

# State & Local Pensions

## An Overview of Funding Issues and Challenges



January 2011

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**R**etirement security, important for all Americans, has been especially important in attracting and retaining public servants. Public sector workers generally have accepted more modest wages in exchange for more generous retirement benefits.

While there has been substantial focus on the unfunded pension liabilities of state and local governments, the issues are often not presented in perspective. For example, the extent of public pension liabilities varies widely among the states and local governments. Some pension plans are fully funded, while others have seen their funding levels drop below 80 percent. In most cases, pension funding shortfalls are the result of the cyclical nature of the economy, which was particularly severe in the 2008–2009 period. In a minority of cases, unfunded liabilities can be directly traced to the failure of public officials to properly fund the pension system over a period of many years.

This primer lays out key facts about public pension plans, how they compare with the private sector, and what kinds of reforms are taking place to restore pension plan health. It does not address retiree health care funding issues, which have a different legal and structural framework.

### The Funding of State and Local Pensions: 2009–2013

Defined benefit pension plan funding is based on assumptions developed and certified by enrolled actuaries. There are two types of assumptions: demographic and economic. Demographic assumptions include projected behaviors such as salary growth, mortality, and length of service. Economic assumptions include inflation and investment returns.

Using these assumptions, actuaries develop projections regarding the level of pension fund assets required to pay future liabilities. Then, based on these projections, they calculate the Annual Required Contribution (ARC) needed from the pension fund sponsor to bring the fund into balance over a specified period of time. The ARC includes the so-called “normal cost,” which is the projected growth in the present value of benefits generated by active employees in the coming year. It also includes any payment required to address unfunded liabilities, which are typically calculated over a 30-year amortization period.

If a plan diligently funds the ARC on an annual basis, and demographic and economic projections prove to be accurate in the long term, the pension plan will be fully funded. However, in the event contributions are not made, and/or the plan experiences adverse shocks, such as a financial downturn, assets will fall below the present value of promised obligations and the plan will report unfunded liabilities. It is also possible that the plan will experience favorable shocks, such as the stock market boom of the 1990s, and become “over-funded.”

A key benchmark for evaluating the viability of a public plan is the sponsor's history of making ARC payments. Another important factor is the history of the ARC as a percentage of payroll; i.e., no long-term upward trend. Recent average ARC paid is about 11 percent of payrolls.

Economic assumptions are rarely realized in the short term. However, over the multi-decade history of public sector pensions, economic assumptions have been largely accurate. The most volatile assumption, and hence the assumption most likely to be inaccurate on a "snapshot basis," is the investment return assumption. As the chart below demonstrates, the major public sector pension plans have exceeded their assumed investment return over the long term.

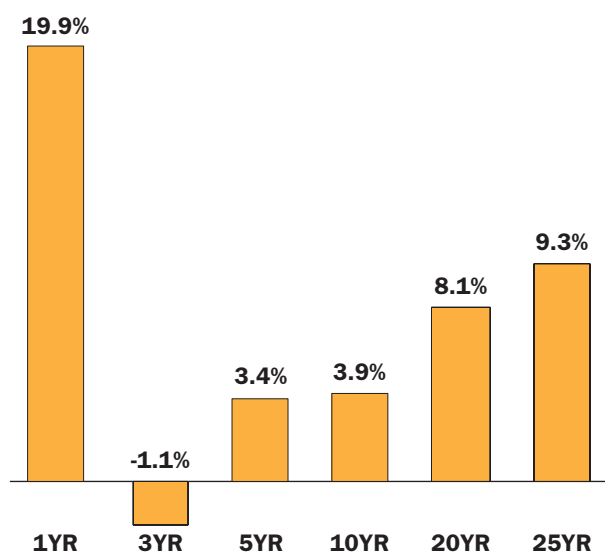
The financial crisis reduced the value of equities in state and local defined benefit pensions just as it did for private sector 401(k) and defined benefit pension plans. When this occurs, the result will be unfunded liabilities.

The 2009 unfunded liability for the sample of 126 plans is more than \$700 billion. To pay off that amount over 30 years, the generally accepted amortization period, would require contributions to increase by about 2 percent of payrolls.<sup>1</sup>

There is a consensus that plans should maintain discipline about making their ARC and should strive

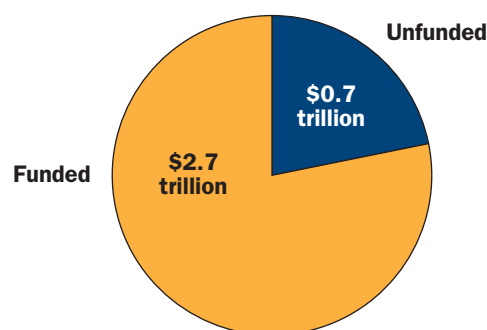
to reach full funding. States and local governments are taking steps to strengthen pension funding because many plans have slipped below 80 percent funding. Those plans that do not maintain fiscal discipline can become severely underfunded, creating serious fiscal problems. Although many of the poorly funded plans are relatively small, several large plans, such as three plans in Illinois (SERS, Teachers, and Universities) and Connecticut (SERS), had funding levels below 60 percent. Although employees have made contributions to these plans, the state governments did not consistently make their ARC. These plans will now need substantially larger increases in contributions to get their plans on sound financial footing.

**Figure 1.** Median annualized investment returns for periods ended 12/31/09



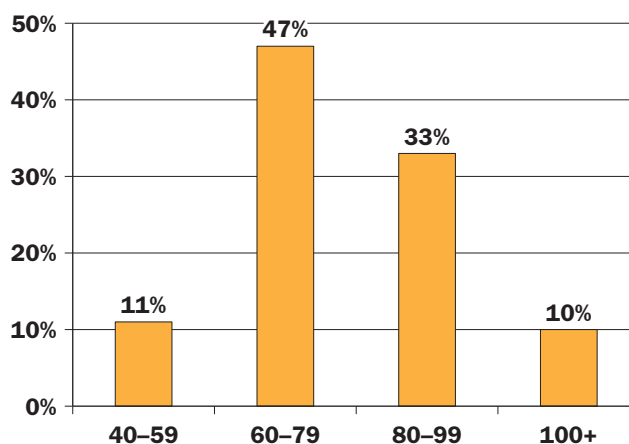
Source: Data—Callan Associates/Chart—NASRA

**Figure 2.** Funding of Aggregate Pension Liability, 2009



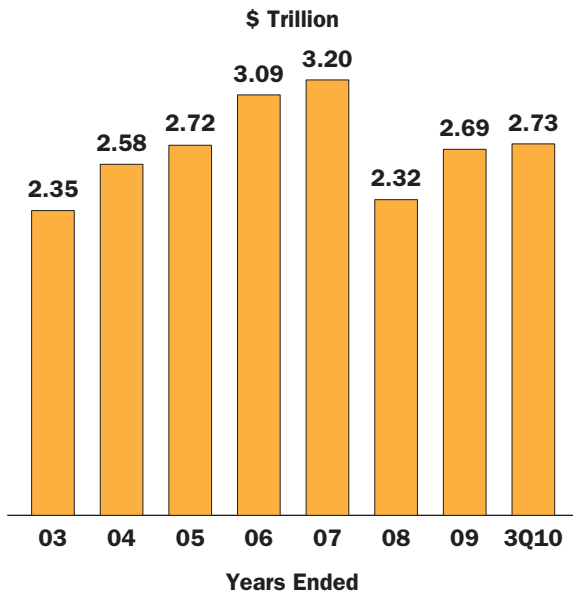
Source: Authors' estimates based on CRR PPD (2009).

**Figure 3.** Distribution of Funding Ratios for Public Plans, 2009



Note: Figure does not add to 100 percent due to rounding.  
Source: Authors' calculations based on CRR PPD (2009).

**Figure 4.** Value of State and Local Government Defined Benefit Assets



Source: U.S. Federal Reserve.

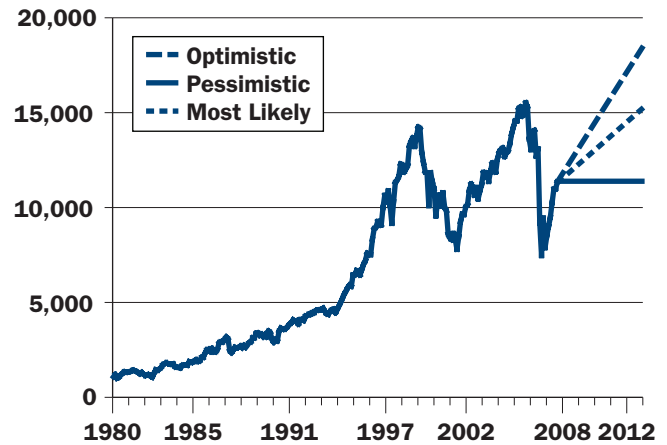
Retired state and local government employees are typically paid from public pension trust funds, which have some \$2.7 trillion in assets. According to the US Census Bureau, public pension funds distribute more than \$175 billion in benefits annually to more than 7.7 million Americans, paying an average yearly benefit of some \$22,700.

## Projections for 2010–2013

While funding ratios for 2009 were the lowest they have been in 15 years, reported numbers are likely to decline further between 2010 and 2013 as gains in the years leading up to 2007 are phased out and losses from the market collapse are phased in. The precise pattern of future funding will depend on what happens to plan investments and over what period plans recognize investment gains and losses.

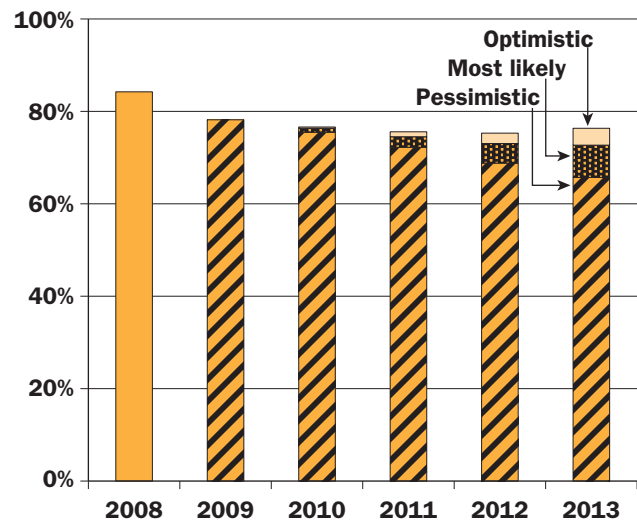
Most plans phase in investment gains and losses over five years, but the period varies from one year to 15. The reason that plans smooth gains and losses is to reduce volatility in contribution rates. Researchers at Boston College's Center for Retirement Research estimate that aggregate funding ratios will decline to 72 percent by 2013 under the most likely scenario.<sup>2</sup>

**Figure 5.** Dow Jones Wilshire 5000 Index, 1980–2010, and Projections for 2013 under Alternative Assumptions



Sources: Wilshire Associates (2010) and authors' projections.

**Figure 6.** Projected State and Local Funding Ratios Under Three Scenarios, 2008–2013



Source: CRR PPD (2008) and authors' estimates (2009–2013).

## Comparing State and Local Pensions with Private Plans

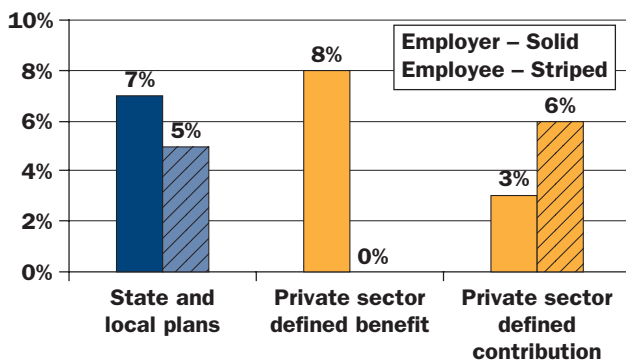
Public and private pensions had similar and much higher funding levels before the downturn in equities reduced retirement assets for all Americans.<sup>3</sup> The aggregate funding level of public plans declined from 84 percent in 2008 to 72 percent in 2013, after factoring in

the first year of investment losses from the stock market decline. Public and private plan fund comparisons are inexact because private plans have different funding rules, many private plans have been terminated or frozen, and public pension plans often “smooth” investment gains or losses over a three- to five-year period. Thus, public plans that “smooth” will show further declines as asset losses from the 2008–2009 market are fully recognized. Similarly, the strong market rebound

over the 2009–10 period will be “smoothed” or recognized over a three- to five-year period.

There are significant differences in how public and private employees and employers address retirement savings. For example, unlike their private sector counterparts, it is typical for public employees to contribute to their defined benefit pension plan. All private sector employees participate in Social Security, while 30 percent of state and local employees do not.

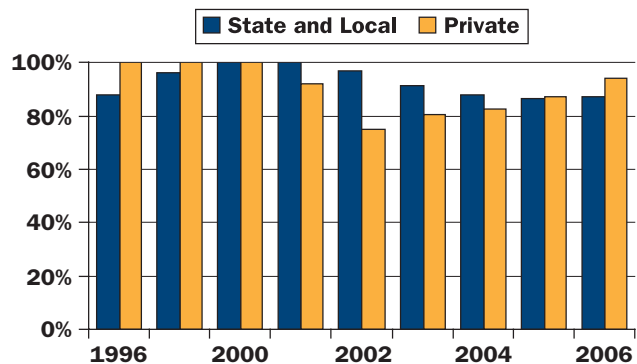
**Figure 7. Employer and Employee Contribution Rates, by Sector, 2006**



Note: The state and local employer contribution rate reflects the average rate from 2002 to 2006 for Social Security eligible employees only. The rates for those without Social Security averaged 10.5 percent for the employer and 8 percent for the employee.

Sources: Brainard (2007); Munnell and Sundén (2004); and Munnell and Soto (2004).

**Figure 8. Funding Ratios of Pension Funds, by Sector, 1996–2006**



Sources: Author's calculations from Zorn (1996–2000); National Association of State Retirement Administrators (2001–2007); and Standard and Poor's (1996–2006).

#### Characteristics of private sector retirement plans

- Roughly one-half of private sector workers have a retirement plan—usually a 401(k)—although a minority has a defined benefit pension plan.
- Private sector employees who are in traditional defined benefit pension plans typically do not contribute to the plan.
- The Employee Retirement Income Security Act of 1974, changes in the tax code, accounting practices, and personnel management systems of private sector employers prompted many private sector sponsors to convert from defined benefit plans to 401(k)s.
- All private sector employees participate in Social Security.

#### Characteristics of public sector retirement plans

- Most public employees have a defined benefit plan and contribute to it.
- 70 percent of public workers are covered by Social Security.
- Retirement benefits tend to be higher compared with private plans and often include a cost of living adjustment (COLA).
- Starting in 1986, state and local governments have followed the accounting standards set by the Governmental Accounting Standards Board (GASB) to report their benefit obligations and pension fund assets.
- Bond raters consider whether GASB standards are followed in assessing credit standing.
- Often there is a different plan for teachers, general government, or public safety employees.



## How States Are Addressing Pension Issues

Since the 2000–2001 recession, at least 30 states have made changes to their pension plans. According to the National Conference of State Legislatures, more state legislatures have made changes in 2010 than in any other year. The most common changes have been to increase employee contributions to pensions or to establish different tiers of benefits for newly hired employees. New hires might have higher vesting requirements, longer service requirements, a later retirement age, and/or a lower pension. There also are more restrictions on retired public workers returning to covered service while continuing to receive their retirement benefit.

Some states increased benefits during this period of time, including Vermont teachers (2010) and Maryland teachers and state employees (2006). Formula benefit increases were enacted in 11 states in 2001.

States that have reduced their benefits and increased employee contributions from 2001 to 2010 include: Colorado, Iowa, Minnesota, Missouri, Mississippi, Vermont, and Virginia. States that have reduced their benefits in the same time period include: Arizona, California, Illinois, Michigan, New Jersey, New Mexico, South Dakota, Rhode Island, and Utah. Most benefit reductions apply solely to new employees so they do not affect the current funding status of the plan. Generally speaking, the changes address the specific facts and circumstances of the state's plan. As with any changes that affect employees, policy leaders seek to balance fiscal pressures with a competitive benefit package that will attract and retain the people they need to deliver essential services.

Because of the severe economic downturn, state and local revenues have declined, making it more difficult for governments to make their full payment on their annual required contribution (ARC) to the government pension plan. Plans in the sample studied paid 92.1 percent of their ARC in 2008. The ARC is increasing for virtually all plans due to the growth in unfunded liabilities related to the 2008 investment losses. In 2009, plans are estimated to pay 87.9 percent of the ARC.

Some plan sponsors have taken steps to reduce their ARC. Louisiana, for example, extended the amortization period to 2030; Vermont extended its funding period to 2039; and California expanded the corridor on the actuarial value of assets to permit more smoothing. Other plans are constrained by law from increasing contributions and must first obtain legislative approval

**Table 1.** *Percent of ARC Paid, 2003–2009*

Fiscal year	Percent of ARC paid	
	Plans with 2009 reports	All plans
<b>2003</b>	84.3%	87.8%
<b>2004</b>	85.5	86.0
<b>2005</b>	82.5	84.1
<b>2006</b>	80.1	83.3
<b>2007</b>	83.2	86.7
<b>2008</b>	86.4	92.1
<b>2009</b>	82.5	87.9 (est.)

*Source: CRR PPD (2003–2009).*

before doing so (e.g., Iowa and Kansas). The extraordinary investment losses in the 2008–2009 period have also caused Congress to extend allowable amortization periods and investment loss smoothing features of the 2008–2009 investment losses to private sector pension plans under the Pension Relief Act of 2010.

## Retirement Plan Design: What Works

Sound management of retirement plans is essential to protect taxpayer interests and to ensure retirement security for employees.

To minimize a government's exposure to potential loss in its financial management practices, the Government Finance Officers Association issued an advisory in 2010 that emphasizes the importance of certain practices:

- **Make annual required contributions.** Employers that skip payments or make smaller payments than required can harm the long-term funding health of the plan. This shifts the burden of paying for the benefit to future generations.
- **Establish appropriate full-retirement ages.** Plan sponsors should evaluate their normal retirement ages and make appropriate adjustments, if needed, to reflect increased life expectancy, the productivity benefits of retaining experienced workers, and the availability of early, unreduced retirement options. Public pension plans cover a range of employees. Police, firefighters, and other public safety personnel, for example, have physically demanding jobs so their retirement plans allow retirement at earlier ages. Employers must make decisions about the preferred length of a career and design their pension plans to reflect these workforce realities.

- Be realistic about investment assumptions.
- Avoid retroactive benefits increases.
- Avoid pension formulas that allow the inclusion of extraordinary income into the formula on which pension benefits are based. Such practices, often called pension “spiking,” are widely viewed as improper as well as costly.

There are no easy solutions to the pension funding challenge. Whatever approaches governments choose, they will need to take a long view and fully consider the complexities of workforce planning and retirement security.

## Endnotes

- 1 Munnell, Alicia H. Aubrey, Jean-Pierre, and Quinby, Laura, *The Funding of State and Local Pensions: 2009–2013*, Center for State and Local Government Excellence, April 2010, p. 6. <http://www.slge.org>.
- 2 Ibid, p. 7. <http://www.slge.org>.
- 3 Munnell, Alicia H. and Mauricio Soto, *State and Local Government Pensions are Different from Private Plans*, Center for State and Local Government Excellence. November 2007, p. 7. <http://www.slge.org>.

## References

- Center for State and Local Government Excellence. November 2007. *State and Local Government Pensions are Different from Private Plans*. Washington, DC. [http://www.slge.org/index.asp?Type=B\\_BASIC&SEC={6B5D32FD-C99D-41F7-9691-4F1B1D11452B}&DE={0181E1FD-7B95-4F68-984C-6B3FB6B76DF1}](http://www.slge.org/index.asp?Type=B_BASIC&SEC={6B5D32FD-C99D-41F7-9691-4F1B1D11452B}&DE={0181E1FD-7B95-4F68-984C-6B3FB6B76DF1})
- . April 2010. *The Funding of State and Local Pensions 2009–2013*. Washington, DC. [http://www.slge.org/index.asp?Type=B\\_BASIC&SEC={6B5D32FD-C99D-41F7-9691-4F1B1D11452B}&DE={39254035-6F82-41F3-8B39-E906BF32EF71}](http://www.slge.org/index.asp?Type=B_BASIC&SEC={6B5D32FD-C99D-41F7-9691-4F1B1D11452B}&DE={39254035-6F82-41F3-8B39-E906BF32EF71})
- Government Finance Officers Association. 2010. GFOA Advisory: Responsible Management and Design Practices for Defined Benefit Pension Plans. Chicago, IL. [http://www.gfoa.org/index.php?option=com\\_content&task=view&id=118&Itemid=130](http://www.gfoa.org/index.php?option=com_content&task=view&id=118&Itemid=130)
- National Conference of State Legislatures. November 2010. Pensions and Retirement Plan Enactments in 2010 State Legislatures. Washington, DC. <http://www.ncsl.org/?tabid=20836>

## Additional Resources

### National Association of Retirement System Administrators

<http://www.nasra.org>

### National Institute for Retirement Security

<http://www.nirsonline.org/>

### National Education Association

<http://www.nea.org/assets/docs/CharacteristicsLargePubEdPensionPlans2010.pdf>

The Center for State and Local Government Excellence thanks AFSCME, AFT, BC-CRR, GFOA, ICMA-RC, NASRA, NCSL, NEA, and SEIU for their assistance and support in developing this pension primer.



## **Helping state and local governments become knowledgeable and competitive employers**

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The Center for State and Local Government Excellence helps state and local governments become knowledgeable and competitive employers so they can attract and retain a talented and committed workforce. The Center identifies best practices and conducts research on competitive employment practices, workforce development, pensions, retiree health security, and financial planning. The Center also brings state and local leaders together with respected researchers and features the latest demographic data on the aging work force, research studies, and news on health care, recruitment, and succession planning on its web site, [www.slge.org](http://www.slge.org).

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- Retiree health care
- Financial education for employees
- Talent strategies and innovative employment practices
- Workforce development