The State of State Pension Plans 2013

A Deep Dive Into Shortfalls and Surpluses

Rachel Barkley
Municipal Credit Analyst
+1 312 696-6256
rachel.barkley@morningstar.com

16 September 2013

The challenges and vulnerabilities facing government pension plans have continued to gain public prominence and attention in the past year. Governing entities and the taxpaying public are beginning to acknowledge the potentially chronic consequences of looming pension liabilities. Headlines warn of an impending pension crisis while ever-escalating pension costs and liabilities have induced new, sometimes unrelenting, pressure on the finances of state and local governments that are still recovering from the recession. In some extreme cases, pension liabilities have served as key drivers for municipalities filing for bankruptcy. Current data indicates these pressures are expected to persist or even intensify. In late 2012, the actuarial firm Milliman found a $1.2 trillion gap for the largest 100 U.S. public pension plans[1] while actuarial reports for a large portion of these plans project sizable increases in required contributions in order to fully fund these liabilities.

1 Sielman, Rebecca. 2012 Public Pension Funding Study. Milliman.

Key Takeaways

- Pension funded levels and UAAL vary widely among states.
- More than half of all states fall below Morningstar's fiscally sound threshold of a 70% funded ratio.
- UAAL per capita is a major indicator as it represents how much each resident would need to pay to fund the liability and can vary compared with funded ratio.
- Ongoing municipal bankruptcy proceedings may have wide-ranging impacts on government pension plans.
- Research indicates the market is not factoring in pension liabilities when pricing bonds.
- Upcoming GASB requirements will change pension standards and accounting significantly.

Despite the increased focus on pensions and their integral role in a government's overall credit quality, pensions remain poorly understood because of a combination of plan complexity, the sheer number of plans, and a lack of transparency due to weak disclosure requirements. To offer a better view of the present state of major pension plans and the potential impact of their vulnerabilities on governments, taxpayers, and investors, Morningstar has analyzed current data for pension plans administered by each of the 50 states as well as the Commonwealth of Puerto Rico. Overall, we found the fiscal health of state pension plans varies drastically, with some states having exceptionally strong plans and others facing severe funding shortfalls.

State pension plans are particularly important for several reasons. Not only do they represent a respective state's financial obligations, but they're often structured as umbrella plans covering employees of that state's myriad local government bodies. State pension plans that solely cover state employees can have a notable influence on underlying governments in the state, as states provide substantial aid to school districts and other local governments. Financial pressure on state governments, including the fiscal strain imposed by ballooning pension costs, may lead to reductions in intergovernmental aid to local governments.

Related Research
- State and Local Pensions 101
- Upcoming Reports on Plans for High Profile Individual State Plans

Overview

While some states are adequately managing their aggregate pension liabilities, the majority of state pension systems are coming under duress. The fiscal solvency and management of these plans varies greatly, according to two key drivers of Morningstar's pension analysis: the funded ratio and the unfunded actuarial accrued liability (UAAL, or unfunded liability) per capita. The funded ratio, which is calculated by dividing the pension plan's assets by its liabilities, serves as a good measure of the plan's ability to meet its obligations. In addition, Morningstar would like to highlight the UAAL per capita, which in our opinion is a useful metric not commonly applied in the current pension analysis narrative. Similar to the debt per capita calculation in municipal credit analysis, the UAAL per capita represents the amount each person in the state would need to pay to fully fund this liability.

For the funded ratio and UAAL calculations, we looked at all defined-benefit plans to which the state contributes and/or has a legal obligation to provide funding (see the appendix for a full discussion of the methodology). This brings up two critical points:

1 Pension plans are not required to report the percentage of the total unfunded liability attributable to each participant under current accounting rules. This is important because many of these plans have multiple contributing governments, meaning that the state is not solely responsible for paying the full liability. Because of this, it is difficult to project the impact on the state budget. However, as the other participants are underlying local governments, the UAAL will still be funded by state taxpayers, either through payments to the state or an underlying entity.

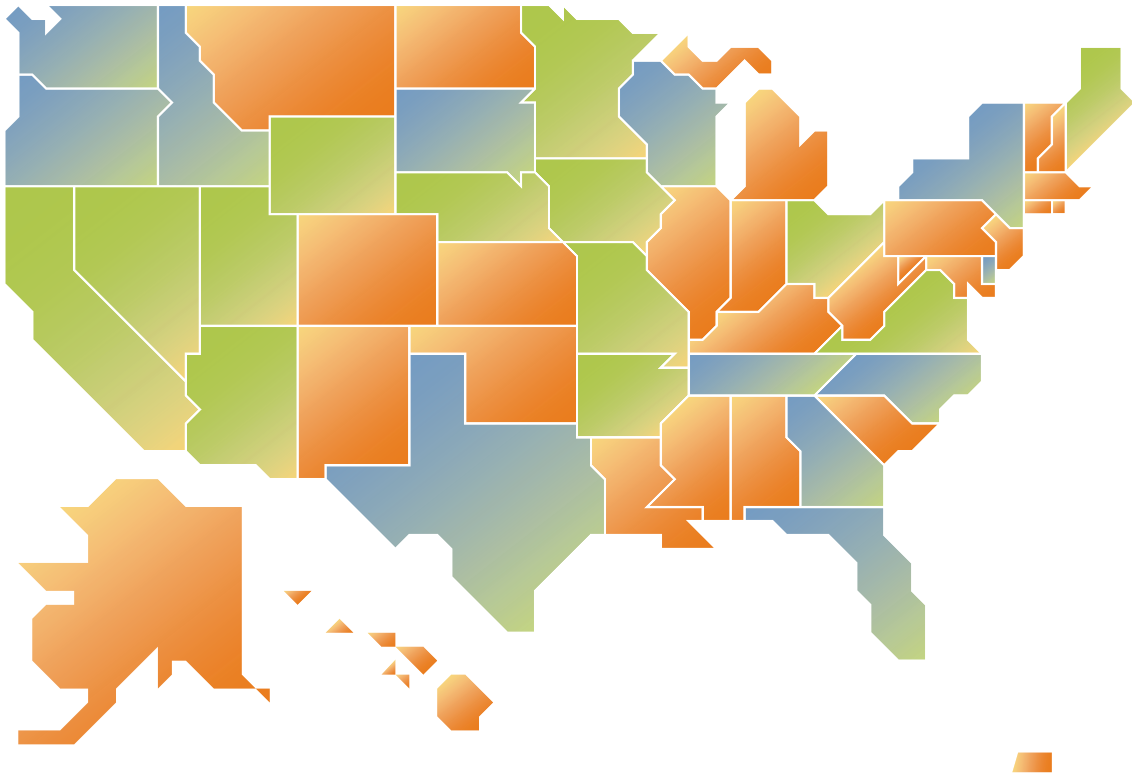
2 Additionally, states are often the administrator of plans to which they have no liability or requirement to contribute. We have excluded these plans from our calculations, given that the states will not be funding these liabilities. We do, however, note that these additional plans administered by the states, as well as local plans not under state administration, represent what can at times be significant additional pension liabilities that taxpayers will be required to fund.

In aggregate, the state plans are 72.6% funded with a UAAL per capita of roughly $2,600, although funded percentages and UAAL per capita vary dramatically among the states. Several states have very strong pension systems. Six states have funded levels of more than 90%, while seven states have UAALs of less than $100 per capita. Wisconsin remains the strongest system, with a 99.9% funded ratio and a UAAL of $18 per capita. A total of 12 states have funded ratios of at least 80%, which is considered to be strong by Morningstar and recommended by the Government Finance Officers Association. On the other side of the spectrum, 26 states and Puerto Rico fall below Morningstar's fiscally sound threshold of a 70% funded ratio.

Among states, Illinois continues to have the worst funded system with a 40.4% funded ratio and a $7,421 per capita UAAL. The poor fiscal health of the Illinois pension plans is due to a combination of

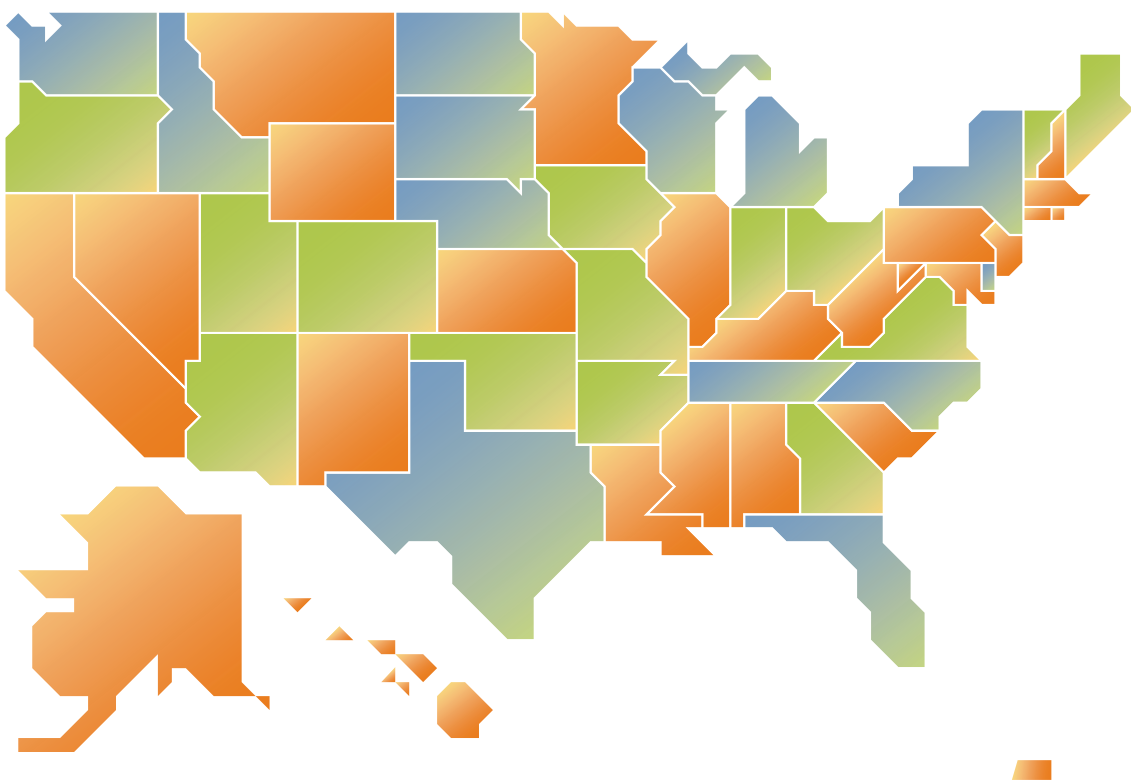
Aggregate Pension Funded Levels by State

80% ↑	Good
70%–79%	Fair
69% ↓	Poor



Aggregate Pension UAAL Per Capita by State

$1,499 ↓	Good
$1,500–$2,999	Fair
$3,000 ↑	Poor



reasons, including historical borrowing from the plans by the state, state law requiring annual funding of less than the annual required contribution (ARC), below-expected investment returns, and weak funding methods.

Puerto Rico, however, falls far below Illinois with an aggregate 11.2% funded level and a UAAL per capita of greater than $8,900. As of the most recent actuarial valuation, all three of the commonwealth's pension plans were projected to deplete their assets over the next few years. It should be noted that Puerto Rico passed pension reforms in 2011 and 2013, including raising the retirement age, increasing employer contributions, and lowering benefits for some employees. Morningstar views the recent reform package as a necessary first step to prevent the system from running out of assets within the next 10 years. However, we believe Puerto Rico's large pension liability will remain a large fiscal burden for the foreseeable future.

Although there tends to be a relationship between funded level and UAAL per capita, there are multiple notable exceptions in which the two data points do not correlate when rank-ordering the systems. While Puerto Rico has the lowest funded ratio, Alaska has by far the highest UAAL per capita, at more than $10,000. This is despite its much higher, although still poor, funded ratio of 59.2%. Meanwhile, Indiana has a funded ratio roughly on par with that of Alaska, at 58.4%. However, the UAAL per capita for Indiana is substantially lower than that of Alaska, at $2,415, and is even lower than that of more well-funded plans. The substantial disparity in the apparent fiscal health of the systems highlighted by these two data points reinforces Morningstar's opinion that the UAAL per capita needs to be taken into consideration when analyzing pensions.

Trends

In aggregate, state pension funded levels continued to decline in 2012, although the annual drop in funded percentage was moderate at 2.1%. Growth in liabilities outpaced that of assets, partially because entities are still absorbing asset losses from the recession, in accordance with the standard actuarial methods. Most plans do not recognize the full magnitude of actual gains or losses at the end of each fiscal year. Instead, they use a process called smoothing to determine the actuarial value of their assets, which incorporates any deviation between expected returns and actual results over a period of time, typically five years. Smoothing has an impact on periods of both positive returns and negative returns. Consequently, these plans will still have another year or two of absorbing the investment losses suffered during the recession, although gains in recent years, particularly 2011, offset a portion of these losses.

However, there is some good news regarding investment returns. While they have been volatile in recent years, data collected by the National Association of State Retirement Administrators indicates long-term returns are generally in line with the 7%–8% return assumptions used by most plans.

According to these findings, the 10-year annualized return for pension plans is 7.5% while the 20-year return is 7.9% and the 25-year return is 8.9% as of the close of calendar 2012[2].

2 NASRA Issue Brief: Public Pension Plan Investment Return Assumptions. National Association of State Retirement Administrators. March 2013.

Market Reaction

Despite the overall poor funded level of these plans, recent research by the Federal Reserve Bank of Cleveland found no evidence that pension obligations were being priced in as a potential threat to a state's overall credit quality when market participants were purchasing municipal bonds.[3] While pensions are a soft liability, they are still obligations of the entity. We have seen multiple instances of states experiencing fiscal pressure because of escalating pension costs, and Morningstar believes market participants should include pension analysis when evaluating the credit quality of bonds.

3 Burson, Jean, et al. Do Public Pension Obligations Affect State Funding Costs? Federal Reserve Bank of Cleveland. January 2013.

Pension Reform

As funded levels have declined and overall fiscal pressure for states has increased in recent years, most states have implemented some level of pension reforms in response. The majority of these changes have been mandated increases or implementation of employee contributions, adjusted formula calculations, and extended periods. Changes typically apply to new hires but may also apply to current employees. Pension benefits are generally protected by the contract clause under the U.S. Constitution. Forty-eight states have additional protections provided under their respective state constitutions[4], which can vary between protecting benefits expected at the time of employment to applying only to benefits accrued before the passage of pension reforms. These provisions can have a substantial impact on an entity's ability to pass pension reforms.

4 Munnell, Alicia et al. Legal Constraints on Changes in State and Local Pensions. Center for Retirement Research at Boston College. August 2012.

Pension reforms continue in 2013. In April, Kentucky approved legislation that requires the state to begin fully funding the annual required contribution by 2015 and creates a defined-contribution plan for new employees. Any cost of living (COLA) adjustments must be prefunded going forward. While Morningstar views this as a positive step for the state to begin managing its pension liability, the state will still have a large hill to climb in order to achieve pension solvency. Overall, the state's plans are at a very low 46.8% funded level with an unfunded liability of roughly $5,000 per capita.

However, not all attempts at pension reforms are successful, most notably in the state of Illinois. In June, a 10-member bipartisan special conference committee was formed to negotiate new pension reforms based on two rival plans sponsored by the Illinois House of Representatives and the Illinois Senate. The committee missed the governor's deadline to devise a compromise plan, leading the governor to move to suspend pay for state legislators until a compromise is reached. As noted previously in this report, Illinois currently has the lowest pension funded level among the 50 states. Based on the state's current projections, the aggregate funded ratios for the state's plans are expected to remain below 50% through 2020 unless further reforms are passed. Morningstar believes significant reforms will be necessary for the state pension system to be solvent over the long term.

Potential Effects of Municipal Bankruptcies

Municipal bankruptcies, while still quite rare for local governments, have been in the news in the past few years as local governments such as Jefferson County, Alabama., and the cities of Stockton and San Bernardino, California., and Detroit have filed for Chapter 9 bankruptcy protection. Of the municipal bankruptcy filings, Morningstar believes the cases of San Bernardino and Detroit especially may have significant impacts on their respective pension plans as well as on pension liabilities on a national level. States are not able to file for bankruptcy under federal law, but we still think these local cases may have an effect on state-administered pension plans, particularly on multiemployer plans that include local governments.

Detroit offers pension benefits through two single-employer plans. As part of the bankruptcy proceedings, the city's emergency manager has proposed a plan that would exchange roughly $11 billion of the city's $19 billion in debt and liabilities for $2 billion of limited-recourse notes on a pro rata basis. Included in the $11 billion to be exchanged is the manager's estimated $3.5 billion of unfunded pension liabilities. Pension beneficiaries are challenging this plan as being unconstitutional. In Michigan, pension benefits are protected by the state constitution, which states that these pension benefits represent contractual obligations that are not allowed to be impaired or diminished. By offering retirees pennies on the dollar for their pension benefits, this seems to be a clear case of impairment. It remains unclear how this state constitutional protection will be viewed in a federal bankruptcy court, however. The big question here—and what could have far-reaching effects on pension plans across the nation—is whether a federal judge can override a state constitution during the bankruptcy process.

For employees of San Bernardino, pension benefits are provided through a state pension plan, CalPERS, a cost-sharing multiple-employer plan. San Bernardino has missed approximately $13 million of its required contributions to the plan since it declared bankruptcy, which it may not make up and would therefore be considered an impairment to CalPERS. Similar to Detroit, California pensions are also protected by the state constitution and statute. According to the National Conference on Public Employee Retirement Systems, California case law has found that "a public employee's pension constitutes an element of compensation, and a vested contractual right to pension benefits accrues upon acceptance of employment. Such a pension right may not be destroyed, once vested, without impairing a contractual obligation of the employing public entity[5]." San Bernardino is the only city to have ever halted payments to the fund. The city of Stockton, which is also undergoing bankruptcy proceedings, has continued to make timely and full payments to CalPERS during the process. CalPERS has filed an objection to San Bernardino's bankruptcy filing, which is currently being litigated.

The bankruptcies of Detroit and San Bernardino have potentially far-reaching implications on how pension liabilities and state protection of benefits are viewed in bankruptcy proceedings. If they are successful

5 National Conference on Public Employee Retirement Systems. *State Constitutional Protections for Public Sector Retirement Benefits.* 2007.

in trimming these liabilities, other entities that cannot afford to support operations, debt payments, and retiree costs at the same time may look to emulate the their actions.

Not All Pension Plans Are Directly Comparable

Wide disparities exist in pension plan structures, management, and accounting practices, making it difficult to compare plans across all states accurately. Two key elements are (1) type of benefit and (2) plan contributor. Benefit types can range from defined benefit to defined contribution or hybrid plans. Plans can be single employer, with the state responsible for the entire liability, or multiemployer, with the state accounting for only a portion of total contribution and liabilities.

Some of the largest differences among state-administered plans are often who is covered and who is responsible for making contributions. Major differences that affect a state's liability commonly involve whether the state is responsible for teacher pensions and whether it contributes to a multiemployer plan for underlying governments. Multiemployer plans can inflate the reported liability, making them difficult to compare with single-employer plans. Teacher pension plans often serve as the largest portion of a state's liability. While the majority of states contribute to teacher plans, some do not. This can significantly lower a state's liability. Colorado underscores this point: Because the state does not contribute to the pension plan covering public school teachers, the UAAL per capita is a moderate $1,771, despite a low 59.2% funded ratio. Again, Morningstar notes that the fact that teachers' liabilities are not covered by the plan does not mean that Colorado taxpayers aren't ultimately liable for the funding.

Another key pension data point, annual contributions by the state, can be affected by plan management and assumptions. Aggressive investment return assumptions make a plan appear better funded than a comparable plan with a more conservative discount rate. Additionally, several states have been making pension contributions at a rate lower than the actuarially determined rate, because of either statutory or legislative regulations. These lower payments often slow the growth of contributions and minimize current pension impact on the budget. While this lowers pensions' current fiscal impact on the states, the liability is simply pushed out into future years, probably exacerbating future fiscal pressures.

These variations have increased in recent years, as many states have added defined-contribution plans or options to existing plans as part of pension reforms, and need to be recognized and considered when comparing pension liabilities across states.

Disclosure: Greater Transparency Needed

Pension disclosure is currently less than ideal. Pension systems provided by the states are discussed in modest detail in the financial notes section of their audits. While single-employer plans report more detailed data, cost-sharing multiemployer plans (CSME) often only report the state's administration of the plan. Pertinent general information, including total assets, liabilities, and funded levels, as well as the annual contributions made by the state, are often not included. To accurately and fully analyze a plan, analysts should examine its audited financial statements and actuarial reports for individual plans, which can be difficult to find. In many cases, neither the financial notes nor the plan documents disclose whether the state is a contributing participant of the plan, or if the state simply plays a fiduciary role with no corresponding liability.

Further complicating this is the time lag in obtaining relevant data. Audits of the government and the individual plans, as well as the actuarial reports, are often released six to nine months after the close of a fiscal year. Furthermore, actuarial report dates do not always correspond to government fiscal years. In state audits for fiscal 2012, pension data can be as of the end of fiscal 2011 or fiscal 2012, depending on the plan. This leaves investors without accurate information for a significant period while the data is often rendered stale by the time of release and potentially no longer reflective of the plan's true fiscal health.

As discussed below, upcoming regulations are expected to address some of these disclosure issues and make pension data more accessible, although timing issues are expected to continue.

Red Flags

The upside for investors is that, with the exception of sweeping plan changes, the fiscal health of pension plans tends to shift gradually over time. Pressured plans can often be identified years before substantial stress is placed on the applicable government. Investors should look for red flags that indicate the solvency of a pension plan is deteriorating. Potential red flags include a substantial unfunded pension liability, a low and/or declining funded ratio, a high UAAL per capita, annual contributions less than the ARC, rapid increases in annual contributions, and pension costs accounting for a significant portion of general government spending.

What to Watch For Going Forward

GASB Standards

On a national level, upcoming regulatory changes are expected to shake up pension reporting and accounting dramatically. The Governmental Accounting Standards Board (GASB), which establishes government accounting standards, approved new accounting and reporting standards for state and local government pension plans in June 2012, with the goal of improving the accounting and financial reporting for affected plans. GASB standards are nonbinding, but compliance is required if governments are to receive a clean audit. The new pension standards become effective in fiscal years beginning after June 15, 2013, and for employers in fiscal years beginning after June 15, 2014. While it will be a few years until all applicable governments fully incorporate these standards, some states are likely to move toward early adoption and compliance.

Overall, the new standards aim to focus pension disclosure on liabilities as opposed to the annual required contribution, or ARC. For defined-benefit plans, disclosure of the ARC will no longer be required. Instead, annual change in the net pension liability (NPL) will serve as the primary pension expense reported. Analysts will need to judge movement of the NPL to determine if an entity is making adequate contributions to the plan.

Defined-benefit plans will be required to report the NPL on their balance sheets. In many cases, this will cause a drastic change in the balance sheet presentation, particularly in terms of total liabilities. This number is expected to be relatively volatile, as asset smoothing won't be allowed for accounting purposes. The NPL will be measured at market value, with annual changes immediately recognized. Despite its expected volatility, the implementation of the NPL will allow investors and constituents to gain a clearer picture of actual projected liabilities. Cost-sharing multiemployer plan participants will record a liability and expense equal to their proportionate share of the total plan liability and expenses, allowing analysts to accurately incorporate pension liabilities into analysis of credits that participate in a CSME plan.

Additionally, the GASB regulations change allowable accounting methods, which will create a disconnect between pension funding and accounting while leading to greater levels of volatility for pension accounting. The impending change expected to have the greatest impact will be the prohibition on using smoothing methods for accounting, as mentioned above, although it will still be allowed for funding purposes. The discount rate of liabilities will change for accounting purposes, but will remain unchanged for funding calculations. For accounting purposes, the allowable assumed discount rate will depend on whether the plan's net position is projected to be sufficient to pay benefits of current employees and retirees. If that condition is met, the regular discount rate may be used. An index rate on tax-exempt 20-year municipal bonds rated AA or higher will be used to the extent that projected assets are not anticipated to meet projected liabilities.

Morningstar contends that this additional pension disclosure, especially the disclosure of individual government liabilities, will be positive for the municipal market as a whole. However, the change in accounting standards is expected to lower the overall funded levels. A recent report by the Center for Retirement Research at Boston College indicates that the aggregate funded level for the sampled 126 large pension plans across the country would decline from 73% to a low 60%[6] as a result of the new accounting methodology. This decline in funding, coupled with the emphasis on the NPL, is likely to increase the level of debate regarding pension benefits and their impact on governments.

6 Munnell, Alicia et al. *The Funding of State and Local Pensions: 2013-2016* Center for Retirement Research at Boston College. July 2013.

Federal Legislation

Additionally, Sen. Orrin Hatch has introduced the Secure Annuities for Employee (SAFE) Retirement Act of 2013 to Congress. The law would allow state and local governments to invest in annuity contracts with private life insurance companies for employee retirement benefits each year. This plan essentially generates a fixed annuity for public employees, managed by the life insurance industry and overseen by the state regulatory system.

This legislation creates a pension program called the SAFE Retirement Plan, available to state and local governments, on a voluntary basis. The government that opted for insurance would hold competitive bidding each year. The insurance carrier awarded the bid would issue each qualified worker a contract guaranteeing an annuity for the amount of one year's worth of work. With this, a worker would retire with one contract for each year worked. According to the plan, the premiums on the policies would be paid solely by public employers.

Although the senator's office acknowledged that an administrative body would be required to organize the payments, officials noted that this would not expand federal powers or impair the rights of states. The 50 states are sovereign entities, and the federal government does not currently oversee their pension plans. Participating insurers and the issued annuity contracts would be subject to oversight by state insurance regulators, unlike current public pension plans, and would be required to meet certain capital requirements or face penalties.

The plan currently has multiple detractors as well as supporters. We expect the debate and potential vote on the bill could be a lengthy process with the outcome hard to predict at this point. We will continue to monitor the legislation's progress and its potential impact on public pension liabilities.

Parting Thoughts

Morningstar believes pensions will play an integral role in determining a state's fiscal health and overall credit quality.

While state pension plans are pressured overall, they should not be viewed collectively. The fiscal health of state pension plans varies drastically, and we expect this differentiation to continue. The main driver of long-term pension health for each state will, in our opinion, be driven by its management practices. Entities that fully fund their ARC, actively seek to manage pension liabilities, and periodically review their actuarial assumptions and investment portfolio are likely to maintain adequate pension funded levels in the long run. Governments' treatment of pension funding and benefits in times of positive market returns and overall economic growth will also be a key indicator of whether plans will experience significant stress in future recessions.

With the growing focus on pensions from both governments and investors, we expect continued adjustments to how governments handle these liabilities. Some of these modifications will be customized changes from individual governments, while national regulatory changes for public pensions are also expected to have a significant impact.

Individually, we expect some states to continue seeking pension reforms. Depending on the state, these could range from minor changes in formula calculations to switching new employees to a defined-contribution plan. The extent of these reforms is likely to depend on the political power of state leadership and affected beneficiaries, the general fiscal health of the state, the strength of the pension plan, and legal constraints.

Please see the attached appendixes, which discuss our methodology for the research, include a glossary of terms, and provide the data used for our analysis.

Methodology

Data for this analysis was gathered from publicly available government comprehensive annual financial reports (CAFRs), pension plan CAFRs, and actuarial valuations. The most recent available data was used from the available sources. Since pension data reported in state CAFRs is often dated, current actuarial reports were used, when available. In certain instances, follow-up phone calls were made to specific states and/or plans to clarify data.

Aggregate data for funded ratios, liability, and UAAL per capita was compiled for defined-benefit plans, or those that have a defined-benefit component, to which the state contributes and/or is legally liable for benefits.

While most plans have a new actuarial valuation on an annual basis, some plans are revalued every two years. In states that had a combination of plans that were revalued annually and biannually, the biannual plan data points were held constant from the year prior in nonvaluation years. We have excluded plans from our calculations for which the state acts solely as an administrator, since the states will not be funding these liabilities. When available, the data for these state-administered plans is presented in the individual plan portion of the data appendix to give readers a clear understanding of overlapping pension liabilities.

Glossary

Actuarial Accrued Liability (AAL)
The present value of future benefits earned by employees to date.

Actuarial Cost Method
The actuarial cost method is the process used by the actuary to allocate the projected liabilities of the plan to prior years (the actuarial accrued liability), the current year (the normal cost), and future years.

Actuarial Value of Assets (AVA)
The actuarial value of the plan's assets. This amount incorporates investment gains and losses dependent upon the asset valuation method.

Agent Multiple-Employer Plan
In agent multi-employer plans, assets are pooled but legally restricted to pay pension obligations of their specific employer.

Annual Required Contribution (ARC)
The ARC is determined by the actuary during the valuation of the plan and equals the amount that would need to be paid during the current fiscal year to fund benefits earned in that year (the normal cost) plus a portion of any unfunded liability from past years.

Asset Valuation Method
The actuarial value of the plan recognizes gains and losses in the market value of plan assets dependent on the asset valuation method.

Cost Sharing Multiple Employer Plan (CSME)
In CSME plans, the participating employers pool their obligations and assets. Assets of the plan can be used to pay pension obligations of any participating employer.

Defined Benefit Plan (DB)
For defined benefit (DB) plans, pension payments operate as an annuity, with each employee entitled to a specific annual payment based on a benefit formula. These formulas generally incorporate years of service, salary and a multiplier variable. Specific benefit formulas vary between plans, and often within plans dependent on an employee's start date and/or employee classification (public safety, general, management, etc.). Defined benefit payments can either be constant for the life of the payment, adjusted annually for cost of living, or adjusted occasionally for cost of living increases as seen fit by the overseeing party. The government is responsible for funding this liability no matter what return it achieves on its investments.

Defined Contribution Plan (DC)
Defined contribution plans are similar to 401ks found in the private sector. The government is obligated to contribute a certain amount annually until retirement while the actual benefit is subject to market returns. The government has no liability to make up for investment losses.

Entry Age Normal Actuarial Cost Method
Entry age normal allocates the cost of benefits from the time an employee is hired (the entry age) to the date of expected retirement either as a level dollar amount or as a percentage of payroll.

Funded Ratio
The percentage of the AAL that is currently funded through the AVA. This is calculated by dividing AVA by the UAAL. Market Value Method of Asset Valuation Under the market value method, plans recognize the full amount of actual gains or losses at the end of each fiscal year.

Market Value Method of Asset Valuation
Under the market value method, plans recognize the full amount of actual gains or losses at the end of each fiscal year.

Net Pension Liability (NPL)
The NPL is the total pension liability (actuarially determined present value of future benefits that are due to work already completed by plan participants) less the plan net position (plan assets set aside in a trust or restricted for benefit payments).

Smoothing Method of Asset Valuation
Smoothing incorporates any deviation between expected returns and actual results over a period of years. Assuming a five-year smoothing period, which is common, 20% of any variation between expected and actual results for a given year would be incorporated into the AVA for each of the next five years.

Unfunded Actuarial Accrued Liability
The difference between the AVA and the AAL.

Aggregate Pension Data By State

		2008	2009	2010	2011	2012
Alabama	Assets	30,977,314	30,763,098	30,118,307	29,122,163	28,136,859
	AAL	40,206,232	41,634,554	42,872,101	43,536,747	42,516,832
	UAAL	9,228,918	10,871,457	12,753,794	14,414,584	14,379,973
	Funded Ratio	77.0%	73.9%	70.3%	66.9%	66.2%
	UAAL Per Capita	1,958	2,307	2,706	3,059	3,051
Alaska	Assets	10,273,770	11,032,112	9,375,501	9,876,701	10,255,099
	AAL	13,859,315	14,567,631	15,347,768	16,592,762	17,329,260
	UAAL	3,585,545	3,535,519	5,972,267	6,716,061	7,074,161
	Funded Ratio	74.1%	75.7%	61.1%	59.5%	59.2%
	UAAL Per Capita	5,188	5,115	8,641	9,717	10,235
Arizona	Assets	28,263,827	28,825,891	29,322,102	29,768,148	30,716,216
	AAL	34,560,848	36,552,608	38,468,647	39,714,837	41,348,254
	UAAL	6,297,021	7,726,717	9,146,545	9,946,689	10,632,038
	Funded Ratio	81.8%	78.9%	76.2%	75.0%	74.3%
	UAAL Per Capita	1,008	1,237	1,464	1,592	1,702
Arkansas	Assets	18,811,399	17,607,157	17,840,827	18,226,718	18,745,631
	AAL	21,576,344	22,724,578	23,849,287	25,155,070	26,255,098
	UAAL	2,764,945	5,117,420	6,008,461	6,928,352	7,509,467
	Funded Ratio	87.2%	77.5%	74.8%	72.5%	71.4%
	UAAL Per Capita	962	1,781	2,092	2,412	2,614

		2008	2009	2010	2011	2012
California	Assets	388,983,543	390,190,277	398,012,541	416,060,505	416,362,505
	AAL	450,134,395	483,870,438	508,720,424	540,987,077	547,771,077
	UAAL	61,150,852	93,680,160	110,707,883	124,926,572	131,408,572
	Funded Ratio	86.4%	80.6%	78.2%	76.9%	76.0%
	UAAL Per Capita	1,669	2,557	3,022	3,410	3,587
Colorado	Assets	13,914,371	13,382,736	12,791,946	12,010,045	12,538,675
	AAL	20,498,668	19,977,217	20,356,176	20,826,543	21,191,405
	UAAL	6,584,297	6,594,481	7,564,230	8,816,498	8,652,730
	Funded Ratio	67.9%	67.0%	62.8%	57.7%	59.2%
	UAAL Per Capita	1,347	1,349	1,548	1,804	1,771
Connecticut	Assets	19,957,800	25,452,900	23,959,500	23,959,500	23,654,500
	AAL	35,262,100	41,311,400	41,311,400	44,826,900	48,200,500
	UAAL	15,304,300	15,858,500	17,351,900	20,867,400	24,546,000
	Funded Ratio	56.6%	61.6%	58.0%	53.4%	49.1%
	UAAL Per Capita	4,316	4,472	4,894	5,885	6,922
Delaware	Assets	7,030,149	7,038,139	7,123,125	7,438,248	7,644,014
	AAL	7,135,176	7,449,643	7,733,868	8,204,860	8,657,810
	UAAL	105,027	411,504	610,743	766,612	1,013,796
	Funded Ratio	98.5%	94.5%	92.1%	90.7%	88.3%
	UAAL Per Capita	119	467	693	870	1,150
Florida	Assets	130,720,547	118,764,692	120,929,666	126,078,053	127,891,781
	AAL	124,087,214	136,375,597	139,652,377	145,034,475	148,049,596
	UAAL	–6,633,333	17,610,905	18,722,711	18,956,422	20,157,815
	Funded Ratio	105.3%	87.1%	86.6%	86.9%	86.4%
	UAAL Per Capita	–358	951	1,011	1,024	1,089
Georgia	Assets	68,720,920	67,406,550	67,932,798	68,460,736	68,054,871
	AAL	75,126,728	75,655,156	80,217,661	82,978,043	83,100,245
	UAAL	6,405,808	8,248,606	12,284,863	14,517,307	15,045,374
	Funded Ratio	91.5%	89.1%	84.7%	82.5%	81.9%
	UAAL Per Capita	677	871	1,297	1,533	1,589
Hawaii	Assets	11,381,000	11,400,100	11,345,600	11,942,800	12,242,494
	AAL	16,549,100	17,636,400	18,483,700	20,096,900	20,683,403
	UAAL	5,168,100	6,236,300	7,138,100	8,154,100	8,440,909
	Funded Ratio	68.8%	64.6%	61.4%	59.4%	59.2%
	UAAL Per Capita	3,875	4,676	5,353	6,114	6,329
Idaho	Assets	10,402,000	8,646,000	9,633,167	11,423,240	11,366,899
	AAL	11,211,800	11,732,200	12,264,000	12,718,428	13,470,356
	UAAL	809,800	3,086,200	2,630,833	1,295,188	2,103,457
	Funded Ratio	92.8%	73.7%	78.5%	89.8%	84.4%
	UAAL Per Capita	530	2,021	1,723	848	1,378

		2008	2009	2010	2011	2012
Illinois	Assets	64,700,501	63,996,419	63,053,413	63,553,027	64,029,900
	AAL	119,084,440	126,435,510	138,794,302	146,460,036	158,611,500
	UAAL	54,383,939	62,439,091	75,740,889	82,907,009	94,581,600
	Funded Ratio	54.3%	50.6%	45.4%	43.4%	40.4%
	UAAL Per Capita	4,267	4,899	5,943	6,505	7,421
Indiana	Assets	22,514,762	21,295,534	21,868,361	21,604,609	21,719,459
	AAL	32,750,778	33,592,160	35,366,037	36,258,923	37,216,043
	UAAL	10,236,015	12,296,626	13,497,676	14,654,314	15,496,584
	Funded Ratio	68.7%	63.4%	61.8%	59.6%	58.4%
	UAAL Per Capita	1,595	1,916	2,103	2,284	2,415
Iowa	Assets	22,252,913	21,517,287	21,927,434	22,973,672	23,940,276
	AAL	25,110,757	26,602,517	27,057,851	28,883,186	30,096,586
	UAAL	2,857,843	5,085,230	5,130,417	5,909,514	6,156,310
	Funded Ratio	88.6%	80.9%	81.0%	79.5%	79.5%
	UAAL Per Capita	947	1,686	1,701	1,959	2,041
Kansas	Assets	11,827,619	13,461,221	13,589,658	13,379,020	13,278,490
	AAL	20,106,787	21,128,206	21,853,783	22,607,170	23,531,423
	UAAL	8,279,168	7,666,985	8,264,125	9,228,150	10,252,933
	Funded Ratio	58.8%	63.7%	62.2%	59.2%	56.4%
	UAAL Per Capita	2,947	2,729	2,942	3,285	3,650
Kentucky	Assets	21,765,574	20,767,785	20,103,024	19,647,575	18,765,565
	AAL	34,094,003	35,686,739	37,007,001	38,883,793	40,121,012
	UAAL	12,328,429	14,918,955	16,903,977	19,236,218	21,355,447
	Funded Ratio	63.8%	58.2%	54.3%	50.5%	46.8%
	UAAL Per Capita	2,877	3,481	3,944	4,488	4,983
Louisiana	Assets	25,113,079	22,396,333	21,772,556	22,450,542	23,026,791
	AAL	36,290,562	32,030,121	39,143,604	40,058,066	41,457,631
	UAAL	11,177,483	9,633,788	17,371,048	17,607,524	18,430,840
	Funded Ratio	69.2%	69.9%	55.6%	56.0%	55.5%
	UAAL Per Capita	2,523	2,175	3,921	3,975	4,161
Maine	Assets	8,750,594	8,440,344	8,426,968	8,795,250	8,998,153
	AAL	11,774,511	12,433,315	12,732,410	11,335,259	11,659,484
	UAAL	3,023,917	3,992,971	4,305,442	2,540,009	2,661,332
	Funded Ratio	74.3%	67.9%	66.2%	77.6%	77.2%
	UAAL Per Capita	2,278	3,008	3,243	1,913	2,005
Maryland	Assets	39,504,284	34,284,569	34,688,346	36,177,656	37,248,401
	AAL	50,244,047	52,729,171	54,085,081	55,917,543	57,869,145
	UAAL	10,739,763	18,444,602	19,396,735	19,739,887	20,620,744
	Funded Ratio	78.6%	65.0%	64.1%	64.7%	64.4%
	UAAL Per Capita	1,885	3,238	3,405	3,465	3,620

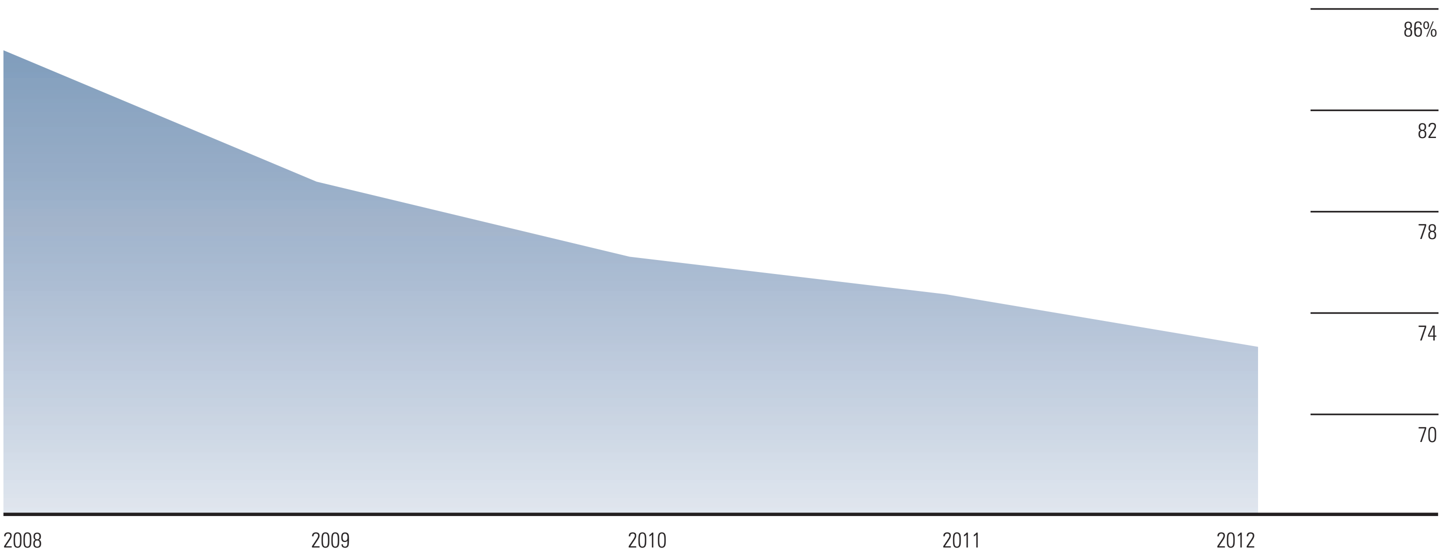
		2008	2009	2010	2011	2012
Massachusetts	Assets	43,284,209	35,919,945	40,281,524	44,362,852	42,649,119
	AAL	53,776,006	56,267,022	58,601,387	61,133,767	64,267,758
	UAAL	10,491,797	20,347,077	18,319,863	16,770,915	21,618,639
	Funded Ratio	80.5%	63.8%	68.7%	72.6%	66.4%
	UAAL Per Capita	1,620	3,141	2,828	2,589	3,338
Michigan	Assets	12,903,600	13,142,300	12,806,500	12,427,700	11,776,300
	AAL	14,902,600	15,720,600	16,226,600	16,956,400	17,726,600
	UAAL	1,999,000	2,578,300	3,420,100	4,528,700	5,950,300
	Funded Ratio	86.6%	83.6%	78.9%	73.3%	66.4%
	UAAL Per Capita	201	259	344	455	598
Minnesota	Assets	29,809,510	29,143,838	28,470,407	28,538,590	28,188,567
	AAL	35,578,009	37,061,377	35,496,899	36,067,386	37,594,728
	UAAL	5,768,499	7,917,539	7,026,492	7,528,796	9,406,161
	Funded Ratio	83.8%	78.6%	80.2%	79.1%	75.0%
	UAAL Per Capita	1,961	2,691	2,388	2,559	3,197
Mississippi	Assets	21,126,762	20,903,289	20,437,755	20,607,036	20,274,489
	AAL	28,931,887	31,005,711	31,828,346	33,087,502	34,933,825
	UAAL	7,805,125	10,102,422	11,390,591	12,480,466	14,659,336
	Funded Ratio	73.0%	67.4%	64.2%	62.3%	58.0%
	UAAL Per Capita	2,653	3,434	3,872	4,242	4,983
Missouri	Assets	38,446,743	38,254,989	38,319,430	38,935,657	38,543,470
	AAL	46,993,230	49,037,428	50,726,637	48,198,049	50,101,293
	UAAL	8,546,486	10,782,439	12,407,208	9,262,392	11,557,824
	Funded Ratio	81.8%	78.0%	75.5%	80.8%	76.9%
	UAAL Per Capita	1,443	1,821	2,095	1,564	1,952
Montana	Assets	8,110,894	7,659,206	7,748,736	7,585,464	7,631,717
	AAL	9,725,168	10,304,575	11,064,666	11,446,051	11,942,461
	UAAL	1,614,274	2,645,369	3,315,930	3,860,587	4,310,744
	Funded Ratio	83.4%	74.3%	70.0%	66.3%	63.9%
	UAAL Per Capita	1,658	2,717	3,405	3,965	4,427
Nebraska	2008	2009	2010	2011	2012	
	Assets	7,963,814	8,073,287	8,149,754	8,415,852	8,777,117
	AAL	8,719,033	9,230,597	9,748,009	10,320,850	11,186,879
	UAAL	755,219	1,157,310	1,598,255	1,904,998	2,409,761
	Funded Ratio	91.3%	87.5%	83.6%	81.5%	78.5%
	UAAL Per Capita	420	643	888	1,059	1,339
Nevada	Actuarial Assets	23,282,100	24,015,893	24,777,010	25,931,848	27,467,740
	AAL	30,563,851	33,148,347	35,164,102	36,969,843	38,698,711
	UAAL	7,281,752	9,132,454	10,387,092	11,037,995	11,230,971
	Funded Ratio	76.2%	72.4%	70.5%	70.1%	71.0%
	UAAL Per Capita	2,765	3,468	3,944	4,192	4,265

		2008	2009	2010	2011	2012
New Hampshire	Actuarial Assets	5,352,635	4,987,921	5,277,852	5,784,530	5,861,896
	AAL	7,876,247	8,529,983	9,013,758	10,058,077	10,421,426
	UAAL	2,523,612	3,542,062	3,735,906	4,273,547	4,559,531
	Funded Ratio	68.0%	58.5%	58.6%	57.5%	56.2%
	UAAL Per Capita	1,921	2,696	2,843	3,252	3,470
New Jersey	Actuarial Assets	90,436,117	88,832,519	87,285,058	86,721,774	86,219,406
	AAL	123,498,574	133,350,490	126,081,481	128,463,551	131,915,760
	UAAL	33,062,457	44,517,970	38,796,423	41,741,777	45,696,354
	Funded Ratio	73.2%	66.6%	69.2%	67.5%	65.4%
	UAAL Per Capita	3,791	5,104	4,448	4,786	5,239
New Mexico	Actuarial Assets	22,283,751	22,094,309	21,858,782	21,679,250	21,342,119
	AAL	26,899,137	29,004,202	30,184,915	32,368,086	33,859,196
	UAAL	4,615,386	6,909,893	8,326,133	10,688,836	12,517,077
	Funded Ratio	82.8%	76.2%	72.4%	67.0%	63.0%
	UAAL Per Capita	2,293	3,432	4,136	5,310	6,218
New York	Actuarial Assets	142,495,000	151,683,000	148,861,000	147,712,000	148,599,000
	AAL	134,599,000	141,255,000	146,733,000	156,572,000	164,256,000
	UAAL	–7,896,000	–10,428,000	–2,128,000	8,860,000	15,657,000
	Funded Ratio	105.9%	107.4%	101.5%	94.3%	90.5%
	UAAL Per Capita	–411	–542	–111	461	814
North Carolina	Actuarial Assets	56,160,291	56,023,560	56,723,860	58,028,590	59,076,841
	AAL	53,705,825	56,453,903	59,169,751	60,911,830	62,926,627
	UAAL	–2,454,466	430,343	2,445,892	2,883,240	3,849,785
	Funded Ratio	104.6%	99.2%	95.9%	95.3%	93.9%
	UAAL Per Capita	–265	46	264	311	415
North Dakota	Actuarial Assets	1,737,600	1,741,800	1,744,500	1,774,000	1,750,600
	AAL	1,863,000	2,029,900	2,340,300	2,474,300	2,641,100
	UAAL	125,400	288,100	595,800	700,300	890,500
	Funded Ratio	93.3%	85.8%	74.5%	71.7%	66.3%
	UAAL Per Capita	190	437	903	1,061	1,350
Ohio	Actuarial Assets	67,871,861	55,918,266	58,249,357	64,279,972	66,059,360
	AAL	70,600,255	74,370,522	77,495,084	81,502,770	85,577,700
	UAAL	2,728,395	18,452,257	19,245,728	17,222,799	19,518,340
	Funded Ratio	96.1%	75.2%	75.2%	78.9%	77.2%
	UAAL Per Capita	237	1,603	1,672	1,496	1,695
Oklahoma	Assets	18,537,172	18,314,382	18,635,761	19,378,070	19,710,700
	AAL	30,587,185	31,740,102	33,218,828	28,943,556	30,186,093
	UAAL	12,050,013	13,425,721	14,583,067	9,565,487	10,475,393
	Funded Ratio	60.6%	57.7%	56.1%	67.0%	65.3%
	UAAL Per Capita	3,279	3,653	3,968	2,603	2,850

		2008	2009	2010	2011	2012
Oregon	Assets	59,327,800	43,520,600	48,729,200	51,583,600	50,168,200
	AAL	52,871,200	54,259,500	56,810,600	59,329,500	61,198,400
	UAAL	–6,456,600	10,738,900	8,081,400	7,745,900	11,030,200
	Funded Ratio	112.2%	80.2%	85.8%	86.9%	82.0%
	UAAL Per Capita	–1,716	2,855	2,148	2,059	2,932
Pennslyvania	Assets	91,557,778	89,986,268	88,750,793	86,759,592	83,530,310
	AAL	105,283,033	111,317,753	118,184,445	127,922,245	130,816,224
	UAAL	13,725,255	21,331,485	29,433,652	41,162,653	47,285,914
	Funded Ratio	87.0%	80.8%	75.1%	67.8%	63.9%
	UAAL Per Capita	1,088	1,691	2,334	3,264	3,749
Rhode Island	Assets	6,834,898	6,752,084	6,509,044	6,333,356	6,295,214
	AAL	11,070,666	11,500,425	10,620,500	10,802,085	10,816,459
	UAAL	4,235,769	4,748,342	4,111,457	4,468,728	4,521,245
	Funded Ratio	61.7%	58.7%	61.3%	58.6%	58.2%
	UAAL Per Capita	4,010	4,495	3,892	4,230	4,280
South Carolina	Actuarial Assets	28,265,922	28,861,714	29,231,346	29,539,613	29,555,334
	Actuarial Accrued Liability	40,318,436	42,050,701	43,963,133	43,512,617	45,202,202
	Unfunded Liability	12,052,514	13,188,987	14,731,787	13,973,004	15,646,868
	Funded Ratio	70.1%	68.6%	66.5%	67.9%	65.4%
	UAAL Per Capita	2,672	2,923	3,265	3,097	3,468
South Dakota	Assets	6,899,778	6,874,347	7,210,582	7,532,802	7,927,002
	AAL	7,084,754	7,494,795	7,502,351	7,822,191	8,562,591
	UAAL	184,975	620,447	291,769	289,389	635,589
	Funded Ratio	97.4%	91.7%	96.1%	96.3%	92.6%
	UAAL Per Capita	231	776	365	362	795
Tennessee	Assets	26,214,995	26,335,199	N/A	30,118,179	N/A
	AAL	27,240,151	29,054,966	N/A	32,707,625	N/A
	UAAL	1,025,156	2,719,767	N/A	2,589,446	N/A
	Funded Ratio	96.2%	90.6%	N/A	92.1%	N/A
Texas	Assets	134,813,725	130,983,262	136,052,621	140,428,845	143,785,554
	AAL	148,594,953	155,679,204	163,418,534	169,301,460	175,449,348
	UUAL	13,781,228	24,695,942	27,365,913	28,872,615	31,663,794
	Funded Ratio	90.7%	84.1%	83.3%	82.9%	82.0%
	UAAL Per Capita	567	1,016	1,126	1,188	1,302
Utah	Assets	19,857,580	20,818,430	21,131,650	21,117,218	21,369,935
	AAL	22,949,835	24,274,639	25,541,865	26,956,604	27,939,108
	UUAL	3,092,255	3,456,209	4,410,215	5,839,386	6,569,173
	Funded Ratio	86.5%	85.8%	82.7%	78.3%	76.5%
	UAAL Per Capita	1,164	1,301	1,660	2,198	2,472

		2008	2009	2010	2011	2012
Vermont	Assets	2,982,563	2,591,717	2,675,772	2,835,461	2,918,189
	AAL	3,449,169	3,645,982	3,681,515	4,027,107	4,265,516
	UAAL	466,606	1,054,265	1,005,743	1,191,646	1,347,327
	Funded Ratio	86.50%	71.10%	72.70%	70.40%	68.41%
	UAAL Per Capita	747	1,689	1,611	1,909	2,158
Virginia	Assets	49,516,000	54,441,000	55,123,000	54,660,000	54,473,000
	AAL	60,530,000	65,174,000	69,135,000	75,889,000	78,423,000
	UAAL	11,014,000	10,733,000	14,012,000	21,229,000	23,950,000
	Funded Ratio	81.8%	83.5%	79.7%	72.0%	69.5%
	UAAL Per Capita	1,405	1,369	1,787	2,707	3,054
Washington	Actuarial Value of Assets	45,493,100	48,759,000	51,382,600	52,886,300	55,095,600
	AAL	50,346,000	53,502,900	57,333,500	57,194,400	56,145,000
	UAAL	4,852,900	4,743,900	5,950,900	4,308,100	1,049,400
	Funded Ratio	90.4%	91.1%	89.6%	92.5%	98.1%
	UAAL Per Capita	740	723	907	657	160
West Virginia	Assets	8,616,775	8,673,874	7,977,030	8,678,142	10,074,666
	AAL	12,232,959	13,642,581	14,266,419	14,986,050	15,741,272
	UAAL	3,616,184	4,968,707	6,289,389	6,307,908	5,666,606
	Funded Ratio	70.4%	63.6%	55.9%	57.9%	64.0%
	UAAL Per Capita	1,964	2,699	3,417	3,427	3,078
Wisconsin	Assets	79,791,900	77,159,400	78,911,300	80,626,900	78,940,000
	AAL	80,079,700	77,412,000	79,104,600	80,758,800	79,039,300
	UAAL	287,800	252,600	193,300	131,900	99,300
	Funded Ratio	99.6%	99.7%	99.8%	99.8%	99.9%
	UAAL Per Capita	51	45	34	23	18
Wyoming	Assets	5,545,412	6,571,160	6,649,755	6,613,541	6,609,064
	AAL	6,989,833	7,401,613	7,740,611	7,969,992	8,300,258
	UAAL	1,444,421	830,453	1,090,856	1,356,451	1,691,194
	Funded Ratio	79.3%	88.8%	85.9%	83.0%	79.6%
	UAAL Per Capita	2,648	1,522	1,999	2,486	3,100
Puerto Rico	Assets	6,135,974	N/A	4,050,709	3,942,378	4,173,649
	AAL	24,784,089	N/A	27,989,514	29,119,732	37,288,739
	UAAL	18,648,115	N/A	23,938,805	25,177,354	33,115,090
	Funded Ratio	24.8%	N/A	14.5%	13.5%	11.2%
	UAAL Per Capita	5,031	N/A	6,458	6,792	8,934
Aggregate	**Total Assets**	**2,117,522,227**	**2,071,841,678**	**2,094,162,725**	**2,148,767,317**	**2,157,578,916**
	AAL	**2,512,307,590**	**2,649,830,069**	**2,762,758,796**	**2,884,850,042**	**2,979,267,860**
	UAAL	**394,785,363**	**577,988,391**	**668,596,071**	**736,082,725**	**821,688,945**
	Funded Ratio	**84.3%**	**78.2%**	**75.8%**	**74.5%**	**72.4%**
			–6.1%	**–2.4%**	**–1.3%**	**–2.1%**

Effect of Recession on State Pensions



Individual Pension Plan Data By State

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Alabama								
Teachers Retirement System	9/30/12	Contributory	DB	CSME	18,786,008	28,251,367	9,465,359	66.5
Employees Retirement System	9/30/12	Contributory	DB	Agent Multi-Employer	9,116,551	13,884,995	4,768,444	65.7
Judicial Retirement System	9/30/12	Contributory	DB	CSME Employer	234,300	380,470	146,170	61.6
Alaska								
Public Employees Retirement System	6/30/11	Contributory	DB and DC	CSME	6,762,149	10,919,047	4,156,898	61.9
Teachers Retirement System	6/30/11	Contributory	DB and DC	CSME	3,345,949	6,196,104	2,850,155	54.0
Judicial Retirement System	6/30/11	Contributory	DB	Single Employer	115,000	164,524	49,524	69.9
Alaska National Guard and Alaska Naval Militia Retirement System	6/30/10	Contributory	DB	Single Employer	32,001	30,034	–1,967	106.5
Elected Public Officers Retirement System	6/30/10	Contributory	DB	Single Employer	0	19,551	19,551	0.0%

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Arizona								
State Retirement System	6/30/12	Contributory	DB and DC	CSME	28,948,011	38,450,289	9,502,278	75.3
Elected Officials Retirement Plan	6/30/12	Contributory	DB	CSME	356,346	610,229	253,883	58.4
Public Safety Personnel Retirement System	6/30/12	Contributory	DB	Agent Multi-Employer	522,980	1,043,064	520,084	50.1
Corrections Officers Retirement Plan	6/30/12	Contributory	DB	Agent Multi-Employer	888,879	1,244,672	355,793	71.4
Arkansas								
Public Employees System	6/30/12	Contributory	DB	CSME	5,625,000	8,163,000	2,538,000	68.9
APERS-District Judges	6/30/12	Contributory	DB	CSME	13,925	28,343	14,418	49.1
State Police Retirement System	6/30/12	Contributory	DB	Single Employer	215,010	355,300	140,290	60.5
Judicial Retirement Plan	6/30/12	Contributory	DB	Single Employer	167,796	195,455	27,659	85.8
Teachers Retirement Plan	6/30/12	Contributory	DB	CSME	11,484,000	16,139,000	4,655,000	71.2
Highway and Transportation Retirement Plan	6/30/12	Contributory	DB	Single Employer	1,239,900	1,374,000	134,100	90.2
California								
Public Employees Retirement Fund	6/30/11	Contributory	DB	Agent Multi-Employer	271,389,000	328,567,000	57,178,000	82.6
Judges Retirement Fund	6/30/11	Contributory	DB	Agent Multi-Employer	54,383	3,296,538	3,242,155	1.6
Judges Retirement Fund II	6/30/11	Contributory	DB	Agent Multi-Employer	561,476	609,562	48,087	92.1
Legislators Retirement Fund	6/30/11	Contributory	DB	Single Employer	125,646	108,977	–16,669	115.3
State Peace Officers and Firefighters DC Plan	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
CALSTRS-Defined Benefit Program	6/30/12	Contributory	DB	CSME	144,232,000	215,189,000	70,957,000	67.0
CALSTRS-Defined Contribution Program	6/30/11	N/A	DC	N/A	N/A	N/A	N/A	N/A

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
CALSTRS-Defined Benefit Supplemental Program	6/30/12	Administrative	DB	CSME	8,042,090	7,991,563	–50,527	100.6
CALSTRS-Cash Balance Benefit Program	6/30/12	Administrative	DB	CSME	158,020	157,986	–34	100.0
CALSTRS-Replacement Benefit Program	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pension2 Program	6/30/11	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Colorado								
PERA-State Division Fund	12/31/12	Contributory	DB	CSME	12,538,675	21,191,405	8,652,730	59.2
PERA-School Division Fund	12/31/12	Administrative	DB	CSME	20,266,574	32,619,033	12,352,459	62.1
PERA-Local Division Fund	12/31/12	Administrative	DB	CSME	3,098,721	4,157,621	1,058,900	74.5
PERA-Judicial Fund	12/31/12	N/A	DB	CSME	238,807	326,897	88,090	73.1
PERA-Denver Public Schools Fund	12/31/12	Administrative	DB	CSME	2,936,695	3,495,549	558,854	84.0
PERA-Defined Contribution Fund	N/A	N/A	DC	CSME	N/A	N/A	N/A	N/A
PERA-401K	N/A	Administrative	DC	CSME	N/A	N/A	N/A	N/A
Connecticut								
State Employees Retirement System	6/30/12	Contributory	DB	Single Employer	9,745,000	23,018,800	13,273,800	42.3
Teachers' Retirement System	6/30/12	Contributory	DB	Single Employer	13,734,800	24,862,200	11,127,400	55.2
Judicial Retirement System	6/30/12	Contributory	DB	Single Employer	174,700	319,500	144,800	54.7
Connecticut Alternate Retirement Plan	N/A	Contributory	DC	Single Employer	N/A	N/A	N/A	N/A
Connecticut Probate Judges and Employees Retirement System	12/31/11	Administrative	DB	Single Employer	85,154	73,127	–12,027	116.4
Connecticut Municipal Employees Retirement Plan	N/A	Administrative	DB	CMSE	N/A	N/A	N/A	N/A
Delaware								
State Employees' Pension Plan	6/30/12	Contributory	DB	CSME	7,270,430	7,949,855	679,424	91.5
Special Fund	6/30/12	Contributory	DB	Single Employer	366	264	–102	138.6

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
New State Police Pension Plan	6/30/12	Contributory	DB	Single Employer	292,262	324,898	32,637	90.0
Judiciary Pension Plans (Closed and Revised)	6/30/12	Contributory	DB	Single Employer	59,279	65,946	6,668	89.9
Delaware Volunteer Firemen's Fund	6/30/12	Noncontributory	DB	CSME	14,972	30,149	15,176	49.7
Diamond State Port Corporate Pension Plan	6/30/12	Contributory	DB	Single Employer	18,930	23,039	4,110	82.2
Closed State Police Pension Plan	6/30/12	Contributory	DB	Single Employer	2,748	293,808	291,060	0.9
County & Municipal Police and Firefighters' Pension Plans	6/30/12	Administrative	DB	CSME	179,816	186,901	7,085	96.2
County & Municipal Other Employees' Pension Plans	6/30/12	Administrative	DB	CSME	23,851	25,189	1,338	94.7
Florida								
Florida Retirement System	7/1/12	Contributory	DB and DC	CSME	127,891,781	148,049,596	20,157,815	86.4
Georgia								
Employees' Retirement System	6/30/12	Contributory	DB	CSME	12,260,595	16,777,922	4,517,327	73.1
Public School Employees Retirement System	6/30/12	Noncontributory	DB	CSME	710,915	895,324	184,409	79.4
Legislative Retirement System	6/30/12	Contributory	DB		28,990	24,966	–4,024	116.1
Judicial Retirement System	6/30/11	Contributory	DB	CSME	327,483	290,486	–36,997	112.7
Military Pension Fund	6/30/12	Contributory	DB	CSME	10,087	28,231	18,144	35.7
Teachers Retirement System	6/30/11	Contributory	DB	CSME	55,427,716	65,978,640	10,550,924	84.0
Hawaii								
Employee Retirement System	6/30/12	Contributory	DB and Hybrid	CSME	12,242,494	20,683,403	8,440,909	59.2
Idaho								
Public Employee Retirement Base Plan	7/1/12	Contributory	DB	CSME	11,306,200	13,396,700	2,090,500	84.4

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Firefighters' Retirement Fund	7/1/11	Administrative	DB	CSME	290,400	311,500	21,100	93.2
Judicial Retirement Fund	7/1/12	Contributory	DB	Single Employer	60,699	73,656	12,957	82.4
Public Employee Retirement Fund Choice Plan 401k	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
Public Employee Retirement Fund Choice Plan 414k	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Illinois								
General Assembly Retirement System	6/30/12	Contributory	DB	Single Employer	56,100	303,500	247,400	18.5
Judges Retirement System	6/30/12	Contributory	DB	Single Employer	601,200	2,021,700	1,420,500	29.7
State Employees Retirement System	6/30/12	Contributory	DB	Single Employer	11,477,300	33,091,200	21,613,900	34.7
Teachers Retirement System	6/30/12	Contributory	DB	CSME	37,945,400	90,024,900	52,079,500	42.1
State University Retirement System	6/30/12	Contributory	DB and DC	CSME	13,949,900	33,170,200	19,220,300	42.1
Indiana								
State Police Retirement Fund	6/30/12	Contributory	DB	Single Employer	372,200	504,800	132,600	73.7%
State Excise Police, Gaming Agent, Gaming Control Officer and Conservation Enforcement Officers Retirement Plan	6/30/12	Contributory	DB	Single Employer	76,000	113,300	37,300	67.1%
Prosecuting Attorney's Retirement Fund	6/30/12	Contributory	DB	Single Employer	27,500	56,100	28,600	49.0%
Legislators' Retirement System Defined Benefit Plan	6/30/12	Contributory	DB	Single Employer	3,400	4,500	1,100	75.6%
Judges Retirement System	6/30/12	Contributory	DB	Single Employer	260,100	437,900	177,800	59.4%
Public Employees Retirement Fund	6/30/12	Contributory	DB	CSME	12,088,200	15,784,200	3,696,000	76.6%
State Teachers Retirement Fund	6/30/12	Contributory	DB	CSME	8,892,059	20,315,243	11,423,184	43.8%
1977 Police Officers' and Firefighters' Pension and Disability Fund	6/30/11	Administrative	DB	CSME	3,593,787	3,638,956	45,169	98.8%
Legislators Retirement System Defined Contribution Plan	N/A	Contributory	DC	Single Employer	N/A	N/A	N/A	N/A

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Iowa								
Public Employees' Retirement System	6/30/12	Contributory	DB	CSME	23,530,094	29,446,197	5,916,103	79.9
Peace Officers' Retirement, Accident and Disability System	6/30/12	Contributory	DB	Single Employer	292,910	480,157	187,247	61.0
Judicial Retirement System	6/30/12	Contributory	DB	Single Employer	117,272	170,232	52,960	68.9
Kansas								
Public Employees' Retirement System	12/31/12	Contributory	DB	CSME	13,278,490	23,531,423	10,252,933	56.4
Kentucky								
Employees Retirement System	6/30/12	Contributory	DB	CSME	3,598,543	12,113,748	8,515,205	29.7
State Police Retirement System	6/30/12	Contributory	DB	Single Employer	259,792	647,689	387,897	40.1
Judicial Retirement Plan	6/30/12	Contributory	DB	Single Employer	176,766	317,404	140,638	55.7
Legislators Retirement Plan	6/30/12	Contributory	DB	Single Employer	39,094	68,318	29,225	57.2
Teachers' Retirement System	6/30/12	Contributory	DB	CSME	14,691,371	26,973,854	12,282,483	54.5
County Employees Retirement System	6/30/12	Administrative	DB	CSME	N/A	N/A	N/A	N/A
Louisiana								
State Employees Retirement System	6/30/12	Contributory	DB	Single Employer	9,026,416	16,157,898	7,131,482	55.9
Teachers' Retirement System	6/30/12	Contributory	DB and DC	CSME	13,584,409	24,540,080	10,955,671	55.4
School Employees' Retirement System	6/30/12	Administrative	DB	CSME	1,403,464	2,278,472	875,008	61.6
State Police Retirement System	6/30/12	Contributory	DB	Single Employer	415,966	759,653	343,687	54.8
Maine								
Public Employees' Retirement System (PERS)—State and Teachers Plan	6/30/12	Contributory	DB	Agent Multi-Employer	8,939,788	11,605,891	2,666,103	77.0
Legislative Retirement Program	6/30/11	Contributory	DB	Single Employer	9,040	5,725	–3,315	157.9
Judicial Retirement Program	6/30/11	Contributory	DB	Single Employer	49,325	47,868	–1,456	103.0
PERS- Participating Local Districts	6/30/12	Administrative	DB	Agent Multi-Employer	2,136,653	2,405,708	269,055	88.8

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Supplemental 401a	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Supplemental 457	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Supplemental 403b	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Maryland								
Teachers' Retirement System	6/30/12	Contributory	DB	CSME	22,523,978	34,252,715	11,728,737	65.8
State Employees' Retirement System	6/30/12	Contributory	DB	CSME	12,667,592	20,283,028	7,615,436	62.5
Law Enforcement Officers Pension System	6/30/12	Contributory	DB	CSME	580,826	1,070,087	489,261	54.3
State Police Retirement System	6/30/12	Contributory	DB	CSME	1,134,511	1,826,546	692,035	62.1
Judges Retirement System	6/30/12	Contributory	DB	CSME	330,154	421,286	91,132	78.4
Correctional Officers' Retirement System	6/30/12	Contributory	DB	CSME	11,341	15,483	4,143	73.2
Massachusetts								
State Employees' Retirement System	1/1/12	Contributory	DB	Single Employer	20,507,644	27,784,731	7,277,087	73.8
Teachers' Retirement System	1/1/12	Contributory	DB	CSME	22,141,475	36,483,027	14,341,552	60.7
Michigan								
Legislative Retirement System	9/30/11	Contributory	DB	Single Employer	149,900	181,800	31,900	82.5
State Police Retirement System	9/30/11	Contributory	DB	Single Employer	1,138,100	1,627,900	489,800	69.9
State Employees Retirement System	9/30/11	Contributory	DB	Single Employer	10,212,000	15,597,000	5,385,000	65.5
Public School Employees Retirement System	9/30/11	Administrative	DB	CSME	41,038,000	63,427,000	22,389,000	64.7
Judges' Retirement Plan	9/30/11	Contributory	DB	CSME	267,200	251,700	–15,500	106.2
Military Retirement Plan	9/30/11	Contributory	DB	Single Employer	0	77,300	77,300	0.0
Defined Contribution Plan	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Minnesota								
State Employees Retirement Fund	7/1/12	Contributory	DB	Single Employer	9,162,301	11,083,227	1,920,926	82.7
Correctional Employees Retirement Fund	7/1/12	Contributory	DB	Single Employer	663,713	968,166	304,453	68.6
Elective State Officers Fund	7/1/12	Contributory	DB	Single Employer	0	8,907	8,907	0.0
Judges Fund	7/1/12	Contributory	DB	Single Employer	144,898	281,576	136,678	51.5
Legislators Ret. Fund	7/1/12	Contributory	DB	Single Employer	15,523	247,657	232,134	6.3
State Patrol Ret. Fund	7/1/12	Contributory	DB	Single Employer	554,244	760,955	206,711	72.8
Minneapolis Employees Retirement Fund	7/1/12	Administrative	DB	CSME	842,811	1,219,735	376,924	69.1
Teachers Ret. Fund	7/1/12	Contributory	DB	CSME	16,805,077	23,024,505	6,219,428	73.0
Police and Fire Fund	7/1/12	Administrative	DB	CSME	5,797,868	7,403,295	1,605,427	78.3
Public Employees Correctional Fund	7/1/12	Administrative	DB	CSME	306,454	343,199	36,745	89.3
Public Employees Retirement Fund	7/1/12	Administrative	DB	CSME	13,661,682	18,598,897	4,937,215	73.5
Volunteer Firefighter Retirement Fund	N/A	Administrative	DB	Multi- Employer Agent	N/A	N/A	N/A	N/A
Unclassified Employees Retirement Fund	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
DC Fund	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
State Colleges and Universities Retirement Fund	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Hennepin County Supplemental Retirement Fund	N/A	Administrative	DC	Single Employer	N/A	N/A	N/A	N/A
Mississippi								
Public Employees' Retirement System	6/30/12	Contributory	DB	CSME	19,992,797	34,492,873	14,500,076	58.0
Highway Safety Patrol Retirement System	6/30/12	Contributory	DB	Single Employer	268,424	421,415	152,991	63.7
Supplemental Legislative Retirement System	6/30/12	Contributory	DB	Single Employer	13,268	19,537	6,269	67.9
Municipal Retirement System	9/30/11	Administrative	DB	Agent Multi-Employer	167,604	363,604	196,000	46.1

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Missouri								
State Employees' Retirement System	6/30/12	Contributory	DB	Single Employer	7,897,167	10,793,652	2,896,484	73.2
Judicial Retirement Plan	6/30/12	Contributory	DB	Single Employer	102,267	413,333	311,066	24.7
Department of Transportation and Highway Patrol Employees' Retirement System	6/30/12	Contributory	DB	Single Employer	1,531,034	3,306,279	1,775,245	46.3
Public School Retirement System	6/30/12	Contributory	DB	CSME	29,013,002	35,588,031	6,575,028	81.5
Montana								
Judges Retirement System	6/30/12	Contributory	DB	Single Employer	63,195	46,190	–17,005	136.8
Highway Patrol Officers Retirement System	6/30/12	Contributory	DB	Single Employer	96,655	167,824	71,169	57.6
Public Employees Retirement System (PERS)—Defined Benefit Plan	6/30/12	Contributory	DB	CSME	3,816,920	5,661,281	1,844,361	67.4
Sheriffs Retirement System	6/30/12	Contributory	DB	CSME	211,535	284,559	73,024	74.3
Game Wardens & Peace Officers Retirement System	6/30/12	Contributory	DB	CSME	97,691	128,927	31,236	75.8
Municipal Police Officers Retirement System	6/30/12	Contributory	DB	CSME	234,025	427,257	193,232	54.8
Firefighters United Retirement System	6/30/12	Contributory	DB	CSME	233,121	377,211	144,090	61.8
Volunteer Firefighter Compensation Act	6/30/12	Contributory	DB	CSME	26,575	34,512	7,937	77.0
Teachers Retirement System	6/30/12	Contributory	DB	CSME	2,852,000	4,814,700	1,962,700	59.2
PERS- Defined Contribution Plan	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
Nebraska								
State Employees Retirement System	1/1/13	Contributory	DB and DC	Single Employer	1,009,414	1,077,958	68,543	93.6
School Retirement System	6/30/12	Contributory	DB	CSME	7,358,964	9,609,157	2,250,193	76.6
Judges Retirement System	6/30/12	Contributory	DB	Single Employer	125,928	137,465	11,537	91.6
State Patrol Retirement System	6/30/12	Contributory	DB	Single Employer	282,811	362,299	79,488	78.1

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
County Employees Retirement System	1/1/13	Administrative	DB and DC	CSME	281,262	297,573	16,311	94.5
Nevada								
Public Employees Retirement System	6/30/12	Contributory	DB	CSME	27,400,000	38,600,000	11,200,000	71.0
Legislators Retirement System	7/1/12	Contributory	DB	Single Employer	3,806	5,578	1,772	68.2
Judicial Retirement System	6/30/12	Contributory	DB	Agent Multi-Employer	63,934	93,133	29,199	68.6
New Hampshire								
Retirement System	6/30/12	Contributory	DB	CSME	5,817,882	10,361,600	4,543,719	56.1
Judicial Retirement Plan	1/1/10	Contributory	DB	Single Employer	44,014	59,826	15,812	73.6
New Jersey								
Consolidated Police and Fire Pension Fund	7/1/12	Contributory	DB	CSME	7,179	8,026	847	89.4
Judicial Retirement System	7/1/12	Contributory	DB	Single Employer	290,192	605,181	314,989	48.0%
Police and Firemen's Retirement System	7/1/12	Contributory	DB	CSME	23,687,045	31,732,123	8,045,079	74.6%
Prison Officers Pension Fund	7/1/12	Contributory	DB	Single Employer	9,044	5,396	–3,649	167.6%
Public Employees' Retirement System	7/1/12	Contributory	DB	CSME	29,151,345	45,392,623	16,241,278	64.2%
State Police Retirement System	7/1/12	Contributory	DB	Single Employer	1,995,388	2,767,769	772,381	72.1%
Teachers' Pension and Annuity Fund	7/1/12	Contributory	DB	CSME	31,079,213	51,404,643	20,325,430	60.5%
Supplemental Annuity Collective Trust Fund	N/A	Administrative	DC	Single Employer	N/A	N/A	N/A	N/A
Central Pension Fund	N/A	Administrative	DC	Single Employer	N/A	N/A	N/A	N/A
Pensions Adjustment Fund	N/A	Contributory	Other	Various	N/A	N/A	N/A	N/A
Defined Contribution Retirement Program	N/A	N/A	DC	N/A	N/A	N/A	N/A	N/A

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
New Mexico								
Public Employees' Retirement System	6/30/12	Contributory	DB	CSME	11,612,047	17,788,044	6,175,997	65.3
Judicial Retirement System	6/30/12	Contributory	DB	CSME	75,507	147,923	72,416	51.0
Magistrate Retirement System	6/30/12	Contributory	DB	CSME	30,879	58,037	27,158	53.2
Volunteer Firefighters Retirement System	6/30/12	Contributory	DB	CSME	17,382	28,219	10,837	61.6
Educational Employees' Retirement System	6/30/12	Contributory	DB	CSME	9,606,304	15,836,973	6,230,669	60.7
New York								
State and Local Employees' Retirement System	4/1/11	Contributory	DB	CSME	126,394,000	140,087,000	13,693,000	90.2
State and Local Police and Fire Retirement System	4/1/11	Contributory	DB	CSME	22,205,000	24,169,000	1,964,000	91.9
North Carolina								
Teachers and State Employees Retirement System	12/31/11	Contributory	DB	CSME	58,125,011	61,846,697	3,721,686	94.0%
Consolidated Judicial Retirement System	12/31/11	Contributory	DB	Single Employer	460,647	512,643	51,996	89.9%
Legislative Retirement System	12/31/11	Contributory	DB	Single Employer	29,468	23,757	–5,711	124.0%
Firemen's and Resecue Squad Workers' Pension Fund	12/31/11	Contributory	DB	CSME	327,984	391,837	63,853	83.7%
National Guard Pension Fund	12/31/11	Contributory	DB	CSME	91,108	129,500	38,391	70.4%
Registers of Deed's Supplemental Pension Fund	12/31/11	Administrative	DB	CSME	42,623	22,194	–20,429	192.1%
Sheriffs Supplemental Pension Fund	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Local Government Employees' Retirement System	12/31/11	Administrative	DC	CSME	19,326,359	19,373,800	47,440	99.8%
Optional Retirement Plan	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Seperation Allowance	N/A	Contributory	DB	Agent Multi-Employer	N/A	N/A	N/A	N/A

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
North Dakota								
Public Employees' Retirement System	7/1/12	Contributory	DB	CSME	1,627,400	2,501,300	873,900	65.1
Highway Patrolmen's Retirement System	7/1/12	Contributory	DB	Single Employer	48,100	68,400	20,300	70.3
Retirement Plan for the Employees of Job Service North Dakota	7/1/12	Contributory	DB	Single Employer	75,100	71,400	–3,700	105.2
Teachers' Fund for Retirement	7/1/12	Administrative	DB	CSME	1,748,100	2,871,900	1,123,800	60.9
Defined Contribution Retirement Plan	7/1/12	Contributory	DC	Single Employer	N/A	N/A	N/A	N/A
Ohio								
Public Employees' Retirement System	12/31/11	Contributory	DB and DC	CSME	65,436,000	84,530,000	19,094,000	77.4
Teachers' Retirement System	7/1/12	Administrative	DB and DC	CSME	59,489,508	106,301,841	46,812,333	56.0
Highway Patrolmen's Retirement System	12/31/11	Contributory	DB	Single Employer	623,360	1,047,700	424,340	59.5
School Employees' Retirement System	6/30/12	Administrative	DB	CSME	10,266,000	16,338,000	6,072,000	62.8
Ohio Police and Fire Pension Fund	1/1/12	Administrative	DB	CSME	10,308,959	16,346,699	6,037,740	63.1
Alternative Retirement Plan	N/A	Contributory	DC	CSME	N/A	N/A	N/A	N/A
Oklahoma								
Wildlife Conservation Retirement System	1/1/12	Contributory	DB	Single Employer	76,865	101,054	24,189	76.1
Firefighters Pension and Retirement System	6/30/12	Administrative	DB	CSME	1,759,100	2,886,400	1,127,300	60.9
Public Employees' Retirement System	7/1/12	Contributory	DB	CSME	6,682,200	8,334,638	1,652,438	80.2
Police Pension and Retirement System	7/1/12	Contributory	DB	CSME	1,834,170	2,034,485	200,315	90.2
Teachers' Retirement System	7/1/12	Contributory	DB	CSME	10,190,500	18,588,000	8,397,500	54.8
Uniform Retirement of Justices and Judges	7/1/12	Contributory	DB	Single Employer	238,554	249,379	10,825	95.7
Law Enforcement Retirement System	7/1/12	Contributory	DB	Single Employer	688,411	878,537	190,126	78.4

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Wildlife Conservation Defined Contribution Plan	N/A	Contributory	DC	Single Employer	N/A	N/A	N/A	N/A
Oregon								
Public Employees' Retirement System	12/31/11	Contributory	DB and DC	CSME and Agent	50,168,200	61,198,400	11,030,200	82.0
Pennsylvania								
State Employees' Retirement System	12/31/12	Contributory	DB	CSME	25,302,688	43,055,564	17,752,876	58.8
Public School Employees Retirement System	6/30/12	Contributory	DB	CSME	58,227,622	87,760,660	29,533,038	66.3
Rhode Island								
Employees Retirement System: Teachers	6/30/12	Contributory	DB	CSME	3,746,300	6,373,081	2,626,781	58.8
Employees Retirement System: State	6/30/12	Contributory	DB	CSME	2,421,192	4,297,261	1,876,070	56.3
Judicial Retirement Benefits Trust	6/30/12	Contributory	DB	Single Employer	43,429	52,085	8,657	83.4
State Police Retirement Benefits Trust	6/30/12	Contributory	DB	Single Employer	84,294	94,032	9,738	89.6
Municipal Employees Retirement System	6/30/12	Administrative	DB	Agent Multi-Employer	N/A	N/A	N/A	N/A
South Carolina								
South Carolina Retirement System	6/30/12	Contributory	DB	CSME	25,540,749	39,457,708	13,916,959	64.7
Police Officers Retirement System	6/30/12	Contributory	DB	CSME	3,808,934	5,357,492	1,548,558	71.1
Retirement System for General Assembly	6/30/12	Contributory	DB	Single Employer	39,233	74,331	35,098	52.8
Retirement System for Judges and Solicitors	6/30/12	Contributory	DB	Single Employer	145,604	251,729	106,125	57.8
National Guard Retirement System	6/30/12	Contributory	DB	Single Employer	20,814	60,942	40,128	34.2
State Optional Retirement Program	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
South Dakota								
South Dakota Retirement System	6/30/12	Contributory	Hybrid DB	CSME	7,828,000	8,453,000	625,000	92.6
Cement Commission Retirement Plan	7/1/10	Contributory	DB	Single Employer	39,132	54,121	14,989	72.3
Department of Labor Employment Security Retirement Plan	7/1/11	Contributory	DB	Single Employer	59,870	55,470	–4,400	107.9
Tennessee								
State Defined Benefit Plan	7/1/11	Contributory	DB	CSME	30,118,179	32,707,625	2,589,446	92.1
Political Subdivision Defined Benefit Plan	7/1/11	Administrative	DB	Agent Multi-Employer	6,562,604	7,361,707	799,103	89.1
Defined Contribition Plan	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
Texas								
Employees Retirement System	8/1/12	Contributory	DB	CSME	24,272,514	29,377,069	5,104,555	82.6
Teacher Retirement System	8/1/12	Contributory	DB	CSME	118,316,042	144,427,226	26,111,184	81.9
Law Enforcement and Custodial Officer Supplemental Retirement Plan	8/1/12	Contributory	DB	Single Employer	832,451	1,015,668	183,217	82.0
Judicial Retirement System Plan 1	8/1/12	Contributory	DB	Single Employer	0	232,922	232,922	0.0
Judicial Retirement System Plan 2	8/1/12	Contributory	DB	Single Employer	300,433	315,199	14,766	95.3
Firefighters' Pension Commissioner	8/1/12	Contributory	DB	CSME	64,114	81,264	17,150	78.9
Optional Retirement Program	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
Utah								
Public Employees Contributory Retirement System	12/31/12	Contributory	DB	CSME	1,094,885	1,285,972	191,087	85.1
Public Employees Noncontributory Retirement System	12/31/12	Contributory	DB	CSME	17,007,940	22,361,197	5,353,257	76.1
Firefighters Retirement System	12/31/12	Contributory	DB	CSME	824,060	955,668	131,608	86.2
Public Safety Retirement System	12/31/12	Contributory	DB	Mixed Agent and CSME	2,283,777	3,129,084	845,307	73.0

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Judges Retirement System	12/31/12	Contributory	DB	Single Employer	131,217	175,817	44,600	74.6
Governors and Legislative Retirement Plan	12/31/12	Contributory	DB	Single Employer	9,077	12,323	3,246	73.7
Tier 2 Retirement Plan Public Employees Plan	12/31/12	Contributory	DB	CSME	17,818	17,890	72	99.6
Tier 2 Public Safety and Firefighters Plan	12/31/12	Contributory	DB	CSME	1,161	1,157	–4	100.3
401k Defined Contribution Plan	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
457 Defined Contribution Plan	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
Roth Plan	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Traditional IRA Plan	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Tier 2 Defined Contribution Plan	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
Vermont								
State Retirement System	6/30/12	Contributory	DB	Single Employer	1,400,779	1,802,604	401,825	77.7
State Teachers Retirement System	6/30/12	Contributory	DB	CSME	1,517,410	2,462,912	945,502	61.6
Municipal Employees Retirement System	6/30/12	Administrative	DB	CSME	417,443	488,572	71,129	85.4
State Defined Contribution Plan	N/A	Contributory	DC	Single Employer	N/A	N/A	N/A	N/A
Municipal Employees Defined Contribution Plan	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Single Deposit Investment Account	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Virginia								
Virginia Retirement System	6/30/11	Contributory	DB	Mixed agent and CSME	52,559,000	75,185,000	22,626,000	69.9
State Police Officers' Retirement System	6/30/11	Contributory	DB	Single Employer	617,000	986,000	369,000	62.6
Law Officers' Retirement System	6/30/11	Contributory	DB	Single Employer	926,000	1,683,000	757,000	55.0
Judicial Retirement System	6/30/11	Contributory	DB	Single Employer	371,000	569,000	198,000	65.2

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
Defined Contribution Plan for Political Appointees	N/A	Contributory	DC	N/A	N/A	N/A	N/A	N/A
Defined Contribution Plan for Public School Superintendents	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Supplemental Retirement Plan	N/A	Administrative	DC	N/A	N/A	N/A	N/A	N/A
Washington								
Public Employees' Retirement System Plan 1	6/30/11	Contributory	DB	CSME	8,883,000	12,567,000	3,684,000	70.7
Public Employees' Retirement System Plans 2 & 3	6/30/11	Contributory	DB and DC	CSME	20,997,000	18,815,000	–2,182,000	111.6
School Employees' Retirement System	6/30/11	Contributory	DB and DC	CSME	2,872,000	2,607,000	–265,000	110.2
Public Safety Employees' Retirement System	6/30/11	Contributory	DB	CSME	141,000	107,000	–34,000	131.8
Teachers Retirement System Plan 1	6/30/11	Contributory	DB	CSME	7,485,000	9,258,000	1,773,000	80.8
Teachers Retirement System Plans 2 & 3	6/30/11	Contributory	DB and DC	CSME	7,141,000	6,299,000	–842,000	113.4
Law Enforcement Officers' and Firefighters Retirement System Plan 2	6/30/11	Contributory	DB	CSME	6,621,000	5,576,000	–1,045,000	118.7
State Patrol Retirement System	6/30/11	Contributory	DB	Single Employer	949,000	829,000	–120,000	114.5
Judicial Retirement System	6/30/11	Contributory	DB	Agent Multi-Employer	2,800	3,200	400	87.5
Judges' Retirement Fund	6/30/11	Contributory	DB	Agent Multi-Employer	3,800	83,800	80,000	4.5
Law Enforcement Officers' and Firefighters Retirement System Plan 1	6/30/11	Administrative	DB	CSME	5,565,000	4,135,000	–1,430,000	134.6
West Virginia								
Public Employees' Retirement System	7/1/11	Contributory	DB	CSME	4,322,668	5,515,252	1,192,584	78.4
Teachers' Retirement System	7/1/11	Contributory	DB	CSME	5,074,665	9,445,148	4,370,483	53.7
Public Safety Death, Disability and Retirement Fund	7/1/11	Contributory	DB	Single Employer	481,994	606,245	124,251	79.5

Plans	Most Recent Actuarial Valuation	State Role	Benefit Type	Plan Structure	Actuarial Assets	Actuarial Accrued Liability	UAAL	Funded Ratio %
State Police Retirement System	7/1/11	Contributory	DB	Single Employer	70,756	79,036	8,280	89.5
Judges' Retirement System	7/1/11	Contributory	DB	Single Employer	124,583	95,591	–28,992	130.3
Teachers' Defined Contribution System	7/1/11	Contributory	DC	CSME	N/A	N/A	N/A	N/A
Deputy Sheriff Retirement System	7/1/11	Administrative	DB	CSME	N/A	N/A	N/A	N/A
Emergency Medical Services Retirement System	7/1/11	Administrative	DB	CSME	N/A	N/A	N/A	N/A
Municipal Police Officers and Firefighters Retirement System	7/1/11	Administrative	DB	CSME	N/A	N/A	N/A	N/A
Wisconsin								
Wisconsin Retirement System	12/31/11	Contributory	DB	CSME	78,940,000	79,039,300	99,300	99.9
Wyoming								
Public Employees Pension Plan	1/1/13	Contributory	DB	CSME	5,749,968	7,319,205	1,569,237	78.6
Paid Firemen's Pension Plan A	1/1/13	Administrative	DB	CSME	139,181	195,199	56,018	71.3
Paid Firemen's Pension Plan B	1/1/13	Administrative	DB	CSME	91,248	85,464	–5,784	106.8
State Patrol, Game & Fish Warden & Criminal Investigator Pension Plan	1/1/13	Contributory	DB	CSME	106,068	137,581	31,513	77.1
Judicial Pension Plan	1/1/13	Contributory	DB	Single Employer	17,549	16,925	–624	103.7
Law Enforcement Retirement Plan	1/1/13	Contributory	DB	CSME	437,235	473,545	36,309	92.3
Volunteer Firemen's Pension Plan	1/1/13	Contributory	DB	CSME	62,462	66,775	4,313	93.5
Volunteer EMT Pension Plan	1/1/13	Noncontributory	DB	CSME	902	712	–191	126.8
Air Guard Firefighter Pension Plan	1/1/13	Contributory	DB	Single Employer	4,450	4,852	403	91.7
Puerto Rico								
Employees' Retirement System	6/30/11	Contributory	DB	CSME and Cash Balance	1,723,811	25,457,354	23,733,543	6.8
Puerto Rico System of Annuities and Pensions for Teachers	6/30/11	Contributory	DB	CSME and Cash Balance	2,385,863	11,448,609	9,062,746	20.8
Judiciary Retirement System	6/30/11	Contributory	DB	Single Employer	63,975	382,776	318,801	16.7