Public Fund Survey Summary of Findings for FY 2005

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Table of Contents

Overview of the Public Fund Survey

The Public Fund Survey is an online compendium of key characteristics of most of the nation's largest public retirement systems. The Survey is sponsored by the National Association of State Retirement Administrators and the National Council on Teacher Retirement.

Beginning with fiscal year 2001, the Survey presents data on public retirement systems that provide pension and other benefits for a combined 12.8 million active (working) members and six million annuitants (retired members, disabilitants and beneficiaries). Combined, systems in the Survey hold in trust $2.26 trillion, invested in diversified portfolios of public and private equities, corporate and government bonds, real estate, cash, and other assets. The membership and assets of systems included in the Survey represent approximately 88 percent of the entire state and local government retirement system community.

According to the U.S. Census Bureau, employees of state and local government comprise more than ten percent of the nation's workforce. These are public school teachers and administrators, firefighters judges, police officers, public health officials, correctional officers, and others providing myriad public services.

The source of Survey data is primarily public retirement system annual financial reports, and also includes actuarial valuations, benefits guides, system websites, and input from system representatives. The Survey is updated continuously as new data, particularly annual financial reports, becomes available. This report of findings focuses on fiscal year 2005, which is the most recent available data for most systems. As new information becomes available for FY 05, the results presented in this report may change slightly.

A key objective of the Survey is to increase the transparency of the public pension community and pension funding levels, providing a factual and objective basis on which to discuss many issues related to retirement benefits for public employees.

The Public Fund Survey is accessible online at www.publicfundsurvey.org.

The Meaning and Implications of Actuarial Funding Ratios

Perhaps the most recognized measure of a public retirement plan's health is its actuarial funding ratio, derived by dividing the actuarial value of plan assets by the value of liabilities accrued to-date. Most pension benefits for public employees are pre-funded, meaning that all or most of the assets needed to fund pension liabilities are accumulated during an employee's working life, then paid out in the form of retirement benefits.

Pre-funding is one way of financing a pension benefit. The opposite of pre-funding is pay-as-you-go, in which current obligations are paid with current receipts. In most cases, a pay-as-you-go pension plan eventually becomes too expensive to support with only tax receipts and contributions. Investment earnings account for most revenue generated by a pre-funded pension plan, reducing the need for contributions from employees and employers (taxpayers).

A pension plan whose assets equal its liabilities is funded at 100% and is *fully funded.* A plan with assets that are less than its accrued liabilities is considered *underfunded*.

Underfunding is a matter of degree, not of kind. That is, underfunding is not necessarily a sign of fiscal or actuarial distress; many pension plans remain underfunded for decades with no detrimental consequences.

As an illustration, the status of a plan whose funding level declines from 101 percent in year one to 99 percent in year two, has changed from overfunded to underfunded. Although the nomenclature describing the plan's funding condition has changed completely, the financial reality of its funding condition has changed little.

The critical factor in assessing the current and future health of a pension plan is not so much the plan's actuarial funding level, as whether or not funding the plan's liabilities creates fiscal stress for the pension plan sponsor.

Other factors held equal, a pension plan that is fully funded is better than one that is underfunded. Yet a plan's funded status is simply a snapshot in an ongoing pre-funding process. It is a single frame of a movie that spans decades. There is nothing magic about a pension plan being fully funded, and even with no changes to funding policies or plan design, most underfunded public pension plans will be able to pay promised benefits for decades. Pension liabilities typically extend years into the future, and it is during this time that a pension fund can accumulate the assets it needs to fund its future liabilities.

All plans, underfunded and fully funded alike, that are open to newly hired workers, rely on future contributions and investment returns. A key difference between underfunded and fully funded plans is that underfunded plans require income to eliminate, or amortize, the shortfall between their assets and their accrued liabilities. The degree of underfunding, along with other factors, is critical to accurately assess the plan's overall health.

In addition to the actuarial funding ratio, other factors of a pension plan's health include:

- the funding amortization period
- required current and future contribution rates
- plan demographics
- the sustainability and suitability of the plan design
- the plan's governance structure
- the fiscal health of the plan sponsor
- the plan sponsor's commitment to funding the plan

Much of this information is available in annual reports and other material published by most public retirement systems.

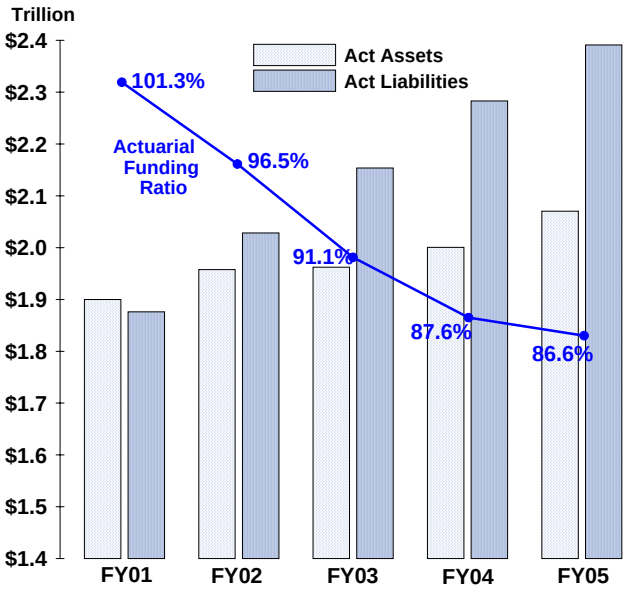
Attaining full funding of a pension plan has been likened to a mortgage, in which the homeowner has thirty years to resolve the obligation. At the end of the 30-year period, when it is paid off, the mortgage would be considered fully funded. Although at any point during the thirty-year period, the outstanding mortgage may be considered an unfunded liability, more relevant considerations are a) whether the homeowner has the resources to continue meeting his or her mortgage payments until the obligation is resolved; and b) whether the obligation is being amortized.

Likewise, more pertinent considerations with regard to funding a public pension plan are the ability of the plan sponsor to continue to pay promised benefits and to make required contributions without causing fiscal stress; and whether the plan's unfunded liability is being amortized.

Past and Current Funding Levels

Figure A summarizes aggregate assets and liabilities and the resulting actuarial funding ratio, for the 114 plans in the Survey for which all five years of data are available. As the figure shows, the aggregate public pension funding level is lower in FY 05 by one percent from the prior year.

Figure A: Change in aggregate actuarial assets, liabilities, and funding levels, FY 01 to FY 05



After four years of consecutive declines, the aggregate funding level is projected to rise in FY 06, as growth in assets is expected to outpace growth in liabilities.

Figure B plots funding levels of 117 individual plans. The size of each circle is roughly proportionate to the plan's size: larger plans are indicated by larger bubbles; smaller plans, by smaller bubbles. 78 of the 117 plans (66.7 percent) are funded at 80 percent or higher. The median funding level for the 117 plans is 84.9 percent.

(Plans shown in Figure B do not include the eight plans in the Survey that use the aggregate cost actuarial method, which does not identify an unfunded liability.)

Figure C presents the changing distribution of plan funding levels since FY 01. The decline in funding levels has been universal (except for those plans that use the aggregate cost valuation method). The median funding level has declined from around 100 percent in FY 01 to 85 percent in FY 05.

Figure B: Actuarial funding ratios for 117 public pension plans

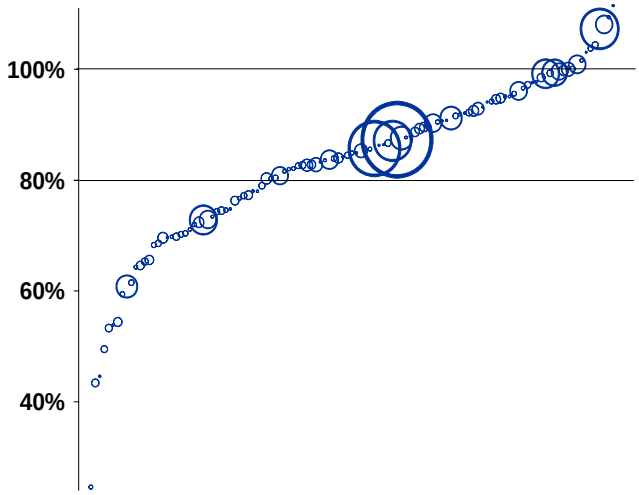


Figure C: Change in distribution of funding levels, FY01 to FY 05

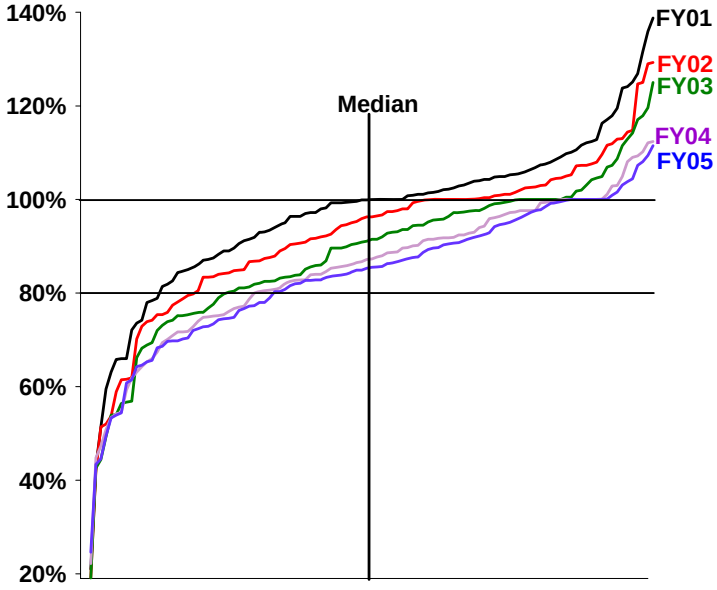
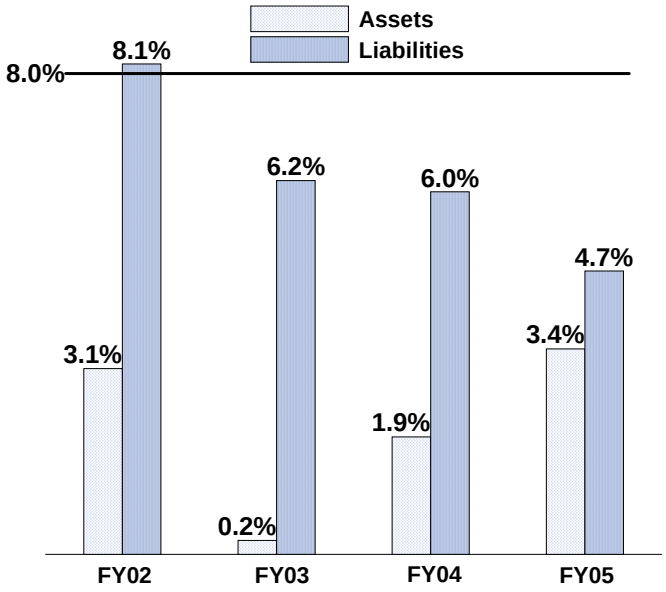


Figure D identifies the aggregate annual increase in the actuarial values of assets and liabilities. When liability growth exceeds the rate of growth in assets, funding levels decline. As funds incorporate more of the investment gains they have experienced since equity markets began rising in March 2003, actuarial asset values will rise, and are projected to exceed liability growth in FY 06, with the result being an improvement in funding levels.

Figure D: Annual change in the aggregate actuarial value of assets and liabilities, FY 02 to FY 05



Declining liability growth is chiefly attributable to four factors:

- Fewer benefit enhancements
- Fewer early retirement incentives
- Lower inflation assumptions
- Fewer discretionary cost-of-living adjustments

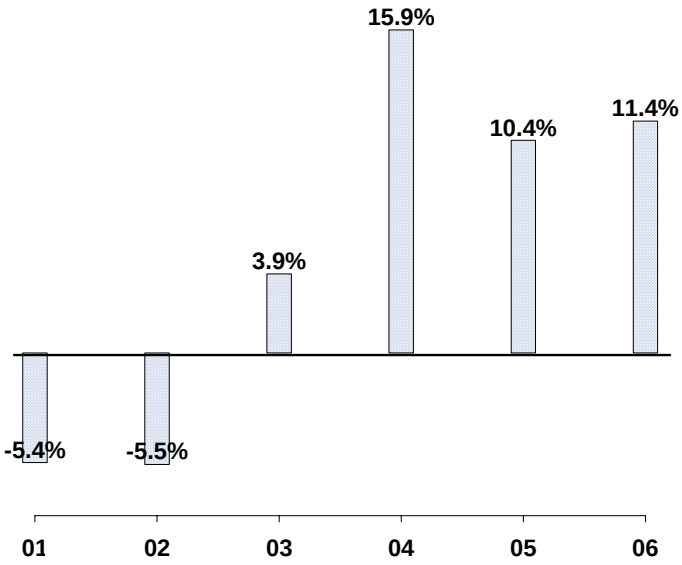
These factors are somewhat offset by lower mortality rates, which mean that people are living longer, thereby collecting a retirement benefit for a longer period of time.

Lower liability growth is a positive development for at least two reasons. First, funding levels will begin to improve only when growth in the actuarial value of assets exceeds liability growth, a feat made easier when liability growth is lower. Also, lower liability growth is a confirmation that funding levels can be affected, if not controlled, by plan sponsors (legislatures and public retirement boards).

Another indication that funding levels will rise in the near future are the positive investment returns for the public pension community. Figure E presents median annual public pension fund investment returns for periods ended June 30 (the fiscal year-end date for most funds). As stated above, because most plans phase in investment gains and losses over several years, most funds have not yet recognized most the investment gains since March 2003, and of course, they have recognized none of the FY 06 gains.

The most recent actuarial valuation date for nearly one-half of all plans in the Survey is prior to 6/30/05. As investment gains from FY 04 to FY06 are more fully recognized and as the effects of the losses from FY 01 and FY 02 are phased out of the calculation, the actuarial value of assets will increase markedly.

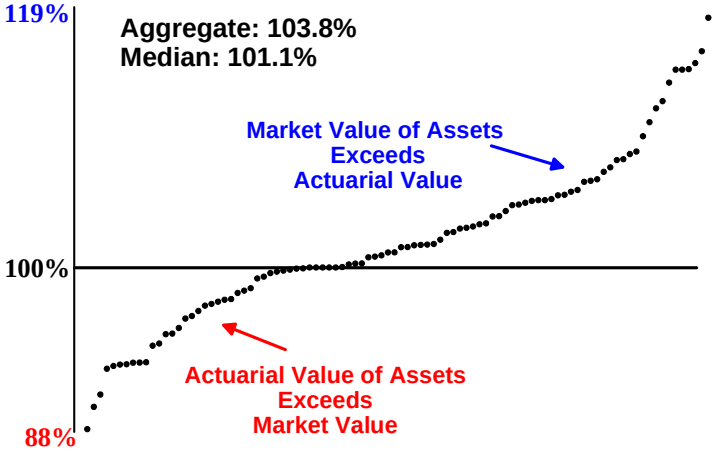
Figure E: Median annual public pension fund investment returns for years ended 6/30, 2001 to 2006



Source: Callan Associates

One indication of this anticipated improvement in the actuarial value of assets is indicated in Figure F, which plots the actuarial value of assets as a percentage of the market value of assets for the 92 plans for which this data is available for FY 05.

Figure F: Distribution of plan market value of assets as a percentage of actuarial value of assets



In the aggregate, the market value of assets exceeds funds' actuarial value by 3.8 percent, a figure that is

certain to rise as strong returns from FY 05 and FY 06 are added.

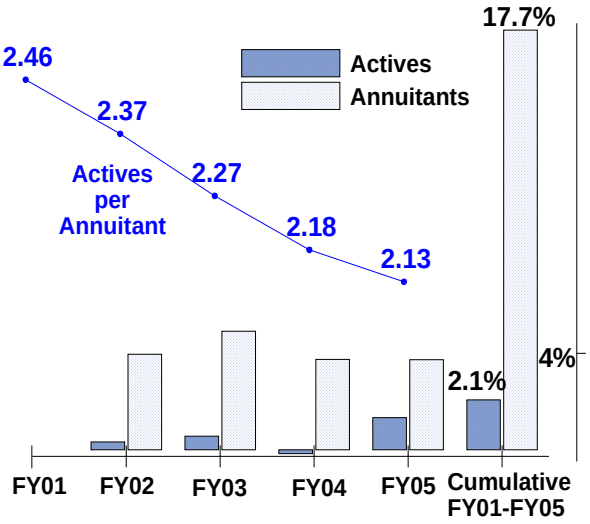
(Plans in Figure F whose actuarial value of assets equal 100 percent of their market value of assets, are those that do not phase in investment gains and losses. As a result, the actuarial value of their assets always equals their market value.)

Changes in Membership

The Survey measures two classes of members: actives, who are working; and annuitants, which includes any member receiving a regular benefit from the system: retired members, beneficiaries and disabilitants.

Figure G summarizes changes in these membership groups from FY 01 to FY 05. A major trend affecting state and local government pension plans in recent years is the rate of growth among annuitants that significantly exceeds the rate of growth among actives.

Figure G: Change in active members and annuitants, FY 01 to FY 05



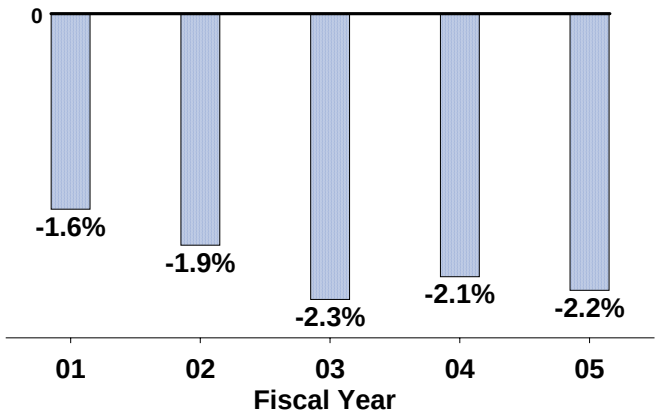
This trend has reduced the ratio of actives to annuitants, from 2.46 in FY 01 to 2.13 in FY 05. A declining ratio of actives to annuitants does not necessarily create a problem, because most public pensions are pre-funded, meaning that they accumulate all or most assets needed to fund retirement benefits during the working (active) life of each participant.

However, to the extent that a plan is underfunded, a low or declining ratio of actives to annuitants can complicate the plan's ability to move toward full funding, as fewer active, contributing workers (on a relative basis) are available to amortize a plan's unfunded liability.

A declining ratio of actives to annuitants in a pre-funded plan can have actuarial and operational effects on a pension plan and a retirement system. For example, fewer contributing active members creates a more negative cash flow (contributions minus benefit payments and administrative expenses). This, in turn, can require a plan to maintain a larger percentage of its assets in more liquid securities or to make other adjustments to its asset allocation which may reduce long-term investment returns. In addition, annuitants tend to require a higher level of service from a retirement system than actives.

Figure H plots the median external cash flow among systems in the Public Fund Survey. The trend of external cash flows becoming increasingly negative is an expected outcome and is likely to continue as long as the rate of growth among annuitants continues to outpace growth among actives.

Figure H: Median external cash flow, FY 01 to FY 05

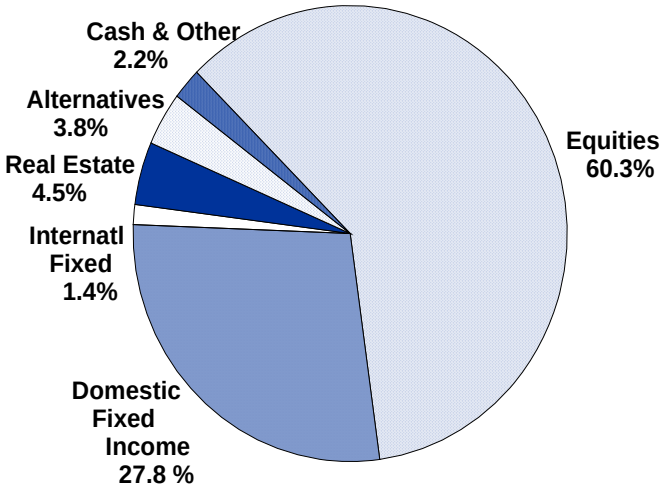


Of the 87 plans whose external cash flow was measured in FY 05, 78, or 90 percent, had a negative external cash flow.

Asset Allocation and Other Investment Issues

Figure I presents average asset allocations for the 90 systems for which this data is available. These averages are based on a range of dates, but mostly are 6/30/05 or 12/31/05. Asset allocations remain little changed from the prior year.

Figure I: Average Asset Allocation, 90 Funds



The averages in Figure I present a somewhat distorted picture, as many funds do not invest in two classes: Alternatives and Real Estate.

Figure J: Comparison of Average Allocations to Real Estate and Alternatives for All Funds and Only Those With an Allocation to These Classes

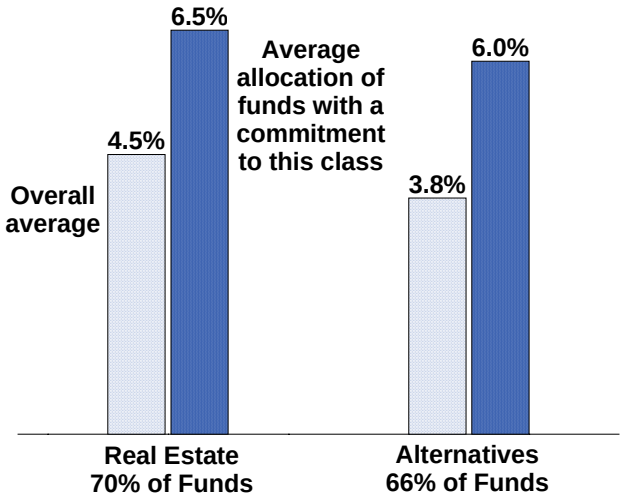


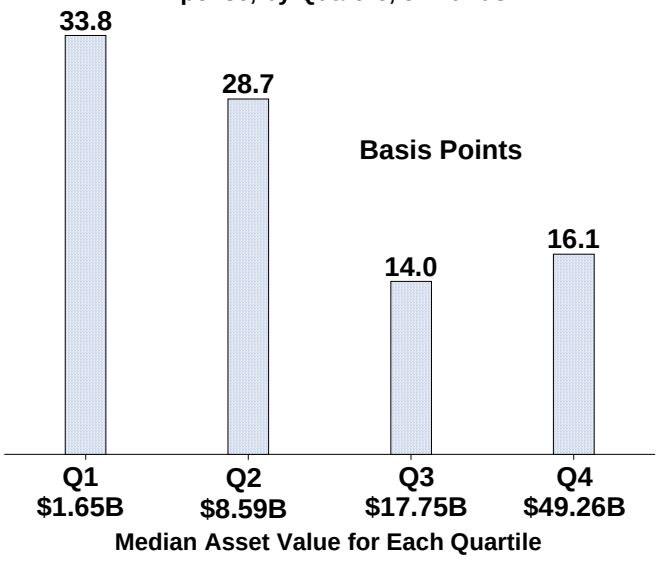
Figure J compares the overall allocation to Real Estate and Alternatives with the allocation of only those funds that have committed assets to these classes. Figure J also indicates the percentage of funds in the Survey that are invested in each of these classes.

Excluding from the average calculation the funds with zero allocation to these classes produces a more accurate depiction of the actual allocation by funds who have committed to these classes: 6.5 percent vs. 4.5 percent for real estate and 6.0 percent vs. 3.8 percent for alternatives.

Figure K presents median investment expense data, by quartile, for the 84 funds in the Survey for which this data is available. Larger funds generally are able to use their size to negotiate lower asset management fees than smaller funds and individual investors.

Expenses for the largest quartile are higher than those for the third quartile of funds, apparently because more funds in the largest quartile invest in higher-cost asset classes, such as real estate and alternatives, which includes hedge funds and venture capital.

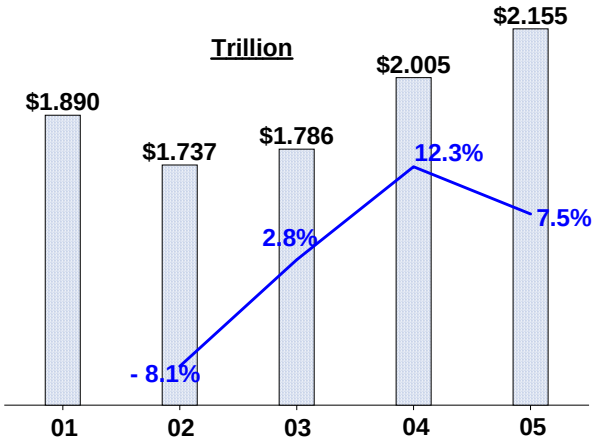
Figure K: FY 05 Median Investment Management Expense, by Quartile, 84 Funds



Changes in Market Values, Benefits, and Contributions

The market value of system assets in the Survey grew by 7.5 percent over FY 04. This marks the third consecutive year of growth following the decline in FY 02. The data presented in Figure K is for the 94 systems that have reported an FY 05 market value. The value of all assets represented in the Public Fund Survey is $2.26 trillion.

Figure K: Combined Market Value of Assets of Systems in the Public Fund Survey and Annual Change, FY 01 to FY 05, 94 Systems

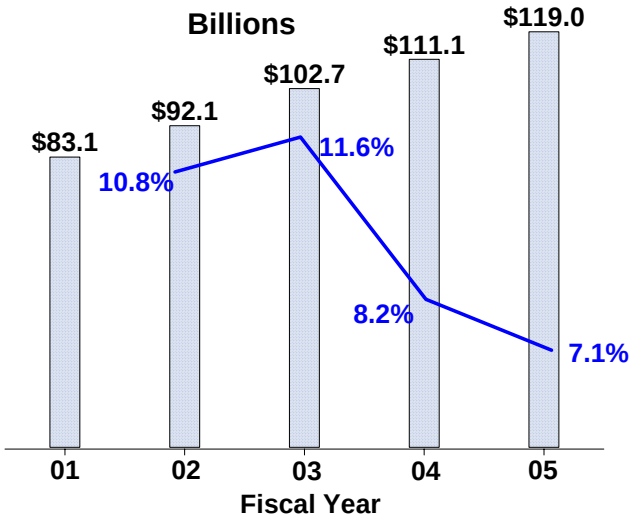


In light of strong market gains since FY 05, (see Figure E) system assets are certain to continue their upward trend in FY 06.

Benefits paid by systems in the Survey continue to grow, but at a slower pace for the second consecutive year. Figure L plots pension benefits paid by the 91 systems for which five years of data are available, and the annual percentage change from the prior year. Slower growth in benefit payments is consistent with anecdotal observations of fewer cost-of-living adjustments and benefit enhancements approved by legislatures and retirement boards in recent years.

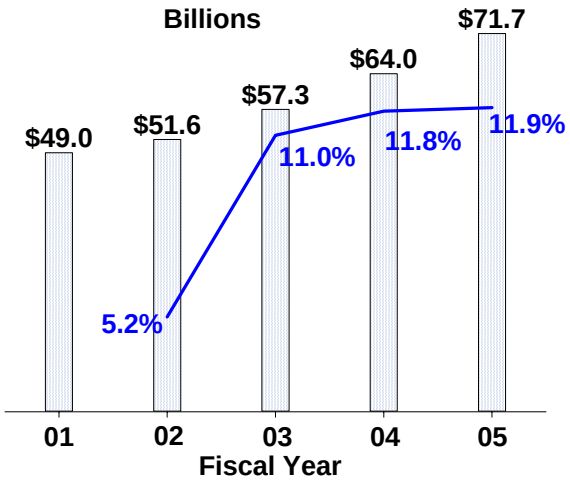
Growth in benefits is driven chiefly by a) increases in the number of annuitants, a group that is growing each year by around four percent, as shown in Figure G; b) higher benefits earned by new annuitants, as their benefits are higher than their predecessors due to inflation; and c) cost-of-living adjustments for annuitants. Approximately two-thirds of the plans in the Survey provide some form of automatic COLA.

Figure L: Pension Benefits Paid and Annual Change in Payments, FY 01 to FY 05, 91 Systems



Contributions, made by both employees and employers, have grown sharply following the 2000-2003 market decline. Data in Figure M excludes proceeds of pension bonds and contributions made for medical benefits., but includes debt service payments on pension bonds.

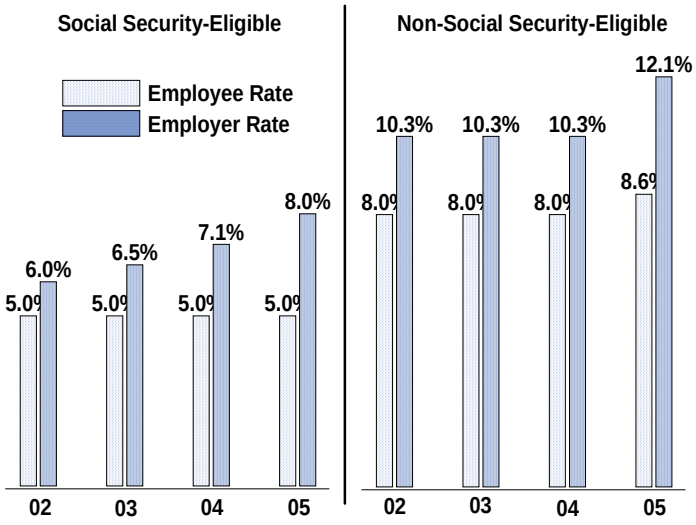
Figure M: Pension Contributions and Annual Change in Contributions, FY 01 to FY 05, 89 Systems



Contribution rates also are rising, as shown in Figure N. Rates are rising for employers or employees, or both, at many, but not all plans. The rates shown in Figure N pertain only to public school teachers and general employee, and do not

include public safety personnel such as firefighters and police officers.

Figure N: Median Contribution Rates, FY 01 to FY 05



Approximately one-fourth of all employees of state and local government do not participate in Social Security, including nearly one-half of all public school teachers and most or substantially all public employees in Alaska, Colorado, Louisiana, Maine, Massachusetts, Ohio, and Nevada. Contribution rates usually are higher for non-Social Security eligible workers, because their benefits are usually higher, to compensate for the absence of Social Security.

Employers and employees participating in non-Social Security plans each save the 6.2 percent FICA tax used to fund Social Security.

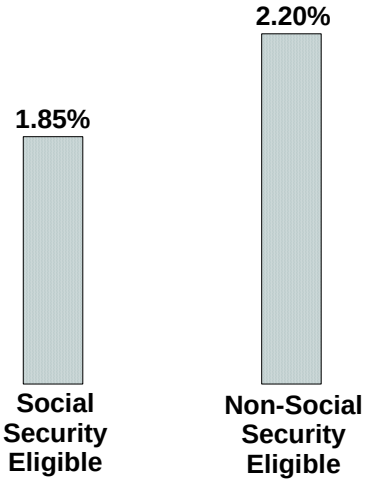
Retirement Multipliers

Retirement multipliers are a major factor used to determine a pension benefit. Typically, an annual pension benefit is determined by multiplying an employees final average salary (usually averaged over the final three or five years of service) by the years of service, by the retirement multiplier. For example, an employee who retirees with 20 years of service and a final average salary of $55,000 from a plan with a multiplier of 2.0% will receive an annual benefit of $22,000:

$$\$55{,}000 \; x \; 20 \; x \; 2.0\% = \$22{,}000$$

Figure O illustrates median retirement multipliers for plans whose employees are Social Security-eligible and –ineligible. The figures are unchanged from the previous year.

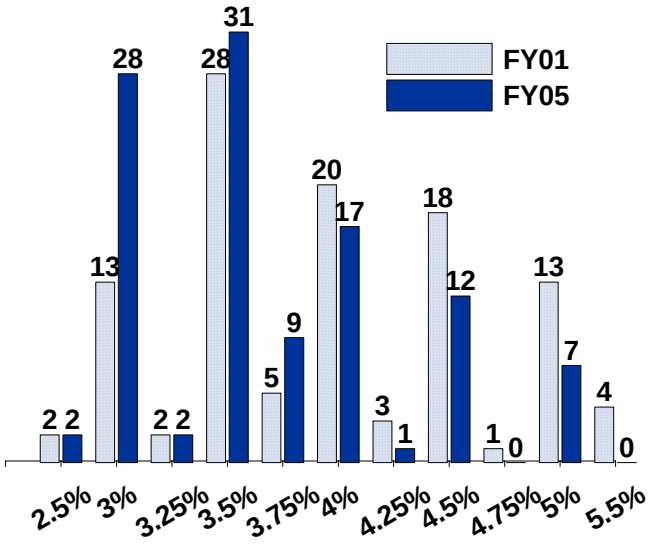
Figure O: Median Retirement Multipliers, FY 05



Inflation and Investment Return Actuarial Assumptions

Among the many actuarial assumptions incorporated into calculating a plan's long-term liabilities, two are particularly important, i.e., rates of inflation and investment return. Figure P plots the change in the distribution of underlying inflation assumptions. In response to lower inflation rates in the U.S. in recent years, many plans have reduced their inflation assumption. In particular, the number of assumed rates above 4.0 percent has been reduced by nearly one-half.

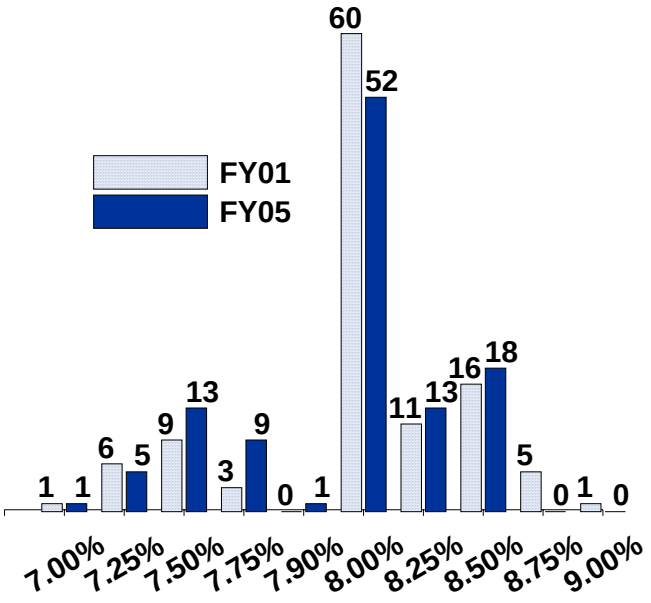
Figure P: Distribution of Inflation Assumptions, FY 01 and FY 05



As shown in Figure Q, many plans have also adjusted, mostly downward, their assumed nominal (non-inflation-adjusted) investment return assumption. Although the most popular assumption remains 8.0 percent, the number of plans using that assumption has declined, and the number of plans using an assumption of lower than 8.0 percent has increased. The predominant and median figure, however, remain 8.0 percent.

As many plans have reduced their nominal inflation assumption, the median assumption for the real rate of return has increased from 4.0 percent in FY 02 to 4.50 percent in FY 05.

Figure Q: Distribution of Investment Return Assumptions, FY 01 and FY 05



Since a majority of revenue for most public pension funds comes from investment earnings, the nominal and real rate of return assumptions can have a dramatic effect on a plan's funding level and required contributions.

Appendix A
Summary of Systems in the Public Fund Survey

State	Retirement System	Asset Mkt Value (000s)	Actives	Annuitants	As of
AK	Alaska Public Employees Retirement System	$8,590,752	33,612	19,572	6/30/2005
AK	Alaska Teachers Retirement System	4,026,995	9,688	8,707	6/30/2005
AL	Retirement Systems of Alabama	26,866,450	213,395	92,644	9/30/2005
AR	Arkansas Teachers Retirement System	8,811,147	68,770	23,858	6/30/2005
AR	Arkansas Public Employees Retirement System	4,640,778	42,938	21,080	6/30/2005
AZ	Arizona State Retirement System	22,607,385	212,275	80,582	6/30/2005
AZ	Arizona Public Safety Personnel Retirement System	4,608,042	16,317	8,160	6/30/2005
AZ	Phoenix Employees' Retirement System	1,549,572	9,036	3,968	6/30/2005
CA	California Public Employees Retirement System	190,201,717	791,194	427,092	6/30/2005
CA	California State Teachers Retirement System	126,447,000	450,282	201,241	6/30/2005
CA	Los Angeles County Employees Retirement Association	32,026,105	86,384	49,853	6/30/2005
CA	San Francisco City and County Retirement System	13,135,263	32,805	19,573	6/30/2005
CA	San Diego County Employees Retirement Association	6,358,473	16,980	11,436	6/30/2005
CA	Contra Costa County Employees' Retirement Association	4,221,722	9,205	6,437	12/31/2005
CO	Colorado Public Employees Retirement Association	34,528,798	180,630	71,401	12/31/2005
CO	Denver Public Schools Retirement System	2,667,851	7,212	5,961	12/31/2005
CT	Connecticut State Employees Retirement System	8,146,302	48,919	36,705	6/30/2005
CT	Connecticut Teachers Retirement Board	6,915,050	50,836	24,870	6/30/2005
DC	District of Columbia Retirement Board	2,613,375	10,750	2,774	9/30/2004
DE	Delaware Public Employees Retirement System	5,928,004	40,430	20,363	6/30/2005
FL	Florida Retirement System	108,221,718	648,379	236,974	6/30/2005
GA	Georgia Teachers Retirement System	45,278,680	203,252	66,282	6/30/2005
GA	Georgia Employees Retirement System	14,811,584	132,657	44,753	6/30/2005
HI	Hawaii Employees Retirement System	9,195,868	63,073	33,301	6/30/2005
IA	Iowa Public Employees Retirement System	18,767,229	160,905	79,604	6/30/2005
ID	Idaho Public Employee Retirement System	8,453,798	64,391	27,246	6/30/2005
IL	Illinois Teachers Retirement System	34,085,218	155,850	82,575	6/30/2005
IL	Illinois Municipal Retirement Fund	19,872,769	170,928	82,108	12/31/2005
IL	Illinois State Universities Retirement System	13,350,277	71,662	39,800	6/30/2005
IL	Chicago Public School Teachers Pension and Retirement Fund	10,777,855	37,521	20,954	6/30/2005
IL	Illinois State Employees Retirement System	10,494,148	69,163	54,828	6/30/2005
IN	Indiana Public Employees Retirement Fund	13,385,346	154,941	56,707	6/30/2005
IN	Indiana State Teachers Retirement Fund	7,179,716	73,923	38,512	6/30/2005
KS	Kansas Public Employees Retirement System	11,324,365	147,751	61,125	6/30/2005
KY	Kentucky Teachers Retirement System	13,519,998	72,281	37,402	6/30/2005
KY	Kentucky Retirement Systems	12,405,191	143,083	69,266	6/30/2005
LA	Louisiana Teachers Retirement System	12,685,913	87,643	54,525	6/30/2005
LA	Louisiana State Employees Retirement System	7,226,055	64,168	37,015	6/30/2005
MA	Massachusetts State Employees' Retirement System	16,489,206	82,152	48,766	12/31/2005
MA	Massachusetts Teachers Retirement Board	15,973,000	84,255	39,755	12/31/2003
MD	Maryland State Retirement and Pension System	32,073,719	188,050	100,196	6/30/2005
ME	Maine State Retirement System	8,972,263	52,434	32,250	6/30/2005
MI	Michigan Public School Employees Retirement System	39,361,450	321,057	151,706	9/30/2005
MI	Michigan State Employees Retirement System	10,132,826	33,770	45,801	9/30/2005
MI	Municipal Employees' Retirement System of Michigan	4,907,442	37,627	20,171	12/31/2005
MN	Minnesota Teachers Retirement Association	15,928,604	74,552	38,957	6/30/2005
MN	Minnesota Public Employees Retirement Association	15,262,263	155,890	63,445	6/30/2005
MN	Minnesota State Retirement System	8,684,997	51,945	26,048	6/30/2005
MN	Minneapolis Employees Retirement Fund	1,282,717	552	4,981	6/30/2004
MN	St. Paul Teachers' Retirement Fund Association	934,667	4,349	2,505	6/30/2005
MN	Minneapolis Teachers Retirement Fund Association	745,215	4,756	3,839	6/30/2005
MN	Duluth Teachers Retirement Fund Association	267,384	1,164	1,153	6/30/2005

Appendix A
Summary of Systems in the Public Fund Survey

State	Retirement System	Asset Mkt Value (000s)	Actives	Annuitants	As of
MO	Missouri Public Schools Retirement System	25,807,503	120,448	52,463	6/30/2005
MO	Missouri State Employees Retirement System	6,479,568	56,336	26,177	6/30/2005
MO	Missouri Local Government Employees Retirement System	3,188,384	33,257	11,429	6/30/2005
MO	MoDOT & Patrol Employees' Retirement System	1,441,055	9,166	6,835	6/30/2005
MO	St. Louis Public School Retirement System	1,061,479	5,549	3,606	12/31/2005
MS	Mississippi Public Employees Retirement System	17,368,296	157,900	66,916	6/30/2005
MT	Montana Public Employees Retirement Board	3,916,187	33,658	18,024	6/30/2005
MT	Montana Teachers Retirement System	2,487,137	18,247	10,299	6/30/2005
NC	North Carolina Retirement Systems	63,949,939	432,874	165,305	6/30/2005
NC	Charlotte Firefighters' Retirement System	263,340	897	435	6/30/2004
ND	North Dakota Teachers Fund for Retirement	1,530,194	9,801	5,586	6/30/2005
ND	North Dakota Public Employees Retirement System	1,480,185	18,056	6,042	6/30/2005
NE	Nebraska Retirement Systems	6,121,977	54,245	13,226	6/30/2005
NH	New Hampshire Retirement System	4,391,286	50,420	17,790	6/30/2004
NJ	New Jersey Division of Pension and Benefits	73,215,663	503,328	211,968	6/30/2005
NM	New Mexico Public Employees Retirement Association	10,258,725	54,237	21,959	6/30/2005
NM	New Mexico Educational Retirement Board	7,451,138	63,362	26,100	6/30/2005
NV	Nevada Public Employees Retirement System	17,747,591	93,995	30,999	6/30/2005
NY	New York State and Local Retirement Systems	128,037,714	587,982	328,357	3/31/2005
NY	New York State Teachers Retirement System	84,908,519	256,177	125,325	6/30/2005
NY	New York City Employees Retirement System	35,526,319	174,997	127,345	6/30/2005
NY	New York City Teachers Retirement System	30,492,170	105,391	62,728	6/30/2005
OH	Ohio State Teachers Retirement System	59,465,401	195,725	115,395	6/30/2005
OH	Ohio Public Employees Retirement System	57,734,715	381,413	151,758	12/31/2005
OH	Ohio Police & Fire Pension Fund	9,514,236	28,441	24,136	12/31/2004
OH	Ohio School Employees Retirement System	8,866,130	122,855	61,433	6/30/2005
OK	Oklahoma Teachers Retirement System	7,540,964	84,286	40,879	6/30/2005
OK	Oklahoma Public Employees Retirement System	5,504,489	43,918	23,679	6/30/2005
OR	Oregon Employees Retirement System	49,260,515	149,922	100,124	6/30/2005
PA	Pennsylvania Public School Employees Retirement System	52,111,426	248,000	152,000	6/30/2005
PA	Pennsylvania State Employees Retirement System	28,751,871	109,981	101,179	12/31/2005
RI	Rhode Island Employees Retirement System	6,259,893	36,006	21,664	6/30/2004
SC	South Carolina Retirement Systems	24,808,447	205,989	99,099	6/30/2005
SD	South Dakota Retirement System	6,159,935	35,774	17,548	6/30/2005
TN	Tennessee Consolidated Retirement System	27,216,262	206,150	89,893	6/30/2005
TX	Teacher Retirement System of Texas	94,034,973	739,479	248,509	8/31/2005
TX	Texas Employees Retirement System	21,292,483	131,331	65,720	8/31/2005
TX	Texas County & District Retirement System	13,481,178	107,212	30,347	12/31/2005
TX	Texas Municipal Retirement System	13,266,433	93,780	29,970	12/31/2005
TX	Houston Firefighters Relief and Retirement Fund	2,286,004	3,891	2,131	6/30/2005
TX	Austin Employees' Retirement System	1,460,767	7,638	3,297	12/31/2005
UT	Utah Retirement Systems	17,458,149	97,906	36,445	12/31/2005
VA	Virginia Retirement System	43,059,892	325,025	119,360	6/30/2005
VA	Educational Employees' Supplementary Retirement System of	1,647,713	18,720	7,430	6/30/2005
VT	Vermont Teachers Retirement System	1,333,532	10,744	4,592	6/30/2005
VT	Vermont State Employees Retirement System	962,944	8,068	4,002	6/30/2005
WA	Washington Department of Retirement Systems	46,580,077	289,422	114,213	6/30/2005
WI	Wisconsin Retirement System	67,883,042	262,085	126,445	12/31/2004
WV	West Virginia Consolidated Public Retirement Board	5,562,000	55,477	47,007	6/30/2005
WY	Wyoming Retirement System	5,632,113	38,248	17,693	12/31/2005
	Total	$2,263,202,215	12,823,591	6,033,689	

Appendix B
Plan Summary

State	Plan	Actuarial Funding Ratio	Actuarial Value of Assets (000s)	Actuarial Liabilities (000s)	Unfunded Liability (Surplus) (000s)	Actuarial Valuation Date	For Fiscal Year Ended
AK	Alaska PERS	70.2	8,030,414	11,443,916	3,413,502	6/30/2004	6/30/2005
AK	Alaska Teachers	64.3	3,845,370	6,123,600	2,278,230	6/30/2004	6/30/2005
AL	Alabama Teachers	89.6	18,704,009	20,886,190	2,182,181	9/30/2004	9/30/2005
AL	Alabama ERS	89.7	8,563,945	9,546,478	982,533	9/30/2004	9/30/2005
AR	Arkansas Teachers	80.4	8,817,000	10,973,000	2,156,000	6/30/2005	6/30/2005
AR	Arkansas PERS	81.6	4,584,000	5,619,000	1,035,000	6/30/2005	6/30/2005
AZ	Arizona SRS	92.5	22,659,000	24,506,000	1,847,000	6/30/2004	6/30/2005
AZ	Arizona Public Safety Personnel	82.1	4,886,963	5,951,937	1,064,974	6/30/2005	6/30/2005
AZ	Phoenix ERS	84.2	1,511,553	1,795,514	283,961	6/30/2005	6/30/2005
CA	California PERF	87.3	169,899,000	194,609,000	24,710,000	6/30/2004	6/30/2005
CA	California Teachers	85.7	121,882,000	142,193,000	24,160,000	6/30/2005	6/30/2005
CA	LA County ERS	82.8	27,089,440	32,700,505	5,611,065	6/30/2004	6/30/2005
CA	San Francisco City & County	103.8	11,299,997	10,885,455	(414,542)	6/30/2004	6/30/2005
CA	San Diego County	80.3	5,612,320	6,990,726	1,378,406	6/30/2005	6/30/2005
CA	Contra Costa County	82.0	3,673,858	4,481,243	807,385	12/31/2004	12/31/2005
CO	Colorado State & School	72.9	31,721,141	43,505,716	11,784,575	12/31/2005	12/31/2005
CO	Denver Schools	87.9	2,693,686	3,065,855	372,169	1/1/2006	12/31/2005
CO	Colorado Municipal	78.0	2,358,719	3,022,624	663,905	12/31/2005	12/31/2005
CT	Connecticut Teachers	65.3	9,846,700	15,070,500	5,223,800	6/30/2004	6/30/2005
CT	Connecticut SERS	53.3	8,517,677	15,987,547	7,469,870	6/30/2005	6/30/2005
DC	DC Police & Fire*	100.0	1,427,800	1,427,800	0	10/1/2002	9/30/2004
DC	DC Teachers*	100.0	917,800	917,800	0	10/1/2003	9/30/2004
DE	Delaware State Employees	101.6	5,660,057	5,572,719	(87,338)	6/30/2005	6/30/2005
FL	Florida RS	107.3	111,539,878	103,917,955	(7,621,923)	7/1/2005	6/30/2005
GA	Georgia Teachers	100.9	44,617,956	44,230,031	(387,925)	6/30/2004	6/30/2005
GA	Georgia ERS	97.2	13,134,472	13,512,773	378,301	6/30/2005	6/30/2005
HI	Hawaii ERS	68.6	8,914,839	12,985,989	4,071,150	6/30/2005	6/30/2005
IA	Iowa PERS	88.7	17,951,490	20,240,099	2,288,609	6/30/2004	6/30/2005
ID	Idaho PERS	94.2	8,208,200	8,778,700	570,500	7/1/2005	6/30/2005
IL	Illinois Teachers	60.8	34,085,218	56,075,029	21,989,811	7/1/2005	6/30/2005
IL	Illinois Municipal	94.6	19,698,401	20,815,060	1,116,659	12/31/2005	12/31/2005
IL	Illinois Universities	65.6	13,350,300	20,349,900	6,999,600	6/30/2005	6/30/2005
IL	Chicago Teachers	79.0	10,506,471	13,295,876	2,789,405	6/30/2005	6/30/2005
IL	Illinois SERS	54.4	10,494,148	19,304,646	8,810,498	6/30/2004	6/30/2005
IN	Indiana PERF	100.1	9,853,976	9,844,353	(9,623)	7/1/2004	6/30/2005
IN	Indiana Teachers	43.4	7,065,299	16,264,893	9,199,594	6/30/2005	6/30/2005
KS	Kansas PERS	69.8	10,971,427	15,714,092	4,742,665	12/31/2004	6/30/2005
KY	Kentucky Teachers	76.3	14,598,800	19,134,800	4,536,000	6/30/2005	6/30/2005
KY	Kentucky County	90.5	6,511,562	7,180,884	2,500,268	6/30/2004	6/30/2005
KY	Kentucky ERS	74.6	5,983,974	8,018,069	2,034,095	6/30/2004	6/30/2005
LA	Louisiana Teachers	64.6	12,082,682	18,699,765	6,617,083	6/30/2005	6/30/2005
LA	Louisiana SERS	61.5	6,673,500	10,847,062	4,173,562	6/30/2005	6/30/2005
MA	Massachusetts Teachers	69.6	17,074,000	24,519,000	7,445,000	1/1/2002	12/31/2003
MA	Massachusetts SERS	82.8	16,210,981	19,575,338	3,364,357	12/31/2003	12/31/2005
MD	Maryland Teachers	89.3	20,801,529	23,305,198	1,568,763	6/30/2005	6/30/2005
MD	Maryland PERS	86.7	11,855,673	13,671,756	1,106,923	6/30/2005	6/30/2005
ME	Maine State and Teacher	68.3	6,452,570	9,442,389	2,989,819	6/30/2004	6/30/2005
ME	Maine Local	111.5	1,663,016	1,491,667	(171,349)	6/30/2004	6/30/2005
MI	Michigan Public Schools	83.7	38,784,000	46,317,000	7,533,000	9/30/2004	9/30/2005
MI	Michigan SERS	84.5	10,149,000	12,004,000	1,855,000	9/30/2004	9/30/2005
MI	Michigan Municipal	76.7	4,731,400	6,164,800	1,433,400	12/31/2004	12/31/2005
MN	Minnesota Teachers	98.5	17,752,917	18,021,410	268,493	6/30/2004	6/30/2005
MN	Minnesota PERF	74.5	11,843,936	15,892,555	4,048,619	6/30/2005	6/30/2005
MN	Minnesota State Employees	95.6	8,081,736	8,455,336	373,600	6/30/2004	6/30/2005
MN	Minneapolis ERF	92.1	1,513,389	1,643,140	129,751	7/1/2004	6/30/2004
MN	St. Paul Teachers	69.7	905,293	1,299,832	394,539	6/30/2005	6/30/2005
MN	Minneapolis Teachers	44.6	783,354	1,755,913	972,559	7/1/2004	6/30/2005
MN	Duluth Teachers	86.4	268,481	310,924	42,443	7/1/2005	6/30/2005
MO	Missouri Teachers	82.7	23,049,441	27,881,513	4,832,072	6/30/2005	6/30/2005
MO	Missouri State Employees	84.9	6,435,344	7,578,028	1,142,684	6/30/2005	6/30/2005
MO	Missouri Local	95.1	2,984,489	3,139,260	154,771	2/28/2005	6/30/2005
MO	Missouri Non-Teachers	83.3	2,011,566	2,414,494	402,928	6/30/2005	6/30/2005
MO	Missouri DOT and Highway Patrol	53.9	1,417,349	2,627,409	1,210,060	6/30/2005	6/30/2005
MO	St. Louis School Employees	86.3	935,300	1,084,400	149,100	1/1/2005	12/31/2005

Appendix B
Plan Summary

State	Plan	Actuarial Funding Ratio	Actuarial Value of Assets (000s)	Actuarial Liabilities (000s)	Unfunded Liability (Surplus) (000s)	Actuarial Valuation Date	For Fiscal Year Ended
MS	Mississippi PERS	72.4	17,180,705	23,727,098	6,546,393	6/30/2005	6/30/2005
MT	Montana PERS	85.5	3,179,010	3,719,998	466,798	6/30/2005	6/30/2005
MT	Montana Teachers	73.4	2,497,500	3,527,000	1,029,500	7/1/2005	6/30/2005
NC	North Carolina Teachers and State Employe	108.1	47,383,509	43,827,854	(3,555,655)	12/31/2004	6/30/2005
NC	North Carolina Local Government	99.3	13,377,297	13,466,189	88,892	12/31/2004	6/30/2005
NC	Charlotte Firefighters	94.1	274,948	292,341	17,393	7/1/2004	6/30/2004
ND	North Dakota Teachers	74.8	1,469,700	1,965,200	495,500	7/1/2005	6/30/2005
ND	North Dakota PERS	90.8	1,236,100	1,361,200	125,100	6/30/2004	6/30/2005
NE	Nebraska Schools	85.6	5,335,197	6,234,658	899,461	7/1/2005	6/30/2005
NH	New Hampshire Retirement System	71.1	3,901,151	5,355,387	1,454,236	6/30/2003	6/30/2004
NJ	New Jersey Teachers	80.8	34,690,000	42,920,000	8,230,000	6/30/2005	6/30/2005
NJ	New Jersey PERS	85.3	27,113,000	31,774,000	4,661,000	6/30/2005	6/30/2005
NJ	New Jersey Police & Fire	84.0	18,703,390	22,278,239	3,574,849	6/30/2004	6/30/2005
NM	New Mexico PERF	91.6	10,008,511	10,920,967	912,456	6/30/2005	6/30/2005
NM	New Mexico Teachers	70.4	7,457,500	10,591,800	3,134,300	6/30/2005	6/30/2005
NV	Nevada Regular Employees	77.3	14,492,171	18,744,127	4,251,956	6/30/2005	6/30/2005
NV	Nevada Police Officer and Firefighter	69.8	3,394,368	4,864,574	1,470,206	6/30/2005	6/30/2005
NY	NY State & Local ERS*	100.0	110,094,000	110,094,000	0	4/1/2004	3/31/2005
NY	New York State Teachers	99.2	72,044,400	72,604,900	560,500	6/30/2004	6/30/2005
NY	New York City ERS	99.6	40,088,213	40,236,258	148,045	6/30/2003	6/30/2005
NY	New York City Teachers	100.0	32,817,102	32,827,541	10,439	6/30/2004	6/30/2005
NY	NY State & Local Police & Fire*	100.0	20,371,000	20,371,000	0	4/1/2004	3/31/2005
OH	Ohio Teachers	72.8	53,765,570	73,817,114	20,051,544	6/30/2005	6/30/2005
OH	Ohio PERS	87.6	50,452,000	57,604,000	7,152,000	12/31/2004	12/31/2005
OH	Ohio School Employees	74.3	8,893,000	11,961,000	3,068,000	6/30/2005	6/30/2005
OH	Ohio Police & Fire	82.6	8,682,704	10,508,367	1,825,663	1/1/2003	12/31/2004
OK	Oklahoma Teachers	49.5	6,952,700	14,052,400	7,099,700	6/30/2005	6/30/2005
OK	Oklahoma PERS	72.0	5,450,665	7,575,420	2,124,755	7/1/2005	6/30/2005
OR	Oregon PERS	96.1	42,874,400	44,625,600	1,751,200	12/31/2003	6/30/2005
PA	Pennsylvania School Employees	91.2	52,094,500	57,123,000	5,028,500	6/30/2004	6/30/2005
PA	Pennsylvania State ERS	92.9	26,794,000	28,852,000	2,058,000	12/31/2005	12/31/2005
RI	Rhode Island ERS	59.4	5,543,427	9,328,983	3,785,556	6/30/2004	6/30/2004
RI	Rhode Island Municipal	93.2	879,450	943,546	64,096	6/30/2003	6/30/2004
SC	South Carolina RS	80.3	20,862,659	25,977,852	5,115,193	7/1/2004	6/30/2005
SC	South Carolina Police	87.7	2,616,835	2,984,584	367,749	7/1/2004	6/30/2005
SD	South Dakota PERS	96.6	5,380,999	5,571,842	190,843	6/30/2005	6/30/2005
TN	TN State and Teachers	99.8	23,627,160	23,266,967	(360,193)	7/1/2005	6/30/2005
TN	TN Political Subdivisions	91.9	3,605,529	3,923,475	317,946	7/1/2005	6/30/2005
TX	Texas Teachers	87.1	89,299,000	102,495,000	13,196,000	8/31/2005	8/31/2005
TX	Texas ERS	94.8	20,835,469	21,969,670	1,134,201	8/31/2005	8/31/2005
TX	Texas County & District	104.4	13,441,414	12,872,100	(569,314)	12/31/2005	12/31/2005
TX	Texas Municipal	82.7	12,486,100	15,095,200	2,609,100	12/31/2005	12/31/2005
TX	Houston Firefighters	97.6	1,922,000	1,970,000	48,000	7/1/2002	6/30/2005
TX	City of Austin ERS	78.0	1,398,800	1,794,200	395,400	12/31/2004	12/31/2005
TX	Texas LECOS	103.1	698,814	677,953	(20,861)	8/31/2005	8/31/2005
UT	Utah Noncontributory	92.2	13,065,512	14,166,548	1,101,036	12/31/2005	12/31/2005
VA	Virginia Retirement System	90.3	39,691,000	43,958,000	4,267,000	6/30/2004	6/30/2005
VA	Fairfax County Schools	84.9	1,643,020	1,935,582	292,562	12/31/2004	6/30/2005
VT	Vermont Teachers	90.7	1,354,006	1,492,150	138,144	6/30/2005	6/30/2005
VT	Vermont State Employees	97.8	1,148,908	1,174,796	25,888	6/30/2005	6/30/2005
WA	Washington PERS 2/3*	100.0	11,431,100	11,431,100	0	9/30/2004	6/30/2005
WA	Washington PERS 1	77.2	9,928,000	12,855,000	2,927,000	9/30/2004	6/30/2005
WA	Washington Teachers Plan 1	83.9	8,728,000	10,401,000	1,673,000	9/30/2004	6/30/2005
WA	Washington LEOFF Plan 1	109.4	4,666,000	4,266,000	(400,000)	9/30/2004	6/30/2005
WA	Washington Teachers Plan 2/3*	100.0	4,138,100	4,138,100	0	9/30/2004	6/30/2005
WA	Washington LEOFF Plan 2*	100.0	2,947,300	2,947,300	0	9/30/2004	6/30/2005
WA	Washington School Employees Plan 2/3*	100.0	1,630,000	1,630,000	0	9/30/2002	6/30/2005
WI	Wisconsin Retirement System	99.4	66,209,400	66,622,300	412,900	12/31/2004	12/31/2004
WV	West Virginia PERS	83.6	3,404,650	4,072,548	667,898	7/1/2005	6/30/2005
WV	West Virginia Teachers	24.6	1,627,355	6,617,708	4,990,353	6/30/2005	6/30/2005
WY	Wyoming Public Employees	95.1	4,843,861	5,091,763	247,902	1/1/2006	12/31/2005
		0.9	$2,178,271,985	$2,514,575,962	$340,265,667		

* Plans using the aggregate cost actuarial method do not identify an unfunded liability.