MOODY'S
INVESTORS SERVICE

MEDIAN REPORT

Adjusted Pension Liability Medians for US States

New measures highlight varying affordability

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Summary

This inaugural report presents adjusted pension data for the 50 individual states, based on our recently published methodology for analyzing state and local government pension liabilities. The report ranks states based on ratios measuring the size of their adjusted net pension liabilities (ANPL) relative to several measures of economic capacity: state revenues, GDP and personal income. Additionally, the report identifies medians for each ratio. Highlights of the report include:

» **State pension burdens vary widely.** The median value of the ratio of ANPL to governmental revenue is 45.1% for fiscal 2011. Adjusted net pension liabilities for individual states ranged from 6.8% to 241% of governmental revenues in fiscal 2011. Our preliminary analysis of fiscal 2012 data indicates increased adjusted pension liabilities as investment performance flattened and broadly similar variations in pension burdens. Investment performance and interest rate trends in fiscal 2013 should at least partly offset the growth of ANPL in 2012.

» **The largest accumulated liabilities most often reflect management decisions not to fund contributions at levels reflecting actuarial guidelines.** Of the ten states with the largest pension burdens, six have been downgraded in recent years for the magnitude and management of their pension obligations, in part a reflection of persistent underfunding.

» **The level of state contributions to cover pension costs of teachers and other local government employees is a significant factor in the size of state liabilities.** The largest pension burdens are also associated with states that directly cover the cost of local school teacher pensions.

» **Allocating reported pension liabilities of cost-sharing plans to participating local governments leads to the greatest difference between our adjusted and states' reported pension liabilities.** Other factors contributing to changing relative pension burden are whether a state's discount rate is above or below the median and to what degree a state smoothes its asset values.

Moody's Pension Adjustments

To achieve greater comparability and transparency in our credit analysis, we recalculate state and local net pension liabilities based on a market-determined discount rate and the market value of assets. We allocate the net pension liabilities of multiple-employer cost-sharing plans among the plan sponsors based on the pro rata contribution of each sponsor to the plan and additional information from state officials and pension administrators. We transform the Moody's adjusted net pension liability (ANPL) into a measure of pension burden by calculating the ratio of ANPL to governmental revenues (as reported in each state's consolidated annual financial report).[1] A three-year moving average of this ratio is an input to our state rating methodology scorecard, while additional aspects of state pension plan finances and governance are considered by our analysts and rating committees when assigning general obligation ratings to state governments. For greater detail on our adjustments and their application in our ratings methodology, please refer to our reports "Adjustments to US State and Local Reported Pension Data" and "US States Rating Methodology" released in April 2013.

Moody's 2011 state pension database includes 104 pension plans sponsored in whole or in part by the 50 states and Puerto Rico, covering the largest multiple-employer cost-sharing, multiple-employer agent, and single-employer plans. We excluded plans that individually account for less than 5% of an issuer's total liabilities because the financial conditions of those plans would not have a material impact on the issuers and doing so streamlined our data gathering efforts. The addition of these smaller plans to the database is expected in the near-term. Consistent with our 50 state debt medians report, Puerto Rico is not included in the 50-state medians and is shown for comparison purposes.

We have used pension data presented in state pension plan annual financial reports for fiscal 2011. The pension data in these reports and captured in our database may be from valuation periods that do not coincide with a state's own 2011 fiscal year. Reported valuations often lag a year, and sometimes two years. Pension plans may also report on a calendar year or some other basis that differs from the state's fiscal year.

States Exhibit Broad Range of Pension Liabilities

For fiscal 2011, the accumulated pension burden of US states, as measured by adjusted net pension liability relative to all governmental funds revenues, ranges from 6.8% to 241%. The states with the lowest pension burden are Nebraska, Wisconsin, and Idaho at 6.8%, 14.4%, and 14.8%, respectively. Among the states with the highest pension burden are Illinois, Connecticut, and Kentucky, at 241%, 190%, and 141%, respectively. The portfolio median for this metric is 45.1%. Exhibit 1 displays the states with the 10 greatest and the 10 smallest pension burdens.

The median state pension liability as a percent of personal income was 7.1%, more than twice the 2.8% median value of state net tax-supported debt to personal income, although the variation across states is wider for pensions than for debt.

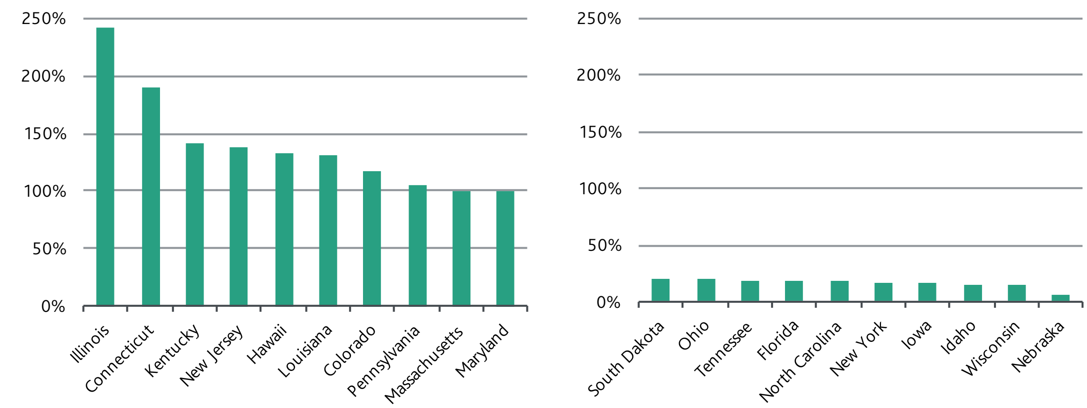
[1] We use governmental revenues because state employment positions are funded from an array of sources that include federal funds. One shortcoming of this approach is that it includes federal Medicaid payments, which are not used to fund government headcount and vary widely across states.

EXHIBIT 1

Wide Range Exists In Pension Burden

States with greatest ANPL to revenues

States with least ANPL to revenues



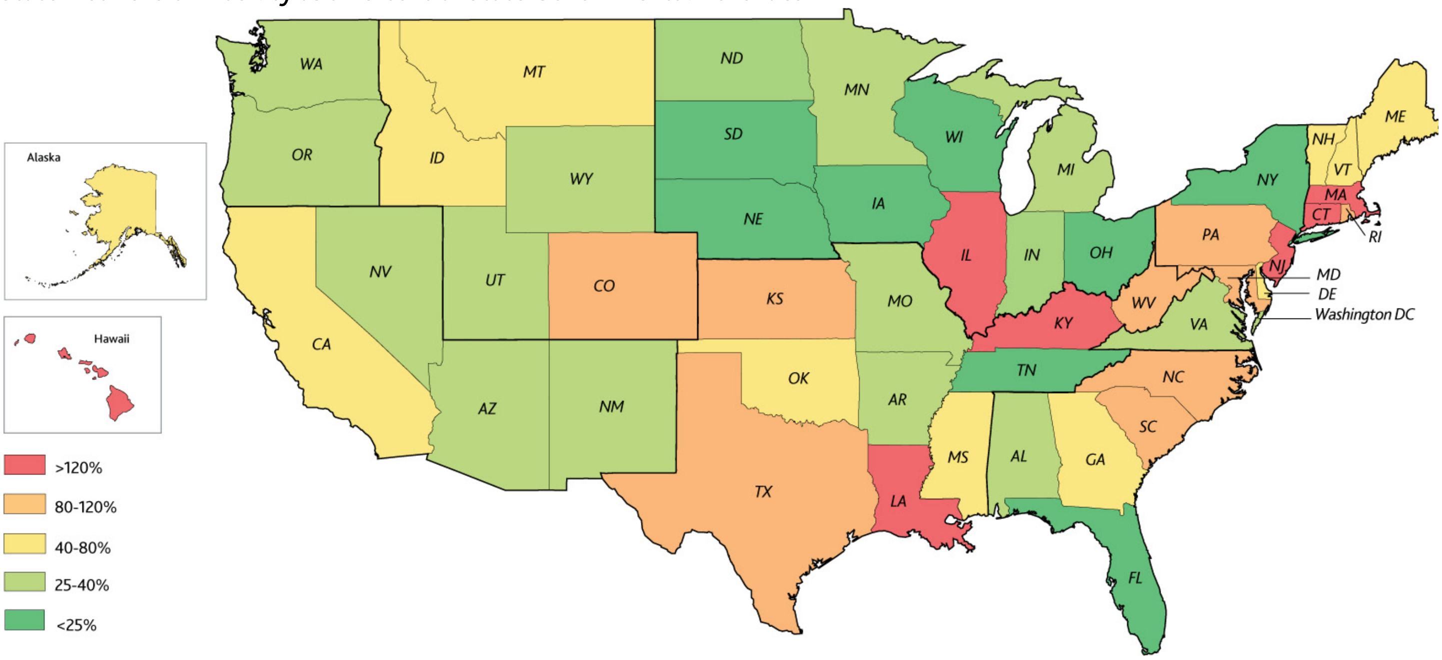
Source: Moody's Investors Service

When we compare adjusted net pension liabilities relative to other measures of state economic resources, such as GDP or personal income, relative rankings are very similar to our ANPL/governmental revenues metric as these measures are highly correlated. Please refer to the tables in the Appendix for details.

The variability of US state net pension liability burden is mapped in Exhibit 2. The map shows ANPL/governmental revenues categorized by the ranges adopted in our US states methodology scorecard. In ascending order, the categories are: less than 25%; from 25% to 40%; from 40% to 80%; from 80% to 120%; and greater than 120%. (In our scorecard, there is an additional category for states with ANPL/governmental revenues greater than 180% but we have collapsed the categories for purposes of presentation – see Exhibit 3).

EXHIBIT 2

State Net Pension Liability as a Percent of State Governmental Revenues



The wide variation in the accumulation of state net pension liabilities reflects the differences among states in historical funding efforts, management of benefit levels, and the extent to which states assume responsibility for employer pension costs related to teachers and other local government employees in addition to state employees. Geographically, there is some concentration of states with large net pension liabilities relative to their resources in the mid-Atlantic and New England states, and all states in the top category are in the eastern half of the country. In the west, ANPL/governmental revenues tends to be lower, but the lowest pension burden states are concentrated in the mid-west.

EXHIBIT 3

US States Rating Methodology Pension Scoring

Sub-Factor	Measurement	Aaa(1)	Aa1(2)	Aa2(3)	Aa3(4)	A(6)	Baa and below (9)
Pensions	3 Year Avg Adjusted Net Pension Liability/Total Governmental Revenue	Less than 25%	25% - 40%	40% - 80%	80% - 120%	120% - 180%	Greater than 180%

Based on Moody's adjustments, the overall ratio of pension plan assets to plan liabilities, commonly known as the funded ratio, is 48%. This compares to a reported funded ratio of 74% before Moody's adjustments. In our view, the adjusted funded ratio is less useful for credit analysis than the ANPL and measures that compare liabilities to economic capacity because it does not indicate the size of pension liabilities relative to an issuer's resources. However, it can be a good indicator of pension governance and whether or not a plan is heading toward pay-go status.

Large Pension Burdens Associated with Contribution Shortfalls

Large pension burdens are not associated with the size of a state's economy or budget. The states that have the largest relative pension liabilities have at least one thing in common: a history of contributing less to their pension plans than the actuarially required contributions (ARC). In an effort to reduce current expenditures, states that underfund simply increase the portion of their liability that must be amortized, resulting in ever-greater ARCs that become even more difficult to meet. For this reason, funding history is an important credit factor.

For some states, such as Louisiana and Maryland, the shortfall in their contributions is a result of statutory requirements or formulas that have failed to keep up with the pace of growing liabilities and ARCs. However, several states have expanded the gap between an actuarially sound contribution and their actual contributions by taking "pension holidays" or other actions to achieve budget relief. States that have done so are generally rated at less than the average state rating of Aa1. Six of the states in our "top 10" pension burden list—Illinois, Connecticut, Kentucky, New Jersey, Hawaii and Pennsylvania—have been downgraded over the last three years, largely because of the management and growing size of their pension liabilities.

The states with the lowest ratio of ANPL to revenues also have little in common outside of a commitment to making full ARC payments to their pension plans. Nebraska is an exception. The state's conservative pension benefits produce disproportionately low liabilities, which help to offset a history of statutory payments set at less than the ARC. Digging a bit deeper into a state's overall credit profile also can reveal that a small relative pension liability can come at a cost: for example, New York offers a relatively expensive benefit package, and keeping pace with full funding of its ARC has pressured the state's budget. Tennessee is another example of a relatively low ANPL that reflects the state's long trend of fully funding its ARC even as the budgetary cost of doing so has increased.

Cost-sharing Adjustment Has Significant Impact on Relative Pension Burden

Adjusting reported state pension liabilities for cost-sharing makes a significant difference in comparisons of relative state pension liabilities. As shown in Exhibit 4, our cost-sharing allocation results in the state share of liabilities of 18 plans in 15 states being reduced to 25% or less compared to the full plan liabilities reported in state financial reports. In some cases, the liability allocated to a state is quite small, such as the teachers retirement systems in Alabama, Ohio and Washington. The full list of cost-sharing plans in our state database and the share of their liabilities that we have allocated to states for fiscal 2011 is in Appendix Table 4.

EXHIBIT 4

Cost-sharing Plans with Least Share of Liability Allocated to States

State	Cost-Sharing Plan	Moody's Allocated Share
ALABAMA	Teachers' Retirement System of Alabama	7.20%
ARIZONA	Arizona State Retirement System	20.50%
ARIZONA	Public Safety Personnel Retirement System	10.30%
FLORIDA	Florida Retirement System	21.40%
GEORGIA	Teachers' Retirement System of Georgia	15.70%
IDAHO	Public Employees' Retirement System	24.90%
IOWA	Public Employees' Retirement System	19.20%
KANSAS	Kansas Public Employees' Retirement System	17.10%
MINNESOTA	Teachers Retirement Association	13.40%
NEVADA	Public Employees' Retirement System	12.70%
NEW MEXICO	Educational Employees' Retirement Board	1.70%
NEW YORK	Police and Fire Retirement System	18.40%
OHIO	Ohio Public Employees' Retirement System	21.70%
OHIO	State Teachers' Retirement System	0.50%
OREGON	Public Employees' Retirement System	18.70%
UTAH	Non Contributory System	19.20%
WASHINGTON	Teachers' Retirement System	4.50%
WASHINGTON	Teachers' Retirement System 2/3	0.40%

Several states among the top 10 in the ANPL/governmental revenues measure absorb the costs of employer contributions for teacher pensions. While underfunding has contributed to large net liabilities, total liabilities in Illinois, Connecticut, Kentucky, New Jersey, Hawaii, Maryland and Louisiana also include those for school districts and are not reported in school district financial statements. Other states that have taken on this responsibility, either through statute or in practice, include North Carolina, North Dakota, Vermont and West Virginia. Maryland is shedding its responsibility for paying pension normal costs for teachers by shifting those expenses to local governments over four years.

Pension Liabilities for 2012 and 2013

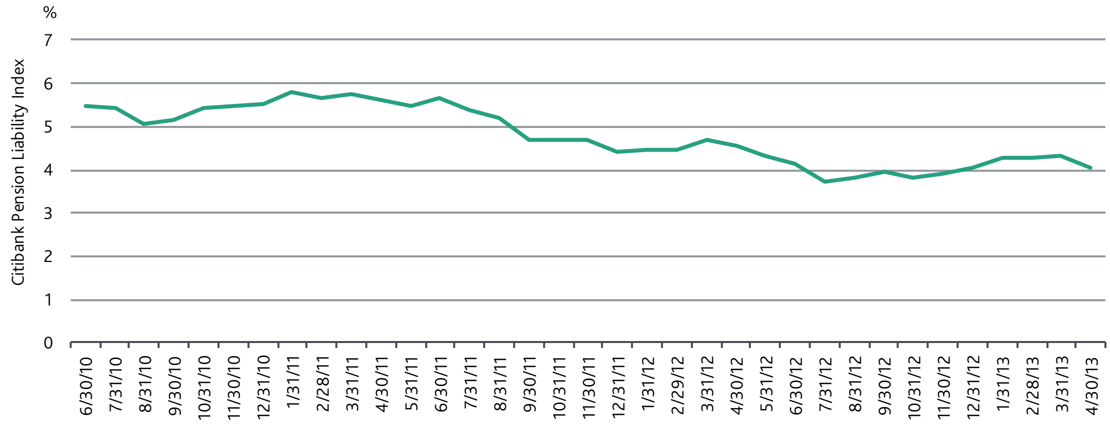
Fiscal 2012 state net pension liabilities, which we expect to publish later this year, were larger than in 2011. This reflects poor investment performance of pension assets and a downward slide in interest rates, partly offset by the effects of several years of budget reductions on state employee headcount and salaries. About three-quarters of the state pension plans in our database adhere to a July 1-June 30 fiscal year. During the 2012 fiscal year ending June 30, the cash and security holdings of the 100 largest public pension plans declined 2.2% from the previous year, according to the US Census. In addition, the Citibank Pension Liability Index[2] declined to 4.13% at June 30, 2012, compared to 5.36% the previous year, which by itself would increase adjusted total pension liabilities more than 15% (see Exhibit 5). Moderating the impact of these factors, state government employment and wages have declined since fiscal 2009, according to the US Bureau of Labor Statistics. In fiscal 2012, state

[2] The Index can be accessed at: http://www.soa.org/professional-interests/pension/resources/pen-resources-pension.aspx

employment fell 1.2% and total wages declined 0.1%. By comparison, most states factored positive wage growth into their prior actuarial liability valuations.[3]

EXHIBIT 5

After Fiscal 2011 Decline, Citibank Liability Index Has Stabilized



Source: Citibank; Society of Actuaries

Investment performance to date in fiscal 2013 suggests that asset growth may suppress absolute levels of net pension liabilities in 2013. For the year ending March 31, 2013, which includes a market swoon in the second quarter of 2012, median public plan investment returns were 9.8%, according to Callan Associates Inc estimates. At the same time, the Liability Index has stabilized and remains roughly equivalent to its June 30, 2012 level.

Over the longer term, several cross-currents will influence trends in the net pension liabilities of states. National economic growth and monetary policy will influence the trends in asset markets, interest rates and state revenues. Liability growth over a longer period will be slowed by pension benefit and funding reforms but may reflect the impacts of renewed public sector wage growth and hiring as state economies and tax revenue collections expand.

Many states have enacted pension reforms that rely on the creation of a new pension tier for new employees and will not have a noticeable impact on net pension liabilities for years. However, these reforms should reduce the rate at which new liabilities accrue and may reduce employer normal costs in the near term. Certain reforms will make a noticeable difference in state net pension liabilities in the near and medium terms, although some of these changes, such as Rhode Island's, have already been factored into calculated pension liabilities. The timing of reform impacts will depend on employee demographics and turnover, among other factors.

State shifts toward increasing contributions to their pension systems will also impact net pension liabilities slowly. Funding plans based on actuarially required contributions (ARC) are typically geared toward amortizing existing liabilities over a 25 or 30 year period. When a state commits to and sustains an actuarially sound funding plan it extinguishes the unfunded liability over the long term. By contrast, for states with statutory contributions less than the ARC or for those who have underpaid for other reasons, the dismal performance of the asset markets in the last decade revealed how quickly such approaches could reduce the funding status of a pension plan. Maryland shifted to a corridor funding

[3] Most government pensions use the entry age normal (EAN) method to determine accrued liabilities. The accruals include assumptions of projected wage increases, in contrast to the projected unit credit (PUC) method which does not. PUC is used by a minority of government pension plans but is the dominant cost method in the private sector.

method, which phases in changes in ARC, in 2002. In response to subsequent deterioration of the pension plan's funded status, the 2013 legislative session enacted a new plan to gradually return to full ARC payments over 10 years. Kentucky, with its history of chronically underfunding its pensions, recently enacted a statute requiring the state and other employers participating in one of the state's large cost-sharing plans to make full actuarial contributions. However, this change will not take effect until fiscal 2015, the first year of the state's next biennial budget period. Similarly, Hawaii's legislated increase in employer pension contributions will not take effect until 2016.

Uncertainty over future funding practices has been created by the impending shift in pension accounting resulting from the implementation of GASB Statements 67 and 68. GASB has altered the focus of pension accounting from a funding-oriented approach to a balance sheet approach. As a result, no authoritative body will be setting guidelines for pension funding that carry the weight of GASB's guidance. Although some professional organizations have attempted to create guidelines, lack of a clear standard may make it difficult for some states to stay on a funding path that sustains a goal of adequate pension financing.

Pension Tables and Comparative Measures

The following tables summarize our calculation of key pension metrics and rank the states accordingly. Pension burden-both on a state's balance sheet and in the context of budgetary flexibility-is one of many factors that we use to determine state credit quality. Therefore these metrics and rankings do not correlate directly to state ratings. The 50 state-medians exclude Puerto Rico, which is shown for comparison purposes only.

These ratios have been calculated based on our definition of adjusted net pension liabilities and governmental revenues.

Appendix

TABLE 1

Selected Characteristics of State Pension Plans

State	Rating	# of Pension Plans[4]	Valuation Date for Largest Plan	As Reported Discount Rate for Largest Plan	Aggregate UAAL ($000)	Moody's Adjusted Discount Rate for Largest Plan	State Share for Largest Plan
Alabama	Aa1	2	9/30/2010	8.00%	12,711,532	5.14%	7.2%
Alaska	Aaa	2	6/30/2010	8.00%	6,648,953	5.47%	72.3%
Arizona	Aa3	3	6/30/2010	8.00%	12,247,216	5.47%	20.5%
Arkansas	Aa1	2	6/30/2011	8.00%	2,382,000	5.67%	100.0%
California	A1	2	6/30/2010	7.75%	80,124,000	5.47%	25.8%
Colorado	Aa1*	1	12/31/2011	8.00%	8,816,498	4.40%	100.0%
Connecticut	Aa3	2	6/30/2010	8.50%	20,069,660	5.47%	100.0%
Delaware	Aaa	3	6/30/2011	7.50%	755,991	5.67%	100.0%
Florida	Aa1	1	7/1/2011	7.75%	18,956,422	5.67%	21.4%
Georgia	Aaa	2	6/30/2010	7.50%	12,311,780	5.47%	15.7%
Hawaii	Aa2	1	6/30/2011	8.00%	8,154,177	5.67%	72.6%
Idaho	Aa1*	1	7/1/2011	7.25%	1,276,181	5.67%	24.9%
Illinois	A3	3	6/30/2011	8.50%	81,333,819	5.67%	100.0%
Indiana	Aaa*	2	6/30/2010	7.00%	11,790,490	5.47%	100.0%
Iowa	Aaa*	1	6/30/2011	7.50%	5,681,771	5.67%	19.2%
Kansas	Aa1*	1	12/31/2010	8.00%	8,264,125	5.54%	17.1%
Kentucky	Aa2*	3	6/30/2011	7.50%	18,726,255	5.67%	100.0%
Louisiana	Aa2	3	6/30/2011	8.25%	18,172,934	5.67%	100.0%
Maine	Aa2	1	6/30/2011	7.25%	2,688,100	5.67%	100.0%
Maryland	Aaa	3	6/30/2011	7.75%	18,286,533	5.67%	100.0%
Massachusetts	Aa1	2	1/1/2011	8.25%	16,752,915	5.54%	100.0%
Michigan	Aa2	1	9/30/2010	8.00%	4,078,000	5.14%	100.0%
Minnesota	Aa1	2	7/1/2011	8.50%	7,201,080	5.67%	13.4%
Mississippi	Aa2	1	6/30/2011	8.00%	12,339,300	5.67%	37.1%
Missouri	Aaa	1	6/30/2011	8.50%	2,101,063	5.67%	100.0%
Montana	Aa1	5	6/30/2011	7.75%	3,779,523	5.67%	46.6%
Nebraska	NGO**	3	1/1/2011	7.75%	111,984	5.54%	100.0%
Nevada	Aa2	1	6/30/2011	8.00%	11,005,100	5.67%	12.7%
New Hampshire	Aa1	2	6/30/2011	7.75%	4,273,547	5.67%	38.6%
New Jersey	Aa3	3	6/30/2010	8.25%	24,936,265	5.47%	100.0%
New Mexico	Aaa	2	6/30/2011	7.75%	10,622,075	5.67%	50.1%
New York	Aa2	2	4/1/2010	7.50%	8,860,000	6.05%	45.8%
North Carolina	Aaa	1	12/31/2010	7.25%	2,773,868	5.54%	38.0%
North Dakota	Aa1*	2	7/1/2011	8.00%	1,616,600	5.67%	100.0%
Ohio	Aa1	2	7/1/2011	8.00%	59,686,709	5.67%	0.5%
Oklahoma	Aa2	4	6/30/2011	8.00%	10,321,131	5.67%	46.1%
Oregon	Aa1	1	12/31/2010	8.00%	13,325,100	5.54%	18.7%
Pennsylvania	Aa2	2	6/30/2010	8.00%	34,362,001	5.47%	62.0%
Rhode Island	Aa2	2	6/30/2010	7.50%	4,094,109	5.47%	40.0%
South Carolina	Aaa	2	7/1/2010	8.00%	14,611,455	5.47%	31.3%
South Dakota	NGO**	1	6/30/2011	7.75%	278,800	5.67%	36.4%
Tennessee	Aaa	1	7/1/2009	7.50%	1,632,873	6.20%	100.0%
Texas	Aaa	2	8/31/2011	8.00%	28,462,940	5.21%	82.6%
Utah	Aaa	3	1/1/2011	7.50%	5,676,084	5.54%	20.7%
Vermont	Aaa	2	6/30/2011	7.90%	1,191,646	5.67%	100.0%
Virginia	Aaa	1	6/30/2010	7.00%	4,838,599	5.47%	100.0%
Washington	Aa1	7	6/30/2010	8.00%	3,170,000	5.47%	48.1%
West Virginia	Aa1	2	7/1/2010	7.50%	6,111,993	5.47%	100.0%
Wisconsin	Aa2	1	12/31/2011	5.50%	99,300	4.40%	28.1%
Wyoming	NGO**	2	1/1/2012	8.00%	1,294,267	4.40%	37.1%
Puerto Rico	Baa3***	2	6/30/2011	6.40%	32,796,289	5.67%	100.0%

* Issuer Rating (No G.O. Debt)

** No General Obligation Debt

*** This figure is not included in any totals, means, or median calculations but is provided for comparison purposes only.

4 Excludes small plans as cited in the report

TABLE 2

Moody's Adjusted Net Pension Liability (ANPL) Rankings

ANPL Rank	State	ANPL
1	Illinois	132,968,296
2	California	120,805,465
3	Texas	91,694,842
4	Pennsylvania	63,532,940
5	New Jersey	63,219,012
6	Massachusetts	44,732,443
7	Connecticut	41,587,093
8	Louisiana	33,376,268
9	Maryland	28,660,114
10	Kentucky	28,619,279
11	New York	22,084,660
12	Colorado	20,338,160
13	Indiana	16,594,134
14	Georgia	14,096,309
15	Florida	12,912,181
16	Michigan	12,124,102
17	South Carolina	11,635,619
18	Washington	11,445,447
19	Virginia	11,115,455
20	Hawaii	10,919,157
21	Alaska	10,605,944
22	Oklahoma	10,391,069
23	Ohio	9,777,555
24	West Virginia	9,281,717
25	Mississippi	8,523,243
26	Minnesota	8,121,311
27	North Carolina	7,479,012
28	Alabama	7,257,979
29	Arizona	7,093,003
30	Missouri	6,505,333
31	Oregon	6,006,038
32	Maine	5,656,940
33	Tennessee	5,394,877
34	Rhode Island	5,273,598
35	New Mexico	5,035,912
36	Arkansas	4,938,387
37	Wisconsin	3,894,188
38	North Dakota	3,273,776
39	Montana	3,241,297
40	Utah	3,162,592
41	Nevada	3,017,365
42	Kansas	2,835,598
43	Delaware	2,819,988
44	New Hampshire	2,748,931
45	Vermont	2,436,052
46	Iowa	2,349,433
47	Wyoming	2,211,227
48	Idaho	979,161
49	South Dakota	728,831
50	Nebraska	527,503
	MEAN:	**18,880,577**
	MEDIAN:	**8,322,277**
	Puerto Rico*	36,251,660

ANPL as % of Revs Rank	State	ANPL as % of Revs
1	Illinois	241.1%
2	Connecticut	189.7%
3	Kentucky	140.9%
4	New Jersey	137.2%
5	Hawaii	132.5%
6	Louisiana	130.2%
7	Colorado	117.5%
8	Pennsylvania	105.0%
9	Massachusetts	100.4%
10	Maryland	99.5%
11	Texas	92.5%
12	Rhode Island	91.3%
13	West Virginia	86.2%
14	Maine	76.6%
15	Montana	62.5%
16	California	61.8%
17	Oklahoma	61.8%
18	Indiana	61.3%
19	North Dakota	61.2%
20	South Carolina	59.7%
21	New Hampshire	56.4%
22	Alaska	55.2%
23	Mississippi	53.0%
24	Vermont	49.2%
25	Delaware	48.2%
26	Georgia	42.0%
27	Wyoming	39.9%
28	Nevada	39.1%
29	New Mexico	37.8%
30	Alabama	36.9%
31	Virginia	35.5%
32	Oregon	33.9%
33	Arkansas	33.6%
34	Washington	32.7%
35	Utah	30.8%
36	Missouri	27.7%
37	Minnesota	27.3%
38	Arizona	26.7%
39	Michigan	25.4%
40	Kansas	23.1%
41	South Dakota	20.7%
42	Ohio	19.6%
43	Tennessee	19.2%
44	Florida	19.2%
45	North Carolina	18.3%
46	New York	16.6%
47	Iowa	16.1%
48	Idaho	14.8%
49	Wisconsin	14.4%
50	Nebraska	6.8%
	MEAN:	**60.6%**
	MEDIAN:	**45.1%**
	Puerto Rico*	234.4%

* This figure is not included in any totals, means, or median calculations but is provided for comparison purposes only.

TABLE 3

Moody's Adjusted Net Pension Liability Relative to Economic Indicators

Rank	State	ANPL as % of PI	Rank	State	ANPL as % of State GDP	Rank	State	ANPL Per Capita
1	Alaska	32.1%	1	Alaska	20.6%	1	Alaska	14,652
2	Illinois	23.6%	2	Illinois	19.8%	2	Connecticut	11,595
3	Connecticut	20.1%	3	Connecticut	18.1%	3	Illinois	10,340
4	Kentucky	19.3%	4	Kentucky	17.4%	4	Hawaii	7,923
5	Louisiana	18.9%	5	Hawaii	16.3%	5	Louisiana	7,296
6	Hawaii	18.5%	6	West Virginia	13.9%	6	New Jersey	7,156
7	West Virginia	15.0%	7	Louisiana	13.5%	7	Massachusetts	6,770
8	New Jersey	13.7%	8	New Jersey	13.0%	8	Kentucky	6,554
9	Massachusetts	12.7%	9	Massachusetts	11.4%	9	Rhode Island	5,019
10	Pennsylvania	11.8%	10	Pennsylvania	11.0%	10	West Virginia	5,004
11	Rhode Island	11.4%	11	Maine	11.0%	11	Pennsylvania	4,985
12	Maine	11.1%	12	Rhode Island	10.5%	12	Maryland	4,908
13	North Dakota	10.1%	13	Maryland	9.5%	13	North Dakota	4,781
14	Maryland	9.7%	14	Vermont	9.4%	14	Maine	4,258
15	Vermont	9.4%	15	Mississippi	8.7%	15	Colorado	3,975
16	Colorado	9.0%	16	Montana	8.5%	16	Wyoming	3,897
17	Montana	9.0%	17	North Dakota	8.1%	17	Vermont	3,888
18	Mississippi	8.9%	18	Colorado	7.7%	18	Texas	3,577
19	Texas	8.9%	19	South Carolina	7.0%	19	Montana	3,249
20	Wyoming	8.1%	20	Texas	7.0%	20	California	3,206
21	Delaware	7.5%	21	Oklahoma	6.7%	21	Delaware	3,105
22	South Carolina	7.4%	22	New Mexico	6.3%	22	Mississippi	2,863
23	California	7.3%	23	California	6.2%	23	Oklahoma	2,746
24	Oklahoma	7.3%	24	Indiana	6.0%	24	Indiana	2,547
25	Indiana	7.1%	25	Wyoming	5.9%	25	South Carolina	2,490
26	New Mexico	7.1%	26	Arkansas	4.7%	26	New Mexico	2,423
27	Arkansas	5.0%	27	New Hampshire	4.3%	27	New Hampshire	2,086
28	New Hampshire	4.5%	28	Delaware	4.3%	28	Arkansas	1,681
29	Alabama	4.3%	29	Alabama	4.2%	29	Washington	1,677
30	Oregon	4.1%	30	Georgia	3.4%	30	Oregon	1,553
31	Georgia	4.0%	31	Washington	3.2%	31	Minnesota	1,519
32	Washington	3.8%	32	Michigan	3.1%	32	Alabama	1,511
33	Minnesota	3.4%	33	Oregon	3.1%	33	Georgia	1,437
34	Michigan	3.4%	34	Minnesota	2.9%	34	Virginia	1,372
35	Utah	3.4%	35	Arizona	2.7%	35	Michigan	1,228
36	Arizona	3.1%	36	Missouri	2.6%	36	New York	1,132
37	Nevada	3.0%	37	Virginia	2.6%	37	Utah	1,124
38	Virginia	3.0%	38	Utah	2.5%	38	Nevada	1,109
39	Missouri	2.9%	39	Nevada	2.3%	39	Arizona	1,097
40	Kansas	2.4%	40	Kansas	2.2%	40	Missouri	1,083
41	Tennessee	2.3%	41	Tennessee	2.0%	41	Kansas	988
42	Ohio	2.2%	42	Ohio	2.0%	42	South Dakota	885
43	New York	2.2%	43	New York	1.9%	43	Ohio	847
44	North Carolina	2.1%	44	South Dakota	1.8%	44	Tennessee	843
45	South Dakota	2.0%	45	Florida	1.7%	45	North Carolina	775
46	Idaho	1.9%	46	North Carolina	1.7%	46	Iowa	767
47	Iowa	1.9%	47	Idaho	1.7%	47	Wisconsin	682
48	Wisconsin	1.7%	48	Iowa	1.6%	48	Florida	677
49	Florida	1.7%	49	Wisconsin	1.5%	49	Idaho	618
50	Nebraska	0.7%	50	Nebraska	0.6%	50	Nebraska	286
	MEAN:	**7.9%**		**MEAN:**	**6.8%**		**MEAN:**	**3,324**
	MEDIAN:	**7.1%**		**MEDIAN:**	**5.3%**		**MEDIAN:**	**2,456**
	Puerto Rico*	58.9%					Puerto Rico*	9,814

* This figure is not included in any totals, means, or median calculations but is provided for comparison purposes only.

TABLE 4

Allocation of Pension Plan Liabilities by State[5]

Alabama	
Teachers' Retirement System of Alabama	7.2%
Employees' Retirement System of Alabama	46.4%
Alaska	
Public Employees' Retirement System	72.3%
Teachers' Retirement System	78.8%
Arizona	
Public Safety Personnel Retirement System	10.3%
Corrections Officer Retirement Plan	56.7%
Arizona State Retirement System	20.5%
Arkansas	
Arkansas Public Employees Retirement System	100.0%
Arkansas Highway and Transportation Retirement Plan	100.0%
California	
California Public Employees' Retirement System	100.0%
California State Teachers' Retirement System	25.8%
Colorado	
State Division Trust Fund	100.0%
Connecticut	
Teachers' Retirement System (TRS)	100.0%
State Employees' Retirement System (SERS)	100.0%
Delaware	
State Employees'	100.0%
Closed State Police	100.0%
New State Police	100.0%
Florida	
Florida Retirement System	21.4%
Georgia	
Teachers' Retirement System of Georgia	15.7%
Employees' Retirement System of Georgia	85.2%
Hawaii	
Employees' Retirement System	72.6%
Idaho	
Public Employee Retirement System	24.9%
Illinois	
Teachers' Retirement System	100.0%
State Universities' Retirement System	100.0%
State Employees' Retirement System of Illinois	100.0%
Indiana	
Pre-1996 Teachers Retirement	100.0%
Public Employees' Retirement Fund	100.0%
Iowa	
Public Employees' Retirement System	19.2%
Kansas	
Kansas Public Employees Retirement System	17.1%
Kentucky	
Kentucky Teachers' Retirement System	100.0%
Kentucky Employees Retirement System	100.0%
Kentucky Employees Retirement System (Hazardous)	100.0%
Louisiana	
Teachers' Retirement System of Louisiana	100.0%
Louisiana State Employees' Retirement System	100.0%
Louisiana School Employees' Retirement System	100.0%
Maine	
Maine Public Employees Retirement System	100.0%
Maryland	
Teachers' Retirement	100.0%
Employees Retirement and Pension Plan - State	100.0%
State Police Retirement System	100.0%
Massachusetts	
Teachers' Retirement System	100.0%
State Employees' Retirement System	100.0%
Michigan	
State Employees' Retirement System	100.0%
Minnesota	
Teachers Retirement Association	13.4%
Minnesota State Retirement System	72.3%
Mississippi	
Public Employees' Retirement System	37.1%
Missouri	
Missouri State Employees' Plan (MSEP)	100.0%
Montana	
Teachers Retirement System	43.3%
Public Employees Retirement System	46.6%
Municipal Police Officers Retirement System	100.0%
Firefighters Unified Retirement System	100.0%
Sheriffs Retirement System	0.0%
Nebraska	
State Cash Balance	100.0%
State Patrol Retirement System	100.0%
Judges' Retirement System	100.0%

5 Allocation of pension plan liabilities may change as states review and clarify this issue for GASB 68 purposes.

TABLE 4

Allocation of Pension Plan Liabilities by State[5]

Nevada	
Public Employees' Retirement System	12.7%
New Hampshire	
New Hampshire Retirement System	38.6%
New Hampshire Judicial Retirement System	100.0%
New Jersey	
Public Employees' Retirement System - State	100.0%
Police and Firemen's Retirement System - State	100.0%
Teachers' Pension and Annuity Fund	100.0%
New Mexico	
Public Employees Retirement Fund	50.1%
Educational Employees' Retirement Board	1.7%
New York	
State and Local Employees' Retirement System	45.8%
Police and Fire Retirement System	18.4%
North Carolina	
Teachers' and State Employees'	38.0%
North Dakota	
Teachers' Fund for Retirement	100.0%
Public Employees' Retirement System	100.0%
Ohio	
State Teachers Retirement System	0.5%
Ohio Public Employees' Retirement System	21.7%
Oklahoma	
Oklahoma Police Pension and Retirement System	43.6%
Oklahoma Public Employees Retirement System	80.7%
Teachers' Retirement System of Oklahoma	46.1%
Oklahoma Firefighters Pension and Retirement System	83.0%
Oregon	
Public Employees' Retirement System	18.7%
Pennsylvania	
State Employees' Retirement System	67.0%
Public School Employees' Retirement System	62.0%
Rhode Island	
Teachers' (component of ERS)	40.0%
State Employees' (component of ERS)	100.0%
South Carolina	
South Carolina Retirement System	31.3%
Police Officers' Retirement System	33.0%
South Dakota	
South Dakota Retirement System	36.4%
Tennessee	
Consolidated State	100.0%
Texas	
Teacher Retirement System	82.6%
Employees Retirement System	100.0%
Utah	
Non Contributory System	20.7%
Public Safety System	35.2%
Contributory System	29.2%
Vermont	
State Teachers' Retirement System	100.0%
Vermont State Retirement System	100.0%
Virginia	
Virginia Retirement System	100.0%
Washington	
Public Employees' Retirement System 2/3	48.1%
Public Employees' Retirement System	49.7%
Teachers' Retirement System	4.5%
Teachers' Retirement System 2/3	0.4%
Law Enforcement Officers' and Fire Fighters' 2	63.0%
Law Enforcement Officers' and Fire Fighters'	0.0%
School Employees' Retirement System 2/3	0.0%
West Virginia	
Teachers' Retirement System	100.0%
Public Employees' Retirement System	68.2%
Wisconsin	
Wisconsin Retirement System	28.1%
Wyoming	
Public Employees Pension Plan	37.1%
Wyoming Law Enforcement	43.8%
Puerto Rico	
Employees' Retirement System	100.0%
Teachers' Retirement System	100.0%

Moody's Related Research

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» Adjustments to US State and Local Government Reported Pension Data, April 2013 (151398)

Rating Methodology:

» US States Rating Methodology, April 2013 (129816)

Median Report:

» 2013 State Debt Medians Report, May 2013 (153920)

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