

Wilshire Research

2005 Wilshire Report on State Retirement Systems: Funding Levels and Asset Allocation

Julia K. Bonafede

Steven J. Foresti

Benjamin J. Yang

(310) 451-3051

jbonafed@wilshire.com

sforesti@wilshire.com

byang@wilshire.com

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Section 1: Summary of Findings

- The following study includes 125 state retirement systems. Of these 125 retirement systems, 64 systems reported actuarial values on or after June 30, 2004 and 61 systems reported before June 30, 2004. Sixteen of these 61 late-reporting systems reported before June 30, 2003.
- For the 64 state retirement systems which provided actuarial data for 2004, pension assets and liabilities were \$778.9 billion and \$942.3 billion, respectively. The ratio of pension assets-to-liabilities, or *funding ratio*, for all 64 state pension plans was 83% in 2004, up from 77% for the same 64 plans in 2003. (Exhibit 2)
- For the 64 state retirement systems which provided actuarial data for 2004, pension assets grew 14%, or \$97.3 billion, from \$681.7 billion in 2003 to \$778.9 billion in 2004 while liabilities grew 6%, or \$53.0 billion, from \$889.4 billion to \$942.3 billion. Rising asset values combined with continued growth in liabilities caused the 64 state pension plans to go from a \$207.7 billion shortfall in 2003 to a \$163.4 billion shortfall in 2004. (Exhibit 2)
- For the 109 state retirement systems which provided actuarial data for 2003, pension assets and liabilities were \$1,600.4 billion and \$1,976.0 billion, respectively. The funding ratio for all 109 state pension plans was 81% in 2003. (Exhibit 1)
- Our findings indicate that the asset shortfall for state pension plans is worse than that of corporate pension plans. Wilshire estimates that as of December 31, 2003 defined benefit pension assets for S&P 500 companies totaled \$1,031 billion, \$123 billion less than pension liabilities of \$1,154 billion, giving an aggregate funding ratio for corporate plans of 89%.¹
- Our findings indicate that the asset shortfall for state pension plans is similar to that of city and county retirement systems. Wilshire estimates that as of June 30, 2003 city and county pension assets totaled \$148.6 billion, \$30.6 billion less than pension liabilities of \$179.2 billion, giving an aggregate funding ratio for city and county retirement systems of 83%.²
- Of the 64 state retirement systems which provided actuarial data for 2004, 84% have market value of assets less than pension liabilities, or are *underfunded*. The average underfunded plan has a ratio of assets-to-liabilities equal to 77%.
- Of the 109 state retirement systems which provided actuarial data for 2003, 94% are *underfunded*. The average underfunded plan has a ratio of assets-to-liabilities equal to 79%.
- State pension portfolios have a 67% average allocation to equities – including real estate and private equity – and a 33% allocation to fixed income. The 67% equity allocation is higher than the 65% equity allocation in the prior year. The increasing equity allocation suggests that pension funds remain committed to stocks. (Exhibit 11)

¹ Based on Wilshire's "2004 Corporate Funding Survey on Pensions," May 11, 2004.

² Based on "2004 Wilshire Report on City & County Retirement Systems: Funding Levels and Asset Allocation," October 1, 2004.

- Asset allocation varies widely by retirement system. Twenty-six of 125 retirement systems have allocations to equity that equal or exceed 75%, and six systems have equity allocations below 50%. The 25th and 75th percentile range for equity allocation is 63% to 74%.
- Wilshire forecasts a long-term return on state pension assets equal to 7.5% per annum, which is 0.5 percentage points below the average actuarial interest rate assumption of 8.0%.

Section 2: Financial Overview

This is our tenth report on the financial condition of state-sponsored defined benefit retirement systems and is based upon data gathered from the most recent financial and actuarial reports provided by 125 retirement systems sponsored by the 50 states and the District of Columbia. Appendix A lists the 125 retirement systems included in this year's study.

The Data

Financial data on public retirement systems lack the timeliness and uniform disclosure governing pension plans sponsored by publicly traded companies, making it difficult to conclude a study with data that is both current and consistent across systems. For this reason, our study methodology involves collecting data during the first quarter of each calendar year with the objective of acquiring as many reports as possible with a June 30 valuation date from the previous year. Even for systems with the desire to report in a timely manner, it often takes six months to a year for actuaries to determine liability values. Sixty-four systems reported actuarial values on or after June 30, 2004 and 61 systems reported before June 30, 2004. Sixteen of these 61 late-reporting systems reported before June 30, 2003.

Assets versus Liabilities

Exhibit 1 shows market value of assets, actuarial value of assets, and pension liability values for all state retirement systems for which Wilshire has data. For example, 122 retirement systems reported actuarial values for 2002 while only 64 retirement systems reported actuarial values for 2004. Note that Exhibit 1 includes both market value and actuarial value of assets. Unless otherwise noted, "assets" will refer to market value of assets for the remainder of this paper.

Exhibit 1
Financial Overview of State Retirement Systems³ (\$ billions)

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
<u>Total Pension Assets:</u>					
- Market Value	\$1,998.7	\$1,846.2	\$1,669.4	\$1,600.4	\$778.9
- Actuarial Value	\$1,835.0	\$1,946.4	\$1,918.4	\$1,763.5	\$804.6
<u>Total Pension Liabilities:</u>	\$1,780.7	\$1,940.6	\$2,056.8	\$1,976.0	\$942.3
<u>Difference:</u>					
- Market Value	\$218.0	-\$94.4	-\$387.4	-\$375.6	-\$163.4
- Actuarial Value	\$54.4	\$5.8	-\$138.4	-\$212.5	-\$137.7
<u>Assets as a % of Liabilities:</u>					
- Market Value	112%	95%	81%	81%	83%
- Actuarial Value	103%	100%	93%	89%	85%
<u>Total No. of Retirement Systems:</u>	125	123	122	109	64

Although the total pension asset and liability values in Exhibit 1 are not comparable because of the different number of retirement systems included for each year, the funding ratios, or ratio of assets-to-liabilities, provide a measure of the financial health for these retirement systems during the last five years. Market value funding ratios fell dramatically between 2000 and 2002, from

³ As disclosed in annual reports (most annual reports use a June 30 or December 31 fiscal year). Liabilities are the reported actuarial accrued liabilities and assets are the current market and actuarial values as of the same valuation date as liabilities.

112% to 81%, and have remained flat over the last three years. Actuarial value funding ratios declined steadily over the last five years, from 103% in 2000 to 85% in 2004.

Exhibit 2 shows asset and liability values for the 64 retirement systems which provided actuarial values for 2004 and compares them with the same totals from the previous four years.

Exhibit 2
Financial Overview of 64 State Retirement Systems (\$ billions)

	2000	2001	2002	2003	2004	Growth %	
						2002-2004	2003-2004
<u>Total Pension Assets:</u>							
- Market Value	\$795.0	\$730.1	\$669.1	\$681.7	\$778.9	16%	14%
- Actuarial Value	\$725.8	\$769.4	\$771.7	\$773.0	\$804.6	4%	4%
<u>Total Pension Liabilities:</u>	\$727.4	\$792.7	\$850.1	\$889.4	\$942.3	11%	6%
<u>Difference:</u>							
- Market Value	\$67.6	-\$62.6	-\$181.0	-\$207.7	-\$163.4		
- Actuarial Value	-\$1.6	-\$23.3	-\$78.5	-\$116.3	-\$137.7		
<u>Assets as a % of Liabilities:</u>							
- Market Value	109%	92%	79%	77%	83%		
- Actuarial Value	100%	97%	91%	87%	85%		
<u>Underfunded Plans as % of All Plans:</u>							
- Market Value	39%	69%	92%	97%	84%		
- Actuarial Value	53%	53%	67%	77%	77%		
<u>Total No. of Systems:</u>	64	64	64	64	64		

In 2003, pension liabilities exceeded assets by \$207.7 billion and the funding ratio, or ratio of assets-to-liabilities, one measure of pension fund health, stood at 77%. One year later, assets have risen to \$778.9 billion, or 14%, while liabilities have grown to \$942.3 billion, or 6%. The result has been a decrease in the difference between assets and liabilities from a negative \$207.7 billion to a negative \$163.4 billion, a \$44.3 billion increase, and an improvement in the ratio of assets-to-liabilities from 77% to 83%.

In 2002, pension liabilities exceeded assets by \$181.0 billion and the funding ratio, or ratio of assets-to-liabilities, stood at 79%. Over the next two years, assets grew 16% while liabilities grew 11%. The result has been a decrease in the difference between assets and liabilities from a negative \$181.0 billion to a negative \$163.4 billion, a \$17.6 billion increase, and an improvement in the ratio of assets-to-liabilities from 79% to 83%.

Aggregate statistics such as these can mask the underlying fiscal strength or weakness of individual plans because assets in well-funded retirement systems are not transferable to underfunded systems. Exhibit 2 shows that 84% of these 64 state pension systems, or 54 pension systems, have assets less than liabilities. If we look only at these 54 underfunded systems, their combined assets as a percent of liabilities equals 77% and their combined unfunded liabilities total \$175.4 billion. Conversely, if we look only at the 10 state pension systems which have assets greater than liabilities, their combined assets as a percent of liabilities equals 106% and their combined overfunded liabilities total \$12.0 billion.

Funding Ratios

Exhibit 3 shows the aggregate, average, and median market value funding ratios for the state pension systems by fiscal year. Exhibit 3 also shows the 25th and 75th percentile market value funding ratios for each year. Market value funding ratios generally fell between 2000 and 2002, and have improved slightly during the last two years.

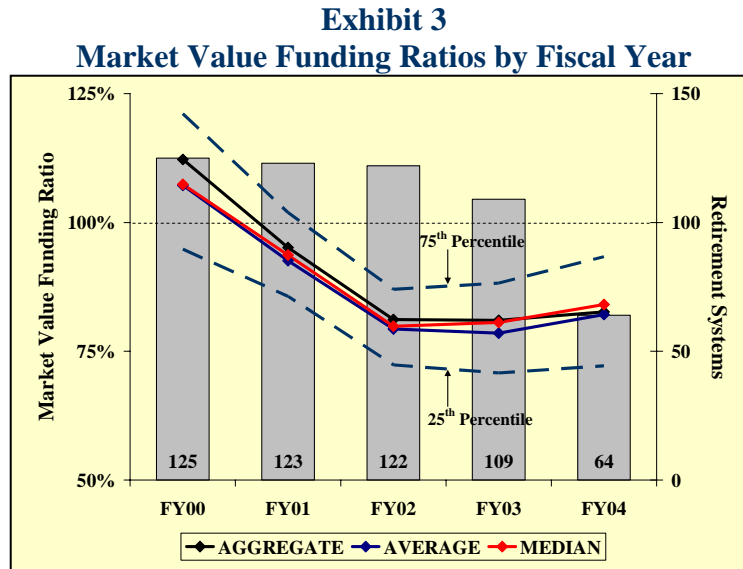


Exhibit 4 shows the same information as Exhibit 3, except uses actuarial value of assets to determine funding ratios. Similar to Exhibit 3, though at a slower rate, funding ratios generally fell between 2000 and 2002. However, actuarial value funding ratios continued to fall during the last two years.

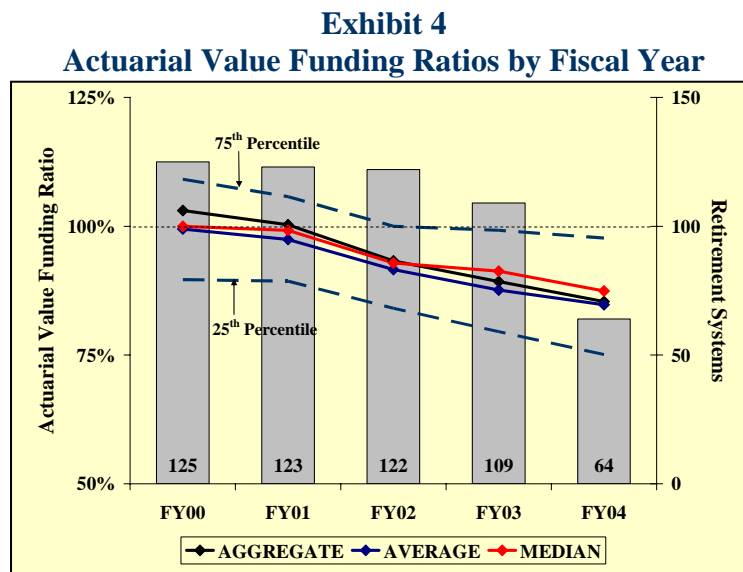
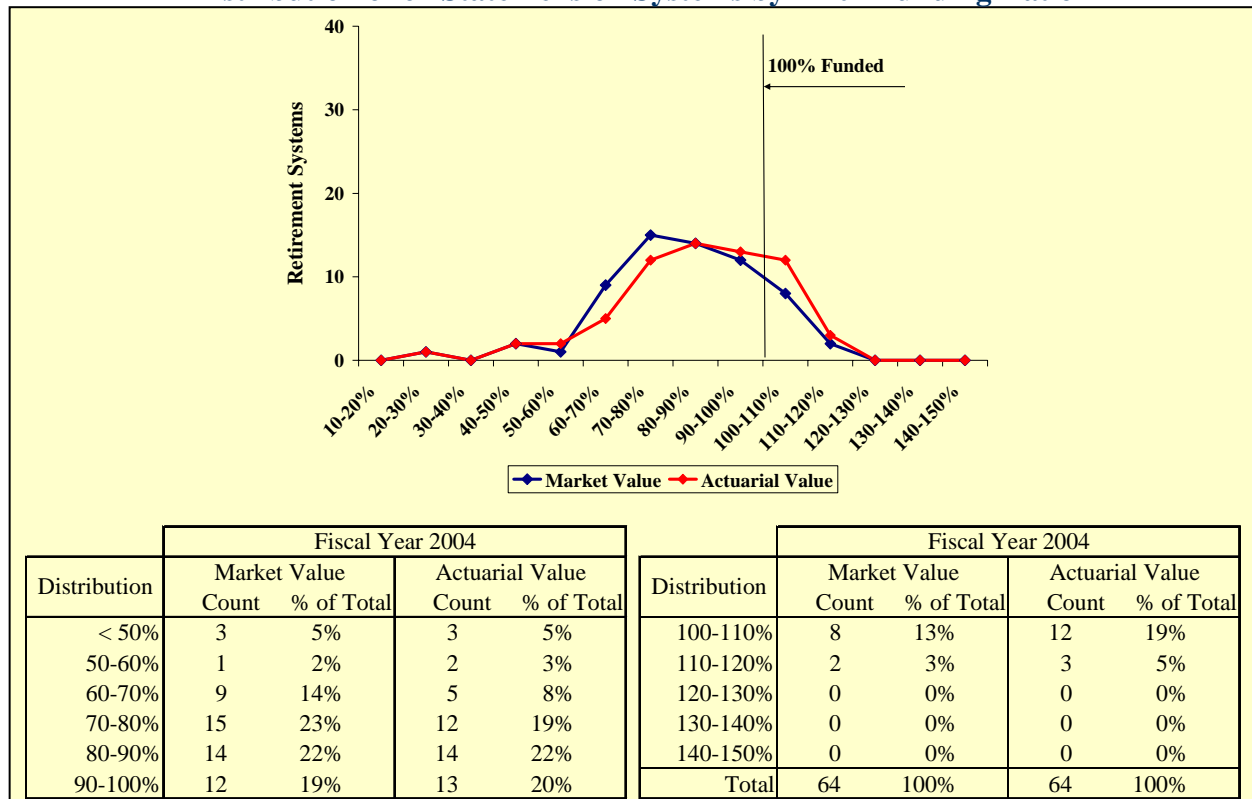


Exhibit 5 gives a more detailed picture of the fiscal condition for the 64 state retirement systems which provided actuarial values for 2004.

Exhibit 5
Distribution of 64 State Pension Systems by FY04 Funding Ratio

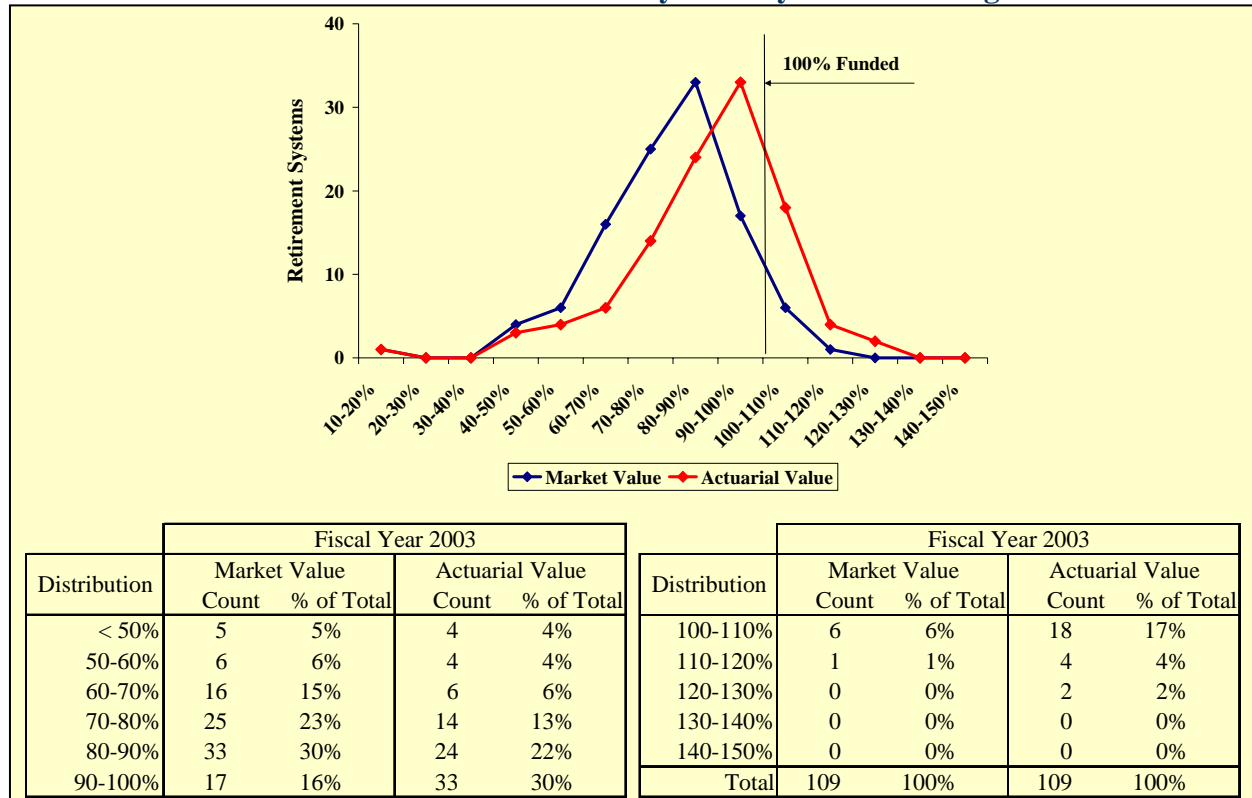


While 54 of the 64 plans, or 84%, have market value of assets below liabilities, Exhibit 5 demonstrates the extent of the shortfall. Three plans have assets less than 50% of liabilities; 13 plans have assets less than 70% of liabilities; and 28 plans have assets less than 80% of liabilities. Using actuarial value of assets to determine funding ratios, 49 of the 64 plans, or 77%, have assets below liabilities. Three plans have assets less than 50% of liabilities; 10 plans have assets less than 70% of liabilities; and 22 plans have assets less than 80% of liabilities.

Similar to Exhibit 5, Exhibit 6 examines the fiscal condition of the 109 state retirement systems which provided actuarial values for 2003.

Exhibit 6

Distribution of 109 State Pension Systems by FY03 Funding Ratio



Using market value of assets to determine funding ratios, 102 of the 109 plans, or 94%, have assets below liabilities. Five plans have assets less than 50% of liabilities; 27 plans have assets less than 70% of liabilities; and 52 plans have assets less than 80% of liabilities. Using actuarial value of assets to determine funding ratios, 85 of the 109 plans, or 78%, have assets below liabilities. Four plans have assets less than 50% of liabilities; 14 plans have assets less than 70% of liabilities; and 28 plans have assets less than 80% of liabilities.

Unfunded Actuarial Accrued Liability

The financial health of retirement systems can also be measured by comparing the size of the unfunded actuarial accrued liability (UAAL) to different metrics. Since assets under Governmental Accounting Standards Board (GASB) Statement No. 25⁴ are based on actuarial value, this section calculates the UAAL using actuarial value of assets.

Exhibit 7 shows the aggregate, average, and median size of the UAAL relative to the covered payroll over the last five years. Exhibit 7 also shows the 25th and 75th percentile for each year.

⁴ GASB No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*.

Exhibit 7
UAAL as a % of Covered Payroll by Fiscal Year

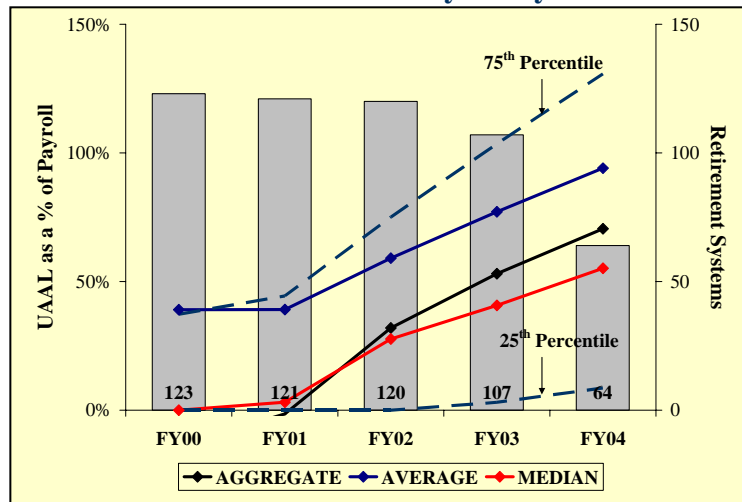


Exhibit 8 shows the aggregate, average, and median size of the UAAL relative to the actuarial value of assets over the last five years. Exhibit 8 also shows the 25th and 75th percentile for each year.

Exhibit 8
UAAL as a % of Actuarial Value of Assets by Fiscal Year

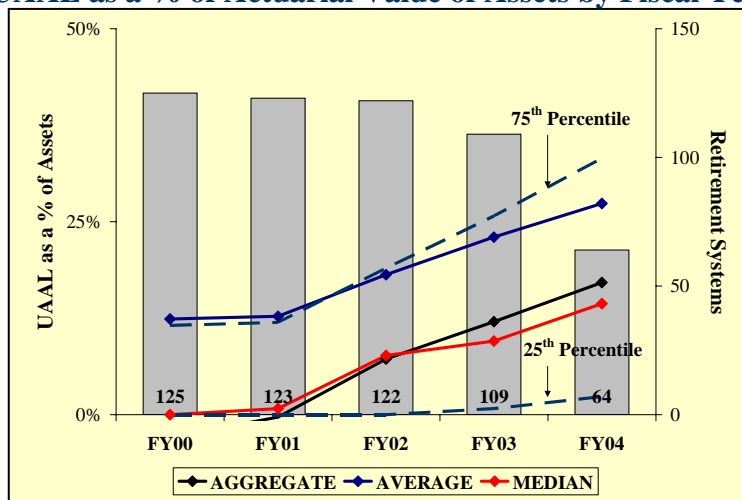
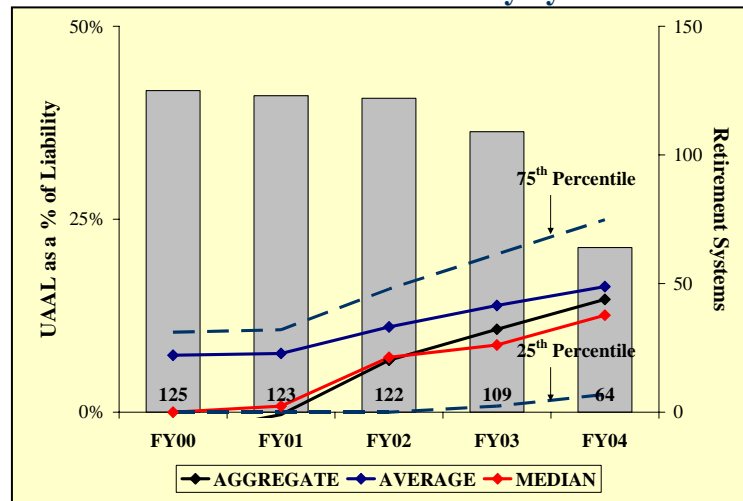


Exhibit 9 shows the aggregate, average, and median size of the UAAL relative to the actuarial accrued liability over the last five years. Exhibit 9 also shows the 25th and 75th percentile for each year.

Exhibit 9
UAAL as a % of Accrued Liability by Fiscal Year



The UAAL has increased relative to all metrics over the last five years, which is indicative of deteriorating financial health for most state retirement systems. However, the actuarial value of assets is often calculated using a smoothing method in order to reduce the impact of market fluctuations when determining pension fund contributions. If the UAAL were calculated using market value of assets, the positive market return over the last year would have led to a decline in the UAAL relative to these metrics, indicating improved financial health for most state retirement systems.

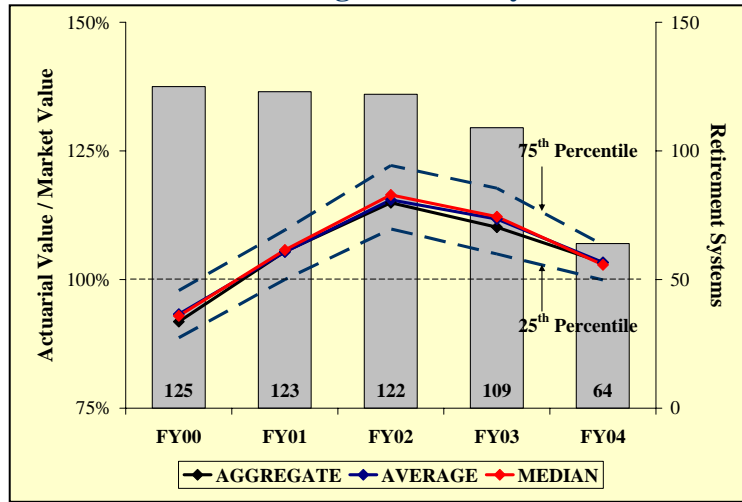
Market Value of Assets versus Actuarial Value of Assets

As mentioned earlier, the actuarial value of assets is often calculated using a smoothing method in order to reduce the effects of market volatility when determining contribution rates. For example, a five-year smooth market value method would recognize 20% of the gain or loss⁵ in the market value of assets over five years. Therefore, the poor market returns over the last few years are still being recognized when calculating the actuarial value of assets, despite the positive market return over the past year.

Exhibit 10 shows the aggregate, average, and median ratio of the actuarial value of assets (AVA) to the market value of assets (MVA) over the last five years. Exhibit 10 also shows the 25th and 75th percentile for each year. During FY01 and FY02, market values fell relative to actuarial values since only a fraction of the poor market returns during those years was recognized when calculating the actuarial value of assets. During the last two years, market values increased relative to actuarial values for the same reason, particularly since the actuarial value of assets was still recognizing the poor market returns from the previous few years.

⁵ A gain (loss) occurs when the actual rate of return is greater than (less than) the assumed rate of return.

Exhibit 10
AVA as a Percentage of MVA by Fiscal Year



Section 3: Asset Allocation

In this section we examine the investment strategies employed by state retirement systems.

Appendix B contains asset allocation information on the state retirement systems collected from the most recent annual reports. Included are allocations to the major asset classes. The average asset allocation across all 124 state retirement systems is shown below in Exhibit 11.

Exhibit 11
Average Asset Allocation for State Pension Plans

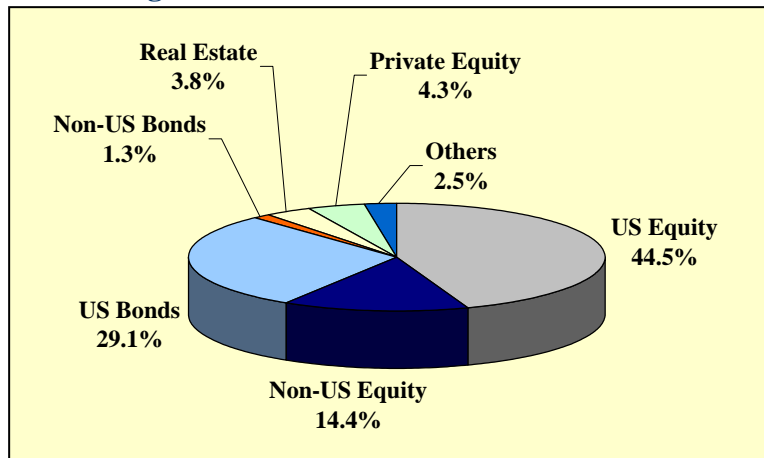


Exhibit 12 compares the average asset allocation for state pension plans over the last two years. Allocations to domestic and international equities increased over the last year, while the allocation to domestic bonds fell dramatically, from 33.6% to 29.1% during this period of time.

Exhibit 12
Average Asset Allocation for State Pension Plans

	<u>2003</u>	<u>2004</u>	<u>Change</u>
US Equity	42.7 %	44.5 %	1.8 %
Non-US Equity	13.3	14.4	1.1
US Bonds	33.6	29.1	-4.5
Non-US Bonds	1.2	1.3	0.1
Real Estate	4.2	3.8	-0.4
Private Equity	4.7	4.3	-0.4
Other	0.3	2.5	2.2

Portfolio expected return and risk are calculated using assumptions for the major asset classes, together with each retirement system's actual asset allocation. Exhibit 13 gives Wilshire's long-term return and risk assumptions for each asset class. We view these assumptions as fairly mainstream relative to those of other qualified investment professionals.

Exhibit 13
Wilshire's Asset Class Assumptions

	Expected Return	Risk
U.S. Equity	8.00 %	17.0 %
International Equity	8.00	19.0
Private Equity	11.00	30.0
Real Estate	7.00	16.0
U.S. Bonds	4.75	5.0
International Bonds	4.50	10.0

Exhibit 14 contains summary statistics on asset allocation for all state retirement systems. The median allocation⁶ is 46.0% to domestic equities and 15.3% to international equities. However, as the lowest and highest columns suggest, there is considerable variability in allocations among individual systems. The median state pension fund has an expected return, by Wilshire's estimate, of 7.5%. This is 0.5 percentage points less than the current average actuarial interest rate of 8.0%.

Exhibit 14
Summary Asset Allocation Statistics for State Systems

	Lowest (%)	Median (%)	Highest (%)
Domestic Equity	0.0 %	46.0 %	72.4 %
International Equity	0.0	15.3	26.0
Private Equity	0.0	3.0	13.9
Real Estate	0.0	3.5	9.8
Domestic Bonds	12.0	27.3	97.5
International Bonds	0.0	0.0	17.0
Other	0.0	1.1	26.9
Expected Returns	4.7 %	7.5 %	8.2 %

Exhibit 15 plots the expected return and risk for each of the 125 state retirement systems based upon their actual asset allocation. Systems which plot in the upper right employ more aggressive asset mixes while points in the lower left represent systems with more conservative mixes. The horizontal line is positioned at a return equal to 8.0%, the current average actuarial interest rate assumption used by state pension plans.

Using Wilshire's return forecasts, only 15 of the 125 state retirement systems, or 12%, are expected to earn long-term asset returns that equal or exceed their actuarial interest rate assumption. This is up from the five state retirement systems that were expected to earn long-term returns that equaled or exceeded their actuarial interest rate assumption in last year's report.

⁶ The "Median" column in Exhibit 14 represents the median for each asset class.

Exhibit 15
Projected Return & Risk by State Pension System

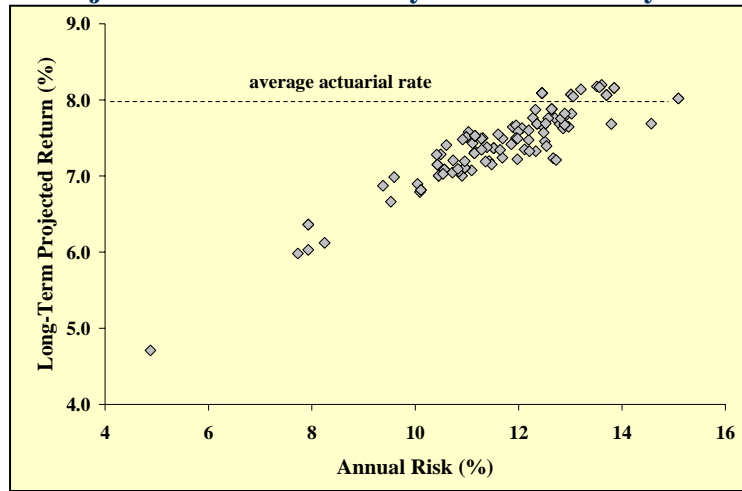
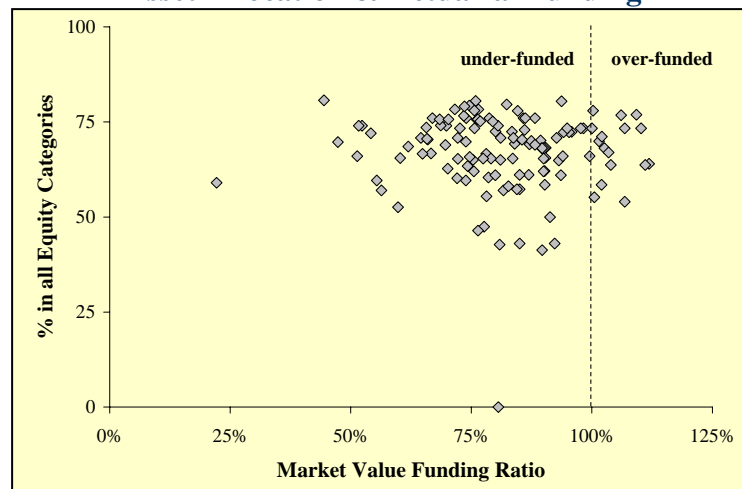


Exhibit 16 addresses the relationship between asset allocation and funding for all state systems. The allocation to equity asset classes, a proxy for the investment aggressiveness, is plotted on the vertical scale. The market value funding ratio is shown on the horizontal scale. There is no discernable relationship between asset allocation and funding.

Exhibit 16
Asset Allocation & Actuarial Funding



The vertical line in Exhibit 16 separates overfunded plans from underfunded plans. Casual observation shows that overfunded plans have approximately the same asset allocation pattern as underfunded plans. Statistically, there is no correlation between the allocation to equity and plan funding ratio. In summary, state retirement systems have a broad spectrum of asset allocations that is unrelated to the size of their unfunded liabilities.

We would like to thank Arun Chikyarappa, John Dashtara, Esmeralda del Bosque, Amy Hemphill, Kian Homayoonfar, Daneille London, Jim Omstrom, Ryan Shelby, Ryan Smith, Jana Stipanovich, and Paul Von Steenburg for their helpful contributions.

Appendix A: State Retirement Systems

<u>Retirement System</u>	<u>Report Date</u>
Alabama Employees' Retirement System	9/30/2002
Alabama Teachers' Retirement System	9/30/2003
Alaska Public Employees' Retirement System	6/30/2003
Alaska Teachers' Retirement System	6/30/2003
Arizona State Retirement System	6/30/2003
Arizona Public Safety Personnel Retirement System	6/30/2004
Arkansas Highway Employees Retirement System	6/30/2003
Arkansas Public Employees Retirement System	6/30/2004
Arkansas Teachers Retirement System	6/30/2003
California Public Employees' Retirement System	6/30/2003
The Regents of the University of California	6/30/2004
California State Teachers' Retirement System	6/30/2003
Colorado Fire & Police Pension Association	12/31/2002
Colorado PERA: Municipal Division Trust Fund	12/31/2003
Colorado PERA: State & School Division Trust Fund	12/31/2003
Connecticut State Employees' Retirement System	6/30/2002
Connecticut State Teacher's Retirement System	6/30/2002
District of Columbia Police Officers & Fire Fighters' Retirement System	9/30/2000
District of Columbia Teachers Retirement System	9/30/2000
Delaware Public Employees' Retirement System	6/30/2004
Florida Retirement Systems	6/30/2004
Georgia Employees Retirement System	6/30/2001
Georgia Teachers Retirement System	6/30/2003
Hawaii Employees' Retirement System	6/30/2004
Idaho Public Employee Retirement System	6/30/2004
Illinois State Employees' Retirement System	6/30/2004
Illinois State Universities Retirement System	6/30/2004
Illinois State Teachers' Retirement System	6/30/2004
Indiana Public Employees' Retirement Fund: Employees	6/30/2002
Indiana PERF: Police Officers' & Firefighters' Pension & Disability Fund	6/30/2002
Indiana State Teachers Retirement Fund	6/30/2004
Iowa Municipal Fire & Police Retirement System	6/30/2004
Iowa Public Employees Retirement System	6/30/2004
Kansas Public Employees Retirement System	6/30/2004
Kentucky Employees Retirement System: County Employees	6/30/2004
Kentucky Employees Retirement System: Employees	6/30/2004
Kentucky Teachers' Retirement System	6/30/2004
Louisiana State Employees' Retirement Systems	6/30/2004
Louisiana Teachers Retirement System	6/30/2004
Louisiana State Police Pension & Retirement System	6/30/2003
Louisiana School Employees' Retirement System	6/30/2003
Maine State Retirement System	6/30/2003
Maryland State Retirement & Pension System: Employees	6/30/2004
Maryland State Retirement & Pension System: State Police	6/30/2004
Maryland State Retirement & Pension System: Teachers	6/30/2004
Massachusetts Public Employee Retirement Administration Commission	1/1/2004
Massachusetts Public Employee Retirement Administration Commission: Teachers	1/1/2004
Michigan Municipal Employees Retirement System	12/31/2002
Michigan State Police Retirement System	9/30/2003
Michigan State Employees Retirement System	9/30/2003
Michigan Public School Employees Retirement System	9/30/2003
Minnesota Public Employees Retirement Association: Employees	6/30/2004
Minnesota Public Employees Retirement Association: Police & Fire	6/30/2004
Minnesota State Retirement System: Employees	6/30/2003
Minnesota State Retirement System: State Patrol	6/30/2003
Minnesota Teachers Retirement Association	6/30/2004
Mississippi Public Employees' Retirement System	6/30/2004
Missouri Highway & Transportation Employees and Highway Patrol Retirement System	6/30/2003
Missouri Non-Teachers School Employee Retirement System	6/30/2004

Appendix A: (cont.)

<u>Retirement System</u>	<u>Report Date</u>
Nebraska Retirement System	6/30/2004
Nevada Public Employees' Retirement System	6/30/2004
New Hampshire Employees Retirement System	6/30/2004
New Hampshire Firefighters & Police Officers Retirement System	6/30/2004
New Hampshire Teachers Retirement System	6/30/2004
New Jersey Public Employees Retirement System	6/30/2002
New Jersey Police & Firemen's Retirement System	6/30/2002
New Jersey State Police Retirement System	6/30/2002
New Jersey Teachers' Pension & Annuity Fund	6/30/2002
New Mexico Public Employees Retirement Association	6/30/2004
New Mexico Educational Retirement System	6/30/2003
New York State & Local Employees' Retirement System	3/31/2004
New York Police & Fire Retirement System	3/31/2004
New York State Teachers Retirement System	6/30/2003
North Carolina Local Governmental Employees' Retirement System	12/31/2003
North Carolina Teachers' & State Employees' Retirement System	12/31/2003
North Dakota Public Employees Retirement System	6/30/2004
North Dakota Teachers' Fund for Retirement	6/30/2004
Ohio Public Employees Retirement System	12/31/2002
Ohio Police & Fire Pension Fund	12/31/2002
Ohio School Employees Retirement System	6/30/2004
Ohio State Teachers Retirement System	6/30/2004
Oklahoma Firefighters Pension & Retirement System	6/30/2004
Oklahoma Public Employees Retirement System	6/30/2004
Oklahoma Police Pension & Retirement System	6/30/2004
Oklahoma Teachers Retirement System	6/30/2004
Oregon Public Employees Retirement System	6/30/2004
Pennsylvania State Employees' Retirement System	12/31/2003
Pennsylvania Public School Employees' Retirement System	6/30/2004
Rhode Island Employees Retirement System: Employees	6/30/2003
Rhode Island Municipal Employees Retirement System	6/30/2003
Rhode Island Employees Retirement System: Teachers	6/30/2003
South Carolina Police Officers Retirement System	6/30/2003
South Carolina Retirement System	6/30/2003
South Dakota Retirement System	6/30/2004
Tennessee Consolidated Retirement System Political Subdivision Pension Plan	6/30/2003
Tennessee Consolidated Retirement System State Employees, Teachers, Higher Education Employees P	6/30/2003
Texas County & District Retirement System	12/31/2003
Texas Employees Retirement System	8/31/2004
Texas Law Enforcement & Custodial Officers Supplemental Retirement Fund	8/31/2004
Texas Municipal Retirement System	12/31/2003
Texas Teachers Retirement System	8/31/2004
Utah Contributory Retirement System	12/31/2003
Utah Firefighters Retirement System	12/31/2003
Utah Noncontributory Retirement System	12/31/2003
Utah Public Safety Retirement System	12/31/2003
Vermont State Employees' Retirement System	6/30/2004
Vermont Municipal Employees' Retirement System	6/30/2004
Vermont State Teacher's Retirement System	6/30/2004
Virginia Retirement System	6/30/2003
Washington Law Enforcement Officers & Fire Fighters' Retirement System 1	6/30/2004
Washington Law Enforcement Officers & Fire Fighters' Retirement System 2	6/30/2004
Washington Public Employees' Retirement System Plan 1	6/30/2004
Washington Public Employees' Retirement System Plan 2	6/30/2004
Washington School Employees' Retirement System Plan 2 & 3	6/30/2004
Washington Teachers' Retirement System Plan 1	6/30/2004
Washington Teachers' Retirement System Plan 2 & 3	6/30/2004
Washington State Patrol Retirement System	6/30/2004
West Virginia Public Employees Retirement System	6/30/2004