WISCONSIN LEGISLATIVE COUNCIL

2010 COMPARATIVE STUDY OF MAJOR PUBLIC EMPLOYEE RETIREMENT SYSTEMS

Prepared by:

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December 2011

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INTRODUCTION

This report compares significant features of major state and local public employee retirement systems in the United States. The report compares retirement benefits provided to general employees and teachers, rather than benefits applicable only to narrower categories of employees such as police, firefighters, or elected officials. Generally, the report has been prepared every two years since 1982 by the Wisconsin Retirement Research Committee staff or the Legislative Council staff.

The 2010 Report includes data from the same 87 public employee retirement systems that have been compared in the prior report. Although this report does not cover all major public employee retirement systems, it includes at least one statewide plan from each state. The same public employee retirement systems have been covered in previous reports, revealing long-term trends in public employee retirement systems.

The methodology for preparing the 2002-10 Reports differs from that of previous reports. Through the 2000 Report, each public employee retirement system covered by the report was asked to send to the Wisconsin Retirement Research Committee or the Legislative Council all annual reports, employee handbooks, statutes, actuarial reports, and related materials. One issue with this approach was that, in many cases, the published reports, handbooks, and materials were not current with respect to the data included in the report for a given year. In addition, the large volume of material that each plan was asked to send resulted in a relatively inefficient way of gathering and storing the data necessary for the report.

For the 2002-10 Reports, the data was gathered, to the extent possible, from the web site maintained by each of the plans covered by the report. All information is based on the most recent actuarial valuation available at the time of publishing. Most of the data was gathered from the 2010 or 2011 actuarial analyses of each of the plans. Any information not available from a web site is gathered, when necessary, by addressing specific questions to plan administrators, either by e-mail or telephone. The responses by public employee pension plan administrators, who took time from their busy schedules to respond to request for data, is greatly appreciated. In addition, the wealth of information available on web sites with respect to public employee pension plans is impressive.

In many cases, the public employee retirement systems in this report have features that differ according to when an employee was initially hired or the identity of the employer. Where this situation exists, an attempt was made to describe the features of the plan applicable to the largest category of participants or to employees who are most recently hired.

One feature of the 2010 Report is that it discusses how retirement benefits and certain other features of the Wisconsin Retirement System (WRS) compare to the other plans in this report. This feature of the report is intended to be useful to Wisconsin legislators and persons interested in comparing the WRS, while maintaining the structure of prior reports for the convenience of retirement system administrators and policymakers from other states.

While every attempt was made to ensure the accuracy of the great amount of data in this report, it is inevitable that errors have occurred in both prior and current reports. Please communicate reports of any errors or comments you may have about the report to: Daniel Schmidt, Senior Analyst; Wisconsin Legislative Council Staff; Suite 401, One East Main Street; Madison, Wisconsin, 53703; or at the following e-mail address: dan.schmidt@legis.wisconsin.gov.

Any corrections that need to be made to the report will be included in the version maintained at the Wisconsin Legislative Council web site: http://www.legis.state.wi.us/lc.

PART I
DESCRIPTION OF RETIREMENT SYSTEMS IN REPORT

A. INTRODUCTION

Chart 1, on pages 7 and 8, provides descriptive data pertaining to the public employee retirement systems covered in this report.

B. NUMBER OF PARTICIPANTS

The 87 plans in the 2010 Report provide pension coverage for 12,200,094 active employees and 6,516,666 retirees and beneficiaries, for a total of 18,716,760 participants. This total is 3.7% greater than the 18,032,010 participants in the 2008 Report. The number of active participants has decreased between the 2008 and 2010 Reports by 1.4% while the number of retirees has grown by 7.9% in the same time period.

C. CATEGORIES OF EMPLOYEES INCLUDED IN PLANS

The column entitled "Employee Coverage" in Chart 1 shows whether the plan reported on provides pension coverage to state employees ("S"), local employees ("L"), teachers ("T"), or some combination of these categories of employees. The 87 plans are categorized as follows:

Employee Coverage	Number of Plans
State employees only	13
Teachers only	27
Local employees only	10
State and local employees	14
State employees and teachers	3
State employees, local employees, and teachers	20

See Figure 1, *2010 Employee Coverage*, for a graphical representation of the categories.

D. RATIO OF ACTIVE EMPLOYEES TO RETIRED EMPLOYEES

Chart 1 also shows the ratio of active employees to retired employees in the 87 systems surveyed. The average ratio has declined over prior years. For 2010, the average ratio was 1.87 while the comparable figures for the 2008 Report, the 2006 Report, the 2004 Report, and the 2002 Report, respectively, were 2.00, 2.14, 2.24, 2.38, and 2.52 (see Figure 2, *Participant Growth 2000 to 2010*). Sixty-four of the systems (including the City of Milwaukee and Milwaukee County) had an active employees to retired employees ratio of less than two. In the 2000 Report, 17 of the systems had an active employees to retired employees ratio of less than two.

E. SOCIAL SECURITY COVERAGE

In 70 of the 87 plans, participants are also covered under the federal Social Security program. Of the 17 public employee retirement systems included in this report that do not provide Social Security coverage, 10 represent pension plans covering teachers only. The decision on whether to participate in the Social Security program was at one time elective, rather than mandatory, for public employers. However, for those employers who have elected coverage, future participation is mandatory.

F. TRENDS

Chart 1 shows a continued growth in the total number of participants in the plans surveyed. However, the number of retirees is growing at a faster rate than is the number of active employees. This is reflected in the declining ratios of active to retired participants for the plans surveyed. As compared to the 2008 Report, there has been no change in the number of plans whose participants are covered by the federal Social Security program.

G. THE WISCONSIN RETIREMENT SYSTEM

The WRS, in 2010, had 266,629 active employees and 155,775 beneficiaries and annuitants, for a total of 422,404 participants. This total is an increase of 15,185 total participants and is 3.6% greater than the 407,219 participants in the 2008 Report. The number of active employees covered by the WRS increased by 3,443 and the number of beneficiaries and annuitants covered by WRS increased by 11,742 between 2008 and 2010. The WRS covers state and local employees and teachers. The ratio of active employees to retired employees in the WRS in 2010 is 1.71, which is a reduction from the ratio of 1.83 found in the 2008 Report. The ratio of active employees to retired employees in the WRS for 2010 (1.71) is somewhat lower than the average ratio for all plans in the report (1.87). WRS employees are generally covered by Social Security.

CHART I
PUBLIC RETIREMENT SYSTEMS SURVEYED

	State	Fund Name	Employee Coverage[1]	Active Employees	Beneficiaries & Annuitants	Ratio	S.S. Coverage
1	Alabama	ERS	S, L	86,108	36,782	2.34	Yes
2	Alabama	TRS	T	136,290	71,691	1.90	Yes
3	Alaska	PERS	S, L	27,565	25,015	1.10	No
4	Alaska	TRS	T	8,226	10,255	0.80	No
5	Arizona	SRS	S, L, T	220,323	98,670	2.23	Yes
6	Arkansas	PERS	S, L	45,380	25,880	1.75	Yes
7	Arkansas	TRS	T	72,208	30,587	2.36	Yes
8	California	PERS	S, L	1,116,044	513,623	2.17	Yes
9	California	TRS	T	441,544	243,796	1.81	No
10	Colorado	PERA	S, L, T	200,297	94,017	2.13	No
11	Connecticut	SERS	S	50,064	41,782	1.20	Yes
12	Connecticut	TRS	T	51,368	30,493	1.68	No
13	Delaware	SEPP	S, T	35,217	19,589	1.80	Yes
14	Florida	FRS	S, L, T	655,367	304,337	2.15	Yes
15	Georgia	ERS	S	68,566	38,582	1.78	Yes
16	Georgia	TRS	T	222,046	87,017	2.55	Yes
17	Hawaii[3]	ERS	S, L, T	66,589	36,260	1.84	Yes
18	Idaho	PERS	S, L, T	67,020	33,625	1.99	Yes
19	Illinois	SRS	S	64,143	58,392	1.10	Yes
20	Illinois	TRS	T	169,173	97,796	1.73	No
21	Illinois	MRF	L	176,179	97,554	1.81	Yes
22	Indiana	PERF	S, L	149,877	67,166	2.23	Yes
23	Indiana	TRF	T	72,872	45,659	1.60	Yes
24	Iowa	PERS	S, L, T	165,626	93,513	1.77	Yes
25	Kansas	PERS	S, L, T	157,919	76,498	2.06	Yes
26	Kentucky	KERS	S	51,381	40,780	1.26	Yes
27	Kentucky	CERS	L	94,243	47,106	2.00	Yes
28	Kentucky	TRS	T	76,387	43,184	1.77	No
29	Louisiana	SERS	S	54,930	41,142	1.34	No
30	Louisiana	TRSL	T	88,783	66,638	1.33	No
31	Maine	PERS	S, L, T	50,482	35,805	1.41	No
32	Maryland	SRPS	S, L, T	223,761	133,718	1.67	Yes
33	Massachusetts	SERS	S	86,586	53,627	1.61	No
34	Massachusetts	TRS	T	88,673	53,951	1.64	No
35	Michigan	SERS	S	25,478	50,462	0.50	Yes
36	Michigan*	MERS	L	35,816	26,930	1.33	Yes
37	Michigan**	PSERS**	T	242,568	187,722	1.29	Yes
38	Minnesota	MSRS	S	48,494	28,435	1.71	Yes
39	Minnesota	PERA	L	140,389	68,494	2.05	Yes
40	Minnesota	TRA	T	77,356	51,853	1.49	Yes
41	Mississippi	PERS	S, L, T	164,896	79,168	2.08	Yes
42	Missouri	SERS	S	53,478	33,251	1.61	Yes
43	Missouri	LAGERS	L	32,975	14,622	2.26	Yes
44	Missouri	PSRS	T	79,256	45,467	1.74	No
45	Montana	PERS	S, L	28,659	17,892	1.60	Yes

46	Montana	TRS	T	18,484	12,899	1.43	Yes
47	Nebraska	SEPP[2]	S	11,739	500	23.48	Yes
48	Nebraska	CEPP[2]	L	5,645	223	25.31	Yes
49	Nebraska	SPP	T	39,764	16,912	2.35	Yes
50	Nevada	PERS	S, L, T	102,594	38,841	2.64	No
51	New Hampshire	NHRS	S, L, T	50,467	25,845	1.95	Yes
52	New Jersey	PERS	S, L	309,099	140,735	2.20	Yes
53	New Jersey	TPAF	T	144,492	72,797	1.98	Yes
54	New Mexico	PERA	S, L	59,620	27,972	2.13	Yes
55	New Mexico	ERA	T	63,295	33,747	1.88	Yes
56	New York	ERS	S, L	529,466	345,106	1.53	Yes
57	New York	TRS	T	280,435	141,633	1.98	Yes
58	North Carolina	TSERS	S, T	323,580	156,791	2.06	Yes
59	North Carolina	LGERS	L	123,398	46,557	2.65	Yes
60	North Dakota	PERS	S, L	20,372	7,758	2.63	Yes
61	North Dakota	TRF	T	10,004	6,933	1.44	Yes
62	Ohio	PERS	S, L	356,734	173,285	2.06	No
63	Ohio	STRS	T	175,842	133,103	1.32	No
64	Oklahoma	PERS	S, L	40,551	29,418	1.38	Yes
65	Oklahoma	TRS	T	88,085	50,829	1.73	Yes
66	Oregon	PERS	S, L, T	177,110	110,642	1.60	Yes
67	Pennsylvania	SERS	S	109,255	111,713	0.98	Yes
68	Pennsylvania	PSERS	T	282,041	184,935	1.53	Yes
69	Rhode Island	ERS	S, T	24,652	21,634	1.14	Yes
70	South Carolina	SCRS	S, L, T	190,239	106,230	1.79	Yes
71	South Dakota	SRS	S, L, T	39,014	20,561	1.90	Yes
72	Tennessee	CRS	S, L, T	214,950	107,875	1.99	Yes
73	Texas	ERS	S	142,490	79,311	1.80	Yes
74	Texas	TRS	T	828,919	312,680	2.65	No
75	Texas	MRS	L	101,240	41,459	2.44	Yes
76	Utah	SRS	S, L, T	92,392	36,139	2.56	Yes
77	Vermont	SRS	S	7,782	5,201	1.50	Yes
78	Vermont	TRS	T	10,123	7,005	1.45	Yes
79	Virginia	SRS	S, L, T	342,609	148,496	2.31	Yes
80	Washington	PERS	S, L	156,526	76,899	2.04	Yes
81	Washington	TRS	T	66,325	40,570	1.63	Yes
82	West Virginia	PERS	S, L	35,977	22,040	1.63	Yes
83	West Virginia	TRS	T	35,670	30,127	1.18	Yes
84	Wyoming	WRS	S, L, T	35,828	17,804	2.01	Yes
85	Milwaukee	City	L	11,247	11,568	0.97	Yes
86	Milwaukee	County	L	4,808	7,292	0.66	Yes
87	Wisconsin	WRS	S, L, T	266,629	155,775	1.71	Yes
	Totals: (87 Funds)			12,200,094	6,516,666	1.87	

[1]Coverage: S = State; L = Local; T = Teachers
[2]Converted to individual cash balance plans from defined contribution plan.
[3]Hawaii numbers based on 2008 data, the most recent available at the time of publishing.
*Michigan employees hired after March 31, 1997 are now enrolled in the defined contribution plan.
**Michigan employees hired after July 1, 2010 are now enrolled in the pension plus plan.

Figure 1. 2010 Employee Coverage

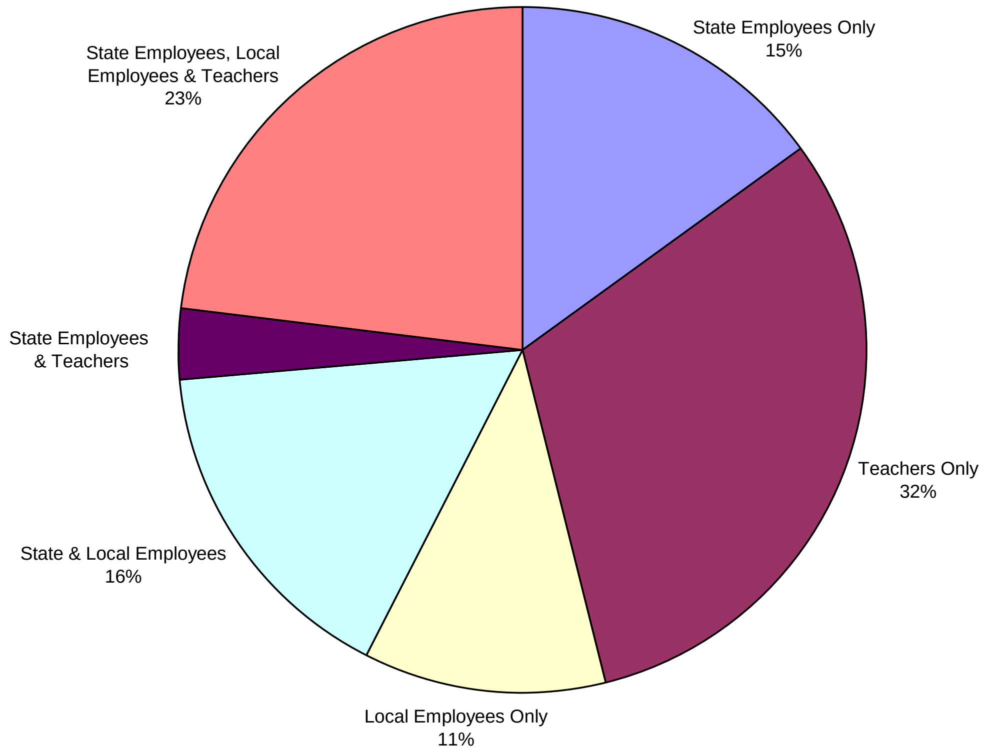
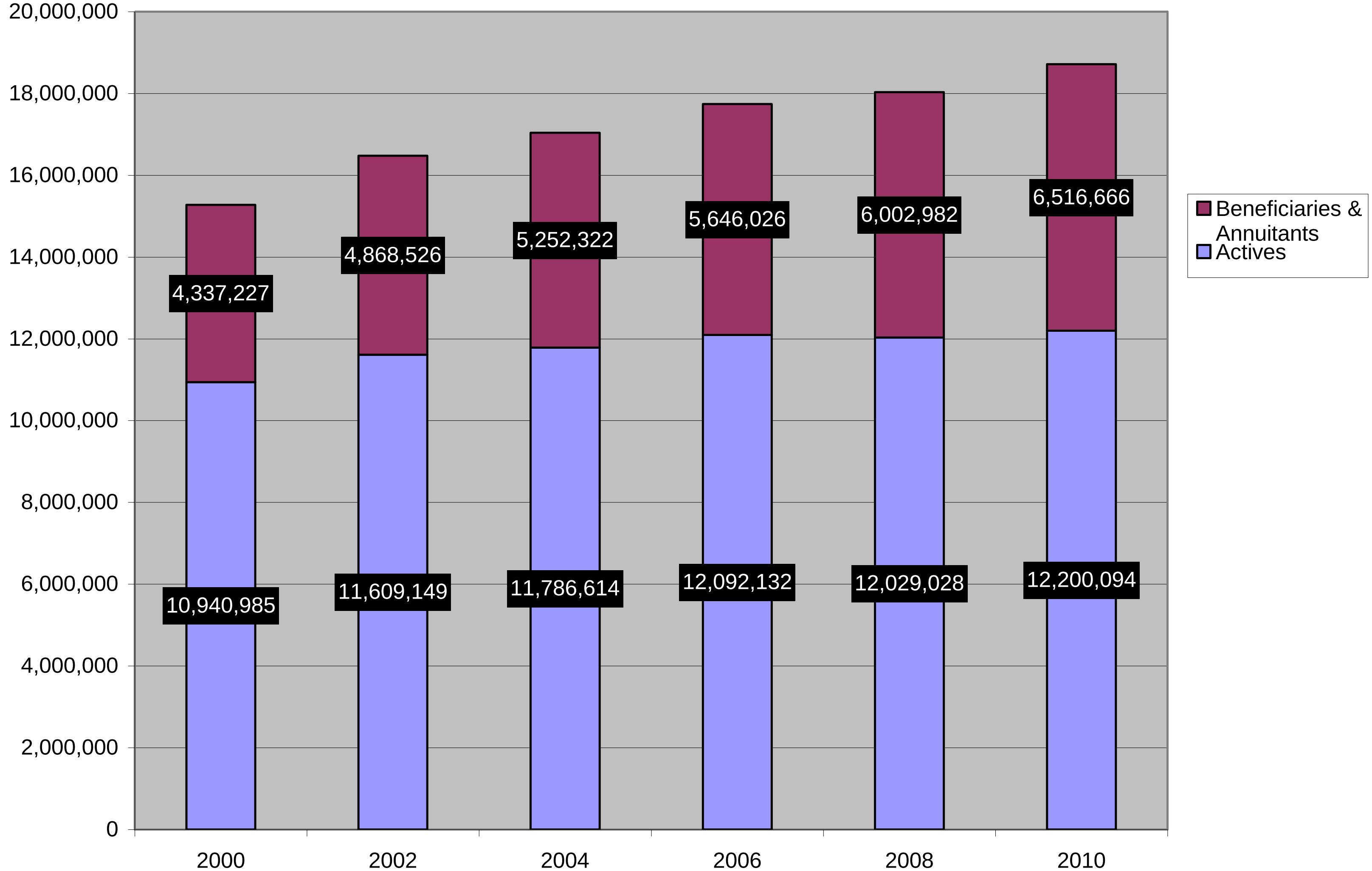


Figure 2. Participant Growth 2000-1010



PART II
NORMAL AND EARLY RETIREMENT PROVISIONS

A. INTRODUCTION

Chart 2, on pages 14 and 15, shows the normal and early retirement provisions for each of the plans covered in the report. All but four of the plans covered in this report are classified as “defined benefit plans” in which retirement benefits are calculated by a formula that takes into account years of service and final average salary. Two of the exceptions are “money purchase” plans in which retirement benefits are calculated by the amount of money in the person's account and the age of the person at the time he or she retires. Benefits are calculated as the total value of the employer and employee contributions plus investment earnings at the time of retirement. The other two exceptions are purely “defined contribution plans” that have been converted from defined benefit plans (both in Alaska). Benefits are calculated for defined contribution plans as the total value of the employer and employee contributions plus investment earnings at the time of retirement.

Note that some of the defined benefit plans may also contain elements of defined contribution or money purchase plans. These “provisions” are generally not reflected in Chart 2, which describes the features of each plan that are standard and that apply to employees generally.

B. NORMAL RETIREMENT

“Normal retirement” refers to the age, number of years of service, or both, that a person must attain in order to qualify for full retirement benefits without an actuarial reduction in his or her annuity for early retirement. Most plans in this report have adopted multiple combinations of age and service under which a person may qualify for normal retirement. These are shown in the column entitled “Normal Retirement” in Chart 2.

Some retirement plans integrate normal retirement with the age under which a person is entitled to receive retirement benefits under the Social Security system. Age 65 is the age at which a person is entitled to receive full Social Security benefits, but this age is scheduled to increase to 66 and then to 67 over time.

Age 62 is the earliest age at which a person can receive Social Security retirement benefits, although the amount of the benefits are reduced to reflect the longer payout period. Chart 2 shows that 83 of the 87 plans allow normal retirement at age 62 or earlier for persons with many years of service. In addition, Chart 2 shows that 50 of the 87 plans permit normal retirement at age 62 or earlier with 10 or less years of service. Four of the plans in this report restrict normal retirement to persons who are at least 65 (New Jersey PERS and PAF; Washington PERS and TRS).

Some plans that permit persons to retire earlier than age 62 also allow them to elect to increase their annuity prior to age 62 to reflect the amount of Social Security benefits it is estimated that they will receive at that time. The amount of the annuity paid after age 62 is then adjusted to compensate for the earlier payments.

Many of the plans in this report have adopted "**X years and out**" provisions, which allow employees to retire at any age (or at a minimum age) with normal retirement benefits after "X" years of service. The most common provision is 30 years of service combined with a minimum age of 55. The following table shows the number of plans that, in 2010, had in effect "X years and out" provisions and compares these with the number of plans that had in effect "X years and out" provisions in the 2008 Report:

	2008	**2010**
35 years of service/age 55 or older	8 plans	5 plans
30 years of service/age 55 or older	29 plans	31 plans
28 years of service/age 55 or older	4 plans	3 plans
27 years of service/age 55 or older	3 plans	1 plan
25 years of service/age 55 or older	11 plans	8 plans
20 years of service/age 55 or older	8 plans	6 plans
TOTAL	63 plans	54 plans

See Figure 3, *2010 Normal Retirement "X Years and Out" Provisions*, for a graphical representation of the 2010 "X years and out" provisions.

In addition to the "X years and out" provisions, some plans have adopted "**Rule of Y**" provisions under which a person can retire with normal retirement benefits when that person's number of years of service, plus his or her age, equals a specified number. The following table shows the number of plans that, in 2010, had Rule of Y provisions and compares these with the number of plans that had Rule of Y provisions in 2008:

	2008	**2010**
Rule of 90	4 plans	7 plans
Rule of 88	1 plan	1 plan
Rule of 85	9 plans	10 plans
Rule of 80	7 plans	7 plans
Rule of 75	2 plans	0 plans
TOTAL	23 plans	25 plans

See Figure 4, *Normal Retirement "Rule of Y" Provisions (Of 23 Plans Incorporating "Rule of Y" Provisions)*, for a graphical representation.

C. EARLY RETIREMENT

Seventy-seven of the 87 plans covered in the 2010 Report permit "early retirement" before the normal age and service requirements of the plans have been met. The annuity of a person who elects early retirement is reduced from the amount that would have been received if the person had reached the normal retirement requirements. The early retirement provisions of each of the plans are shown in the column entitled "Early Retirement" in Chart 2. The most common minimum age for early retirement is age 55, with some minimum years of service. The second most common minimum age for early retirement is age 50.

Forty-eight of the 87 plans in the 2010 Report allow early retirement at a minimum age of 55 or more. Thirteen of the 87 plans in the report allow early retirement at a minimum age of less than

55. Nine of the 87 plans in the report do not allow early retirement. The remainder of the plans are either money purchase plans or allow early retirement after a certain number of years of service, without specifying any minimum age (see Figure 5, *2010 Early Retirement Provisions*).

The annuity of a person who elects to retire before reaching the minimum age and years of service required for normal retirement is subject to a reduction that is commonly referred to as an "**actuarial discount**." The amount of the reduction for each of the plans is shown in the column entitled "Reduction for Early Retirement" in Chart 2. In many cases, the column in Chart 2 is not able to show all of the complexity of how the amount of the reduction is actually computed, because this amount is frequently different for employees at different ages or with different numbers of years of service or for various classifications of employees. However, the column does show the most common percentage reduction for each of the plans in the report.

D. TRENDS

The 2010 Report appears to indicate the reversal of a trend noted in previous reports that permitted retirement at earlier ages. Between the 2000 and 2004 Reports, the plans reduced their normal retirement provisions by reducing the minimum age or the number of years of service required, or both. Between the 2004 and 2006 Reports, only two plans did so. Between the 2006 and 2008 Reports, an additional seven plans reduced their normal retirement provisions. Between the 2008 and 2010 Reports, states increased their normal retirement provisions and one decreased its normal retirement provision.

In addition, between the 2000 and 2004 Reports, 10 plans reduced their early retirement provisions by reducing the minimum age or the number of years of service required, or both. Between the 2004 and 2006 Reports, only two plans did so. Between the 2006 and 2008 Reports, an additional eight plans reduced their early retirement provisions. Between the 2008 and 2010 Reports, 11 plans increased their early retirement provisions.

E. THE WRS

The normal retirement requirement for general employees in the WRS is 65 years of age. However, general employees who are at least 57 years of age and who have at least 30 years of service can retire without an actuarial discount. Also, general employees in the WRS may retire at 55 years of age with an actuarial discount. The amount of actuarial discount for early retirement for general employees in the WRS varies according to the employee's number of years of service.

CHART II
NORMAL AND EARLY RETIREMENT REQUIREMENTS

	State	Fund Name	Coverage*	Normal Retirement (Age/Years)	Early Retirement (Age/Years)	Annual Reduction for Early Retirement
1	Alabama	ERS	S, L	60/10; any/25	None	
2	Alabama	TRS	T	60/10; any/25	None	
3	Alaska	PERS	S, L	59-1/2*	None	
4	Alaska	TRS	T	59-1/2*	None	
5	Arizona	SRS	S, L, T	65; 62/10; R80	50/5	Table
6	Arkansas	PERS	S, L	65/5; any/28	55/5; any/25	6% a yr
7	Arkansas	TRS	T	60/5; any/28	Any/25	Lesser of 5% for each yr < 28 yrs service or for each yr prior to age 60
8	California	PERS	S, L	55/10	50/5	Multiplier varies
9	California	TRS	T	60/5	55/5; 50/30	3% to 6% a yr
10	Colorado	PERA	S, L, T	65/5; 50/30; 55/R85; any/35	50/25; 55/20; 60/5	Table
11	Connecticut	SERS	S	62/10; 60/25; 70/5	55/10	2.5% a yr
12	Connecticut	TRS	T	60/20; any/35	Any/25; 55/20; 60/10	3% a yr
13	Delaware	SEPP	S, T	62/5; 60/15; any/30	55/15; any/25	2.4% a yr
14	Florida	FRS	S, L, T	65/8; any/33	Any/8	5% a yr
15	Georgia	ERS	S	65/10; any/30	60/10; any/25	7% a yr
16	Georgia	TRS	T	60/10; any/30	Any/25	7% a yr
17	Hawaii	ERS	S, L, T	62/5; 55/30	55/20	5% a yr
18	Idaho	PERS	S, L, T	65/5; R90	55/5	3% a yr for 1st 5 yrs; 5.75% a yr thereafter
19	Illinois	SRS	S	60/8; R85	55/25	6% a yr
20	Illinois	TRS	T	62/5; 60/10; R85	55/20	6% a yr
21	Illinois	MRF	L	60/8; 55/35	55/8	3% a yr
22	Indiana	PERF	S, L	65/10; 60/15; 55/R85	50/15	Table
23	Indiana	TRF	T	65/10; 60/15; 55/R85	50/15	5% a yr to 60; 1.2% a yr age 60 to 65
24	Iowa	PERS	S, L, T	65; 62/20; 55/R88	55/4	3% a yr
25	Kansas	PERS	S, L, T	65/1; 65/5; 62/10; 60/30; R85	55/10	2.4%/7.2% a yr; 35% at age 60; 57.5% at age 55
26	Kentucky	KERS	S	65/5; R87	60/10	5%/4% a yr
27	Kentucky	CERS	L	65/5; R87	60/10	5%/4% a yr
28	Kentucky	TRS	T	60/5; any/27	55/10	5% a yr
29	Louisiana	SERS	S	60/10	Any/20	Table
30	Louisiana	TRSL	T	60/5; 55/25; any/30	Any/20	Multiplier varies
31	Maine	PERS	S, L, T	62/5	Any/25	6% a yr
32	Maryland	SRPS	S, L, T	62/5; 63/4; 64/3; 65/2; 60/5; any/30	55/15	6% a yr; max 42%
33	Massachusetts	SERS	S, L	55/10; any/20	None	
34	Massachusetts	TRS	T	55/10; any/20	None	
35	Michigan	SERS	S	60/10; 55/30	55/15	6% a yr
36	Michigan	MERS	L	Varies by plan	Varies by plan	Varies by plan
37	Michigan	PSERS	T	60/5; 60/10; 55/30; any/30	55/15	6% a yr
38	Minnesota	MSRS	S	65/3; any/30; R90	55/3	3% a yr

39	Minnesota	PERA	L	65/3; any/30; R90	55/3	3% a yr
40	Minnesota	TRA	T	60; any/30	55	3% a yr
41	Mississippi	PERA	S, L, T	60/8; any/25	None	
42	Missouri	SERS	S	67/10; 55/R90	62/10	6% a yr
43	Missouri	LAGERS	L	60/5; R80 option	55/5	6% a yr
44	Missouri	PSRS	T	60/5; R80; any/30	55/5; any/25	3.6% a yr
45	Montana	PERS	S, L	65/any; 60/5; any/30	50/5; any/25	6% a yr
46	Montana	TRS	T	60/5; any/25	50/5	6%; 3.6% a yr
47	Nebraska	SERS	S	55		Cash balance
48	Nebraska	CERS	L	55		Cash balance
49	Nebraska	SPP	T	65; 55/R85	60/5; any/35	3% a yr
50	Nevada	PERS	S, L, T	65/5; 62/10; any/30	Any/5	6% a yr
51	New Hampshire	NHRS	S, L, T	60/any	50/10; R70/20	1.5%; 3%; 4%; 6.67% a yr
52	New Jersey	PERS	S, L	65/any	Any/30	3% a yr
53	New Jersey	PAF	T	65/any	Any/30	3% a yr
54	New Mexico	PERA	S, L	67/5 to R80; any/30	None	
55	New Mexico	ERA	T	67/5; any/30; R80	R75	2.4% a yr
56	New York	ERS	S, L	62/10	55/10	Table
57	New York	TRS	T	62/10; 57/30	55/10	Table
58	North Carolina	TSERS	S, T	65/5; 60/25; any/30	60/5; 50/20	3% a yr
59	North Carolina	LGERS	L	65/5; 60/25; any/30	60/5; 50/20	3% a yr
60	North Dakota	PERS	S, L	65/any; R85	55/3	6% a yr
61	North Dakota	TRF	T	65/5; R90	55/5	6% a yr
62	Ohio	PERS	S, L	60/5; any/30	55/25	3% a yr
63	Ohio	STRS	T	65; any/30	60/5; 55/25	3% a yr
64	Oklahoma	PERS	S, L	65; R90	55/10	Table
65	Oklahoma	TRS	T	62/5; R90	55/5; any 30	Table
66	Oregon	PERS	S, L, T	65/any; 58/30	55/5	Full actuarial reduction
67	Pennsylvania	SERS	S	65/3; R92	Any/10	3% to 6% per yr average
68	Pennsylvania	PSERS	T	62; 60/30; any/35; R92	55/25	3% a yr
69	Rhode Island	ERS	S, T	65/10; any/29	62/20	Table
70	South Carolina	SCRS	S, L, T	65/5; any/28	55/25; 60/5	5% a yr for each yr under age 65; 4% a yr for each yr under age 28
71	South Dakota	SRS	S, L, T	65/3; 55/R85	55/3	3% a yr
72	Tennessee	CRS	S, L, T	60/5; any/30	55/25	4.8% a yr
73	Texas	ERS	S	65/10; R80	55/10; 50/12	5% a yr
74	Texas	TRS	T	65/5; 60/20	55/5; any/30	5% a yr
75	Texas	MRS	L	60/5; any/20	None	
76	Utah	SRS	S, L, T	65/4; any/30	Any/25; 60/20; 62/10	3% a yr; full actuarial reduction for each yr before age 60
77	Vermont	SRS	S	65/any; R87	55/5	Table
78	Vermont	TRS	T	62/any; any/30	55/5	6% a yr
79	Virginia	SRS	S, L, T	65/5; 50/30	50/10; 55/5	6%; 4.8% a yr
80	Washington	PERS	S, L	65/10	55/10	3% a yr or table
81	Washington	TRS	T	65/10	55/10	3% a yr or table
82	West Virginia	PERS	S, L	60/5; 55/R80	55/20	Full actuarial reduction
83	West Virginia	TRS	T	60/5; 55/30; any/35	55/30	Full actuarial reduction
84	Wyoming	WRS	S, L, T	60/4; R85	50/4; any/25	5% a yr
85	Milwaukee	City	L	60/any; 55/30	55/15	Table
86	Milwaukee	County	L	60/5; 55/30	55/15	5% a yr
87	Wisconsin	WRS	S, L, T	65/any; 30/R87	55	Varies by amt of service

Coverage: S = State; L = Local; T = Teachers; x/y = Age/Service

*Defined contribution plan: taxes and penalties may apply if contributions are withdrawn prior to age 59-1/2

Figure 3. 2010 Normal Retirement "X Years & Out" Provisions

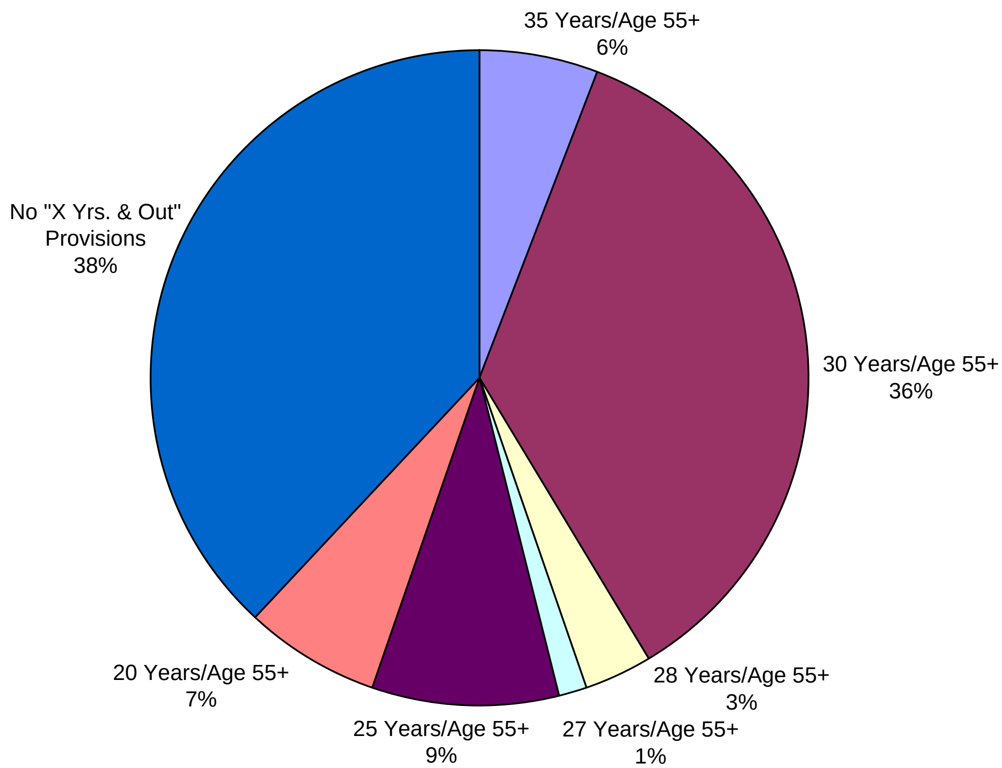


Figure 4. Normal Retirement "Rule of Y" Provisions

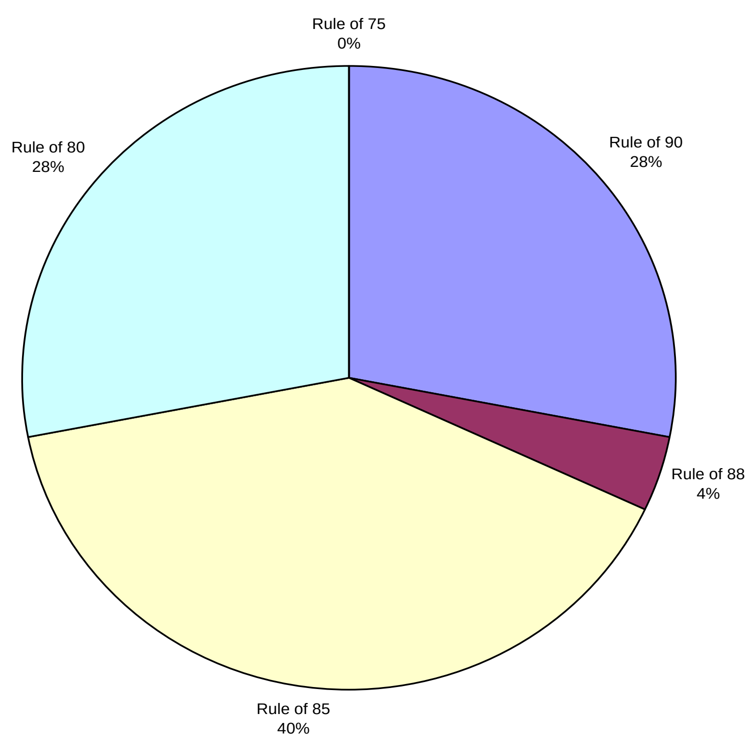
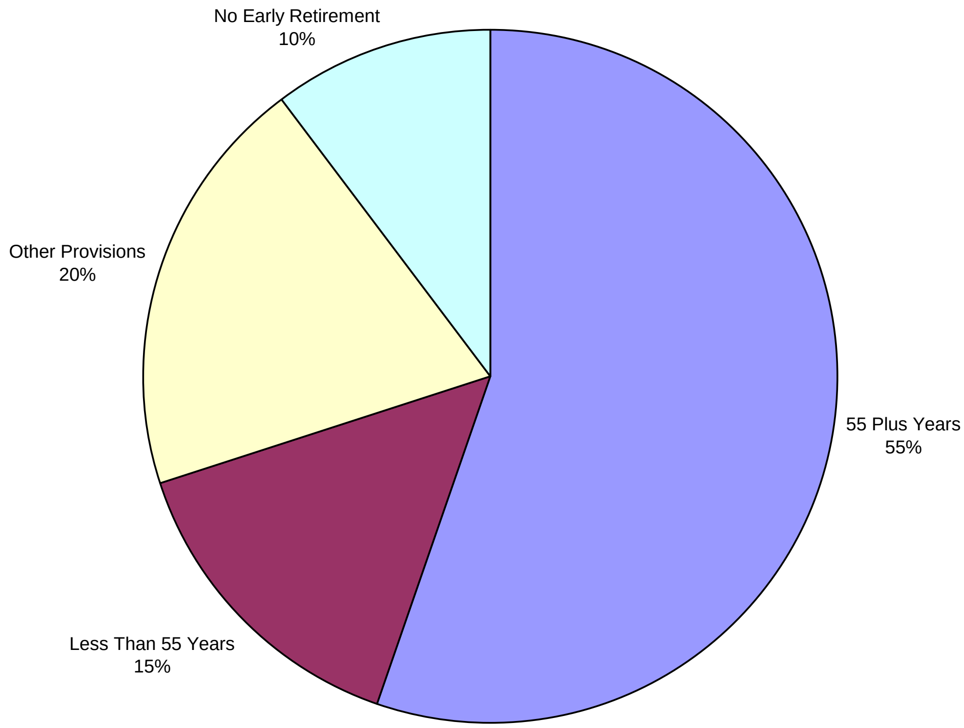


Figure 5. 2010 Early Retirement Provisions



PART III
CONTRIBUTION RATES AND VESTING REQUIREMENTS

A. INTRODUCTION

Chart 3, on pages 21 and 22, shows the employee contribution rate, the employer contribution rate, and the vesting period for each of the 87 plans in the report. The contribution rates are shown as a percentage of salary.

B. EMPLOYEE CONTRIBUTIONS

Large private sector corporations that provide defined benefit pension plans frequently do not require employee contributions to the primary plan, but frequently also provide supplemental profit-sharing or savings plans that allow employees to contribute to the plan and receive an employer "match" to some or all of the contribution. Conversely, most public employee pension plans at least nominally require employees to contribute a certain percentage of their salary to the plan, although some public employee pension plans provide for employer "pick-up" of the employee contribution. In addition, secondary savings plans for public employees, such as Section 457 deferred compensation plans, are funded totally from employee contributions with no employer match.

In many plans, amounts designated as employee contributions for accounting purposes may be paid by the employer. There are financial advantages to both the employer and the employee if, instead of granting compensation increases, an employer pays the employee contribution to the retirement plan. Compensation payments are subject to old age, survivors and disability insurance payments (Social Security), and Medicare payments while contributions to a retirement plan are not. In addition, the practice may be attractive to employers because employer pick-up of retirement contributions is not added into employee base wages, limiting future percentage-based salary increases.

The column in Chart 3 entitled "Employee Contribution" shows the employee contribution rates, expressed as a percentage of payroll, for the 87 plans covered in the report. These requirements are compared with employee contributions in the 2008 Report in the following table:

Employee Contribution Rates	2008	2010
5% or less	30 plans	31 plans
More than 5%	46 plans	48 plans
Rate varies (usually by age or employee classification)	5 plans	4 plans
Plan is noncontributory	6 plans	4 plans
TOTAL	87 plans	87 plans

See Figure 6, *2010 Employee Contribution Rates*, for a graphical representation.

C. EMPLOYER CONTRIBUTIONS

As has been noted in previous reports, the employer contribution information in Chart 3 provides less reliability than other information found in this report. Employer contributions often vary between categories of employees and change significantly from year to year, particularly if investment returns from pension funds are volatile. In addition, employer costs are often designated under several categories reflecting normal costs, amortization, administrative costs, and unfunded post-retirement increases and the designation of these costs may vary from plan to plan. The employer contribution rates shown in Chart 3 are derived from actuarial reports and, where these were not available, by information received from plan administrators. Where possible, the normal cost rate or the statutory rate is stated. Medical and other nonpension costs are generally not included in "employer contributions."

In addition, the employer contributions reported in Chart 3 are intended to reflect actual contributions made by the employer. In some plans covered by the report, employers may have paid contributions to the retirement plans at rates less than those that were determined by actuarial valuation as necessary to fully fund the pension plan.

D. VESTING

The term "vesting" refers to an employee's right, after satisfying some minimum service requirement, to receive some pension benefits regardless of whether the employee remains in a job covered by the pension plan. Vesting requirements for the plans included in the 2008 Report are displayed in the last column of Chart 3. The following table shows the changes that have occurred since 2000 in the plans covered by the report:

	2008	**2010**
Immediate vesting	2 plans	2 plans
Vesting after 3 years	7 plans	7 plans
Vesting after 4 years	4 plans	4 plans
Vesting after 5 years	51 plans	45 plans
Vesting after 6 years	1 plan	3 plans
Vesting after 8 years	4 plans	3 plans
Vesting after 10 years	17 plans	21 plans
Graded or varying	1 plan	2 plans
TOTAL	87 plans	87 plans

In 2010, a total of 58 plans, or 66.7% of the 87 plans in the report, require five or less years of service to vest. This is a decrease of six plans since the 2008 Report and 15 plans since the 2000 Report. The recent trend appears to be towards vesting periods of greater than five years. The number of plans in 2010 that require 10 years of service to vest has increased by four plans between 2008 and 2010. See Figure 7, *2010 Vesting Rates*, for a graphical representation.

E. TRENDS

The long-term trend in public employee pension plan vesting is generally toward vesting periods of five years or less than five years; however, it is noteworthy that there has been a recent increase in longer vesting periods as referenced in the prior paragraph. Twenty-seven of the 87 plans covered in the 2010 Report had vesting requirements that were greater than five years. Employee contribution rates were increased in 22 plans between the 2008 and 2010 Reports. Employer contribution rates increased for 47 plans between 2008 and 2010. There were 19 employer contribution rates that decreased between 2008 and 2010.

F. THE WRS

No vesting period was required for employees in the WRS in 2010. Employees beginning work on or after July 1, 2011 must accrue five years of creditable service to be vested in the WRS. The employee contribution rate for general employees for 2010 was 5% but, for the reasons discussed above, in practice, almost all contributions to the WRS were paid by employers. The employer contribution rate for 2010 was 4.8%, plus an additional 1.2% benefit adjustment contribution credited to the employer accumulation account. Beginning in 2011, the employer and employee contributions will be split evenly between the two and the employer may not make the employee contribution for most classes of employees.

CHART III
CONTRIBUTION AND VESTING REQUIREMENTS

	State	Fund Name	Social Security	Employee Contribution	Employer Normal Cost or Statutory Contribution	Vesting Period
1	Alabama	ERS	Yes	5.00%	4.99%	10 years
2	Alabama	TRS	Yes	5.00%	6.42%	10 years
3	Alaska	PERS	No	8.00%	5.00%	5 years
4	Alaska	TRS	No	8.00%	7.00%	5 years
5	Arizona	SRS	Yes	11.39%	10.10%	Immediate
6	Arkansas	PERS	Yes	5.00%	13.47%	5 years
7	Arkansas	TRS	Yes	6.00%	14.00%	5 years
8	California	PERS	Yes	5.00%	10.73%	5 years
9	California	TRS	No	8.00%	8.25%	5 years
10	Colorado	PERA	No	8.00%	10.15%	5 years
11	Connecticut	SERS	Yes	2.00%	9.00%	5 years
12	Connecticut	TRS	No	6.00%	10.11%	10 years
13	Delaware	SEPP	Yes	3.00% above $6,000	6.85%	5 years
14	Florida	FRS	Yes	3.00%	4.91%	6 years
15	Georgia	ERS	Yes	1.25%	6.32%	10 years
16	Georgia	TRS	Yes	5.53%	5.30%	10 years
17	Hawaii	ERS	Yes	6.00%	6.54%	5 years
18	Idaho	PERS	Yes	6.23%	10.39%	5 years
19	Illinois	SRS	Yes	4.00%	32.25%	8 years
20	Illinois	TRS	No	9.40%	25.49%	5 years
21	Illinois	MRF	Yes	4.50%	12.42%	8 years
22	Indiana	PERF	Yes	3.00%	8.60%	10 years
23	Indiana	TRF	Yes	3.00%	5.85%	10 years
24	Iowa	PERS	Yes	5.38%	8.33%	4 years
25	Kansas	PERS	Yes	4.00/6.00%	7.72%	5 years
26	Kentucky	KERS	Yes	5.00%	11.61%	5 years
27	Kentucky	CRS	Yes	5.00%	16.16%	5 years
28	Kentucky	TRS	No	9.11%	17.21%	5 years
29	Louisiana	SERS	No	8.00%	6.78%	5 years
30	Louisiana	TRSL	No	8.00%	15.50%	5 years
31	Maine	SRS	No	7.65%	14.35-53.32%	5 or 10 years
32	Maryland	SRS	Yes	2.00%	6.47%	5 years
33	Massachusetts	SERS	No	9.00%	3.16%	10 years
34	Massachusetts	TRS	No	11.00%	1.62%	10 years
35	Michigan	SERS	Yes	Non-contributory	8.30%	10 years
36	Michigan	MERS	Yes	Varies by plan (0 to 10.00%)	Varies by plan	6, 8, or 10 yrs
37	Michigan	PSERS	Yes	3.00 to 4.30%	10.10%	10 years
38	Minnesota	MSRS	Yes	5.00%	5.00%	3 years
39	Minnesota	PERA	Yes	9.10%	11.78%	3 years
40	Minnesota	TRA	Yes	9.00%	13.14%	3 years
41	Mississippi	PERS	Yes	9.00%	2.18%	8 years
42	Missouri	SERS	Yes	4.00%	4.51%	5 years
43	Missouri	LAGERS	Yes	0 to 4.00%	Varies by plan	5 years
44	Missouri	PSRS	No	14.00%	14.00%	5 years
45	Montana	PERS	Yes	6.90%	7.17%	5 years

46	Montana	TRS	Yes	7.15%	2.49%	5 years
47	Nebraska	SERS	Yes	4.80%	156% of mbr contr	3 years
48	Nebraska	CERS	Yes	4.50%	150% of mbr contr	3 years
49	Nebraska	SPP	Yes	8.28%	101% of mbr contr	5 years
50	Nevada	PERS	No	11.88%	11.88%	5 years
51	New Hampshire	NHRS	Yes	7.00%	11.04%	10 years
52	New Jersey	PERS	Yes	6.50%	4.70% state; 3.49% local	10 years
53	New Jersey	TPAF	Yes	6.50%	14.3%	10 years
54	New Mexico	PERA	Yes	Varies	Varies	5 years
55	New Mexico	ERB	Yes	7.90%	13.90%	5 years
56	New York	ERS	Yes	3.00%	9.40%*	10 years
57	New York	TRS	Yes	3.50%	8.62%	10 years
58	North Carolina	TSERS	Yes	6.00%	5.12%	5 years
59	North Carolina	LGERS	Yes	6.00%	6.88%	5 years
60	North Dakota	PERS	Yes	4.00%	4.12%	3 years
61	North Dakota	TRF	Yes	8.75%	8.75%	5 years
62	Ohio	PERS	No	10.00%	14.00%	5 years
63	Ohio	STRS	No	10.00%	14.00%	5 years
64	Oklahoma	PERS	Yes	3.50%	16.50%	6 years
65	Oklahoma	TRS	Yes	7.00%	9.50%	5 years
66	Oregon	PERS	Yes	6.00%	5.73%	5 years
67	Pennsylvania	SERS	Yes	6.25%	8.01%	10 years
68	Pennsylvania	PSERS	Yes	7.37% (average)	8.65%	5 years
69	Rhode Island	ERS	Yes	8.75% (9.50% teachers)	22.98% (22.32% teachers)	10 years
70	South Carolina	SCRS	Yes	6.50%	9.68%	5 years
71	South Dakota	SRS	Yes	6.00%	6.00%	3 years
72	Tennessee	CRS	Yes	Non-contributory	13.02%	5 years
73	Texas	ERS	Yes	6.50%	6.95%	10 years
74	Texas	TRS	No	6.40%	6.40%	5 years
75	Texas	MRS	Yes	5.00, 6.00, or 7.00%	9.86%*	5 years
76	Utah	SRS	Yes	Non-contributory	16.32%	4 years
77	Vermont	SRS	Yes	5.10%	4.81%	5 years
78	Vermont	TRS	Yes	5.00%	1.80%	5 years
79	Virginia	SRS	Yes	5.00%	6.26%	5 years
80	Washington	PERS	Yes	4.91%	8.41%	10 years
81	Washington	TRS	Yes	4.80%	9.18%	10 years
82	West Virginia	PERS	Yes	4.50%	12.50%	5 years
83	West Virginia	TRS	Yes	6.00%	29.20%	5 years
84	Wyoming	WRS	Yes	7.00%	7.12%	4 years
85	Milwaukee	City	Yes	5.50%	0.00%**	4 years
86	Milwaukee	County	Yes	Non-contributory	$29,529,322	5 years
87	Wisconsin	WRS	Yes	5.00%	4.80%	Immediate

*Average rate for 2012 contribution

**No employer contribution was necessary as expected assets equaled expected actuarial accrued liability at the time of the most recent actuarial study

Figure 6. 2010 Employee Contribution Rates

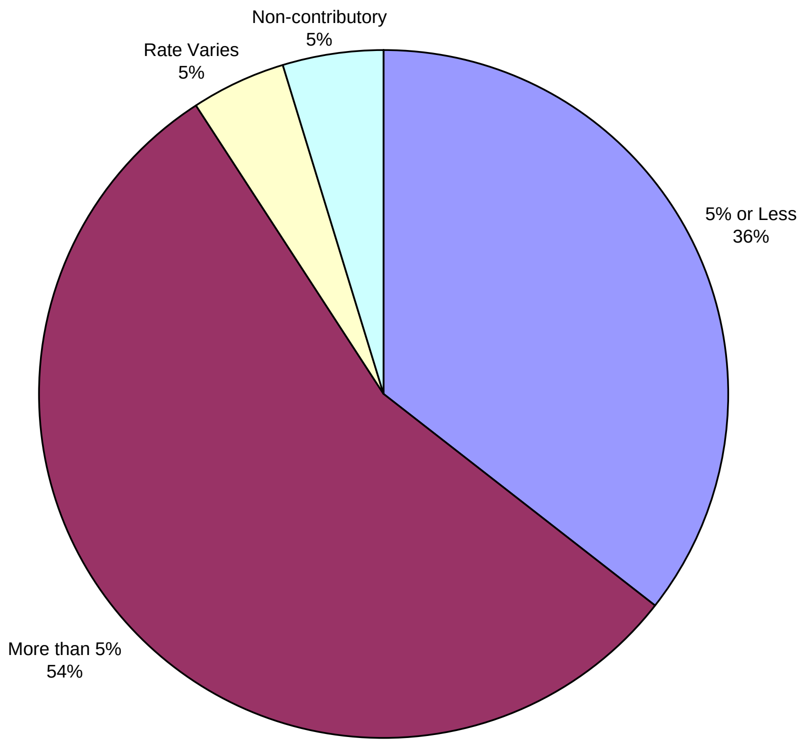
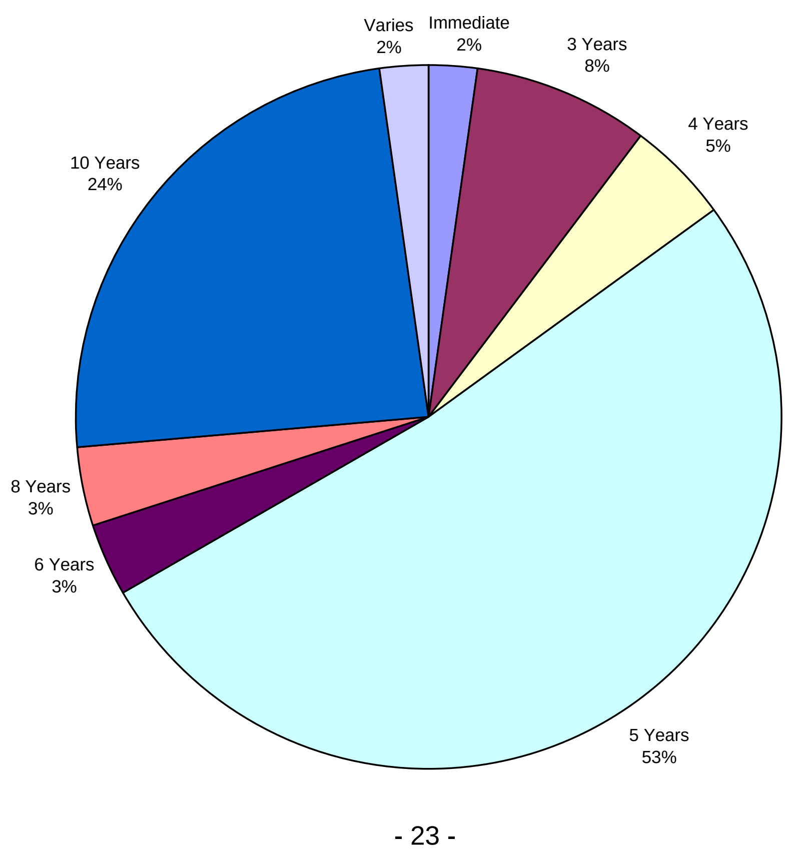


Figure 7. 2010 Vesting Rates



PART IV
RETIREMENT BENEFIT CALCULATIONS

A. INTRODUCTION

Chart 4, on pages 27 and 28, shows the retirement benefit formulas in effect for 2010 for each of the plans. The formulas are those used to calculate the benefits of general employees and teachers and may not apply to other categories of employees. For example, elected officials and employees who are classified as "protective employees" generally have higher formula benefit multipliers and earlier normal retirement dates.

In addition, many of the plans in the report have different "tiers" of formula benefits that apply to employees depending upon when they were hired. In Chart 4, an attempt was made to present the data for each plan that is applicable to the largest category of employees and to employees who newly entered public service.

As is shown in Chart 4, 83 of the 87 plans in the report are "defined benefit plans" in which an employee's retirement benefits are generally calculated by multiplying the employee's number of years of service times a "formula multiplier" and multiplying the product of this calculation by the employee's final average salary:

Years of Service x Formula Multiplier x Final Average Salary = Retirement Annuity

In effect, the formula multiplier is the percentage of the final average salary that an employee earns as a retirement annuity for each year of service.

As previously noted, two of the 87 plans in the report are "money purchase" plans in which an employee's retirement benefits are calculated by the amount of money in the employee's retirement account. Some of the defined benefit plans in the report also include "money purchase" elements. The other two plans are defined contribution plans where the value of contributions plus interest equals the retirement benefit.

B. "BASIC" PLANS IN WHICH EMPLOYEES ARE NOT COVERED BY SOCIAL SECURITY

Employees of 17 of the 87 plans are not covered by Social Security. The plans in which employees are not covered by Social Security frequently have a higher formula multiplier to compensate for the lack of Social Security coverage.

The 17 plans in which employees are not covered by Social Security have formula multipliers ranging between 2% and 2.5% for each year of service. The average formula multiplier for these 17 plans is approximately 2.2% for each year of service.

C. "COORDINATED" PLANS IN WHICH EMPLOYEES ARE COVERED BY SOCIAL SECURITY

Seventy of the 87 plans in this report are "coordinated" with the Social Security system, meaning that employees earn Social Security benefits for their employment. There are a wide range of formula multipliers in effect for these 70 plans, which sometimes vary by number of years of service, by date of employment, or by age at retirement. For 2010, the average formula multiplier for the coordinated plans that are not money purchase plans, defined contribution plans, or plans in which the employer determines the formula multiplier is approximately 1.95%. This number may be somewhat misleadingly low because a number of plans increase their multiplier rates following a certain number of years of service; generally 15, 25, or 30 years.

The formula benefits for 2010, as shown in Chart 4, are summarized and compared with the data found in the 2008 Report in the following table:

Formula Multiplier	**2008**	**2010**
1.1% to 1.3%	0 plans	2 plans
Over 1.3% to 1.5%	2 plans	5 plans
Over 1.5% to 1.7%	15 plans	17 plans
Over 1.7% to 1.9%	13 plans	7 plans
Over 1.9% to 2.1%	25 plans	21 plans
Over 2.1%	6 plans	10 plans
Employer determines formula multiplier	2 plans	3 plans
Formula benefit plus money purchase	3 plans	2 plans
Money purchase plan	2 plans	3 plans
TOTAL	70 plans	70 plans

See Figure 8, *2010 Formula Multipliers*, for a graphical representation.

D. FINAL AVERAGE SALARY

Defined benefit plans base the amount of a retirement annuity on the employee's "final average salary." The final average salary is generally the employee's highest earnings over a specified number of years or months, which are sometimes required to be consecutive years or months. Generally, an employee's highest salary will be the amount of salary he or she earned immediately prior to retirement.

Since the 2008 Report, eight plans have increased the number of years required to calculate final average salary. The most common method is to use a three-year average, which may be required to be consecutive years or may be required to be years that fall within a given period. (For example, the three highest years within a 10-year period.) Forty-eight of the 87 plans in the report use a three-year final average salary. The next most prevalent calculation of final average salary is a five-year period--22 of the 87 plans used a five-year period in 2010. See Figure 9, *2010 Final Average Salary Period*, for a graphical representation.

E. LIMITATIONS ON BENEFITS

The last column of Chart 4 shows the plans that have established a limit on the amount of pension benefits that may be received by a retiree. This limitation may be expressed as a maximum percentage of final average salary, as a maximum number of years that may be credited, or as a maximum percentage of highest salary. The majority of plans surveyed in the report impose no maximum benefit limitation. They are followed by those with a limit of 100% of final average salary.

F. TRENDS

The trend noted in previous reports to increase formula multipliers has slowed significantly and some states have even lowered their multipliers. Four (including both “basic” and “coordinated” plans) of the 87 plans increased their formula multipliers between 2006 and 2008. Thirty-two of 85 plans increased their formula multipliers between 1996 and 2000. Between 2008 and 2010, nine plans decreased their formula multipliers and three plans increased their multipliers. As noted in subsection D., there has been an increase in the number of years required to calculate final average salary figures. Plan caps have not changed significantly.

G. THE WRS

The WRS is primarily a defined benefit plan. However, it also has a “money purchase” feature that computes an employee’s retirement benefits by the amount of an annuity that can be purchased with moneys in the employee’s retirement account. The employee receives the higher of either the formula-based defined benefit annuity or the money purchase annuity.

The formula multiplier for general employees in the WRS is 1.6%, which is lower than the 1.95% average formula multiplier for the plans in the report that are coordinated with the Social Security system. 1999 Wisconsin Act 11 added an additional 0.165 to the formula multiplier for creditable service on or before January 1, 2000. However, for creditable service earned after January 1, 2000, the formula multiplier for general employees returned to 1.6%.

Final average salary under the WRS is an average of the three highest years of an employee’s salary. Annuities for general employees are capped at 70% of final average salary.

CHART IV
FINAL AVERAGE SALARY PERIODS-FORMULAS-LIMITATIONS

	State	Fund Name	FAS Period	Formula Multiplier	Limitation
1	Alabama	ERS	3 H/10	2.0125%	None
2	Alabama	TRS	3 H/10	2.0125%	None
3	Alaska	PERS	N/A	N/A; defined contribution plan	None
4	Alaska	TRS	N/A	N/A; defined contribution plan	None
5	Arizona	SRS	3 HC	2.1% (1st 20 yrs); 2.15% (next 5 yrs); 2.2% (next 5 yrs); 2.3% over 30 yrs	80% FAS
6	Arkansas	PERS	3 H	2% + .5% for yrs of service over 28 yrs	100% FAS
7	Arkansas	TRS	3 H	2.15%	None
8	California	PERS	3 H	2% at 55; 2.5% at 63 or older	65 yrs max
9	California	TRS	1 H	2% at 60; 2.4% at 63	100% FAS
10	Colorado	PERA	4 H	2.5%	100% FAS
11	Connecticut	SERS	3 H (130% cap)	1.33% + .5% over $48,800; 1.625% yrs over 35	None
12	Connecticut	TRS	3 H	2%	75% FAS
13	Delaware	SEPP	3 H	1.85%	None
14	Florida	FRS	8 H	1.6% to 1.68% (age and yrs of service)	100% FAS
15	Georgia	ERS	2 HC	2%	90% high yr
16	Georgia	TRS	2 HC	2%	40 yrs max
17	Hawaii	ERS	3 H	2%	None
18	Idaho	PERS	3 1/2 HC	2%	100% FAS
19	Illinois	SRS	8 HC/10	1.67%	75% FAS
20	Illinois	TRS	4 HC/10	2.2%	75% FAS
21	Illinois	MRF	4 HC/10	1.67% (1st 15 yrs); 2% (added yrs)	75% FAS
22	Indiana	PERF	5 H	1.1% + money purchase annuity	None
23	Indiana	TRF	5 H	1.1% + money purchase annuity	None
24	Iowa	PERS	3 H	2% (1st 30 yrs); 1% (next 5 yrs)	65% FAS
25	Kansas	PERS	3 H/5 H	1.75%	None
26	Kentucky	KERS	Last 5	1.1-1.75% depending on yrs service	None
27	Kentucky	CERS	5 H	1.1-1.75% depending on yrs service	None
28	Kentucky	TRS	5 H/3 H	1.7-3% depending on yrs service	100% FAS
29	Louisiana	SERS	3 HC	2.5%	100% FAS
30	Louisiana	TRSL	3 HC	2.5%	100% FAS
31	Maine	SRS	3 H	2%	None
32	Maryland	SRS	3 HC	1.4%	100% FAS
33	Massachusetts	SERS	3 HC	.5% to 2.5% (age-related)	80% FAS
34	Massachusetts	TRS	3 HC	.5% to 2.5% (age-related) + 2% for each yr over 24	80% FAS
35	Michigan	SERS	3 HC	1.5%	None
36	Michigan	MERS	5/3 HC	1.3% to 2.5% (employer option)	80% FAS for multipliers of 2.25% and over
37	Michigan	PSERS	5/3 HC	1.5%	None
38	Minnesota	MSRS	5 H	1.7%	None
39	Minnesota	PERA	5 HC	2.7%	None
40	Minnesota	TRA	5 HC	2.5%	None
41	Mississippi	PERS	25 + yr avg	2% (1st 25 yrs); 2.5% (added yrs)	None
42	Missouri	SERS	3 HC	1.7% (and .8% to age 62 if R90 met)	None
43	Missouri	LAGERS	5/3 HC	1-2.5% (varies by employer option)	None
44	Missouri	PSRS	3 HC	2.5%; 2.55% with 31 or more yrs of service	100% FAS
45	Montana	PERS	3 HC	1.785%; 2% with at least 25 yrs of service	None

46	Montana	TRS	3 HC	1.67%	None
47	Nebraska	SERS		Cash balance	None
48	Nebraska	CERS		Cash balance	None
49	Nebraska	SPP	3 H	2%	None
50	Nevada	PERS	3 HC	2.5%	75% FAS
51	New Hampshire	NHRS	3 H (cap)	1.67% to 65; 1.515% after 65	$120,000
52	New Jersey	PERS	5 H	1.67%	None
53	New Jersey	TPAF	5 H	1.67%	None
54	New Mexico	PERS	3 HC	Varies	80% FAS
55	New Mexico	ERA	5 HC	2.35%	None
56	New York	ERS	3 HC (10% cap)	1.67% (under 20 yrs); 2% (over 20 yrs); 3.5% (over 30 yrs)	None
57	New York	TRS	3 HC	1.67% (under 25 yrs)	None
58	North Carolina	TSERS	4 HC	1.82%; 2% (over 25 yrs); 3.5% (over 30 yrs)	None
59	North Carolina	LGERS	4 HC	1.85%	None
60	North Dakota	PERS	3 H/10	2%	None
61	North Dakota	TRF	5H	2%	None
62	Ohio	PERS	3 H	2.2% (1st 30 yrs); 2.5% (added yrs)	100% FAS
63	Ohio	STRS	3 H	2.2% (1st 35 yrs); 2.5% (35 or more yrs)	100% FAS
64	Oklahoma	PERS	3 H/10	2%	None
65	Oklahoma	TRS	5 H	2%	None
66	Oregon	PERS	3 H	1.5%	None
67	Pennsylvania	SERS	3 H	2-2.5%	100% high yr
68	Pennsylvania	PSERS	3 H	2-2.5%	None
69	Rhode Island	ERS	5 HC	1.6% (1st 10 yrs); 1.8% (2nd 10 yrs); 2% (21-25 yrs); 2.25% (26-30 yrs); 2.5% (31-37 yrs); 2.25% (38 yrs)	80% FAS
70	South Carolina	SCRS	3 HC	2.25%	None
71	South Dakota	SRS	3 HC/10	1.7%	None
72	Tennessee	CRS	5 HC	1.5% + .25% FAS over SSIL	90% FAS
73	Texas	ERS	4 H	2.3%	100% AMC*
74	Texas	TRS	5 H	2.3%	None
75	Texas	MRS	Last 3 yrs**	Money purchase options	None
76	Utah	SRS	3 H	2%	None
77	Vermont	SRS	3 HC	1.67%	60% FAS
78	Vermont	TRS	3 HC	1.67%	53.34% FAS
79	Virginia	SRS	3 HC	1.7%	100% FAS
80	Washington	PERS	5 HC	1% + .25% per yr after 20 yrs (non-contributory)	None
81	Washington	TRS	5 HC	1% + .25% per yr after 20 yrs (non-contributory)	None
82	West Virginia	PERS	3 HC/10	2%	None
83	West Virginia	TRS	5 H/15	2%	None
84	Wyoming	WRS	3 H	2.125% (1st 15 yrs); 2.25% (added yrs)	None
85	Milwaukee	City	3 H	2%	70% FAS
86	Milwaukee	County	3 HC	2%	80% FAS
87	Wisconsin	WRS	3 H	1.6%	70% FAS

*Average monthly compensation

**36 months ending 13 months before calculation

Figure 8. 2010 Formula Multipliers

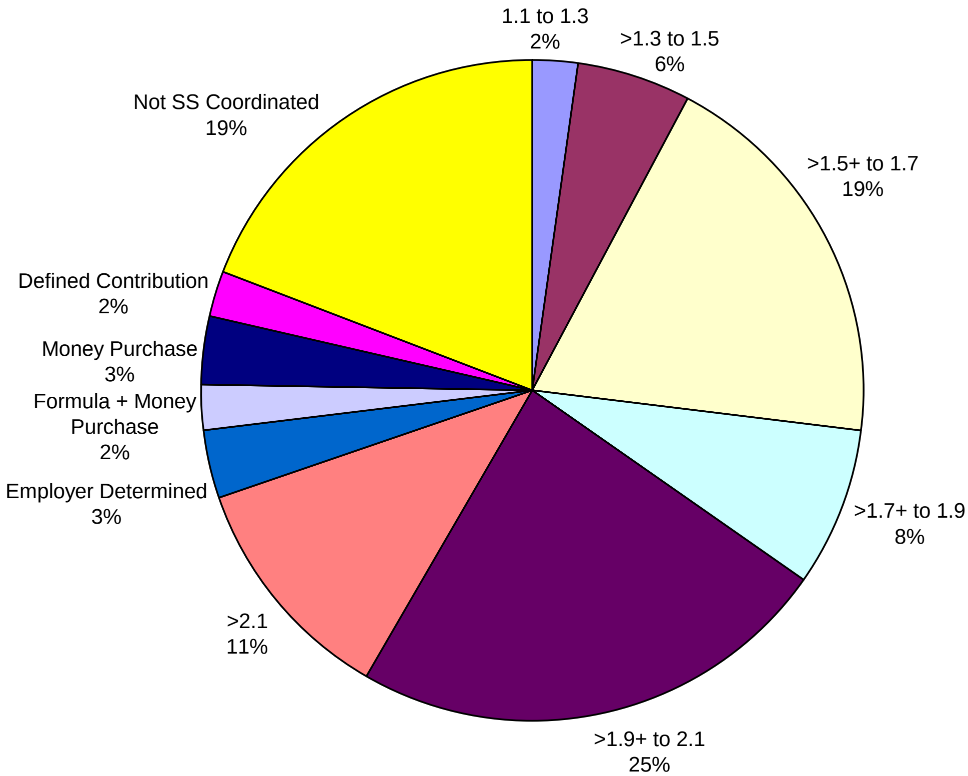
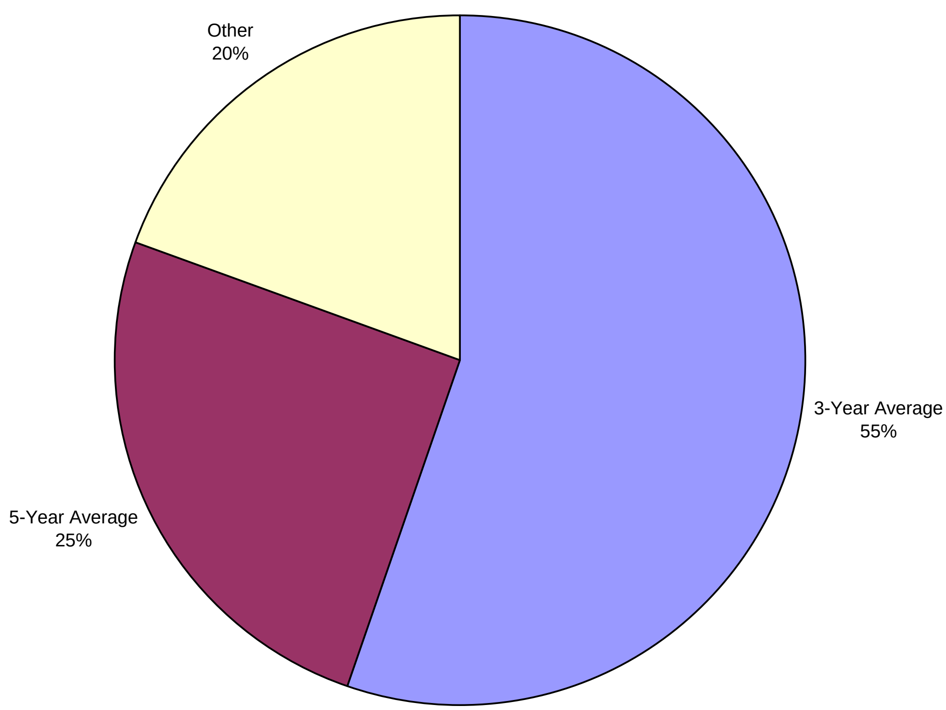


Figure 9. 2010 Final Average Salary Period



PART V
POST-RETIREMENT ANNUITY INCREASES AND TAXES

A. INTRODUCTION

Chart 5, on pages 33 and 34, shows the provisions of each plan for increasing retirement annuities after an employee has retired. Chart 5 also shows how annuity payments from each plan are treated under that state's income tax laws. In addition, benefit adjustments in the Social Security program over the last 10 years and income taxation of Social Security benefits are also discussed in this part.

B. SOCIAL SECURITY

Pension designers are concerned with the adequacy of benefits at the time of retirement and also with the continuing purchasing power of those benefits during retirement as affected by inflation. Since 1975, Social Security benefits have been automatically adjusted each year by the percentage increase in the consumer price index (CPI). The increases in Social Security benefits for each of the last 10 years are shown below and displayed in Figure 10, *Social Security CPI % Adjustments 2000 to 2011*:

CPI Year	Date on Which First Payable	Percentage Increase
2000	1/1/2001	3.5%
2001	1/1/2002	2.6%
2002	1/1/2003	1.4%
2003	1/1/2004	2.1%
2004	1/1/2005	2.7%
2005	1/1/2006	4.1%
2006	1/1/2007	3.3%
2007	1/1/2008	2.3%
2008	1/1/2009	5.8%
2009	1/1/2010	0.0%
2010	1/1/2011	0.0%
2011	1/1/2012	3.6%

For those employees in the 70 of the 87 plans in this report (80%) that are also covered by the Social Security program, at least that portion of their total retirement income that is received from Social Security automatically keeps pace with inflation.

Under federal law, up to 50% of Social Security benefits are subject to income taxation if the taxpayer's adjusted gross income is between $25,000 and $34,000 for single taxpayers or between $32,000 and $44,000 for married taxpayers filing a joint income tax return. If a taxpayer's income exceeds these levels, then 85% of his or her Social Security benefits are subject to federal income taxation.

State income taxation of Social Security benefits varies. Twenty-eight states completely exempt Social Security benefits from income taxation. Thirteen states impose income taxes on all or a portion of Social Security benefits and nine states have no personal income tax or a very limited personal income tax that does not affect Social Security payments.

C. POST-RETIREMENT ANNUITY COST-OF-LIVING ADJUSTMENTS

Most of the plans in this report have provisions for post-retirement annuity adjustments to protect the purchasing power of annuities against inflation. The provisions of each of the plans are described in the fourth column of Chart 5. The following table summarizes and compares the post-retirement annuity adjustment provisions found in the 2008 Report against those found in the 2010 Report:

	2008	**2010**
Adjustments indexed to CPI	35 plans	28 plans
Automatic percentage increase	26 plans	29 plans
Investment surplus	5 plans	5 plans
Ad hoc (any increase must be authorized by Legislature or a decision-making board) or money purchase	19 plans	19 plans
No increase	2 plans	6 plans
TOTAL	87 plans	87 plans

Note that, as shown in Chart 5, many of the plans in which post-retirement annuity increases are indexed to the CPI also include a cap on the total percentage adjustment that may be made within any given year. Also, many of the plans in which post-retirement annuity increases are indexed to the CPI or are automatic also include provisions for additional annuity adjustments if there are investment surpluses in the retirement fund. Nineteen of the 87 plans are either money purchase plans or provide post-retirement annuity increases only on an "ad hoc" basis, where either the Legislature or a decision-making board determines whether, and when, a post-retirement annuity increase is granted. See Figure 11, *2010 Cost of Living Adjustments (COLA)*, for a graphical representation.

D. STATE INCOME TAXATION OF ANNUITIES

The last column of Chart 5 shows the treatment of pension benefits under each of the plans by the state income tax laws in effect in that state. In 21 of the 87 plans, pension benefits are subject to state income taxation and no specific amount of retirement benefits is tax exempt. Also, in 21 of the 87 plans, pension benefits are totally exempt from state income taxation. Eleven of the plans are in states with no income taxation.

Caution must be used in interpreting the information in the last column of Chart 5. In many of the states in which pension income is fully taxable, other provisions of state income tax laws may ameliorate or completely eliminate the effect of the state income tax laws on retirees. For example, some state income tax laws have a level of exemptions, deductions, or tax credits that substantially reduce or eliminate state income taxation for persons at certain income levels. Also, in addition, some of these exemptions, deductions, or tax credits may be increased for taxpayers who have reached a certain age. In these states, the level of income taxation on retirees may be equal to or less than that in states where public employee pension income is exempt from state income taxation.

E. TRENDS

Most of the plans in this report have adopted provisions in which retirement annuities are annually increased, either by a set percentage or in response to changes in the CPI. These provisions were mostly adopted in the 1970s and 1980s, in response to the high inflation that occurred in those years.

F. THE WRS

Retirees in the WRS whose annuities are paid from the "core" fund receive annual annuity adjustments tied to whether reserve surpluses in the fund, as adjusted by a formula, are sufficient to generate an increase. In addition, the annual adjustment may result in a reduction of annuities if investment losses are severe, particularly if investment losses occur over a number of consecutive years. However, annuities paid from the "core" fund may not be reduced below the level initially paid to a retiree. For annuities paid in 2010, the annuity adjustment in the core fund was -1.2%.

WRS retirement benefits are subject to state income taxation except for certain payments made with respect to persons who were employees prior to 1964 or who had retired prior to 1964. Income from Social Security is exempt from Wisconsin income taxes. In addition, up to $5,000 per year of income from qualified retirement plans is exempt from Wisconsin income taxes for taxpayers with an adjusted gross income of $15,000 or less ($30,000 for married joint filers) who are 65 or older.

CHART V
POST-RETIREMENT INCREASES AND STATE TAX PROVISIONS

	State	Fund Name	Social Security	Annual Post-Retirement Increases	State Taxation of PERS Benefits
1	Alabama	ERS	Yes	Ad hoc only	Benefits exempt
2	Alabama	TRS	Yes	Ad hoc only	Benefits exempt
3	Alaska	PERS	No	N/A: acct balance + invest earnings	No income tax
4	Alaska	TRS	No	N/A: acct balance + invest earnings	No income tax
5	Arizona	SRS	Yes	Excess earnings - 4% cap	Exempt to $2,500
6	Arkansas	PERS	Yes	3%	Exempt to $6,000
7	Arkansas	TRS	Yes	3%	Exempt to $6,000
8	California	PERS	Yes	2% max based on CPI	Benefits taxable
9	California	TRS	No	2%	Benefits taxable
10	Colorado	PERA	No	Lesser of 2% or CPI-W	Exempt to $20,000/$24,000
11	Connecticut	SERS	Yes	60% of CPI up to 6%, 2.5% minimum	Benefits taxable
12	Connecticut	TRS	No	2%	Benefits taxable
13	Delaware	SEPP	Yes	Ad hoc only	Exempt to $12,500
14	Florida	FRS	Yes	3%	No income tax
15	Georgia	ERS	Yes	Ad hoc-based on CPI	Exempt to $40,000
16	Georgia	TRS	Yes	Ad hoc-based on CPI	Exempt to $40,000
17	Hawaii	ERS	Yes	2.5%	Benefits exempt
18	Idaho	PERS	Yes	CPI - 1% minimum to 6% max (conditional)	Benefits taxable
19	Illinois	SRS	Yes	3% or 1/2 of CPI	Benefits exempt
20	Illinois	TRS	No	3%	Benefits exempt
21	Illinois	MRF	Yes	3%	Benefits exempt
22	Indiana	PERF	Yes	Ad hoc only (1.5% presumed)	Benefits taxable
23	Indiana	TRF	Yes	Ad hoc only (1% presumed)	Benefits taxable
24	Iowa	PERS	Yes	Excess earnings - CPI; 3% cap	Exempt to $6,000, $12,000 married
25	Kansas	PERS	Yes	2%	Benefits exempt
26	Kentucky	KERS	Yes	1.5%	Exempt to $41,110
27	Kentucky	CERS	Yes	1.5%	Exempt to $41,110
28	Kentucky	TRS	No	1.5%	Exempt to $41,110
29	Louisiana	SERS	No	Excess earnings; CPI; 3% cap	Benefits exempt
30	Louisiana	TRSL	No	Excess earnings	Benefits exempt
31	Maine	SRS	No	CPI - 4% cap	Exempt to $6,000
32	Maryland	SRS	Yes	CPI - 3% cap	Exempt to $23,600
33	Massachusetts	SERS	No	CPI - on 1st $12,000- conditional, 3% cap	Benefits exempt
34	Massachusetts	TRS	No	CPI - on 1st $12,000- conditional, 3% cap	Benefits exempt
35	Michigan	SERS	Yes	3% ($300 annual cap)	Benefits exempt
36	Michigan	MERS	Yes	3 plans - depending on employer agreement (generally 2.5%)	Benefits exempt
37	Michigan	PSERS	Yes	3%	Benefits exempt
38	Minnesota	MSRS	Yes	2.5%	Benefits taxable
39	Minnesota	PERA	Yes	1%	Benefits taxable
40	Minnesota	TRA	Yes	2%	Benefits taxable
41	Mississippi	PERS	Yes	3%	Benefits exempt
42	Missouri	SERS	Yes	80% CPI - 5% cap	Exempt to $33,703

43	Missouri	LAGERS	Yes	CPI - 4% cap	Exempt to $33,703
44	Missouri	PSRS	No	CPI - 5% cap; 80% of original benefits lifetime cap	Exempt to $33,703
45	Montana	PERS	Yes	1.5%	Exempt to $3,600
46	Montana	TRS	Yes	1.5%	Exempt to $3,600
47	Nebraska	SERS	Yes	2.5%	Benefits taxable
48	Nebraska	CERS	Yes	2.5%	Benefits taxable
49	Nebraska	SPP	Yes	CPI - 2.5% cap	Benefits taxable
50	Nevada	PERS	No	2 to 5%	No income tax
51	New Hampshire	NHRS	Yes	Ad hoc	Benefits exempt
52	New Jersey	PERS	Yes	Suspended	Exempt to $15,000/$20,000
53	New Jersey	TPAF	Yes	Suspended	Exempt to $15,000/$20,000
54	New Mexico	PERA	Yes	3%	$2,500 exempt
55	New Mexico	ERA	Yes	50% of CPI - 2% min; 4% cap	$2,500 exempt
56	New York	ERS	Yes	50% of CPI, max 3% on 1st $18,000	Benefits exempt
57	New York	TRS	Yes	50% of CPI, max 3% on 1st $18,000	Benefits exempt
58	North Carolina	TSERS	Yes	Ad hoc	Exempt to $4,000/$8,000
59	North Carolina	LGERS	Yes	Ad hoc	Exempt to $4,000/$8,000
60	North Dakota	PERS	Yes	Ad hoc	Benefits taxable
61	North Dakota	TRF	Yes	Ad hoc	Benefits taxable
62	Ohio	PERS	No	3%	Benefits taxable
63	Ohio	STRS	No	3%	Benefits taxable
64	Oklahoma	PERS	Yes	Ad hoc	Exempt to $10,000
65	Oklahoma	TRS	Yes	Ad hoc	Exempt to $10,000
66	Oregon	PERS	Yes	CPI - 2% cap	Benefits taxable
67	Pennsylvania	SERS	Yes	Ad hoc	Benefits exempt
68	Pennsylvania	PSERS	Yes	Ad hoc	Benefits exempt
69	Rhode Island	ERS	Yes	CPI - 3% cap	Benefits taxable
70	South Carolina	SCRS	Yes	CPI - 2% cap	$15,000 deduction
71	South Dakota	SRS	Yes	3.1% (sliding scale)	No income tax
72	Tennessee	CRS	Yes	CPI - 3% cap	Benefits exempt for income under $16,200/$27,000
73	Texas	ERS	Yes	Ad hoc	No income tax
74	Texas	TRS	No	Ad hoc	No income tax
75	Texas	MRS	Yes	Up to 70% of CPI (ad hoc)	No income tax
76	Utah	SRS	Yes	CPI - 4% cap	Exempt to $7,500/$15,000
77	Vermont	SRS	Yes	50% of CPI - 5% cap	Benefits taxable
78	Vermont	TRS	Yes	50% of CPI - 5% cap	Benefits taxable
79	Virginia	SRS	Yes	CPI - 5% cap	Deduction up to $12,000
80	Washington	PERS	Yes	CPI - 3% cap	No income tax
81	Washington	TRS	Yes	CPI - 3% cap	No income tax
82	West Virginia	PERS	Yes	No	Exempt to $2,000
83	West Virginia	TRS	Yes	No	Exempt to $2,000
84	Wyoming	WRS	Yes	CPI - 3% cap	No income tax
85	Milwaukee	City	Yes	CPI - 3% cap	Limited exemptions
86	Milwaukee	County	Yes	2%	Limited exemptions
87	Wisconsin	WRS	Yes	Investment earnings; reductions possible	Limited exemptions

Figure 10. Social Security CPI % Adjustments 2000 to 2011

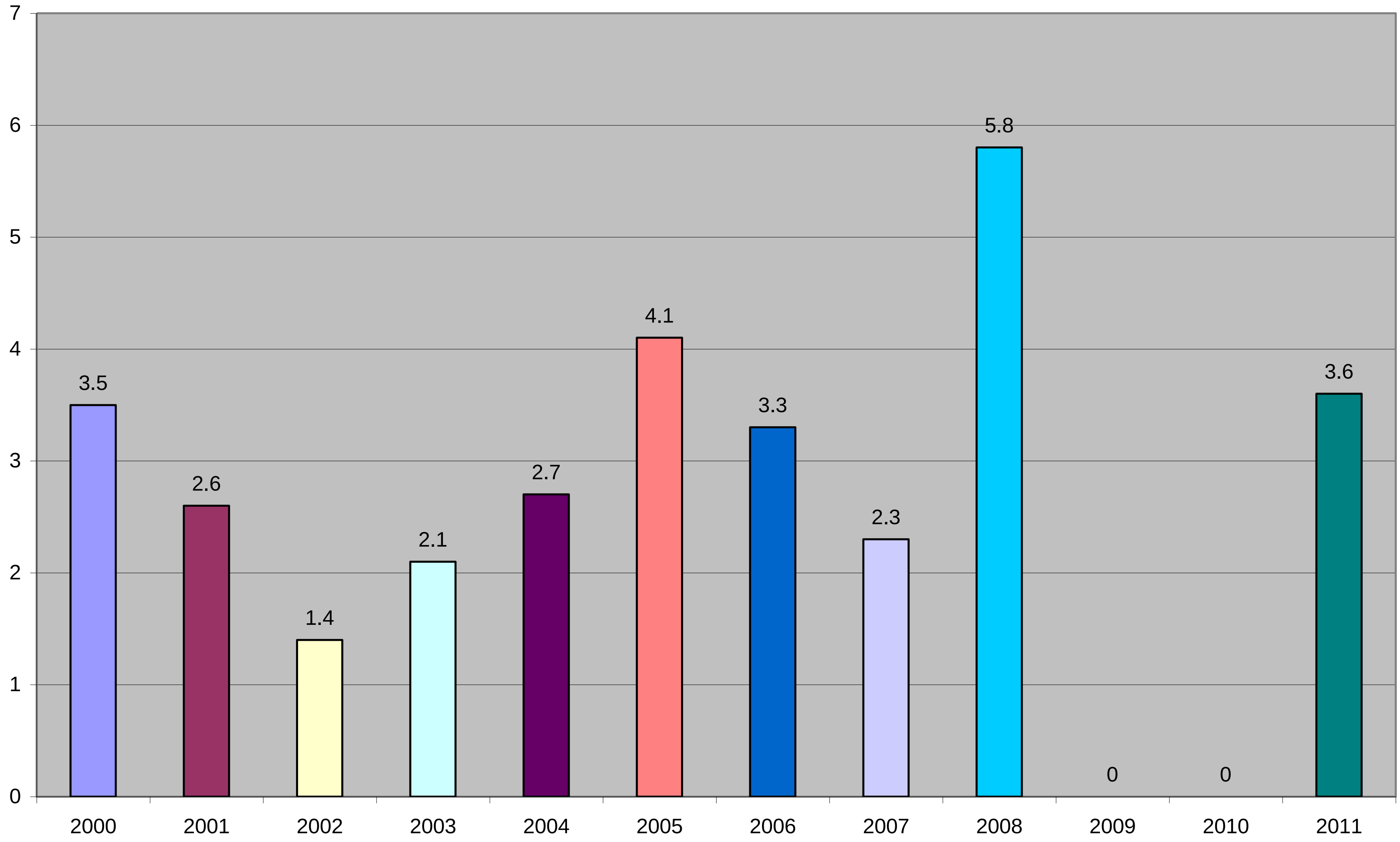
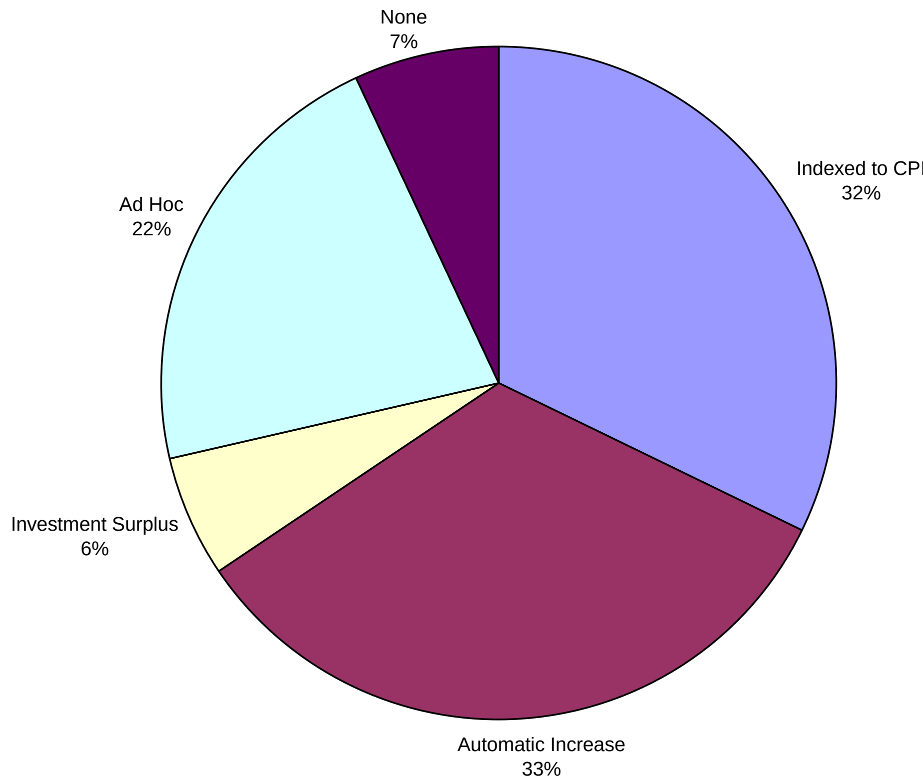


Figure 11. 2010 Cost of Living Adjustments



PART VI
ACTUARIAL AND ACCOUNTING INFORMATION

A. INTRODUCTION

Chart 6, on pages 40 and 41, provides selected actuarial and accounting information about each of the plans in the report. This part of the report discusses the actuarial method used by each of the plans, provides the interest assumption, wage inflation assumption, and economic spread for each of the plans, and provides the Governmental Accounting Standards Board (GASB) 25 funding ratio for each of the plans in 2010.

B. ACTUARIAL METHODS

The third column in Chart 6 lists the actuarial methods used by each of the 87 plans. An actuarial method is a procedure for determining the present value of pension benefits that will be paid in the future and allocating that value and the cost of the benefits to specific time periods. There are a number of accepted actuarial methods that presumably will reach the goal of fully funding all pension obligations as they become due, but they allocate costs in different ways during the period of employment of participants in the plan.

Sixty-nine, or 79%, of the 87 plans use the entry age actuarial method; 12, or 14%, of the 87 plans use the unit credit method; four, or 5%, of the 87 plans use the aggregate cost method or other methods.

C. INTEREST ASSUMPTION

The interest assumption, which is also sometimes referred to as the "earnings assumption," is one of the key economic assumptions in determining the level of contribution rates. The fourth column in Chart 6 provides the interest assumption for each of the 87 plans in the report. This information is compared with previous reports in the following table:

Interest Assumption	2000	2004	2006	2008	2010
From 5% to 7%	1 plan	1 plan	1 plan	1 plan	4 plans
Over 7% to 8%	56 plans	59 plans	61 plans	63 plans	65 plans
Over 8%	27 plans	24 plans	23 plans	21 plans	16 plans
Not determined or not applicable	1 plan	1 plan	0 plans	2 plans	2 plans
TOTAL	85 plans	85 plans	85 plans	87 plans	87 plans

See Figure 12, *2010 Plan Interest Assumptions*, for a graphical representation of current data.

D. ECONOMIC SPREAD

Another key economic assumption in pension planning is the assumption of the wage inflation rate or general salary increases in excess of those provided for merit or seniority. The difference between the wage inflation assumption and the interest assumption is often referred to as the "economic spread," which is the assumed real rate of return on invested assets above the wage inflation rate. The fifth and sixth columns of Chart 6 show the wage inflation assumptions and the resultant economic spread for each of the plans in the report.

E. FUNDING RATIO

Until 1995, the GASB required public pension plans to disclose the "pension benefit obligation," which is a measure of the present value of pension benefits, adjusted for the affects of projected salary increases. The pension benefits were estimated only on service earned by employees up to the date of the estimate.

GASB 25, issued in November 1994, requires that for funding disclosures beginning with periods after June 15, 1996, the funding disclosures be based upon regular actuarial valuations. Included in the requirements under GASB 25 is a "schedule funding progress that reports the actuarial value of assets, the actuarial accrued liability and the relationship between the two over time...."

The following table summarizes the funding ratios for each of the plans in the 2010 Report and compares them with the 2008, 2006, 2004, and 2000 Reports.

Funding Ratio	2000	2004	2006	2008	2010
More than 100%	33 plans	9 plans	7 plans	10 plans	4 plans
90% to 100%	22 plans	28 plans	21 plans	19 plans	11 plans
80%, but less than 90%	14 plans	19 plans	20 plans	18 plans	23 plans
70%, but less than 80%	5 plans	15 plans	17 plans	24 plans	16 plans
60%, but less than 70%	1 plan	7 plans	11 plans	6 plans	17 plans
50%, but less than 60%	1 plan	3 plans	3 plans	6 plans	7 plans
Less than 50%	3 plans	2 plans	3 plans	2 plans	7 plans
Not determined	6 plans	2 plans	3 plans	2 plans	2 plans
TOTAL	85 plans	85 plans	85 plans	87 plans	87 plans

See Figure 13, *2010 Plan Funding Ratios*, for a graphical representation of current data.

F. TRENDS

Funding ratios of more than 100% have decreased substantially since the 2000 Report, reflecting the general decline in earnings that occurred during the period, including a significant decrease between 2008 and 2010. Thirty-three plans had funding ratios in excess of 100% in 2000, but only four plans had funding ratios in excess of 100% in 2010. Overall funding has also decreased significantly, only 17% of the plans studied had funding ratios of 90% or more in 2010. The average funding ratio in 2010 fell from 81% in 2008 to 73.4% in 2010. There was a significant increase in plans that are less than 50% funded (5) as well.

The entry age method is still the predominant method used by the plans studied.

G. THE WRS

The actuarial method used by the WRS is entry age. The interest assumption for 2010 was lowered to 7.2% from the former 7.8% and the "economic spread" is currently 3.2%.

For 2010, the funding ratio for the WRS was 99.8%, which was significantly higher than the average funding ratio of 73.4% for all plans studied.

CHART VI
ACTUARIAL AND ACCOUNTING PROVISIONS

	State	Fund Name	Actuarial Method	Interest Assumption	Wage Inflation	Economic Spread	Funded Ratio
1	Alabama	ERS	Entry age	8.00%	4.50%	3.50%	68.20%
2	Alabama	TRS	Entry age	8.00%	4.50%	3.50%	71.10%
3	Alaska	PERS	N/A	N/A	N/A	N/A	N.D.
4	Alaska	TRS	N/A	N/A	N/A	N/A	N.D.
5	Arizona	SRS	Unit credit	8.00%	3.75%	4.25%	76.70%
6	Arkansas	PERS	Entry age	8.00%	4.00%	4.00%	74.00%
7	Arkansas	TRS	Entry age	8.00%	4.00%	4.00%	73.80%
8	California	PERS	Entry age	7.75%	3.00%	4.75%	60.80%
9	California	TRS	Entry age	8.00%	3.25%	4.75%	78.00%
10	Colorado	PERA	Entry age	8.00%	3.75%	4.25%	64.70%
11	Connecticut	SERS	Unit credit	8.25%	4.00%	4.25%	44.40%
12	Connecticut	TRS	Entry age	8.50%	4.00%	4.50%	61.42%
13	Delaware	SEPP	Entry age	8.00%	3.75%	4.25%	96.00%
14	Florida	FRS	Entry age	7.75%	3.00%	4.75%	86.59%
15	Georgia	ERS	Entry age	7.50%	3.00%	4.50%	80.10%
16	Georgia	TRS	Entry age	7.50%	3.75%	3.75%	87.20%
17	Hawaii	ERS	Entry age	8.00%	4.00%	4.00%	68.80%
18	Idaho	PERS	Entry age	7.75%	3.50%	4.25%	78.90%
19	Illinois	SRS	Unit credit	7.75%	3.00%	4.75%	37.40%
20	Illinois	TRS	Unit credit	8.50%	3.50%	5.00%	48.40%
21	Illinois	MRF	Entry age	7.50%	3.00%	4.50%	86.30%
22	Indiana	PERF	Entry age	7.00%	3.00%	4.00%	85.20%
23	Indiana	TRF	Entry age	7.00%	3.00%	4.00%	44.30%
24	Iowa	PERS	Entry age	7.50%	4.00%	3.50%	80.80%
25	Kansas	PERS	Entry age	8.00%	3.25%	4.75%	60.00%
26	Kentucky	KERS	Entry age	7.75%	4.50%	3.25%	38.30%
27	Kentucky	CERS	Entry age	7.75%	4.50%	3.25%	56.84%
28	Kentucky	TRS	Unit credit	7.50%	4.00%	3.50%	61.00%
29	Louisiana	SERS	Unit credit	8.25%	N.D.	N.D.	57.60%
30	Louisiana	TRSL	Unit credit	8.25%	3.00%	5.25%	54.40%
31	Maine	SRS	Entry age	7.75%	4.75%	3.00%	65.90%
32	Maryland	SRS	Entry age	7.75%	3.50%	4.25%	64.10%
33	Massachusetts	SERS	Entry age	8.25%	N.D.	N.D.	81.00%
34	Massachusetts	TRS	Entry age	8.25%	N.D.	N.D.	63.00%
35	Michigan	SERS	Entry age	8.00%	3.50%	4.50%	78.00%
36	Michigan	MERS	Entry age	8.00%	4.50%	3.50%	74.50%
37	Michigan	PSERS	Entry age	8.00%	3.50%	4.50%	78.90%
38	Minnesota	MSRS	Entry age	8.50%	4.50%	4.00%	90.69%
39	Minnesota	PERA	Entry age	8.50%	4.00%	4.50%	80.31%
40	Minnesota	TRA	Entry age	8.50%	4.50%	4.00%	81.87%
41	Mississippi	PERS	Entry age	8.00%	4.25%	3.75%	64.20%
42	Missouri	SERS	Entry age	8.50%	4.00%	4.50%	80.40%
43	Missouri	LAGERS	Entry age	7.50%	4.00%	3.50%	81.00%
44	Missouri	PSRS	Entry age	8.00%	5.00%	3.00%	77.70%
45	Montana	PERS	Entry age	7.75%	4.00%	3.75%	70.25%
46	Montana	TRS	Entry age	7.75%	4.50%	3.25%	61.53%
47	Nebraska	SERS	Entry age	7.75%	3.50%	4.25%	95.90%
48	Nebraska	CERS	Entry age	7.75%	3.50%	4.25%	94.70%

49	Nebraska	SPP	Entry age	8.00%	3.50%	4.50%	88.90%
50	Nevada	PERS	Entry age	8.00%	3.50%	4.50%	70.50%
51	New Hampshire	NHRS	Entry age	8.50%	4.50%	4.00%	58.50%
52	New Jersey	PERS	Unit credit	8.25%	5.45%	2.80%	52.80%
53	New Jersey	TPAF	Unit credit	8.25%	4.00%	4.25%	68.40%
54	New Mexico	PERA	Entry age	8.00%	4.00%	4.00%	78.48%
55	New Mexico	ERB	Entry age	8.00%	3.00%	5.00%	65.70%
56	New York	ERS	Aggregate	8.00%	3.00%	5.00%	93.90%
57	New York	TRS	Aggregate	8.00%	3.00%	5.00%	100.30%
58	North Carolina	TSERS	Entry age	7.25%	N.D.	N.D.	95.90%
59	North Carolina	LGERS	Entry age	7.25%	N.D.	N.D.	99.50%
60	North Dakota	PERS	Entry age	8.00%	4.50%	3.50%	73.40%
61	North Dakota	TRF	Entry age	8.00%	3.00%	5.00%	66.30%
62	Ohio	PERS	Entry age	8.00%	4.00%	4.00%	75.30%
63	Ohio	STRS	Entry age	8.00%	3.50%	4.50%	59.10%
64	Oklahoma	PERS	Entry age	7.50%	4.00%	3.50%	80.70%
65	Oklahoma	TRS	Entry age	8.00%	3.00%	5.00%	56.70%
66	Oregon	PERS	Unit credit	8.00%	2.75%	5.25%	85.80%
67	Pennsylvania	SERS	Entry age	8.00%	2.75%	5.25%	84.40%
68	Pennsylvania	PSERS	Entry age	8.00%	3.25%	4.75%	75.10%
69	Rhode Island	ERS	Entry age	7.50%	2.75%	4.75%	48.40%
70	South Carolina	SCRS	Entry age	8.00%	3.00%	5.00%	65.50%
71	South Dakota	SRS	Entry age	7.75%	2.80%	4.95%	96.30%
72	Tennessee	CRS	Entry age-FIL*	7.50%	3.00%	4.50%	90.60%
73	Texas	ERS	Entry age	8.00%	3.50%	4.50%	83.20%
74	Texas	TRS	Entry age	8.00%	3.00%	5.00%	82.70%
75	Texas	MRS	Unit credit	7.00%	3.00%	4.00%	82.90%
76	Utah	SRS	Entry age	7.75%	3.00%	4.75%	82.00%
77	Vermont	SRS	Entry age	8.25%	3.00%	5.25%	81.20%
78	Vermont	TRS	Entry age	6.25-9.00%	3.00%	3.25-6%	63.80%
79	Virginia	SRS	Entry age	7.50%	2.50%	5.00%	80.20%
80	Washington	PERS	Hybrid	8.00%	3.50%	4.50%	113.00%
81	Washington	TRS	Hybrid	8.00%	3.50%	4.50%	116.00%
82	West Virginia	PERS	Entry age	7.50%	3.00%	4.50%	74.60%
83	West Virginia	TRS	Entry age	7.50%	3.00%	4.50%	46.50%
84	Wyoming	WRS	Entry age	8.00%	3.50%	4.50%	84.60%
85	Milwaukee	City	Unit credit	8.50%	3.00%	5.50%	104.40%
86	Milwaukee	County	Entry age	8.00%	3.00%	5.00%	93.30%
87	Wisconsin	WRS	Entry age-FIL*	7.20%	3.20%	4.00%	99.80%

*FIL = Frozen initial liability method

Figure 12. 2010 Plan Interest Assumptions

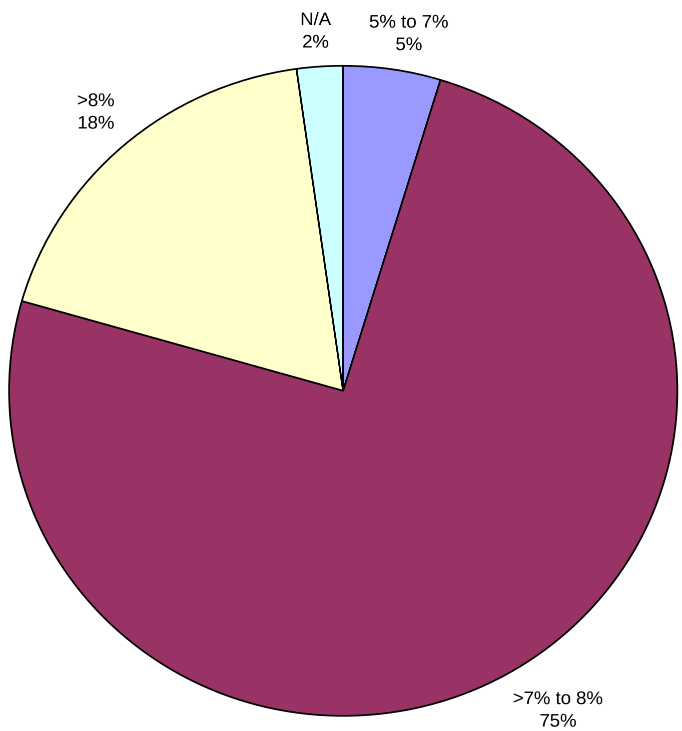


Figure 13. 2010 Plan Funding Ratios