

SOUTH CAROLINA RETIREMENT SYSTEM
REPORT OF THE ACTUARY ON
THE THIRTY-FIFTH VALUATION
PREPARED AS OF JUNE 30, 1986 .

**BUCK
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June 19, 1987

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

Gentlemen:

We transmit herewith our report on the thirty-fifth actuarial valuation of the South Carolina Retirement System, prepared as of June 30, 1986.

The actuarial assumptions are, in the aggregate, reasonable, and represent our best estimate of anticipated experience under the System. The actuarial cost method utilized is the projected benefit method with level percentage entry age normal cost and open-end accrued liability. This cost method is specifically recognized as an acceptable method by the Employee Retirement Income Security Act of 1974. The current assets applicable to the System were supplied by the Retirement System office. They are valued at adjusted amortized cost.

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.

The valuation indicates that for Class One employers the total contribution rate payable should be 3.70 per cent of earnable compensation. For Class Two employers the contribution rates should be 7.00 per cent of earnable compensation by the State and 6.15 per cent of earnable compensation by other employers. In addition, the contribution rates of participating employers should be continued at .30 per cent of payroll to provide the pre-retirement death benefits.

Comencing with the June 30, 1986 valuation of the System, the liabilities for cost-of-living increases for retirees and active members eligible for service retirement are included in the valuation results, and the post-retirement increase special fund has been eliminated. The estimated effect of these changes has been to increase the funding period from two to about 17 years.

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 JUNE 30, 1986

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>	<u>6/30/86</u>	<u>6/30/85</u>
Number of active members:		
Men	53,001	52,237
Women	96,536	93,558
Total	149,537	145,795
Annual earnable compensation of active members during year:		
Men	\$ 1,100,985	\$ 1,013,742
Women	1,533,458	1,377,550
Total	\$ 2,634,443	\$ 2,391,292
Number of retired members and beneficiaries	32,742	30,977
Annual retirement allowances	\$ 177,332	\$ 142,455
Assets for valuation purposes	\$ 4,202,379	\$ 3,576,867
Normal contribution as per cent of compensation:		
Class One Service	2.32%	2.32%
Class Two Service:		
State	3.74	3.74
Others	3.19	3.19
Unfunded accrued liability (UAL)	\$ 825,871	\$ 210,043
UAL contribution as per cent of compensation:		
Class One Service	1.38%	.88%
Class Two Service:		
State	3.26	2.76
Others	2.96	2.46
UAL liquidation period (years)	17	4

(continued)		
<u>Valuation Date</u>	<u>6/30/86</u>	<u>6/30/85</u>
Pre-retirement death benefit contribution as per cent of compensation	.30%	.30%
Post-retirement increase special fund contribution as per cent of compensation	N/A	.50%*
Total contributions as per cent of compensation:		
Class One Service	4.00%	4.00%
Class Two Service:		
State	7.30	7.30
Others	6.45	6.45

*Includes .30% diverted from the regular funding to the post-retirement increase special fund established by legislation effective July 1, 1981. Remainder is additional contribution required of all employers.

2. Comments on the valuation results as of June 30, 1986 are given in Section IV and further discussion of the contribution levels is set out in Section V. Since the June 30, 1985 valuation, an amendment passed stating that the cost of all current and future cost-of-living adjustments in the retirement allowances of all retirees and beneficiaries and active members currently eligible for service retirement be reflected in the valuation results of this System beginning June 30, 1986.
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 on a magnetic tape.

2. From the data, tabulations were made showing as of June 30, 1986 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 June 30, 1986 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 June 30, 1986.

TABLE I
THE NUMBER AND EARNABLE COMPENSATION OF ACTIVE MEMBERS
AS OF JUNE 30, 1986

GROUP	MEN	WOMEN	TOTAL
EMPLOYEES			
Number	40,106	44,780	84,886
Earnable Compensation (\$1,000's)	\$ 825,435	\$ 703,005	\$ 1,528,440
TEACHERS			
Number	12,895	51,756	64,651
Earnable Compensation (\$1,000's)	\$ 275,550	\$ 830,453	\$ 1,106,003
TOTAL			
Number	53,001	96,536	149,537
Earnable Compensation (\$1,000's)	\$ 1,100,985	\$ 1,533,458	\$ 2,634,443

NOTE: There are in addition 79,141 inactive members, 8,709 active members not on the payroll as of the valuation date, and 485 members with insufficient information. 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 June 30, 1986.

TABLE II

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
RETIRED MEMBERS AND BENEFICIARIES ON THE ROLL
AS OF JUNE 30, 1986

GROUP	NUMBER	TOTAL ANNUAL RETIREMENT ALLOWANCES (\$ 1,000's)
Service Retirements		
Employees:		
Men	6,490	\$ 39,765
Women	5,081	22,850
Teachers:		
Men	2,764	19,891
Women	<u>12,539</u>	<u>69,223</u>
Total	<u>26,874</u>	<u>\$ 151,729</u>
Disability Retirements		
Employees:		
Men	1,287	\$ 5,939
Women	808	3,467
Teachers:		
Men	362	2,065
Women	<u>1,014</u>	<u>5,096</u>
Total	<u>3,471</u>	<u>\$ 16,567</u>
Beneficiaries of Deceased Retired Members and Active Members		
Men	325	\$ 1,175
Women	<u>2,072</u>	<u>7,861</u>
Total	<u>2,397</u>	<u>\$ 9,036</u>
Grand Total	<u>32,742</u>	<u>\$ 177,332</u>

SECTION III - ASSETS

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.

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 June 30, 1986, these assets amounted to \$1,114,708,721.

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 \$3,087,669,940 as of June 30, 1986.

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 June 30, 1986. The following comments on the valuation are pertinent (all dollar amounts are in thousands):

The schedule shows that the System has actuarial liabilities of \$8,073,027, of which \$1,920,109 is for the prospective benefits payable on account of present retired members and beneficiaries and \$6,152,918 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 \$4,202,379 and anticipated future contributions by members of \$1,850,530, leaving a balance of \$2,020,118 to be provided by future contributions of the employers. Of this amount, \$1,194,247 represents the present value of normal contributions by the employers and the balance of \$825,871 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 3.70 per cent of earnable compensation, of which 2.32 per cent is attributable to the normal contribution and 1.38 per cent is attributable to the unfunded accrued liability contribution for the period July 1, 1986 to June 30, 1987.

For Class Two employers, the total contribution rate should be 7.00 per cent payable by the State and 6.15 per cent by the other Class Two employers. Of the total rates, 3.74 per cent and 3.19 per cent are attributable to normal contributions of the State and other employers, respectively. The unfunded accrued liability rates are therefore 3.26 per cent for the State and 2.96 per cent for other employers for the period July 1, 1986 to June 30, 1987.

On the basis of the above unfunded accrued liability contribution rates it is anticipated that the unfunded accrued liability of \$825,871 shown in the valuation balance sheet will be liquidated within a period of 17 years from the valuation date.

The rate necessary to provide the pre-retirement lump sum death benefit on a one-year term cost basis may be continued at .30 per cent of earnable compensation on the basis of the valuation. In view of the development of reserve assets of \$36,570,666 creditable to the Group Life Insurance Fund, consideration should be given to reducing the rate in the near future. Employers

participating in the Pre-retirement Death Benefit Program should contribute .30 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	2.32%	3.74%	3.19%
Unfunded Accrued Liability	1.38	3.26	2.96
Pre-retirement Death Benefit	<u>.30</u>	<u>.30</u>	<u>.30</u>
Total	4.00%	7.30%	6.45%

SECTION VI - VALUATION BASIS

The valuation of the Retirement System was made on the basis of the rates of separation and mortality tables in effect since June 11, 1974 and a salary scale and interest rate of 7% adopted by the Board on April 8, 1980. An outline of the actuarial assumptions and methods employed is presented in Schedule B.

SECTION VII - ACCOUNTING INFORMATION

- Opinion No. 8 of the Accounting Principles Board of the American Institute of Certified Public Accountants, as amended by Statement No. 36 of the Financial Accounting Standards Board, requires that certain items of information concerning retirement systems be furnished by the actuary for the State's audited financial statements.

2. Statement No. 35 of the Financial Accounting Standards Board requires that certain items of information be furnished by the actuary for the system's audited financial statements.
3. The information required by the amended Opinion No. 8 and Statement No. 35 includes the actuarial present value of accrued (accumulated) benefits as of the valuation date. The relevant amounts as of June 30, 1986 are:

Actuarial present value of accrued benefits:

Vested benefits	
Members currently receiving payments	\$ 1,841,159,812
Other members	<u>891,751,237</u>
	\$ 2,732,911,049
Nonvested benefits	<u>165,021,627</u>
Total	\$ 2,897,932,676

The actuarial present value of vested and nonvested accrued benefits is based on an interest rate of 7-1/2%. This rate represents the estimated constant equivalent rate of return for the periods during which payment of these benefits will be deferred based on the interest rates in use as of the valuation date to calculate the Pension Benefit Guaranty Corporation's annuity values for terminating plans covered by the Employee Retirement Income Security Act of 1974.

SCHEDULE ARESULTS OF THE VALUATION AS OF JUNE 30, 1986
(All dollar amounts are in thousands)

(1)	Actuarial liabilities	
	Present value of prospective benefits payable in respect of:	
	(a) Present retired members and beneficiaries	\$ 1,920,109
	(b) Present active and inactive members	<u>6,152,918</u>
	(c) Total actuarial liabilities	\$ 8,073,027
(2)	Assets of the System	<u>4,202,379</u>
(3)	Present value of future contributions = (1)(c) - (2)	\$ 3,870,648
(4)	Present value of future contributions by members	<u>1,850,530</u>
(5)	Present value of future contributions by employers = (3) - (4)	\$ 2,020,118
(6)	Present values of 1 per cent of future compensation	
	(a) Class One Service	\$ 2,563
	(b) Class Two Service: State	282,334
	(c) Class Two Service: Others	41,496
(7)	Present value of future normal contributions by employers at	
	(a) 2.32% = (6)(a) x 2.32	\$ 5,946
	(b) 3.74% = (6)(b) x 3.74	1,055,929
	(c) 3.19% = (6)(c) x 3.19	<u>132,372</u>
	(d) Total	\$ 1,194,247
(8)	Present value of unfunded accrued liability contributions by employers = (5) - (7)(d)	\$ 825,871
(9)	Unfunded accrued liability rates	
	(a) Class One Service	1.38%
	(b) Class Two Service: State	3.26
	(c) Class Two Service: Others	2.96
(10)	Unfunded accrued liability liquidation period	17 years
(11)	Pre-retirement death benefit contribution rate	.30%

SCHEDULE B

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: 7% 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>
	Men Teachers				Women Teachers			
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	4.00%	1.74	.20	.20	4.00%
55	2.03	.50	.34	5.50	1.18	.29	.35	6.00
60		.70	.59	7.50		.45	.61	8.00
64		.92	.94	20.00		.66	.82	35.00

Age	<u>With- drawal</u>	<u>Death</u>	<u>Dis- ability</u>	<u>Service Retire- ment</u>	<u>Salary Increase</u>
	<u>Employees</u>				<u>Teachers and Employees</u>
	20	11.11%	.07%	.04%	
25	9.97	.09	.04		10.40
30	7.91	.11	.06		9.00
35	6.06	.14	.08		7.30
40	4.67	.18	.10		6.51
45	3.67	.28	.15		6.10
50	2.83	.46	.25	2.00%	5.80
55	2.03	.75	.40	3.50	5.60
60		1.08	.61	5.00	5.40
65		1.36	.85	17.50	5.30

DEATHS AFTER RETIREMENT: Combined Annuity Mortality Tables, Modified and Makehamized, for service retirement and dependent beneficiaries with a 2 year setback in ages for men employees, a 3 year setback for women employees, men teachers and men dependents and a 4 year setback for women teachers and women dependents. 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.

SCHEDULE CSUMMARY OF MAIN SYSTEM PROVISIONS AS
INTERPRETED FOR VALUATION PURPOSESBACKGROUND

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 attained age 60 or has rendered 30 or more years of creditable service.

A member must retire at age 70 except that with the approval of both his employer and the Board, the member may remain in service to the end of the fiscal year in which he reaches his seventy-second birthday.

Amount of Allowance

Effective July 1, 1976 on service retirement, a Class One member receives a retirement allowance equal to 1% of the portion of his average final compensation not in excess of \$4,800, plus 1.30% of such compensation in excess of \$4,800, multiplied by the number of years of his creditable service.

On service retirement, a Class Two member receives a retirement allowance equal to 1.25% of the portion of his average final compensation not in excess of \$4,800, plus 1.65% of the portion of such compensation in excess of \$4,800, multiplied by the number of years of his creditable service.

If a member 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.

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 30 years of creditable service or had attained age 65, or who had 20 years of creditable service and attained age 60, 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 an amount as if the member had retired on the date of his death under Option 2 as described below. If such a person has received a refund of the member's accumulated contributions, he may, upon repayment of such refund in a single sum, receive the allowance under Option 2 from the time of the repayment of the contributions to the System.

Upon the death of a member before retirement 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 and the Group Life Insurance payment, an allowance for life in an amount as if the member had retired on the date of his death and had elected for payments to commence at age 60 under Option 2 as described below. The compensation to be used for purposes of computing this benefit is the average final compensation as of the date of death.

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 said December 31 is to be increased by 4%. Any increase in allowance granted hereunder through July 1, 1980 is to be permanent, irrespective of any subsequent decrease in the Consumer Price Index, and is to be included in determining any subsequent increase.

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

Effective July 1, 1964, without regard to the member's Social Security coverage, Class One members contribute at the rate of 3% of earnable compensation not in excess of \$4,800, and 5% of the portion in excess of \$4,800, and Class Two members contribute at the rate of 4% of earnable compensation not in excess of \$4,800, and 6% of the portion in excess of \$4,800.

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 EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
AGE AS OF JUNE 30, 1986

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
16	3 \$	8,022	1 \$	2,468
17	5	15,062	3	5,236
18	14	61,912	20	86,202
19	131	872,821	93	634,293
20	321	2,714,760	218	1,684,598
21	443	3,965,062	440	3,735,704
22	586	5,375,083	701	6,827,586
23	783	8,335,724	1,422	16,293,073
24	886	10,523,807	2,128	26,471,375
25	1,143	14,235,546	2,407	31,675,954
26	1,143	15,543,553	2,474	33,373,593
27	1,271	17,692,298	2,651	36,949,832
28	1,329	19,626,234	2,731	39,345,215
29	1,417	21,846,227	3,013	43,785,559
30	1,550	24,550,464	3,141	48,019,480
31	1,511	25,286,911	3,248	49,661,603
32	1,578	27,490,226	3,510	55,509,351
33	1,685	30,997,699	3,519	56,356,984
34	1,760	34,130,947	3,650	60,406,191
35	1,720	34,499,514	3,650	61,436,954
36	1,761	36,664,173	3,560	60,333,314
37	1,872	40,468,626	3,533	60,012,390
38	1,791	40,672,512	3,505	60,086,934
39	1,945	45,040,308	3,812	65,396,376
40	1,757	41,959,020	3,315	56,508,107
41	1,419	34,279,590	2,633	44,839,699
42	1,443	35,284,681	2,641	44,682,684
43	1,385	34,774,765	2,618	44,729,043
44	1,267	31,882,160	2,461	41,670,298
45	1,204	30,034,527	2,200	37,348,329
46	1,139	29,715,299	2,031	34,505,694
47	1,096	27,262,503	1,932	32,356,964
48	1,133	29,032,502	1,827	30,707,030
49	1,021	24,409,418	1,790	29,541,007
50	1,046	26,086,407	1,652	27,220,123
51	1,025	24,883,928	1,735	28,605,661
52	1,052	26,281,141	1,634	26,544,986
53	1,052	25,388,422	1,552	25,944,518
54	1,096	25,958,760	1,578	25,951,829
55	870	21,891,285	1,431	23,527,109

TABLE 1
THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
AGE AS OF JUNE 30, 1986

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	957	\$ 22,442,619	1,365	\$ 22,534,854
57	889	21,271,277	1,275	20,561,974
58	853	19,585,758	1,306	20,746,478
59	784	18,085,820	1,306	21,309,490
60	735	17,212,212	1,059	16,895,726
61	712	16,128,523	960	15,665,923
62	617	15,051,463	824	13,489,708
63	453	10,802,327	536	8,611,067
64	407	9,579,954	459	7,046,942
65	313	8,097,977	335	4,946,389
66	180	4,036,248	220	3,330,839
67	124	2,972,227	151	1,947,211
68	86	1,795,739	96	1,290,705
69	67	1,440,653	75	915,577
70	60	1,066,332	46	570,034
71	37	502,146	24	281,792
72	29	611,964	16	218,158
73	13	203,302	14	150,194
74	9	131,611	3	22,698
75	4	61,135	1	12,356
76	6	52,208	2	56,424
77	2	7,900	2	58,898
78	2	6,720		
79	3	3,166		
80	2	7,808		
81	1	16,118		
82	1	32,748		
83	1	9,172	1	21,163
86	1	28,205		
TOTAL	53,001	\$1,100,985,231	96,536	\$1,533,457,946
SUMMARY				
EMPLOYEES	40,106	\$ 825,435,291	44,780	\$ 703,004,913
TEACHERS	12,895	\$ 275,549,940	51,756	\$ 830,453,033

SEE FOOTNOTE TABLE I

TABLE 2
 THE NUMBER AND EARNABLE COMPENSATION
 OF MEMBERS DISTRIBUTED BY
 YEARS OF CREDITED SERVICE AS OF JUNE 30, 1986

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	2,611	\$ 30,143,673	3,313	\$ 36,639,692
1	6,495	87,930,224	11,619	132,425,654
2	4,892	78,721,760	9,989	130,741,040
3	3,465	57,246,361	6,154	85,350,443
4	2,591	45,689,924	4,918	71,665,986
5	2,785	51,937,351	5,130	77,035,601
6	2,572	49,744,402	5,168	77,488,811
7	2,784	54,468,797	5,713	85,114,369
8	2,453	51,015,857	5,205	82,586,796
9	2,090	45,128,488	4,351	71,101,420
10	1,842	40,354,673	3,867	64,666,077
11	1,675	39,686,559	3,580	61,250,941
12	1,937	46,364,040	3,966	71,434,586
13	1,908	47,540,296	3,481	64,527,472
14	1,625	43,108,900	2,961	56,918,231
15	1,403	38,430,975	2,584	50,356,172
16	1,217	33,076,377	2,212	43,831,908
17	1,103	30,171,340	1,919	38,980,554
18	906	25,453,424	1,574	32,235,663
19	780	22,368,829	1,269	26,044,930
20	716	20,839,274	1,176	24,369,772
21	635	18,416,864	862	19,144,423
22	531	15,809,932	782	17,274,365
23	484	14,682,349	623	14,302,423
24	403	12,114,637	553	12,757,440
25	359	10,874,802	490	11,153,056
26	369	10,934,558	461	10,455,120
27	335	10,436,392	414	9,679,462
28	307	9,705,102	355	8,460,668
29	292	9,215,405	402	9,777,769
30	324	10,743,776	364	8,679,028
31	218	7,212,364	229	5,506,425
32	137	4,556,736	178	4,573,491
33	155	5,063,284	145	3,598,223
34	108	3,532,020	118	2,993,386
35	117	3,667,310	110	2,691,212

TABLE 2
THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
YEARS OF CREDITED SERVICE AS OF JUNE 30, 1986

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	80	\$ 2,837,640	79	\$ 1,915,491
37	72	2,390,269	60	1,487,156
38	66	2,605,276	45	1,233,030
39	49	2,098,385	44	1,070,346
40	33	1,233,063	20	514,834
41	24	1,055,789	20	549,456
42	21	937,489	5	147,778
43	13	615,081	13	319,634
44	4	211,369	6	137,390
45	6	264,875	2	86,049
46	3	173,752	1	18,430
47	2	44,934	3	56,603
48	2	60,039	2	51,183
50	1	16,118		
51			1	57,957
52	1	54,097		
TOTAL	53,001	\$1,100,985,231	96,536	\$1,533,457,946
SUMMARY		<u>1,533,457,946</u> 2,634,443,177		
EMPLOYEES	40,106	\$ 825,435,291	44,780	\$ 703,004,913
TEACHERS	12,895	\$ 275,549,940	51,756	\$ 830,453,033

SEE FOOTNOTE TABLE I

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JUNE 30, 1986

SERVICE RETIREMENTS AND BENEFICIARIES

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
7	1 \$	3,340		
9	1	3,251		
10	1	1,934		
15	1	2,842	1 \$	242
16			1	4,732
17	1	7,618	2	12,257
18	1	6,062		
19	1	6,698	3	18,934
20			3	4,452
21	1	2,814	2	3,711
22	3	3,782	2	2,652
23			3	10,056
24	2	6,406	2	3,345
25	1	5,437		
26	2	5,542	1	676
27	2	4,210	2	14,196
28	1	2,696	2	3,576
29	4	12,632	3	11,205
30	4	14,606	4	7,710
31	4	14,390	6	24,149
32	6	21,613	6	21,668
33	1	6,574	3	19,850
34	2	4,632	6	33,337
35	5	37,832	11	34,782
36	1	1,402	4	9,990
37	4	14,941	2	6,063
38	10	23,411	5	24,406
39	6	18,492	6	19,288
40	3	6,270	10	23,398
41	4	8,537	8	24,636
42	2	2,061	3	30,541
43	6	14,599	3	11,115
44	6	18,115	10	30,743
45	2	2,754	8	19,086
46	4	8,120	11	55,435
47	4	10,684	7	25,579
48	6	41,940	12	56,261
49	5	53,340	10	51,629
50	10	60,116	15	76,425
51	15	136,140	21	116,315
52	16	149,060	23	195,754
53	30	277,685	41	319,757
54	42	570,262	64	529,642
55	43	533,455	87	783,985

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JUNE 30, 1986

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	64 \$	841,379	124 \$	1,216,622
57	89	1,272,870	166	1,669,313
58	76	992,950	177	1,801,098
59	101	1,323,695	216	2,301,122
60	130	1,692,171	250	2,402,115
61	178	2,139,825	370	2,921,632
62	229	2,113,497	511	3,103,001
63	358	2,602,870	642	3,271,981
64	427	2,865,904	812	4,390,697
65	530	3,673,268	883	4,252,425
66	591	3,770,846	1,012	4,914,632
67	531	3,379,029	943	4,792,490
68	586	3,424,616	867	4,076,817
69	516	2,994,024	899	4,213,411
70	552	3,179,898	946	4,206,991
71	503	2,934,296	857	4,193,937
72	459	2,294,668	831	3,927,146
73	448	2,399,365	785	3,534,776
74	409	2,011,939	823	3,740,872
75	389	1,924,820	754	3,468,883
76	354	1,770,710	753	3,330,382
77	309	1,546,925	702	3,430,271
78	251	1,426,768	698	3,220,885
79	218	1,016,120	640	3,201,343
80	189	1,025,903	540	2,483,210
81	169	900,853	525	2,425,450
82	148	695,077	470	2,235,419
83	111	525,660	379	1,747,546
84	102	397,659	339	1,352,570
85	62	394,975	278	1,146,995
86	62	310,202	210	879,210
87	34	168,776	173	674,401
88	31	195,396	147	602,613
89	31	136,472	111	430,933
90	20	98,393	105	404,407

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JUNE 30, 1986

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
91	18	\$ 86,278	96	\$ 358,990
92	7	37,819	64	257,712
93	11	40,543	53	196,733
94	9	30,292	39	155,530
95	3	18,262	29	122,838
96	4	28,974	26	110,287
97	3	15,246	14	50,633
98			6	24,313
99	2	1,769	5	10,770
100			4	16,753
101	1	3,925		
102			2	9,047
104			2	8,320
105			1	3,951
TOTAL	9,579	\$ 60,831,222	19,692	\$ 99,933,051

SUMMARY

LIFE ANNUITY	4,083	\$ 19,350,776	13,177	\$ 61,766,147
CASH REFUND	1,082	6,779,788	1,642	9,070,771
100% J+S	1,402	8,003,627	461	1,690,482
50% J+S	1,270	11,198,156	443	2,645,620
SOC. SEC. LEVELING	763	9,012,994	1,639	15,147,223
BENEFICIARIES	325	1,175,265	2,072	7,860,443
100% PDP-UP	344	2,280,071	118	685,033
50% PDP-UP	310	3,030,545	140	1,067,332

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY
AGE AS OF JUNE 30, 1986

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
27	1 \$	1,694		
28	1	1,468		
30	1	1,724	1 \$	1,349
31			2	6,205
32	7	17,215	5	25,275
33	5	12,108	1	2,495
34	2	4,333	7	27,241
35	4	19,016	5	18,704
36	5	13,943	5	15,286
37	3	9,682	5	10,796
38	6	18,938	12	39,340
39	7	29,628	11	39,832
40	8	21,149	5	14,596
41	10	46,258	11	88,371
42	15	51,226	8	35,031
43	6	35,142	18	75,574
44	10	55,912	20	74,489
45	13	61,939	16	74,755
46	13	48,607	12	52,486
47	12	53,135	11	49,246
48	25	102,343	20	62,695
49	23	105,630	17	56,914
50	18	98,060	16	65,144
51	31	146,970	27	103,251
52	20	99,258	26	144,838
53	27	181,876	36	165,009
54	42	220,811	44	195,964
55	52	299,379	43	240,257
56	50	319,995	46	239,023
57	54	266,083	48	236,380
58	68	377,887	63	335,671
59	59	325,835	79	408,535
60	70	364,486	82	432,059
61	85	448,566	92	459,372
62	78	401,037	84	443,259
63	93	481,342	98	470,417
64	85	358,667	109	483,349
65	114	585,694	115	561,551

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY
AGE AS OF JUNE 30, 1986

DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
66	84	\$ 421,466	91	\$ 487,220
67	90	394,265	101	434,495
68	84	349,819	96	381,953
69	65	294,780	83	411,297
70	67	290,000	75	309,315
71	44	190,493	59	286,518
72	38	151,645	55	232,240
73	41	169,769	41	170,151
74	4	7,461	8	36,138
75	2	9,222	4	20,911
76	1	3,794	2	8,400
77	2	9,457		
78	1	2,267	2	8,530
79			1	4,186
81			1	4,239
83			1	4,289
84			1	4,034
85	1	3,387		
86			1	4,186
88	1	6,087		
95	1	13,565		
TOTAL	1,649	\$ 8,004,513	1,822	\$ 8,562,861

SUMMARY

LIFE ANNUITY	862	\$ 4,309,092	1,473	\$ 6,959,471
CASH REFUND	184	963,473	151	770,407
100% J+S	303	1,090,113	117	411,984
50% J+S	198	1,141,241	55	264,055
SOC. SEC. LEVELING			1	7,529
100% POP-UP	54	217,969	13	48,046
50% POP-UP	48	282,625	12	101,369