

SOUTH CAROLINA RETIREMENT SYSTEM
REPORT OF THE ACTUARY ON
THE THIRTY-FIRST VALUATION
PREPARED AS OF JUNE 30, 1982

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

**BUCK
CONSULTANTS**

Gentlemen:

We transmit herewith our report on the thirty-first actuarial valuation of the South Carolina Retirement System, prepared as of June 30, 1982.

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, exclusive of the pre-retirement death benefit, should be continued at 3.20 per cent of earnable compensation. For Class Two employers the contribution rates, exclusive of the pre-retirement death benefit, should be continued at 6.50 per cent of earnable compensation by the State and 5.65 per cent of earnable compensation by other employers. These rates are exclusive of any payments to the post-retirement increase special fund. In addition, the contribution rates of participating employers should be continued at .30 per cent of payroll to provide the pre-retirement death benefits.

Also, .30 per cent of compensation was diverted from regular funding to the post-retirement increase special fund. The Law requires employers to make an additional contribution to this fund of .20 per cent of compensation. Thus, the total contribution rate to the post-retirement increase special fund should be .50 per cent of compensation.

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

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

(Signed) THOMAS J. CAVANAUGH

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Consulting Actuary

a subsidiary of Buck Consultants, Inc.

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REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1982

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:

<u>Valuation Date</u>	<u>6/30/82</u>	<u>6/30/81</u>
Number of active members:		
Men	50,571	51,794
Women	86,726	88,482
Total	137,297	140,276
Annual earnable compensation of active members during year:		
Men	\$ 818,998,192	\$ 775,755,013
Women	1,020,110,891	961,416,270
Total	\$ 1,839,109,083	\$ 1,737,171,283
Number of retired members and beneficiaries	26,150	24,386
Annual retirement allowances	\$ 99,677,070	\$ 89,784,800
Assets for valuation purposes	\$ 2,353,300,619	\$ 2,052,819,853
Normal contribution as per cent of compensation:		
Class One Service	2.44%	2.21%
Class Two Service:		
State	3.35	3.08
Others	3.00	2.54
Unfunded accrued liability (UAL)	\$ 393,549,030	\$ 416,289,141
Unfunded accrued liability contribution as per cent of payroll:		
Class One Service	.76%	.99%
Class Two Service:		
State	3.15	3.42
Others	2.65	3.11
Unfunded accrued liability liquidation period (years)	10	10
Pre-retirement death benefit contribution as per cent of payroll	.30%	.30%
Post-retirement increase special fund contribution as per cent of payroll*	.50%	.50%

*Includes .30% to be diverted to post-retirement increase special fund effective July 1, 1981. Remainder is additional contribution required of all employers.

2. Comments on the valuation results as of June 30, 1982 are given in Section IV and further discussion of the contribution levels is set out in Section V. Two amendments were made to the provisions of the System since the June 30, 1981 valuation and were taken into account in this valuation. One provided for pop-up options and in conjunction with this the Board resolved that, effective January 1, 1982, the factors used to calculate all allowances paid in an optional form would be determined on a unisex basis. The second amendment, which has no effect on valuation results, provides for employer "pick-up" of member contributions, effective July 1, 1982. In addition, the Board increased the interest rate credited for member contributions from 4% to 6% per annum, compounded annually, as of July 1, 1982. This resolution was also taken into account in this 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. In order to obtain the aggregate liabilities and assets on account of members of the System as of June 30, 1982, data were needed with respect to each active member and beneficiary of the System and also with respect to terminations during the valuation year. The data with respect to both active and terminated members and beneficiaries 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, 1982 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 on the roll as of June 30, 1982 classified by age. These tabulations are presented in Schedule D.
3. The following table shows the number of active members of the Retirement System together with earnable compensation as of June 30, 1982.

TABLE 1

THE NUMBER AND EARNABLE COMPENSATION OF ACTIVE MEMBERS
AS OF JUNE 30, 1982

GROUP	TOTAL		TEACHERS		EMPLOYEES	
	Number	Earnable Compensation	Number	Earnable Compensation	Number	Earnable Compensation
Men	50,571	\$ 818,998,192	12,490	\$ 197,886,669	38,081	\$ 621,111,523
Women	86,726	1,020,110,891	47,015	541,589,065	39,711	478,521,826
Total	137,297	\$1,839,109,083	59,505	\$ 739,475,734	77,792	\$1,099,633,349

NOTE: There are in addition 71,710 inactive members and 11,501 active members not on the payroll as of the valuation date. 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, 1982.

TABLE II

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
RETIRED MEMBERS AND BENEFICIARIES ON THE ROLL
AS OF JUNE 30, 1982

GROUP	NUMBER	TOTAL ANNUAL RETIREMENT ALLOWANCES
Service Retirements		
Teachers:		
Men	2,115	\$ 10,459,123
Women	10,386	40,872,599
Employees:		
Men	4,838	20,069,925
Women	3,711	11,855,057
Total	21,050	\$ 83,256,704
Disability Retirements		
Teachers:		
Men	336	\$ 1,513,774
Women	996	3,837,546
Employees:		
Men	1,195	4,124,077
Women	674	2,180,732
Total	3,201	\$ 11,656,129
Beneficiaries of Deceased Retired Members and Active Members		
Men	247	\$ 606,137
Women	1,652	4,158,100
Total	1,899	\$ 4,764,237
Grand Total	26,150	\$ 99,677,070

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 and the Cost-of-Living Fund for post-retirement increases.

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, 1982, these assets amounted to \$664,046,676.

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 \$1,689,253,943 as of June 30, 1982.

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, 1982. The following comments on the valuation are pertinent:

The schedule shows that the System has actuarial liabilities of \$4,749,929,850 of which \$825,829,295 is for the prospective benefits payable on account of present retired members and beneficiaries, and \$3,924,100,555 is for the prospective benefits payable on account of present active and inactive members. Against these liabilities, the System has present assets of \$2,353,300,619 and anticipated future contributions by members of \$1,258,415,015 leaving a balance of \$1,138,214,216 to be provided by future contributions of the employers. Of this amount,

\$744,665,186 represents the present value of normal contributions by the employers and the balance of \$393,549,030 represents the present value of 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 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 and post-retirement increase special fund:

For Class One employers, the total employer contribution rate should be continued at 3.20 per cent of earnable compensation of which 2.44 per cent is attributable to the normal contribution and .76 per cent is attributable to the accrued liability contribution for the period July 1, 1982 to June 30, 1983.

For Class Two employers, the total contribution rate should be continued at 6.50 per cent payable by the State and 5.65 per cent by the other Class Two employers. Of the total rates, 3.35 per cent and 3.00 per cent are attributable to normal contributions of the State and other employers, respectively. The accrued liability rates are therefore 3.15 per cent for the State and 2.65 per cent for other employers for the period July 1, 1982 to June 30, 1983.

On the basis of the above accrued liability contribution rates it is anticipated that the accrued liability of \$393,549,030 shown in the valuation balance sheet will be liquidated within a period of 10 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 and in view of the development of reserve assets of \$18,498,828 creditable to the Group Life Insurance Fund. Employers participating in the Pre-retirement Death Benefit Program should contribute .30 per cent of earnable compensation in addition to the appropriate rate above.

The employer contribution rate of .30 per cent of compensation is to be diverted from regular funding to the post-retirement increase special fund. All employers are also required to make an additional contribution of .20 per cent of compensation to the Cost-of-Living Fund which had assets in the amount of \$6,783,630 as of June 30, 1982. Therefore, a total contribution rate of .50 per cent of compensation should be made by all employers to the post-retirement increase special fund.

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	2.44%	3.35%	3.00%
Accrued Liability	.76	3.15	2.65
Pre-retirement Death Benefit	.30	.30	.30
Post-retirement Increase Special Fund	.50	.50	.50
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

1. 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, 1982 are:

Actuarial present value of accrued benefits:

Vested benefits

Participants currently receiving payments	\$ 669,648,697
Other participants	<u>552,214,371</u>
	\$ 1,221,863,068

Nonvested benefits

67,851,251

Total	\$ 1,289,714,319
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The actuarial present value of vested and nonvested accrued benefits is based on an interest rate of 10-1/2%. 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 A

RESULTS OF THE VALUATION AS OF JUNE 30, 1982

(1) Actuarial Liabilities

Present value of prospective benefits payable
in respect of:

(a) Present retired members and beneficiaries	\$	825,829,295	
(b) Present active and inactive members		<u>3,924,100,555</u>	
(c) Total actuarial liabilities	\$	4,749,929,850	✓
(2) Assets of the System		<u>2,353,300,619</u>	① ✓
(3) Unfunded Value of Prospective Benefits = (1)(c) - (2)	\$	2,396,629,231	✓
(4) Present Value of Future Contributions by Members		<u>1,258,415,015</u>	
(5) Total Prospective Contributions by Employers = (3) - (4)	\$	1,138,214,216	
(6) Present Values of 1 Per Cent of Future Compensation			
(a) Class One Service	\$	1,293,524	
(b) Class Two Service: State		194,984,841	
(c) Class Two Service: Others		29,436,590	2,527,929,955
(7) Present Value of Future Normal Contributions by Employers at			
(a) 2.44% = (6)(a) x 2.44	\$	3,156,199	
(b) 3.35% = (6)(b) x 3.35		653,199,217	
(c) 3.00% = (6)(c) x 3.00		<u>88,309,770</u>	744,665,186
(d) Total	\$	744,665,186	
(8) Present Value of Accrued Liability Contributions by Employers = (5) - (7)(d)	② ✓ \$	393,549,030	
(9) Accrued Liability Rates (effective 7/1/82)			
(a) Class One Service			.76%
(b) Class Two Service: State			3.15
(c) Class Two Service: Others			2.65
(10) Accrued Liability Liquidation Period			10 years
(11) Pre-retirement Death Benefit Contribution Rate			.30%
(12) Post-retirement Increase Special Fund Contribution Rate			.50%

1 + 2 = ACCRUED ACCOED LIABILITIES

2,746,850,000

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	<u>Annual Rate of</u>							
	<u>With- drawal</u>	<u>Death</u>	<u>Disa- bility</u>	<u>Service Retirement</u>	<u>With- drawal</u>	<u>Death</u>	<u>Disa- bility</u>	<u>Service Retirement</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>Disa- bility</u>	<u>Service Retirement</u>	<u>Salary Increase</u>
	Employees				Teachers and Employees
20	11.11%	.07%	.04%		11.31%
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 three consecutive fiscal years 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 Allowance

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.

In no event will a Class One member who retires on or subsequent to July 1, 1976 or a Class Two member whose creditable service commenced on or before June 30, 1964 receive a smaller retirement allowance than he would have received under the benefit provisions applicable to a Class One member in effect prior to July 1, 1976.

Effective July 1, 1975 out-of-State service means service as a teacher or employee rendered by a member of the System for any state, territory or other governmental subdivision under the jurisdiction of the United States other than this State.

Effective July 1, 1975 out-of-State service is creditable irrespective of when it was performed at a cost of 10% of current annual earnable compensation for each year established, provided that the earnable compensation used cannot be less than his earnable compensation in any one of the three preceding fiscal years.

If the member's creditable service does not, at his retirement, exceed his out-of-State service, the employer annuity based on his total out-of-State service before and after July 1, 1945 shall be reduced in the proportion which his creditable service bears to his out-of-State service.

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, and who has had 5 or more years of creditable service.

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.

In no event will a Class One member whose creditable service commenced prior to July 1, 1976 receive a smaller allowance than he would have received under the disability benefit provisions applicable to Class One members prior to July 1, 1976.

In no event will a Class Two member whose creditable service commenced on or before June 30, 1964 receive a smaller allowance than he would have received under the disability benefit provisions applicable to a Class One member.

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 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.

Option 6. A member may elect 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. Effective July 1, 1981 all subsequent increases in allowances will be paid from the post-retirement increase special fund and are guaranteed only to the extent of the assets in that fund.

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.

Effective July 1, 1981, .30% of payroll will be diverted from the accrued liability rate to the post-retirement increase special fund and employers will make an additional .20% of payroll contribution to that fund.

TABLE 1

THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
AGE AS OF JUNE 30, 1982

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
16	25	3,385	15	2,815
17	9	27,101	8	18,696
18	27	109,351	23	66,055
19	174	951,527	127	649,699
20	359	2,247,629	313	1,912,268
21	486	3,471,483	516	3,590,239
22	637	4,816,280	854	6,183,560
23	842	7,063,859	1,705	14,414,221
24	1,019	9,362,338	2,217	20,728,743
25	1,171	11,497,173	2,744	26,876,818
26	1,305	13,644,169	2,903	30,736,805
27	1,369	15,489,549	3,038	32,889,334
28	1,470	17,383,464	3,283	36,790,499
29	1,539	19,313,471	3,287	37,594,526
30	1,638	21,785,612	3,380	40,323,089
31	1,674	23,667,951	3,325	40,505,851
32	1,738	25,700,905	3,272	40,052,670
33	1,799	28,910,388	3,220	39,942,178
34	1,764	29,146,067	3,038	37,789,707
35	1,861	32,025,534	3,297	41,154,232
36	1,692	29,918,647	2,895	35,673,249
37	1,395	25,313,233	2,330	28,332,281
38	1,336	24,927,001	2,317	28,276,164
39	1,339	25,755,328	2,304	28,559,629
40	1,198	23,107,293	2,216	27,151,428
41	1,130	22,309,972	1,928	23,915,729
42	1,069	21,529,562	1,844	22,834,922
43	1,022	19,554,465	1,799	21,953,008
44	1,068	21,144,445	1,717	21,102,151
45	940	17,678,509	1,656	20,037,985
46	1,029	19,757,495	1,559	18,906,466
47	1,004	18,853,241	1,654	20,100,407
48	1,032	20,087,275	1,606	19,512,961
49	1,006	19,137,900	1,537	19,263,064
50	1,106	20,527,563	1,612	19,691,716
51	914	17,815,712	1,501	18,930,310
52	999	18,334,771	1,459	18,385,130
53	948	18,131,425	1,487	18,419,369
54	965	17,221,942	1,481	18,433,010
55	910	16,180,971	1,540	19,362,110

TABLE 1

THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
AGE AS OF JUNE 30, 1982

CONTINUED

AGE	NUMBER	MEN		WOMEN	
		NUMBER	AMOUNT	NUMBER	AMOUNT
56	853	\$	15,693,571	1,307	\$ 16,248,702
57	904		15,772,808	1,352	16,858,372
58	835		15,584,920	1,288	16,023,151
59	828		14,756,534	1,077	13,387,474
60	828		14,587,502	1,104	13,841,075
61	823		14,839,341	900	11,028,260
62	667		11,972,218	798	10,030,572
63	445		8,044,030	579	7,164,439
64	396		6,954,569	399	4,755,363
65	286		5,327,981	323	3,819,807
66	197		3,751,316	200	2,107,716
67	141		2,474,385	117	1,184,651
68	99		1,493,283	95	981,248
69	88		1,434,168	85	726,304
70	72		1,043,088	47	390,527
71	36		393,297	27	183,130
72	33		431,993	20	199,590
73	24		210,221	12	86,358
74	8		52,053	2	14,399
75	6		19,849		
76	8		111,145		
77	1		15,327		
78	4		47,080		
79	1		10,560	1	16,659
81	2		49,892		
85	1		23,075		
TOTAL	50,571	\$	818,998,192	86,726	\$1,020,110,891

SUMMARY

EMPLOYEES	38,081	\$	621,111,523	39,711	\$	478,521,826
TEACHERS	12,490	\$	197,886,669	47,015	\$	541,589,065

SEE FOOTNOTE TABLE I

THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
YEARS OF SERVICE AS OF JUNE 30, 1982

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	1,960\$	13,690,637	2,248\$	15,077,396
1	6,201	60,021,230	10,027	83,584,879
2	4,988	65,107,324	8,833	88,311,115
3	4,837	67,575,823	9,173	95,648,557
4	3,933	59,874,830	8,009	89,801,658
5	3,125	48,318,561	6,145	70,476,795
6	2,374	38,645,798	4,712	54,130,263
7	2,202	38,211,636	3,907	45,240,646
8	2,412	41,689,739	4,475	54,269,769
9	2,277	41,707,408	3,661	46,821,914
10	1,895	36,557,089	3,186	41,744,397
11	1,612	31,922,057	2,949	39,641,707
12	1,447	28,888,930	2,627	34,842,116
13	1,426	28,151,367	2,234	31,541,466
14	1,082	22,352,384	1,888	26,756,769
15	1,016	21,520,522	1,531	22,038,307
16	939	20,361,417	1,503	21,117,045
17	760	16,380,602	1,010	15,574,400
18	633	13,151,487	1,044	15,666,038
19	544	11,890,819	815	13,127,236
20	511	11,492,240	738	11,615,884
21	447	9,965,621	619	10,179,061
22	454	10,163,246	566	9,328,363
23	409	9,053,880	571	9,578,704
24	383	8,802,038	443	7,438,102
25	406	9,473,713	509	8,910,178
26	341	7,622,648	448	7,436,171
27	345	7,651,762	498	8,496,754
28	256	5,824,669	369	6,511,359
29	240	5,278,841	370	6,494,487
30	168	3,418,439	246	4,315,509
31	211	4,776,211	279	4,843,227
32	175	4,249,076	215	3,701,698
33	160	3,865,281	196	3,424,485
34	98	2,709,468	140	2,634,945
35	84	2,338,422	141	2,456,264

THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
YEARS OF SERVICE AS OF JUNE 30, 1982

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	67	\$ 1,948,724	92	\$ 1,643,800
37	31	749,862	84	1,519,722
38	36	996,249	46	848,021
39	17	465,864	54	982,254
40	16	430,959	42	801,080
41	22	616,513	35	655,468
42	14	452,354	16	339,085
43	4	156,297	11	202,946
44	4	185,065	8	152,558
45	2	57,074	3	46,399
46	1	41,520	3	36,977
47	4	124,603	2	34,830
48	2	67,893	2	29,055
49			1	9,427
51			1	14,942
53			1	16,663
TOTAL	50,571	\$ 818,998,192	86,726	\$ 1,020,110,891

SUMMARY

EMPLOYEES	38,081	\$ 621,111,523	39,711	\$ 478,521,826
TEACHERS	12,490	\$ 197,886,669	47,015	\$ 541,589,065

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, 1982

SERVICE RETIREMENTS AND BENEFICIARIES

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
6			1 \$	3,000
10	1 \$	2,546		
11			1	191
12			1	3,744
15			1	5,414
16			2	2,745
17	1	8,960	1	389
18	1	196	2	1,883
19			1	1,047
20			1	925
21	1	4,648		
22	1	691	1	450
23	1	749	1	3,399
24			1	1,063
25	5	7,249	1	2,370
26	1	4,035	2	1,848
27	3	8,496	4	16,189
28	1	842	2	3,206
29	1	5,302		
30	2	3,774	3	8,069
31	3	6,830	7	18,289
32			2	2,651
33	3	6,753	1	56
34	5	6,975	1	3,781
35	6	14,298	3	7,756
36	2	1,935	4	2,931
37	2	2,882	6	11,482
38	1	157	1	3,761
39	5	10,295	2	1,313
40	2	3,007	5	11,584
41	2	1,928	4	3,952
42	3	6,051	6	14,915
43	1	1,892	5	8,676
44	2	1,181	7	21,147
45	2	6,973	4	4,347
46	6	8,031	7	23,903
47	2	8,955	7	20,966
48	3	6,332	4	11,422
49	8	20,468	12	37,998
50	4	25,644	14	34,729
51	6	38,378	15	38,925
52	15	106,053	38	186,095
53	18	179,015	37	199,227
54	18	154,803	48	296,494

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JUNE 30, 1982

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
55	26	\$ 255,219	69	\$ 486,409
56	36	386,397	86	605,262
57	57	516,475	88	581,101
58	49	478,375	110	740,420
59	55	538,030	144	1,032,433
60	77	659,410	191	1,245,596
61	124	1,029,792	316	1,639,842
62	145	805,568	440	2,128,337
63	260	1,305,689	525	2,188,148
64	333	1,638,643	572	2,240,405
65	350	1,508,076	643	2,562,329
66	468	2,158,153	785	2,977,364
67	440	1,955,658	758	3,022,850
68	458	1,797,739	783	3,027,698
69	451	1,842,402	738	2,767,788
70	413	1,585,116	813	2,909,855
71	418	1,639,276	771	2,789,928
72	418	1,657,076	770	2,642,244
73	359	1,466,725	751	2,780,179
74	308	1,268,613	748	2,528,169
75	259	912,560	708	2,555,724
76	263	994,044	604	1,937,372
77	233	802,251	599	1,839,523
78	200	700,640	544	1,680,613
79	159	485,586	452	1,372,768
80	150	406,589	402	1,050,570
81	102	411,070	350	932,928
82	91	300,835	289	707,605
83	70	188,300	235	550,363
84	54	183,944	223	518,268
85	44	121,183	164	356,409
86	41	106,622	152	296,902
87	44	93,568	141	253,270
88	19	49,800	122	239,699
89	31	78,694	101	183,502

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JUNE 30, 1982

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
90	22	\$ 55,497	74	\$ 130,965
91	4	17,322	53	95,711
92	11	27,530	61	104,398
93	6	11,648	39	60,053
94	3	7,569	22	24,576
95	5	10,370	17	27,837
96	1	702	7	9,973
97	2	3,376	7	7,523
98			4	8,314
99	1	807	2	3,865
100			3	6,363
101	1	3,143	4	5,894
102			1	2,816
103			1	239
104			1	3,024
105	1	2,779		
TOTAL	7,200	\$ 31,135,185	15,749	\$ 56,885,756

SUMMARY

LIFE ANNUITY	3,308	\$ 11,434,890	10,829	\$ 37,347,327
CASH REFUND	1,043	4,380,293	1,611	6,345,120
100% J+S	1,107	4,008,812	428	1,245,143
50% J+S	1,151	7,440,816	434	1,935,091
SOC. SEC. LEVELING	338	3,219,507	783	5,802,234
BENEFICIARIES	247	606,137	1,652	4,158,100
100% POP-UP	3	13,457	4	11,455
50% POP-UP	3	31,273	8	41,286

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY
AGE AS OF JUNE 30, 1982

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
26	1 \$	1,429	1 \$	2,551
27			1	3,140
28	1	918	1	2,044
29	1	1,644	1	2,132
30	1	1,271	2	7,210
31	1	2,548	3	6,543
32	4	7,683	2	4,601
33	2	5,340	3	6,205
34	1	1,580	3	9,702
35	2	6,711	4	10,895
36			4	12,198
37	4	14,265	7	24,100
38	6	16,754	4	9,802
39	5	23,689	6	14,976
40	4	13,768	10	29,061
41	11	34,265	9	33,470
42	10	36,814	6	24,503
43	7	27,731	7	19,730
44	13	40,963	9	22,590
45	10	37,476	10	29,787
46	10	34,816	11	37,233
47	15	53,334	15	53,765
48	15	47,872	18	83,540
49	22	99,904	24	81,436
50	27	116,705	27	109,533
51	29	149,005	23	101,069
52	30	128,115	32	129,061
53	46	187,280	33	143,060
54	44	218,812	47	216,964
55	38	180,583	49	210,149
56	45	192,859	63	257,249
57	65	257,340	64	304,680
58	58	237,856	60	251,446
59	69	279,679	67	275,676
60	87	321,318	77	291,837
61	97	409,646	105	423,815
62	92	375,696	95	414,417
63	108	383,464	111	399,930
64	99	350,688	110	351,710
65	85	277,160	90	339,831
66	91	320,522	88	287,171

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY
AGE AS OF JUNE 30, 1982

DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
67	61	\$ 191,967	72	\$ 256,666
68	62	159,331	67	209,764
69	50	163,233	48	154,835
70	35	74,924	43	109,795
71	17	42,211	29	77,979
72	15	38,902	24	54,163
73	10	18,785	17	38,929
74	5	7,327	11	16,053
75	6	11,421	9	14,629
76			8	7,742
77	5	6,825	7	8,314
78	1	554	3	3,216
79	2	3,815	3	3,762
80			5	5,134
81	2	3,259	1	1,674
82			3	4,493
83			4	2,625
84	1	5,203	2	1,408
85	1	322	3	2,296
86			1	673
87	1	1,536	5	3,142
88			1	422
90			1	829
91	1	10,733	1	923
TOTAL	1,531	\$ 5,637,851	1,670	\$ 6,018,278

SUMMARY

LIFE ANNUITY	808	\$ 3,138,552	1,356	\$ 4,963,196
CASH REFUND	189	732,211	150	568,475
100% J+S	313	794,098	105	268,085
50% J+S	219	948,622	58	212,565
SOC. SEC. LEVELING			1	5,957
100% POP-UP	1	8,184		
50% POP-UP	1	16,184		