



WISCONSIN LEGISLATIVE COUNCIL

2006 COMPARATIVE STUDY OF MAJOR PUBLIC EMPLOYEE RETIREMENT SYSTEMS

Prepared by:

William Ford, Senior Staff Attorney
Wisconsin Legislative Council

December 2007

2006 COMPARATIVE STUDY OF MAJOR PUBLIC EMPLOYEE RETIREMENT SYSTEMS

Prepared by:
William Ford, Senior Staff Attorney
December 2007

CONTENTS

	<u>Page</u>
Introduction.....	3
<i>Part I - Description of Retirement Systems in Report.....</i>	5
A. Introduction	5
B. Number of Participants	5
C. Categories of Employees Included in Plans	5
D. Ratio of Active Employees to Retired Employees	5
E. Social Security Coverage	6
F. Trends	6
G. The Wisconsin Retirement System.....	6
<i>Part II - Normal and Early Retirement Provisions.....</i>	9
A. Introduction	9
B. Normal Retirement.....	9
C. Early Retirement.....	10
D. Trends.....	11
E. The WRS	11
<i>Part III - Contribution Rates and Vesting Requirements.....</i>	15
A. Introduction	15
B. Employee Contributions	15
C. Employer Contributions	16
D. Vesting	16
E. Trends	17
F. The WRS.....	17

Part IV - Retirement Benefit Calculations.....	21
A. Introduction.....	21
B. "Basic" Plans in Which Employees Are Not Covered by Social Security	21
C. "Coordinated" Plans in Which Employees Are Covered by Social Security	21
D. Final Average Salary	22
E. Limitations on Benefits.....	22
F. Trends	23
G. The WRS	23
Part V - Post-Retirement Annuity Increases and Taxes	27
A. Introduction.....	27
B. Social Security	27
C. Post-Retirement Annuity Cost-of-Living Adjustments	28
D. State Income Taxation of Annuities.....	28
E. Trends	29
F. The WRS	29
Part VI - Actuarial and Accounting Information	33
A. Introduction.....	33
B. Actuarial Methods	33
C. Interest Assumption	33
D. Economic Spread.....	33
E. Funding Ratio	34
F. Trends	34
G. The WRS	34

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 2 years since 1982 by the Wisconsin Retirement Research Committee staff or the Legislative Council staff.

The 2006 Report includes data from the same 85 public employee retirement systems that have been compared in each of the previous reports. Although this report does not cover all major public employee retirement systems, it does include at least one statewide plan from each state. Because the same public employee retirement systems have been covered in the report over time, it can be used to determine long-term trends in public employee retirement systems.

The methodology for preparing the 2002, 2004, and 2006 Reports differs from that of previous reports. For the 1982 through the 2000 Reports, 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 problem with this approach is 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, because of the large volume of material that each plan was asked to send and the storage of that material, this was a relatively inefficient way of gathering the data necessary for the report.

For the 2006 (and the 2002 and 2004) Reports, the data was gathered, to the extent possible, from the web site maintained by each of the plans covered by the report. Most of the data was gathered from the 2006 actuarial analyses of each of the plans. Any information not available from the web site was gathered by addressing specific questions, either by e-mail or telephone, to plan administrators. The response 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 and to employees who are first hired currently.

One feature of the 2006 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. Please communicate reports of any errors or comments you may have about the report to: William Ford, Senior Staff Attorney; Wisconsin Legislative Council Staff; Suite 401, One East Main Street; Madison, Wisconsin, 53703; or at the following e-mail address: william.ford@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 85 plans in the 2006 Report provide pension coverage for 12,092,132 active employees and 5,646,026 retirees and beneficiaries, for a total of 17,738,156 participants. This total is 4% greater than the 17,038,936 participants in the 2004 Report. The number of active participants has grown between the 2004 and the 2006 Reports by 2.6% while the number of retirees has grown by 7.5% 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 85 plans reported on are categorized as follows:

<u>Employee Coverage</u>	<u>Number of Plans</u>
State employees only	11
Teachers only	27
Local employees only	8
State and local employees	16
State employees and teachers	3
State employees, local employees, and teachers	20

D. RATIO OF ACTIVE EMPLOYEES TO RETIRED EMPLOYEES

Chart 1 also shows the ratio of active employees to retired employees in the 85 systems surveyed. The average ratio has declined over prior years. For 2006, the average ratio was 2.14 while the comparable figures for the 2004 Report, the 2002 Report, the 2000 Report, and the 1996 Report, respectively, were 2.24, 2.38, 2.52 and 2.89. 43 of the systems (including the City of Milwaukee and Milwaukee County) had an active employees to retired employees ratio of less than 2. In the 2000 Report, 17 of the systems had an active employees to retired employee ratio of less than 2 and in the 1996 Report, only 8 systems had a ratio of less than 2.

E. SOCIAL SECURITY COVERAGE

In 68 of the 85 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 elect 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 2004 study, 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 2006, had 260,302 active employees and 129,289 beneficiaries and annuitants, for a total of 389,591 participants. This total is .3% greater than the 388,296 participants in the 2004 Report. The number of active employees covered by the WRS decreased by 1,783 between 2004 and 2006. The WRS covers state and local employees and teachers. The ratio of active employees to retired employees in the WRS in 2006 is 2.01, which is a reduction from the ratio of 2.08 found in the 2004 Report. The ratio of active employees to retired employees in the WRS for 2006 (2.01) is somewhat lower than the average ratio for all plans in the report (2.14). Most WRS employees are covered by Social Security.

CHART I
PUBLIC RETIREMENT SYSTEMS SURVEYED

<u>State</u>	<u>Fund Name</u>	<u>Employee Coverage*</u>	<u>Active Employees</u>	<u>Beneficiaries & Annuitants</u>	<u>Ratio</u>	<u>S.S. Coverage</u>
1 Alabama	ERS	S, L	82,830	33,266	2.49	Yes
2 Alabama	TRS	T	135,126	64,362	2.10	Yes
3 Alaska	PERS	S, L	34,660	21,852	1.59	No
4 Alaska	TRS	T	9,835	9,349	1.05	No
5 Arizona	SRS	S, L, T	217,893	78,392	2.78	Yes
6 Arkansas	PERS	S, L	43,453	22,234	1.95	Yes
7 Arkansas	TRS	T	85,916	30,014	2.86	Yes
8 California	PERS	S, L	809,690	443,341	1.83	Yes
9 California	TRS	T	453,365	207,846	2.18	No
10 Colorado	PERA	S, L, T	180,360	69,416	2.60	No
11 Connecticut	SERS	S	50,605	36,964	1.37	Yes
12 Connecticut	TRS	T	51,015	26,695	1.91	No
13 Delaware	SEPP	S, T	34,313	19,108	1.80	Yes
14 Florida	FRS	S, L, T	643,379	252,060	2.55	Yes
15 Georgia	ERS	S	72,716	31,355	2.32	Yes
16 Georgia	TRS	T	209,349	70,239	2.98	Yes
17 Hawaii	ERS	S, L, T	64,069	34,304	1.87	Yes
18 Idaho	PERS	S, L, T	64,762	26,438	2.45	Yes
19 Illinois	SERS	S	68,075	54,868	1.24	Yes
20 Illinois	TRS	T	159,272	85,103	1.87	No
21 Illinois	MRF	L	174,008	84,704	2.05	Yes
22 Indiana	PERF	S, L	153,664	62,248	2.47	Yes
23 Indiana	TRF	T	73,350	39,849	1.84	Yes
24 Iowa	PERS	S, L, T	163,091	82,204	1.98	Yes
25 Kansas	PERS	S, L, T	149,073	63,348	2.35	Yes
26 Kentucky	ERS	S, L	145,384	73,000	1.99	Yes
27 Kentucky	TRS	T	73,740	38,497	1.92	No
28 Louisiana	SERS	S	57,811	40,624	1.42	No
29 Louisiana	TRSL	T	81,347	61,554	1.32	No
30 Maine	SRS	S, L, T	52,282	32,918	1.59	No
31 Maryland	SRPS	S, L, T	191,273	103,831	1.84	Yes
32 Massachusetts	SERS	S	83,178	50,593	1.64	No
33 Massachusetts	TRS	T	88,788	44,452	2.00	No
34 Michigan	SERS	S	32,575	45,980	0.71	Yes
35 Michigan	MERS	L	37,826	21,505	1.76	Yes
36 Michigan	PSERS	T	305,445	157,163	1.94	Yes
37 Minnesota	MSRS	S	48,000	24,204	1.98	Yes
38 Minnesota	PERA	L	158,366	66,102	2.40	Yes
39 Minnesota	TRA	T	79,164	44,683	1.77	Yes
40 Mississippi	PERS	S, L, T	158,893	69,729	2.28	Yes

41	Missouri	SERS	S	54,493	27,052	2.01	Yes
42	Missouri	LAGERS	L	29,940	11,787	2.54	Yes
43	Missouri	PSRS	T	75,539	38,110	1.98	No
44	Montana	PERS	S, L	27,962	15,654	1.79	Yes
45	Montana	TRS	T	18,099	11,019	1.64	Yes
46	Nebraska	PERS	S, L	62,245	14,604	4.26	Yes
47	Nebraska	SPP	T	36,042	13,052	2.76	Yes
48	Nevada	PERS	S, L, T	98,187	33,262	2.95	No
49	New Hampshire	NHRS	S, L, T	51,738	19,711	2.62	Yes
50	New Jersey	PERS	S, L	310,392	121,166	2.56	Yes
51	New Jersey	TPAF	T	151,873	65,445	2.32	Yes
52	New Mexico	PERA	S, L	51,699	22,699	2.28	Yes
53	New Mexico	ERA	T	63,362	26,100	2.43	Yes
54	New York	ERS	S, L	561,951	306,531	1.83	Yes
55	New York	TRS	T	260,041	129,587	2.01	Yes
56	North Carolina	TSERS	S, T	375,516	134,719	2.79	Yes
57	North Carolina	LGERS	L	141,255	38,488	3.67	Yes
58	North Dakota	PERS	S, L	18,102	6,187	2.93	Yes
59	North Dakota	TFR	T	9,585	5,893	1.63	Yes
60	Ohio	PERS	S, L	381,464	156,747	2.43	No
61	Ohio	STRS	T	175,065	119,184	1.47	No
62	Oklahoma	PERS	S, L	45,472	24,372	1.87	Yes
63	Oklahoma	TRS	T	87,194	41,782	2.09	Yes
64	Oregon	PERS	S, L, T	187,704	101,519	1.85	Yes
65	Pennsylvania	SERS	S	110,972	102,060	1.09	Yes
66	Pennsylvania	PSERS	T	255,000	157,000	1.62	Yes
67	Rhode Island	ERS	S, T	32,000	19,000	1.68	Yes
68	South Carolina	SCRS	S, L, T	181,022	94,667	1.91	Yes
69	South Dakota	SRS	S, L, T	36,074	18,076	2.00	Yes
70	Tennessee	CRS	S, L, T	204,735	89,772	2.28	Yes
71	Texas	ERS	S	132,411	67,596	1.96	Yes
72	Texas	TRS	T	874,369	257,144	3.40	No
73	Texas	MRS	L	95,583	32,175	2.97	Yes
74	Utah	SRS	S, L, T	99,589	38,509	2.59	Yes
75	Vermont	SRS	S	8,288	4,173	1.99	Yes
76	Vermont	TRS	T	10,696	4,789	2.23	Yes
77	Virginia	SRS	S, L, T	332,916	124,639	2.67	Yes
78	Washington	PERS	S, L	222,854	80,402	2.77	Yes
79	Washington	TRS	T	67,270	37,321	1.80	Yes
80	West Virginia	PERS	S, L	36,000	18,900	1.90	Yes
81	West Virginia	TRS	T	22,500	24,600	0.91	Yes
82	Wyoming	WRS	S, L, T	39,619	18,788	2.11	Yes
83	Milwaukee	City	L	12,015	10,787	1.11	Yes
84	Milwaukee	County	L	5,056	7,275	0.69	Yes
85	Wisconsin	WRS	S, L, T	260,302	129,289	2.01	Yes

Totals: (85 Funds) 12,092,132 5,646,026 2.14

*Coverage: S = State; L = Local; T = Teachers

PART II

NORMAL AND EARLY RETIREMENT PROVISIONS

A. INTRODUCTION

Chart 2, on pages 12 and 13, shows the normal and early retirement provisions for each of the plans covered in the report. All but 2 of the plans covered in this report are "defined benefit plans" in which retirement benefits are calculated by a formula that takes into account years of service and final average salary. The 2 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.

Note that some of the defined benefit plans also contain elements of money purchase plans, generally an option under which an employee may elect to have some of his or her contribution to the retirement plan placed in a money purchase account. These "money purchase options" are 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 85 plans allow normal retirement at age 62 or earlier, for persons with long years of service. In addition, Chart 2 shows that 57 of the 85 plans permit normal retirement at age 62 or earlier, with 10 or less years of service. Only 2 of the plans in this report restrict normal retirement to persons who are at least 65.

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) 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 2006, 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 2000 Report.

	<u>2000</u>	<u>2006</u>
35 years of service/age 55 or older	8 plans	7 plans
30 years of service/age 55 or older	28 plans	28 plans
28 years of service/age 55 or older	3 plans	4 plans
27 years of service/age 55 or older	2 plans	2 plans
25 years of service/age 55 or older	12 plans	11 plans
20 years of service/age 55 or older	4 plans	4 plans
TOTAL	57 plans	56 plans

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 2006, had Rule of Y provisions and compares these with the number of plans that had Rule of Y provisions in 1996.

	<u>1996</u>	<u>2006</u>
Rule of 90	4 plans	3 plans
Rule of 88	1 plan	1 plan
Rule of 85	3 plans	5 plans
Rule of 80	4 plans	5 plans
TOTAL	12 plans	14 plans

C. EARLY RETIREMENT

75 of the 85 plans covered in the 2006 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.

47 of the 85 plans in the 2006 Report allow early retirement at a minimum age of 55 or more. 16 of the 85 plans in the report allow early retirement at a minimum age of less than 55. 8 of the 85 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.

As was mentioned above, 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 2006 Report indicates a marked slowing of a trend noted in previous reports to permit retirement at earlier ages. Between the 2000 Report, and the 2004 Report, 9 plans reduced their normal retirement provisions by reducing the minimum age or the number of years of service required, or both. However, between the 2004 and the 2006 Reports, only 2 plans did so. In addition, between the 2000 Report and the 2004 Report, 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 2 plans did so.

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 actuarial discount. The early retirement requirement for general employees in the WRS is 55 years of age. 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

<u>State</u>	<u>Fund Name</u>	<u>Coverage*</u>	<u>Normal Retirement (Age/Years)</u>	<u>Early Retirement (Age/Years)</u>	<u>Reduction for Early Retirement</u>
1 Alabama	ERS	S, L	60/10; any/25	None	
2 Alabama	TRS	T	60/10; any/25	None	
3 Alaska	PERS	S, L	60/5; any/30	55/5	6% a year
4 Alaska	TRS	T	60/8; any/20	55/8	Table
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 year
7 Arkansas	TRS	T	60/5; any/28	Any/25	Lesser of 5% for each year less than 28 yrs. of service or 5% for each year prior to age 60
8 California	PERS	S, L	55/5	50/5	Multiplier varies
9 California	TRS	T	60/5	55/5; 50/30	3% to 6% a year
10 Colorado	PERA	S, L, T	65/5; 50/30; 55/R80	50/25; 55/20; 60/5	6%; 3%; 4%
11 Connecticut	SERS	S	62/10; 60/25	55/10	3% a year
12 Connecticut	TRS	T	60/20; any/35	Any/25; 55/20; 60/10	3% a year
13 Delaware	SEPP	S, T	62/5; 60/15; any/30	55/15; any/25	2.4% a year
14 Florida	FRS	S, L, T	62/6; any/30	Any/6	5% a year
15 Georgia	ERS	S	60/10; any/30	Any/25	7% a year; max. 35%
16 Georgia	TRS	T	60/10; any/25	Any/25	7% a year
17 Hawaii	ERS	S, L, T	62/5; 55/30	55/20	6% a year
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	SERS	S	60/8; R85	55/25	6% a year
20 Illinois	TRS	T	62/5; 60/10; 55/35	55/20	6% a year
21 Illinois	MRF	L	60/8; 55/35	55/8	3% a year
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 year
24 Iowa	PERS	S, L, T	65; 62/20; R88	55/4	3% a year
25 Kansas	PERS	S, L, T	65; 62/10; R85	55/10	2.4%/7.20% a year
26 Kentucky	ERS	S, L	65/4; any/27	55/5; any/25	5%/4% a year
27 Kentucky	TRS	T	60/5; any/27	55/5	5% a year
28 Louisiana	SERS	S	60/10; 55/25; any/30	50/10; any/20	Table
29 Louisiana	TRSL	T	60/5; 55/25; any/30	Any/20	Multiplier varies
30 Maine	SRS	S, L, T	60/5	Any/25	2.25% a year
31 Maryland	SRS	S, L, T	60/5; any/30	Any/25	6% a year; max. 30%
32 Massachusetts	SERS	S, L	55/10; any/20	None	
33 Massachusetts	TRS	T	55/10; any/20	None	
34 Michigan	SERS	S	60/10; 55/30	55/15	6% a year
35 Michigan	MERS	L	Varies by plan	Varies by plan	Varies by plan
36 Michigan	PSERS	T	60/5; any/30	55/15	6% a year
37 Minnesota	MSRS	S	Soc. Sec. Normal*	55/3	Table
38 Minnesota	PERA	L	Soc. Sec. Normal*	55/3	Table
39 Minnesota	TRA	T	Soc. Sec. Normal*	55/3	Table
40 Mississippi	PERA	S, L, T	60/4; any/25	None	

41	Missouri	SERS	S	65/5; 65/4 Active; 60/15; 48/R80	57/5	6% a year
42	Missouri	LAGERS	L	60/5; R80 option	55/5	6% a year
43	Missouri	PSRS	T	60/5; R80; any/30	55/5; any/25	Table
44	Montana	PERS	S, L	65/any; 60/5; any/30	50/5; any/25	Table
45	Montana	TRS	T	60/5; any/25	50/5	6%; 3.6% a year
46	Nebraska	SERS	S	55		Money purchase
47	Nebraska	SPP	T	65; 55/R85	60/5; any/35; 55/R85	3% a year
48	Nevada	PERS	S, L, T	65/5; 60/10; any/30	Any/5	4% a year
49	New Hampshire	NHRS	S, L, T	60/any	50/10; R70/20	1.5%; 3%; 4%; 6.67% a year
50	New Jersey	PERS	S, L	60/any	Any/25	3% a year
51	New Jersey	TRS	T	60/any	Any/25	3% a year
52	New Mexico	PERA	S, L	65/5 to 60/20; any/25	None	
53	New Mexico	ERA	T	65/5; any/25; 60/R75	R75	2.4%/7.2% a year
54	New York	ERS	S, L	62/5; 55/30	55/5	6%/3% a year
55	New York	TRS	T	62/5; 55/30	55/5	6%/3% a year
56	North Carolina	TSERS	S, T	65/5; 60/25; any/30	60/5; 50/20	3% a year
57	North Carolina	LGERS	L	65/5; 60/25; any/30	60/5; 50/20	3% a year
58	North Dakota	PERS	S, L	65/any; R85	55/3	6% a year
59	North Dakota	TRF	T	65/3; R85	55/3	6% a year
60	Ohio	PERS	S, L	60/5; any/30	55/25	3% a year
61	Ohio	STRS	T	65; any/30	60/5; 55/25	3% a year
62	Oklahoma	PERS	S, L	62/6; R90	55/10	Table
63	Oklahoma	TRS	T	62/5; R90	55/5	Table
64	Oregon	PERS	S, L, T	65/any; 58/30	55	Actuarial reduction
65	Pennsylvania	SERS	S	60/3; any/35	Any/5	Table
66	Pennsylvania	PSERS	T	62; 60/30; any/35	55/25	3% a year
67	Rhode Island	ERS	S, T	60/10; any/28	None	
68	South Carolina	SCRS	S, L, T	65/any; any/28	60; 55/25	Table
69	South Dakota	SRS	S, L, T	65/3; 55/R85	55/3	Table
70	Tennessee	CRS	S, L, T	60/5; any/30	55/10; any/25	4.8% a year
71	Texas	ERS	S	60/5; R80	None	
72	Texas	TRS	T	65/5; R80	55/5; any/30	Table
73	Texas	MRS	L	60/5; any/20 or 25 option		Money purchase
74	Utah	SRS	S, L, T	65/4; any/30	Any/25; 60/20; 62/10	3% a year; 7% for each year before age 60
75	Vermont	SRS	S	62/any; any/30	55/5	6% a year
76	Vermont	TRS	T	62/any; any/30	55/5	6% a year
77	Virginia	SRS	S, L, T	65/5; 50/30	50/10; 55/5	6%; 4.8% a year
78	Washington	PERS	S, L	65/5	55/20	Table
79	Washington	TRS	T	65/5	55/20	Table
80	West Virginia	PERS	S, L	60/5; 55/R80	55/10	6% a year
81	West Virginia	TRS	T	60/5; 55/30; any/35	Any/30	Actuarial reduction
82	Wyoming	WRS	S, L, T	60/any; R85	50/4; any/25	5% a year
83	Milwaukee	City	L	60/any; 55/30	55/15	Table
84	Milwaukee	County	L	60/any; 55/30	55/15	5% a year
85	Wisconsin	WRS	S, L, T	65/any; 57/30	55	Varies by amount of service

Coverage: S = State; L = Local; T = Teachers

x/y = Age/Service

* But not higher than age 66

<p>PART III</p> <p>CONTRIBUTION RATES AND VESTING REQUIREMENTS</p>
--

A. INTRODUCTION

Chart 3, on pages 18 and 19, shows the employee contribution rate, and the employer contribution rate and the vesting period, for each of the 85 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 which 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, as will be discussed below, 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 are actually 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. This is because compensation payments are subject to old age, survivors and disability insurance payments (Social Security) and Medicare payments, but contributions to a retirement plan are not. In addition, the practice may be attractive to employers because employer pick up of retirement contributions does not get added into employee base wages and have an effect on future salary increases.

The column in Chart 3 entitled "Employee Contribution" shows the employee contribution rates, expressed as a percentage of payroll, for the 85 plans covered in the report. These requirements are compared with employee contributions in the 2000 Report in the following table:

<u>Employee Contribution Rates</u>	<u>2000</u>	<u>2006</u>
5% or less	34 plans	28 plans
More than 5%	35 plans	45 plans
Rate varies (usually by age or employee classification)	6 plans	6 plans
Plan is noncontributory	10 plans	6 plans
TOTAL	85 plans	85 plans

C. EMPLOYER CONTRIBUTIONS

As has been noted in previous reports, the employer contribution information in Chart 3 is of 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. Medical and other nonpension costs are 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 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 2006 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:

	<u>2000</u>	<u>2006</u>
Immediate vesting	2 plans	2 plans
Vesting after 3 years	6 plans	6 plans
Vesting after 4 years	5 plans	5 plans
Vesting after 5 years	42 plans	50 plans
Vesting after 8 years	4 plans	4 plans
Vesting after 10 years	25 plans	17 plans
Graded or varying	1 plan	1 plan
TOTAL	85 plans	85 plans

In 2006, a total of 63 plans, or 74% of the 85 plans in the report, require 5 or less years of service to vest. This is an increase of 8 plans since the 2000 Report. The trend appears to be towards vesting periods of 5 years or less, perhaps reflecting federal vesting requirements that apply to private sector pension plans. The number of plans in 2006 that require 10 years of service to vest has decreased by 8 plans from the 2000 Report and by 23 plans from the 1990 Report.

E. TRENDS

The trend in public employee pension plan vesting is towards vesting periods of 5 years or less than 5 years. Only 21 of the 85 plans covered in the 2006 Report had vesting requirements that were greater than 5 years. Employee contribution rates were increased in 20 plans between the 2004 Report and the 2006 Report. Employer contribution rates fluctuated considerably between the 2004 Report and the 2006 Report. Employer contribution rates increased for 44 plans and decreased for 11 plans between 2004 and 2006.

F. THE WRS

No vesting period is required for employees in the WRS. The employee contribution rate for general employees for 2006 is 5%. However, for the reasons discussed above, in practice, almost all contributions to the WRS are paid by employers. The employer contribution rate for 2006 was 4.5%, plus an additional .9% benefit adjustment contribution credited to the employer accumulation account.

CHART III
CONTRIBUTION AND VESTING REQUIREMENTS

<u>State</u>	<u>Fund Name</u>	<u>Social Security</u>	<u>Employee Contribution</u>	<u>Employer Contribution</u>	<u>Vesting Period</u>
1 Alabama	ERS	Yes	5%	7.78%	10 years
2 Alabama	TRS	Yes	5%	9.36%	10 years
3 Alaska	PERS	No	6.75%	16.77%	5 years
4 Alaska	TRS	No	8.65%	13.76%	8 years
5 Arizona	SRS	Yes	9.1%	9.1%	Immediate
6 Arkansas	PERS	Yes	5%	12.54%	5 years
7 Arkansas	TRS	Yes	6%	14%	5 years
8 California	PERS	Yes	6%	10.356%	5 years
9 California	TRS	No	8%	8.25%	5 years
10 Colorado	PERA	No	8%	10.15%	5 years
11 Connecticut	SERS	Yes	2%		5 years
12 Connecticut	TRS	No	6%	3.01%	10 years
13 Delaware	SEPP	Yes	3% above \$6,000	6.1%	5 years
14 Florida	FRS	Yes	Non-contributory	6.72%	6 years
15 Georgia	ERS	Yes	1.25%	10.41%	10 years
16 Georgia	TRS	Yes	5%	9.24%	10 years
17 Hawaii	ERS	Yes	6%	13.75%	5 years
18 Idaho	PERS	Yes	6.23%	10.39%	5 years
19 Illinois	SERS	Yes	4%	\$210.5 million	8 years
20 Illinois	TRS	No	9.4%	7.64%	5 years
21 Illinois	MRF	Yes	4.5%	10.04%	8 years
22 Indiana	PERF	Yes	3%	4.7%	10 years
23 Indiana	TRF	Yes	3%	19.25%	10 years
24 Iowa	PERS	Yes	3.7%	5.75%	4 years
25 Kansas	PERS	Yes	4%	5.27%	10 years
26 Kentucky	ERS	Yes	5%	5.89%	5 years
27 Kentucky	TRS	No	9.855%	13.105%	5 years
28 Louisiana	SERS	No	7.689%	19.1%	10 years
29 Louisiana	TRSL	No	8%	15.9%	5 years
30 Maine	SRS	No	7.65%	15.09%	5 years
31 Maryland	SRS	Yes	2%	9.18%	5 years
32 Massachusetts	SERS	No	8.3%	2.9%	10 years
33 Massachusetts	TRS	No	11%	15.4%	10 years
34 Michigan	SERS	Yes	Non-contributory	13.6%	10 years
35 Michigan	MERS	Yes	Varies by plan	Varies by plan	6, 8, or 10 yrs.
36 Michigan	PSERS	Yes	3-4.3%	7.6%	10 years
37 Minnesota	MSRS	Yes	4%	4%	3 years
38 Minnesota	PERA	Yes	5.5%	6%	3 years
39 Minnesota	TRA	Yes	5%	9.05%	3 years
40 Mississippi	PERS	Yes	7.25%	10.75%	4 years

41	Missouri	SERS	Yes	Non-contributory	12.59%	5 years
42	Missouri	LAGERS	Yes	0%-4%	Varies by plan	5 years
43	Missouri	PSRS	No	12%	12%	5 years
44	Montana	PERS	Yes	6.9%	6.9%	5 years
45	Montana	TRS	Yes	7.150%	7.58%	5 years
46	Nebraska	SERS	Yes	4.8%	156% of EE rate	3 years
47	Nebraska	SPP	Yes	7.98%	101% of EE rate + .7%	5 years
48	Nevada	PERS	No	10.5%	10.5%	5 years
49	New Hampshire	NHRS	Yes	6.3%	6.7%	10 years
50	New Jersey	PERS	Yes	5%	\$7.97 million	10 years
51	New Jersey	TPAF	Yes	5%	\$93.83 million	10 years
52	New Mexico	PERA	Yes	7.42%	16.59%	5 years
53	New Mexico	ERA	Yes	7.825%	10.9%	5 years
54	New York	ERS	Yes	3%	8%	5 years
55	New York	TRS	Yes	3%	7.97%	5 years
56	North Carolina	TSERS	Yes	6%	2.66%	5 years
57	North Carolina	LGERS	Yes	6%	4.8%	5 years
58	North Dakota	PERS	Yes	4%	4.12%	3 years
59	North Dakota	TRF	Yes	7.75%	7.75%	3 years
60	Ohio	PERS	No	9%	13.54%	5 years
61	Ohio	STRS	No	9%	13.7%	5 years
62	Oklahoma	PERS	Yes	3% to 3.5%	11.5%	8 years
63	Oklahoma	TRS	Yes	7%	13.43%	5 years
64	Oregon	PERS	Yes	6%	8.04%	5 years
65	Pennsylvania	SERS	Yes	6.25%	3.52%	5 years
66	Pennsylvania	PSERS	Yes	7.16%	4%	5 years
67	Rhode Island	ERS	Yes	8.75% (9.5% teachers)	14.84%	10 years
68	South Carolina	SCRS	Yes	6.25%	7.55%	5 years
69	South Dakota	SRS	Yes	6%	6%	3 years
70	Tennessee	CRS	Yes	Non-contributory	7.3%	5 years
71	Texas	ERS	Yes	6%	6.45%	5 years
72	Texas	TRS	No	6%	6.4%	5 years
73	Texas	MRS	Yes	3, 5, 6, or 7%	3% to 14%	5 years
74	Utah	SRS	Yes	Non-contributory	11.59% to 14.52%	4 years
75	Vermont	SRS	Yes	3.35%	6.26%	5 years
76	Vermont	TRS	Yes	3.4%	5.09%	5 years
77	Virginia	SRS	Yes	5%	6.62%	5 years
78	Washington	PERS	Yes	6%	2.25%	5 years
79	Washington	TRS	Yes	5% to 15%	2.92%	5 years
80	West Virginia	PERS	Yes	4.5%	10.5%	5 years
81	West Virginia	TRS	Yes	6%	15%	5 years
82	Wyoming	WRS	Yes	5.57%	5.68%	4 years
83	Milwaukee	City	Yes	5.5%	0	4 years
84	Milwaukee	County	Yes	Non-contributory	\$46,929,347	5 years
85	Wisconsin	WRS	Yes	5%	4.5%	Immediate

PART IV

RETIREMENT BENEFIT CALCULATIONS

A. INTRODUCTION

Chart 4, on pages 24 and 25, shows the retirement benefit formulas in effect for 2006 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 first begin public service currently.

As is shown in Chart 4, 83 of the 85 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:

$$\text{Years of Service} \times \text{Formula Multiplier} \times \text{Final Average Salary} = \text{Retirement Annuity}$$

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

2 of the 85 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.

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

Employees of 17 of the 85 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 3.33% for each year of service. The average formula multiplier for these 17 plans is approximately 2.3% for each year of service.

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

68 of the 85 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 68 plans, which sometimes vary by number of years of service, by date of employment, or by age at retirement. For 2006, the average formula multiplier for the coordinated plans that are not money purchase plans or plans in which the employer determines the formula multiplier is approximately 1.97%. Since the 2004 Report, 2 of the plans coordinated with Social Security have increased their formula multiplier and 1 has reduced its formula multiplier.

The formula benefits for 2006, as shown in Chart 4, are summarized and compared with the data found in the 2000 Report in the following table:

<u>Formula Multiplier</u>	<u>2000</u>	<u>2006</u>
1.1% to 1.3%	3 plans	0 plans
Over 1.3% to 1.5%	3 plans	2 plans
Over 1.5% to 1.7%	18 plans	12 plans
Over 1.7% to 1.9%	12 plans	14 plans
Over 1.9% to 2.1%	19 plans	24 plans
Over 2.1%	7 plans	8 plans
Employer determines formula multiplier	2 plans	2 plans
Formula benefit plus money purchase	2 plans	4 plans
Money purchase plan	2 plans	2 plans
TOTAL	68 plans	68 plans

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 2004 Report, there has been little change in how any of the plans calculate final average salary. The most common method is to use a 3-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 3 highest years within a 10-year period.) 56 of the 85 plans in the report use a 3-year final average salary. The next most prevalent calculation of final average salary is a 5-year period--16 of the 85 plans used a 5-year period in 2006.

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 a maximum percentage of highest salary. The majority of plans surveyed in the report impose no maximum benefit limitation.

F. TRENDS

The trend noticed in previous reports to increase formula multipliers has noticeably slowed. 4 (including both "basic" and "coordinated" plans) of the 85 plans increased their formula multipliers between 2004 and 2006. 32 of the 85 plans increased their formula multipliers between 1996 and 2000. Little change has been noticed in how final average salary is computed or in the number of plans that cap retirement benefits.

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 1.97% 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 3 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

<u>State</u>	<u>Fund Name</u>	<u>FAS Period</u>	<u>Formula Multiplier</u>	<u>Limitation</u>
1 Alabama	ERS	3 H/10	2.0125%	None
2 Alabama	TRS	3 H/10	2.0125%	None
3 Alaska	PERS	5 HC	2% (1st 10 yrs.); 2.25% (2nd 10); 2.5% (added yrs.)	None
4 Alaska	TRS	3 H	2% (1st 20 yrs.); 2.5% (added yrs.)	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	None
6 Arkansas	PERS	3 H	2%	None
7 Arkansas	TRS	3 H	2.15%	None
8 California	PERS	1 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	3 H	2.5%	100% FAS
11 Connecticut	SERS	3 H (cap)	1.33% + 0.5% over \$43,400; 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	5 H	1.6% to 1.68% (age & yrs. of service)	100% FAS
15 Georgia	ERS	2 HC	2.0%	90% high yr.
16 Georgia	TRS	2 HC (cap)	2%	40 yrs. max.
17 Hawaii	ERS	3 H	2%	None
18 Idaho	PERS	3 1/2 HC	2%	100% FAS
19 Illinois	SERS	4 HC/10	1.67%	75% FAS
20 Illinois	TRS	4 HC/10 (cap)	2.2%	75% FAS
21 Illinois	MRF	4 HC/10 (cap)	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	1.75%	None
26 Kentucky	ERS	5 H	1.97%	None
27 Kentucky	TRS	3 H	2.5%	100% FAS
28 Louisiana	SERS	3 HC	3.33%	100% FAS
29 Louisiana	TRSL	3 HC + (cap)	2.5%	100% FAS
30 Maine	SRS	3 H	2%	None
31 Maryland	SRS	3 HC	1.8%	100% FAS
32 Massachusetts	SERS	3 HC	.5%-2.5% (age-related)	80% FAS
33 Massachusetts	TRS	3 HC	.1%-2.5% (age-related) + 2% for each yr. over 24	80% FAS
34 Michigan	SERS	3 HC	1.5%	None
35 Michigan	MERS	5/3 HC	1.3% to 2.5% (employer option)	80% FAS for multipliers over 2.25%
36 Michigan	PSERS	3 HC	1.5%	None
37 Minnesota	MSRS	5 HC	1.7%	None
38 Minnesota	PERA	5 HC	1.7%	None
39 Minnesota	TRA	5 HC	1.7%	None
40 Mississippi	PERS	4 HC (cap)	2% (1st 25 yrs.); 2.5% (added yrs.)	100% FAS

41	Missouri	SERS	3 HC	1.7% (and .8% to age 62 if R80 met)	None
42	Missouri	LAGERS	5/3 HC	1%-2% (employer option)	None
43	Missouri	PSRS	3 HC	2.5%; 2.55% with 31 or more yrs. service	100% FAS
44	Montana	PERS	3 HC	1.785%; 2% with at least 25 yrs. of service	None
45	Montana	TRS	3 HC	1.67%	None
46	Nebraska	SERS		Money purchase	None
47	Nebraska	SPP	3 HC	2%	None
48	Nevada	PERS	3 HC	2.67%	75% FAS
49	New Hampshire	NHRS	3 H (cap)	1.67% to 65; 1.515% after 65	None
50	New Jersey	PERS	3 H	1.82%	None
51	New Jersey	TPHF	3 H	1.82%	None
52	New Mexico	PERS	3 HC	3%	80% FAS
53	New Mexico	ERA	5 HC	2.35%	None
54	New York	ERS	3 HC (cap)	1.67% (under 20 yrs.); 2% (over 20 yrs.); 3.5% (over 30 yrs.)	None
55	New York	TRS	3 HC (cap)	Same as New York's ERS	None
56	North Carolina	TSERS	4 HC	1.82%	None
57	North Carolina	LGERS	4 HC	1.85%	None
58	North Dakota	PERS	3 H/10	2%	None
59	North Dakota	TRF	3 H	2%	None
60	Ohio	PERS	3 H	2.2% (1st 30 yrs.); 2.5% (added yrs.)	100% FAS
61	Ohio	STRS	3 H	2.2% (1st 30 yrs.); 2.5% (added yrs.)	100% FAS
62	Oklahoma	PERS	3 H/10	2%	None
63	Oklahoma	TRS	5 HC	2%	None
64	Oregon	PERS	3 H	1.5% + money purchase annuity	None
65	Pennsylvania	SERS	3 H	2.5%	100% high yr.
66	Pennsylvania	PSERS	3 H	2.5%	None
67	Rhode Island	ERS	3 HC	1.7% (1st 10 yrs.); 1.9% (2nd 10 yrs.); 3% (21-34 yrs.); 2% (35+)	80% FAS
68	South Carolina	SCRS	3 HC	1.82%	None
69	South Dakota	SRS	3 HC/10	1.625% (service before 7/1/02); 1.55% service after 7/1/02	None
70	Tennessee	CRS	5 HC	1.5% + .25% FAS over SSIL	94.5% FAS
71	Texas	ERS	3 H	2.3%	100% FAS
72	Texas	TRS	3 H	2.3%	None
73	Texas	MRS		Money purchase options	None
74	Utah	SRS	3 H	2%	None
75	Vermont	SRS	3 HC	1.67%	50% FAS
76	Vermont	TRS	3 HC	1.67%	50% FAS
77	Virginia	SRS	3 HC	1.7%	100% FAS
78	Washington	PERS	5 HC	2%	None
79	Washington	TRS	5 HC	1% + money purchase	None
80	West Virginia	PERS	3 HC/10	2%	None
81	West Virginia	TRS	5 H/15	2%	None
82	Wyoming	WRS	3 HC	2.125% (1st 15 yrs.); 2.25% (added yrs.)	None
83	Milwaukee	City	3 H	2%	70% FAS
84	Milwaukee	County	3 HC	2%	80% FAS
85	Wisconsin	WRS	3 H	1.6%	70% FAS

PART V

POST-RETIREMENT ANNUITY INCREASES AND TAXES

A. INTRODUCTION

Chart 5, on pages 30 and 31, 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 is shown below:

<u>CPI Year</u>	<u>Date on Which First Payable</u>	<u>Percentage Increase</u>
1998	1/1/1999	1.3%
1999	1/1/2000	2.4%
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%

For those employees in the 68 of the 85 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 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. 26 states completely exempt Social Security benefits from income taxation. 15 states impose income taxes on all or a portion of

Social Security benefits and 9 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. These 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 2002 Report against those found in the 2006 Report:

	<u>2002</u>	<u>2006</u>
Adjustments indexed to CPI	39 plans	38 plans
Automatic percentage increase	22 plans	23 plans
Investment surplus	3 plans	4 plans
Ad hoc (any increase must be authorized by Legislature or a decision-making board) or money purchase	21 plans	20 plans
TOTAL	85 plans	85 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. 20 of the 85 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.

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 18 of the 85 plans, pension benefits are subject to state income taxation and no specific amount of retirement benefits is tax exempt. In 21 of the 85 plans, pension benefits are totally exempt from state 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. 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 2006, the annuity adjustment in the core fund was .8%.

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. Beginning in 2008, income from Social Security will be completely exempt from Wisconsin income taxes. Beginning in 2009, up to \$5,000 per year of income from qualified retirement plans will be exempt from Wisconsin income taxes for taxpayers with 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

<u>State</u>	<u>Fund Name</u>	<u>Social Security</u>	<u>Annual Post-Retirement Increases</u>	<u>State Taxation of PERS Benefits</u>
1 Alabama	ERS	Yes	Ad hoc only	Benefits exempt
2 Alabama	TRS	Yes	Ad hoc only	Benefits exempt
3 Alaska	PERS	No	75% of CPI if 65, 9% cap; 50% of CPI if 60 or retired 5 yrs. - 6% cap	No income tax law
4 Alaska	TRS	No	75% of CPI if age 65, 9% cap; 50% of CPI if 60 or retired 8 yrs.	No income tax law
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%	Benefits taxable
9 California	TRS	No	2%	Benefits taxable
10 Colorado	PERA	No	3.5%	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	Excess earnings: 1.5% or 6% cap	Benefits taxable
13 Delaware	SEPP	Yes	Ad hoc only	Exempt to \$12,500
14 Florida	FRS	Yes	3%	No income tax law
15 Georgia	ERS	Yes	CPI - 1.5% semi-annual cap	Exempt to \$25,000
16 Georgia	TRS	Yes	CPI - 1.5% semi-annual cap	Exempt to \$25,000
17 Hawaii	ERS	Yes	2.5%	Benefits exempt
18 Idaho	PERS	Yes	CPI - 1% minimum to 6% max. (conditional)	Benefits taxable
19 Illinois	SERS	Yes	3%	Benefits exempt
20 Illinois	TRS	No	3%	Benefits exempt
21 Illinois	MRF	Yes	3%	Benefits exempt
22 Indiana	PERF	Yes	Ad hoc only	Benefits taxable
23 Indiana	TRF	Yes	Ad hoc only	Benefits taxable
24 Iowa	PERS	Yes	Excess earnings - 3% cap	Exempt to \$6,000, \$12,000 married
25 Kansas	PERS	Yes	Ad hoc only	Benefits exempt
26 Kentucky	ERS	Yes	CPI	Exempt to \$41,110
27 Kentucky	TRS	No	1.5%	Exempt to \$41,110
28 Louisiana	SERS	No	Excess earnings; CPI; 3% CAP	Benefits exempt
29 Louisiana	TRSL	No	CPI - 3% cap	Benefits exempt
30 Maine	SRS	No	CPI - 4% cap	Exempt to \$6,000
31 Maryland	SRS	Yes	CPI - 3% cap	Exempt to \$21,500
32 Massachusetts	SERS	No	CPI - on 1st \$12,000-conditional, 3% cap	Benefits exempt
33 Massachusetts	TRS	No	CPI - on 1st \$12,000-conditional, 3% cap	Benefits exempt
34 Michigan	SERS	Yes	3% (\$300 annual cap)	Benefits exempt
35 Michigan	MERS	Yes	3 plans - depending on employer agreement	Benefits exempt
36 Michigan	PSERS	Yes	3%	Benefits exempt
37 Minnesota	MSRS	Yes	CPI - 2.5% cap plus investment surplus	Benefits taxable
38 Minnesota	PERA	Yes	CPI - 2.5% cap plus investment surplus	Benefits taxable
39 Minnesota	TRA	Yes	CPI - 2.5% cap plus investment surplus	Benefits taxable
40 Mississippi	PERS	Yes	3%	Benefits exempt

41	Missouri	SERS	Yes	80% CPI: 5% cap	Benefits taxable
42	Missouri	LAGERS	Yes	CPI - 4% cap	Exempt to \$6,000/12,000
43	Missouri	PSRS	N	CPI - 80% of original benefits lifetime cap	Exempt to \$6,000/12,000
44	Montana	PERS	Yes	3%	Exempt to \$3,600
45	Montana	TRS	Yes	1.5%	Exempt to \$3,600
46	Nebraska	SERS	Yes	Money purchase	Benefits taxable
47	Nebraska	SPP	Yes	CPI - 2.5% cap	Benefits taxable
48	Nevada	PERS	No	2% to 5% (varies) with number of years retired	No income tax law
49	New Hampshire	NHRS	Yes	Ad hoc	Benefits exempt
50	New Jersey	PERS	Yes	60% of CPI	Exempt to \$15,000/20,000
51	New Jersey	TPAF	Yes	60% of CPI	Exempt to \$15,000/20,000
52	New Mexico	PERA	Yes	3%	Benefits taxable
53	New Mexico	ERA	Yes	50% of CPI - 4% cap	Benefits taxable
54	New York	ERS	Yes	If age 62 + retired 5 yrs.: 50% of CPI, max. 3% on 1st \$18,000	Benefits exempt
55	New York	TRS	Yes	If age 62 + retired 5 yrs.: 50% of CPI, max. 3% on 1st \$18,000	Benefits exempt
56	North Carolina	TSERS	Yes	Ad hoc	Exempt to \$4,000/8,000
57	North Carolina	LGERS	Yes	Ad hoc	Exempt to \$4,000/8,000
58	North Dakota	PERS	Yes	Ad hoc	Benefits taxable
59	North Dakota	TRF	Yes	Ad hoc	Benefits taxable
60	Ohio	PERS	No	3% cap	Benefits taxable
61	Ohio	STRS	No	3% cap	Benefits taxable
62	Oklahoma	PERS	Yes	Ad hoc	Exempt to \$10,000
63	Oklahoma	TRS	Yes	Ad hoc	Exempt to \$10,000
64	Oregon	PERS	Yes	CPI - 2% cap	Benefits taxable
65	Pennsylvania	SERS	Yes	Ad hoc	Benefits exempt
66	Pennsylvania	PSERS	Yes	Ad hoc	Benefits exempt
67	Rhode Island	ERS	Yes	3%	Benefits taxable
68	South Carolina	SCRS	Yes	CPI - 4% cap	Exempt to \$10,000
69	South Dakota	SRS	Yes	3.1%	No income tax law
70	Tennessee	CRS	Yes	CPI - 3% cap	Benefits exempt
71	Texas	ERS	Yes	Ad hoc	No income tax law
72	Texas	TRS	No	Ad hoc	No income tax law
73	Texas	MRS	Yes	Up to 70% of CPI (employer option)	No income tax law
74	Utah	SRS	Yes	CPI - 4% cap	Exempt to \$7,500/15,000
75	Vermont	SRS	Yes	50% of CPI - 5% cap	Benefits taxable
76	Vermont	TRS	Yes	50% of CPI - 5% cap	Benefits taxable
77	Virginia	SRS	Yes	CPI - 5% cap	Exempt to \$12,000
78	Washington	PERS	Yes	CPI - 3% cap	No income tax law
79	Washington	TRS	Yes	CPI - 3% cap	No income tax law
80	West Virginia	PERS	Yes	Ad hoc	Exempt to \$2,000
81	West Virginia	TRS	Yes	Ad hoc	Exempt to \$2,000
82	Wyoming	WRS	Yes	CPI - 3% cap	No income tax law
83	Milwaukee	City	Yes	2% after 5 yrs. retired	Exempt for some
84	Milwaukee	County	Yes	2%	Exempt for some
85	Wisconsin	WRS	Yes	Investment earnings; reductions possible	Exempt for some

<p>PART VI</p> <p>ACTUARIAL AND ACCOUNTING INFORMATION</p>
--

A. INTRODUCTION

Chart 6, on pages 36 and 37, 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 2006.

B. ACTUARIAL METHODS

The third column in Chart 6 lists the actuarial methods used by each of the 85 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.

66, or 78%, of the 85 plans use the entry age actuarial method; 13, or 15%, of the 85 plans use the unit credit method; 6 of the 85 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 85 plans in the report. This information is compared with previous reports on the following table:

<u>Interest Assumption</u>	<u>2000</u>	<u>2004</u>	<u>2006</u>
From 5% to 7%	1 plan	1 plan	1 plan
Over 7% to 8%	56 plans	59 plans	61 plans
Over 8%	27 plans	24 plans	23 plans
Not determined	1 plan	1 plan	0 plans
TOTAL	85 plans	85 plans	85 plans

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 effects of projected salary increases. The pension benefits were estimated only on service earned by employees up to the date of the estimate.

GASB statement #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 2006 Report, and compares them with the 2004 and 2000 Reports.

<u>Funding Ratio</u>	<u>2000</u>	<u>2004</u>	<u>2006</u>
More than 100%	33 plans	9 plans	7 plans
90% to 100%	22 plans	28 plans	21 plans
80%, but less than 90%	14 plans	19 plans	20 plans
70%, but less than 80%	5 plans	15 plans	17 plans
60%, but less than 70%	1 plan	7 plans	11 plans
50%, but less than 60%	1 plan	3 plans	3 plans
Less than 50%	3 plans	2 plans	3 plans
Not determined	6 plans	2 plans	3 plans
TOTAL	85 plans	85 plans	85 plans

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. 33 plans had funding ratios in excess of 100% in 2000, but only 7 plans had funding ratios in excess of 100% in 2006. However, 45% of the plans studied had funding ratios of 90% or more in 2006. The average funding ratio in 2006 was 82%.

Since the 2004 Report, no changes were made in the actuarial methods used by the 85 plans. The entry age method is the predominant method used by the plans studied.

G. THE WRS

The actuarial method used by the WRS is entry age, which is the most prevalent method used by the 85 plans in the report. The interest assumption for 2006 is 7.8% and the "economic spread" is 3.7%.

For 2006, the funding ratio for the WRS was 99.6%, which was greater than the average funding ratio of 82% for the plans studied.

CHART VI
ACTUARIAL AND ACCOUNTING PROVISIONS

	<u>State</u>	<u>Fund Name</u>	<u>Actuarial Method</u>	<u>Interest Assumption</u>	<u>Wage Inflation</u>	<u>Economic Spread</u>	<u>Funding Ratio</u>
1	Alabama	ERS	Entry age	8%	4.5%	3.5%	89.6%
2	Alabama	TRS	Entry age	8%	4.5%	3.5%	84.0%
3	Alaska	PERS	Unit credit	8.25%	3.5%	4.75%	65.7%
4	Alaska	TRS	Unit credit	8.25%	3.5%	4.75%	60.9%
5	Arizona	SRS	Unit credit	8%	4.5%	3.5%	83.7%
6	Arkansas	PERS	Entry age	8%	4%	4%	83%
7	Arkansas	TRS	Entry age	8%	4%	4%	80.3%
8	California	PERS	Entry age	7.75%	3%	4.75%	87.3%
9	California	TRS	Entry age	8%	3.25%	4.75%	86%
10	Colorado	PERA	Entry age	8.5%	3.5%	5%	73.3%
11	Connecticut	SERS	Unit credit	8.5%	5%	3.5%	53.2%
12	Connecticut	TRS	Entry age	8.5%	4%	4.5%	68.4%
13	Delaware	SEPP	Entry age	8%	3.75%	4.25%	101.7%
14	Florida	FRS	Entry age	7.75%	4%	3.75%	105.6%
15	Georgia	ERS	Entry age	7.5%	3.5%	4%	94.5%
16	Georgia	TRS	Entry age	7.5%	3.75%	3.75%	98%
17	Hawaii	ERS	Entry age	8%	4%	4%	65%
18	Idaho	PERS	Entry age	7.25%	4.5%	3.25%	95.2%
19	Illinois	SERS	Unit credit	8.5%	3%	5.5%	52.2%
20	Illinois	TRS	Unit credit	8.5%	3.5%	5%	62.0%
21	Illinois	MRF	Entry age	7.5%	4%	3.5%	100.1%
22	Indiana	PERF	Entry age	7.25%	N.D.	N.D.	96.8%
23	Indiana	TRF	Entry age	7.5%	4.5%	3%	43.4%
24	Iowa	PERS	Entry age	7.5%	4%	3.5%	88.4%
25	Kansas	PERS	Entry age	8%	4%	4%	68.8%
26	Kentucky	ERS	Entry age	7.75%	4%	3.75%	61.3%
27	Kentucky	TRS	Unit credit	7.5%	4%	3.5%	73.1%
28	Louisiana	SERS	Unit credit	8.25%	N.D.	N.D.	63.9%
29	Louisiana	TRSL	Unit credit	8.25%	3.2%	5.05%	67.5%
30	Maine	SRS	Entry age	7.75%	4.75%	3%	77.1%
31	Maryland	SRS	Entry age	7.75%	4%	3.75%	93.8%
32	Massachusetts	SERS	Entry age	8.25%	N.D.	N.D.	81.5%
33	Massachusetts	TRS	Entry age	8.25%	N.D.	N.D.	67.2%
34	Michigan	SERS	Entry age	8%	3.5%	4.5%	79.8%
35	Michigan	MERS	Entry age	8%	4.5%	3.5%	76.0%
36	Michigan	PSERS	Entry age	8%	3.5%	4.5%	79.3%
37	Minnesota	MSRS	Entry age	8.5%	N.D.	N.D.	96.23%
38	Minnesota	PERA	Entry age	8.5%	6%	2.5%	74.65%
39	Minnesota	TRA	Entry age	8.5%	5%	3.5%	92.05%
40	Mississippi	PERS	Entry age	8%	4%	4%	72.0%

41	Missouri	SERS	Entry age	8.5%	3.5%	5%	85.3%
42	Missouri	LAGERS	Entry age	7.5%	4%	3.5%	95%
43	Missouri	PSRS	Entry age	8%	N.D.	N.D.	82.6%
44	Montana	PERS	Entry age	8%	4.25%	3.75%	88%
45	Montana	TRS	Entry age	7.75%	4.5%	3.25%	76.1%
46	Nebraska	SERS	Entry age	7.6%	3.5%	4.1%	104%
47	Nebraska	SPP	Entry age	8%	3.5%	4.5%	93.4%
48	Nevada	PERS	Entry age	8%	3.5%	4.5%	74.9%
49	New Hampshire	NHRS	Aggregate	9%	3.5%	5.5%	67.99%
50	New Jersey	PERS	Unit credit	8.25%	4%	4.25%	89.9%
51	New Jersey	TPAF	Unit credit	8.25%	4%	4.25%	81.5%
52	New Mexico	PERA	Entry age	8%	4.5%	3.5%	92.1%
53	New Mexico	ERB	Entry age	8%	3%	5%	70.4%
54	New York	ERS	Aggregate	8%	3%	5%	N.D.
55	New York	TRS	Aggregate	8%	3%	5%	98.8%
56	North Carolina	TSERS	Entry age	7.25%	N.D.	N.D.	106.5%
57	North Carolina	LGERS	Entry age	7.25%	N.D.	N.D.	99.4%
58	North Dakota	PERS	Entry age	8%	3.5%	4.5%	88.8%
59	North Dakota	TRF	Entry age	8%	3%	5%	75.4%
60	Ohio	PERS	Entry age	8%	4%	4%	93%
61	Ohio	STRS	Entry age	8%	3.5%	4.5%	75%
62	Oklahoma	PERS	Entry age	7.5%	2.5%	5%	74.1%
63	Oklahoma	TRS	Entry age	8%	3%	5%	49.3%
64	Oregon	PERS	Entry age	8%	3.75%	4.25%	104.2%
65	Pennsylvania	SERS	Entry age	8.5%	3%	5.5%	92.7%
66	Pennsylvania	PSERS	Entry age	8.5%	3.25%	5%	83.6%
67	Rhode Island	ERS	Entry age	8.25%	3%	5.25%	59.6%
68	South Carolina	SCRS	Entry age	7.25%	3%	4.25%	71.6%
69	South Dakota	SRS	Entry age	7.75%	N.D.	N.D.	96.7%
70	Tennessee	CRS	Entry age-FIL	7.5%	N.D.	N.D.	99.8%
71	Texas	ERS	Entry age	8%	4%	4%	95.2%
72	Texas	TRS	Entry age	8%	3%	5%	87.3%
73	Texas	MRS	Unit credit	7%	N.D.	N.D.	82.1%
74	Utah	SRS	Entry age	8%	4.75%	3.25%	93.2%
75	Vermont	SRS	Entry age	8%	N.D.	N.D.	99.3%
76	Vermont	TRS	Entry age	8.25%	N.D.	N.D.	84.6%
77	Virginia	SRS	Entry age	7.5%	3%	5%	81.3%
78	Washington	PERS	Aggregate	8%	4.5%	3.5%	N.D.
79	Washington	TRS	Aggregate	8%	4.5%	3.5%	N.D.
80	West Virginia	PERS	Entry age	7.5%	3.5%	4%	73.2%
81	West Virginia	TRS	Entry age	8%	3.5%	4.5%	19.1%
82	Wyoming	WRS	Entry age	8%	4%	3%	95.1%
83	Milwaukee	City	Unit credit	8.5%	3%	5.5%	122.9%
84	Milwaukee	County	Entry age	8%	3.5%	3%	76.2%
85	Wisconsin	WRS	Entry age-FIL	7.8%	4.1%	3.7%	99.6%

*N.D. = Not determined.