In a poorly funded plan (pensions or OPEB), more future money comes from direct state contributions and from the same state coffers that fund education, economic development and health care.
  - A poorly funded plan or one that is moving in the wrong direction may also eventually cause trouble for an organization's credit rating. This could increase the cost of borrowing money, which will make it more expensive for governments to pay for infrastructure improvements such as bridges and roads that typically are supported through borrowing.
  - Although states aspire to having fully funded pensions, it is important to recognize that "underfunding is a matter of degree," said Keith Brainard, research director for the National Association of State Retirement Administrators (NASRA).<sup>11</sup> The important point is not whether states have reached 98 percent or 101 percent funding; it is the direction in which they are heading and the distance they have to travel to get there.

# Methodology

This report is the product of an extensive data collection effort, a review of the literature, a thorough analysis of actuarial studies and evaluations, and interviews with experts and individuals knowledgeable about particular states.

To analyze states' pension systems, PCS examined state annual reports with information over a 10-year time period. Data in the pension section of this report were obtained from State Comprehensive Annual Financial Reports (CAFRs) as well as CAFRs from state pension systems. The numbers aggregate multiple plans in the state pension system and include, in many instances, municipal workers and teachers. PCS did not attempt to disaggregate municipal workers because this could not be accomplished for every state.

To analyze states' other post-employment benefits, PCS reviewed CAFRs and the preliminary actuarial assessments of state non-pension liabilities over the next 30 years. In this case, PCS focused the analysis on state employees alone, in order to achieve a more consistent comparison, because states vary

greatly in whether non-pension retiree benefits for teachers are funded at the state or local level. Armed with those preliminary assessments, gathered from a variety of government offices at the state level, PCS assembled a comprehensive and up-to-date compilation of these liabilities, the amounts the states are currently paying for retirement benefits and their funding practices. PCS collected actuarial valuations in spring and summer 2007, continuing through the fall to pursue valuations from states that had not been completed previously. One caveat: Many of these calculations are preliminary and are likely to change as health plans are altered and actuaries re-examine the subject. A handful of states had not finished actuarial valuations by the completion of this report. Where feasible this research was augmented with interviews with actuaries, economists, state controllers, auditors, legislative analysts and other experts in the field.

The expert statements included in this report come directly from interviews conducted by PCS between September 2006 and October 2007, unless otherwise noted. A complete list of resources can be found on PCS's Web site at [www.pewcenteronthestates.org](http://www.pewcenteronthestates.org).



Figures are in thousands.

| State                   | Actuarial liability | Unfunded liability | Annual required contribution | Actual payments in 2006 | State                             | Actuarial liability | Unfunded liability | Annual required contribution | Actual payments in 2006 |
|-------------------------|---------------------|--------------------|------------------------------|-------------------------|-----------------------------------|---------------------|--------------------|------------------------------|-------------------------|
| Alabama <sup>1</sup>    | \$33,961,978        | \$5,522,322        | \$684,861                    | \$684,861               | Montana                           | \$8,584,710         | \$1,675,759        | \$157,078                    | \$239,822               |
| Alaska                  | 13,090,657          | 3,369,759          | 423,666                      | 259,496                 | Nebraska                          | 7,395,639           | 832,277            | 210,977                      | 210,977                 |
| Arizona                 | 34,353,623          | 5,274,143          | 640,199                      | 640,199                 | Nevada                            | 25,794,627          | 6,482,437          | 1,058,892                    | 1,015,757               |
| Arkansas                | 19,114,260          | 3,409,290          | 463,786                      | 500,475                 | <b>New Hampshire</b>              | 6,402,875           | 2,474,605          | 170,578                      | 170,578                 |
| California <sup>1</sup> | 355,483,412         | 46,673,644         | 6,342,208                    | 6,265,138               | <b>New Jersey</b>                 | 109,610,983         | 23,141,602         | 2,180,913                    | 591,342                 |
| Colorado                | 49,490,604          | 12,803,562         | 978,924                      | 609,853                 | New Mexico                        | 72,544,980          | 4,076,390          | 484,506                      | 439,274                 |
| Connecticut             | 34,190,000          | 14,914,600         | 1,031,000                    | 1,031,000               | New York <sup>2</sup>             | 140,150,000         | 0                  | 2,782,147                    | 2,782,147               |
| Delaware                | 6,416,275           | 207,635            | 122,914                      | 118,950                 | North Carolina                    | 61,827,530          | 2,954,470          | 516,570                      | 516,689                 |
| Florida                 | 110,977,831         | -6,181,784         | 2,193,928                    | 2,106,171               | North Dakota                      | 3,473,500           | 681,600            | 81,586                       | 54,089                  |
| Georgia                 | 65,994,177          | 2,501,741          | 1,117,742                    | 1,117,742               | Ohio                              | 139,251,460         | 26,200,600         | 2,604,033                    | 2,433,921               |
| Hawaii                  | 14,661,399          | 5,132,028          | 423,446                      | 423,446                 | <b>Okahoma</b>                    | 27,839,660          | 11,468,080         | 1,053,336                    | 763,719                 |
| Idaho                   | 9,951,100           | 525,200            | 244,600                      | 262,800                 | Oregon                            | 51,254,000          | 5,362,000          | 488,500                      | 492,408                 |
| Illinois                | 103,073,463         | 40,732,132         | 3,085,601                    | 1,025,341               | Pennsylvania                      | 91,494,400          | 12,223,300         | 1,877,118                    | 652,231                 |
| Indiana                 | 28,953,950          | 10,565,887         | 947,890                      | 955,620                 | <b>Rhode Island<sup>1</sup></b>   | 9,822,437           | 4,329,104          | 193,394                      | 193,394                 |
| Iowa                    | 21,651,122          | 2,507,086          | 387,542                      | 324,677                 | <b>South Carolina<sup>1</sup></b> | 33,712,394          | 9,134,923          | 689,400                      | 690,374                 |
| Kansas                  | 17,552,000          | 5,364,000          | 471,424                      | 298,883                 | South Dakota <sup>1</sup>         | 5,903,592           | 197,808            | 81,620                       | 81,620                  |
| Kentucky                | 30,659,476          | 9,303,806          | 564,361                      | 483,740                 | Tennessee                         | 28,117,127          | 366,114            | 665,879                      | 665,879                 |
| Louisiana               | 33,358,313          | 10,978,703         | 1,066,311                    | 1,075,547               | Texas                             | 132,087,713         | 15,140,379         | 2,315,721                    | 1,944,441               |
| Maine                   | 12,357,418          | 2,826,820          | 294,888                      | 312,017                 | Utah                              | 18,783,454          | 689,963            | 535,152                      | 535,152                 |
| Maryland                | 41,537,681          | 7,614,087          | 874,079                      | 716,745                 | Vermont                           | 3,195,421           | 256,358            | 102,681                      | 78,358                  |
| Massachusetts           | 50,431,974          | 14,055,201         | 1,320,178                    | 1,242,751               | Virginia <sup>1</sup>             | 51,683,000          | 9,934,000          | 988,662                      | 857,660                 |
| Michigan                | 63,268,090          | 12,155,000         | 1,564,557                    | 1,297,741               | <b>Washington<sup>1</sup></b>     | 29,074,500          | 5,984,300          | 1,421,200                    | 396,100                 |
| Minnesota               | 30,787,259          | 2,111,112          | 284,372                      | 280,874                 | <b>West Virginia</b>              | 11,774,772          | 5,330,649          | 484,234                      | 879,888                 |
| Mississippi             | 25,680,550          | 6,865,090          | 537,721                      | 537,580                 | Wisconsin                         | 73,735,800          | 320,500            | 569,000                      | 569,000                 |
| Missouri                | 43,856,576          | 8,426,945          | 1,048,125                    | 852,530                 | Wyoming                           | 6,215,540           | 316,168            | 78,257                       | 117,074                 |

1 2005 data were used to report on the state's liability and unfunded liability, as 2006 data were not available from the state.

2 See p. 4, page 13

3 2005 data were used to report on the state's liability and unfunded liability, as 2006 data were not available from the state. Rhode Island did not have financial reporting on its specific pension plans after 2004 at the time of this report.

4 South Dakota has two plans, 2006 data were only available for its major retirement plan and 2005 figures for its smaller plan were used in the total calculation.

NOTE: States in bold represent pension systems below 80 percent funded.

Actuarial liability is the total value of pension benefits owed to current and retired employees or dependents based on past years of service.

Annual required contribution is the amount of money that actuaries calculate the employer needs to contribute to the plan during the current year for benefits to be fully funded by the end of the amortization period, which is typically 30 years or less.

SOURCE: Pew Center on the States

## Saving for the Bill Coming Due

FOR THE SAKE OF SIMPLICITY, it may be tempting for the press and policy makers to paint a one-size-fits-all portrait of state pensions. But each state has its own complicated story to tell. From 2000 to 2006, for example, New Hampshire's pension funds took a tumble, while North Carolina's funding status was nearly unchanged. Kansas<sup>1</sup> set aside only about two-thirds of its annual required pension contribution in 2006, while neighboring Nebraska set aside the full amount.<sup>2</sup> About half the states have troubling unfunded liabilities in some of their pension plans and the other half do not, at least at the moment.

Overall, the national pension "balance sheet" is in relatively decent shape,<sup>3</sup> with 30 state pension systems more than 80 percent funded (Exhibit 2-1). Almost half of those are over 90 percent funded, according to PCS research. However, the remaining 20 states have funding ratios of less than 80 percent, meaning that their proportion of assets to liabilities may create fiscal stress if unaddressed, according to many experts in the field (see Exhibit 2-1—the 20 states are in bold).

All told, states have contributed enough money—about \$1.99 trillion—to cover roughly 85 percent of their \$2.35 trillion<sup>4</sup> long-term

liability for their retirees' pensions over the next 30 years. Still, that leaves them with about \$361 billion in unfunded liabilities.

Large underfunded long-term liabilities put future budgets—and taxpayers—at risk. For years, West Virginia has had difficulty putting sufficient money into education or health care because of its need to cover huge pension liabilities the state accrued decades ago, according to Governor Joe Manchin III.<sup>24</sup> And while West Virginia has been aggressive and responsible in overfunding its annual pension contribution over the past decade—the state's system is now 55 percent funded, compared with a 39 percent funding level in 2003—the funding mistakes of the past make catching up extremely difficult (see Appendix Exhibits A-1 and A-2).

*20 states  
have funding  
ratios of  
less than  
80 percent*

States can delay action to deal with an underfunded pension, but only temporarily. The share of the population aged 65 or older will grow to 20 percent in 2030, according to the U.S. Census Bureau. In 1950, the number of workers relative to retirees was 16.5 to 1, today the ratio is 3.3 to 1, and it will move down to 2 to 1 during the next 40 years, according to Census estimates.<sup>17</sup> When a pension system is fully funded, the ratio of workers to retirees matters little, because the money for retirees is already in

the bank.<sup>39</sup> But when a plan is underfunded, making the payouts can become extremely burdensome for states.

PCS's research highlights two important rules for states to follow if they are to address their long-term pension obligations cost-effectively. Agreement on these points is nearly universal, and they have been voiced by experts ranging from researchers at rating agencies such as Standard & Poor's and academic institutions such as the University of Pennsylvania, the University of Michigan and Harvard University to retirement administrators in a number of states. Following these sound financial principles allows states to evenly spread out the costs of long-term benefits over time, rather than have low costs now and a substantial—and potentially budget-breaking—cost spike later.<sup>41</sup>

**FULL FUNDING.** First, it is critical for a state to diligently meet its own yearly goal for funding its long-term pension liability (known in actuarial terms as the actuarial required contribution, or ARC) and to base that goal on accurate assumptions.

Florida's legislature is displaying a high degree of fiscal caution that has presumably helped the state achieve the fully funded status it has held since 1998. The state passed legislation that basically reserved a portion of the pension surplus to serve as a safeguard against unexpected increases in liabilities, providing the state with extra financial security.<sup>42</sup> North Carolina has also had consistently high levels of funding, even when the stock market dropped or the state was under fiscal stress. The state has been disciplined about paying its annual bill and maintaining the financial health of its pension system. Illinois and New Jersey are examples of poor financial decision-making as both states have actively reduced

contributions to their plans over the past 10 years, leading to chronic underfunding.

**AFFORDABILITY OF NEW BENEFITS.** Second, a state must make sure it can afford new promises, as once a benefit increase is made it is extremely difficult to take back. This means the state must carefully consider the long-term impact of benefit changes, including shifts in vesting periods, early retirement programs, cost-of-living adjustments, salary calculation methods, and a host of other factors that affect pension amounts and the states' own long-term fiscal health. States, in general, have become more careful about adding benefits in the last few years and several have enacted legislation that establishes safeguards against benefit increases enacted in haste. A 2007 Hawaii law, for example, bars benefit enhancements between January 2, 2008 and January 2, 2011 if the plan has an unfunded accrued liability. A 2007 Missouri law prevents pension plans in the state from increasing benefits if they are less than 80 percent funded.<sup>43</sup>

Finally, states can take additional steps to reduce their long-term pension obligations. Among other measures, they can close loopholes in pension systems that allow employees to inflate the amount they collect after retirement. They can consider creating hybrid plans that combine elements of defined contribution and defined benefit plans. And they can improve oversight and governance of their system so that decisions are well informed by up-to-date, accurate and reliable data, and to ensure the funds are well managed.

The detailed analysis that follows seeks to help state policy makers and the public answer these critical questions:

- What differences are there among the states in how they manage their pension plans?

- What are the fundamental reasons for these differences?
- What tools can troubled states bring to bear to prevent problems in the future, and what can they do to ameliorate the problems of today?



## Pension Funding Levels: The State of Play

Generally, the money to pay for pensions comes from three sources: employees' contributions; employer contributions, and investment returns. Employee contributions, which are required in the vast majority of states, must be paid annually. But in many states, governments—the employers—are able to put off some of their own required payments. These payments include the cost of benefits earned by their employees in any given year, as well as contributions that will help make up for past underfunding and lead to full funding of the plan over the amortization period (typically 30 years). If the government's contribution falls short, the costs for services rendered in that year will be shifted to future taxpayers and the state also will forego the advantage of investment returns on those dollars.

Exhibit 2-1 shows how well, or how poorly, the 50 states are doing at funding their long-term pension obligations, and shows the great variation in the level of funding of states' pension plans. These aggregate figures, which include all pension plans that states listed in their latest comprehensive annual financial reports, give a snapshot of funding status as of June 30, 2006.

According to PCS research, the average funding level in 2006 was 82 percent, a drop from the high point in 2000 when the mean ratio of pension assets to pension liabilities was 97 percent.

Note that the 82 percent average is lower than the 84 percent average funding level reflected in the 2006 Public Fund Survey data compiled by the National Association of State Retirement Administrators. That survey includes the largest public retirement systems in the United States, focusing chiefly on systems for general employees, public school teachers and public safety personnel. PCS's report includes all pension funds covered in the state comprehensive annual financial reports. Teacher and state employee funds dominate in numbers, but the reports also include plans for elected officials and judicial, public safety, corrections and university employees, and, in some cases, municipal plans operated by the state.

# What Drives Differences in Funding Levels?

Our analysis shows that states have considerable control in either moderating the bad times through effective planning or diminishing the good times through poor decision-making. The 1990s were a time of growth for pension plans as a healthy economy and a booming stock market enabled swift rises

in pension funding levels. In 2000, half of the states were fully funded. But in that year, dot.com problems were already having a negative impact. The 9/11 attack and continuing stock market drop in 2002 devastated the asset levels of many pension plans. Between 2000 and 2002, the average

## A Word about Pension Funding Levels

The data in Exhibit 2-1 and Appendix Exhibits A-1 and A-2 are derived from the work of actuaries, who develop a variety of assumptions<sup>34</sup> tailored to the particular situation of individual states. Tiny variations in these assumptions cascade like numerical snowballs into dramatic differences between states. For example, New Hampshire calculated its actuarial accrued liability assuming it would receive a return of 9 percent on the funds it had invested—higher than any other state. If it used the same 7.5 percent assumption used by West Virginia, its unfunded liability would rise considerably.<sup>35</sup>

An important caveat to these exhibits: A major difference among states is the way they smooth out the impact of market changes over time. Currently, only a handful of states, including Idaho, Illinois, Oregon and West Virginia, use a fair market value approach for valuing their largest funds. Because they are looking at the current value, these states respond more dramatically to year-to-year shifts, but their numbers do not retain the impact of bad or good years over time. Otherwise, smoothing periods generally range from four years (for example, in Colorado, Louisiana and Ohio) to as many as 15 years in California. Not surprisingly, states with shorter smoothing periods will currently appear to have better funding levels than those with longer periods, because the down years in the early part of the decade are no longer reflected in their averages. Funding in Louisiana and Colorado has been on an upward trend since 2005, and Ohio started to show upward motion in 2006.

In addition, a few states use the “aggregate cost method” of accounting, which does not provide an unfunded liability amount. Washington and New Hampshire supplied notes in their annual reports that allowed researchers to derive this ratio. New York did not supply notes, but provided its internal calculations to PCS. A new standard from the Governmental Accounting Standards Board, GASB 50, stipulates that states provide unfunded liability calculations by using one of the five permissible actuarial cost methods other than aggregate cost.

A final concept to mention is the treatment of summary statistics. In calculating average funding rates for states in this report, we have simply taken all the state funding levels and taken the mean. However, one can also look at national funding levels by adding up the assets of all 50 states and dividing them by the liabilities of all 50 states. That number also reflects an aggregate picture of pension funding levels. Using this method generates substantially higher aggregate funding levels than simply averaging state funding levels, because the larger states have better funded pension plans than the smaller states.

pension funding level dropped from 97 percent to 89 percent, resulting in an increase of unfunded liabilities of \$166 billion. Furthermore, due to smoothing, many states were still feeling the effect of those bleak years up through 2006.

In general, states that are poorly funded have done a combination of three things over time: failed to annually pay their own actuarially required contribution; increased benefits, or made overly optimistic actuarial predictions. States with large underfunded pension plans will be forced to eventually meet those obligations, which will require increases in taxes or reductions in other spending. Thus, the states with unfunded liabilities are the ones that will face increased financial stress in the future to pay for obligations incurred in the past.

Over the long term, states control whether their pension plans will be appropriately funded. But decision-makers may have to grapple with tough choices that stem from previous policy decisions. In general, this is not necessarily an issue of pensions being too generous. States offer pensions and other benefits in part to attract and retain skilled workers despite the lower salaries offered in the public sector.<sup>36</sup> The important consideration is that when states, for whatever reason, decide to incur an expense like employee benefits, they also should have a plan for how to pay for that expense. This is what some states have failed to do.

*States have considerable control in either moderating the bad times through effective planning or diminishing the good times through poor decision-making.*

## A Two-State Comparison

Comparing states is always a tricky business. The details of how pension benefits and costs are calculated vary tremendously. Averages can be misleading, and a huge number of factors, such as the underlying financial assumptions, have an impact on the costs of the system and the benefits received.

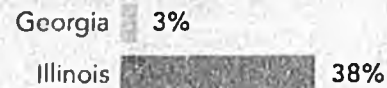
But putting aside the kinds of calculations that leave even experts scratching their heads, a very simple comparison of two states, Illinois and Georgia, is illustrative.<sup>37</sup> These two large states—ranked fifth and tenth in total population, respectively—have relatively similarly sized state employee plans but have taken very different approaches to funding

their pensions. As a result, in 2006 Georgia's pension fund was 96 percent funded, while the Illinois system was 60 percent funded.

Georgia's unfunded pension obligation, or UAAL, during the next 30 years is 30 percent of covered payroll, whereas the unfunded pension bill for the Illinois plan is 147 percent (Exhibit 2-2). The unfunded liability is 38 percent of 2006 total operating expenditures in Illinois and just 3 percent of total expenses in Georgia. The annual required contribution is 10 percent of payroll for both Illinois and Georgia; however, while Georgia was able to pay the contribution in full, Illinois paid only 33 percent of its required contribution in 2006.

While Georgia is fully funding its pension contributions, Illinois is failing to meet its obligations, leading to a big difference in the health of the two pension systems.

Unfunded pension obligations as a percentage of total state expenses



Unfunded pension obligations as a percentage of covered payroll\*



NOTE: Covered payroll includes all employees participating in the state's pension plan.  
SOURCE: Pew Center on the States

The problems with the Illinois pension system do not stem from unusual generosity to average employees. In fact, Illinois asks most employees to contribute 4 percent of their salary,<sup>18</sup> while Georgia's employee contribution is 1.25 percent.<sup>19</sup> The average pension in Illinois state government is on the low end compared with other states, according to an analysis by the Illinois Comptroller's office last winter. According to these figures, given a final salary of \$45,000 in each place and 30 years of service, the Georgia pension would pay out \$28,938 per year and the Illinois pension would be \$22,545 annually.<sup>20</sup>

According to a 2007 study by the Illinois Center for Tax and Budget Accountability, "The data make it clear that the state's unfunded pension liability accrued to date was not caused by overly generous benefits, high head counts, excessive costs or even poor investment returns. Instead, the real culprit has been and continues to be the repeated failure of the state to make its full annual employer contribution to the system."<sup>21</sup>

## Sound Principles and Promising Practices

Key to achieving a fully funded pension plan is a commitment to pay the actuarial required contributions (ARC) in full each year. The annual pension cost, which is calculated every year, is the amount of funding needed to pay for new liabilities accrued in that year as well

as to pay off a portion of the unfunded liabilities accrued in previous years. States that are able to pay the full ARC each year will experience a gradual reduction in unfunded liabilities until they are fully funded, provided that assumptions are accurate over the long

term and calculations take into account any additional benefits that have been granted.

Recently, the split between states meeting their funding requirements and those failing to do so is about 50-50. Exhibit 2-3 shows 10 leading states that have more than fully funded

their annual pension costs in 2006 and 10 states that failed to contribute what actuaries said they should. This annual pension cost is generated using one of the GASB-approved actuarial funding methods and is designed to distribute costs for worker benefits over the course of the workers' employment.

**2-3 PAYING THE ANNUAL PENSION BILL, 2006 - 10 LEADING STATES, 10 LAGGING STATES**



Section 2  
Pensions

SOURCE: Pew Center on the States; Based on States' 2006 Comprehensive Annual Financial Report Data.

A single year of adequate funding, however, does not add up to a properly maintained pension plan.<sup>12</sup>

States such as Alabama, Arkansas and North Carolina, which fully fund each year, seem to have established an ethos that mandates this fiscally sensible practice. Others, such as Virginia, Kansas and Massachusetts, have more erratic records.

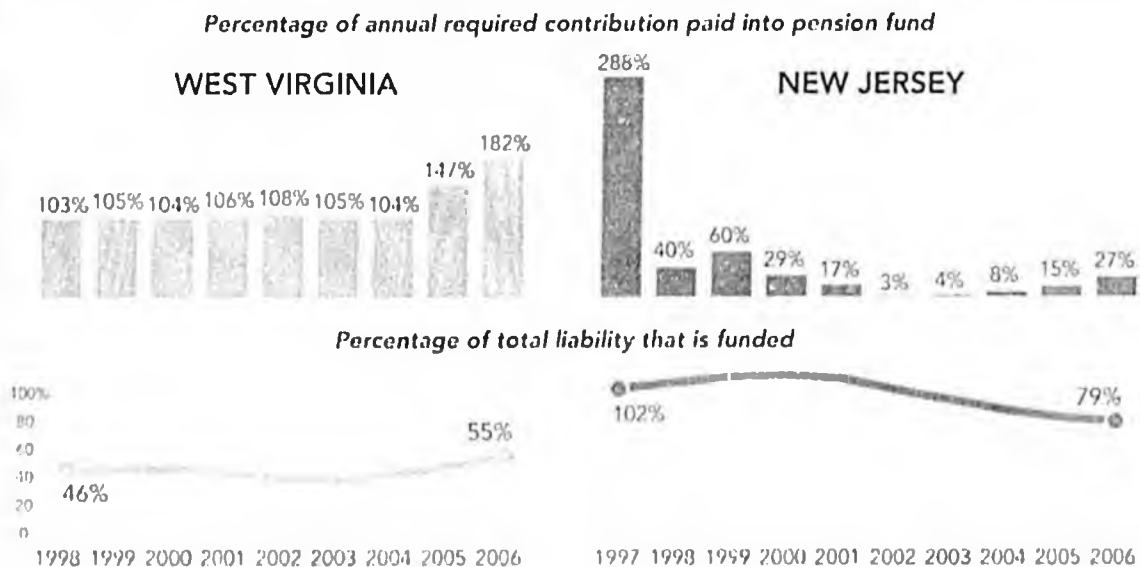
However, states that fund their required contributions at 100 percent each year—beginning as far back as 1997—could still have a dramatic unfunded liability today. Unfortunately, short-changing plans in decades past can have ripple effects many

years later. In addition, if actuarial assumptions missed the mark, even a 100 percent contribution may fail to move the state toward a fully funded position.

Nonetheless, a commitment to pay the ARC year after year is good practice, and it can substantially improve the position of even a poorly funded state like West Virginia. As Exhibit 2-4 demonstrates, West Virginia's performance in paying the annual pension cost over the past decade has improved vastly, and it is starting to pay dividends in addressing the state's unfunded liability. In a short time, from 2003 (its low point) to 2006, the state shrank its unfunded liability by 17 percent and \$1.1 billion.

**2-4 PAYING THE BILL ... OR FALLING BEHIND**

West Virginia's pension fund is improving thanks to diligence in making its required annual payments, while years of not paying enough has diminished New Jersey's pension system funding level.



NOTE: 1997 data unavailable for West Virginia.

SOURCE: Pew Center on the States; Based on States' Comprehensive Annual Financial Report Data

Other states, however, have proven unable or unwilling to raise the necessary funds to pay an actuarially sound amount into their pension fund. In New Jersey, for example, leaders skipped some required pension contributions that resulted in an \$8 billion shortfall between 1998 and 2003.<sup>13</sup> The low point came in 2002 when the state contributed \$16 million out of the \$560 million actuarially recommended amount, resulting in only 3 percent of the ARC being put into the pension fund. New Jersey's funded ratio stands at 79 percent in 2006 after being fully funded only four years before. New Jersey is an extreme example but, as Exhibit 2-4 shows, it is highly illustrative of how critical consistent contributions can be to a state's pension system.

Decisions to skimp on annual contributions have taken a dramatic toll on pension funding levels in other states as well. A few examples:

- **ILLINOIS.** The decision to cut pension contributions sharply in 1982 and 1983, followed by only moderate increases through 1995, are cited by the Illinois Comptroller as the root of the state's pension problems.<sup>14</sup> Although the state recently passed several long-term reforms to its pension system, the pattern of underfunding actuarially required contributions has not abated. The state used \$2 billion from a 2003 pension bond offering to make payments in fiscal years 2003 and 2004 and cut pension payments by \$2.3 billion in fiscal years 2006 and 2007, according to the Civic Federation of Chicago. The rationale was that savings to the pension system from the bond sale and funding reforms adopted by the legislature made those payment cuts possible, but longtime

observers of the state's troubled pension system were dismayed. "These partial pension holidays are short-sighted and ill-considered," said Civic Federation Vice President Lise Valentine. "You have to examine the pension holidays in the context of the overall budget, where we see expansions of other state programs and discretionary spending at the same time that pension contributions are cut. This demonstrates an unwillingness to fully fund the pension obligations and to pay for the true cost of employee benefits."

- **HAWAII.** Hawaii's budget director told Pew's Government Performance Project in 2000 that the state, facing enormous budget pressures, had failed to make pension contributions of \$44.1 million in 1999 and \$155.8 million in 2000. Data from the state's comprehensive annual financial reports show that pension contributions stood at about 83 percent of what actuaries required in 1999. In 2000, actual contributions met only 13 percent of the required amount. The following year, the state held back even further, contributing only about 5 percent. Since that time, Hawaii has solidly funded its pensions. But the three-year hiatus from full funding, coupled with investment losses, took a severe toll on the funding status of the

*"These partial pension holidays are short-sighted and ill-considered."*

*— Civic Federation Vice President Lise Valentine*

state employee plan, which dropped from its high of about 94 percent funded in 2000 to 65 percent funded at the close of 2006.

- **KENTUCKY.** Kentucky also had one of the most dramatic descents in funding levels, from about 111 percent funded in 2000 to about 70 percent funded in 2006. Employer contribution rates for both the Kentucky

Employees Retirement System and the State Police Retirement System have fallen short in nine of the past 15 years. According to the Legislative Research Commission, the pattern of reduced contributions continued for the past six straight years, including fiscal year 2007, resulting in "more than \$744 million in lost contributions and investment opportunities."<sup>45</sup>

## Additional Strategies for Ensuring Sound Pension Plans

Fully funding pension contributions each year requires a great deal of political fortitude and the kind of long-term thinking that is hard to come by, particularly in difficult economic times.

The good news is that there are additional measures states can take to have an impact on their long-term pension liabilities. These measures include:

**PLUGGING THE LEAKS:** Auditor reports are full of examples of loopholes within pension systems that allow individuals to inflate the amounts they collect after retirement. But states can close the loopholes and stem possible abuses.

**EVALUATING THE FISCAL IMPACT OF BENEFIT CHANGES:** Even tiny changes in benefits can result in very large long-term liabilities. Some states have started to require that a careful actuarial assessment of long-term costs accompany any proposed pension benefit increase.

**CONSIDERING HYBRID PLANS:** Despite legislative initiatives in some states to convert state pension plans to defined contribution systems (in which recipients are promised only

that a set amount of cash will be put aside for them each year), the defined benefit plan format (in which recipients are promised a specified package upon retirement) remains the dominant and most popular form. Most professionals expect that defined benefit plans will remain the core retirement benefit for many years to come, in most states. But some states have begun experimenting with hybrid plans, which are a mix of defined benefit and contribution plans.

**REQUIRING FASTER, MORE ACCURATE FINANCIAL REPORTING:** Pension systems are extremely complex and difficult to compare due to the wide variety of choices that actuaries make when determining asset value, calculating actuarial liability, and setting funding and recommended contribution levels. Faster, clearer financial reporting among plans could improve the accuracy of actuarial projections and would provide policy makers and other state officials with the most current data to inform their decisions.

**IMPROVING PENSION OVERSIGHT:** Although the states have resisted suggestions that the federal government step in to provide more accountability for state and local pension

plans, many are starting to improve governance practices and provide greater oversight of their own plans. Commissions that pay attention to pension funding levels, benefits and practices can promote sustained, consistent attention on an issue that tends to float in and out of public awareness with changes in the economy.



## Plugging the Leaks

States can pull back on the amount of money that goes out in pension benefits without attacking the general principles of a defined benefit plan or the pension benefits on which the average employee relies. Here are a handful of issues to target, drawn from a PCS review of recent reports from auditors, legislative task forces, independent government watchdog groups, universities, pension systems and special commissions in the 50 states. The examples are representative of problems that have surfaced in multiple states.

**FINAL-SALARY INFLATION.** In general, the way pension benefits are calculated requires that "final salary" be multiplied by a preset formula based on the number of years employed. In several states and local governments, this practice has resulted in employees hiking up their salaries during the last years of their employment by any method allowed.

This is a particular problem in states such as Kentucky, where overtime pay is allowed to be included in the calculation,<sup>16</sup> and in New Hampshire, where accrued sick leave and vacation time can be used to increase final income.<sup>17</sup>

The fewer the number of years used to determine final salary, the greater the possibility that the figure can be manipulated. For this reason, several states have moved—or are trying to move—from a three-year average to a five-year average. Kansas and North Dakota passed legislation to change to five-year averaging in 2007,<sup>48</sup> and a change in Kentucky is scheduled to go into effect in 2009.<sup>49</sup> New Hampshire considered some reforms to its system in 2007, including changing from a three-year to a five-year average and preventing the use of accrued sick leave and vacation time in salary calculations, but the reforms did not pass.<sup>50</sup>

A related problem occurs when employees change jobs in the last years of their career so that the pension determination is based on a salary that is far from typical of their career. For example, in Iowa, former legislators often move into executive branch positions with salaries that pay two to three times the amount they received as a part-time legislator. "This is a bipartisan ploy that has played out regardless of the party in control of the executive branch for at least the last 20 years," said Randy Bauer, former Iowa budget director.

**INFLATING YEARS OF SERVICE.** Since the number of years worked is generally part of the formula for determining a pension, another

ploy for increasing the payout is to bulk up the number of years counted toward retirement. Until 2007, New Jersey made this easy for employees and elected and appointed officials by allowing pension credit for any year in which a minimum of \$1,500 was earned.<sup>51</sup> This allowed people to relatively easily add extra years of service to their pension calculation. In 2006, the New Jersey legislature considered but did not pass a change in the law to increase the threshold to \$5,000.<sup>52</sup> In May 2007, Governor Jon Corzine signed a law that abolished the practice for elected and

add years of service spent in a volunteer job—for example, serving as an unpaid town alderman—to add to his pension benefits. Because volunteer jobs do not pay a salary, the state has set a proxy rate of \$2,500 as a base for employee contributions. In these cases, the employee would need to contribute 7 percent of \$2,500—\$175—for each year of service added. According to a study by Ken Ardon at the Pioneer Institute for Public Policy Research, that payment is a pretty good deal, because it buys about \$1,000 in additional lifetime pension benefits for each year purchased.<sup>56</sup>



appointed officials.<sup>53</sup> This was one of 41 recommendations by the Joint Legislative Committee on Public Employees Benefits Reform.<sup>54</sup> Prior to this change, individuals had remained active in the state's pension system by earning minimal amounts, sometimes at "no show" jobs.<sup>55</sup>

Sometimes states allow workers to count time served in jobs outside of state government toward the determination of their pension, contributing a percentage of salary as they would on a state job. As long as the rate of payment is appropriate, this may cause little difficulty. But sometimes it's not. In Massachusetts, for example, an employee can

**EARLY RETIREMENT PROGRAMS.** Often, early retirement programs allow individuals to retire before the normal retirement age by buying service credits for additional "years." So, for example, if the government has a rule of 80—meaning that a person's age and years of service must add up to that number to qualify for full retirement benefits—a prospective retiree who is 55 and has worked 20 years could buy

five additional years to qualify for full benefits immediately.

This practice can work fine if the price of the additional years of service is calculated with careful attention to actuarial needs. But often, in the zeal to cut the workforce through an early retirement program, the details are not well thought out.

That is what happened in the late 1990s and the early 2000s in Colorado. According to information provided to Pew's Government Performance Project (GPP), practices in the late 1990s allowed employees to buy five to 20 years of service at "fire sale prices."<sup>57</sup> Although

the program certainly cut the workforce, it added significant costs to the pension system and contributed to the dramatic drop in funding levels from about 105 percent funding in 2000 to about 73 percent funding at the end of fiscal year 2005. "It was not an actuarially sound price," one Colorado finance official told the GPP in 2005. "People got a bargain, and everyone knew they were getting a bargain and that's why everyone was flocking over there to purchase extra years."

States have embarked on far fewer early retirement programs recently, compared with the early part of the decade, according to the Public Fund Survey, *Summary of Findings for FY2006*. As longevity increases and the gap between public and private retirement ages widens, they are looking for ways to add years to the normal retirement age as well. Often changes are targeted just at new employees to avoid legal challenges that may result from shifting the rules on current workers. In Colorado, a rule of 80 was changed to a rule of 85 for anyone joining the workforce after January 1, 2007. In North Dakota, a similar change moved the teachers' plan from a rule of 85 to a rule of 90.<sup>58</sup> In California, an initiative that was filed this year to control pension costs would require the state to conform to the U.S. Social Security age for new civilian employees and age 55 for law enforcement.<sup>59</sup>

**ELIGIBILITY FOR ENHANCED RETIREMENT BENEFITS.** Some jobs have physical requirements that make it sensible to offer retirement at a younger age. State police and corrections workers often qualify for enhanced benefits due to the difficulty and danger of their jobs. The problem in many states is that over time there tends to be an expansion in the number of people covered in these special plans. In California, for example, a third of the

workforce receives public safety pensions compared with one in 20 in the 1960s, according to a Deloitte Research Study published in 2006.<sup>60</sup>

In Illinois, Governor Rod Blagojevich told *Business Week* that one in three state employees receive "hazard rate" pension benefits that were originally intended for state police.<sup>61</sup> It is a matter of states' own public policy to determine which jobs should qualify for these enhanced benefits. The important thing is for policy makers to recognize the financial costs associated with these expansions. In Massachusetts, a blue ribbon panel on the state's public employees' pension classification systems noted that the pension benefits available for "hazardous" jobs had been extended to district attorneys and supervisors at MassPort, a public authority that manages transportation infrastructure in the state.<sup>62</sup>

In its two-year session that concluded in 2006, the Pennsylvania legislature gave "enforcement officer" status to game commission officers, which would have allowed retirement at age 50 instead of 60. This was one of 130 retirement-related bills introduced during this period, many asking for benefit expansions. Governor Edward Rendell vetoed the bill.<sup>63</sup>

**POWER WITHOUT ACCOUNTABILITY.** When there is a disconnect between those who have the power to increase pension benefits and those who have the responsibility of funding those increases, fiscal responsibility can get lost. Illinois, for example, took note of this problem in 2006 when its legislature capped end-of-career salary hikes at 6 percent for teachers, school administrators and university personnel. Prior to this, there was a fear that school districts and universities "may have been inflating payments to employees in their last



years of employment," because the pension costs were carried by the state budget and not their own budgets, according to the Illinois Comptroller.<sup>61</sup>

The new law requires school districts that grant raises of more than 6 percent to fund pension benefit costs associated with those raises. The law also requires employers who grant sick leave "in excess of the member's normal annual sick leave allotment" to fund related pension benefit increases.<sup>65</sup>

## Evaluating the Fiscal Impact of Benefit Changes

It is far easier to increase benefits than to take them away. That is why legislatures need to carefully consider the long-term impact of any proposed increases. But when state coffers are full and the benefits appear to have little immediate cost to the state, increases can be

difficult to resist. In addition, in states where salaries and benefits are the subject of labor negotiations, retirement benefits, which make workers happy but require fewer current dollars, are offered in place of bigger salary increases.

Although states generally require that fiscal impact statements accompany legislation that is expected to have a financial effect, this is not always done rigorously and benefit increases can sneak through without adequate attention. "Municipal governments and pension fund managers have long complained that legislative pension proposals often feature inadequate or even inaccurate forecasts," according to E.J. McMahon, senior fellow at the Center for Civic Innovation at the Manhattan Institute. In a fiscal memo, he cites a number of examples of benefit increases in New York that have been justified in the legislature based on severely outdated information. For example, a reduction in the

## Remember: Promises Come With a Price

Good times may be the most hazardous for pension plans. This is a particularly important point, because many pension plans are likely to show an increase in funding levels in 2007. State investment returns have been very good in the past few years and the majority of states use five-year smoothing periods, which will no longer factor in the bleak investment returns of 2002.

Some pension observers worry that the upturn in funding levels may lead legislators to focus only on the most recent figures and ignore the inevitable pendulum swings of any stock market-related investments. "Good times are dangerous if you raise benefits, because you're adding another commitment that will increase the burden when interest rates fall and your liabilities surge," said Alicia Munnell, director of the Center for Retirement Research at Boston College.<sup>68</sup>

This is particularly true because a pension benefit, once given, is very difficult to take away. The majority of states have some form of constitutional protection for their pensions, according to a September 2007 report by the U.S. Government Accountability Office (GAO).<sup>69</sup> And although state interpretations of constitutions may vary, courts generally have held that pensions belong to employees and benefits cannot be withdrawn or altered in a way that is detrimental or contrary to past agreements.

number of years—from 30 to 25—required to receive benefits passed the legislature in 2005. But the “justification” section of the support memo provided outdated stock market data from the year 2000.<sup>66</sup>

To help ensure that adequate attention is given to long-term consequences of decisions about pension benefits, Oklahoma passed the Actuarial Analysis Act in 2006. Modeled on a similar law in Georgia, the act requires that specific review and oversight actions accompany any legislation that could have a long-term impact on the retirement system. For example, bills with a fiscal impact can only be introduced in the first year of a two-year session and can only be approved in the second year—to make sure that there is no rush to action. If a bill will have an impact on costs, it has to be accompanied by an increase in employer contributions or another appropriation to fully fund the benefits.<sup>67</sup>

Georgia’s legislation has been in effect about eight years. It requires the legislature’s retirement committee to send for an actuarial study whenever any change to the benefit structure is suggested. Here, too, the requirement for additional study results in a year “cooling off period” between the introduction of a bill and any vote that’s taken. “It’s had a very salutary effect on us,” said Tom Hills, the chief financial officer in Georgia. “If someone says, ‘Let’s triple the retirement

benefit for any state employee who served in Iraq,’ you might do that in the emotion of the moment. This allows you to drop back and study it.”

## Considering Hybrid Plans

In the past 10 years, two states have shifted to defined contribution plans for new employees. In Michigan and Alaska, employees who started work after 1997 and 2006, respectively, are no longer promised a set benefit when they retire. Instead, they have savings plans to which they make annual contributions, which are supplemented by contributions from the state government.

Leaders in other states including California, South Carolina, Massachusetts, Illinois and Virginia have tried to make a similar switch,

but have been unsuccessful to date.<sup>73</sup> The controversy surrounding defined contribution plans should not be much of a surprise. Nebraska, for example, moved to a defined contribution plan in 1964. But between 1983 and 1999,

state and county workers averaged a 6 percent return on their individual accounts, compared with an 11 percent return for teachers and judges who had a defined benefit plan.<sup>74</sup> Testifying before the House Committee on Pensions and Investments in 2000, Anne Sullivan, director of the Nebraska Public

*“If someone says, ‘Let’s triple the retirement benefit for any state employee who served in Iraq,’ you might do that in the emotion of the moment. This allows you to drop back and study it.”*

*—Tom Hills, chief financial officer of Georgia*

Employees Retirement System, said, "We have had over 35 years to 'test' this experiment and find generally that our defined contribution plan members retire with lower benefits than their defined benefit plan counterparts."<sup>22</sup>

Employees' preference for defined benefits can also be seen in the states that have offered a primary defined contribution plan as an alternative to a defined benefit plan. (These include Colorado, Florida, Montana, North Dakota, Ohio and South Carolina.) In those states, employees still overwhelmingly pick the defined benefit plan, according to a recent study of state experience by Mark C. Olleman, a consulting actuary and principal at Milliman, Inc.<sup>23</sup>

There are several key differences between defined benefit and defined contribution plans. Some states have found that their annual costs for their defined benefit plans have become burdensome due to past funding decisions, increased longevity among state employees, and in some cases the capacity of both state employees and employers to abuse the system. Cost containment/control is a major benefit of defined contribution plans. The other key difference between the two types of pension systems is risk. In a defined benefit plan the financial risk is borne by the state, while in a defined contribution plan the employee bears the risk. This is of special concern for state employees who are not part of the Social Security system and thus do not have that safety net. As states consider utilizing defined contribution plans, they will need to ensure that adequate funds are available to support retirees either by providing annuities through defined contribution plans or simply heavily encouraging adequate employee contribution rates.

Potentially more promising are hybrid plans, which incorporate parts of both types of plans.

At least five states offer hybrid plans, according to the Kentucky Legislative Research Commission.<sup>24</sup> In Ohio and Washington, for example, employees have the option of signing up for a combined plan in which employer contributions fund a lower but guaranteed retirement benefit, while employee contributions are invested separately in a defined contribution plan. Oregon officials estimate that a new hybrid program adopted by the state in 2003 contributed to more than \$400 million in pension reform savings.

Washington has further improved individual investment returns on the employee side by giving employees the option of investing in a portfolio that mirrors the investments of the state's defined benefit plan. About 70 percent of defined contribution assets are now invested in this way, according to Olleman.<sup>25</sup>

In 2003, moved at least in part by the evidence cited above, Nebraska offered state employees another choice instead of a defined contribution plan. The so-called "cash balance plan" is a hybrid of a defined benefit plan, in which employees and the state both make annual contributions, according to Phyllis Chambers, director of the Nebraska Public Employees Retirement System. Employees are guaranteed a 5 percent annual rate of return, although successful investments may push the rate even higher.<sup>26</sup>

"We think this plan is working well," Chambers said. "Since 2003, the returns have been good and we have been giving a dividend to employees above the credited rate. For those employees that do not want the volatility of a defined contribution plan, the cash balance is a good option because they know that there will be a minimum return of 5 percent. Also, they don't have to worry about what to invest in because it is done for them."

## Requiring Faster, More Accurate Financial Reporting

Corporations must disclose timely information about their pension plans to investors and file information with the Securities and Exchange Commission. There are no similar requirements for public pensions. Although many of them do an excellent job of reporting to members and the public, a number of states have significantly late annual financial reports.

In March of each year, Wilshire Associates, an investment consulting and management firm, reports on pension funding status of the largest public pension plans. One of the issues it perennially faces is the delay of financial reports. In March 2007, for instance, 17 out of 125 state pension funds examined had a financial report issued prior to June 30, 2005. Another 61 reports were released prior to June 30, 2006.<sup>18</sup>

Timely financial reporting has obvious benefits in delivering important information to policy makers, managers and citizens. It also may be a sign that other aspects of a system are running effectively. An analysis of a database of public pension plans from 1990 to 2000, at Wharton's Pension Research Council, revealed pension systems with stellar financial reporting practices also had annual investment returns that were 2.1 percent higher than funds with lesser financial reporting practices.<sup>19</sup>

The issue of timeliness also applies to actuarial valuations, which are now required every two years (compared with an annual requirement in the private sector). Jim Rizzo, an actuary with Gabriel Roeder

Smith, said many states opt to do actuarial valuations more frequently, but they don't have to. "The numbers you put in a comprehensive annual financial report could be so old and stale that they're not useful to the reader," Rizzo said. "If the year ends September 30, 2007, then that year began on October 1, 2006, and you could be using an actuarial valuation for the year that began in 2004. By the time the Comprehensive Annual Financial Report gets published, it could be three years since the valuation."<sup>20</sup>

The Governmental Accounting Standards Board (GASB) continues to look into ways that accounting and financial reporting for retirement benefits could be improved. In 2007, GASB issued a standard that will provide improved transparency for state and local government pension activities. Among the changes is a requirement for those plans that use the aggregate method in determining actuarial funding requirements to provide funding status information using another method.<sup>21</sup>



In addition, GASB is conducting a research project that will assess the effectiveness of current pension standards in meeting financial statement user needs. Issues that will be addressed include the overall approach to calculate annual pension costs and pension liabilities and detailed issues, including the discount rate, amortization methods and amortization periods, and actuarial cost methods.

The initial research phase of the project will be completed by April 2008. After consulting with its advisory committee, GASB is scheduled to decide whether a pension project should be added to the current technical agenda.



## Improving Pension Oversight

One concern voiced by critics of government pension systems is that they are not subject to adequate oversight. This worry, expressed by Senators Charles Grassley and Max Baucus, ranking members of the U.S. Senate Finance Committee, led to the launch of a 15-month exploration of state and local retirement benefits by the GAO in July 2006. The GAO recently released a report on this topic and another is due in the coming months.

The senators expressed their concerns in a letter to David Walker, the Comptroller General of the United States, in which they argued that public pensions are held to a lower level of scrutiny than those in the private sector.<sup>80</sup> Most states, watchful of increased federal regulation, have reacted with alarm to the idea that the GAO study might spark more federal oversight. The National Association of State Retirement Administrators and the National Council on Teacher Retirement responded to the senators with a letter that defended the status and security of state and local funds.<sup>81</sup> This was followed with another letter from 28 national organizations emphasizing the soundness of public funds and the importance of recognizing the difference in the public and private sectors.<sup>82</sup> In fact, when the first GAO report was released, it conveyed a generally positive tone about the health of state and local pension systems.

Whatever happens on the federal level, there are abundant signs that increased oversight by the states is coming. This issue is explored in depth in the October 2007 *Governing* magazine article, "Who's Minding the \$3 Trillion Store," which was researched under the auspices of PCS in conjunction with this report.<sup>83</sup> The Civic Federation of Chicago has also done valuable work on the subject of pension governance.<sup>84</sup>

Many states have standing legislative committees devoted to pensions and a number of states also have oversight commissions that keep an eye on pension fund operations. According to the National Conference of State Legislatures, these include:

- Indiana - Pension Management Oversight Commission
- Louisiana - Commission on Public Retirement

- Massachusetts - Public Employee Retirement Administration Commission
- New Jersey - Pension and Health Benefits Review Commission
- Ohio - Retirement Study Council
- Oklahoma - State Pension Commission
- Pennsylvania - Public Employee Retirement Study Commission
- Texas - Pension Review Board
- Washington - Office of the State Actuary; Pension Funding Council; Select Committee on Pension Policy

In early 2007, Texas's Attorney General Greg Abbott also stepped into the action, taking a look at the state's 96 state and local pensions.

Abbott's concerns largely centered on pension governance. He noted that a number of local pension funds were using amortization periods longer than stipulated by GASB,<sup>66</sup> and in a

June 2007 speech to the Pension Review Board, he complained of unbalanced board membership, a lack of transparency in financial reporting and poor decisions in setting actuarial assumptions.<sup>66</sup> Abbott said he was particularly concerned about the possibility of conflicts of interest after discovering situations in which investment managers had hired board members after these firms had contracted with the retirement boards on which they sat. "They develop a chummy relationship," he said. "These job offers can be seen as a reward or inducement to shift the board member's allegiance to that particular investment manager."

Abbott says he hopes other attorneys general will also start to look at this issue, working on compliance with the law, while legislatures and boards of trustees focus on reforms needed to improve pension governance systems.

## Conclusion

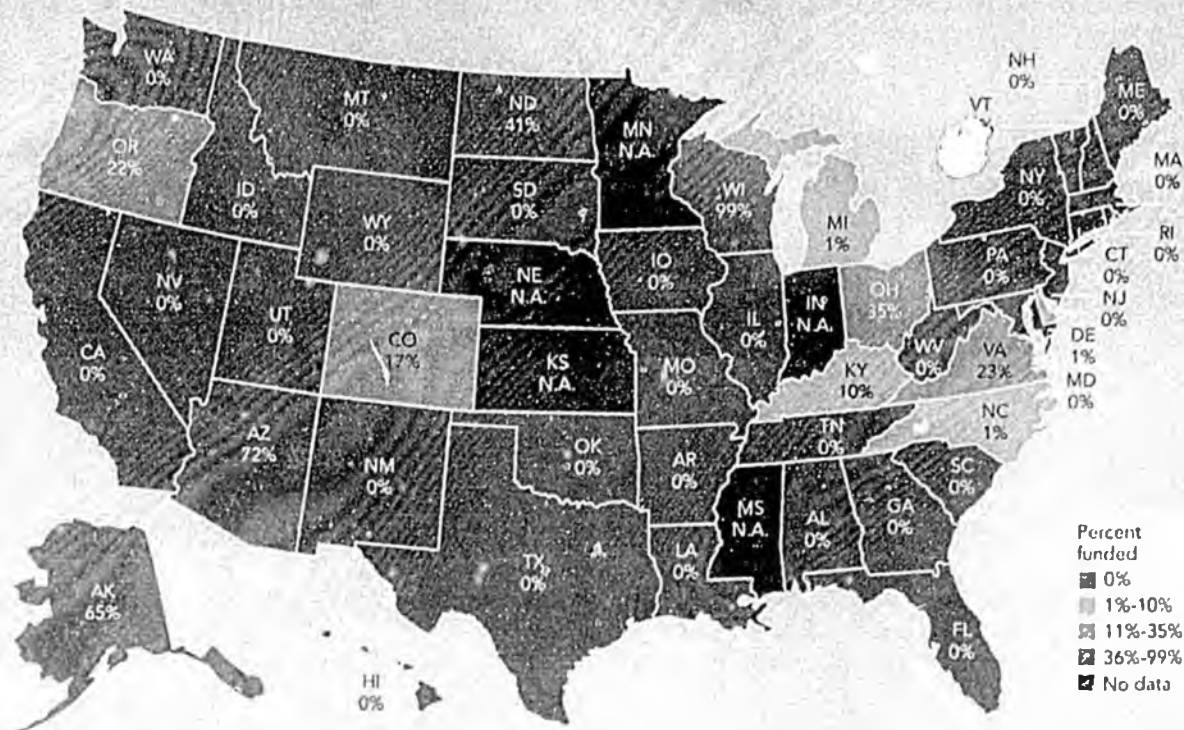
The strategies discussed in this section can help states reduce government pension costs and improve current pension management and future decision-making. However, these strategies will not eliminate the fundamental issue—that some states have liabilities they have not adequately funded. For the states that have fallen behind, there is no easy fix. Achieving an improved position requires the political will and

discipline necessary to begin funding their pension plans at actuarially adequate levels. Even states that are currently in a good position in terms of pension funding should heed the lessons in this report to help avoid the poor decision-making that led to the problems other states now face. When states delay action, the problem grows exponentially and the costs of a solution grow right along with it.

# Endnotes

- 24 Kansas established a number of pension reforms in 2007. One new provision requires that employer contributions equal the actuarially required amount (and not be less than employee contributions).
- 25 See Table A-2 in Appendix A. Information in this report aggregates financial data from all pension funds listed in states' 2006 comprehensive annual financial reports.
- 26 This PCS conclusion generally tracks with the findings of a September 2007 report by the U.S. Government Accountability Office. See GAO, *State and Local Government Retiree Benefits: Current Status of Benefit Structures, Protections, and Fiscal Outlook for Funding Future Costs*, report to the Committee on Finance, U.S. Senate (GAO 07-1156) (September 2007). The GAO report cites the opinion of "public sector experts, union officials and advocates" that 80 percent is a responsible funding ratio for pension systems. There is some disagreement on this point, however. It is useful to regard funding levels as a snapshot and recognize that they are always changing and are also extremely dependent on the health of the economy, and affected by a wide variety of individual practices relating to how they are calculated. A funding level of 80 percent, following a recession, is very different from a funding level of 80 percent following an economic expansion.
- 27 The actual total of actuarial assets in state pension funds, as calculated by PCS, is \$1.992 trillion.
- 28 Interview with PCS, December 2006.
- 29 Sujit M. CanagaRetna, "State Retirement Systems: Recent Trends," (presentation at the Fall Southern Legislative Issues Conference, Savannah, Ga., November 12, 2006).
- 30 There is no guarantee, of course, that a pension that appears to be fully funded will stay that way. Benefit increases are often retroactive and will add to the actuarial accrued liability. Assumptions are also constantly readjusted as actuaries reexamine past projections and experience.
- 31 Pre-funding also has the benefit of addressing intergenerational equity issues. The idea behind intergenerational equity is that the taxpayers paying for government employee benefits should have been the ones who received services from those employees, however, if states put off funding their obligations, future generations will be on the hook for past and future bills.
- 32 An important note, Florida's surplus is not amortized as the GASB expects. The Florida legislature essentially ensured that this set aside would remain for longer than the GASB approved 30-year period. This is an extremely cautious approach, but it illustrates that if a state is serious about being fully funded, it can make certain it stays that way.
- 33 National Conference of State Legislatures, *Pension and Retirement Plan Enactments in 2007 State Legislatures*, by Ronald K. Snell (October, 2007).
- 34 See glossary in Section I.
- 35 There are many other variations that can cause difficulties in comparing states. The Pew Center on the States Web site provides a state-by-state listing showing how assumptions and amortization periods vary. A resources section provides readers an opportunity to call up financial reports of individual states and check out the assumptions themselves. Even within a state, assumptions may vary from plan to plan.
- 36 There have been conflicting studies on this point. Public and private sector jobs are difficult to compare because many of the categories of employment tend to be different. The most recent compensation survey of public sector employees, the *AFT Public Employees 2007 Compensation Survey*, reports that most state employees earn less than their private-sector counterparts, though the median increase in average salaries across the 45 jobs surveyed was 5.7 percent, "the highest increase recorded in the last five years."
- 37 For this illustration, PCS is using the unfunded liabilities and annual required payment figures from only the respective state employee plans for Georgia and Illinois.
- 38 As with much pension information, there is considerable variation even within one state. Employees of the Illinois State Employees Retirement System (SERS) pay 8 percent if they are not in Social Security and 4 percent if they are in Social Security, unless they get the "Alternative Formula" for higher-risk jobs. Then they pay 9.5 percent or 6 percent according to information provided by the Civic Federation in Chicago. Employee contribution rates are listed in the financial statements of each of five state pension funds in Illinois. There is also a summary in the Illinois Division of Insurance's biennial reports. <http://www.idfpr.com/DOI/Pension/Pension.asp>
- 39 PCS interview with Tom Hills, chief financial officer, State of Georgia, September 2007.
- 40 Illinois Comptroller's Office, "Illinois Pension Benefits Lower Than Most States," *Fiscal Focus* (January-February 2007).
- 41 Illinois Retirement Security Initiative, Center for Tax and Budget Accountability, *The Illinois Public Pension Funding Crisis: Is Moving from the Current Defined Benefit System to a Defined Contribution System an Option That Makes Sense?*, by Jourdane Gabriel and Chrissy A. Mancini (Chicago, 2007), 8.
- 42 See Table A-2 in Appendix A, which goes back 10 years to show the extent to which each state has kept up with the amount its actuaries believe is necessary to maintain or move toward full funding.
- 43 New Jersey Legislature, Joint Legislative Committee, *Public Employee Benefits Reform, Final Report, 2006 Special Session* (Trenton, December 1, 2006), 37-38. The \$9 billion reflects the UAAI, however, the ARC was shorted by only \$3.2 billion over that time period.
- 44 Illinois Comptroller's Office, "Illinois State Pensions Continue to Put Pressure on State Budget," *Fiscal Focus* (January-February 2007).
- 45 Legislative Research Commission, *Issues Confronting the 2007 Kentucky General Assembly, An Update of Informational Bulletin No. 21 (1-05)*, Informational Bulletin no. 221 (Frankfort, October 2, 2006). In its other pension systems, Kentucky has done a better job of funding the Annual Required Contribution. For example, the full contribution for the teachers' system has been made in each of the last 10 years. This has contributed to a more positive appearance of ARC funding for the state as a whole. See [www.pewcenteronthestates.org](http://www.pewcenteronthestates.org) for state pension tables.
- 46 Dan Hassert, "The Public Pension Squeeze," *Kentucky Post*, 14 April 2007.
- 47 "State Workers Needn't Rush into Retirement," *Concord (New Hampshire) Monitor*, 13 May 2007.
- 48 National Conference of State Legislatures, *Pension and Retirement Plan Enactments in 2007 State Legislatures*, by Ronald Snell (Washington DC, October 2007). The NCSL provides summary information on legislative changes in retirement benefits for the last nine years at [http://www.ncsl.org/programs/fiscal/all\\_pension.htm](http://www.ncsl.org/programs/fiscal/all_pension.htm).
- 49 Hassert, "The Public Pension Squeeze."
- 50 "State Workers Needn't Rush into Retirement," *Concord Monitor*.
- 51 Charles Stilo, "New Law Will Remove Many From Public Pension System," *(New Jersey) Record*, 11 May 2007.

- 52 Gregory J. Volpe, "Many Staffers Qualified for Pension Credit," *Cherry Hill (New Jersey) Courier Post*, 29 April 2007.
- 53 Stile, "New Law Will Remove Many From Public Pension System."
- 54 New Jersey, Joint Committee, *Public Employee Benefits Reform, Final Report* (December 2006). The list of recommendations is on pages 59 to 153. The document, which covers both pensions and other post-employment benefits, is available at [http://www.njleg.state.nj.us/PropertyTaxSession/OPI/cpe\\_final\\_report.pdf](http://www.njleg.state.nj.us/PropertyTaxSession/OPI/cpe_final_report.pdf).
- 55 Legislation in 2007 removes new elected and appointed officials from the defined benefit system, shifting them to a defined contribution plan. Going forward, it also prevents professional service contractors - like lawyers and engineers - from being part of the defined benefit plan.
- 56 Ken Ardon, "Public Pensions: Unfair to State Employees, Unfair to Taxpayers," Public Employee Benefits Series - Part 1," *White Paper* no. 30, Pioneer Institute for Public Policy Research, (May 2006), 12.
- 57 Government Performance Project interview with Miller Hudson, executive director of the Colorado Association of Public Employees, August 2004.
- 58 See NCSL, "Pension and Retirement Plan Enactments," [http://www.ncsl.org/programs/fiscal/all\\_pensun.htm](http://www.ncsl.org/programs/fiscal/all_pensun.htm).
- 59 The initiative was filed in 2007, with supporters aiming for it to appear on the November 2008 ballot. As of September 2007, signature collection had not yet begun.
- 60 Rick Davenport et al., *Paying for Tomorrow: Practical Strategies for Tackling the Public Pension Crisis*, A Deloitte Research Study, (July 2006), 7.
- 61 Nanette Byrnes and Christopher Palmeri, "Sinkhole! How Public Pension Promises Are Draining State and City Budgets," Special Report - Public Pensions, *Business Week*, 13 June 2005.
- 62 Alicia H. Munnell, et al., *Report of the Blue Ribbon Panel on Massachusetts Public Employees' Pension Classification System*, presented to the senate and house chairs of the Joint Committee on Public Service, (Massachusetts, July 2006), 9.
- 63 Mark Scalfaro, "Sweet Pension Deal Turns Sour," *Pittsburg Post-Gazette*, 17 December 2006, [http://www.10000news.org/downloads/Sweet\\_Pension\\_deal\\_turns\\_sour\\_part\\_1\\_Pgh\\_Post\\_Gazette\\_121706.pdf](http://www.10000news.org/downloads/Sweet_Pension_deal_turns_sour_part_1_Pgh_Post_Gazette_121706.pdf).
- 64 Illinois Comptroller's Office, "Illinois Pensions Continue."
- 65 Tom Phoenix and Lance Weiss, Deloitte Consulting LLP, "The Impending Pension and Health Plan Crisis and the Impact of an Aging Workforce on Talent Management," (presentation at the States & Local Government Pension Forum, Chicago, IL, February 28, 2006).
- 66 E. J. McMahon, "Legislators Still Aim to Sweeten Public Pensions," *Fiscal Watch Memo*, Manhattan Institute for Public Policy Research, (revised 15 July 2005), <http://www.nyfiscalwatch.com>.
- 67 David Blatt, "Oklahoma's Pension System, Tomorrow's Problem Requires Attention Today: 'The Oklahoma Pension Legislation Actuarial Analysis Act of 2006: Tying Odysseus to the Mast?'," Issue Brief, Community Action Project (January 2007).
- 68 In the past, the Center for Retirement Research has generally focused its research on pensions in the private sector, but it recently began a two-year project to establish a database on state and local pension systems and explore funding status and economic impact. This work is funded by a \$1.5 million grant from the Center for State and Local Government Excellence.
- 69 United States Government Accountability Office, *State and Local Government Retiree Benefits*.
- 70 CanagaRetna, "State Retirement Systems," 5-6.
- 71 Illinois Retirement Security Initiative, *The Illinois Public Pension Funding Crisis*, 11.
- 72 House Committee on Pensions and Investments, Texas House of Representatives, *Interim Report 2000: A Report to the House of Representatives 77th Texas Legislature*, (Austin, November 2000), 26.
- 73 Mark C. Olleman, "Defined Contribution Experience in the Public Sector," *Benefits & Compensation Digest*, International Foundation of Employee Benefit Plans (February 2007).
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- 75 Olleman, "Defined Contribution Experience," 23.
- 76 PCS interview, October 2007.
- 77 Julia Bonafede, et al., Wilshire Consulting, *2007 Wilshire Report on State Retirement Systems: Funding Levels and Asset Allocation*, Wilshire Associates Incorporated, (March 5, 2007), [http://www.wilshire.com/BusinessUnits/Consulting/Investment/2007\\_State\\_Retirement\\_Funding\\_Report.pdf](http://www.wilshire.com/BusinessUnits/Consulting/Investment/2007_State_Retirement_Funding_Report.pdf).
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- 82 Letter to the Hon. Charles E. Grassley, Chairman, and the Hon. Max Baucus, ranking member, United States Senate Committee on Finance and the Hon. David M. Walker, Comptroller General of the United States, (August 2, 2006), <http://www.nasra.org/resources/Grassley-Baucus%20Joint%20Letter.pdf>.
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- 84 Civic Federation, "Civic Federation Calls For Public Pension Benefit Reform" (Chicago, February 13, 2006), [http://www.civiced.org/articles/civiced\\_203.pdf](http://www.civiced.org/articles/civiced_203.pdf).
- 85 A handful of state pension plans don't meet the Governmental Accounting Standards Boards guideline that amortization periods should be 30 years or less. This is because they have chosen to spread out payments over a longer period and thereby pay less in any given year. States with 40 year amortization periods at the end of 2006 included Illinois, Kansas, Michigan and Oklahoma. Whatever the length of time, the number of years in an amortization period can have a significant impact on the required contribution. For example, in January 2006, the Nebraska Retirement Systems Committee of the legislature quite candidly examined the merits of changing from a 25 year amortization period to a 30 year amortization period as a way of reducing contribution rates for the Nebraska school pension plan. That change alone, it concluded, would reduce the required contribution from \$12.8 million to \$6.6 million. A full list of amortization periods used by states is available at the PCS Web site.
- 86 Pamela Yip, "Watch Those Government Pension Plans," *Dallas Morning News*, 2 July 2007.



Figures are in thousands.

| State                   | Actuarial liability | Unfunded liability | Annual required contribution | Actual payments in 2006 | State                       | Actuarial liability | Unfunded liability | Annual required contribution | Actual payments in 2006 |
|-------------------------|---------------------|--------------------|------------------------------|-------------------------|-----------------------------|---------------------|--------------------|------------------------------|-------------------------|
| Alabama                 | \$5,290,000         | \$5,290,000        | \$344,000                    | \$76,000                | New Hampshire               | \$2,906,000         | \$2,906,000        | \$226,000                    | \$45,500                |
| Alaska                  | 3,413,000           | 1,206,000          | 152,000                      | 97,000                  | New Jersey                  | 21,587,000          | 21,587,000         | 1,881,000                    | 313,000                 |
| Arizona <sup>1</sup>    | 421,300             | 94,800             | 93,000                       | 93,000                  | New Mexico <sup>3</sup>     | 4,990,000           | 4,990,000          | 467,000                      | 83,000                  |
| Arkansas                | 2,130,000           | 2,130,000          | —                            | 185,000                 | New York                    | 49,663,000          | 49,663,000         | 3,810,000                    | 934,000                 |
| California              | 47,878,000          | 47,878,000         | 3,593,000                    | 1,363,000               | North Carolina <sup>1</sup> | 11,460,000          | 11,400,000         | 2,390,000                    | 230,000                 |
| Colorado                | 1,248,000           | 1,033,000          | 71,000                       | 21,000                  | North Dakota                | 83,000              | 49,000             | 6,000                        | 6,000                   |
| Connecticut             | 21,681,000          | 21,681,000         | 1,597,000                    | 393,000                 | Ohio <sup>1</sup>           | 10,784,959          | 6,509,000          | 1,597,000                    | 1,597,000               |
| Delaware                | 4,435,000           | 4,410,000          | 475,000                      | 136,000                 | Oklahoma                    | 814,000             | 814,000            | 87,000                       | 18,000                  |
| Florida                 | 3,628,000           | 3,628,000          | 213,000                      | 57,000                  | Oregon <sup>2</sup>         | 832,000             | 645,000            | 75,000                       | 75,000                  |
| Georgia                 | 4,905,000           | 4,705,000          | 368,000                      | 173,000                 | Pennsylvania                | 13,778,000          | 13,501,000         | 1,125,000                    | 519,000                 |
| Hawaii                  | 6,791,000           | 6,791,000          | 488,000                      | 141,000                 | Rhode Island                | 696,000             | 696,000            | 53,000                       | 18,000                  |
| Idaho                   | 486,000             | 486,000            | 38,000                       | 2,000                   | South Carolina              | 4,252,000           | 4,252,000          | 320,000                      | 122,000                 |
| Illinois <sup>2,4</sup> | 48,000,000          | 48,000,000         | —                            | 578,000                 | South Dakota                | 127,000             | 127,000            | —                            | 62,000                  |
| Iowa                    | 220,000             | 220,000            | 23,000                       | 20,000                  | Tennessee                   | 2,305,000           | 2,305,000          | 156,000                      | 64,000                  |
| Kentucky                | 9,019,000           | 8,090,000          | 130,000                      | 66,000                  | Texas <sup>2,4</sup>        | 26,817,000          | 26,817,000         | —                            | -111,000                |
| Louisiana               | 7,344,000           | 7,344,000          | 967,000                      | 190,000                 | Utah                        | 749,000             | 749,000            | 47,000                       | 47,000                  |
| Maine                   | 2,297,000           | 2,297,000          | 177,000                      | 73,000                  | Virginia                    | 3,001,500           | 2,320,000          | 311,500                      | 150,000                 |
| Maryland                | 14,543,000          | 14,543,000         | 1,114,000                    | 236,000                 | Washington                  | 3,800,000           | 3,800,000          | 314,000                      | 68,000                  |
| Massachusetts           | 13,287,000          | 13,287,000         | 1,062,000                    | 354,000                 | West Virginia <sup>1</sup>  | 7,761,000           | 7,761,000          | 824,000                      | 133,000                 |
| Michigan                | 8,028,000           | 7,968,000          | 631,404                      | 394,000                 | Wisconsin <sup>2</sup>      | 1,823,000           | 17,000             | 52,000                       | 52,000                  |
| Missouri                | 2,186,000           | 2,186,000          | 159,000                      | 78,000                  | Wyoming                     | 72,000              | 72,000             | 6,000                        | 3,000                   |
| Montana                 | 525,000             | 525,000            | 51,000                       | 8,000                   |                             |                     |                    |                              |                         |
| Nevada                  | 4,100,000           | 4,100,000          | 273,000                      | 41,000                  |                             |                     |                    |                              |                         |

1 States with combined state and local systems where PCS was able to estimate the state actuarial liability and unfunded liability of other post-employment benefits. PCS was unable to isolate the annual required contribution and 2006 actual payments for state employees only, and these numbers reflect the combined state and local system. Combined AAL and UAAL figures, respectively, from the actuarial valuations include Arizona-\$1.5 billion, \$420 million, North Carolina-\$23.9 billion, \$23.7 billion, Ohio-\$11.6 billion, \$20.5 billion.

2 No actuarial valuation exists at this time.

3 Combined state and local systems where isolating the state component of other benefits may not be possible.

4 Actuarial liability and unfunded liability estimates for Illinois and Texas are from the Civic Committee of the Commercial Club of Chicago and Credit Suisse (2007), respectively.

NOTES: States in bold are moving toward fully funding their non-pension obligations. The actuarial accrued liability and unfunded actuarially accrued liability are based on short-term discount rates, which presume no pre-funding of the obligation. The amounts decrease if the annual required contribution is consistently funded each year.

Actuarial liability is the total value of benefits owed to current and retired employees or dependents based on past years of service.

Annual required contribution is the amount of money that actuaries calculate the employer needs to contribute to the plan during the current year for benefits to be fully funded by the end of the amortization period, which is typically 30 years or less.

SOURCE: Pew Center on the States



# Other Benefits

## Rising Costs and Unfunded Obligations

LAST YEAR, THE STATES PAID ABOUT \$9.7 BILLION in retiree benefits other than pensions, according to PCS's study of data collected from comprehensive annual financial reports. Health care is by far the most significant of these other post-employment benefits (OPEB), but they also include dental care, life insurance and other promised benefits that provide economic security to retirees. What is most significant, however, is not the amount states are spending on these benefits today. The real impact on states' fiscal health—and on the public sector employees counting on these benefits—comes from the dramatic and unrelenting growth of the annual costs of OPEB.

For many years, the fiscal challenges and complexity of retirement benefits were barely noticed in many states. But new accounting standards, established in 2004 by GASB, are finally bringing the issue front and center.

States and other large governments (those with annual revenues greater than \$100 million) will first report on these liabilities in their fiscal year 2008 financial reports, which will generally come out sometime between December 2008 and March 2009. But actuaries for most states have already completed preliminary assessments of the bill that will come due for retirement benefits during the next 30 years. Armed with these and other documents gathered from a number of state governments, PCS has developed a complete and up-to-date compilation of states' long-

term liabilities for those benefits.<sup>67</sup> These numbers are likely to be refined over the coming year—but they are reasonably accurate and the best available figures at this time.

According to PCS data, the total actuarial accrued liability for state employees' retiree health care and other post-employment benefits is about \$381 billion.<sup>68</sup> About 97 percent—\$370 billion—of the obligations for state employees over an amortization period that usually runs about 30 years was unfunded at the end of fiscal year 2006 (see Exhibit 3-1).

The \$381 billion figure is a conservative number that does not reflect the full extent of the long-term cost, as some states face large bills for teachers as well. Cities, counties and school districts also are totaling up their own liabilities and will continue to do so over the next several years. (Credit Suisse, which published a report on OPEB liabilities last March, estimated the total liability for states and local governments at about \$1.5 trillion.<sup>69</sup>)

In an ideal world, states would fund retiree health care and other non-pension benefits as they're earned, as they generally do with

*"The evolution in states dealing with post-retirement health care costs is calculation, surprise and shock."*

*—with Howard, Assistant Director for the Department of State, Connecticut Administration*

Other Benefits

pensions. This would reduce intergenerational inequity and would also lessen the total amount owed. (This is because a state that puts money aside for the future in a qualified irrevocable trust can earn higher interest rates over time.) But because states generally have not pre-funded retiree health and other non-pension benefits, there's a lot of catching up to do. Moving to full funding is a daunting task, because the annual required contribution is, on average, about three times what states currently pay each year to meet costs for current retirees.

So what are states doing to address current and future obligations to their employees as they try to balance competing pressures to build a strong workforce and control spending? Some are embarking on the pre-funding road and are putting money aside in trust funds. Others are redesigning the benefits themselves, using accrued sick leave

to set up retiree health care savings accounts or shifting retirees to Medicare advantage drug prescription programs. Some states are already cutting back in various ways that will whittle down costs—for instance, by elevating retirement ages for new or non-vested employees or by increasing retiree contributions to premiums. At least one state, Illinois, has attempted to buy out some employees by offering a lump sum, as General Motors has done in the private sector.<sup>90</sup>

As the shock of identifying the long-term costs of retiree health care and other non-pension benefits ebbs, many questions remain about how cuts in benefits or other changes may affect employee behavior and the bottom line. States and other governments have embarked on a multiyear process in which they surely will be watching each other to see what works and what does not. This is just the beginning.

## How Retiree Health Care Benefits Differ from Pensions

In 2004, after almost 20 years of study on the issue, GASB established new standards of accounting and financial reporting by public entities for other post-employment benefits, amending generally accepted accounting principles related to those transactions. (These same standards have been in place for private sector companies since the early 1990s.) Governments were given a few years to phase in the new standards. For state entities, that meant coming up with an actuarial accrued liability figure for their 2008 annual reports.

For governments and actuaries, developing long-term liability figures for retiree health care and other non-pension benefits can be complicated because several new assumptions must be built into the equation. These new assumptions include the annual rise in health care costs and the number of retirees who will actually take the state up on its offer of benefits (sometimes an employee chooses a spouse's coverage over the state's plan).

The greater uncertainties involved nearly guarantee that the valuations of long-term liabilities will rise and fall, particularly during the next few years, as states and actuaries evaluate plan characteristics, modify some plans to make them affordable, and decide how to manage benefits going forward.

States face a number of other big unknowns. Will the nation's health care financing system change substantially in the next 30 years? How will any changes affect retiree benefits? How far will courts allow governments to go in reducing benefits, as has happened in the private sector? These are just a few of the questions governments will be considering in the coming years.

## Highlights From the Data

Exhibit 3-1 provides data for 45 states: 43 states have produced actuarial valuations of their OPEB; the data include estimates for Illinois and Texas. The figures in the exhibit assume that the state is paying for these benefits on a pay-as-you-go basis.<sup>91</sup> The long-term costs drop considerably if states consistently pay their annual required contribution (ARC) and deposit it in a qualified irrevocable trust. The savings come from the higher investment return that results from long-term savings and earnings that build up over time. As of the end of fiscal year 2006:

- Only six states—Arizona, Ohio, Oregon, North Dakota, Utah and Wisconsin—were on track to have fully funded OPEB obligations during the next 30 years. A few other states have moved in that direction since fiscal year 2006.
- Only three states had funded more than 50 percent of their actuarial liability: Wisconsin at 99 percent, Arizona at 72 percent and Alaska at 65 percent.
- Of the five largest states—California, Texas, New York, Florida and Illinois—none had put aside any money for other post-employment benefits.
- Eleven states had estimated liabilities in excess of \$10 billion, led by New York with \$50 billion, California with \$48 billion and New Jersey and Connecticut with \$22 billion each. Illinois is also included on this list with \$48 billion in liabilities, according to estimates by the Civic Committee of the Commercial Club of Chicago.<sup>92</sup>
- Most of the states with large liabilities relative to their size are located in the East: New Jersey, New York, Connecticut, Maryland, Delaware and New Hampshire.
- Four states had put aside at least \$1 billion for future OPEB expenses: Ohio, with \$11.1 billion; Alaska, with \$2.2 billion; Wisconsin, with \$1.8 billion, and Arizona with \$1 billion.

## The Challenge of Rising Costs

This report does not attempt to evaluate the virtues or flaws of states' decisions to offer larger or smaller benefit packages to their employees. Instead, the analysis focuses on the real world as it exists today—one in which many states will see the price tag on retirement benefits rise significantly well into the future.

New Jersey, for example, paid \$200 million—a systemwide total—for the health care costs of its current retirees in fiscal year 2000. By fiscal year 2005, this amount had mushroomed by

355 percent to \$911 million. In the years since 2005, and for the foreseeable future, the costs are rising far faster than the rest of the budget. The state's 2007 retiree health costs were \$1.2 billion, and the 2008 bill will be 25 percent higher than that. By contrast, state spending generally will rise 7.2 percent from fiscal year 2007 to fiscal year 2008, according to the New Jersey Treasury Department.<sup>93</sup>

States that pay a large portion of retirees' health care costs have generally struggled with rising

Other states

## Understanding the Numbers

The data used for this report include information from 45 states. The data for 43 states are based on actuarial computations produced by the states themselves. As of mid-October 2007, the remaining seven states had not finished producing actuarial valuations. Five of those—Indiana, Kansas, Minnesota, Mississippi and Nebraska—are likely to show relatively small liabilities because they are among the 10 states where retirees pay their own health insurance premiums. In these states, the governments' cost is limited to an "implicit subsidy," which comes from allowing retirees to participate in the same insurance pool as younger and generally healthier state employees.

Of the states with substantial OPEB obligations, only Illinois and Texas were missing an actuarial valuation. A 2006 report from the Civic Committee of the Commercial Club of Chicago estimated that number at \$48 billion for Illinois, a figure that includes state employees only.<sup>93</sup> The Texas legislature passed a law last spring that gave state and local governments a choice of following GASB standards or standards developed by its own comptroller. Governments that chose the latter course of action would still need to include a projection of long-term non-pension costs as supplementary information to the financial statement, but this would not be considered a liability. No publicly available actuarial valuation existed yet for Texas state government when this report went to press. The Legislative Budget Board has estimated the total liability as more than \$50 billion after 10 years, including local governments.<sup>94</sup> Credit Suisse has estimated the state portion at \$26.8 billion.<sup>95</sup>

In an effort to ensure consistency among the states, PCS has limited its analysis to state employees, with OPEB obligations for teachers and local employees removed whenever possible. As a result, the figures in Exhibit 3-1 may not match with unfunded liability figures that have appeared in local newspapers. For example, New Jersey's most recent actuarial valuation shows a total of \$68.8 billion in liabilities. Of this amount, however, \$36.5 billion covers school teachers and another \$10.8 billion covers municipal and county employees. The portion for state employees is \$21.6 billion.

When states were unable to break out the data that applied exclusively to state employees, the inclusion of either teachers' plans or local plans is noted on the table. The source of each figure, and the date of the calculation, can be found on the PCS Web site ([www.pewcenteronthestates.org](http://www.pewcenteronthestates.org)). In some cases, the valuations used were preliminary and states are currently working on updated versions. The actuarial valuations used for this table were supplemented with information from comprehensive annual financial reports. In cases where PCS researchers needed help isolating state data, they contacted state officials.

Even if benefits remain the same, however, it is highly likely that some of the figures shown in Exhibit 3-1 will change significantly in future valuations. Calculating the long-term cost of retiree benefits is new to the states and adjustments in their calculations are not unusual. Maine, for example, had a valuation in 2003 that put its long-term OPEB actuarial liability at \$1.2 billion. As of January 2007, it determined the liability to be about \$3.2 billion. That amount includes the state's obligations for both retired state employees and retired teachers, according to Frank Johnson, executive director of Maine's employee health and benefits department. (The amount listed in Exhibit 3-1 represents state employees only.)

These calculations require sophisticated actuarial projections that take into account many hard-to-predict variables such as the rate of retirements, the lifespan of retirees, the increase in health costs and the interest earned on money set aside as benefits are earned. Changes in any of the assumptions over time will alter the data.

bills. In Maine, benefit payments were 6.7 percent of payroll for fiscal year 2007, but will rise to at least 11.2 percent of payroll in fiscal year 2016, according to state figures.<sup>17</sup> California's Legislative Analyst's Office pegged growth in retiree health care costs at nearly 11.8 percent between 2007 and 2008. By contrast, other state spending grew less than 1 percent.

In Nevada, pay-as-you-go costs were projected to rise 20 percent from 2008 to 2009, according to information presented to the legislature in January 2007. If the state were to fund its ARC in 2008, the payment would be four times the pay-as-you-go cost.<sup>18</sup>

If states persist on the pay-as-you-go path, the bills for retiree benefits other than pensions will continue to grow quickly. Nevada and Maine, two very different states socioeconomically and

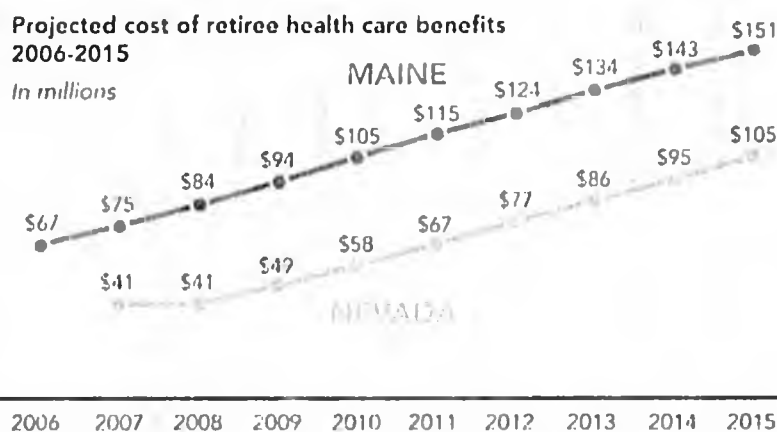
geographically, are largely in the same boat when it comes to bills coming due for OPEB, as Exhibit 3-2 illustrates. That is why these and other states are thinking hard about what mix of actions to take. Without appropriate attention and planning, these obligations only get bigger and more difficult to manage.

Until recently, most states have permitted their OPEB obligations to grow with little or no consideration for how to pay for them. As noted earlier, our analysis revealed that about 97 percent, or \$370 billion, of these 30-year obligations were unfunded at the end of fiscal year 2006. By sharp contrast, all states attempt to set aside large pools of assets to fund long-term pension liabilities, albeit with varying success.

However, a few states, including Utah, Maine and Michigan, have been estimating the costs

### 3-2 PAYING THE MINIMUM IS NOT ENOUGH

The rising costs of health care benefits for retirees will be felt most acutely by states on the pay-as-you-go\* path, as illustrated by Nevada and Maine.



\* "Pay as you go" is defined as paying only the amount needed to pay for benefits currently due and payable to retirees. Often this means financing for current benefits comes from current employees' contributions.

NOTE: 2006 data unavailable for Nevada.

SOURCES: Leslie Johnston, Memorandum to Nevada Joint Ways and Senate Finance Subcommittee, RE: GASB 43 and 45 Supplemental Information, January 24, 2007; Nevada CAFR pp. 69-70.; John Bartel and Steven Glicksman, State of Maine: Retiree Healthcare Plan Actuarial Valuation, January 2007.

*"I hope the experience with retiree health makes people realize that we have some pretty significant fiscal challenges over the long term."*

— *Scott Pattison, executive director of the National Association of State Budget Officers*

of their non-pension benefits for some time. Others, such as Alaska, Kentucky and Arizona, have included retiree health care as part of pension funding. As a result, although these states' pension funding levels may have appeared somewhat deflated compared with other states in the past (when few states were paying attention to long-term retiree health care costs), they now have a jump on many other states."

At the end of fiscal year 2006, 13 states had some funding set aside, although most of the amounts were minimal. Ohio stands out in the amount of money socked away: \$11.1 billion at the end of fiscal year 2006, a sum that grew to \$12.8 billion by the end of fiscal year 2007, according to the Ohio Public Employee Retirement System. But even Ohio's retiree health benefits are only 39 percent funded, up from 35 percent in 2006.

## How the States Stack Up

PCS's analysis shows how strikingly different the states are from one another. Half the states account for almost 94 percent of the total unfunded OPEB liabilities. "The diversity of the states is far more dramatic on the retiree health issue than many others," said Pattison. "We have some members who see this as almost a crisis and others have no problems."

The job is all the tougher because of the many other long-term costs emerging as states' populations and infrastructures age. States face retiree OPEB bills simultaneously with rising pension costs; expanding budgets for prisons; and demands for more money for schools, maintenance backlogs for bridges, roads and water systems and other needs.

At the same time, governments are under pressure to keep taxes low.

The underlying problem, said Elizabeth Keating, a professor at Boston College's Carroll School of Management, has been fiscal systems based on an annual cash budget, which does not hold decision-makers responsible for the results of their choices down the road. She and others maintain that governments need to focus attention on the long-term ramifications of their decisions. Meanwhile, state budgets, employees, retirees and taxpayers are likely to face tough times ahead. "I hope the experience with retiree health makes people realize that we have some pretty significant fiscal challenges over the long term," said Scott Pattison, executive director of the National Association of State Budget Officers. "I hope this changes the dynamic in which we make policy decisions over the short term without a realization of the costs that are going to grow over the next five, 10, 15 years and beyond."

Much of the difference is directly tied to the decisions that governments have made about how large or small retirement benefits should be and who should receive them. Even neighboring states, which may well be drawing employees from the same group of applicants, have made remarkably different choices about the benefits they provide their retirees. For

example, Virginia's unfunded liability is \$2.3 billion, while Maryland's is \$14.5 billion, according to the states' own disclosures.<sup>100</sup> Maryland offers a more substantial premium subsidy and provides assistance to retirees with fewer years of service.

In general, the largest states have the largest liabilities. Of the 10 states with the highest populations, only Florida stands out as having a relatively small actuarial accrued liability. That is not surprising because Florida's cash subsidy for health insurance is limited, providing a \$5

## The Other Post-Employment Benefits Menu

All states that offer post-retirement health care benefits to employees do so in different ways. A few of the key differences include:

- **The nature of the benefits.** While standard major medical coverage tends to receive the most attention, life insurance, dental and vision coverage and other benefits can be included.
- **Divisions of contribution.** In some states, the government contributes most or all of the monthly premiums for retiree health benefits. In others, the government contribution is capped and employees make up the rest. In still other states, the government pays only the implicit rate subsidy (the cost incurred by allowing retirees, who are generally older and less healthy, to participate in the same plan as active employees).
- **Eligibility.** In many states, employees become eligible for these benefits based on a combination of age and years of service. For example, an employee turning 55 with 10 years of service to the state may be eligible to continue receiving the same health benefits after retirement. Retiree health plans are frequently tiered so that benefits increase after more years of service.
- **Coverage.** Some plans cover only employees, while others include spouses and other dependents. States also differ widely in whether or not they provide coverage to early retirees who do not yet qualify for Medicare.
- **Basic plan structure.** As in the private sector, virtually all OPEB plans fall into one of two categories: defined benefit or defined contribution. Defined benefit plans specify the amount of benefits to be provided to the employees after their employment ends. Defined contribution plans stipulate only the amounts to be contributed by a government employer to a plan member's account, but do not promise a certain amount of benefits employees will receive after their employment ends.
- **The number of participating governments.** So-called single-employer plans involve only the state government; multiple-employer plans include more than one government, often localities.
- **Varieties of multiple-employer plans.** When multiple governments pool or share the costs of financing benefits and administering the plan and the assets, the plan is called a cost-sharing multiple-employer plan. In agent multiple-employer plans, states still share the administrative costs and pool investments, but separate actuarial calculations are made for each participating government, and separate accounts are maintained to ensure that each employer's contributions are used only to provide benefits for employees of that government. The goal of these plans is to spread risk and administrative costs while providing centralized expertise.

monthly subsidy toward health insurance coverage for every year of employment up to 30 years. On the other hand, California, North Carolina and Texas often pay retirees' entire premiums, according to the Workplace Economics 2006 State Employee Benefits Survey.<sup>191</sup>

States' liability amounts are determined not only by the size of states' contribution to retirees' insurance premiums, but also by such factors as the number of retirees covered, the vesting period, the type of health plan, and dependent and spousal coverage. (See "The OPEB Menu" for a more thorough description of the most important variables that come into play.)

Retirement age is a particularly pertinent factor. All states' retirees are living longer and so remain beneficiaries for a longer time.

Beyond that, the age at which states permit various employees to retire and collect benefits varies greatly. The retirement age is critical because the cost of covering an individual retiree who has not yet become eligible for Medicare can be much greater than the cost of covering a retiree who is Medicare eligible. In New Jersey, for instance, spending for the average pre-Medicare retiree is \$573 a month, 189 percent of the cost for a retiree who is covered by Medicare, according to the most recent State Health Benefits Survey from the Segal Company.<sup>192</sup> A study by Alaska's actuary analyzed retiree health care costs and found that 75 percent of the state's OPEB spending came from employees who retired before 65. This information helped convince the Alaska legislature to cut off benefits to pre-Medicare retirees as part of its substantial retirement reforms of 2005.<sup>193</sup>

## States Attempt to Move Forward

GASB's role is to establish accounting and financial reporting standards—not to require governments to make any particular policy or management decisions. But on the verge of disclosing their liabilities for retirement benefits, many governments confront the need to take action. "There are two ways to address the issue," said Jason Dickerson, a legislative analyst in California who has been following the topic there and in other states. "You can put money aside to fund benefits or you can change benefits so as to reduce future costs."

A January 2007 Aon Consulting survey of governments of all sizes shows many leaders are still unsure of where to turn.<sup>194</sup> The survey, released in July, showed that fewer than half the governments surveyed had developed a

plan of action to handle the new accounting standards. Ninety percent did not know how they would get the money to fund the long-term obligation, although more than half were considering long-term funding options. A third of the respondents were contemplating plan modifications—either revising eligibility requirements, increasing cost sharing, cutting coverage for future employees or moving to a defined contribution approach, which would shift the risk of medical inflation to retirees.

In fact, a hybrid approach seems increasingly likely for a number of states. "Initially, a lot of our clients were looking at this in black and white: pay for it all or reduce all the benefits," said Tim Nimmer, an actuary at Aon, which performed the actuarial valuations for non-

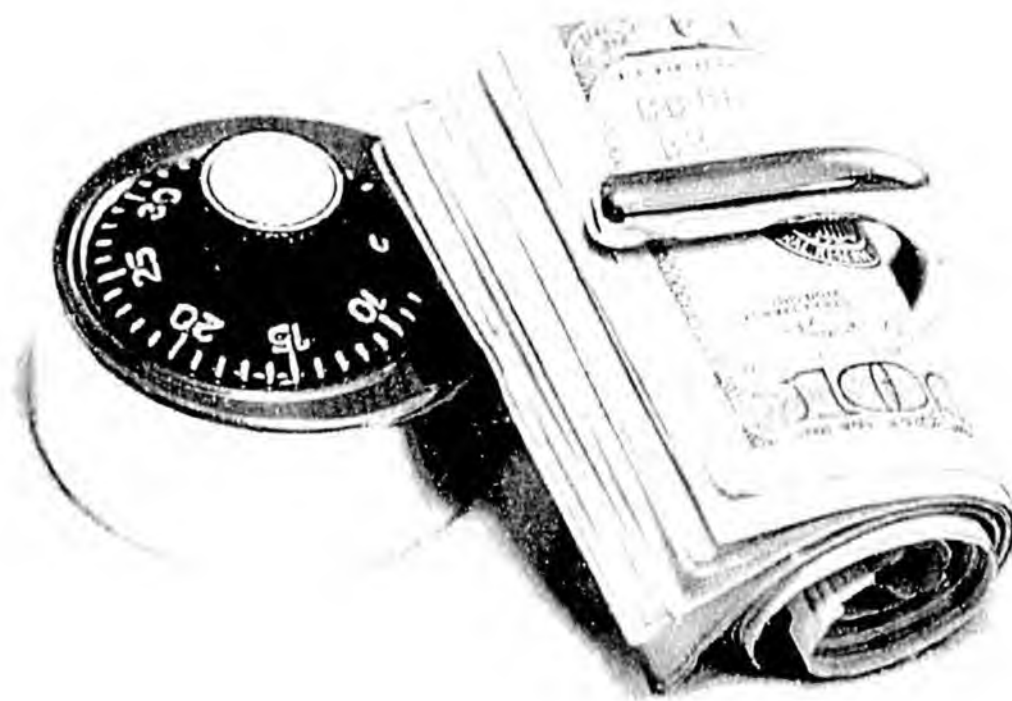
pension benefits in eight states. "I'm guessing that almost all of them will land in that gray area of a combination of the two. They're looking for what's politically palatable and what is fiscally palatable."

To see what states are doing at this early stage, PCS analyzed survey responses from Pew's Government Performance Project and legislative data from the National Conference of State Legislatures (NCSL).

## Fully Funding the Long-term Obligations

According to NCSL's legislative tracking, at least 13 states in 2007 set up state trust funds or provided enabling legislation for local trust funds. A handful of other states had already taken these actions. These irrevocable trusts require that all the money that goes in is used in a predetermined way—in this case, to pay for retirement benefits in years to come. The stipulation prevents budget raiders from siphoning off these funds for current needs. Ohio (see "States to Watch") has used such a mechanism to hold the funds it has been setting aside for OPEB obligations since 1974. Utah

also established an irrevocable trust for its OPEB costs and appropriated the full actuarially required contribution of about \$17 million for both fiscal years 2007 and 2008. Alabama, Delaware, Georgia and West Virginia (see "States to Watch") are among the states that have also set up irrevocable trusts. Some states are considering earmarking revenue streams to fund their long-term liability, such as a portion of lottery proceeds or tobacco settlement dollars, according to the National Association of State Comptrollers, which has set up an OPEB Implementation Network.<sup>13</sup>



OPEB Requirements

Massachusetts passed irrevocable trust legislation for fiscal year 2008 and is fully funding its \$1.1 billion anticipated annual required contribution for 2008 with approximately \$340 million of general fund dollars and most of its accumulated unspent tobacco settlement receipts. Governor Deval Patrick proposed dedicating up to 90 percent of future tobacco settlement proceeds to at least partially fund OPEB costs in the irrevocable trust. The legislature rejected the proposal, but created a commission to study future funding with a report due in December in time for the fiscal year 2009 budget debate.

Other states may be looking at the option of bonding out their OPEB obligations. One state that selected this option is Wisconsin. In 2003, it issued \$600 million in OPEB bonds as part of a larger transaction that also included the issuance of \$729 million in pension bonds. The OPEB portion of this transaction was the first time a bond had been used to pay for the actuarial liability for other post-employment benefits at the state level. It has enabled the state to come close to fully funding its fairly modest OPEB obligation.<sup>18A</sup>

However, there is an inherent risk in bonding to meet retiree obligations, based on the timing of the transaction. For example, New Jersey implemented a \$2.8 billion pension bonding plan in 1997, and it fell victim to bad timing when the market turned sour and the interest paid on the bond exceeded what the state earned on its pension investments. Other governments that sold pension obligation bonds in the late 1990s also lost money in the early part of this decade.

The appeal of irrevocable trusts goes beyond the obvious desire to provide security for retirees and protection for future taxpayers. If states start funding their retiree benefits

through this vehicle, their actuaries can actually decrease the total actuarial liability. That's because it is presumed that invested money will earn more interest if it is set aside for the long haul, reducing the long-term cost of benefits. (See "Other Benefits of Full Funding.")

However, government officials wonder what will happen to money that has been "irrevocably" dedicated to retiree health care if the federal government passes some kind of universal health insurance. "A lot of people are resistant to putting that money aside because tax laws aren't clear on their ability to take that money out," said Dickerson of the California Legislative Analyst's Office.

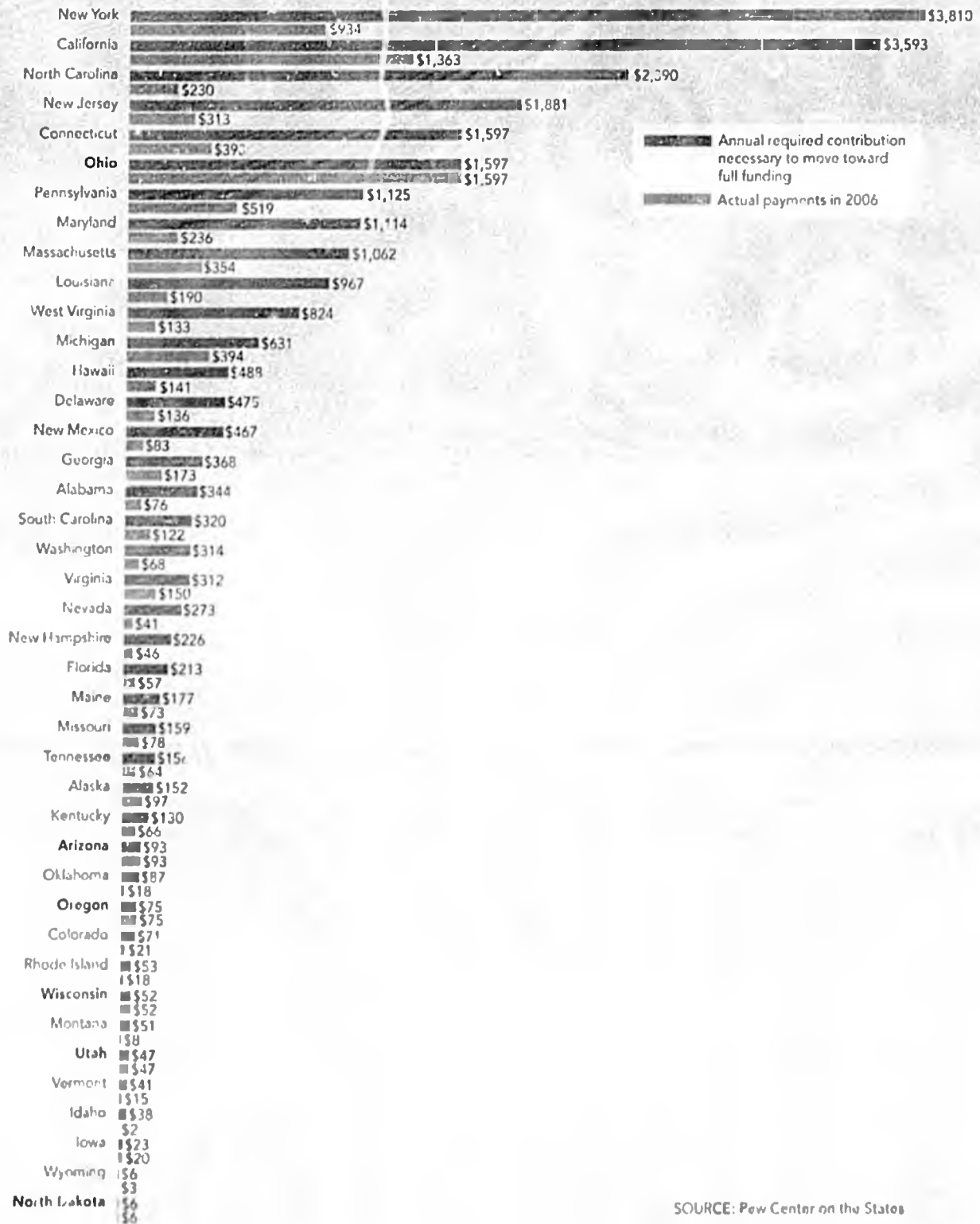
In any case, for most if not all states, the option of fully funding these liabilities in the near future is not feasible because of the dramatic rise in costs. Exhibit 3-3 compares the costs states spent in 2006 with the amount determined by actuarial valuations as necessary to move toward full funding. The states where the red and blue lines are closest have already started moving toward funding these benefits.

In fact, based on data from 40 states with explicit OPEB liabilities, PCS has calculated that the median annual required contribution states would need to move toward full funding of their plans can be almost three times what they are paying right now: \$314 million compared with \$110 million, respectively.

An effort to begin funding for the future is worth considering for a variety of reasons. However, given the size of their long-term liabilities, many states are going to be supplementing that effort with other steps to reduce the bill coming due.

FALLING SHORT ON PAYING THE ANNUAL BILL FOR OTHER BENEFITS

Almost all states need to pay more into their retiree health care plans if they want to move toward full funding. States in bold paid their annual required contribution in 2006. Data shown are for the 41 states with available figures. Numbers are in millions.



SOURCE: Pew Center on the States

Other Benefits

| State         | Expected Return on Pay as You Go | Expected Return if Funded |
|---------------|----------------------------------|---------------------------|
| Alabama       | 4.00%                            | 6.00%                     |
| California    | 4.50%                            | 7.75%                     |
| Massachusetts | 4.50%                            | 8.25%                     |
| Nevada        | 3.80%                            | 8.00%                     |
| S. Carolina   | 4.50%                            | 7.25%                     |
| West Virginia | 4.50%                            | 7.75%                     |

NOTE: If the annual required contribution were funded consistently each year, a higher interest rate could be used and the dollar amounts would be reduced.

SOURCE: Pew Center on the States

## Scaling Back on Benefits

In general, states have far more flexibility to make changes to retiree benefits like health care than they do to pensions. But it gets more complicated when it comes to individual states, in part because of how they make their decisions about benefits. One might assume, for instance, that in heavily unionized states, benefits would be determined by labor negotiations. But that's

not always true. At the state level in California, for example, retiree health benefits are not a topic open to union negotiation. These decisions are the province of the pension systems' board, according to Dickerson of the California Legislative Analyst's Office. On the other hand, in California's local governments, labor negotiations have already started to have

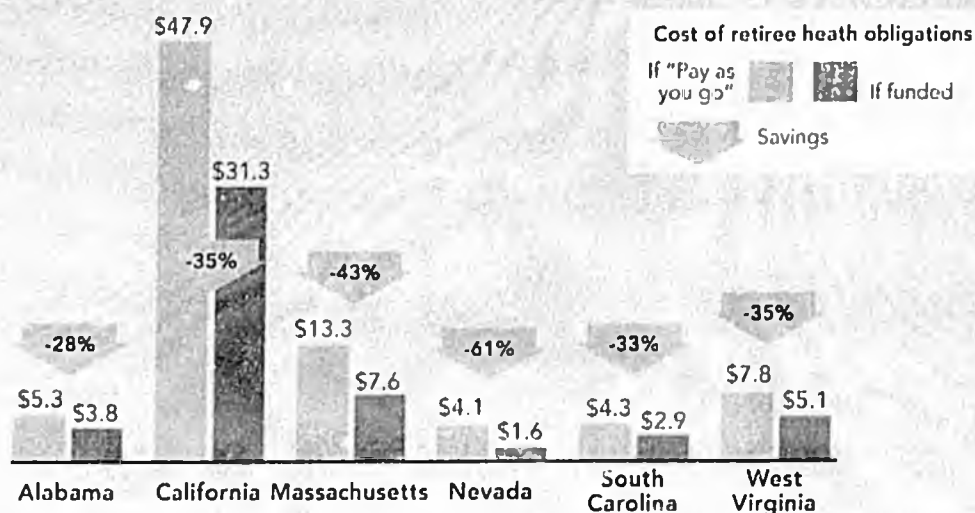
## Other Benefits of Full Funding

The benefit that comes from putting money in a trust is that it starts to earn interest and, over time, that interest becomes another funding source for the benefits, replacing some of the contribution that would otherwise come from future taxpayers.

In fact, states that move toward full funding of their benefits will see an immediate impact on the actuarial accrued liability because there is an increase in the discount rate that is used to calculate this amount. Exhibits 3-4 and 3-5 highlight a sampling of states, the impact of discount rates when they simply pay the benefits out of current monies, and the impact of the higher discount rate that would be permitted if they establish a qualified trust and begin providing consistent long-term funding. Most states that provide long-term funding likely will provide a portion and not the whole thing, which will enable them to use a discount rate somewhere between the two options shown.

For example, in California, actuaries have calculated the long-term obligation for state employees at \$48 billion. One important element in that calculation is the "discount rate"—the interest rate assumption the state is allowed to apply to current assets used to pay future bills. With that bill paid for on a pay-as-you-go basis, the actuaries assume a 4.5 percent interest rate, similar to what the state earns in its short-term cash accounts. But if California were to start putting aside sufficient money each year in a qualified trust, higher interest earnings could be achievable. So the actuaries would use a 7.75 percent interest rate—the same rate used in its pension system—reducing the total amount owed to \$31 billion.

The examples below demonstrate the financial benefits of a qualified trust that is consistently funded.  
(In billions)



SOURCE: Pew Center on the States

an impact. This has also been the case in the private sector (see "A Harbinger?").

In other states the decisions may fall to the legislature or collective bargaining with unions, and the flexibility to make changes depends on state law and past labor agreements. For example, in 1997 in Connecticut, the administration of then-Governor John Rowland reached a 20-year agreement with the state's labor unions, which prevents any significant changes from being made until 2017. "That's tied our hands," said Nancy Wyman, state comptroller.

A smattering of states have made changes over the last several years—but experts predict that this kind of activity will be ever more common as states move from the head-scratching phase to more clear-cut plans.

This topic is so new that there is little or no evidence that any one of the approaches that states have taken thus far is necessarily superior to others. Here are examples of what's been happening across the country in the last several years:

- In 2005, Pennsylvania started requiring new retirees to pay 1 percent of their annual base salary at the time of retirement for health care costs. In addition, as of July 1, 2008, 20 years of state service will be required for lifetime health benefits in Pennsylvania compared with 15 years in the past.<sup>17</sup>
- In 2005, North Carolina increased the time that new employees need to work to qualify for full subsidization of benefits.<sup>18</sup> (See "States to Watch.")

## A Harbinger?

In September, the United Auto Workers union and General Motors reached an agreement that some observers point to as a useful example for the public sector. Faced with a \$50 billion actuarial accrued liability for post-retirement benefits and ongoing intense competition from international carmakers, GM and the union agreed to end the company's defined benefit plan for non-pension benefits and shift to a Voluntary Employee Beneficiary Association deal in which the automaker pays an annual amount to a union-run medical benefit plan.

This defined contribution approach removes the risk to GM of dealing with health care inflation. The unions were willing to accept this option, faced with the potential of more drastic cuts in the future or layoffs if the company couldn't afford to pay the benefits promised.<sup>112</sup>

For states in which retiree benefits are the subject of labor negotiations, this topic is highly likely to be a prominent part of future discussions. At the local level, for example, several unions have negotiated changes in benefits or benefit structure over the last year. One theme, particularly in California, has been for a union to protect benefits of current employees while allowing benefits to be diminished for new employees. Unions in Orange County went a step further, negotiating a pay increase for current employees while substantially reducing non-pension benefits for future hires and retirees. It is likely that this case will be litigated, said Dickerson.

- In 2006, Maryland increased co-payments on prescriptions and increased employee and retiree premium payments.<sup>113</sup>
- In 2005, Alaska ended early retiree health coverage for new employees, limiting retiree coverage to those who are 65 and older.<sup>114</sup> (The state also shifted new employees from defined benefit pension plans to defined contribution plans.)
- In 2006, Illinois began offering 15,000 state retirees not covered by Medicare the option of dropping their state-subsidized health insurance in exchange for a \$150 monthly payment. Only those who had another source of insurance were eligible. The state pays \$834 per month to insure the health of a retiree not covered by Medicare. As of September 30, 2007, 124 employees had accepted this offer, according to Timothy Blair, executive secretary for the State Employees' Retirement System of Illinois.<sup>115</sup>

## States to Watch

### West Virginia

Having experienced the bitter toll that underfunded pensions take on a state budget, West Virginia was one of the states that moved most rapidly to deal with a \$7.8 billion unfunded liability for its other post-employment benefits. Among other things, the state increased retiree co-payments, set up an irrevocable trust for funding and shifted retirees to a Medicare advantage prescription drug plan.

According to Ted Cheatham, executive director of West Virginia Public Employees Insurance, the actions reduced the state's long-term liability by more than half, to \$3.4 billion. Part of the savings stems from a reduction in medical cost inflation, with the state shifting from the 8 percent inflation rate it expected in the next few years to a 6 percent inflation rate, based on health care cost growth that mitigated substantially in fiscal year 2007.

The following describes the state's health care benefits for retirees before and after the reforms.

**BEFORE.** The state required co-payments from active employees but not from retirees. Retirees paid a premium based on years of service and date of hire, but it was considerably discounted from what the state actually spent. Retiree health care costs were covered on a pay-as-you-go basis, with the premiums from active employees providing a \$100 million subsidy for retiree costs every year. Supplemental Medicare coverage was provided on a fee for service basis. Meanwhile, the number of retirees was growing at a net rate of 1,000 a year.

**AFTER.** Co-pays were set for retirees at \$10 for primary care, \$20 for specialists and \$50 for emergency room visits, with retirees expected to pay 20 percent of hospital expenses not covered by Medicare. Out of pocket expenses were capped at \$500. All retirees were required to join a Medicare advantage prescription drug plan. These actions reduced per capita costs from \$300 per member per month to \$121 per member per month. In addition, the West Virginia Retiree Health Benefits Trust Fund was set up. It currently has \$39 million with another \$63 million deposit expected by year's end. Finally, to relieve some pressure on retirees' wallets, the state reduced premium costs by a flat \$22 per Medicare member per month.

A number of retirees are unhappy with the change, but it could have been worse; the state's original proposal in fall 2006 was considerably more expensive for retirees. In adopting the new plan, the state—heavily unionized—worked with a number of labor groups. Although they vary in their level of acceptance, Cheatham said “most are satisfied with where we ended up.” At this point, there

*“Had we not made these changes to reduce the liability we would have had to do something more drastic to retiree benefits in the future.”*

*— Ted Cheatham,  
executive director of West Virginia  
Public Employees Insurance*

has not been any litigation regarding the changes. “Had we not made these changes to reduce the liability we would have had to do something more drastic to retiree benefits in the future,” said Cheatham.

Cheatham added that by changing to the Medicare drug prescription plan, the state was able to take advantage of federal dollars that directly fund that program. By contrast, if the state had continued to provide its own prescription drug benefits, the subsidy provided by the federal government under Medicare Part D could not be used to reduce the other post-employment benefits liability, according to GASB rules.

## Ohio

Only a small number of states have accumulated significant assets to offset their OPEB obligations. Ohio, which had \$11.1 billion saved as of fiscal year 2006, has accumulated much more than even the next closest state (Alaska at \$2.2 billion).

Ohio began offering health care to its retirees in 1969 and started paying their health insurance premiums in 1974.<sup>111</sup> Managers initiated the first round of restructuring in 1986 by raising eligibility from five years of service to 10. The state introduced wellness programs and choice of plan during the 1990s. And it continued to restructure further by placing a cap on the lifetime benefit an individual retiree can receive as well as increasing deductibles and co-payments and tightening definitions of dependents.



The solvency test measures how long any dedicated funds will last given the expected level and timing of expenditures. Because Ohio has partially funded its OPEB obligation, the solvency test can be used to gauge its progress. In 2005, officials with the Ohio Public Employees Retirement System estimated the solvency period at 17 years. It grew to 18 years in 2006 and is estimated at 27 years for 2007, according to state officials.

## Utah

Utah is noteworthy because it has a relatively modest long-term liability of \$750 million or \$488 million, respectively, for its non-pension benefits, depending on whether the state follows a pay-as-you-go approach or continues to pay the annual required contribution, as it has done in 2007 and 2008. Yet it has taken steps to restructure its benefits as a result of requirements to disclose these obligations.

During its 2005 session, the Utah legislature passed a bill, effective January 1, 2006, allowing retiring employees to receive 25 percent of the value of unused sick leave as a contribution into a 401(k) account.<sup>112</sup> (Those who retired before January 1, 2006, were able to cash out this amount of unused sick leave.) The value of any unused sick leave earned after this date is converted into a health reimbursement account. A prior provision allowing employees to receive health and life insurance coverage for up to five years or until they turned 65 is being phased out.

Employees have not accepted these changes without a fight. Utah was sued by the Utah Public Employees Association on behalf of five anonymous plaintiffs who charged that the legislature had illegally changed the rules of vesting and contributions.<sup>113</sup> The state Supreme Court held that the legislative change was not an unconstitutional taking and that the plaintiffs did not have a property interest in the specific use of unused sick leave.

## North Carolina

North Carolina offers other post-employment benefits to retired state employees, its universities and community college faculty and teachers who are members of the Teachers' and State Employees' Retirement System, as well as to other systems covering the judicial and legislative branches of government. The plan is the same as the one covering active employees.

In 2006, the North Carolina legislature overwhelmingly passed a bill that increased OPEB vesting periods from five to 20 years for employees hired after September 30, 2006. Those retiring with fewer than 20 years' service will have to pay between 50 percent and 100 percent of their health insurance premium, depending upon the number of years served.<sup>17</sup>

Because this reform is prospective, the state will not realize any financial benefits until 2011, when its OPEB obligation is likely to be somewhat reduced.<sup>17</sup> Figuring out the impact of the change is highly complex. While it

certainly cuts back on the number of individuals who are eligible for full benefits, it will also result in a phenomenon economists call "adverse selection," which occurs when plan members who pay more in premiums than they consume in services exit the plan. Because those retiring with fewer than 20 years of service will now have to pay a significant portion of their premiums, many employees are expected to obtain health insurance from a lower cost provider. This loss of premium payments partially offsets the positive fiscal impact. It also means the resulting pool of plan members will be older and sicker, which could have a similar effect.

The net result of this reform is still anticipated to save money. But states should thoroughly investigate all restructuring options to ensure that the unintended consequences of changes to OPEB plans are not greater than the anticipated benefits.

## Innovation in Management

Two factors lead to the large year-to-year increases in retiree health care benefits: the increasing number of retirees and the inflation of medical costs. States' estimates of liabilities vary somewhat depending on their assumptions about these two variables. Pinning down medical inflation is particularly tricky. Analysts in California and elsewhere have expressed concern that assumptions paint a way-too-optimistic portrait of what will happen over time. Still, governments have used a variety of management tools to whittle away at what they're spending on health care. Practices that have proven particularly useful

include establishing preferred drug lists, pushing the use of generics rather than brand-name drugs, shifting to managed care, and providing preventive services.

Here are three particularly hot areas of focus for governments to bring down retiree health costs:

### Savings through consolidation

States can help their localities and themselves by bundling their plans under a single administrative umbrella. This can have immediate benefit because when risk is spread

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over a larger population, premiums tend to decline. Also, the so-called "big pencil" approach makes it far easier to bargain effectively with health care providers. Groups of employees can potentially also lower administrative costs as investment costs and overhead decline per member.

Missouri has been resolutely attempting to use consolidation to check health care costs for retirees. As of February 2007, the Missouri Consolidated Health Plan (MCHCP) claimed 104,545 members, or about 24 percent of all government workers in the state.<sup>119</sup> The plan's comprehensive annual financial report points to an extremely moderate increase of 1.7 percent in medical costs from fiscal year 2005 to fiscal year 2006 and an overall increase in operating expenses of only 3.3 percent during that period.<sup>120</sup>

In March 2006, a Missouri Foundation for Health report called on the state to expand eligibility for the plan to include non-governmental entities, seeing an opportunity to provide affordable health care coverage for all citizens using this successful structure. The report stated, "Because MCHCP already

provides coverage not just for state employees but also for a variety of municipal employers, it is logical to consider it as a candidate to serve small non-governmental employers as well."<sup>120</sup>

## Wellness programs

Many governments are promoting smarter choices for employees and retirees in four categories: health assessments and monitoring; health insurance incentives; healthy work environment initiatives, and physical fitness programs. Governments can use these programs to lower costs and get beneficiaries more involved in managing their care.

Texas offers among the most comprehensive wellness programs. In its plan year ending August 31, 2006, the Texas Blue Connection Preventive Care Intervention program sent nearly 92,000 women over age 40 "birthday cards," encouraging them to be screened for cancer and osteoporosis. Nearly 50,000 men over age 50 were sent similar cards encouraging prostate exams.<sup>121</sup>



## Aggressive health care management

California's public employee retirement system recently initiated a purchasers' coalition to work with hospitals to increase the quality of service while managing costs. Called a "Partnership for Change," the program promotes performance measurement and public reporting. It strives to increase competition by negotiating rates with hospitals based on performance and value, while providing reliable data for purchasers to help make decisions. Benchmarking is used to increase transparency.

In summer 2003, the Massachusetts Group Insurance Commission (GIC) embarked on a multiyear effort called the Clinical Performance Improvement Initiative.<sup>122</sup> The initiative, which

has become central to the GIC's strategy for health care coverage, seeks to deliver high-quality and cost-efficient health care to the GIC's 289,000 members. Now in its third year of implementation, the initiative relies on a database of over 150 million claim lines supplied by the six health plans currently providing coverage to GIC members. All of the claims are de-identified, which means that personal information is protected. The database is used to make quality and resource efficiency comparisons among physicians. The GIC's health plans use the results of the analysis to rank their doctors and stratify them into different groups or tiers. The health plans use modest co-pay differentials as incentives to encourage members to utilize higher tiered, more cost-efficient providers. This approach also seeks to encourage providers to improve their care delivery so as to "lift all the boats."

## Conclusion

As states begin to report on the costs of health care and other non-pension benefits for public sector retirees, the long-term liabilities appearing on their "balance sheets" are likely to generate significant attention. A handful of states have been coping with how to pay for other post-employment benefits for some time, and these examples highlight the

benefits of consistent funding, reasoned policy decisions and good management. At this point, most states are just beginning to understand the problem, which is an important first step. The challenge of averting a funding crisis is daunting—but it will get exponentially larger if ignored.



# Endnotes

- 87 Currently 43 states have completed at least preliminary actuarial valuations for their other post-employment benefit liabilities. Although efforts have been made to confine research to state employees, some states are unable to isolate state employee benefits from teacher or local benefits included in cost-sharing plans.
- 88 The PCS analysis centers on OPEB obligations for state employees, due to the wide range of practices regarding state involvement with other post-employment benefits for teachers or municipal employees.
- 89 David Zion and Amit Varshney, "You Dropped a Bomb on Me, GASB," *Credit Suisse* (March 22, 2007). *Credit Suisse* estimated the unfunded liabilities for states at \$558 billion, but included calculations for teachers in the total. It estimated the liability for localities at \$951 billion to arrive at the \$1.5 trillion. For the 16 states for which it had no estimates, *Credit Suisse* used a formula calculation in which it multiplied the number of employees by \$100,000.
- 90 Michéle Maynard and Jeremy W. Peters, "GM to Offer Buyout Deal to More Than 125,000 Workers," *The New York Times*, 22 March 2006.
- 91 For definitions of these terms, see the Glossary in Section 1.
- 92 There was no actuarial valuation for Illinois' other retiree benefits.
- 93 Civic Committee of the Commercial Club of Chicago, *Facing Facts: A Report of the Civic Committee's Task Force on Illinois State Finance* (Commercial Club of Chicago, December 6, 2006), <http://www.civiccommittee.org/initiatives/StateFinance/FacingFacts.pdf>.
- 94 Legislative Budget Board staff, *Texas State Government Effectiveness and Efficiency: Selected Issues and Recommendations*, submitted to the 80th Texas Legislature (Austin, January 2007), 129.
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## Appendices

## Appendix A

A-1

## A MOVING PICTURE: HOW STATE PENSION FUNDING LEVELS HAVE CHANGED, 1997-2006

| State         | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 | 1999 | 1998 | 1997 |
|---------------|------|------|------|------|------|------|------|------|------|------|
| Alabama       |      | 84%  | 90%  | 93%  | 97%  | 101% | 103% | 102% | 101% | 111% |
| Alaska        | 74%  | 64%  | 67%  | 70%  | 73%  | 99%  | 100% | 104% | 103% | 101% |
| Arizona       | 85%  | 86%  | 90%  | 99%  | 108% | 118% | 122% | 118% | 120% | 117% |
| Arkansas      | 82%  | 82%  | 86%  | 90%  | 96%  | 100% | 101% | 101% | 100% | 97%  |
| California    |      | 87%  | 86%  | 84%  | 96%  | 106% | 116% | 118% | 114% | 105% |
| Colorado      | 74%  | 73%  | 71%  | 76%  | 88%  | 99%  | 105% | 103% | 96%  | 92%  |
| Connecticut   | 56%  | 59%  | 60%  | 66%  | 69%  | 72%  | 72%  | 65%  | 65%  | 64%  |
| Delaware      | 97%  | 97%  | 98%  | 101% | 103% | 105% | 108% | 107% | 100% | 97%  |
| Florida       | 106% | 107% | 112% | 114% | 115% | 118% | 118% | 113% | 106% | 91%  |
| Georgia       | 96%  | 98%  | 100% | 101% | 102% | 103% | 103% | 98%  | 96%  | 90%  |
| Hawaii        | 65%  | 69%  | 72%  | 76%  | 84%  | 91%  | 94%  | 94%  |      |      |
| Idaho         | 95%  | 93%  | 90%  | 82%  | 83%  | 95%  | 113% | 109% | 106% | 94%  |
| Illinois      | 60%  | 60%  | 64%  | 49%  | 54%  | 63%  | 75%  | 73%  | 72%  | 70%  |
| Indiana       | 64%  | 65%  | 67%  | 67%  | 64%  | 67%  | 67%  | 64%  | 61%  |      |
| Iowa          | 88%  | 89%  | 89%  | 90%  | 93%  | 97%  | 98%  | 97%  | 95%  | 94%  |
| Kansas        | 69%  | 69%  | 70%  | 75%  | 78%  | 85%  | 88%  | 86%  | 83%  | 83%  |
| Kentucky      | 70%  | 76%  | 83%  | 88%  | 94%  | 102% | 111% | 105% | 97%  | 94%  |
| Louisiana     | 67%  | 64%  | 63%  | 68%  | 74%  | 78%  | 79%  | 75%  | 73%  | 68%  |
| Maine         | 77%  | 76%  | 75%  | 74%  | 77%  | 78%  | 79%  | 75%  | 69%  | 63%  |
| Maryland      | 82%  | 88%  | 92%  | 93%  | 94%  | 98%  | 101% | 97%  | 90%  | 86%  |
| Massachusetts | 72%  | 73%  | 75%  | 70%  | 83%  | 84%  | 87%  | 81%  | 81%  | 75%  |
| Michigan      | 81%  | 79%  | 84%  | 87%  | 93%  | 99%  | 101% | 101% | 99%  | 103% |
| Minnesota     | 93%  | 98%  | 100% | 102% | 105% | 108% | 107% | 107% | 107% | 102% |
| Mississippi   | 73%  | 72%  | 75%  | 79%  | 83%  | 87%  | 82%  | 82%  | 84%  | 79%  |
| Missouri      | 81%  | 81%  | 80%  | 81%  | 93%  | 96%  | 100% | 98%  | 96%  | 95%  |

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A-1

## A MOVING PICTURE - HOW STATE PENSION FUNDING LEVELS HAVE CHANGED, 1997-2006 CONTINUED

| State                 | 2006       | 2005       | 2004       | 2003       | 2002       | 2001       | 2000       | 1999       | 1998       | 1997       |
|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Montana               | 80%        | 78%        | 80%        | 91%        | 91%        | 103%       | .03%       | 83%        | 83%        | 79%        |
| Nebraska              | 89%        | 88%        | 89%        | 92%        | 96%        |            |            |            |            |            |
| Nevada                | 75%        | 76%        | 79%        | 81%        | 82%        | 84%        | 85%        | 82%        | 78%        | 76%        |
| New Hampshire         | 61%        | 60%        | 71%        | 75%        | 82%        | 85%        | 90%        | 89%        | 108%       | 110%       |
| New Jersey            | 79%        | 82%        | 87%        | 94%        | 101%       | 109%       | 111%       | 110%       | 106%       | 102%       |
| New Mexico            | 82%        | 84%        | 87%        | 92%        | 98%        | 99%        | 96%        | 90%        | 84%        | 82%        |
| New York <sup>1</sup> | 100%       | 100%       | 100%       | 100%       | 100%       | 100%       | 100%       | 100%       | 100%       | 100%       |
| North Carolina        | 105%       | 106%       | 106%       | 106%       | 109%       | 110%       | 108%       | 104%       | 99%        | 99%        |
| North Dakota          | 81%        | 82%        | 86%        | 91%        | 97%        | 103%       | 108%       | 97%        | 99%        | 100%       |
| Ohio                  | 81%        | 80%        | 81%        | 79%        | 81%        | 96%        | 96%        | 94%        | 92%        | 89%        |
| Oklahoma              | 59%        | 60%        | 60%        | 66%        | 65%        | 66%        | 68%        | 65%        | 64%        | 58%        |
| Oregon                | 110%       | 104%       | 96%        | 97%        | 91%        | 107%       | 98%        | 99%        | 93%        | 93%        |
| Pennsylvania          | 87%        | 87%        | 93%        | 100%       | 106%       | 115%       | 127%       | 121%       | 111%       | 106%       |
| Rhode Island          |            | 56%        | 60%        | 64%        | 73%        | 78%        | 81%        | 83%        | 78%        | 75%        |
| South Carolina        |            | 73%        | 81%        | 83%        | 86%        | 88%        | 89%        | 98%        | 94%        | 91%        |
| South Dakota          |            | 96%        | 98%        | 97%        | 97%        | 96%        | 96%        | 97%        | 96%        | 95%        |
| Tennessee             | 99%        | 99%        | 99%        | 99%        | 98%        | 98%        | 99%        | 99%        | 99%        | 99%        |
| Texas                 | 89%        | 88%        | 93%        | 95%        | 97%        | 121%       | 107%       | 104%       | 105%       | 100%       |
| Utah                  | 96%        | 93%        | 92%        | 95%        | 93%        | 103%       | 105%       | 102%       | 96%        | 91%        |
| Vermont               | 92%        | 95%        | 94%        | 94%        | 94%        | 92%        | 92%        | 91%        | 90%        | 86%        |
| Virginia              |            | 81%        | 89%        | 95%        | 100%       | 106%       | 104%       | 94%        | 87%        | 79%        |
| Washington            |            | 79%        | 85%        | 88%        | 93%        | 98%        | 102%       | 96%        | 88%        | 81%        |
| West Virginia         | 55%        | 49%        | 43%        | 39%        | 40%        | 44%        | 47%        | 46%        | 46%        |            |
| Wisconsin             | 100%       | 99%        | 99%        | 99%        | 97%        | 96%        | 96%        | 96%        | 95%        | 95%        |
| Wyoming               | 95%        | 95%        | 86%        | 92%        | 92%        | 103%       | 115%       |            |            |            |
| <b>US Average</b>     | <b>82%</b> | <b>82%</b> | <b>83%</b> | <b>86%</b> | <b>89%</b> | <b>95%</b> | <b>97%</b> | <b>94%</b> | <b>92%</b> | <b>90%</b> |

<sup>1</sup> See n. 4, page 13.

NOTE: Missing cells indicate that data were unavailable.

SOURCE: Pew Center on the States

**PAYING THE ANNUAL BILL - KEEPING UP WITH ANNUAL REQUIRED PAYMENTS**  
 1997-2006

| State          | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 | 1999 | 1998 | 1997 |
|----------------|------|------|------|------|------|------|------|------|------|------|
| Alabama        | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Alaska         | 61%  | 47%  | 92%  | 118% | 120% | 109% | 99%  | 105% | 91%  | 93%  |
| Arizona        | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Arkansas       | 108% | 110% | 101% | 102% | 102% | 101% | 102% | 101% | 101% | 101% |
| California     | 108% | 110% | 101% | 102% | 102% | 101% | 102% | 101% | 101% | 101% |
| Colorado       | 62%  | 49%  | 52%  | 69%  | 100% | 100% | 100% | 100% | 100% | 100% |
| Connecticut    | 100% | 88%  | 89%  | 94%  | 99%  | 94%  | 94%  | 94%  | 66%  | 70%  |
| Delaware       | 97%  | 93%  | 91%  | 88%  | 80%  | 80%  | 84%  | 85%  | 85%  | 85%  |
| Florida        | 96%  | 102% | 92%  | 98%  | 97%  | 110% | 111% | 100% | 100% | 100% |
| Georgia        | 100% | 100% | 100% | 100% | 100% | 100% | 101% | 101% | 100% | 100% |
| Hawaii         | 100% | 100% | 100% | 100% | 100% | 5%   | 13%  | 83%  |      |      |
| Idaho          | 107% | 102% | 98%  | 110% | 131% | 131% | 117% | 100% | 99%  | 99%  |
| Illinois       | 33%  | 44%  | 111% | 67%  | 78%  | 80%  | 114% | 98%  | 96%  | 74%  |
| Indiana        | 101% | 85%  | 78%  | 103% | 108% | 123% | 125% | 120% | 92%  | 85%  |
| Iowa           | 84%  | 86%  | 91%  | 99%  | 100% | 100% | 101% | 104% | 101% | 103% |
| Kansas         | 63%  | 69%  | 69%  | 79%  | 80%  | 78%  | 77%  | 77%  | 74%  | 72%  |
| Kentucky       | 86%  | 93%  | 94%  | 100% | 104% | 101% | 101% | 101% | 104% | 99%  |
| Louisiana      | 101% | 101% | 93%  | 97%  | 102% | 107% | 105% | 107% | 103% | 100% |
| Maine          | 106% | 105% | 112% | 109% | 165% | 100% | 102% | 108% | 109% | 108% |
| Maryland       | 82%  | 83%  | 89%  | 92%  | 100% | 100% | 100% | 100% | 100% | 100% |
| Massachusetts  | 94%  | 101% | 63%  | 67%  | 101% | 116% | 99%  | 120% | 156% | 174% |
| Michigan       | 83%  | 78%  | 65%  | 78%  | 89%  | 126% | 111% | 99%  | 123% | 109% |
| Minnesota      | 99%  | 115% | 114% | 148% | 172% | 156% | 162% | 152% | 137% | 131% |
| Mississippi    | 100% | 100% | 100% | 100% | 101% | 101% | 100% | 100% | 100% | 115% |
| Missouri       | 81%  | 77%  | 84%  | 96%  | 100% | 100% | 100% | 100% | 99%  | 99%  |
| Montana        | 153% | 91%  | 94%  | 99%  | 100% | 130% | 129% | 101% |      |      |
| Nebraska       | 100% | 91%  | 100% | 99%  | 100% | 100% |      |      |      |      |
| Nevada         | 96%  | 100% | 99%  | 90%  | 96%  | 100% | 97%  | 95%  | 94%  | 100% |
| New Hampshire  | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| New Jersey     | 27%  | 15%  | 8%   | 4%   | 3%   | 17%  | 29%  | 60%  | 40%  | 288% |
| New Mexico     | 91%  | 96%  | 100% | 100% | 100% | 99%  | 99%  | 99%  | 99%  | 99%  |
| New York       | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| North Carolina | 100% | 100% | 100% | 100% | 100% | 82%  | 100% | 100% | 100% | 100% |
| North Dakota   | 66%  | 67%  | 81%  | 97%  | 101% | 101% | 101% | 100% | 100% | 100% |
| Ohio           | 93%  | 98%  | 97%  | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

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PAYING THE ANNUAL BILL - KEEPING UP WITH ANNUAL REQUIRED PAYMENTS,  
1997-2006 CONTINUED

| State          | 2006 | 2005 | 2004 | 2003 | 2002 | 2001 | 2000 | 1999 | 1998 | 1997 |
|----------------|------|------|------|------|------|------|------|------|------|------|
| Oklahoma       | 73%  | 58%  | 60%  | 64%  | 71%  | 77%  | 71%  | 74%  | 81%  | 78%  |
| Oregon         |      | 101% | 100% | 100% | 97%  | 95%  | 95%  | 97%  | 100% | 100% |
| Pennsylvania   | 35%  | 46%  | 100% | 117% | 219% | 112% | 100% | 100% | 100% | 100% |
| Rhode Island   | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| South Carolina | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| South Dakota   | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Tennessee      | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |      |
| Texas          | 84%  | 83%  | 83%  | 86%  | 104% | 138% | 102% | 103% | 97%  | 101% |
| Utah           | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Vermont        | 76%  | 75%  | 67%  | 86%  | 96%  | 96%  | 96%  | 94%  | 85%  | 78%  |
| Virginia       | 87%  | 83%  | 85%  | 64%  | 71%  | 100% | 93%  | 85%  | 71%  | 62%  |
| Washington     | 28%  | 20%  | 22%  | 27%  | 57%  | 164% | 104% | 287% | 114% | 80%  |
| West Virginia  | 182% | 147% | 104% | 105% | 108% | 106% | 104% | 105% | 103% |      |
| Wisconsin      | 100% | 100% | 100% | 100% | 100% | 100% | 96%  | 100% | 100% | 100% |
| Wyoming        | 150% | 113% | 75%  | 69%  | 127% | 469% | 189% |      |      |      |

NOTE: Missing cells indicate that data were unavailable in order to calculate the percent of the annual required contribution funded.

SOURCE: Pew Center on the States

# Appendix B

## The Stand-Out States

To identify the degree of challenge states face in meeting their non-pension obligations to retirees, PCS turned to means used by GASB, Standard & Poor's and Moody's Investor Services for adjusting comparisons of states. We looked at the 40 states for which actuarial valuations are now available and for which we could isolate the state contribution for state employees only. Exhibits B-1 through B-4 put retiree benefit liabilities in context based on population, personal income and payroll.

For those 40 states, the mean per capita costs of their accrued liabilities is \$1,283.<sup>121</sup> Since

there's a wide range of benefits offered, the median is \$774. Looking at the unfunded liabilities as a percentage of total state personal income, the mean is 3.4 percent and the median is 2.5 percent,<sup>124</sup> and when viewed as a percent of covered payroll, the mean is 191 percent and the median is 135 percent.<sup>125</sup> The following section provides tables showing the states that stand out from the pack. These figures assume that the states are not pre-funding the obligation. Once again, if the ARC is paid consistently over time, the AAL and UAAL drop considerably.

### Per capita

Exhibit B-1, which is based on population data from the U.S. Bureau of the Census and the U.S. Department of Commerce, shows the 10 states with the highest per-capita unfunded actuarial accrued liability (UAAL) for their state employees. This indicates the fiscal burden each state's citizens are carrying because of the UAAL, although it does not assess their ability or capacity to pay.

The top three states all have per-capita unfunded accrued liabilities over five times the median, suggesting a relatively heavy burden. Illinois does not appear in Exhibit B-1 because an actuarial valuation was not available. However, as previously noted, the Civic Committee of the Commercial Club of Chicago estimated the liability for state employees at \$48 billion. Using this information, PCS estimates Illinois' per capita liability at \$3,741, which would make it among the top five states in liabilities per state resident.

**B-1**

### UNFUNDED RETIREE HEALTH BILL PER CAPITA

| States      | UAAL/Capita | States        | UAAL/Capita |
|-------------|-------------|---------------|-------------|
| Connecticut | \$6,186     | New Hampshire | \$2,210     |
| Hawaii      | \$5,283     | Massachusetts | \$2,064     |
| Delaware    | \$5,167     | Kentucky      | \$1,923     |
| Maryland    | \$2,590     | Alaska        | \$1,800     |
| New York    | \$2,572     | Median        | \$774       |
| New Jersey  | \$2,474     | Mean          | \$1,283     |

SOURCE: Pew Center on the States; Based on Actuarial Valuations

Appendix B

## As a percentage of personal income

Per-capita statistics, however, do not tell the whole story because they do not take into account the differences in wealth or ability to pay. Measures of personal income in the states, as reported by the U.S. Department of Commerce, help get at that factor. Subject to this further level of analysis, the 10 states with

the largest liabilities do not change dramatically. But the order shifts a bit. Hawaii climbs to the top, and Kentucky appears as its burden rises when measured by its ability to pay. If Illinois data were included, it would appear in Exhibit B-2—again in the top five—at 9.8 percent.

### B-2

#### UNFUNDED RETIREE HEALTH BILL AS A PART OF PERSONAL INCOME

| States      | UAAL/Personal Income | States        | UAAL/Personal Income |
|-------------|----------------------|---------------|----------------------|
| Hawaii      | 14.6%                | New Hampshire | 5.6%                 |
| Delaware    | 13.2%                | Louisiana     | 5.5%                 |
| Connecticut | 12.4%                | Maine         | 5.4%                 |
| Kentucky    | 6.6%                 | New Jersey    | 5.3%                 |
| New York    | 6.1%                 | Median        | 2.5%                 |
| Maryland    | 5.9%                 | Mean          | 3.4%                 |

SOURCE: Pew Center on the States; Based on Actuarial Valuations

## As a percentage of payroll

Another measure used to gauge relative burden—and one that GASB will ask states to produce in their financial reporting—involves the size of the obligation compared to the size of the payroll being covered. Covered payroll is a tricky statistic because some states report the covered payroll for the state portion of their retiree benefits while others report only

the amount for the entire plan. For purposes of this calculation, PCS has excluded the data for those states reporting the latter. For the 34 states where both UAAL and covered payroll data for the state only were available, the median ratio is 135 percent. The 10 states with the highest ratio are reflected in Exhibit B-3.

### B-3

#### UNFUNDED RETIREE HEALTH BILL AS A PART OF PAYROLL

| States      | UAAL/Covered Payroll | States     | UAAL/Covered Payroll |
|-------------|----------------------|------------|----------------------|
| Connecticut | 690%                 | Louisiana  | 362%                 |
| New York    | 552%                 | Maryland   | 362%                 |
| Kentucky    | 422%                 | California | 347%                 |
| Alabama     | 410%                 | New Jersey | 333%                 |
| Hawaii      | 395%                 | Median     | 135%                 |
| Maine       | 377%                 | Mean       | 191%                 |

SOURCE: Pew Center on the States; Based on Actuarial Valuations

Note the rise of New York and the appearance of Alabama, Maine and California. Again, if Illinois data were considered, its unfunded liability as a share of payroll would be ranked first at 709 percent. Why did these states rate so high on UAAL/covered payroll? One

plausible explanation according to a number of sources, including New York's Citizens Budget Commission, is that employees in some of those states may have received wage increases that were relatively low in exchange for better post-retirement benefits over the years.<sup>126</sup>

## States at the Other End of the Spectrum

Until recently, Indiana and Nebraska were the only two states that offer no benefits for retirees over age 65 (although both do have some provisions for retirees who are not yet eligible for Medicare).<sup>127</sup> Oregon also eliminated its coverage for Medicare eligible retirees who were hired on or after August 29, 2003, according to the GAO.<sup>128</sup> Eight additional states—Idaho, Iowa, Kansas, Minnesota, Mississippi, Montana, South Dakota and Wyoming—pay no premiums for retirees, but do allow all eligible retirees to sign on to the state plan.<sup>129</sup> This type of benefit provides an "implicit subsidy," which comes from allowing retirees to participate in the same pool as younger and generally healthier state employees. Because retirees are much older than the average participant in state plans,

they are more expensive to cover, bringing up the average costs of the entire plan. In Wyoming, for example, although the retirees pay for benefits themselves, the inclusion of these older men and women in the insured pool increases the costs to the state by some \$72 million over a 30-year period.<sup>130</sup>

Exhibit B-4 shows states that have the smallest long-term obligations relative to the state's population and as a share of personal income.<sup>131</sup>

In Kansas, Indiana, Minnesota, Mississippi and Nebraska—five of the seven states where actuarial valuations were unavailable—the unfunded actuarial liabilities are likely small.

### B-4 UNFUNDED RETIREE HEALTH BILL PER CAPITA AND AS A SHARE OF PERSONAL INCOME

| States                   | UAAL/Capita | UAAL/Personal Income |
|--------------------------|-------------|----------------------|
| Wisconsin <sup>132</sup> | \$3         | 0.0%                 |
| Arizona                  | \$15        | 0.0%                 |
| Iowa                     | \$74        | 0.2%                 |
| North Dakota             | \$77        | 0.2%                 |
| Wyoming                  | \$140       | 0.3%                 |
| Median                   | \$774       | 2.5%                 |

SOURCE: Pew Center on the States; Based on Actuarial Valuations

Appendices

# Endnotes

- 123 Of the 43 states that have completed an actuarial valuation, 40 states were used in this calculation. These numbers do not reflect Oregon, New Mexico and West Virginia because their valuations did not disaggregate state only data. PCS was able to calculate the state employee portion of OPEB UA/L for Arizona, North Carolina and Ohio.
- 124 Similar to the per capita calculations, Oregon, New Mexico and West Virginia were not included because their valuations did not disaggregate state only data.
- 125 PCS was only able to gather covered payroll for state employees in 37 of the 40 states where we have actuarial valuations and were able to disaggregate state data.
- 126 New York's Citizen Budget Committee, *The Case for Redesigning Retirement Benefits for New York's Public Employees*, (April 29, 2005)
- 127 Workplace Economics, Inc, *2006 State Employee Benefits Survey*
- 128 United States Government Accountability Office, 2007.
- 129 Workplace Economics, Inc, *2006 State Employee Benefits Survey*
- 130 *Report on the State of Wyoming Retiree Health Insurance Study and GASB 45 Liability* (presented by Buck Consultants to the State of Wyoming Joint Appropriations Committee, November 1, 2005), <http://personnel.state.wy.us/EGI/Buck%20Retiree%20Study.pdf>
- 131 Once again, these figures are only for the 40 states which have actuarial valuations and where state employees could be isolated.
- 132 Wisconsin took care of its modest unfunded liability for other post-employment benefits by bonding it out. See p. 50 in Section 3, Other Benefits. The \$600 million in other post-employment benefit bonds may not take care of the full amount, however, as costs are outpacing projections.





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Promises with a Price Public Sector Retirement Benefits



# Pension Obligation Bonds

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February 4, 2008

Alaska Department of Revenue



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## Overview of Pension Obligation Bonds (POBs)

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## Pension Obligation Bonds (POBs)

- Pension Obligation Bonds are bonds issued by a state or local government to pay its obligation to the pension system in which its employees are members.
- POBs have been an increasingly popular and successful way for state and local governments to accomplish financial objectives.
- Since 1995, six states and over 234 local governments have issued POBs totaling in excess of \$40 billion.

## POBs Have Been Issued Throughout the US

- Over \$6 billion
- Between \$1 and \$6 billion total issued
- Less than \$1 billion issued



Source: Lehman Brothers

## Why Should We Consider Issuing POBs?

- Interest rate savings – the interest rate of POBs issued in the near future will be lower than 8.25% charged by the pension system.
- Arbitrage – the actual investment return of pension asset exceeds the POB cost.
- POBs are not generally viewed as adding to the debt burden of the state or local government issuer because they replace existing pension obligations.
- POBs can improve funding ratios at a relatively low cost of funds and with a repayment schedule that fits the state's or local governments' goals and constraints.

## POBs Are:

Not ...



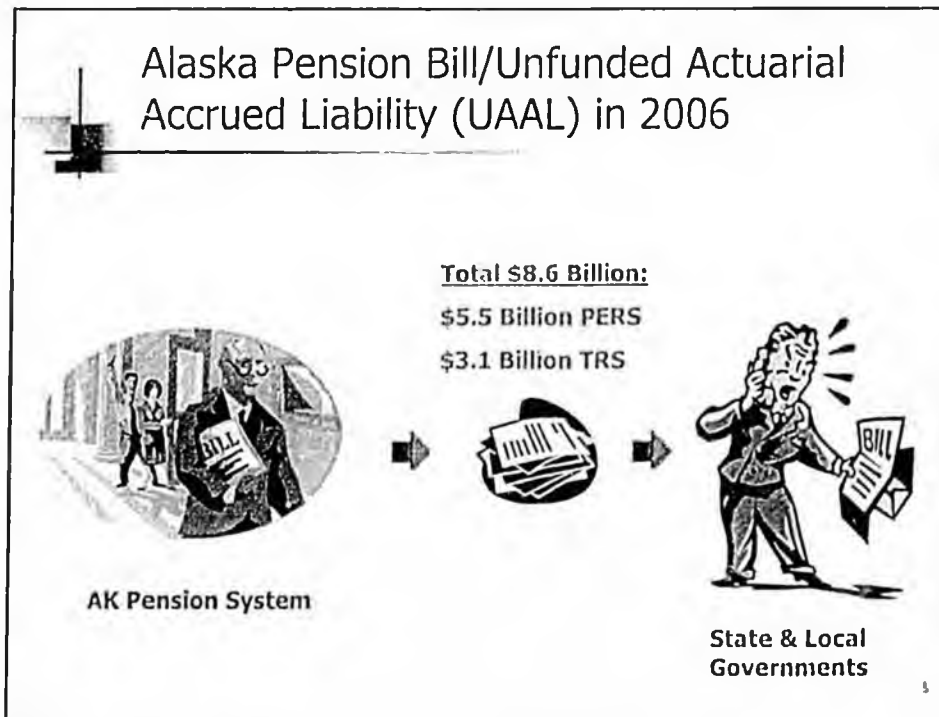
Golden Bullet

But ...

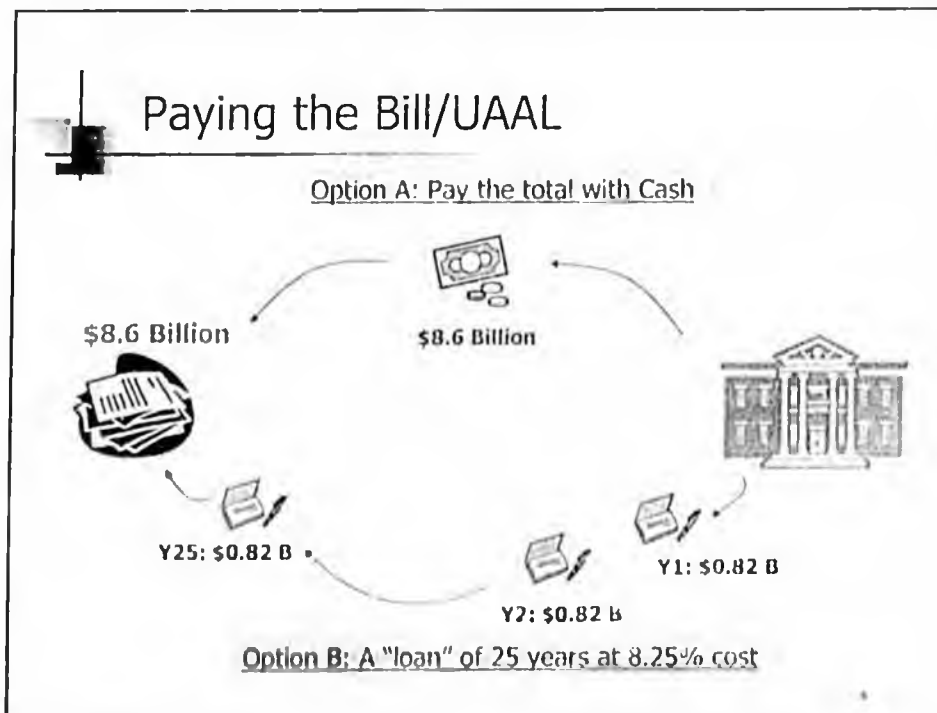


Financial Tool

## Alaska Pension Bill/Unfunded Actuarial Accrued Liability (UAAL) in 2006

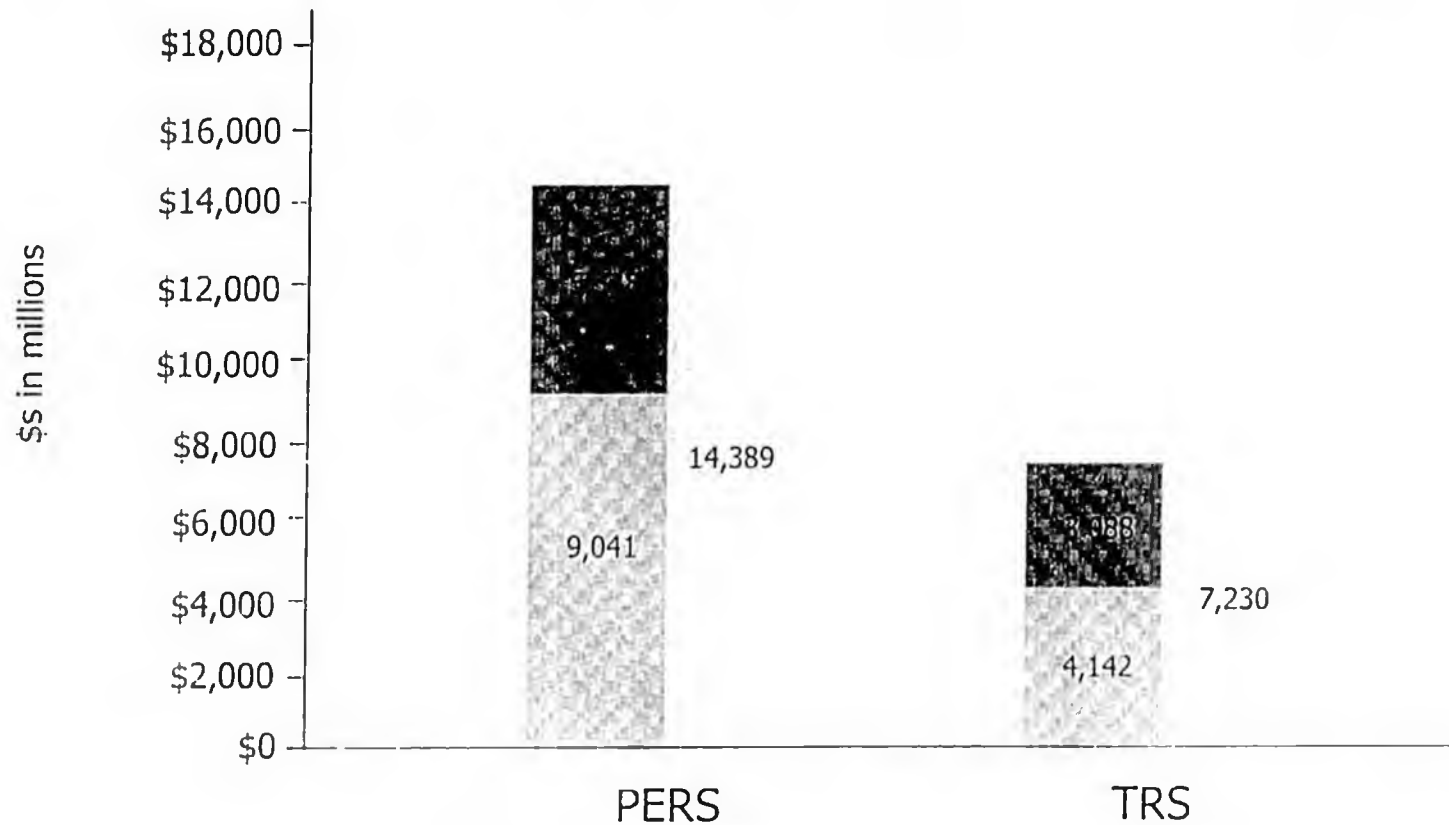


## Paying the Bill/UAAL



# Funding Status Overview

Summary of Funding Status for PERS and TRS as of June 30, 2006



## Interest Rate Savings

## Interest Rate Savings

Comparing the amortization of \$1 billion debt at 8.25% cost to \$1 billion debt at 5.25% over 25 years:

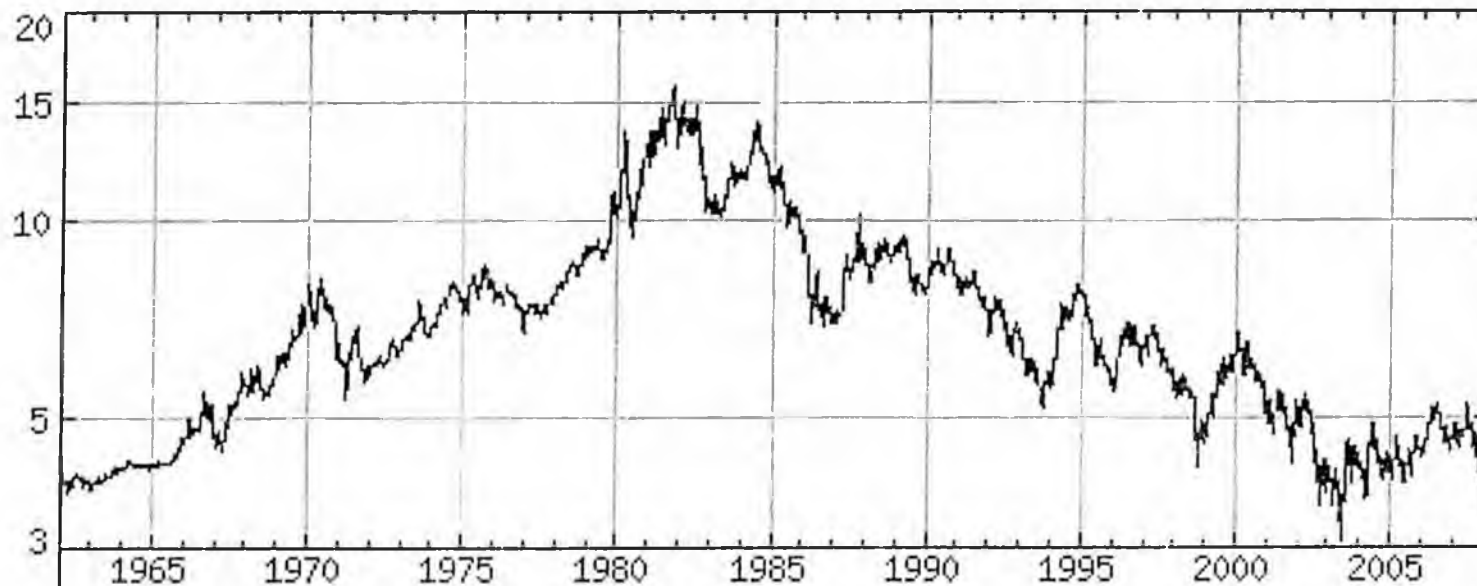
- Saving on interest cost is 3.0%;
- Saving on annual debt payment is \$23 million;
- NPV of savings on annual debt payment over 25 years is \$323 million discounted at 5%.

|                                | Amount (\$Billion) | Interest Cost | Annual P&I Payment (\$Million) |
|--------------------------------|--------------------|---------------|--------------------------------|
| \$                             | 1                  | 8.25%         | \$ 96                          |
| \$                             | 1                  | 5.25%         | \$ 73                          |
| Savings                        |                    | 3.00%         | \$ 23                          |
| NPV of Cumulative Savings @ 5% |                    |               | \$ 323                         |

# Interest Rate History

- 10-Year Treasury yield is 3.65% as of February 1, 2008. This rate is extraordinarily attractive when viewed in a historical context.

## 10-Year Treasury Yields



# Treasury Rates Still Historically Attractive

## 3-month LIBOR Rate

|          |        |
|----------|--------|
| Min:     | 1.00%  |
| Average: | 5.03%  |
| Max:     | 10.63% |
| Current: | 4.62%  |

Lower than current level  
36% of the time

## 5-Year Treasury Rate

|          |       |
|----------|-------|
| Min:     | 2.03% |
| Average: | 5.69% |
| Max:     | 9.73% |
| Current: | 3.27% |

Lower than current level  
8% of the time

## 10-Year Treasury Rate

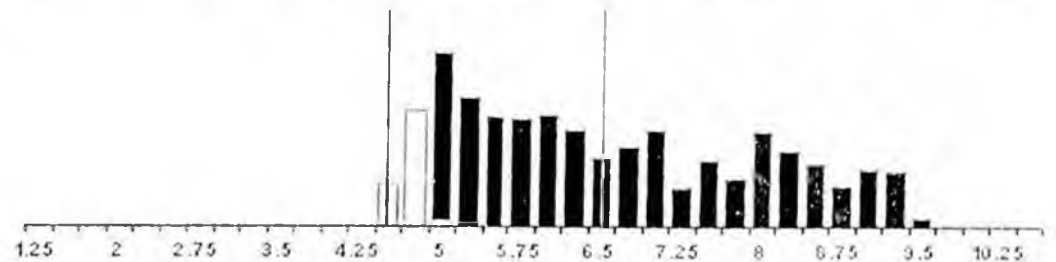
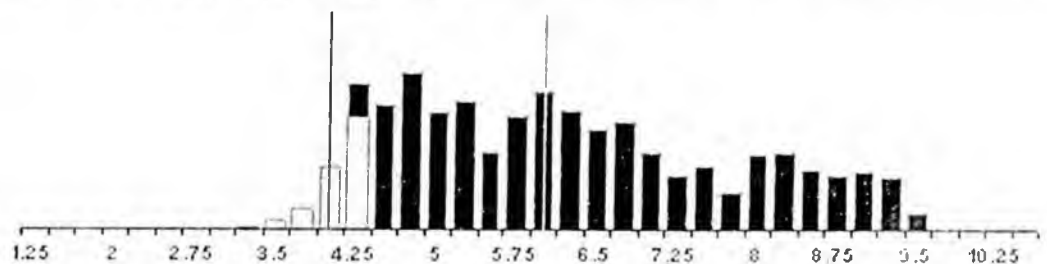
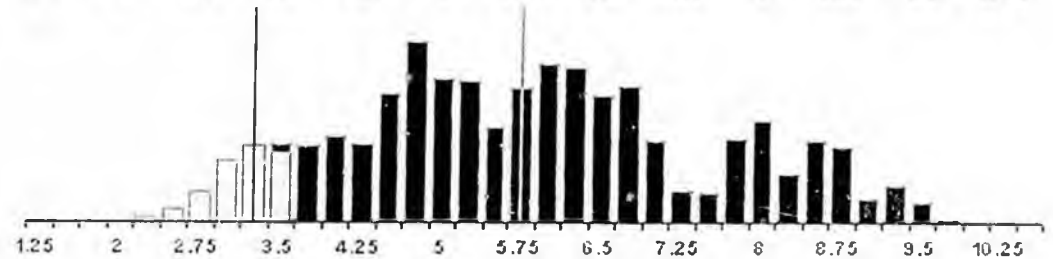
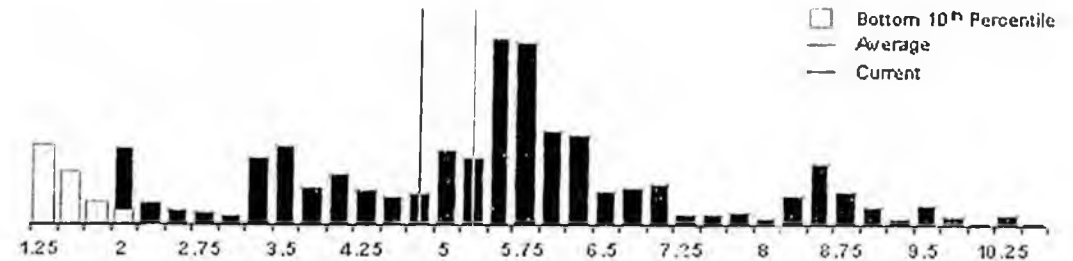
|          |       |
|----------|-------|
| Min:     | 3.11% |
| Average: | 6.06% |
| Max:     | 9.54% |
| Current: | 3.91% |

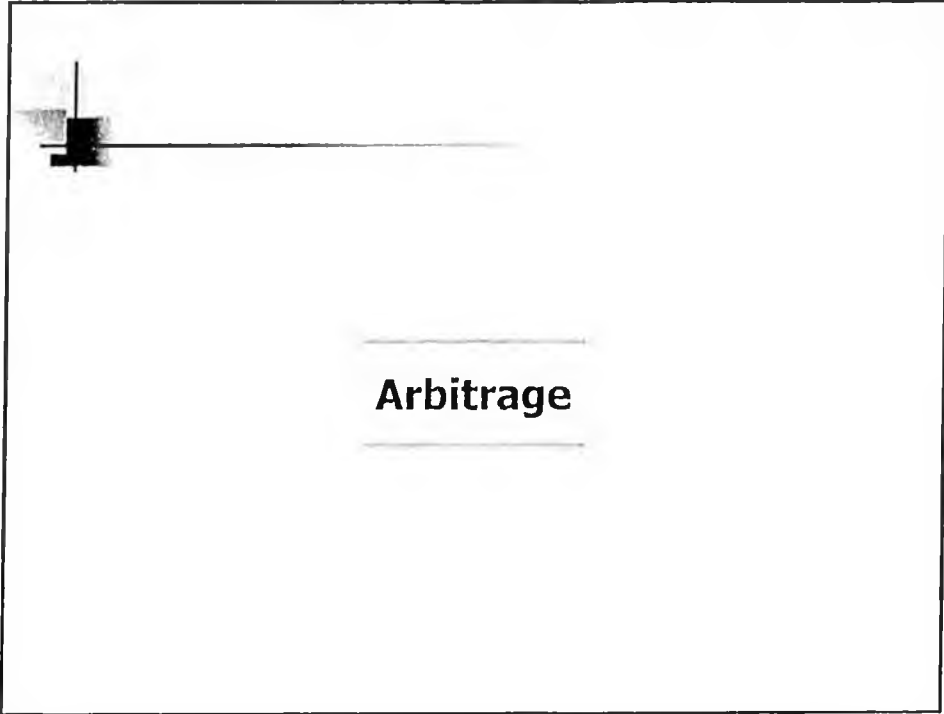
Lower than current level  
3% of the time

## 30-Year Treasury Rate

|          |       |
|----------|-------|
| Min:     | 4.17% |
| Average: | 6.40% |
| Max:     | 9.45% |
| Current: | 4.39% |

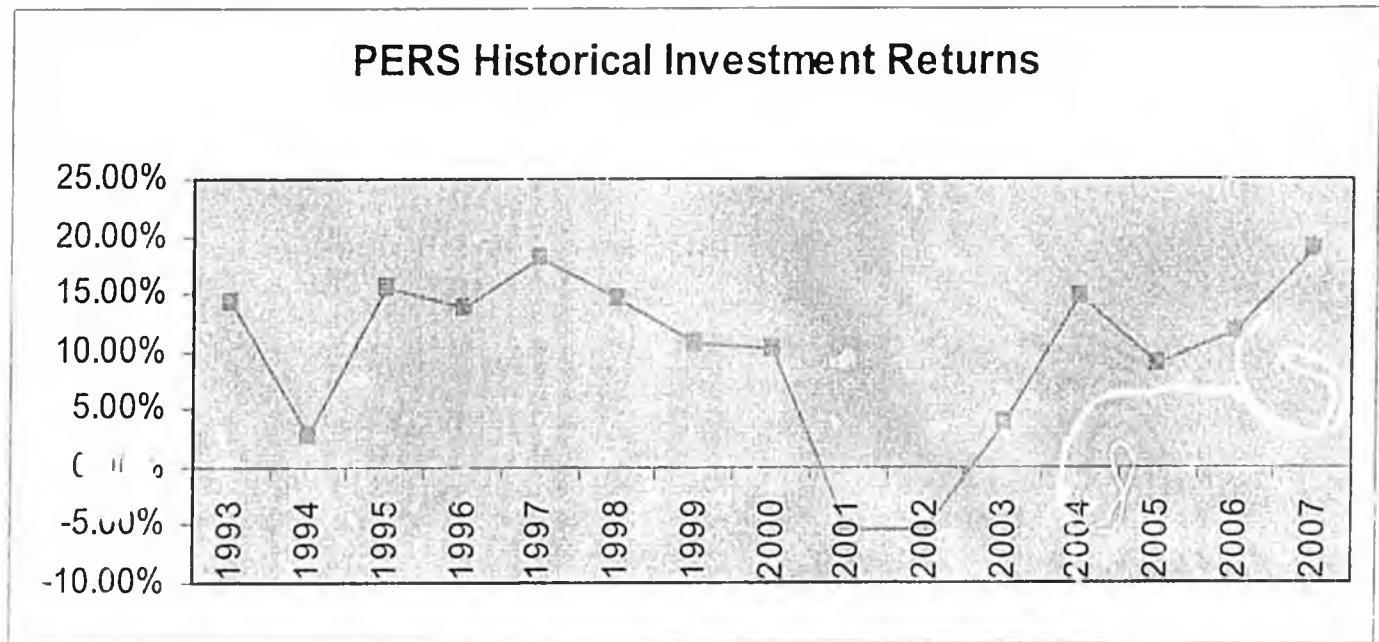
Lower than current level  
1% of the time





# Historical Investment Returns of State Pension Plans (PERS)

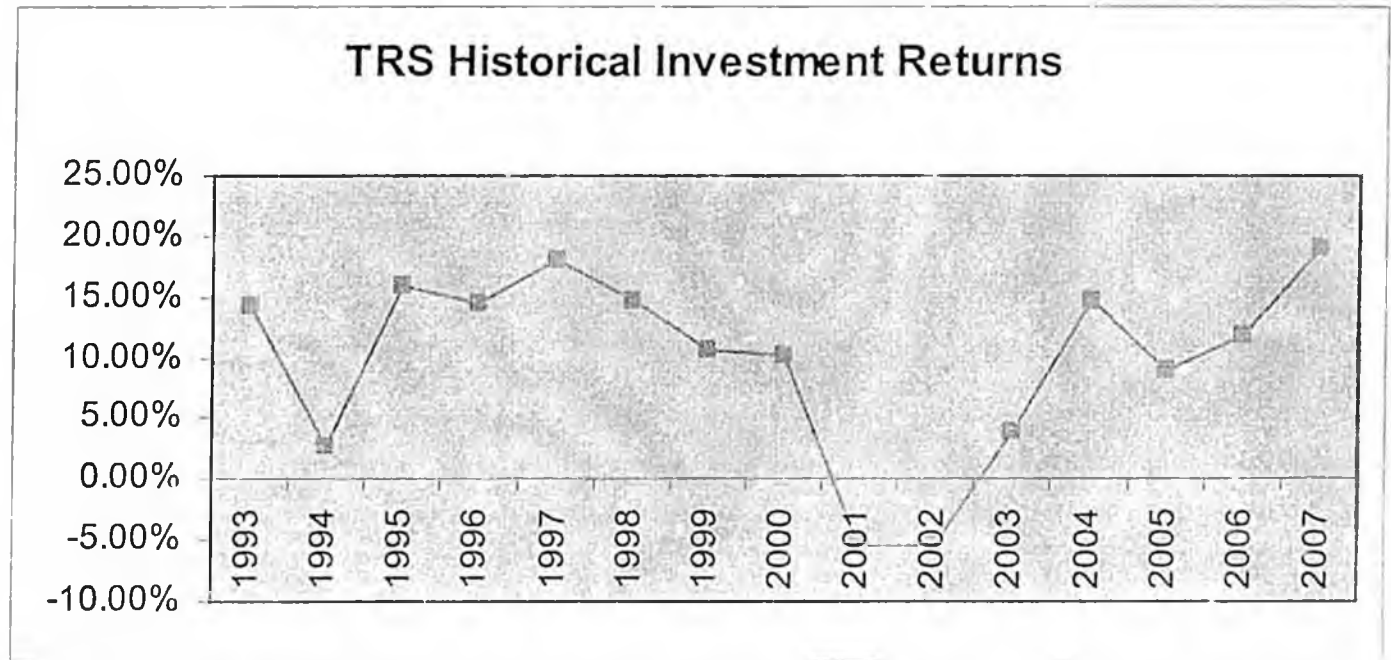
| FY   | PERS ROR |
|------|----------|
| 2007 | 18.88%   |
| 2006 | 11.69%   |
| 2005 | 8.86%    |
| 2004 | 14.73%   |
| 2003 | 3.82%    |
| 2002 | -5.40%   |
| 2001 | -5.30%   |
| 2000 | 10.12%   |
| 1999 | 10.65%   |
| 1998 | 14.62%   |
| 1997 | 18.07%   |
| 1996 | 13.70%   |
| 1995 | 15.56%   |
| 1994 | 2.66%    |
| 1993 | 14.25%   |
| 1992 | 11.80%   |



- The average return from 1992 to 2007 is 9.67%.
- Standard Deviation is 7.40%.

# Historical Investment Returns of State Pension Plans (TRS)

| FY   | TRS ROR |
|------|---------|
| 2007 | 18.89%  |
| 2006 | 11.72%  |
| 2005 | 8.90%   |
| 2004 | 14.75%  |
| 2003 | 3.81%   |
| 2002 | -5.41%  |
| 2001 | -5.36%  |
| 2000 | 10.19%  |
| 1999 | 10.73%  |
| 1998 | 14.73%  |
| 1997 | 18.00%  |
| 1996 | 14.35%  |
| 1995 | 15.89%  |
| 1994 | 2.61%   |
| 1993 | 14.16%  |
| 1992 | 11.58%  |



- The average return from 1992 to 2007 is 9.72%.
- Standard Deviation is 7.45%.

## Long Term Target Asset Allocation

| Asset Class                   | Allocation | Range |
|-------------------------------|------------|-------|
| Domestic Large Capitalization | 30%        | ± 3%  |
| Domestic Small Capitalization | 6%         | ± 3%  |
| International Equity          | 14%        | ± 3%  |
| Emerging Markets Equity       | 2%         | ± 2%  |
| Private Equity                | 7%         | ± 5%  |
| Domestic Fixed-Income         | 26%        | ± 3%  |
| High Yield                    | 2%         | ± 2%  |
| International Fixed Income    | 2%         | ± 2%  |
| Real Estate                   | 10%        | ± 4%  |
| Absolute Return               | 4%         | ± 4%  |
| Other                         | 3%         | ± 3%  |
| Cash                          | 0%         | ± 3%  |

Median Return      8.05%  
Standard Deviation    12.27%

Source: Callan Associates, Inc.

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## Credit Neutrality