Pension benefits are a significant and rising obligation that state and local governments have to their current and former workers. Governments do not pay pension benefits directly to retirees, but rather make contributions to actuarially funded pension systems, and the systems make benefit payments to retirees. The vast majority of state and local government employee retirement plans are defined benefit plans, where the government pension fund generally guarantees a steady stream of income to retirees. The trend toward defined contribution plans, where an individual’s future income depends on his or her investment returns, has been far less pronounced in the public sector than in the private sector.¹

Although local governments have many more workers than state governments, states actually account for about 55 percent of all state-local pension contributions (including state contributions for local workers). Even though state-financed contributions are larger, local contributions are larger relative to local governments’ ability to finance them. State government pension contributions amounted to about 3.7 percent of tax revenue in 2004 in the typical state, while local government contributions were an estimated 5.5 percent of local tax revenue.²
Government contributions to pension plans, in theory, are designed to fully fund future liabilities in a way that keeps annual contributions on a reasonably smooth path, avoiding sharp shifts from year to year. In most cases, if a government does not make its full required contribution in a given year it will have to pay more later, with interest.

In the short run, state and local government budgets are affected not by the size of pension benefits or pension fund investment returns, but through contribution requirements that can be set a year or more in advance. In any single year these contributions may be only loosely connected to benefits and returns. Over the longer run, however, contributions will change in a lagged and usually smoothed manner in relation to changes in benefits, investment returns, and workforce demographics.

State and local government pension plans have large holdings of corporate stock, and when the stock market booms as it did in the late 1990s, pension assets soar. States cannot “withdraw” money from these plans if they have extraordinary stock market earnings but they have many ways to share in that benefit, generally with a short lag. Some fiscal benefit occurs automatically. For example, when the value of plan assets increases, the unfunded liability (if there is one) goes down, reducing what governments must pay to amortize that liability. Governments and pension plans also can take explicit action to reduce contributions, including raising estimates of future investment returns, or declaring “contribution holidays” (drastically reducing or even skipping contributions for a year or two).

Between 1994 and 2002, two-thirds of state governments reduced pension contributions relative to tax revenue and many declines were quite significant. Ten states reduced contributions by more than three percentage points (relative to tax revenue); by contrast, only two states increased contributions by more than three percentage points. Figure 1 shows five state governments with large declines in pension contributions. In several, contributions recently have begun to rise.

**Figure 1**

![Graph showing state government pension contributions as a percentage of state taxes for selected states with large contribution declines](attachment:image.png)

*Sources: Contributions and Tax Revenue, U.S. Bureau of the Census*
State and local governments now face pressures that have begun driving pension contributions upward. The stock market decline of 2000-2002 has begun causing contributions to rise (some of this will be dampened by the strong stock market of 2003 and 2004, but the net effect will be upward). Changes in actuarial assumptions can cause contributions to rise — some plans have lowered assumed investment returns based on recent experience. Demographic assumptions also can cause contributions to rise — if, for example, retirees live longer than previously assumed, or if the workforce salary base grows less quickly than expected (reducing projected pension plan revenue from future employee contributions), government contributions may have to rise. Also, many governments enriched pension benefits during the fiscal boom, and those increases drive unfunded liabilities and their amortization upward. Finally, states that reduced their contributions to artificially low levels during the boom years will see contributions rise, and this has begun already.

In which states will pension contributions have to rise the most? Analysts use several indicators to draw conclusions about the potential budget implications of state and local government pension plans. One is the ratio of the plan’s assets to its liabilities. A recent Standard and Poor’s report noted that the average funded ratio of large state-sponsored plans exceeded 100 percent in 2000, reflecting the strong stock market, but fell to about 84 percent by 2004 and was below 100 percent in all but three states. The aggregate unfunded liability was estimated to be $284 billion. However, it is not unusual for the funded ratio to drop substantially following recessions and rise afterward. State pension plans, in aggregate, have far higher funding ratios today than they did in the 1960s and 1970s. A second measure is the ratio of employer contributions to the “actuarial required contribution” (the amount a government should pay to meet the plan’s funding requirements).

Each measure has flaws as a guide to pressures facing governments participating in a plan. A plan could be underfunded (its funded ratio is less than 100%), but a participating government’s current payments might already be large enough to amortize the unfunded liability. If a government is making payments below the actuarially required amount, it might not necessarily face a sharp rise in future contributions if, for example, the plan is overfunded. Despite these and other flaws, these measures are the best readily available indicators of pension plan health.

Figure 2 shows both measures for the largest state employee pension plan in several states that appear significantly underfunded or that have low contribution rates. It also shows the extent to which these state governments reduced their contributions between 1994 and 2002 when many governments were reducing contributions. The table cannot tell us how much contributions might have to rise, but the magnitude of the drop suggests that contribution rises might be substantial. For reference, a rise equal to 4 percent of tax revenue is larger than the typical tax increase following the 2001 recession. Hawaii’s contributions already have increased substantially from its 2002 level.

Even when governments are paying the full actuarial required contribution, contributions might have to rise substantially. First, the funding method alone can require sharp contribution increases. Second, the actuarial required contribution is based on assumptions that may prove wrong. A good example is Rhode Island, where employers were paying 100 percent of required contributions. The Rhode Island employees’ retirement system recently revised its actuarial assumptions to reflect younger-than-expected retirement ages, lengthening the period over which benefits would be paid, and raising average benefits. As a result of these and other assumption changes, its actuarial consulting firm projected that employer contributions would have to more than double between fiscal years 2005 and 2008.
As this discussion shows, readily available measures do not provide good information on the pressures that pension underfunding will place on state budgets. The funded ratio is helpful but it depends on embedded economic and demographic assumptions that vary considerably across states and over time, and it can be misleading for technical reasons, as well. Although the ratio of actual contributions to required contributions can provide insight, the Rhode Island example shows that this measure also has weaknesses.

Perhaps the best way to understand the pressures that state-local pension systems will place on government finances in the near term, is to project the annual contributions that would be required under several scenarios (different economic, demographic, and funding assumptions), and compare those potential contributions with the contributions currently being made and with the size of government budgets. Such an analysis is beyond the scope of this article.

Given weaknesses in available measures, what do we know? The vast majority of states have underfunded pension systems. By one measure — the funded ratio — retirement systems in 13 states had actuarial assets that were less than 75 percent of actuarial liabilities, and as noted in Figure 2 above some states are making contributions that fall well below actuarial requirements. In aggregate, this underfunding is not large relative to long-run experience. However, some states clearly have serious underfunding problems and contributions will need to rise substantially, although it is difficult to predict precisely when. Some states — particularly Illinois, Rhode Island, and West Virginia — have long had significantly underfunded plans and are likely to face pressure for substantial contribution increases. Many of the states that took contribution holidays in the 1990s may have to raise contributions substantially just to get back to where they were. Predicting which states will face the greatest pressure in the near term would take analysis that goes beyond

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**Figure 2**

<table>
<thead>
<tr>
<th>Pension plan funding measures, selected states</th>
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</thead>
<tbody>
<tr>
<td>Reported Funding Status of State Employees Plan</td>
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<tr>
<td>Funded Ratio: Actuarial Assets as % of Actuarial Liabilities</td>
</tr>
<tr>
<td>Alaska</td>
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<tr>
<td>Colorado</td>
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<tr>
<td>Hawaii</td>
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<td>Illinois</td>
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<td>Kentucky</td>
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<td>Oklahoma</td>
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<td>Rhode Island</td>
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<tr>
<td>Washington</td>
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<tr>
<td>West Virginia</td>
</tr>
</tbody>
</table>

*Higher is better*

Sources: Funding status based upon most recent available Comprehensive Annual Financial Report, Schedule of Funding Progress and Schedule of Employer Contributions

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the measures currently examined by most analysts and analyzes underlying actuarial assumptions and how they may change.

**Retiree Health Care and Related Benefits**

State and local governments often provide health care and other “post-employment benefits” to retirees. As with pensions, employees earn these benefits during working years but don’t receive them until retirement. The aging government workforce, rapidly rising health care costs, and increasing life spans of retirees are conspiring to create huge liabilities for the future health care costs of current and retired workers, which one analyst estimates could approach $1 trillion.6

Unlike pensions, governments have not been required to report their obligations for these benefits (dubbed “other post-employment benefits,” or OPEB, by accountants) and most do not set aside reserves to cover those future costs. As a result, governments have had an incentive to provide compensation in the form of future benefits rather than current wages. The costs of these OPEBs are typically paid out of current budget resources. Their cost will grow rapidly for the reasons given above, and may become much larger than health care costs for current retirees. For example, in fiscal year 2002, New Jersey’s retiree health care costs were only 56 percent of costs for current workers, but New Jersey’s Benefits Review Task Force projects that by 2010 retiree health care benefits will be 25 percent larger than costs for current workers.7

New accounting rules will change this. Beginning with 2007-08 financial statements, states and large local governments will be required to estimate their “actuarial liability” for these post-employment benefits and amortize the unfunded liability over 30 years.8 The new rules will NOT require governments to set aside reserves, but those that continue on a “pay-as-you-go” basis generally will report a rapidly growing liability.

The amounts are large and can dwarf the amount of unfunded pension liabilities. Maryland, which analyzed its liability early, estimated an unfunded retiree health care liability of $23 billion, compared with its unfunded pension liability of $4.6 billion. One important issue is how annual budgets might be affected if governments choose to fund benefits more fully. Figure 3 shows relevant information for three early-reporting governments — Delaware, Maryland, and the Los Angeles school district. In each case the full-funding amount is several times as large as current payments, and the increase would be large relative to revenue raised from own sources (taxes, fees, and charges) — ranging from 3.7 percent of revenue in Delaware to more than 14 percent in the Los Angeles school district.

The amounts will vary dramatically depending on the generosity of the retiree health care package, the age and health of the workforce, actuarial assumptions, and other factors.

Whether and how governments will respond is a decision for elected officials. Options include:

- **Do nothing:** Governments that continue on a pay-as-you-go basis will still face increased costs as their workforce ages, retirements increase, and health costs rise. Outlays may rise less rapidly initially under a do-nothing strategy than if they begin to prefund, but far more rapidly in later years. Judging by the responses of many governments so far, “do nothing” is not an option that many will consider seriously.
**Figure 3**

**How 3 Early-Reporting Governments Could Be Affected**

**IF They Fully Funded Retiree Health Benefits**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Actuarially required annual contribution, including amortization of unfunded liability (i.e., full funding)</td>
<td>$529</td>
<td>$286</td>
</tr>
<tr>
<td>Less: Current annual contribution (pay as you go)</td>
<td>172</td>
<td>101</td>
</tr>
<tr>
<td>Equals: Increase in annual payments needed for full funding</td>
<td>$357</td>
<td>$185</td>
</tr>
<tr>
<td>Government own-source revenue</td>
<td>$2,499</td>
<td>$4,972</td>
</tr>
<tr>
<td>Increase needed for full funding, as % of own-source revenue</td>
<td>14.3%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Full-funding amount divided by current amount</td>
<td>3.1</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Notes and sources:
Current and actuarially required contributions based on valuation analyses prepared for each government (see endnote)
Fiscal year for each government is year used in its own analysis: LAUSD (2005-06), DE (2007-08), MD (2006-07)
Government own-source revenue for MD and DE: Census Bureau data for 2004 plus 5% annual growth
Government own-source revenue for LAUSD: local revenue plus transfers; Superintendent’s Final Budget for 2005-06

- Raise taxes, cut other spending, or use surplus funds to begin prefunding existing liabilities: The governments of Fairfax County, Virginia, and the District of Columbia each have made modest contributions to reserve funds. Mayor Bloomberg of New York City proposed using $2 billion of unanticipated revenue to “establish a trust to fund a portion of its liability for the benefits of its current and future retirees…. Deposits into the trust are irrevocable and all money deposited into the trust must be used to pay the costs of retiree health care benefits in future years.”

- Issue bonds to prefund existing liabilities: Gainesville, Florida, has already done this, and investment banks are marketing this option to governments.

- Scale back benefits: Governments have many options, including restricting eligibility for benefits, increasing the time it takes to vest in full benefits, increasing co-payments and deductibles. They may consider tiered approaches that make benefits for currently working future retirees less generous than those for current retirees, and benefits for future hires less generous than those for current workers. A panel examining New Jersey’s funding of obligations to retirees recommended that the state consider requiring all employees to contribute to retiree health care costs (the state now pays 100 percent of the cost). Governments will have to weigh the impact these choices may have on worker recruitment and retention.

These choices are likely to play out over the next several years as more governments conduct the actuarial valuations required by the new accounting rules and debate their options.
Endnotes


2 Based on median contributions for the 50 states. State share based on Census Bureau data on retirement contributions and tax revenue. Local share based on Census Bureau data on retirement contributions and on author’s estimates of local tax revenue.

3 The data for each plan was obtained from its most recent comprehensive annual financial report — in most cases for 2005. In the case of West Virginia, which is widely regarded as one of the poorest-funded plans in the nation, the most recent report was for 2003 and it appears to be unaudited. Standard and Poor’s recently issued a report showing funding ratios for the two largest plans combined in the 50 states, and the funded ratio for West Virginia for these plans was 43.9 percent (see Young, Parry, Robin Prunty, and Ben Cutler, *Rising U.S. State Unfunded Pension Liabilities Are Causing Budgetary Stress*, Standard and Poor’s Corporation, February 22, 2006.)


8 These rules are set forth in Statements 43 and 45 of the Governmental Accounting Standards Board (GASB).

