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ABSTRACT

Findings of a national survey that examined retirement and retiree health benefits provisions are presented in this document. A 1990-91 survey mailed to all state and local retirement plans in which education employees participate elicited responses from 53 state-sponsored and 5 local-sponsored plans (representing a total active membership of 6.4 million employees). The latest in the National Education Association's 20-year-old series, this report includes a section on health benefits provisions, with 24 of the plans reporting a health insurance option for retirees. Characteristics of plans for education employees only and those for all public employee retirees and their varying benefits are described. The following other areas are discussed: retirement eligibility (normal retirement age, early retirement age, vesting, portability); legislation and governance (composition and authority of boards of trustees, recent pension legislation); and funding (employee and employer contributions, investment policies). Thirty-one tables are included. Appendices contain benefit formula/accrual rates, retirement eligibility requirements, employee and employer contribution rates, plan membership and financial information, and retirement system health insurance information. (LMI)

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Contents

Executive Summary
Introduction4
Number of Retirees and Benefit Amounts
Retirement Eligibility
Legislation and Governance
Funding
Health Benefits



Tables

1.	Sponsorship and Coverage of Plans	4
2.	Categories of Employees Covered by Retirement Systems in 1990-91 Survey	4
	Active Membership by Subgroup	
4.	Number of Retirees and Average Yearly Retirement Benefits by Subgroup	6
5.	Summary of Accrual Rates	6
6.	Final Average Salary (FAS) Provisions	7
7.	Distribution of Number of Consecutive FAS Years	7
8.	Consecutive Years Used to Determine Final Average Salary by Subgroup	7
9.	Number of Plans with a Disability Benefit by Subgroup	8
10.	Summary of COLA Provisions	8
	COLA Provisions by Subgroup	
12.	Reported Percentage Ad Hoc COLAs Provided to All Retirees from 1983 to 1989	9
13.	Distribution of Retirees by Years of Service, Type, and Category of Employee	9
14.	Normal Retirement: Age and Service Requirements	10
15.	Early Retirement: Age and Service Requirements	11
16.	Distribution of Vesting Previsions.	11
17.	Portability of Benefits by Subgroup	12
18.	Number of Plan Trustees	13
	Boards of Trustees by Subgroup	
20.	Policy-Making Authority of the Boards of Trustees	13
21.	Recent Pension Legislation	14
22.	Recent Legislated Pension Changes by Subgroup	14
23.	Contribution Rates by Subgroup	15
24.	. System Assets and Unfunded Liability	16
	. Average Investment Income and Net Annual Yield by Subgroup	
26.	. Average Investment Portfolio	16
27.	. Plans Divesting Holdings in South Africa by Subgroup	17
28.	. Retirement Systems Offering Health Insurance by Subgroup	18
29.	. Groups Covered by a System-wide Health Benefits Plan	18
30.	. Sources of Systems Contributions for Health Benefits	18
31.	. Annual Health Insurance Contributions per Enrollee	19
A	ppendixes	
A.	Benefit Formula/Accrual Rates	20
B.	Retirement Eligibility Requirements	22
C.	Employee and Employer Contributions Rates	
	Plan Membership and Financial Information	
E.	Retirement System Health Insurance	26



Executive Summary

Fifty-eight retirement plans responded to the National Education Association 1990-91 Retirement and Health Benefits Provisions Survey. This survey is part of the series of retirement provisions surveys conducted by NEA over the past 20 years. For the first time, items on health benefits provisions were included in the 1990-91 survey.

The survey was mailed to all state and local retirement plans in which education employees participate. The 53 state-sponsored plans and 5 locally sponsored plans that responded had a total active membership of more than 6.4 million employees. Throughout the report, the results are broken down into three subgroups. The subgroups are occupational coverage (education only and general public employees), plan size (less than or equal to 100,000 active members and more than 100,000 active members), and Social Security coverage. The education plans included 43 percent of the total active employees in the survey, while the general public employee plans included 57 percent of the total active employees in the survey.

Participating plans reported paying benefits totaling over \$18 billion per year. The plans in the survey had an average of 44,667 retirees and paid an average yearly benefit of \$6,970 per retiree. The average benefit paid by the education-only plans was greater than the overall average. Education-only plans paid an average benefit of \$8,076.

Over 60 percent of the plans reported some type of automatic cost-of-living (COLA) provision. The most common COLA provision was based on changes in the Consumer Price Index with a cap on the size of the increase.

The most common age requirement for normal retirement was 60. However, nearly half of the plans allowed normal retirement at any age if a service requirement was met—most frequently 30 years. The most frequent early retirement age was 55.

Boards of trustees for the plans represented in the survey ranged in size from 5 to 26. The most frequent sizes of the boards were 9 and 7.

The most frequent areas of pension legislation were changes in the contribution rate, the benefit formula, survivor benefits, liberalization of the investment policy, and death benefits.

The major sources of funding for retirement plans are employee and employer contributions and the return on the investments of the plans' trust funds. Employees contributed an average of 5.5 percent of salary to the retirement system. Employer contributions were more than twice as large, averaging 12.5 percent of payroll. The plans reported an average annual yield on investments of 12 percent.

The plans in the survey reported average assets of over \$7.8 billion. They also reported an average total unfunded liability, i.e. the plan's liabilities in excess of the assets in the funds, of over \$2.4 billion.

The survey included items on coverage of the system-wide health benefit plans, costs and financing of the plans, and the benefits provided. Twenty-four of the 58 plans in the survey reported offering health insurance to retirees. Nearly all of the plans that offered health insurance offered it to all retirees and most of the plans offered health benefits to the retirees' spouses and dependents.

The average system contribution for health benefits was over \$43 million. The annual total health insurance contribution per Medicare eligible enrollee was over \$1,800, and over \$2,800 per non-Medicare eligible enrollee. Health insurance premiums have increased rapidly during the past few years. During a period when inflation was averaging around 4 percent per year, the plans in the survey reported an average annual increase in health insurance premiums for the last five years of 18.5 percent.



Introduction

This report presents the results of the National Education Association 1990-91 Retirement and Retiree Health Benefits Provisions survey. This survey is part of a series of retirement provision surveys conducted by NEA over the past 20 years. The 1990-91 survey included items on health benefit provisions for the first time.

Data from the last survey, conducted in 1985-86, are included in this report where comparable data exist. Because the number of respondents in the two surveys differed, caution should be used when comparing the results of the 1985-86 survey and the 1990-91 survey. Readers should focus on the trends over time rather than specific dollar or percentage changes.

The survey was mailed to all state and local retirement plans in which education employees participate. The 58 retirement plans responding to the 1990-91 survey consisted of 53 state-sponsored plans and 5 locally sponsored plans, with a total active membership of more than 6.4 million employees. Table 1 shows that, of the 53 state plans, 11 plans covered public school teachers, 13 plans covered public school teachers and support personnel, and 29 plans covered general public employees including teachers and support personnel (one plan covered firefighters and police officers). The 5 locally sponsored plans included 2 plans that covered public school teachers, 2 plans that covered teachers and support personnel, and 1 plan that covered general public employees. The 1985-86 survey included 72 plans: 61 state-sponsored plans and 11 locally sponsored plans.

Generally plans either provide mandatory coverage to categories of employees or exclude categories of employees from membership in the plan. A detailed look at the categories of employees that are covered by the surveyed plans is shown in Table 2. With the exceptions of substitute teachers, state department of education employees, and state legislators, few plans allow voluntary membership in the plan. In addition, 46 of the plans (81%) reported that part-time employees are covered by the retirement plan. The average number of hours per week that a part-time employee had to work to be covered by the plan was 15.6 hours per week. Eleven of the plans covered employees who worked at least 20 hours per week.

Table 1.
Sponsorship and Coverage of Plans

Sponsor 1	990-91 (Number	1985-86 of plans)
State	53	61
Teachers only	11	23
Teachers and support personne	el 13	10
Public employees	29*	28
Local	5	11
Teachers only	2	6
Teachers and support personn	el 2	3
Public employees	1	2

^{*} One plan covered firefighters and police officers

Table 2.
Categories of Employees Covered by
Retirement Systems in 1990-91 Survey

		Voluntary membership er of plans)	Not elig.
Full-time public school (K	-12)		
Regular certified	46		10
Substitute teachers	10	10	32
Support personnel	33	6	16
Public institutions of high	er ed		
Faculty & professional	staff 25	10	17
Support staff	25	5	24
Non-public school system	1		
personnei			
State dept. of education	n 29	11	17
Private school personn	el 1	1	54
State education assoc.	staff 11	3	41
Local education assoc.	staff 5	3	43
incl. UniServ staff			
Judges	11	3	42
State legislators	9	11	36
Police and firefighters	18		35
Other state/muni emple	oyees 27	2	29
Other nonpublic emplo		11	53

Table 3 shows the number of plans by the three subgroups that are used in the report and the total active membership reported by the plans. The three subgroups are occupational coverage (education-only and general employees); plan size (less than or equal to 100,000 active members and more than 100,000 active members); and Social Security coverage. Considering both levels of government, 29 plans were restricted to teachers and/or educational support personnel and 29 plans covered general public employees.

Of the 6.4 million active members covered by the survey, the education-only plans included 43 percent of the total active employees in the survey, while the general public employee plans included 57 percent of the total active employees in the survey. Education plans are smaller than general public employee plans. The education-only plans had an average of 101,505 active members, while the general public employee plans had an average of 131,716 active members.

The 30 plans that reported an active membership of 100,000 or less accounted for 1.36 million members. The 25 large plans (more than 100,000 active members) reported a total of 5.05 million members.

The 13 plans that did not have Social Security coverage were smaller than the plans that provided Social Security coverage, averaging 92,613 active members versus 123,543 active members.

Table 3.
Active Membership By Subgroup

Subgroup	Number of plans*	Total active membership		
	1990-91	1990-91	1985-86**	
Occupational coverage				
Education only Public employees	28(28) 29(27)	2,842,154 3,571,432	2,576,469 3,212,733	
Plan size*** 100,000 or less More than 100,000	30(30) 25(25)	1,363,455 5,050,131		
Social Security coverage				
No Social Security Social Security	13(13) 45(42)	1,203,972 5,209,614		
All respondents	58(55)	6,413,586		

Number of plans that provided number of active members shown in parenthesis.



^{**} Only comparable data are shown for 1985-86.

^{***} Three plans did not report the number of active members.

Number of Retirees and Benefit Amounts

Participating plans reported paying benefits totaling over \$18 billion in the most recent year for which data were available. Table 4 shows the average number of retirees and the average yearly retirement benefits by subgroups. Overall, the plans in the survey had an average of 44,667 retirees and paid an average yearly benefit of \$6,970 per retiree.

The average benefits paid varied substantially among the subgroups. The average benefit paid by the education-only plans was greater than the overall average (\$8,076 vs. \$6,970). The average benefit paid by the small plans was \$1,379 higher than the average benefit paid by large plans. This may be because the majority of small plans are education employee plans, which have higher average benefit levels. Plans that did not include Social Security paid higher average benefits than plans that included Social Security (\$8,912 vs. \$6,074). The large difference in benefits for these two types of plans occurs because retirees under plans with Social Security coverage also receive Social Security while those in plans without Social Security must rely on the plan to provide retirement income.

Table 4.
Number of Retirees and Average Yearly
Retirement Benefits by Subgroup

Subgroup 1990-91	Average number of retirees 1990-91	-	ge benefit 5-86
Occupational coverage	 -		
Education only	36,000	\$8,076	\$7,417
Public employees	55,883	5,604	5,122
Plan size			
100,000 or less	20,630	\$7,696	\$5,077
More than 100,000	65,270	6,317	6,191
Social Security covera	ge		
No Social Security	42.211	\$8,912	\$6,385
Social Security	45,759	6,074	6,165
All respondents	44,667	\$6,970	\$6,346

Retirement Benefit Provisions

In defined benefit plans, the formula for determining the benefit contains three major variables. They are the accrual rate, the salary average over a specified number of years (known as the final average salary or FAS), and the number of years of service. The employee's age at retirement is sometimes considered in the benefit formula, but more often age enters into the determination of benefits as a reduction in the normal benefits if the employee retires before the plan's normal retirement age.

Accrual rate

The most common accrual rate was 2.0 percent reported by 14 plans. In the typical defined benefit plan the accrual rate is the percentage that is multiplied by the FAS and years of service. Many plans use a single percentage, but it is not unusual for plans to have very complex formulas with different accrual rates for different periods of service or different ages at retirement. For example, a plan might have an accrual rate of 1.5 percent for years of service 1-10; an accrual rate of 1.75 percent for years of service 11-20; and an accrual rate of 2.0 percent for years of service over 20. The accrual rates for the plans in the survey are detailed in Appendix A and summarized in Table 5. The most common benefit formula reported in the survey had an accrual rate between 2.0 and 2.24 percent for each year of service. In addition to the 21 plans that reported accrual rates in that range, several of the plans with complex formulas (indicated by footnotes in Appendix A) had an accrual rate in that range for at least some periods of service.

Table 5. Summary of Accrual Rates, 1990-91

Accrual rate	Number of plans	
Less than 1.5%	3	
1.5% to 1.99%	17	
2% to 2.24%*	21	
2.25% to 2.49%	0	
2.5%	4	

¹⁴ plans have an accrual rate of 2.0%



Final average salary

Along with the accrual rate and years of service, the retiree's final average salary is a component of most plan's retirement benefit formula. The final average salary (FAS) is the earnings figure to which the accrual rate is applied to calculate the retirement income. Normally, the FAS is based on earnings over a number of years in order to dampen the effect on the annuity of any fluctuation in earnings near the time of retirement.

The final average salary provisions are shown in Table 6. The most common provision, used by 26 (46%) of the 56 plans that responded to this question, defined the FAS as the average of salaries for a specified number of consecutive years. The distribution of the number of consecutive years is shown in Table 7. Three years was by far the most common number of consecutive years used in determining the FAS. Fifty-four percent of the plans that reported using the highest consecutive X years of service used the "highest consecutive 3 years." Table 8 shows the average and modal (most frequent) number of years for these plans. The use of the "highest consecutive 3 years" was true for all the subgroups.

Table 6.
Final Average Salary (FAS) Provisions

Provision	Number of plans 1990-91	% of plans 1990-91	% of plans 1985-86
Average of			
Highest X consecutive years	26	46	52
Highest X years during final Y ye	ears 6	11	14
Highest X years, not consecutive	e 22	39	31
Highest X years, to exceed \$Z	2	4	3

Table 7.
Distribution of Number of Consecutive
FAS Years

Number of cons. years	Number of plans 1990-91	% of plans 1990-91	% of plans 1985-86
2		8	3
3	14	54	54
4	1	4	8
5	9	35	27

Table 8.

Consecutive Years Used to Determine Final Average Salary by Subgroup

Subgroup	Number of plans	Mean years	Modal years
Occupational coverage	je		
Education only	13	3.69	3
Public employees	13	3.62	3
Plan size			
100,000 or less	14	3.79	3
More than 100,000) 11	3.55	3
Social Security cover	age		
No Social Security	, 6	4.00	3
Social Security	20	3.55	3
All respondents	26	3.65	3

Disability benefits

Fifty-four of the plans (93.1%) reported providing special retirement benefits to members who become disabled. Thirty-eight plans reported that they had a minimum service requirement before an employee was eligible for disability benefits. The most common service requirements were 5 years (reported by 20 plans) and 10 years (reported by 10 plans).

Employees with AIDS or HIV are eligible for disability benefits under all of the plans with disability provisions. AIDS or HIV is treated the same as any other disability by all of the plans.

Twenty-nine of the plans have a minimum benefit so that even if an employee becomes disabled with a short amount of service and/or at a young age the employee will receive a larger benefit than the normal computation would provide. Of those plans with a minimum benefit, 12 had a fixed percent of salary as the minimum with 25 percent being reported most frequently as the minimum. Another 3 plans reported using as a minimum the amount that the retiree is projected to be qualified for at the age of normal retirement. Nine of the plans reported having a minimum dollar amount for the disability benefit.

Twenty-three plans (42.6%) have a maximum disability benefit. The average maximum disability benefit is 63.5 percent of salary. Only five plans reported that the disability benefit is limited by other income available from Social Security, disability insurance, or state funds.



Education-only plans are slightly more likely to have a disability benefit than public employee plans (96.6% v. 89.7%). All of the plans with no Social Security coverage reported having a disability benefit. Since Social Security provides a disability benefit, the absence of Social Security coverage makes a disability benefit within the retirement plan very important to this group. Ninety-one percent of the plans with Social Security coverage reported a disability benefit. Table 9 shows the number of plans that reported a disability benefit by subgroup.

Table 9.

Number of Plans with a Disability Benefit by Subgroup

Subgroup	Number of plans	% of subgroup	
Occupational coverage	e		
Education only	28	96.6	
Public employees	26	89.7	
Plan size			
100,000 or less	28	93.3	
More than 100,000	23	92.0	
Social Security covers	age		
No Social Security	13	100	
Social Security	41	91.1	_

Cost-of-living adjustments

The 1990-91 NEA survey asked participating plans about automatic cost-of-living adjustment provisions as well as ad hoc adjustments granted to retirees during 1986, 1987, 1988, and 1989.

Fifty percent of the plans (29) reported some type of automatic cost-of-living provision. Another 12 percent of the plans (7) reported an automatic COLA provision that is contingent upon the earnings of the retirement fund. The remaining 38 percent of the plans (22) had no automatic COLA provision. The most common COLA provision was based on changes in the Consumer Price Index (CPI) with a maximum cap on the size of the increase. This provision was reported by 69 percent (20 of 29) of the plans that have an automatic COLA provision. The most common cap on the yearly adjustments was 3 percent. Among the 23 plans that based the automatic COLA provision on the CPI, six reported using the CPI-U and four reported using the CPI-W.

The automatic cost-of-living adjustment provisions are summarized in Table 10.

Table 10.
Summary of COLA Provisions

COLA provision	Number of plans	Amount (%)
Fixed \$ per year	0	<u> </u>
Percent equal to CPI increases	3	
Percent based on CPI with cap	20	
Modal cap		3
Mean cap		3.29
Fixed percent	6	
Modal percent		3
Mean percent		2.80
Contingent on fund earnings	7	
Total plans reporting		
COLA provisions	36	

Nearly twice as many public employee plans as education-only plans reported an automatic COLA provision. The COLA provisions are shown by subgroup in Table 11. Sixty-six percent of public employee plans had either an automatic or contingent COLA provision, while 38 percent of education-employee-only plans had either an automatic or contingent COLA provision. The plans with less than 100,000 members were less likely to have an automatic or contingent COLA (53% vs. 68%), and plans without Social Security were more likely to have an automatic or contingent COLA than Social Security plans (62% vs. 49%).

Table 11. COLA Provisions by Subgroup

Subgroup	Automatic Co (Number of		1990-91 (% of su	
Occupational cove	erage		·	
Education only	8	3	38	40
Public employee	s 15	4	66	80
Plan size				
100,000 or less	11	5	53	50
More than 100,0	00 12	2	68	77
Social Security co	verage			
No Social Secur	itv 6	2	62	70
Social Security	17	5	49	52



The mean ad hoc COLA adjustments provided to all retirees and the CPI increases for years 1983 to 1985 (from the 1985-86 survey) and 1986 to 1989 (from the 1990-91 survey) are shown in Table 12. During the four-year period from 1986 to 1989, 23 plans provided at least one ad hoc COLA. The ad hoc COLAs were slightly higher than the increases in the CPI. With the exception of 1989, this is true for both increases on a year by year basis or the average increase over the entire time period. The average COLA provided over the four-year period 1986-89 for the plans that provided at least one COLA was 3.9 percent. During this period the average increase in the CPI was 3.6 percent.

When ad hoc COLA adjustments are provided, they are generally given to all retirees. Only one plan reported that it provided COLA adjustments only to special groups of retirees such as disability retirees and not to all retirees. One other plan reported providing a 1 percent greater COLA to special groups of retirees in 1989.

The majority of plans (19 of 23) that provided at least one ad hoc COLA based it on the current benefit level rather than on the initial benefit level. Basing the COLA on the current benefit compounds the COLAs over time and results in a larger benefit than if the COLAs were based on the original benefit.

Table 12.
Reported Percentage Ad Hoc COLAs
Provided to All Retirees from 1983 to 1989

Year	Number of plans	Mean percentage	CPI increase
1983	11	4.8	3.2
1984	14	5.6	4.3
1985	17	4.2	3.6
1986	16	4.6	1.9
1987	14	5.6	3.6
1988	15	4.9	4.1
1989	13	4.4	4.8

Distribution of Retirees

The distribution of retirees in fiscal year 1989 is shown by years of service and type in Table 13. Approximately 45 percent of the retirees retired with 20-29 years of service and nearly 36 percent retired with 30 or more years of service. Approximately 18 percent of the retirees had less than 20 years of service.

Two-thirds of the retirees retired based on length of service. The next most common type of retirement was a deferred retirement (14.6%), followed by early retirement (8.4%) and disability retirement (5.8%).

Certified K-12 personnel were the largest group of retirees, making up 46.2 percent of retirees. Other (i.e., non-education) system members were the next largest group of retirees, making up 36 percent of the group. Public school support personnel accounted for approximately 10 percent of the retirements, and higher education faculty and support personnel made up almost 8 percent of the retirements.

Table 13.
Distribution of Retirees by Years of Service, Type, and Category of Employee

	FY 1	FY 1984*	
	Avg. number per plan	% of retirees	% of retirees
Years of service			
0-9	209	8.3	7.8
10-19	254	10.1	33.7
20-29	1150	45.7	29.3
30-39	822	32.6	26.9
40+	83	3.3	2.3
Type of retirement			
Service	2240	66.4	
Early	285	8.4	
Disability	197	5.8	
Deferred	492	14.6	
Survivor	157	4.7	
Category of emplo	vee		
Certified K-12	3563	46.2	
Support K-12	781	10.1	
Higher ed faculty	179	2.3	
Higher ed suppo		5.4	
All other	2777	36.0	

Only comparable data are shown for 1984.



Retirement Eligibility

This section analyzes responses to the survey questions related to eligibility for retirement benefits. The topics covered in this section are age and service requirements for normal retirement and early retirement and plan vesting provisions.

Normal Retirement: Age and Service Requirements

Plans responding to the survey were asked to report the age and service requirements that had to be met by active employees in order to qualify for retirement benefits. For purposes of this survey, an employee is considered to have met the plan requirements for normal retirement if he or she can retire on an immediate, unreduced annuity. In some cases, this may be earlier than the normal retirement age specified by the plan, which is often age 62 or 65. The term early retirement is reserved for cases where a benefit reduction is imposed because the employee does not meet the plan age and/or service requirements for immediate, unreduced benefits.

The normal retirement age and service requirements for the 58 plans in the survey are shown in Table 14. Many of the plans have multiple criteria. For example, a member of the plan may be eligible for retirement at age 55 with 30 years of service or at age 62 with 10 years of service. The most common age requirement was 60, followed closely by ages 65 and 55. However, nearly half (28) of the plans allowed normal retirement at any age if a service requirement was met—most frequently 30 years (18 plans). The most common age and service requirement was 65 with 5 or less years of service.

For all the subgroups the earliest age and service combination allowed for normal retirement was any age with 30 years of service. This is unchanged from the 1985-86 survey, which reported any age with 30 years of service to be the most frequent earliest normal provision.

Table 14.
Normal Retirement: Age and Service
Requirements

	Years of service						
Age	5 or less	10 (Nur	20 nber o	25 f plans	30 •)	35	Total*
Any a	ge			3	18	3	28
50 55 60 62 65	3 5 13 4 25	1 3 6 5 1	1 3 5	8 1	1 3 1 3	1	6 23 29 13 27

^{*} Numbers in rows do not total the row total because not all possible ages are shown in table. Age and service combinations reported by only one plan have been deleted.

Early Retirement: Age and Service Requirements

Early retirement refers to a provision that allows a member to retire before meeting the normal retirement eligibility requirements with a reduction in benefits if the member meets certain age and service requirements. The age and service requirements for early retirement are shown in Table 15. Like the normal retirement requirements, plans often have multiple criteria for early retirement eligibility. The most frequent early retirement age was 55 (38 plans). Seventeen of the plans allowed early retirement at age 55 with 5 or less years of service. Twenty-six plans (44.8%) allowed early retirement at any age if a service requirement was met. The most frequent service requirement at any age was 30 years service, which was reported by 10 plans, and 25 years of service reported by 8 plans. Retirement eligibility requirements for responding systems are detailed in Appendix B.

The most frequent requirement reported by education employee plans, plans with less than 100,000 members, and plans with no Social Security coverage was any age with 30 years service. The most



frequent early retirement provision for public employee plans, plans with greater than 100,000 members, and plans with Social Security coverage was any age with 25 years of service.

Table 15.
Early Retirement: Age and Service Requirements

	Years of service						
Age	5 or less		20 lumbei	25 r of pia	30 n=)	35	Total*
			10:110-61	01 pie			
Any a	age	2	2	8	10	2	26
50	3	1			2		8
55	17	6	4	7	1	1	38
60	7	2	2				11
62		3			1		4
65	1						1

^{*} Numbers in rows do not total the row total because not all possible ages are shown in table. Age and service combinations reported by only one plan have been deleted.

Vesting

A retirement plan's vesting provisions determine when employees acquire a nonforfeitable right to benefits under the plan, even if they leave employment prior to eligibility for an immediate retirement benefit.

The most common vesting provision, granting full vesting upon completion of a specified number of years of service, was reported by 79 percent of the plans. This practice of moving to full vesting from no vesting at a single career point is known as cliff vesting. Nineteen plans, 41% of the plans reporting the use of cliff vesting, provided full vesting after 5 years. The next most frequent vesting point was 10 years, reported by 16 (35%) of the plans reporting cliff vesting.

Another vesting approach, reported by 20 percent of the plans (12 plans), grants full vesting at a particular age, provided that a specified amount of service has been attained. Most plans with age and service vesting granted full vesting to employees at age 65 with 4 or 5 years of service.

The distributions of years of service for cliff vesting schedules and the distributions of the age and service requirements for age and service vesting are shown in Table 16.

Table 16.
Distribution of Vesting Provisions

	1990-91 Number of plans	% of plans	1985-86 % of plans*
	Cliff vesti	ng schedules	
Years of se	rvice		
3	5	8.6	
4	2	3.4	4.2
5	19	32.8	27.8
10	16	27.6	43.1
27	3	5.2	
30	1	1.7	4.2
Total	46	79.3	

Age and service vesting

Age requir	rement		
5 0 i	2	3.4	
55	3	5.2	2.8
60	2	3.4	5.5
65	5	8.6	5.5
Total	12	20.6	
Service re	quirement		
2	1	1.7	
4	4	6.9	1.4
5	5	8.6	6.9
10	2	3.4	8.3
Total	12	20.6	

^{*} Only comparable data are shown for 1985-86.

Portability

Two out of five plans in the survey allowed service credit for at least some out-of-state service. This portability of service credit is important because it allows employees to move to a new system and become quickly vested in the new system and thus obtain retirement coverage. Without portability a person could work under several retirement systems



during his or her career and never become vested and hence never be eligible for retirement benefits.

As shown in Table 17, public employee plans were slightly more likely to allow credit for military service than education-only plans (44.8% vs., 37.3%), while education-only plans were slightly more likely to allow service credit for other out-of-state service than public employee plans (41.4% vs.. 34.5%). Plans without Social Security were more likely than plans with Social Security to allow credit for both military service (53.8% vs.. 37.7%) and for out-of-state service (61.5% vs.. 31.1%). Five years of service credit was the most common maximum allowed for military service. Three plans had no limit on the amount of credit allowed for military service. The most common maximum for out-of-state service credit was 10 years. Five plans reported no maximum on the amount of service credit allowed for out-of-state service.

Table 17.
Portability of Benefits by Subgroup

Subgroup	Military service (% of su	Other service bgroup)
Occupational coverage		<u> </u>
Education only	37.3	41.4
Public employees	44.8	34.5
Plan size		
100,000 or less	33.3	40.0
More than 100,000	52.0	36.0
Social Security coverage	10	
No Social Security	53.8	61.5
Social Security	37.7	31.1
All respondents	41.4	37.9



Legislation and Governance

Composition and Authority of Boards of Trustees

Boards of trustees for the plans represented in the survey ranged in size from 5 to 26 members. Four plans reported operating without boards of trustees, with governing authority vested in a senior official of the sponsoring government. Table 18, which contains the distribution of the number of plan trustees, shows that there is a wide variance in the size of the boards. The most frequent sizes of the boards were 9 (24.1% of the plans) and 7 (17.2% of the plans).

Table 18. Number of Plan Trustees

	1990-9	91	_1985-	86
Number of trustees	Number of plans	% of plans	Number of plans	% of plans
None	4	6.9	3	4.2
5	6	10.3	10	14.1
6	3	5.2	5	7.0
7	10	17.2	10	14.1
8	1	1.7	3	4.2
9	14	24.1	9	12.7
10	4	6.9	12	16.9
11	5	8.6	7	9.9
12	1	1.7	1	1.4
13	3	5.2	2	2.8
14	1	1.7		
15	2	3.4	4	5.6
16	1	1.7	1	1.4
17	2	3.4	3	4.2
24			1	1.4
26	1	1.7		
TOTAL	58	100.0	71	100.0

The composition of the boards of trustees is shown for the subgroups in Table 19. The average size of the boards was 9.6 members and an average 5.8 of the board members were members of the retirement system. While the average size of the boards did not differ between public employee and education only plans, system members had slightly greater membership on the boards of public employee plans (6.1 out of 9.6 members vs. 5.5 out of 9.6 members).

The greatest difference in representation of system members on the boards is between plans that have no Social Security and plans that include Social Security. The system members in the plans that have no Social Security account for 72 percent of the members of the boards, while system members in Social Security plans account for only 57 percent of the members of the boards.

Table 19.
Boards of Trustees by Subgroup

	Mea of t		
Subgroup	Total	System members	% of total
Occupational coverage			
Education only	9.6	5.5	57
Public employees	9.6	6.1	64
Plan size			
100,000 or less	9.4	5.7	61
More than 100,000	9.8	6.2	63
Social Security coverage			
No Social Security	9.0	6.5	72
Social Security	9.8	5.6	57
All respondents	9.6	5.8	60

Approximately two-thirds of the boards of trustees have policy-making authority over investments and disability benefits (Table 20). Slightly more than half of the boards have policy-making authority over benefit structures and benefit improvements.

Table 20.
Policy-Making Authority of the Boards of Trustees

Area	% reporting authority
Investments	67
Benefit structures	52
Benefit improvements	56
Disability benefits	65



Recent Pension Legislation

The survey requested information on significant pension-related legislation enacted between 1985 and 1990. As shown in Table 21, the most frequent areas of pension legislation were changes in the contribution rate (34 plans reporting changes) and changes to the benefit formula (33 plans reporting changes). The next most frequently reported changes were changes in the survivor benefits (reported by 26 plans), liberalization of the investment policy (reported by 20 plans), and changes in the death benefits (reported by 17 plans).

Table 21.
Recent Pension Legislation

	1990-91		1985-86	
Area	Number of plans	% of plans	% of plans	
Benefit formula was changed. System was made	33	57	34.7	
noncontributory.	3	5	4.2	
 System was integrated/ coordinated with Soc. Security Survivor benefits were 	. 0	0	0	
changed.	26	45	33.3	
5. Death benefits were changed.6. Board of trustees selection	17	29	23.6	
process was changed.	8	14	9.7	
7. Investment policy was				
liberalized.	20	35	36.1	
8. Contribution rate was changed	. 34	59	47.2	

The most common legislative change for educationonly plans was a change in the contribution rate (65% of the plans), followed by a change in the benefit formula. Public employee plans' most common pension change was the benefit formula (62%), followed by changes in the contribution rate (52%). A comparison of pension legislation by subgroup is shown in Table 22.

Plans with 100,000 or less members reported more legislative changes than plans with more than 100,000 members. A larger percentage of the smaller plans reported changes in all the legislative areas except death benefits. The large plans reported the lowest number of changes. The plans with more than 100,000 members constituted the only subgroup in which there was no legislative change in any area reported by a majority of the plans.

Among plans with no Social Security, the most frequent legislative changes were in the contribution rates and survivor benefits. This was the only subgroup that reported changes in the survivor benefits by a majority of the plans.

Table 22.

Recent Legislated Pension Changes by Subgroup

	Number of plans	%	Number of plans	%
	Educa on		Publ Employ	
 Benefit formula Made noncontributory Integrated w/ Soc. Sec Survivor benefits Death benefits Trustee selection Investment policy Contribution rate 	15 0 0 14 10 3 12	52 0 0 48 34 10 41 65	18 3 0 12 7 5 8	62 10 0 41 24 17 28 52
	Less 100,0		Greater 100,0	
 Benefit formula Made noncontributory Integrated w/ Soc. Set Survivor benefits Death benefits Trustee selection Investment policy Contribution rate 	21 2 c. 0 15 7 5 10 21	70 7 0 50 23 17 33 70	10 1 0 10 9 3 8 12	40 4 0 40 36 12 32 48
	With S	oc. Sec.	No Soc	.Sec.
 Benefit formula Made noncontributory Integrated w/ Soc. Se Survivor benefits Death benefits Trustee selection Investment policy Contribution rate 		58 7 0 40 29 16 33 56	7 0 0 8 4 1 5	54 0 0 62 31 8 39 69



Funding

Employee and Employer Contributions

The major sources of funding for retirement plans are employee and employer contributions and the return on the investments of the plan's trust funds. This section analyses the contribution rates for employees and employers. The investment policies and return on trust fund investments are discussed in the next section.

Four of the plans reported that employees do not contribute to the plan. Forty of the plans reported that employee contributions are made via employer pickup under IRS section 414(h)(2). Under this method, an employee's salary is reduced by the amount of the contribution, which is paid by the employer. This effectively allows the employee contribution to be made with pretax dollars. Ten of the plans reported that employee contributions are based on the regular salary exclusive of extra pay received for extra duties. Thirty-six of the plans base the employee contributions on total compensation.

Employees contributed an average of 5.5 percent of salary to the retirement system. Employer contributions were more than twice as large, averaging 12.5 percent of payroll. Local governments made larger contributions to the retirement system than state governments. Overall, local contributions were approximately twice the size of state government contributions to the retirement system, averaging 8.3 percent of payroll for local governments and 4.2 percent for state governments.

Table 23 shows the employee and employer contribution rates reported for the subgroups. Appendix C lists the contribution rates reported by each plan in the survey. Education-only plans had higher employee contributions than public employee plans, but the employer contributions also were higher. The large plans had higher contributions by both employees and employers. Plan contributions were the highest for both employees and employers in plans without Social Security. However, if the employee and employer Social Security taxes are added to the retirement plan contributions, employees in Social Security plans make a larger total contribution to their retirement coverage than employees without Social Security.

Table 23. Contribution Rates by Subgroup

			Employer	•
	nployee of salary)	Total	State 6 of salar	Local
Occupational	· -			
coverage				
Education only	6.4	7.9	1.5	6.4
Public employees	5.0	16.7	7.4	9.3
Plan size				
100,000 or less	5.3	10.7	2.9	7.8
More than 100,000	6.7	15.0	5.9	9.1
Social Security				
No Social Security	7.9	20.6	5.9	14.7
Social Security	5.0	9.7	3.6	6.1
All respondents	5.9	12.5	4.2	8.3

Investment Policies

Investment policies are critical to retirement plans' ability to fund benefits. In addition, they have a significant effect on U.S. financial markets and the economy. This section deals with portfolio composition and investment policies.

The plans in the survey reported average assets of over \$7.8 billion. They also reported a total average unfunded liability of over \$2.4 billion. Unfunded liability is a plan's liabilities in excess of the assets in the fund. Overall the unfunded liabilities represent approximately 31 percent of the total of the fund's assets. System assets and the unfunded liability are shown for the subgroups in Table 24 and detailed for all responding plans in Appendix D. Among the subgroups, the education-only plans reported a greater unfunded liability as a percent of fund assets than the public employee plans (38% v. 25%). The plans without Social Security reported unfunded liabilities of 42 percent versus unfunded liabilities of 27 percent of assets reported for Social Security plans.



Table 24.
Average System Assets and Unfunded Liability

Subgroup	Assets (Billions)	Unfunded liability (Billions)
All respondents	\$7.84	\$2.43
Occupational coverage Education only Public employees	6.85 9.01	2.60 2.22
Plan size 100,000 or less More than 100,000	4.69 12.72	1.27 3.87
Social Security coverag No Social Security Social Security	8.82 7.58	3.77 2.11

The plans reported average investment income of over \$260 million for the previous complete year (1989 for most plans). The mean annual yield for all the plans was 12 percent. This is lower than the average yield of 13.7 percent in 1985-86.

The average investment income and net annual yield are shown in Table 25. No large differences in the yields were reported among the subgroups except that education-only plans were outperformed by public employee plans by yields of 12.9 percent to 11.2 percent.

Table 25.

Average investment Income and Net
Annual Yield by Subgroup

Subgroup	Investment income	Annual yield (%)
All respondents	\$260,713,113	12.0
Occupational coverage		
Education only	266,580,305	11.2
Public employees	254,537,122	12.9
Plan size		
100,000 or less	176,819,512	12.2
More than 100,000	456,809,654	11.7
Social Security coverage		
No Social Security	268,978,752	11.7
Social Security	258,233,422	12.1

The portfolio in Table 26 represents the average holdings of the plans in each of the various types of investments. Nearly a third of the investment portfolio (31.1%) was invested in common and preferred stock. The next largest holdings were in U.S. Government securities (21.4%) and corporate bonds (17.9%). A comparison between the 1990-91 and 1985-86 surveys shows that the investment portfolio of an average plan in the survey reflects an increase in stocks and bonds and a decrease in government securities.

Table 26.
Average Investment Portfolio

	1990-91	1985-86*
	(%)	(%)
Cash or cash equivalents	8.1	
U.S. government securities	21.4	7.4
State & local government securities	2.7	23.1
Common and preferred stock	31.8	25.3
Corporate bonds	17.9	14.7
Mortgages	6.2	6.0
Real estate	2.3	2.2
Mutual funds	06	0.5
Venture capital	1.8	
Member loans	0.4	
Other securities	7.8	

*Only comparable data are shown for 1985-86.

Nearly a third of the plans (31%) reported a policy of divesting new or existing pension plans of investments from firms financially involved in South Africa. A divestiture policy was reported more frequently by education-only plans than by general public employee plans. Nearly 40 percent of the education-only plans reported a divestiture policy, while only a quarter of the public employee plans reported such a policy. Divestiture policies were more common among plans with more than 100,000 members (44%) than among plans with less than 100,000 members (23.3%). There was little difference in divestiture policies between plans with and without Social Security.



Table 27.
Plans Divesting Holdings in South Africa
By Subgroup

	199	0-91
Subgroup	Number of plans	% of plans
Ali respondents	18	31.0
Occupational coverage	.	
Education only	11	37.9
Public employees	7	24.1
Plant size		
100,000 or less	7	23.3
More than 100,000	11	44.0
Social Security covers	ige	
No Social Security	4	30.8
Social Security	14	31.1



Health Benefits

The 1990-91 survey included questions for the first time on health insurance offered to retirees by the retirement system. The survey included items on coverage of the system-wide health benefit plans, costs and financing of the plans, and the benefits provided.

Coverage

Twenty-four of the 58 plans in the survey reported offering health insurance to retirees. The number of plans in each of the subgroups that offered health insurance is shown in Table 28. There was little difference between the percent of education-only plans (46.4%) and the percent of public employee plans (44.0%) that offer heath insurance. Plans with more than 100,000 members were much more likely to offer health insurance than plans with less than 100,000 members (52.0% v. 33.3%), and plans without Social Security were more likely to offer health insurance than plans that have Social Security (53.8% v. 37.8%).

Table 28.
Retirement Systems Offering Health
Insurance, by Subgroup

Subgroup	Number of plans	% of plans
All respondents	24	41.4
Occupational coverage		
Education only	13	46.4
Public employees	11	44.0
Plan size		
100,000 or less	10	33.3
More than 100,000	13	52.0
Social Security coverage		
No Social Security	7	53.8
Social Security	17	37.8

Nearly all of the plans that offer health insurance offer it to all retirees (91.7%), and most of the plans offer health benefits to retirees' spouses and dependents (75%) (Table 29). Over a third of the plans that offer health insurance also included active em-

ployees in the system plan (37.5%). It is interesting to note that survivors were offered health insurance by only 29.2% of the pla: s. Details of system responses may be found in Appendix E.

Table 29. Groups Covered by a System-wide Health Benefits Plan

Group	Number of plans	% of plans
Active employees	9	37.5
All retirees	22	91.7
Special groups of retirees Retirees' spouses &	10	41.7
dependents	18	75.0
Survivors	7	29.2

Health Benefits Financing

The sources of funding for the retirement system health benefit plans are shown in Table 30. No funding source dominated as the method for funding the health insurance plans. A separate insurance trust fund was reported as a funding source by the largest number of plans (29.2%), but almost as many plans (25%) received state funds as a source of funding. The retirement trust fund was reported as a source of funds by 20.8 percent of the plans. Local or school district funds were reported as the source of funding by only one plan (4.2%).

Table 30.
Sources of Systems Contributions for Health Benefits

Source	Number of plans	% of plans*
Retirement trust fund	5	20.8
Insurance trust fund	7	29.2
State funds	6	25.0
Local or school district fund	is 1	4.2
Other	5	20.8

^{*} Total is greater than 100% due to multiple sources of funding.



Health benefit plans are a large expense. The average system contribution was over \$43 million. Health insurance premiums have increased rapidly during the past few years. During the last five years, a time period when inflation was averaging around 4 percent per year, the plans in the survey reported an average annual increase in health insurance premiums of 18.5 percent.

The average annual contributions per enrollee are shown in Table 31. Total contributions (system plus enrollee) are approximately 1.6 times as large for non-Medicare-eligible enrollees as for Medicare-eligible enrollees. For both Medicare and non-Medicare-eligible enrollees the plans paid more than half of the health benefits premium (i.e., contribution). Plans paid approximately 55 percent of the premium for Medicare-eligible and approximately 60 percent of the premium for non-Medicare-eligible enrollees.

Table 31. Average Annual Health Insurance Contributions per Enrollee

Medicare-eligible	enrollees
wadicai c.oligibio	Q111 011003

System contribution \$1,004 Enrollee contribution 820

Non-Medicare eligible enroilees

System contribution \$1,720 Enrollee contribution 1,158 Fourteen plans provided a description of the most common indemnity benefit plan. An indemnity benefit plan is one in which a percentage of the enrollee's medical expenses are paid either by direct payments to providers or reimbursement directly to the enrollee after a deductible is reached. The calendar year deductible ranged from \$50 to \$800 with an average of \$309.

Indemnity plans typically have a cap on the out-of-pocket expenses that an enrollee has to pay in a year. After the cap is reached, the plan pays 100 percent of all covered expenses. The maximum out-of-pocket expenses in a year ranged from \$500 to \$5,000 with an average of \$1,727.

The most typical copayment amount, that is, the percent of covered expenses that a plan will pay, was 80 percent for hospitalization, medical, and surgical expenses. Only one of the plans reported providing dental benefits.

Thirteen of the 14 plans that reported details of their indemnity plans had a lifetime maximum of benefits. These ranged from \$100,000 to \$1,000,000 with an average of \$861,538.



Appendix A. Benefit Formula/Accrual Rates

Plan	Formula
AL Teachers' Retirement System	2.01%
CA Public Employees Retirement System	2.00%
CA State Teachers' Ret. System	2.00%
CA Univ of California Retirement System	Factor*
CO PERA	2.50%(1)
CT Teachers Retirement Board	2.00%
FL Retirement System-Regular Class	Factor
GA Teachers Retirement System	2.00%
IA Public Employees Retirement System	50% x FAS at 30 yrs
D Public Employee Retirement System	1.67%
IL. Teachers' Retirement System	(2)
IN State Teachers' Retirement Fund	Factor
KS Public Employees Retirement System	1.40%(3)
KY County Employees Retirement System	2.20% ်
KY Retirement Systems	2.20%
KY Teachers' Retirement System	2.50%(4)
LA Teachers' Retirement System	(5)
MA Teachers Retirement System	Factor
MD State Retirement & Pension	1/55
MI Public School Employees Retirement	1.50%
MN Public Employees Retirement - Basic	(6)
MN Public Employees Retirement - Coord.	(7)
MN Public Employees Retirement - P & F	2.50%
MN St. Paul Teachers' Ret. Fund Assoc.	1.50%
MN Teachers Retirement Assoc.	(8)
MO Public School Retirement System	2.10%
MS Public Employees' Retirement System	1.88%(9)
MT Teachers' Retirement System	yrs/60
ND PERS	1.65%
ND Teachers' Fund for Retirement	1.28%
NE Omaha School Employees Ret. System	1.65% + \$3.50 x yr
NE Public Employees Retirement System	Age Factor
NH Retirement System	1.67%(10)
NJ Teachers' Pension and Annuity Fund	1.7%
NV Public Employees Ret. System	2.50%
NY State & Local Employees Ret. Sys	1.66%(11)
NY State Teachers' Ret.	2.00%(12)
OH Public Employees' Ret. System	2.10%(13)
OH School Employees Retirement System	2.10%` ′
OH State Teachers Retirement System	2.10%(14)
OK Teachers' Retirement System	2.00%
OR Public Employees Retirement System	1.67%
PA Public School Employees Ret. System	2.00%
SC Carolina Retirement Systems	1.82%
SD Retirement System	1.25%
TN Consolidated Retirement System	1.50%(15)
TX Employees Retirement System	Factor
TX Teacher Retirement System	2.00%
UT Public Empl. Noncontributory Ret Sys	2.00%
UT Public Employees' Retirement System	2.00%(16)
VA Ed. Employees' Supplementary Ret.	(17)
VA Retirement System	1.59%(18)
VT Teacher Retirement System	1.67%
WA State Teachers' Retirement - Plan I	2.00%
WA State Teachers' Retirement - Plan II	2.00%
WI Retirement System	1.60%
WV Teachers Retirement	2.00%
WY Retirement System	2.00%
TT CHOMOMOR Cystem	£.00 /0

(See notes on next page)



Appendix A. Benefit Formula/Accrual Rates, cont.

Notes:

- * "Factor" indicates that the plan uses a table of accrual rates, that is, rates are not uniformly related to years of service.
- (1) maximum 20 yrs; 1.25% x FAS x yrs greater than 20
- (2) 1.67% yrs 1-10; 1.9% yrs 11-20; 2.1% yrs 21-30; 2.3% yrs greater than 30
- (3) participating service; 1% for prior service
- (4) service after 12/31/83; 2% service before 1/1/84
- (5) 2% x FAS x yrs with 20 yrs service2.5% x FAS x yrs with 30 yrs service2.5% x FAS x yrs with 20 yrs service at age 65
- (6) greater of (a) 2% x FAS x yrs 1-10 + 2.5% x FAS x yrs greater than 10 minus 3% per yr under 65 or (b) 2.5% x FAS x yrs minus actuarial reduction under 65
- (7) greater of (a) 1% x FAS x yrs 1-10 + 1.5% x FAS x yrs greater than 10 minus 3% per yr under 65 or (b) 1.5% x FAS x yrs minus actuarial reduction under 65
- (8) Tier 1: 1% x FAS x yrs 1-10 + 1.5% x FAS x yrs greater than 10 Tier II: 1.5% x FAS x yrs service
- (9) maximum 30 yrs; 2% x FAS x yrs greater than 30
- (10) 1.5% after age 65
- (11) maximum 24 yrs; 2% x FAS x yrs 25-30; 1.5% x FAS x yrs greater than 30
- (12) reduced by 5% for each yr less than 20
- (13) maximum 30 yrs; 2.5% x FAS x yrs greater than 30
- (14) 2.5% for contributing service over 30 yrs
- (15) up to Soc Sec integration level; 1.75% above Soc Sec integration level
- (16) service after 7/1/75; 1.25% service from 7/1/67 to 6/30/75; 1.1% service prior to 7/1/67
- (17) 2.85% x FAS x yrs state benefit to age 65; 1.85% x FAS x yrs state benefit over age 65
- (18) 1.59% x \$13,200 + 1.659% greater than \$13,200



Appendix B. Retirement Eligibliity Requirements

System		Normal retirement Age and Service	Early retirement Age and Service		
AL T	Feachers' Retirement System	60/10; any/25			
	Public Employees Retirement System	50/05; 55/10			
	State Teachers' Ret. System	60/05	55/05; 50/30		
CA L	Jniv of California Retirement System	50/05	50/06		
	PERA	any/35; 55/30; 60/20; 65/05	55/20; 60/05		
CT T	Teachers Retirement Board	any/35; 60/20	any/25; 55/20		
FL F	Retirement System-Regular Class	any/30; 62/10	any/10		
	Teachers Retirement System	any/30; 62/30	60/10		
	Public Employees Retirement System	65/any; 62/30; 55/37	55/any		
	Public Employee Retirement System	65/05	55/05		
	Teachers' Retirement System	62/05; 60/10; 55/20	5/20		
	State Teachers' Retirement Fund	65/10; 60/15; 55/00	50/15		
	Public Employees Retirement System	any/40; 65/01; 60/35	55/10		
	County Employees Retirement System	any/27; 65/04	55/05; any/25		
	Retirement Systems	65/any	55/05; any/25		
	Teachers' Retirement System	60/05	any/27		
	Teachers' Retirement System	any/20; 55/25	65/20; any/20		
	Teachers Retirement System	any/20; 55/10	55/10; any/20		
	State Retirement & Pension	62/05; 63/04; 64/03; 65/02	5/15; any/25		
MI I	Public School Employees Retirement	any/30; 60/10; 60/05	55/15		
MN I	Public Employees Retirement - Basic	65/01	55/03; any/30		
	Public Employees Retirement - Coord.	65/01	55/03; any/30		
	Public Employees Retirement - P & F	55/03; 65/01	50/03; any/30		
MN :	St. Paul Teachers' Ret. Fund Assoc.	any/30; 55/03; 65/any	55/03; 62/30		
	Teachers Retirement Assoc.	65/any; 62/30	55/03; any/30		
	Public School Retirment System	any/30; 60/05	55/05; any/25		
	Public Employees' Retirement System	60/04; 55/25	any/25		
	Teachers' Retirement System	any/25; 60/05	50/05		
	PERS	65/any	55/05		
	Teachers' Fund For Retirement	65/05	55/05		
	Omaha School Employees Ret. System	65/01	55/10; 55/35; 62/10		
	Public Employees Retirement System	65/05	60/05; any/35		
	Retirement System	60/any	50/10 (1)		
	Teachers' Pension and Annuity Fund	60/any	55/25; any/25		
	Public Employees Ret. System	any/30; 60/10; 55/10; 50/20	60/10; 65/05; any/3		
	State & Local Employees Ret. Sys.	62/10	FF (00		
	State Teachers' Retirement	55/20; 55/02	55/02		
OH	Public Employees' Ret. System	any/30; 60/05; 55/25	60/05; 55/25		
OH	School Employees Retirement System	any/30; 55/25; 60/05	60/05; 55/25; any/3		
	State Teacher Retirement System	any 30; 60/05; 55/25	60/05; 55/25; any/3		
	Teachers' Retirement System	62/10; 50/30; 49/31; 48/32	55/10 55/2000 000/20		
	Public Employees Retirement System	any/30; 58/any	55/any; any/30		
PA	Public School Employees Ret. System	any/35; 62/01; 60/30	55/25; any/10		
	Carolina Retirement Systems	any/30; 65/any	60/any; 55/25		
SD	Retirement System	65/05; 64/21; 63/22; 62/23	FF (4.0) 0 m v/0 F		
TN	Consolidated Retirement System	any/30; 60/10	55/10; any/25		
TX	Employees Retirement System	60/10; 55/25; 50/30	55/25; 50/30 55/05: 07:/20		
TX	Teacher Retirement System	65/05; 60/20; 55/30	55/05; any/30		
UT	Public Empl. Noncontributory Ret. Sys.	any/30; any/25; 60/20; 62/10	60/20; 62/10; any/2		
UT	Public Employees' Retirement System	any/30; 65/04; 62/10; 60/20	60/20; 62/10		
VA	Ed. Employees' Supplementary Ret.	55/25; 65/05	55/05; 45/25		
VA	Retirement System	65/05	55/05 55/40		
VT	Teacher Retirement System	any/30; 62/any	55/10		
WA	State Teachers' Retirement - Plan I	any/30; 60/05; 55/25	55/00		
WA	State Teachers' Retirement - Plan II	65/05; 55/20	55/20 57/00		
WI	Retirement System	65/any; 55/any	57/30		
WV	Teachers Retirement	any/35; 55/30; 60/05	55/30; any/35; any		
WY	Retirement System	50/04; 60/25	50/04		



Appendix C. Employee and Employer Contribution Rates

		Employee (% of pay)		Employer (% of pay)		
AL	Teachers' Retirement System	5	TC	7		
	Public Employees Retirement System	7	RS	21		
	State Teachers' Ret. System	8	RS			
	Univ of California Retirement System	-				
	PERA	8	TC	25		
	Teachers Retirement Board	6	ŤĊ	20		
	Retirement System-Regular Class	J	RS	15.14		
	Teachers Retirement System	6	RS	13		
	Public Employees Retirement System	J	110	10		
	Public Employee Retirement System	5.34	TC	8.89		
	Teachers' Retirement System	8	TC	0.05		
	State Teachers' Retirement Fund	3				
			TC			
	Public Employees Retirement System	4	TC	7		
	County Employees Retirement System	5	TC	7		
	Retirement Systems	5	TC			
	Teachers' Retirement System		5.0			
	Teachers' Retirement System	7	RS			
	Teachers Retirement System	5.78	RS			
	State Retirement & Pension					
	Public School Employees Retirement	5				
MN	Public Employees Retirement - Basic	8	TC	11		
MN	Public Employees Retirement - Coord.	4	TC	4		
MN	Public Employees Retirement - P & F	8	TC	12		
MN	St. Paul Teachers' Ret. Fund Assoc.	4	TC	4		
	Teachers Retirement Assoc.					
	Public School Retirement System	10	RS	10		
	Public Employees' Retirement System	• •	.,.			
	Teachers' Retirement System	7	TC			
	PERS	4	ŔŠ	4.12		
	Teachers' Fund For Retirement	6.75	TC	6.75		
	Omaha School Employees Ret. System	6	TC	6		
		6	TC	0		
	Public Employees Retirement System			1.07		
	Retirement System	5	TC	1.37		
	Teachers' Pension and Annuity Fund	16	TO			
	Public Employees Ret. System	10	TC			
	State & Local Employees Ret. Sys	3	TC	<u>6</u>		
	State Teachers' Ret.			7		
	Public Employees' Ret. System	_				
	School Employees Retirement System	9	TC	14		
	State Teacher Retirement System	9.25	TC	14		
	Teachers' Retirement System			1		
	Public Employees Retirement System	6	TC	22		
	Public School Employees Ret. System	6.25	TC			
SC	Carolina Retirement Systems	6	TC			
	Retirement System	5	TC	5		
	Consolidated Retirement System	5	TC	10		
	Employees Retirement System	6	RS			
	Teacher Retirement System	-				
	Public Empl. Noncontributory Ret. Sys.					
	Public Employees' Retirement System	6	TC			
	Ed. Employees' Supplementary Ret.	2	RS	6		
	Retirement System	-	170	12		
		2.75	TC	14		
	Teacher Retirement System	2.75	TC	11.00		
	State Teachers' Retirement - Plan !	6	TC	11.33		
	State Teachers' Retirement - Plan II	7.5	TC	11.33		
Wi	Retirement System	_		_		
	Teachers Retirement	6	TC	6		
	Retirement System	6	TC	12		

RS Contributions based on regular salary. TC Contributions based on total compensation.





Appendix D. Plan Membership And Financial Information

	System	Active members	Retirees (\$ millions)	Fy 1989 benefits (\$ millions)	Assets (\$ millions)	Unfunded liability
AL	Teachers' Retirement System	106880	25560	187.57		453.37
CA	Public Employees Retirement System	593394	299892	2233.18	51517.13	4916.92
CA	State Teachers' Ret. System	284913	119373	1353.80	28700.00	10939.31
CA	Univ Of California Retirement System	89329	15217	131.05	11000.00	
CO	PERA	105377	33447	0.30	9.54	0.96
CT	Teachers Retirement Board	40258	13668	183.72	4104.66	4343.41
FL	Retirement System-regular Class	502768	100611	667.11	16129.42	14296.89
GA	Teachers Retirement System	135526	27743		9214.58	3300.53
IA	Public Employees Retirement System	131619	48103	155.43	4323.74	
ID	Public Employee Retirement System	51250*	18100*	102.65*	2028.48*	645.20
IL	Teachers' Retirement System	100889	45880	509.27		5582.61
IN	State Teachers' Retirement Fund				1900.00	4500.00
KS	Public Employees Retirement System	103721	31280	129.20	3896.00	375.66
KY	County Employees Retirement System	47592			1085.90	35.82
KY	Retirement Systems	101723			2757.39	185.01
KY	Teachers' Retirement System	47284	19952	205.23	3751.76	1424.11
LA	Teachers' Retirement System	85965			3500.00	3900.00
MA	Teachers	65253			3821.70	
MD	State Retirement & Pension	158973		456.75	10576.94	5408.28
MI	Public School Employees Retirement	285992	76111	547.02	12251.35	4518.00
MN	Public Employees Retirement - Basic	99515	27872	153.39	0044.00	
MN	Public Employees Retirement - Coord.	99515	27872	153.39	3611.20	1265.07
MN	Public Employees Retirement - P & F	5891	1412	15.45		
MN	St. Paul Teachers' Ret. Fund Assoc.	3436	1236	15.51	279.92	145.25
MN	Teachers Retirement Assoc.	64796	18979	166.20	1.68	
МО	Public School Retirment System	55198	18038	157.79	4770.07	81.00
MS	Public Employees' Retirement System	125838	30026	187.62	4528.78	2364.11
MT	Teachers' Retirement System	15087	6330	49.55	689.68	602.53
ND	PERS	14151	2700*	14.83*	396.18*	-5.31
ND	Teachers' Fund for Retirement	9803	4100*	20.47*	450.43	25.30
NE	Omaha School Employees Ret. System	4331	1444	0.77	233.34	32.47
NE	Public Employees Retirement System	28193		4 40 4 400	916.74	35.17
NH	Retirement System	44000	0.1100	1424.48*	115.70*	0000 #4
NJ	Teachers' Pension and Annuity Fund	113535	34169	32.10	9533.28	2909.51
NV	Public Employees Ret. System	50040	11756	112.00	3514.50	1208.36
NY	State & Local Employees Ret. Sys.	614392*	214206*	1624.50*	45189.00	
NY	State Teachers' Retirement	191000	400540	700.00	23000.00	E000.04
OH	Public Employees' Ret. System	36770	103549	702.62	18794.94	5863.64
OH	School Employees Retirement System	91778	45675	170.99	2955.40	
OH	State Teacher Retirement System	220806	65917	1022.75	17800.00	0000 00
OK	Teachers' Retirement System	67709	23780	252.92	2000.00	2900.00
OR	Public Employees Retirement System	119908	52136 05400	304.29	9378.50	7017 50
PA	Public School Employees Ret. System	200430	95429	59.16	14325. 96	7217.56
SC	Carolina Retirement Systems	160000	38649	243.00	1000.00	2070.92
SD	Retirement System	29378	13272	50.33	1363.09	120.30
TN	Consolidated Retirement System	155799	52697	278.18	8047.78	1713.00
TX:	Employees Retirement System	126668	44.4700	005.04	6509.11	0400 70
T)(Teacher Retirement System	460722	114798	935.94	21906.26	3488.72
UT	Public Empl. Noncontrib. Ret. Sys.	59132				
UT	Public Employees' Retirement System	43379			405.00	155.05
VA	Ed. Employees' Supplementary Ret.	11019	EC040	275.04	435.02	155.65
VA	Retirement System	237183	55940	375.91	006.40	2.66
VŢ	Teacher Retirement System	9487			296.10	110.00



Appendix D. Plan Membership And Financial Information, cont.

System	Active members	Retirees (\$ millions)	Fy 1989 benefits (\$ millions)	Assets (\$ millions)	Unfunded liability
WA State Teachers' Retirement - Plan I WA State Teachers' Retirement - Plan II WI Retirement System	35525 21598 202550 46644	21289* 6* 5441 21186	216.92* 64.73 128.82	3396.67 547.63	2424.30* (125.30)* 2300.00
WV Teachers Retirement WY Retirement System TOTAL	6,869,912	1,984,741	\$14,392.41	1475.02 \$378,552.50	195.79 \$102,776.10

^{*} Data revision supplied after analysis and summary tables in the text were completed.

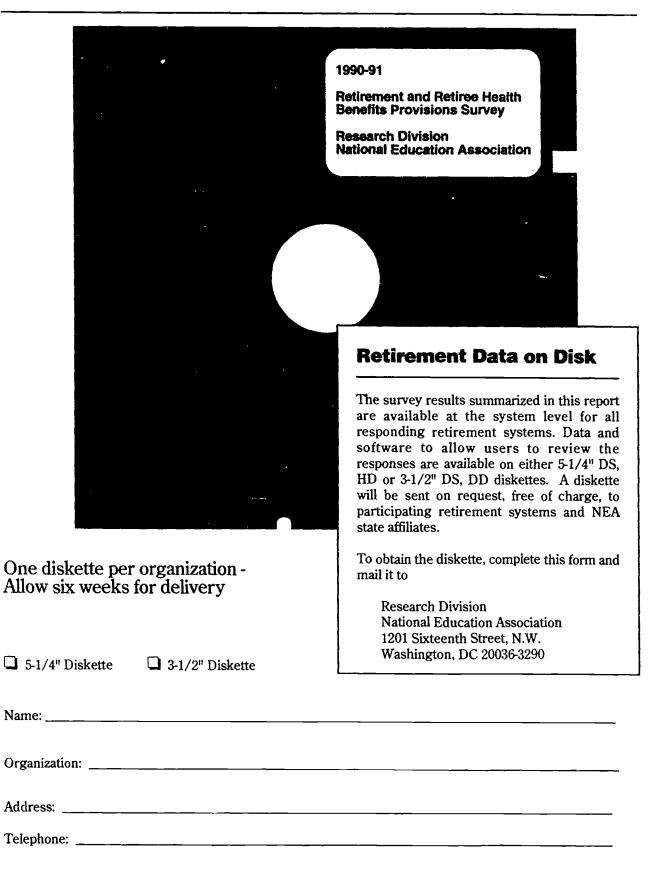


Appendix E. Retirement System Health Insurance

	Gro	ups Cove	red by H	eaith Ben	efits	Min. yrs to be	Family coverage	Avg. annua
Systems with retiree health insurance		Retiree			Survivor		subsdzd.	iner.
CA Public Employees Retirement System	X	X	Х	x	x		Υ	12.4
CA Univ Of California Retirement System	Х	X	X	Χ			Υ	12.0
CO PERA		X	X	Χ		5	N	30.0
CT Teachers Retirement Board				X			Y	
L Teachers' Retirement System	X		X				N	
N State Teachers' Retirement Fund		Χ		X			N	
KY County Employees Retirement System	l	Х		X	X		N	12.0
KY Retirement Systems		Х				4	N	12.0
KY Teachers' Retirement System		Х	Х	X		5	Y	20.0
MI Public School Employees Retirement		Χ		X			Y	11.3
MS Public Employees' Retirement System		X			X		N	
ND PERS	Х	X	Х	X	X	5	N	60.0
NE Omaha School Employees Ret. System	пX	X	Х	Χ	X		N	14.9
NJ Teachers' Pension and Annuity Fund	Х	X	Х	X			Y	13.0
OH Public Employees' Ret. System		X		X		10	Y	7.0
OH School Employees Retirement System	ì	Χ	Х	X	X	10	Y	9.2
OH State Teacher Retirement System		Χ		X	X	5	Y	18.5
OR Public Employees Retirement System		X					N	
TN Consolidated Retirement System	Х	X				10	N	15.0
TX Employees Retirement System	X	X	X	Χ			Y	16.4
TX Teacher Retirement System		X		X		10	N	38.0
VT Teacher Retirement System		X					N	
WI Retirement System	Х	X		Χ			N	12.8
WV Teachers Retirement	X		Х				Y	



Automated Survey System







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