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STATE AND LOCAL
GOVERNMENT
RETIREE BENEFITS

Current Funded Status
of Pension and Health
Benefits





Highlights of [GAO-08-223](#), a report to the Committee on Finance, U.S. Senate

STATE AND LOCAL GOVERNMENT RETIREE BENEFITS

Current Funded Status of Pension and Health Benefits

Why GAO Did This Study

Pension and other retiree benefits for state and local government employees represent liabilities for state and local governments and ultimately a burden for state and local taxpayers. Since 1986, accounting standards have required state and local governments to report their unfunded pension liabilities. Recently, however, standards changed and now call for governments also to report retiree health liabilities. The extent of these liabilities nationwide is not yet known, but some predict they will be very large, possibly exceeding a trillion dollars in present value terms.

The federal government has an interest in assuring that all Americans have a secure retirement, as reflected in the federal tax deferral for contributions to both public and private pension plans. Consequently, the GAO was asked to examine: 1) the key measures of the funded status of retiree benefits and 2) the current funded status of retiree benefits. GAO analyzed data on public pensions, reviewed current literature, and interviewed a range of experts on public retiree benefits, actuarial science, and accounting.

What GAO Recommends

GAO is not making recommendations in this report. Experts on public benefits funding provided technical clarifications, which were incorporated as appropriate.

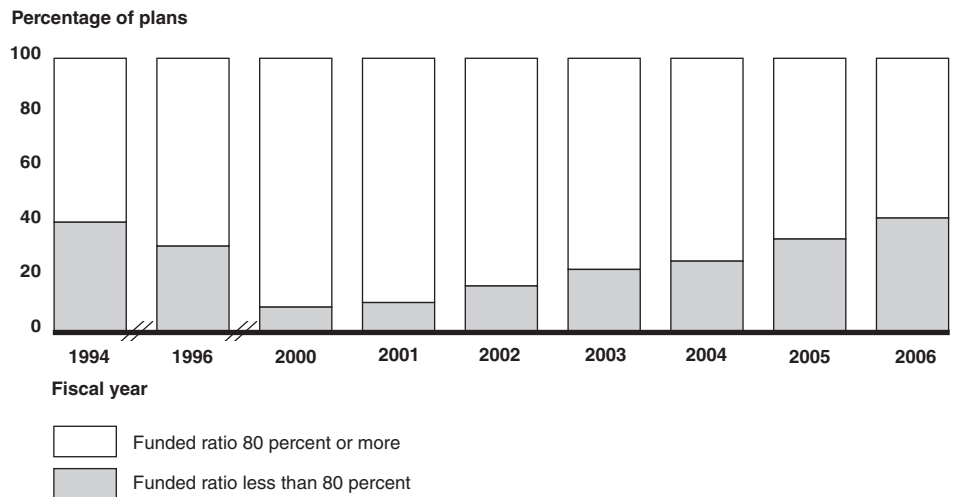
To view the full product, including the scope and methodology, click on [GAO-08-223](#). For more information, contact Barbara Bovbjerg at (202) 512-7215 or bovbjerg@gao.gov.

What GAO Found

Three key measures help to understand different aspects of the funded status of state and local government pension and other retiree benefits. First, governments' annual contributions indicate the extent to which governments are keeping up with the benefits as they are accumulating. Second, the funded ratio indicates the percentage of actuarially accrued benefit liabilities covered by the actuarial value of assets. Third, unfunded actuarial accrued liabilities indicate the excess, if any, of liabilities over assets in dollars. Governments have been reporting these three measures for pensions for years, but new accounting standards will also require governments to report the same for retiree health benefits. Because a variety of methods and actuarial assumptions are used to calculate the funded status, different plans cannot be easily compared.

Currently, most state and local government pension plans have enough invested resources set aside to keep up with the benefits they are scheduled to pay over the next several decades, but governments offering retiree health benefits generally have large unfunded liabilities. Many experts consider a funded ratio of about 80 percent or better to be sound for government pensions. We found that 58 percent of 65 large pension plans were funded to that level in 2006, a decrease since 2000. Low funded ratios would eventually require the government employer to improve funding, for example, by reducing benefits or by increasing contributions. However, pension benefits are generally not at risk in the near term because current assets and new contributions may be sufficient to pay benefits for several years. Still, many governments have often contributed less than the amount needed to improve or maintain funded ratios. Low contributions raise concerns about the future funded status. For retiree health benefits, studies estimate that the total unfunded actuarial accrued liability for state and local governments lies between \$600 billion and \$1.6 trillion in present value terms. The unfunded liabilities are large because governments typically have not set aside any funds for the future payment of retiree health benefits as they have for pensions.

Percentage of State and Local Pension Plans with Funded Ratios above or below 80 Percent



Source: GAO analysis of PFS, PENDAT data.

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Abbreviations

ARC	annual required contribution
AAL	actuarial accrued liability
ERISA	Employee Retirement Income Security Act
GASB	Governmental Accounting Standards Board
NASRA	National Association of State Retirement Administrators
PFS	Public Fund Survey
PBGC	Pension Benefit Guaranty Corporation
PPCC	Public Pension Coordinating Council

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United States Government Accountability Office
Washington, DC 20548

January 29, 2008

The Honorable Max Baucus
Chairman
The Honorable Charles E. Grassley
Ranking Member
Committee on Finance
United States Senate

Nearly 20 million employees and 7 million retirees and dependents of state and local governments—including school teachers, police, firefighters, and other public servants—are promised pensions, and many are promised retiree health benefits. Many of these benefits are guaranteed by state law or contract and represent actuarial accrued liabilities¹ for state and local governments and ultimately the taxpayer. Typically, pension benefits are paid from a fund made up of assets from employers' and employees' annual contributions and the investment earnings from those contributions. Such a fund has an unfunded liability when the actuarial value of assets is less than actuarial accrued liabilities. Accounting standards have called for state and local governments to report their unfunded pension liabilities since 1986. But accounting standards have only recently been established that call for reporting the size of unfunded retiree health liabilities. While few state and local governments have as yet officially reported these unfunded liabilities, some studies have estimated that they may exceed \$1 trillion dollars nationwide in present value terms. Such estimates raise concerns about the fiscal challenges that state and local governments will face in the coming decades. As discussion of the unfunded liabilities of state and local governments has increased, questions have been raised by some about how to understand these amounts.

State and local retiree benefits are not subject, for the most part, to the federal funding requirements that apply to pensions sponsored by private employers. Nevertheless, the federal government has an interest in assuring that all Americans have a secure retirement, as reflected in the federal tax deferral for contributions to both public and private pension plans. Given the concerns about unfunded liabilities for state and local retiree benefits, we are reporting

¹Actuarial accrued liabilities, referred to in this report as "liabilities," are the portion of the present value of future benefits that is attributable to employee services in past periods, under the actuarial cost method utilized.

on: 1) the key measures of the funded status of retiree benefits and 2) the current funded status of retiree benefits.

To address these objectives, we reviewed literature and interviewed a range of experts and stakeholders, including national associations of state and local officials, labor unions, bond raters, and actuarial and accounting professionals, among others. To describe the funded status of state and local pension plans, we analyzed self-reported data from the Public Fund Survey (PFS) as well as surveys by the Public Pension Coordinating Council (PPCC).² This report represents one of two recent reports on state and local government retiree benefits. The other report, *State and Local Government Retiree Benefits: Current Status of Benefit Structures, Protections, and Fiscal Outlook for Funding Future Costs* (GAO-07-1156), provides a descriptive overview of such benefits.

We conducted our work in Washington, D.C.; New York; and Connecticut from July 2006 to January 2008 in accordance with generally accepted government auditing standards.

Results in Brief

Three key measures help to understand different aspects of the funded status of state and local government retiree benefits. First, governments' annual contributions indicate the extent to which they are keeping up with the value of benefits as they are accumulating. Second, the funded ratio indicates the percentage of a plan's liabilities covered by its assets. Third, unfunded liabilities indicate the excess, if any, of liabilities over assets in dollars. Low funded ratios correspond to high unfunded liabilities and require larger future contributions to pay benefits, which may create future budget problems and means future generations will bear more of the cost. Governments have been reporting these funded status measures for pensions for years. However, new accounting rules will also call on governments to report the funded status of retiree health benefits in a similar manner, even though many have not made any contributions to build assets to cover liabilities. These funded status measures should be reviewed using several years of data because in some years fiscal pressures may encourage governments to choose other budget priorities. Also, the value of assets can fluctuate from year to year with changes in investment

²The PFS is sponsored by the National Association of State Retirement Administrators and the National Council on Teacher Retirement. In 2005, the PFS data we used represented 58 percent of total assets invested in public pension plans nationwide, and 72 percent of total members. PFS data covered years beginning with 2001. PPCC data covered years 1994, 1996, and 2000.

returns, so examining a single year of funding data can be misleading. Because governments use a variety of methods and actuarial assumptions to calculate the funded status, different plans cannot be easily compared.

Currently, most state and local government pension plans have enough invested resources set aside to pay for the benefits they are scheduled to pay over the next several decades, but governments that offer retiree health benefits generally have large unfunded liabilities. Many experts consider a funded ratio of about 80 percent or better to be sound for state and local government pensions. According to the self-reported PFS data, 58 percent of 65 large public pension plans were funded to that level in 2006, a decrease since 2000 when about 90 percent of plans were so funded. While most plans' funding may be sound, a few plans have persistently reported low funded ratios. Low funded ratios will eventually require the government employer to improve funding, for example, by reducing benefits or by increasing contributions. Increasing contributions may require revenue increases or reductions in non-benefit spending. However, even for many plans with lower funded ratios, benefits are generally not at risk in the near term because current assets and new contributions may be sufficient to pay benefits for several years. Still, many governments have often contributed less than the amount needed to improve or maintain funded ratios. Low contributions raise concerns about the future funded status, and may shift costs to future generations. For retiree health benefits, various studies estimate that the total unfunded liability for state and local governments lies between \$600 billion and \$1.6 trillion although the estimates are based on samples of governments that are not necessarily representative. The unfunded liabilities are large because state and local governments typically have not set aside any funds for future retiree health benefits in the way they have for pensions. Instead, their practice has been to pay for the retiree health benefits due in a given year from the revenues for that year, like many private employers. This financing approach can leave little flexibility for governments, and therefore may stress future budgets. As a result, as health care costs increase, governments may face even greater pressure to reduce benefits or increase revenues. However, our analysis shows that the annual amount paid for retiree health benefits is currently low compared to pensions, but growth of health costs will be faster and less predictable.

The Internal Revenue Service and experts in the field provided technical comments, which we incorporated as appropriate.

Background

State and local governments will likely face daunting fiscal challenges in the next few years, driven in large part by the growth in health-related costs.³ Medicaid and health insurance for state and local employees and retirees make up a large share of such costs. In contrast, our analysis shows that state and local governments on average would need to increase pension contribution rates to 9.3 percent of salaries—less than .5 percent more than the 9.0 percent contribution rate in 2006 to achieve healthy funding on an ongoing basis.

With few exceptions, defined benefit pension plans still provide the primary pension benefit for most state and local workers. About 90 percent of full-time state and local employees participated in defined benefit pension plans as of 1998.⁴ A defined benefit plan determines benefit amounts by a formula that is generally based on such factors as years of employment, age at retirement, and salary level.⁵ A few states offer defined contribution or other types of plans as the primary retirement instrument.⁶ In fiscal year 2006, state and local government pension systems covered 18.4 million members and made periodic payments to 7.3 million beneficiaries, paying out \$151.7 billion in benefits.

Many state and local governments also offer retirees health care benefits—in addition to Medicare benefits provided by the federal government—the costs of which have been growing rapidly. One study estimated that state and local governments paid \$20.7 billion in fiscal year 2004 for retiree health benefits. For retirees who are under age 65 (that is, not yet Medicare-eligible), many state and local employers provide access to group health coverage with varying levels of employer contributions. As of 2006, 14 states did not contribute to the premium for this coverage, while

³GAO, *State and Local Governments: Persistent Fiscal Challenges Will Likely Emerge within the Next Decade*, GAO-07-1080SP (Washington, D.C.: July 18, 2007).

⁴The last year for which the Bureau of Labor Statistics published these data was 1998. U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in State and Local Governments, 1998* (Washington, D.C.: 2000).

⁵In contrast, for defined contribution plans, the key determinants of the benefit amount are the employee's and employer's contribution rates and the rate of return achieved on plan assets (made up of the amounts contributed to an individual's account over time). Defined contribution plans include 401(k)s.

⁶Two states (Alaska and Michigan) and the District of Columbia offer defined contribution plans as their primary plan for general public employees. Two states (Indiana and Oregon) offer primary plans with both defined benefit and defined contribution components; and one state (Nebraska) offers a cash balance defined benefit plan as its primary plan.

14 states picked up the entire cost, and the remainder fell somewhere in between. For virtually all state and local retirees age 65 or older, Medicare provides the primary coverage. Most state and local government employers provide supplemental coverage for Medicare-eligible retirees that covers prescription drugs.⁷

Financing of State and Local Retiree Benefits

Both government employers and employees generally make contributions to fund state and local pension benefits. States follow statutes specifying contribution amounts or determine the contribution amount each legislative session. However many state and local governments are statutorily required to make yearly contributions based either on actuarial calculations or according to a statutorily specified amount. For plans in which employees are covered by Social Security, the median contribution rate in fiscal year 2006 was 8.5 percent of payroll for employers and 5 percent of pay for employees, in addition to 6.2 percent of payroll from both employers and employees to Social Security. For plans in which employees are not covered by Social Security, the median contribution rate was 11.5 percent of payroll for employers and 8 percent of pay for employees.

Actuaries estimate the amount that will be needed to pay future benefits. The benefits that are attributable to past service are called the “actuarial accrued liabilities.” (In this report, the actuarial accrued liabilities are referred to as “liabilities.”) Actuaries calculate liabilities based on an actuarial cost method and a number of assumptions including discount rates and worker and retiree mortality. Actuaries also estimate the “actuarial value of assets” that fund a plan (in this report, the actuarial value of assets is referred to as “assets”). The excess of actuarial accrued liabilities over the actuarial value of assets is referred to as the “unfunded actuarial accrued liability” or “unfunded liability.” Under accounting standards, such information is disclosed in financial statements. In contrast, the liability that is recognized on the balance sheet is the cumulative excess of annual benefit costs over contributions to the plan. Certain amounts included in the actuarial accrued liability are not yet recognized as annual benefit costs under accounting standards, as they are amortized over several years.

⁷States also typically offer other retiree benefits such as vision, dental, long-term care, and life insurance, but these are generally funded entirely by retirees. For more information on the range and types of benefits provided, see GAO, *State and Local Government Retiree Benefits: Current Status of Benefit Structures, Protections, and Fiscal Outlook for Funding Future Costs*, GAO-07-1156 (Washington, D.C.: Sept. 24, 2007).

In a typical defined benefit pension plan, employer and employee contributions are made to a specific fund from which benefits will be paid. The yearly contributions from employers and employees are invested in the stock market, bonds, and other investments. Unlike most pension plans, retiree health benefits have generally been financed on a pay-as-you-go basis. Pay-as-you-go financing means that state and local governments have not set aside funds in a trust reserved for future retiree health costs. Instead, governments pay for each year's retiree health benefits from the current year's budget.

Oversight of State and Local Retiree Benefits

The federal government has an interest in the funded status of state and local government retiree pensions and health care, even though it has not imposed the same funding and reporting requirements as it has on private sector pension plans. State and local government pension plans are not covered by most of the substantive requirements, or the insurance program operated by the Pension Benefit Guaranty Corporation (PBGC), under the Employee Retirement Income Security Act of 1974 (ERISA), which apply to most private employer benefit plans. Federal law generally does not require state and local governments to prefund or report on the funded status of pension plans or health care benefits.⁸ However, in order to receive preferential tax treatment, state and local pensions must comply with requirements of the Internal Revenue Code. In addition, the retirement income security of all Americans is an ongoing concern of the federal government.

All states have legal protections for their pensions. The majority of states have constitutional provisions prescribing how pension trusts are to be funded, protected, managed, or governed. The remaining states have pension protections in their statutes or recognize legal protections under common law. Legal protections usually apply to benefits for existing workers or benefits that have already accrued; thus, state and local governments generally can change the benefits for new hires.⁹ In contrast to pensions, retiree health benefits generally do not have the same

⁸Similarly, ERISA generally does not include funding and reporting requirements for private companies' health benefits.

⁹For more information on the protections for state and local retiree benefits, see GAO, *State and Local Government Retiree Benefits: Current Status of Benefit Structures, Protections, and Fiscal Outlook for Funding Future Costs*, [GAO-07-1156](#) (Washington, D.C.: Sept. 24, 2007).

constitutional or statutory protections. Instead, to the extent retiree health benefits are legally protected, it is generally because they have been collectively bargained and are subject to current labor contracts.

Since the 1980s, the Governmental Accounting Standards Board (GASB) has maintained standards for accounting and financial reporting for state and local governments. GASB operates independently and has no authority to enforce the use of its standards. Still, many state laws require local governments to follow GASB standards, and bond raters do consider whether GASB standards are followed. Also, to receive a “clean” audit opinion under generally accepted accounting principles, state and local governments are required to follow GASB standards. These standards require reporting financial information on pensions, such as contributions and the ratio of assets to liabilities. In contrast to pensions, the financial status of retiree health care benefits has generally not been reported or even estimated actuarially until recently. However, new GASB standards (Statements 43 and 45) call for employers to quantify and report on the size of retiree health care benefit liabilities. The new health care reporting standards are being phased in over time to give more time to smaller state and local government sponsors to generate estimates. Table 1 shows the respective GASB 43 and 45 effective dates, as well as to what type of entity each statement applies.

Table 1. Effective Dates for GASB Statements 43 and 45, Requiring Public Employers to Estimate Health Care Liabilities

		GASB 43	GASB 45
	Applies to	Plans administered as trusts and multiple-employer plans that are not administered as trusts	All employers that provide retiree health benefits
Applies for periods beginning after			
Total annual revenues as of 1999	\$100,000,000 or more	12/15/05	12/15/06
	\$10,000,000 - \$99,999,999	12/15/06	12/15/07
	Less than \$10,000,000	12/15/07	12/15/08

Source: GASB.

Key Measures of the Funded Status of Retiree Benefits Are Contributions, Funded Ratios, and Unfunded Liabilities of Individual Plans over Time

Understanding the financial health of pension plans can be confusing. To help clarify, we found that three measures are key to understanding pension plans' funded status. GASB standards require reporting all three of these measures. First, one can look at yearly contributions governments are making to their plans. Actuaries calculate yearly contribution amounts needed to maintain or improve the funded status of plans over time. Comparing this amount to the amount governments actually contribute indicates how well governments are keeping up with yearly funding needs. Two other measures, funded ratios and unfunded liabilities, both suggest the extent to which current assets can cover accrued benefits. These three measures should be viewed together and over time to get a complete picture of the funded status. The funded status measures of different plans cannot be compared to one another easily because different governments use different actuarial funding methods and assumptions to estimate them.

Three Measures, Viewed in Relation to One Another over Time, Describe Funded Status

Some officials we interviewed expressed confusion about how to understand the funded status of public pension plans. State and local governments report a significant amount of information on funding, required by GASB standards. The media often report various measures of the funded status without explaining the meaning of the terms or without enough context. In addition, governments have been reporting these funded status measures for pensions for years. However, the new accounting rules will also call on governments to report the funded status of retiree health benefits in a similar manner, even though many have not made any contributions to build assets to cover liabilities.

We identified three key measures to help explain plans' funded status: contributions, funded ratios, and unfunded liabilities. According to experts we interviewed, any single measure at a point in time may give a dimension of a plan's funded status, but it does not give a complete picture. Instead, the measures should be reviewed collectively over time to understand how the funded status is improving or worsening. For example, a strong funded status means that, over time, the amount of assets, along with future scheduled contributions, comes close to matching a plan's liabilities.

Comparing governments' actual contributions to the "annual required contribution" (ARC) helps in evaluating the funded status of each plan. Each year, plan actuaries calculate a contribution amount that, if paid in

full, would normally maintain or improve the funded status.¹⁰ This amount is referred to as the ARC, although the use of the word “required” can be misleading because governments can choose to pay more or less than this amount.¹¹ If the actuarial assumptions are consistent with the plans’ future experience, paying the full ARC each year provides reasonable assurance that sufficient money is being set aside to cover currently accruing benefits as well as a portion of any unfunded accrued benefits left over from previous years, instead of leaving those costs for the future. In other words, when a government consistently pays the ARC, the benefits accrued by employees are paid for by the taxpayers who receive the employees’ services. When the ARC is not paid in full each year, future generations must make up for the costs of benefits that accrued to employees in the past. In addition, the ARC can be compared to the government’s yearly budget to understand the financial burden of the benefits, according to officials. This comparison indicates how affordable the plan is to the government in a given year. A high ARC relative to a government’s budget may indicate that the costs of benefits are relatively high or that payments have been deferred from previous years.

The funded ratio is the ratio of assets to liabilities. Liabilities are the amount governments owe in benefits to current employees who have already accrued benefits they will collect in the future. The funded ratio indicates the extent to which a plan has enough funds set aside to pay accrued benefits. If a plan has a funded ratio of 80 percent, the plan has enough assets to pay for 80 percent of all accrued benefits. A rising funded ratio over time indicates that the government is accumulating the assets needed to make future payments for benefits accrued to date. A low or declining funded ratio over time may raise concerns that the government will not have the assets set aside to pay for benefits.

While the funded ratio equals the ratio of assets to liabilities, unfunded liabilities equal the difference between liabilities and assets in dollars. Thus, unfunded liabilities indicate the amount of benefits accrued for which no money is set aside. Assets may fall short of liabilities, for example, when governments do not contribute the full ARC, when they

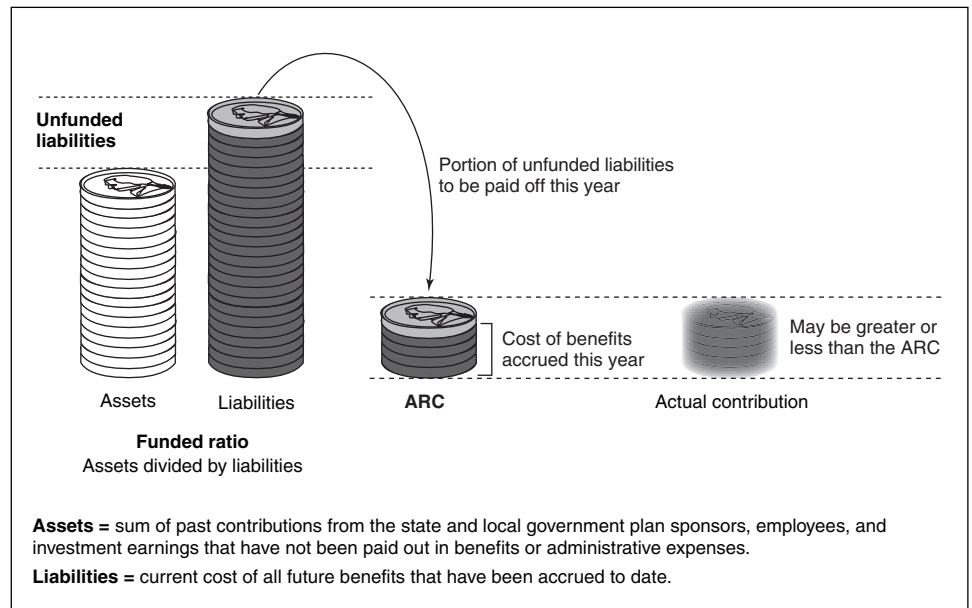
¹⁰The ARC is made up of the amount of future benefits promised to plan participants that accumulated in the current year, plus a portion of any unfunded liabilities.

¹¹Contributions from both sponsors and employees, combined with investment earnings on plan assets, must cover both future benefit payments and the administrative expenses associated with the plan.

increase benefits retroactively, or when returns on investments are lower than assumed. Additionally, because all these financial calculations involve estimates of future payments, they are based on a number of assumptions about the future. Unfunded liabilities can grow if actuaries' assumptions do not hold true. For example, if beneficiaries live longer than anticipated, they will receive more benefits than predicted, even if the government has been paying the ARC consistently. Unfunded liabilities will eventually require the government employer to increase revenue, reduce benefits or other government spending, or do some combination of these. Revenue increases could include higher taxes, returns on investments, or employee contributions. Nevertheless, we found that unfunded liabilities do not necessarily imply that pension benefits are at risk in the near term. Current funds and new contributions may be sufficient to pay benefits for several years, even when funded ratios are relatively low.

As described in figure 1, unfunded liabilities are calculated as intermediate steps in the process of calculating the ARC. After calculating the unfunded liabilities, actuaries usually determine an amount to fund the unfunded liabilities over several years or "amortize" the cost of the liability. That amortized portion is added to the cost of benefits that employees accrued in the current year to determine the ARC. If a government pays the ARC, then a portion of the unfunded liabilities is paid off each year. When no more unfunded liabilities exist, the funded ratio is 100 percent, and the plan has "fully funded" all the benefits that its current employees have accrued under the plan's actuarial cost method. However, a fully funded plan still requires yearly contributions to maintain full funding because as employees perform additional service, they accrue additional benefits.

Figure 1. Relationship among the Key Measures of the Funded Status



Source: GAO analysis; images partially by Art Explosion.

The funded status measures should be reviewed over time because several factors can affect them. In particular, the money set aside is invested and returns can fluctuate. If a plan’s invested assets grow at a rate significantly above or below the rate assumed for funding purposes in a given year, it can change the funded status measures, regardless of the government’s contributions. Granting retroactive benefits also increases liabilities and increases unfunded liabilities, even if a government has been contributing the full ARC each year. Funded ratios and unfunded liabilities also can reflect changes in assumptions about member characteristics. For example, as plan members are projected to live in retirement longer, the estimated amount expected to be paid for future benefits rises.

Comparing the Funded Status of Different Plans Is Difficult

Under GASB reporting standards, the funded status of different pension plans cannot be compared easily because governments use different actuarial approaches such as different actuarial cost methods, assumptions, amortization periods, and “smoothing” mechanisms.

Actuarial Cost Methods

Most public pension plans use one of three “actuarial cost methods,” out of the six GASB approves. Actuarial cost methods differ in several ways. First, each uses a different approach to calculate the “normal cost,” the

portion of future benefits that the cost method allocates to a specific year, resulting in different funding patterns for each, as described in Table 2.

Table 2: Normal Cost Calculations for Three Most Commonly Used Actuarial Cost Methods

Actuarial cost Method	Description	How the method calculates the normal cost for the current year
Projected unit credit	Projected benefits of each employee covered by the plan are allocated by a consistent formula to valuation years.	Equal to the current value of the future benefit that each employee earned this year, using the employee's projected salary at retirement as a base.
Entry age normal	The current value of future benefits of each employee is allocated on a level basis over the earnings or service of the employee between entry age and assumed exit age.	Equal to the level percentage of payroll that would exactly fund each employee's prospective benefits if contributed from the member's date of eligibility until retirement.
Aggregate	The excess of the value of future benefits of all employees over the current value of assets is allocated on a level basis over the earnings or service of the group between the valuation date and assumed exit. This allocation is performed for the group as a whole, not as a sum of individual allocations.	The percentage of payroll equal to the current value of future benefits minus assets, divided by the current value of future salaries.

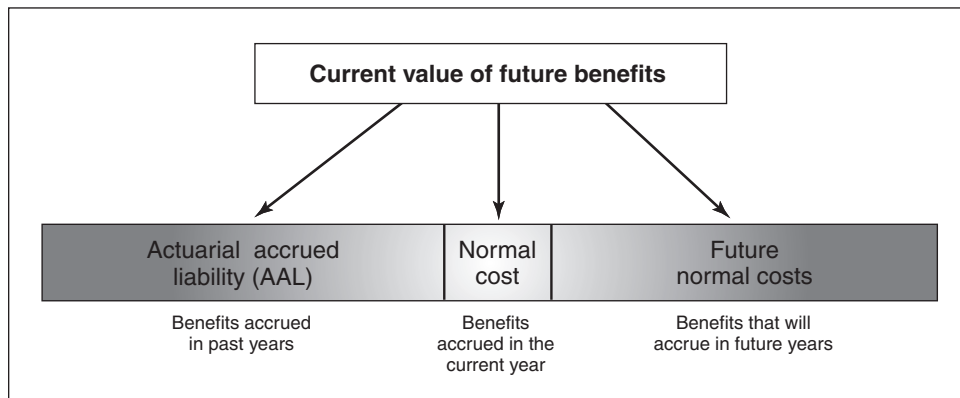
Sources: Actuarial Standards Board, Government Accountants Journal, Organization for Economic Cooperation and Development, American Academy of Actuaries.

The Aggregate Cost Method

Some news reports have expressed uncertainty about the use of the aggregate actuarial cost method, but experts indicated that the aggregate method is as sound as the other methods. Experts explained that under the aggregate method, unfunded liabilities are allocated as future normal costs instead of being amortized and added to the normal cost. As a result, no unfunded liabilities are reported, and the funded ratio is often reported as 100 percent and year-to-year payments may be more volatile. Relatively few plans actually employ the aggregate method. For those plans, GASB recently began to require governments to report the funded ratio using the entry age normal method.

Actuarial cost methods are used to allocate the current value of future benefits into amounts attributable to the past, to the current year, and to future years, as shown in figure 2. The cost of future benefits that are attributable to past years under the actuarial cost method is called the actuarial accrued liability (AAL), while the cost of benefits accrued under the cost method in the current year is known as the normal cost.

Figure 2: Division of the Current Value of Future Benefits among Time Periods



Source: Paul Angelo, Fellow of the Society of Actuaries, and GAO.

Some Call for Assuming Risk-Free Investment Returns

Some in the pension community have been advocating an alternative approach to measuring the funded status of public plans. Proponents of this approach point to certain implications of the field of “financial economics” that suggest that using the expected rate of return to project future fund earnings does not adequately take into account the risk inherent in some investments. They believe it is preferable, for disclosure purposes, that a plan’s assets and liabilities be “marked to market.” In particular, plan liabilities should be measured, independent of the actuarial cost method used for funding, as the cost of closing out the plan’s accrued benefit obligations based on service to date. This implies using the cost of annuities or discounting the expected cash flows using a risk-free rate of return and would likely result in much less favorable funded status estimates. Further, they believe that using a “smoothed” value of assets rather than the market value of assets obscures the plan’s risk profile and may have operational consequences as well.

Most governments do not use risk-free return assumptions to calculate funded status. Most public plan actuaries believe that using this approach is inappropriate because their plans do invest in diversified portfolios with higher rates of returns than risk-free rates. Those higher returns are reasonable to expect, they feel, based on past experience and will decrease the contributions that would be required if assumed returns were lower. Their current practice, they argue, produces estimates of contributions that best reflect what will actually be required on average over the long term. Using a risk-free return assumption would result in higher current contribution rates, requiring current taxpayers to pay more for the cost of future benefits.

The funded status of plans using different cost methods differs because each has a different approach to dividing up the value of future benefits. Different cost methods are designed for plans to accrue liabilities at different rates, so the normal cost and the AAL vary according to the cost method. For example, under some cost methods, governments accrue more liabilities in the early part of employees’ career rather than later. As a result, two identical plans, using identical actuarial assumptions but different cost methods, would report a different funded status.¹²

Assumptions

In addition to the cost methods, differences in assumptions used to calculate the funded status can result in significant differences among plans that make comparisons difficult. One key assumption is the rate at which governments assume their invested assets will grow. If governments assume a high growth rate, their calculations will indicate that they do not have to pay as much today, because the assets set aside will grow more rapidly. In 2006, 70 percent of state and local government pension plans assumed a return of 8.0 to 8.5 percent, while 30 percent assumed a lower rate of return (7 percent at the lowest). If a plan’s assets fail to grow at the assumed rate of return, then the shortfall becomes part of the unfunded liabilities. However, in other years, assets may earn more than the assumed rate of return, reducing unfunded liabilities.

Amortization Periods for Unfunded Liabilities

In addition to actuarial cost methods and assumptions, differences in amortization periods make it difficult to compare the funded status of different plans. Governments amortize unfunded liabilities to reduce the volatility of contributions from year to year. Governments can choose shorter or longer periods over which to amortize unfunded liabilities. GASB standards allow governments to amortize unfunded liabilities over a

¹²Even if a single method were required for financial reporting purposes, government sponsors could still use a different method for funding purposes, since financial reporting standards do not dictate the fiscal policies used to fund the plans.

period of up to 30 years.¹³ State and local governments can amortize their benefits because there is little chance that they will cease to exist.

Smoothing Periods

Finally, actuaries for many plans calculate the value of current assets based on an average value of past years. As a result, if the value of assets fluctuates significantly from year to year, the “smoothed” value of assets changes less dramatically. GASB does not limit the number of years governments may use to smooth the value of assets, but in 2006, most governments averaged the value of current assets with those of the last zero to 5 years. Comparing the funded status of plans that use different smoothing periods can be confusing because the value of the different plans’ assets reflects a different number of years. Given fluctuations in the stock market from year to year, the reported value of assets for plans that use different numbers of years for smoothing calculations could reflect significantly different market returns.

Most Public Pensions Have Assets to Pay Benefits over Several Decades, Though Contributions Vary, While Unfunded Liabilities for Retiree Health Are Significant

More than half of public pension plans reported that they have put enough assets aside in advance to pay for benefits over the next several decades, while governments providing retiree health benefits generally have significant unfunded liabilities. The percentage of pension plans with funded ratios below 80 percent, a level viewed by many experts as sound, has increased in recent years, and a few plans are persistently underfunded. Although members of these plans may not be at risk of losing benefits in the near term, the unfunded liabilities will have to be made up in the future. In addition, a number of governments reported not contributing enough to reduce unfunded liabilities, which can shift costs to future generations. For state and local governments’ retiree health benefits, studies have estimated unfunded liabilities nationwide to be between \$600 million and \$1.6 trillion, although the amounts for individual governments vary widely. Even though annual costs for retiree health benefits are currently low compared to pensions, continuing to pay for current benefits with current revenues can put stress on government budgets because health care costs are increasing rapidly.

¹³Under GASB standards, sponsors can also re-amortize unfunded liabilities each year, known as “open amortization.” Under such an approach, for example, each year sponsors can pay the annual cost for a 30-year amortization of that year’s unfunded liabilities; the following year, the sponsor can re-amortize the remaining unfunded liabilities over an additional 30 years, and so on.

Most Public Pension Plans Have Enough Funds to Pay for Benefits over the Long-Term

Most public pension plans report having sufficient assets to pay for retiree benefits over the next several decades. Many experts and officials to whom we spoke consider a funded ratio of 80 percent to be sufficient for public plans for a couple of reasons.¹⁴ First, it is unlikely that public entities will go bankrupt as can happen with private sector employers, and state and local governments can spread the costs of unfunded liabilities over up to 30 years under current GASB standards. In addition, several commented that it can be politically unwise for a plan to be overfunded; that is, to have a funded ratio over 100 percent. The contributions made to funds with “excess” assets can become a target for lawmakers with other priorities or for those wishing to increase retiree benefits.

More than half of state and local governments’ plans reviewed by the Public Fund Survey (PFS) had a funded ratio of 80 percent or better in fiscal year 2006, but the percentage of plans with a funded ratio of 80 percent or better has decreased since 2000, as shown in figure 3.¹⁵ Our analysis of the PFS data on 65 self-reported state and local government pension plans showed that 38 (58 percent) had a funded ratio of 80 percent or more, while 27 had a funded ratio of less than 80 percent. In the early 2000s, according to one study, the funded ratio of 114 state and local government pension plans together reached about 100 percent; it has since declined.¹⁶ In fiscal year 2006, the aggregate funded ratio was about 86 percent. Some officials attribute the decline in funded ratios since the late 1990s to the decline of the stock market, which reduced the value of assets. This sharp decline would likely affect funded ratios for several

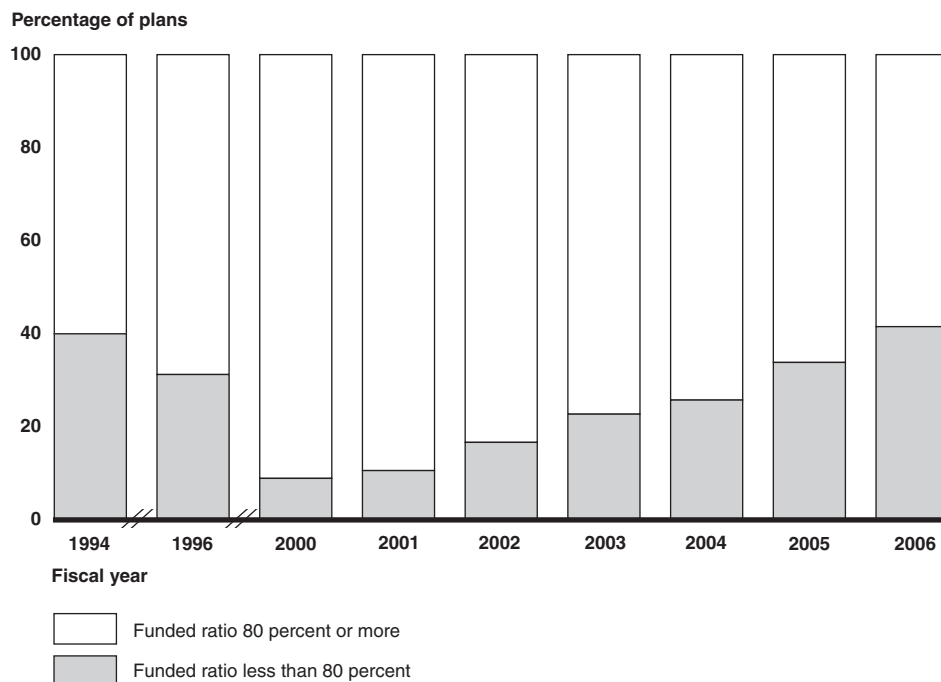
¹⁴The Pension Protection Act of 2006 provided that large private sector pension plans will be considered at risk of defaulting on their liabilities if they have less than 80 percent funded ratios under standard actuarial assumptions and less than 70 percent funded ratios under certain additional ‘worst-case’ actuarial assumptions. When private sector plans default on their liabilities, the Pension Benefit Guaranty Corporation becomes liable for benefits. These funding standards will be phased in, becoming fully effective in 2011, and at-risk plans are required to use stricter actuarial assumptions that will result in them having to make larger plan contributions. Pub. L. No. 109-280, sec. 112(a), § 430(i), 120 Stat. 780, 839-42.

¹⁵In this section, we refer to our analysis of the Public Fund Survey (PFS) and the PENDAT database. The PFS is sponsored by the National Association of State Retirement Administrators and the National Council on Teacher Retirement. These sources contain self-reported data on state and local government pension plans in years 1994, 1996, and 2000 to 2006. Each year, between 62 and 72 plans were represented in our dataset. In 2005, the 70 plans represented 58 percent of total assets invested in public pension plans nationwide in 2005, and 72 percent of total members.

¹⁶K. Brainard, *Public Fund Survey Summary of Findings for FY 2006*, National Association of State Retirement Administrators, (Georgetown, Tex.: October 2007).

years because most plans use smoothing techniques to average out the value of assets over several years. Our analysis of several factors affecting the funded ratio showed that changes in investment returns had the most significant impact on the funded ratio between 1988 and 2005, followed by changes in liabilities.¹⁷

Figure 3: Percentage of State and Local Government Pension Plans with Funded Ratios above or below 80 Percent, by Fiscal Year



Source: GAO analysis of PFS, PENDAT data.

Although most plans report being soundly funded in 2006, a few have been persistently underfunded, and some plans have seen funded ratio declines

¹⁷These findings may be unique to the time period examined (1988-2005). In other periods, other factors, such as changes to benefits, may account for more of the change in the funded ratio than the rates of return on the investment portfolio.

in recent years.¹⁸ We found that several plans in our data set had funded ratios below 80 percent in each of the years for which data is available. Of 70 plans in our data set, 6 had funded ratios below 80 percent for 9 years between 1994 and 2006. Two plans had funded ratios below 50 percent for the same time period. In addition, of the 27 plans that had funded ratios below 80 percent in 2006, 15 had lower funded ratios in 2006 than in 1994. The sponsors of these plans may be at risk in the future of increased budget pressures.

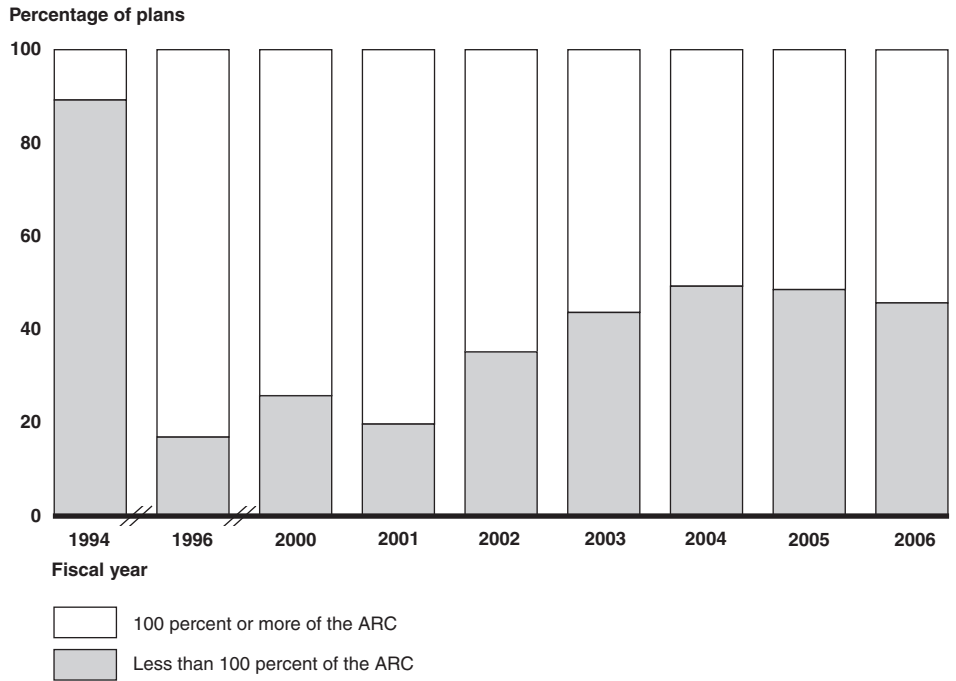
By themselves, lower funded ratios and unfunded liabilities do not necessarily indicate that benefits for current plan members are at risk, according to experts we interviewed. Unfunded liabilities are generally not paid off in a single year, so it can be misleading to review total unfunded liabilities without knowing the length of the period over which the government plans to pay them off. Large unfunded liabilities may represent a fiscal challenge, particularly if the period to pay them off is short. But all unfunded liabilities shift the responsibility for paying for benefits accrued in past years to the future.

Some Pension Sponsors Do Not Contribute Enough to Improve Funding Status

A number of governments reported not contributing enough to keep up with yearly costs. Governments need to contribute the full ARC yearly to maintain the funded ratio of a fully funded plan or improve the funded ratio of a plan with unfunded liabilities. In fiscal year 2006, the sponsors of 46 percent of the 70 plans in our data set contributed less than 100 percent of the ARC, as shown in figure 4, including 39 percent that contributed less than 90 percent of the ARC. In fact, the percentage of governments contributing less than the full ARC has risen in recent years. This continues a trend in recent years of about half of governments making full contributions.

¹⁸Reports estimate total unfunded liabilities for public pension plans nationwide between \$307 and \$385 billion, but the estimates do not cover all state and local government plans. One study by the National Association of State Retirement Administrators reviewed the funding status of 125 of the nation's large public pension plans in fiscal year 2006 and found total unfunded liabilities to be more than \$385 billion. Another study reviewed state-only pension plans and found that in 2005, the most recent year for which substantially complete data was available, total unfunded liabilities for 108 plans were about \$307 billion. Neither study is a random sample of state and local government pension plans that represents all public plans nationwide. NASRA *Public Fund Survey* (2006). This estimate represents 85 percent of public plan assets nationwide. Wilshire Consulting, *2007 Wilshire Report on State Retirement Systems: Funding Levels and Asset Allocation* (2007). This study includes only state plans, not local plans.

Figure 4: Percentage of State and Local Government Pension Plans for which Governments Contributed More or Less Than 100 Percent of the ARC, by Fiscal Year



Source: GAO analysis of PFS, PENDAT data.

In particular, some of the governments that did not contribute the full ARC in multiple years were sponsors of plans with lower funded ratios. In 2006, almost two-thirds of plans with funded ratios below 80 percent in 2006 did not contribute the full ARC in multiple years. Of the 32 plans that in 2006 had funded ratios below 80 percent, 20 did not contribute the full ARC in more than half of the 9 years for which data is available. In addition, 17 of these governments did not contribute more than 90 percent of the full ARC in more than half the years.

State and local government pension representatives told us that governments may not contribute the full ARC each year for a number of reasons. First, when state and local governments are under fiscal pressure, they may have to make difficult choices about paying for competing interests. State and local governments will likely face increasing fiscal challenges in the next several years as the cost of health care continues to rise. In light of this stress, the ability of some governments to continue to pay the ARC may be questioned. Second, changes in the value of assets

can affect governments' expectations about how much they will have to contribute. Because a high proportion of plan assets are invested in the stock market, the decline in the early 2000s decreased funded ratios and increased the unfunded liabilities of many plans. Such a marked decline in asset values was not typical in the experience of public pension funds, according to one expert. Reflecting the need to keep up with the increase in unfunded liabilities, ARCs increased, challenging many governments to make full contributions after they had grown accustomed to lower ARCs in the late 1990s. Moreover, some plans have contribution rates that are fixed by constitution, statute, or practice and do not change in response to changes in the ARC. Even when the contribution rate is not fixed, the political process may take time to recognize and act on the need for increased contributions. Nonetheless, many states have been increasing their contribution rates in recent years, according to information compiled by the National Conference of State Legislatures. Third, some governments may not contribute the full ARC because they are not committed to pre-funding their pension plans and instead have other priorities, regardless of fiscal conditions.

When a government contributes less than the full ARC, the funded ratio can decline and unfunded liabilities can rise, if all other assumptions are met about the change in assets and liabilities.¹⁹ Increased unfunded liabilities will require larger contributions in the future to keep pace with the liabilities that accrue each year and to make up for liabilities that accrued in the past. As a result, costs are shifted from current to future generations.

¹⁹When a government does not contribute at least the normal cost plus interest on the unfunded liability (which is an amount less than the full ARC), unfunded liabilities will increase.

Unfunded Retiree Health Liabilities Are Large for Many State and Local Governments

Our review of studies estimating the total retiree health benefits for all state and local governments showed that liabilities are between \$600 billion and \$1.6 trillion.²⁰ The studies noted that, like many private employers, few governments have set aside any assets to pay for these obligations. The projected unfunded liabilities do not have to be paid all at once, but can be paid over many years. Some governments do not pay for any retiree health benefits and therefore do not have any unfunded liabilities. Others may have large unfunded liabilities. For example, California has estimated its unfunded retiree health benefits liabilities at \$70 billion, while the state of Utah estimates \$749 million.

Estimates of unfunded liabilities for retiree health benefits are subject to change substantially because projecting future costs of health care is difficult. Compared to the future payments for pension benefits, payments for health care benefits are significantly more unpredictable. Pension calculations generally use salaries as a base for calculations and result in a predictable benefit amount per year. But the cost of providing health care benefits varies with the changing cost of health care as well as with each individual's usage. In addition, state and local governments usually have the ability to reduce or eliminate benefits.

Unfunded liabilities for retiree health benefits are high because unlike pension plans, nearly all state and local government retiree health benefits have been financed on a pay-as-you-go basis. In other words, most governments have not set aside funds in a trust dedicated for future retiree health benefit payments. As a result, governments do not pay a yearly ARC, but rather pay for retiree health benefits as they become due from annual funds. However, the new GASB accounting standards will require state and local governments to report their funding status on an accrual basis. In other words, for the first time, most governments will begin to

²⁰Chris Edwards and Jagadeesh Gokhale. "Unfunded State and Local Health Costs: \$1.4 Trillion." *Tax and Budget Bulletin*, no. 40 (Cato Institute: 2006); David Zion and Amit Varshney, "You Dropped a Bomb on Me, GASB: Uncovering \$1.5 Trillion in Hidden OPEB Liabilities for State and Local Governments," *Equity Research, Accounting and Tax* (Credit Suisse: 2007); Brian Whitworth, Igor Balevich, and Jim Kelly *OPEB for Public Entities: GASB 45 and other Challenges* (J.P. Morgan: 2005). These estimates of health care liabilities are limited by their methodologies. For example, the reports generalize about all state and local governments' liabilities from a non-representative sample, and the reports did not consider the variation in actuarial methods and assumptions in the calculations (See app. I). The studies base their estimates on actuarial valuations and public reports that have been performed by some state and local governments in advance of the deadlines for the new GASB standards. The studies then extrapolate the findings to calculate a nationwide total for all state and local governments.

calculate and report their funding status in a manner similar to the way they report pensions' funding status, whether or not they are prefunded.

Officials told us that state and local governments have not prefunded retiree health benefits for several reasons. First, for many governments, retiree health benefits began as an extension of employee health care benefits, which are usually paid for from general funds. Governments did not view retiree health as a separate stream of payments. Second, retiree health benefits were established at a time when health care costs were more affordable, so paying for the benefits as a yearly expense was less burdensome. Third, the inflation rate for health care is less predictable than for pensions, so calculating the current funding status is difficult. Fourth, given that specific retiree health benefits are generally not guaranteed by law, employers are freer to modify benefits; as a result, state and local governments are reluctant to commit funds to an obligation that may be reduced or eliminated in the future. Finally, changes in national health care policy and health insurance markets can affect what benefits state and local governments cover, so state and local governments may have resisted locking in their commitment to pay for future retiree health benefits by prefunding, and instead preferred to finance on a pay-as-you-go basis.

Although the unfunded liabilities for retiree health benefits are generally much higher than for pensions, their current annual payments are considerably lower. According to our analysis presented in our recent report on this topic,²¹ in 2006, the aggregate state and local contribution rate for pensions was about 9 percent of salaries, and the pay-as-you-go expense for retiree health benefits was about 2 percent of salaries. However, if retiree health continues to be financed on a pay-as-you-go basis, the pay-as-you-go amount is estimated to more than double to 5 percent of salaries by 2050 to keep up with the growth in health costs, adding to budgetary stress. Pay-as-you-go financing also leaves less budgetary flexibility because state and local governments must pay the full costs of each year's benefits. In contrast, under pre-funding, benefits are paid from a fund that already exists, so government contributions can be reduced when fiscal pressures are great. As a result, governments may face even greater pressure to reduce benefits or shift the costs of benefits

²¹GAO-07-1156, pp. 27-30. As noted in that report, the simulations of future contribution rates are very sensitive to assumptions about the growth rate of health care costs and to assumptions about the rate of return on investments.

to beneficiaries, for example, by restricting eligibility, reducing coverage, or increasing premiums. Still, pre-funding retiree health benefits would require significantly higher contributions in the short term than pay-as-you-go financing would require.

Concluding Observations

Understanding the funded status of state and local government retiree benefits requires examining, on a plan-by-plan basis, whether funding levels are improving over time and whether governments are making the contributions recommended by the plan's actuary each year. The variety of actuarial funding methods and assumptions makes it difficult to compare funded status across different pension plans. However, funded status information is not intended to help compare plans, but rather to determine contributions that will achieve full funding over time and to assess a given plan's funded status over time.

The funded status of state and local government pensions overall is reasonably sound, though recent deterioration underscores the importance of keeping up with contributions, especially in light of anticipated fiscal and economic challenges. Since the stock market downturn in the early 2000s, the funded ratios of some governments have declined. Governments can gradually recover from these losses. However, the failure of some to consistently make the annual required contributions undermines that progress and is cause for concern, particularly as state and local governments will likely face increasing fiscal pressure in the coming decades. While unfunded liabilities do not generally put benefits at risk in the near-term, they do shift costs and risks to the future.

In the case of retiree health benefits, pay-as-you-go financing has been the norm up to the present day. The initial estimates of the unfunded liabilities will be daunting. But that is a natural consequence of pay-as-you-go financing. Just as the unfunded liabilities did not accumulate overnight, it may be unrealistic to expect them to be paid for overnight. Rather, state and local governments need to find strategies for dealing with unfunded liabilities, and such strategies will take time, will require difficult choices, and could be affected by changes in national health policy.

Agency Comments

We provided officials from the Internal Revenue Service, GASB staff, and other external reviewers knowledgeable about the subject area a copy of this report for their review. They provided us with technical comments that we incorporated, where appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to relevant congressional committees, the Acting Commissioner of Internal Revenue, and other interested parties. Copies will also be made available to others upon request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>. Please contact me at (202) 512-7215, if you have any questions about this report. Other major contributors include Tamara Cross, Assistant Director; Ken Stockbridge; Anna Bonelli; Temeca Simpson; Amy Abramowitz; Joseph Applebaum; Rick Krashevski; Jeremy Schwartz; Walter Vance; Charles Willson; and Craig Winslow.



Barbara D. Bovbjerg
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and Income Security Issues

Appendix I: Objectives, Scope, and Methodology

The objectives of this report were to examine 1) the key measures of the funded status of retiree benefits and 2) the current funded status of state and local pension and retiree health benefits.

To describe the key measures of the funded status of retiree benefits, we interviewed experts on state and local government pension and retiree health benefits such as national organizations, bond rating agencies, and representatives from one local government retiree benefit system. We also spoke with experts on actuarial science such as the Actuarial Standards Board, the American Academy of Actuaries, and independent actuaries. We spoke to staff of the Governmental Accounting Standards Board to understand accounting practices and principles. We also reviewed actuarial literature and attended conferences. In addition, we conducted the following analysis:

- To understand the impact of various economic factors on the funding ratio of public pension plans, we developed a simple model of the determinants of the funding ratio and conducted “counterfactuals” holding rates of return on investments constant. To do this, we used the following data sources:
 - funding ratio data from the Public Fund Survey (PFS) for years 2001 to 2005 and the Survey of State and Local Pensions for years 1988 to 2000;
 - market value of pension assets from the Federal Reserve’s Flow of Funds Accounts;
 - contributions and benefits data from the Bureau of Economic Analysis’s National Income and Product Accounts database; and
 - data on returns on pension fund portfolios by analyzing market data.
- Our methodology and data sources for this analysis include some limitations. First, annual data are not available in the Survey of State and Local Pensions for 5 years during the period. For those years, values were imputed by using the average growth between the two closest values. In addition, the funding ratios are available on a fiscal year basis and were subsequently adjusted to a calendar year period. Second, assumptions may not be representative of all pension plans, such as the assumptions based on smoothing functions and the real expected returns on investments. Last, counterfactuals do not include policy adjustments that may occur because of different rates of return.

To describe the funded status of state and local governments' pensions, in addition to a literature review, we analyzed pension funding data provided by the National Association of State Retirement Administrators (NASRA). The data come from two different databases. The first database is the PFS and is sponsored by NASRA and the National Council on Teacher Retirement (NCTR). Data from years 2001 to 2006 were available. PFS data are gathered by reviewing publicly available financial documents from the state and local government plans. The second database is called the PENDAT database and was sponsored by the Public Pension Coordinating Council. PENDAT data are available in fiscal years 1992, 1994, 1996, 1998, and 2000.¹ PENDAT data were collected via a survey sent to the administrators of a sample of plans nationwide.

- The PFS and PENDAT databases do not include all of the same entries. We matched individual entries from PENDAT to PFS, resulting in a sample with between 63 and 71 plans that had data across each of the available years from 1994 to 2006. In fiscal year 2005, these plans represented 58 percent of plan assets nationwide, and 72 percent of state and local government pension plan members.
- We reviewed the PFS and PENDAT data and found them to be reliable for our purposes. To do this, we reviewed all entries of key data points in the PFS data using publicly available sources from the state and local government plan sponsors and made adjustments to the data as needed. The corrections made to the PFS data were not material. To review the PENDAT database, we reviewed the methodology used to collect the data and verified the data of 23 percent of entries using external sources. The corrections were not found to be material.
- The information contained in the PFS and PENDAT databases have limitations: 1) surveys, including PENDAT, are subject to several kinds of error such as the failure to include all members of the population in the sample, nonresponse error, and data processing error; 2) the funding ratio and other funding indicators represent the financial status for the fiscal year with the most recent actuarial valuation, and thus do not all represent the same fiscal year's financial status; 3) the plans included in the analysis are not necessarily representative of all state and local government pension plans nationwide; and 4) data for every plan is not available in each year.

¹Few entries were available from 1998, so we did not use any data from this year.

To obtain information on the funded status of retiree health benefits, we interviewed experts on retiree health benefits funding from national organizations, bond rating agencies, and one local government retiree benefits system. We also reviewed studies conducted by various organizations estimating the funded status. These organizations each obtained information about retiree health benefits liabilities from a number of different state and local governments and then extrapolated these figures to generate a nationwide estimate of all state and local governments. We reviewed the following studies:

- Credit Suisse, *You Dropped a Bomb on Me*, GASB, 2007. Limitations of this study include: only states in the analysis, not local jurisdictions, are included; assumes that those government entities for which Credit Suisse was able to find estimates of future retiree health benefit obligations were representative of governments overall in terms of age distribution and funding levels; and does not consider the variation in actuarial assumptions and methods between the different plans.
- Cato Institute, *Unfunded State and Local Health Costs: \$1.4 Trillion*, 2006. Limitations of this study include: includes states only in the analysis, not local jurisdictions; assumes that those government entities for which Cato was able to find estimates of future retiree health benefit obligations were representative of governments overall in terms of age distribution and funding levels; does not consider the variation in actuarial assumptions and methods between the different plans; it is not clear how many employees were covered by the sample because there were so many localities; and figures on the percentage of employees covered by health care plans in state and local government jurisdictions may not be precise.
- *OPEB for Public Entities: GASB 45 and Other Challenges*, JP Morgan, 2005. Limitations of this study include: assumes that those government entities for which they were able to find estimates of future retiree health benefit obligations were representative of governments overall in terms of age distribution and funding levels; and does not consider the variation in assumptions and methods between the different plans.

We conducted our work in Washington, D.C.; New York; and Connecticut, from July 2006 to January 2008 in accordance with generally accepted government auditing standards.

Related GAO Products

State and Local Government Retiree Benefits: Current Status of Benefit Structures, Protections, and Fiscal Outlook for Funding Future Costs. [GAO-07-1156](#). Washington, D.C.: September 24, 2007.

State and Local Governments: Persistent Fiscal Challenges Will Likely Emerge within the Next Decade. [GAO-07-1080SP](#). Washington, D.C.: July 18, 2007.

Retiree Health Benefits: Majority of Sponsors Continued to Offer Prescription Drug Coverage and Chose the Retiree Drug Subsidy. [GAO-07-572](#). Washington, D.C.: May 31, 2007.

Employer-Sponsored Health and Retirement Benefits: Efforts to Control Employer Costs and the Implications for Workers. [GAO-07-355](#). Washington, D.C.: March 30, 2007.

State Pension Plans: Similarities and Differences Between Federal and State Designs. [GAO/GGD-99-45](#). Washington, D.C.: March 19, 1999.

Public Pensions: Section 457 Plans Pose Greater Risk than Other Supplemental Plans. [GAO/HEHS-96-38](#). Washington, D.C.: April 30, 1996.

Public Pensions: State and Local Government Contributions to Underfunded Plans. [GAO/HEHS-96-56](#). Washington, D.C.: March 14, 1996.

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