

SOUTH CAROLINA RETIREMENT SYSTEM
REPORT OF THE ACTUARY ON
THE FORTY-SECOND VALUATION
PREPARED AS OF JULY 1, 1993

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February 15, 1994

State Budget and Control Board
South Carolina Retirement System
Columbia, South Carolina 29211

Gentlemen:

We transmit herewith our report on the forty-second actuarial valuation of the South Carolina Retirement System, prepared as of July 1, 1993.

The valuation indicates that for Class Two employers the total contribution rates should be 7.70 per cent of earnable compensation by the State and 6.85 per cent of earnable compensation by other employers.

In our opinion, the Schedule of Valuation Results included in this report correctly presents the condition of the South Carolina Retirement System as to those benefits which are funded on an actuarial reserve basis.

We trust that the report is in satisfactory form for use by the Board.

Respectfully submitted,

(Signed) DONALD M. OVERHOLSER

Donald M. Overholser
Consulting Actuary

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**REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA RETIREMENT SYSTEM
PREPARED AS OF JULY 1, 1993**

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding valuation's results are summarized below (all dollar amounts are in thousands):

<u>Valuation Date</u>	7/1/93	7/1/92
Number of active members	171,546	168,752
Annual earnable compensation	\$ 3,989,960	\$ 3,793,708
Number of retired members and beneficiaries	45,955	44,032
Annual allowances	\$ 437,569	\$ 394,731
Assets for valuation purposes	\$ 9,392,497	\$ 8,472,313
Unfunded accrued liability (UAL)	\$ 2,360,272	\$ 2,291,578
UAL liquidation period (years)	28	29
Normal contribution as per cent of compensation	3.93%	3.93%
UAL contribution as per cent of compensation:		
State	3.62%	3.62%
Others	2.77	2.77
Pre-retirement death benefit contribution as per cent of compensation	.15%	.15%
Total contributions as per cent of compensation:*		
State	7.70%	7.70%
Others	6.85	6.85

*Special rates for Class 1 members

2. Comments on the valuation results as of July 1, 1993 are given in Section IV and further discussion of the contribution levels is set out in Section V. The System has not been amended since the previous valuation.

3. Schedule B of this report outlines the full set of actuarial assumptions and methods employed. The provisions of the System are summarized in Schedule C.

SECTION II - MEMBERSHIP DATA

1. Data needed with respect to each active member, retired member and beneficiary of the System and also with respect to terminations during the valuation year were furnished to the actuary by the Retirement System office.
2. From the data, tabulations were made showing as of July 1, 1993 the number and annual earnable compensation of active members classified by age and years of service and the number and retirement allowances of retired members and beneficiaries as of July 1, 1993 classified by age. These tabulations are presented in Schedule D.
3. The following table shows the number and annual earnable compensation of active members of the Retirement System as of July 1, 1993.

TABLE I
THE NUMBER AND EARNABLE COMPENSATION OF ACTIVE MEMBERS
AS OF JULY 1, 1993

GROUP	MEN	WOMEN	TOTAL
EMPLOYEES			
Number	42,871	56,579	99,450
Earnable Compensation (\$1,000's)	\$ 1,122,558	\$ 1,192,372	\$ 2,314,930
TEACHERS			
Number	13,365	58,731	72,096
Earnable Compensation (\$1,000's)	\$ 370,281	\$ 1,304,749	\$ 1,675,030
TOTAL			
Number	56,236	115,310	171,546
Earnable Compensation (\$1,000's)	\$ 1,492,839	\$ 2,497,121	\$ 3,989,960

NOTE: In addition, there are 116,378 inactive members. The results of the valuation were adjusted to take these members into account.

4. The following table shows the number and annual amount of retirement allowances payable to retired members and to beneficiaries of deceased retired and active members as of July 1, 1993.

TABLE II

**THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
RETIRED MEMBERS AND BENEFICIARIES ON THE ROLL
AS OF JULY 1, 1993**

GROUP	NUMBER	TOTAL ANNUAL RETIREMENT ALLOWANCES (\$1,000'S)
<u>Service Retirements</u>		
Employees:		
Men	9,417	\$ 109,520
Women	8,002	62,044
Teachers:		
Men	3,805	52,997
Women	<u>15,926</u>	<u>151,426</u>
Total	<u>37,150</u>	<u>\$ 375,987</u>
<u>Disability Retirements</u>		
Employees:		
Men	1,668	\$ 12,266
Women	1,390	9,529
Teachers:		
Men	481	4,482
Women	<u>1,465</u>	<u>11,064</u>
Total	<u>5,004</u>	<u>\$ 37,341</u>
<u>Beneficiaries of Deceased Retired Members and Active Members</u>		
Men	588	\$ 3,304
Women	<u>3,213</u>	<u>20,937</u>
Total	<u>3,801</u>	<u>\$ 24,241</u>
Grand Total	<u>45,955</u>	<u>\$ 437,569</u>

SECTION III - ASSETS

1. The amounts of the present assets taken into account in this valuation are at adjusted amortized cost. The values of the assets were taken from a statement furnished by the Director of the System and exclude reserve assets creditable to the Group Life Insurance Fund for pre-retirement lump sum death benefits.
2. Included in the valuation are the assets of the employee annuity savings fund which represent the accumulated contributions of members together with interest thereon. As of July 1, 1993, these assets amounted to \$2,558,019,000. Also included in the valuation are the assets of the employer annuity accumulation fund to which the contributions made by employers are credited and from which are paid all benefits on account of retired members and their beneficiaries. The assets of the accumulation fund amounted to \$6,834,478,000 as of July 1, 1993. The total value of assets as of July 1, 1993 amounted to \$9,392,497,000.
3. During the year ended June 30, 1993, the investment rate of return on assets was 9.69%. This compares with an investment rate of return of 9.71% during the previous year.

SECTION IV - COMMENTS ON THE VALUATION

Schedule A of this report contains the results of the valuation which show present and prospective assets and liabilities of the System as of July 1, 1993. The following comments on the valuation are pertinent (all dollar amounts are in thousands):

The schedule shows that the System has actuarial liabilities of \$16,143,353, of which \$4,920,436 is for the prospective benefits payable on account of present retired members and beneficiaries and \$11,222,917 is for the prospective benefits payable on account of present active and inactive members. These liabilities include the reserves for all current and future cost-of-living increases to current retired members and beneficiaries and active members currently eligible for service retirement. Against these liabilities, the System has present assets of \$9,392,497 and anticipated future contributions by members of \$2,636,556 leaving a balance

of \$4,114,300 to be provided by future contributions of the employers. Of this amount, \$1,754,028 represents the present value of normal contributions by the employers and the balance of \$2,360,272 represents the present value of unfunded accrued liability contributions.

The retirement act provides that the contributions of employers shall consist of a normal contribution to cover the liability on account of service currently rendered and an unfunded accrued liability contribution on account of liabilities for past service which are not covered by present assets.

The following rates of contribution are payable by employers exclusive of the rate required for the pre-retirement lump sum death benefit:

For Class One employers, the total employer contribution rate should be 4.25 per cent of earnable compensation, of which 2.79 per cent is attributable to the normal contribution and 1.46 per cent is attributable to the unfunded accrued liability contribution for the period July 1, 1993 to June 30, 1994.

For Class Two employers, the total contribution rate should be 7.55 per cent payable by the State and 6.70 per cent by other employers. Of the total rates, 3.93 per cent is attributable to normal contributions of the State and other employers. The unfunded accrued liability rates are therefore 3.62 per cent for the State and 2.77 per cent for other employers for the period July 1, 1993 to June 30, 1994.

On the basis of the above unfunded accrued liability contribution rates and assuming that active payroll will increase by 4% each year, it is anticipated that the unfunded accrued liability of \$2,360,272 shown in the valuation balance sheet will be liquidated within a period of approximately 28 years from the valuation date.

We recommend that the rate for employers participating in the Pre-retirement Death Benefit Program remain at .15 per cent of earnable compensation in addition to the appropriate rate above.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

The following table gives the rates of contribution payable by employers, as determined on the basis of the present valuation.

RATES OF CONTRIBUTION	CLASS ONE	CLASS TWO	
		STATE	OTHERS
Normal	2.79%	3.93%	3.93%
Unfunded Accrued Liability	1.46	3.62	2.77
Pre-retirement Death Benefit	<u>.15</u>	<u>.15</u>	<u>.15</u>
Total	4.40%	7.70%	6.85%

SECTION VI - VALUATION BASIS

The valuation of the Retirement System was made on the basis of the rates of separation and mortality tables adopted by the Board on December 14, 1989 and a salary scale and 8% interest rate adopted by the Board on July 18, 1989. An outline of the actuarial assumptions and methods employed is presented in Schedule B.

SECTION VII - ACCOUNTING INFORMATION

- Governmental Accounting Standards Board Statement No. 5 sets forth certain items of information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JULY 1, 1993**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving benefits	162,333
Active Members:	
Vested	108,248
Non-vested	<u>63,298</u>
Total Actives	171,546

2. Another such item is the pension benefit obligation, a standardized measure of the System's liabilities. It is the amount owed for benefits allocated to employee service before the balance sheet date, when total projected benefits (including the effects of projected salary increases) are allocated equally over all years of employee service before and after the balance sheet date. The pension benefit obligation, prepared in accordance with Governmental Accounting Standards Board Statement No. 5, and a comparison with net assets available for benefits as of July 1, 1993 are presented below. The amounts shown reflect post-retirement increases in allowances already granted and at 4 per cent per year in the future for all retired and active members.

Pension Benefit Obligation
(in \$ thousand)

• Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving benefits	\$ 5,348,542
• Current employees:	
Accumulated contributions	2,343,966
Employer-financed vested	1,142,564
Employer-financed nonvested	<u>3,786,635</u>
Total Pension Benefit Obligation	\$ 12,621,707
• Net assets available for benefits	\$ 9,392,497
• Unfunded Pension Benefit Obligation	\$ 3,229,210

3. The following first eight years of the ten-year historical trend information, prepared in accordance with Governmental Accounting Standards Board Statement No. 5, provides information on progress made in accumulating sufficient assets to pay benefits when due. A purpose of the chart is to establish a consistent method for analyzing and making comparisons among different public retirement systems.

Required Supplementary Information Analysis of Funding Progress
(in \$ million)

	(1)	(2)	(3)	(4)	(5)	(6)
	Net		Percent-	Unfunded		Unfunded
	Assets	Pension	age	Pension	Annual	PBO as %
Fiscal	Available	Benefit	Funded	Benefit	Covered	of
Year	for	Obligation		Obligation	Payroll	Covered
<u>Beginning</u>	<u>Benefits</u>	<u>Obligation</u>	<u>(1) ÷ (2)</u>	<u>(2) - (1)</u>	<u>Payroll</u>	<u>Payroll</u>
						<u>(4) ÷ (5)</u>
7/1/86	\$4,202.4	\$5,747.5	73.1%	\$1,545.1	\$2,634.4	58.7%
7/1/87	4,805.4	6,447.5	74.5	1,642.1	2,796.5	58.7
7/1/88	5,413.7	7,377.8	73.4	1,964.1	3,023.4	65.0
7/1/89	6,068.6	8,646.1	70.2	2,577.5	3,305.4	78.0
7/1/90	6,813.7	9,496.7	71.7	2,683.0	3,484.6	77.0
7/1/91	7,612.9	10,596.3	71.8	2,983.4	3,664.6	81.4
7/1/92	8,472.3	11,551.5	73.3	3,079.2	3,793.7	81.2
7/1/93	9,392.5	12,621.7	74.4	3,229.2	3,990.0	80.9

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of the Retirement System's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the Retirement System.

SCHEDULE A

RESULTS OF THE VALUATION AS OF JULY 1, 1993
 (All dollar amounts are in thousands)

(1)	Actuarial liabilities	
	Present value of prospective benefits payable in respect of:	
	(a) Present retired members and beneficiaries	\$ 4,920,436
	(b) Present active and inactive members	<u>11,222,917</u>
	(c) Total actuarial liabilities	\$ 16,143,353
(2)	Assets of the System	<u>9,392,497</u>
(3)	Present value of future contributions = (1)(c) - (2)	\$ 6,750,856
(4)	Present value of future contributions by members	<u>2,636,556</u>
(5)	Present value of future contributions by employers = (3) - (4)	\$ 4,114,300
(6)	Present value of future normal contributions by employers	\$ 1,754,028
(7)	Present value of unfunded accrued liability contributions by employers = (5) - (6)	\$ 2,360,272
(8)	Unfunded accrued liability rates	
	(a) Class One Service	1.46%
	(b) Class Two Service: State	3.62
	(c) Class Two Service: Others	2.77
(9)	Unfunded accrued liability liquidation period	28 years
(10)	Pre-retirement death benefit contribution rate	.15%

SCHEDULE B**OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS**

INTEREST RATE: 8% per annum, compounded annually.

SEPARATIONS FROM SERVICE AND SALARY INCREASES: Representative values of the assumed annual rates of separation and annual rates of salary increase are as follows:

Age	Annual Rates of							
	<u>With- drawal</u>	<u>Death</u>	<u>Dis- ability</u>	<u>Service Retire- ment*</u>	<u>With- drawal</u>	<u>Death</u>	<u>Dis- ability</u>	<u>Service Retire- ment*</u>
	<u>Men Teachers</u>				<u>Women Teachers</u>			
20	11.11%	.04%	.01%		13.79%	.03%	.02%	
25	9.97	.05	.01		12.83	.03	.03	
30	7.91	.08	.02		9.12	.04	.04	
35	6.06	.12	.03		5.61	.06	.04	
40	4.67	.18	.06		3.43	.08	.07	
45	3.67	.25	.11		2.33	.13	.12	
50	2.83	.35	.20	5.00%	1.74	.20	.20	5.00%
55	2.03	.50	.34	5.00	1.18	.29	.35	5.00
60		.70	.59	10.00		.45	.61	15.00
64		.92	.94	20.00		.66	.82	20.00

Age	Employees					Salary Increase Teachers and Employees
	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Service Retirement*</u>		
	<u>Men</u>	<u>Women</u>				
20	13.94%	12.55%	.07%	.04%		11.81%
25	12.46	11.21	.09	.04		10.90
30	9.78	8.80	.11	.06		9.50
35	7.38	6.64	.14	.08		7.81
40	5.57	5.01	.18	.10		7.00
45	4.27	3.84	.28	.15		6.60
50	3.18	2.86	.46	.25	5.00%	6.30
55	2.14	1.93	.75	.40	5.00	6.10
60			1.08	.61	10.00	5.90
64			1.36	.85	20.00	5.80

*Plus 0.15 in year when first eligible for unreduced early retirement.

DEATHS AFTER RETIREMENT: 1971 Group Annuity Mortality Tables, rated back one year, for service retirement and dependent beneficiaries. A special mortality table is used for disability retirements.

LOADING OR CONTINGENCY RESERVES: None.

VALUATION METHOD: Projected benefit with level percentage entry age normal cost and open-end unfunded accrued liability. Gains and losses are reflected in the period remaining to liquidate the unfunded accrued liability. Lump sum death benefits are provided on a one-year term cost basis.

ASSET VALUATION METHOD: Adjusted amortized cost.

COST-OF-LIVING INCREASES: For funding purposes, 4% per year for current retirees and active members eligible to retire; for GASB, 4% per year after assumed retirement for all members.

SCHEDULE C**SUMMARY OF MAIN SYSTEM PROVISIONS AS
INTERPRETED FOR VALUATION PURPOSES**BACKGROUND

The South Carolina Retirement System was established as of July 1, 1945. There are two classes of employers and members under the System. Those employers becoming participants in the System on or after July 1, 1964 are Class Two employers. Class One employers include all employers who elected, by written notice to the Board not later than December 31, 1964, to remain and have their members remain under the provisions of the System as in effect on June 30, 1964. Class Two employers include all employers who elect, by written notice to the Board in allowable election periods, to participate and have their members participate as Class Two members provided such employers and employees in their employ make additional required contributions.

A summary of the main benefit provisions of the System, as interpreted in preparing the actuarial valuation, and a summary of the sources of revenue from which benefits are paid is presented in the following digest. "Average final compensation" means the average annual earnable compensation of a member during the twelve consecutive quarters of his creditable service producing the highest such average. "Prior service" means service prior to July 1, 1945 for which credit is allowed. "Membership service" means service rendered while a member of the System for which credit is allowed. The term "creditable service" means the sum of prior service and membership service.

BENEFITS**Service Retirement Allowance****Condition for Retirement**

A retirement allowance is payable upon the request of any teacher or employee who has met one of the following conditions:

- a) rendered 30 or more years of creditable service,
- b) attained age 60,
- c) attained age 55 and rendered 25 or more years of creditable service.

Amount of Allowance

A Class One member receives a retirement allowance equal to 1.45% of average final compensation, multiplied by the number of years of his creditable service.

A Class Two member receives a retirement allowance equal to 1.82% of average final compensation, multiplied by the number of years of his creditable service.

If a member retiring under condition (b) above has not attained age 65 or completed 30 years of creditable service at the time of retirement, his allowance is reduced $\frac{5}{12}$ of 1% for each month by which his age at retirement is less than age 65.

If a member retiring under condition (c) above has not completed 30 years of service at the time of retirement, his allowance is reduced by $\frac{4}{12}$ of 1% for each month of service credit less than 30 years.

Disability Retirement Allowance**Condition for Allowance**

A disability retirement allowance is payable to any member who while in service becomes permanently incapacitated for duty mentally or physically.

Amount of Allowance

Upon disability retirement, on or after July 1, 1976, a Class One or a Class Two member receives a service retirement allowance if he has attained age 65; otherwise he receives a disability retirement allowance equal to the service retirement allowance which would have been payable had he continued in service to age 65, minus the actuarial equivalent of the contributions he would have made during such continued service. The compensation to be used for purposes of computing this benefit is the average final compensation as of the date of disability.

Deferred Retirement Allowance

Condition for Allowance

A deferred retirement allowance, commencing at age 60, is payable to any member who ceases to be a teacher or an employee after he has rendered at least 5 years of creditable service, provided he leaves his contributions in the System.

Amount of Allowance

The deferred retirement allowance is computed like a service retirement allowance, except that the employee annuity is the actuarial equivalent at age 60 of the member's contributions with such interest credits as are allowed.

Supplemental Minimum Allowance

Upon retirement after 20 or more years of creditable service a supplemental monthly sum is paid, in addition to the regular allowance and any amount provided from the general funds of the State, to provide a minimum of \$150 per month plus \$1 per month for each completed year of service in excess of 20, reduced by 5/12 of 1% for each month by which the member's age at retirement is less than age 65 unless he has completed 35 years of creditable service.

Return of Contributions and Optional Death Benefit

Upon the withdrawal of a member without a retirement benefit, he is paid his total contributions with the accumulated regular interest thereon.

Upon the death of a member before retirement, his accumulated contributions are payable to his designated beneficiary or to his estate.

Upon the death of a member before retirement who had attained age 65 or who had 15 years of creditable service, the person nominated to receive the amount of the member's accumulated contributions may elect to receive, in lieu of such accumulated contributions, an allowance for life in the same amount as if the member had retired at the time of his death and had named the person as beneficiary under Option 2. For purposes of the benefit calculation, a member under age 60 with less than 30 years' credit is assumed to be 60 years of age.

Upon the death of a retired member who has not elected an optional form of allowance, a lump sum amount equal to the excess, if any, of his total accumulated contributions at the time his retirement allowance commenced over the sum of the retirement allowance payments made to him, is paid to his designated beneficiary or estate.

Lump Sum Death Benefit

Upon the death of a contributing member in service after the completion of one year of membership service or at any time if death is a result of an injury arising out of and in the course of the performance of duty, a lump sum equal to the member's annual earnable compensation at the time of death is paid to the person he has nominated for the refund of his accumulated contributions or estate, provided the member's employer is a participant in the Pre-retirement Death Benefit Program. Benefits under this program are to be provided in the form of group life insurance.

Optional Allowance

Until the first payment on account of any benefit becomes normally due, any member may elect to receive his retirement allowance in accordance with one of the following forms, which are computed to be actuarially equivalent:

Option 1. A reduced retirement allowance payable during the retired member's life, with the provision that, if he dies within 10 years from his retirement date, an amount equal to his accumulated contributions at retirement, less 1/120 for each month he received a retirement allowance payment, shall be paid to a designated person.

Option 2. A reduced retirement allowance payable during the retired member's life, with the provision that after his death the reduced retirement allowance is to be continued to a designated beneficiary.

Option 3. A reduced retirement allowance payable during the retired member's life, with the provision that after his death one-half the reduced retirement allowance is to be continued to a designated beneficiary.

Option 4. A retirement allowance in such amount that, together with his Social Security benefit, he will receive approximately the same income per annum before and after the earliest age at which he is eligible for a Social Security benefit. A member who makes an election of this Option 4 shall be deemed to have made a further election of Option 1.

Option 5. A member may elect Option 2 or Option 3 with the added provision that in the event the designated beneficiary predeceases the member, the retirement allowance payable to the member after the designated beneficiary's death shall be equal to the retirement allowance which would have been payable had the member not elected the option.

**Post-Retirement
Increases in Allowances**

If the increase in the Consumer Price Index for the previous year ending December 31 equals or exceeds 3%, the retirement allowance of each beneficiary in receipt of an allowance for at least one year as of the following July 1 is to be increased by 4%, provided such increase in allowance

will not result in an increase in the employer contribution rate. Any increase in allowance granted hereunder through July 1, 1980 is permanent, irrespective of any subsequent decrease in the Consumer Price Index, and is included in determining any subsequent increase. No increase will be granted on a service retirement allowance until the second July 1st after the member attains age 60 or would have completed 30 years of creditable service.

The allowance of a surviving annuitant of a beneficiary whose allowance is increased under this section is to be increased by the same percent, when and if payable.

CONTRIBUTIONS

By Members

Class One members contribute at the rate of 5% of earnable compensation, and Class Two members contribute at the rate of 6% of earnable compensation.

By Employers

Employers make annual contributions consisting of a "normal contribution" and an "accrued liability contribution". The "normal contribution" rate is determined by the actuary after each valuation. The "accrued liability contribution" rate is determined by the first actuarial valuation of the System, provided, however, that such rate shall be increased on the basis of subsequent valuations if benefits are increased. Such rate may be decreased if the actuary engaged by the Board certifies that such reduction will not impair the System. Each year's accrued liability payment is to be at least 3% greater than the preceding annual accrued liability payment subject to the preceding sentence. On and after July 1, 1946, all employers' contributions for teachers are paid by the State.

SCHEDULE D

TABLE 1

**THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY AGE
AS OF JULY 1, 1993**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
16	3	\$ 31,108	3	\$ 40,144
17	3	21,424	1	2,304
18	12	64,260	11	39,415
19	67	546,895	56	435,514
20	165	1,735,280	126	1,118,140
21	310	3,487,703	229	2,377,288
22	428	5,315,950	555	6,505,125
23	637	8,974,961	1,155	17,828,259
24	820	12,651,316	1,672	27,755,427
25	940	15,823,530	2,001	35,447,136
26	1,006	17,450,282	2,239	40,989,932
27	1,046	19,017,054	2,318	43,751,105
28	1,161	21,864,570	2,387	45,737,587
29	1,364	27,064,204	2,612	50,643,070
30	1,410	28,467,996	2,833	56,740,904
31	1,392	29,043,218	2,883	57,829,268
32	1,422	30,125,389	3,088	63,709,179
33	1,460	32,354,133	3,138	63,008,892
34	1,486	33,003,513	3,260	66,620,329
35	1,566	36,833,110	3,344	69,426,722
36	1,646	38,256,816	3,757	77,493,098
37	1,636	39,874,533	3,921	84,399,971
38	1,591	40,552,331	4,047	88,757,036
39	1,675	42,596,840	4,315	95,043,174
40	1,774	47,019,042	4,261	96,238,276
41	1,821	50,199,671	4,469	103,174,633
42	1,844	51,989,957	4,437	103,410,249
43	1,864	53,402,774	4,262	102,081,343
44	2,006	60,105,025	4,273	102,284,436
45	1,946	59,180,139	4,174	99,221,243
46	2,071	65,666,225	4,427	107,458,053
47	1,860	59,706,626	3,830	92,122,121
48	1,476	46,819,404	3,068	72,306,412
49	1,505	48,800,483	3,032	72,078,649
50	1,426	47,535,217	2,921	68,442,964
51	1,377	44,717,887	2,745	64,585,227
52	1,214	39,658,641	2,374	55,883,851
53	1,149	38,301,958	2,095	48,331,011
54	1,036	33,700,201	1,912	43,295,629
55	1,071	35,198,912	1,796	39,731,750

TABLE 1

**THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY AGE
AS OF JULY 1, 1993**

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	889	\$ 27,638,195	1,657	\$ 36,381,947
57	907	27,769,149	1,510	32,345,677
58	888	27,259,873	1,465	30,451,993
59	833	26,153,081	1,351	28,038,926
60	826	24,993,356	1,150	23,628,068
61	746	21,762,494	1,120	22,438,715
62	552	17,503,211	777	15,588,735
63	420	12,830,023	567	11,381,602
64	338	10,589,647	458	8,877,501
65	256	7,637,364	351	6,672,674
66	168	4,470,964	248	5,005,223
67	143	4,093,110	146	2,609,899
68	119	3,091,462	124	2,062,638
69	98	2,825,199	104	1,672,223
70	76	1,819,432	69	1,207,053
71	83	1,662,026	52	716,398
72	57	1,269,872	48	586,572
73	45	714,000	30	446,422
74	32	573,632	17	216,428
75	24	513,848	18	238,912
76	16	240,156	8	88,708
77	6	89,378	6	80,434
78	10	60,150	2	10,007
79	3	33,743	3	24,131
80	4	31,811	1	2,812
81	1	7,419	1	2,870
82	2	23,485		
83	2	9,551		
84	1	1,292		
85	1	180		
86	3	11,142		
88	1	2,261		
TOTAL	56,236	\$ 1,492,839,084	115,310	\$ 2,497,121,434
SUMMARY				
EMPLOYEES	42,871	\$ 1,122,558,078	56,579	\$ 1,192,371,913
TEACHERS	13,365	370,281,006	58,731	1,304,749,521

SEE FOOTNOTE TABLE I

TABLE 2

**THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY SERVICE
AS OF JULY 1, 1993**

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	2,440	\$ 22,560,269	4,234	\$ 39,296,928
1	5,397	95,963,062	10,758	186,871,339
2	4,279	81,489,497	8,741	154,450,368
3	4,387	88,933,564	9,269	165,883,389
4	3,640	77,940,632	7,870	147,028,417
5	3,158	70,941,972	6,898	133,757,518
6	2,738	65,540,206	5,528	111,168,815
7	2,573	67,662,654	5,035	105,962,777
8	2,403	63,969,999	4,972	107,200,886
9	2,210	60,984,473	4,973	109,538,857
10	1,694	46,852,807	3,412	77,546,319
11	1,347	39,417,200	2,982	70,893,348
12	1,513	44,741,954	3,203	77,616,948
13	1,488	45,941,355	3,361	80,572,043
14	1,632	49,055,336	3,840	90,988,554
15	1,516	47,681,673	3,556	88,268,168
16	1,304	42,003,912	3,093	77,574,010
17	1,231	40,736,285	2,803	72,771,832
18	1,079	38,111,762	2,678	71,690,470
19	1,291	44,690,493	2,962	80,456,044
20	1,291	46,716,931	2,683	74,378,562
21	1,143	44,494,345	2,305	65,508,890
22	998	39,325,109	2,021	57,856,787
23	882	34,622,036	1,625	47,608,349
24	816	31,508,359	1,424	42,362,733
25	690	27,959,545	1,127	33,721,307
26	575	23,182,320	930	28,169,827
27	542	22,160,452	818	24,844,246
28	420	17,086,695	595	19,212,949
29	341	14,196,183	499	16,293,060
30	333	14,914,308	382	12,635,550
31	180	7,955,911	215	7,268,805
32	126	6,015,445	124	4,243,987
33	140	6,329,529	85	2,640,546
34	103	4,521,642	71	2,304,994
35	88	4,215,497	39	1,358,859

TABLE 2
THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY SERVICE
AS OF JULY 1, 1993

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	58	\$ 2,861,373	46	\$ 1,706,504
37	53	2,749,001	49	1,767,267
38	40	2,019,665	23	761,610
39	24	1,118,012	23	885,407
40	20	975,918	12	381,318
41	18	852,715	9	301,820
42	10	501,023	14	476,329
43	7	347,991	6	224,306
44	4	195,356	3	147,661
45	2	107,603	3	130,477
46	2	148,845	3	107,689
47	4	218,484	4	130,929
48	2	81,626		
49	2	105,538		
50			1	47,872
51	1	69,876	2	75,328
52	1	62,646		
55			1	30,436
TOTAL	56,236	\$ 1,492,839,084	115,310	\$ 2,497,121,434
SUMMARY				
EMPLOYEES	42,871	\$ 1,122,558,078	56,579	\$ 1,192,371,913
TEACHERS	13,365	370,281,006	58,731	1,304,749,521

SEE FOOTNOTE TABLE I

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JULY 1, 1993

SERVICE RETIREMENTS AND BENEFICIARIES

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
7	1	\$ 1,534		
9			1	\$ 1,534
11			3	4,080
12	2	3,220	1	1,041
13	4	25,716	1	4,714
14	1	7,566	4	9,832
15	1	5,005	2	23,255
16	2	8,552		
17	1	2,978	2	12,162
18	1	2,837	4	22,205
19	2	7,275	2	11,584
20	2	5,168		
21	1	4,727	3	18,829
22	4	28,496	5	23,037
23	5	37,980	6	51,490
24	6	24,959	6	32,478
25	5	26,968	8	42,046
26	5	39,521	2	2,347
27	1	275	6	19,445
28	5	14,678	5	28,913
29	6	26,254	6	41,522
30	3	20,729	2	13,445
31	3	10,201	7	40,860
32	6	29,398	6	14,562
33	5	21,058	4	14,031
34	7	23,262	7	17,791
35	8	48,535	7	20,030
36	9	40,315	8	46,017
37	8	48,497	11	51,760
38	7	31,776	10	51,688
39	10	42,668	7	45,497
40	8	50,391	12	31,134
41	5	46,500	19	145,880
42	5	16,406	22	109,230
43	9	45,666	15	77,431
44	6	32,508	7	43,260
45	16	64,282	17	83,055
46	13	68,307	24	199,323
47	13	108,552	30	159,731
48	14	121,251	27	192,470
49	8	90,684	24	208,278

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JULY 1, 1993

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
50	28	\$ 408,101	28	\$ 275,644
51	31	403,722	48	513,940
52	39	867,891	66	856,979
53	81	1,719,814	93	1,468,251
54	81	1,717,155	123	2,233,936
55	113	2,549,728	182	3,008,836
56	146	3,138,464	168	3,035,892
57	143	3,264,340	203	3,494,030
58	174	3,909,270	299	5,437,384
59	209	4,743,193	258	4,782,740
60	235	5,259,374	378	6,248,847
61	329	6,778,407	545	7,798,296
62	336	5,807,985	716	8,183,872
63	563	6,797,799	889	8,027,810
64	558	7,483,993	930	8,716,982
65	650	7,659,913	1,067	9,530,660
66	663	7,726,556	1,271	11,505,633
67	688	8,390,878	1,204	10,532,145
68	666	8,254,949	1,237	10,574,038
69	719	8,476,412	1,282	10,293,611
70	675	7,687,640	1,154	9,285,122
71	690	7,639,705	1,257	10,002,769
72	682	7,555,263	1,168	8,622,875
73	623	6,472,605	1,167	8,765,808
74	510	5,217,992	1,064	8,100,912
75	522	4,872,376	924	6,675,353
76	435	4,422,101	876	6,279,091
77	431	4,000,044	923	6,281,608
78	402	3,637,159	769	5,709,338
79	329	2,543,161	750	5,522,282
80	320	2,806,707	701	4,865,550
81	263	2,001,014	722	5,028,895
82	238	1,927,401	629	4,495,935
83	199	1,690,799	577	3,970,838
84	178	1,466,945	539	4,162,606
85	150	1,365,630	511	3,622,823
86	107	885,820	416	3,157,767
87	96	780,958	340	2,540,713
88	68	559,396	288	2,049,778

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JULY 1, 1993

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
89	71	\$ 558,345	246	\$ 1,836,449
90	41	336,658	192	1,372,911
91	36	278,316	160	920,292
92	16	133,425	126	830,946
93	21	181,275	86	518,466
94	11	57,278	66	331,421
95	7	43,246	57	345,329
96	7	40,816	31	177,173
97	5	34,271	21	116,491
98	2	11,684	17	109,453
99	1	2,046	15	89,919
100	2	12,618	11	55,588
101			6	38,840
102	2	5,909	7	53,644
103			3	22,112
105			2	12,518
TOTAL	13,810	\$ 165,821,242	27,141	\$ 234,407,128

SUMMARY

LIFE ANNUITY	5,483	\$ 49,233,585	17,428	\$ 134,975,484
CASH REFUND	927	9,983,237	1,404	12,427,279
100% J&S	1,866	21,699,719	494	2,985,053
50% J&S	1,399	22,468,410	368	3,672,999
SOC. SEC. LEVELING	1,751	33,980,764	3,428	50,282,713
100% POP-UP	920	10,260,711	322	3,098,555
50% POP-UP	876	14,891,290	484	6,027,737
BENEFICIARIES	588	3,303,526	3,213	20,937,308

TABLE 4

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY
AGE AS OF JULY 1, 1993**

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
23	2	\$ 2,784		
27	2	4,560		
28	1	3,335	3	\$ 11,483
29	2	4,380		
30			1	2,288
31	4	14,971	5	17,786
32	3	11,415	3	15,236
33	5	17,364	6	30,745
34	4	26,951	7	33,836
35	6	32,039	12	77,141
36	8	32,581	14	92,638
37	8	37,992	21	138,580
38	13	72,828	13	65,294
39	20	99,561	22	120,761
40	17	100,501	24	192,783
41	13	93,418	30	183,146
42	19	111,125	28	229,807
43	18	146,307	33	234,662
44	33	255,073	27	208,475
45	22	163,178	45	309,155
46	26	236,808	43	306,899
47	38	292,767	45	314,113
48	32	275,187	42	368,970
49	35	306,829	39	261,505
50	44	384,185	51	418,018
51	39	388,230	59	458,370
52	44	407,567	50	317,036
53	40	373,854	51	421,505
54	46	377,362	58	409,627
55	52	364,476	47	331,227
56	62	510,646	59	390,639
57	62	577,720	69	507,653
58	62	560,515	78	512,556
59	72	589,427	86	677,048
60	72	644,097	105	755,293
61	87	635,372	111	832,232
62	84	693,479	104	785,615
63	104	868,142	109	769,970
64	87	614,471	104	738,249
65	89	611,277	120	823,562

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY
AGE AS OF JULY 1, 1993

DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
66	81	\$ 585,832	112	\$ 777,523
67	74	532,717	98	788,144
68	82	683,733	95	727,211
69	62	475,685	82	630,723
70	65	583,359	86	618,618
71	47	329,258	87	593,042
72	69	549,090	88	641,504
73	54	454,040	76	664,509
74	65	434,212	77	529,919
75	43	307,870	64	434,856
76	30	236,393	62	494,044
77	32	220,899	56	336,282
78	25	171,742	48	356,969
79	20	135,737	36	246,047
80	15	68,227	33	212,444
81	2	8,858	6	38,174
82	3	14,716	4	27,818
83			3	9,377
84	1	918	2	4,582
86			1	4,818
89			1	6,043
90			1	6,043
91	1	6,043	5	30,866
92			1	6,083
93	1	6,124	1	6,083
94			3	18,531
95			1	6,325
97			1	6,043
101			1	6,244
TOTAL	2,149	\$ 16,748,227	2,855	\$ 20,592,768

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY
AGE AS OF JULY 1, 1993

DISABILITY RETIREMENTS

CONTINUED

	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
SUMMARY				
LIFE ANNUITY	1,217	\$ 9,825,040	2,378	\$ 17,351,142
CASH REFUND	174	1,435,672	167	1,284,435
100% J&S	364	2,160,294	169	856,313
50% J&S	169	1,674,143	62	491,823
100% POP-UP	121	735,253	39	216,683
50% POP-UP	104	917,825	40	392,372