SOUTH CAROLINA RETIREMENT SYSTEM

REPORT OF THE ACTUARY ON

THE TWENTY-NINTH VALUATION

PREPARED AS OF JUNE 30, 1980

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May 28, 1981



Mr. Purvis Collins, Director South Carolina Retirement System P. O. Box 11960 - Capitol Station Columbia, South Carolina 29211

Dear Mr. Collins:

We are enclosing herewith the signed bound copy of the "South Carolina Retirement System Report of the Actuary on the Twenty-Ninth Valuation Prepared as of June 30, 1980."

Very truly yours,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

Thomas J. Cayanaugh, F.S

Consulting Actuary

TJC:PLB Enc.

George B. Buck Consulting Actuaries, Inc. Two Pennsylvania Plaza, New York, New York 10001 Telephone 212 | 279 4400

March 27, 1981

BUCS CONSULTANTS

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

Gentlemen:

We transmit herewith our report on the twenty-ninth actuarial valuation of the South Carolina Retirement System, prepared as of June 30, 1980.

As a result of Board action and legislative changes in 1980, several items affecting the operation of the System should be noted. First, no valuation was performed as of June 30, 1979 because of a special projection study done in its place. Second, the Board adopted new assumptions effective June 30, 1979. Finally, a post-retirement increase special fund was established by legislation to cover all cost-of-living benefit adjustments granted after June 30, 1981. The diversion of .30 per cent of compensation to this fund effective July 1, 1981 was taken into account in this valuation.

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 entry age normal cost and open-end accrued liability. This cost method is specifically recognized as an acceptable method by the Employee Retirement specifically Act of 1974. The current assets applicable to the System 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.

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The valuation indicates that for Class One employers the total contribution rate payable, exclusive of the pre-retirement death benefit, may be continued at 3.50 per cent of earnable compensation, and for Class Two employers the contribution rates, exclusive of the pre-retirement death benefit, may be continued at 6.80 per cent of earnable compensation by the State and 5.95 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.

The valuation included sufficient reserves to cover one lifetime cost-ofliving increase of 4 per cent per annum commencing July 1, 1980, in accordance with Section 61-128 of the act.

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

Respectfully submitted,

GEORGE B, BUCK CONSULTING ACTUARIES, INC.

Thomas J. Calaraugh, F.S.A.

Consulting Actuary

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REPORT ON AN ACTUARIAL VALUATION OF THE SOUTH CAROLINA RETIREMENT SYSTEM PREPARED AS OF JUNE 30, 1980

SECTION 1 - SUMMARY OF PRINCIPAL RESULTS

 For convenience of reference, the principal results of the valuation and a comparison with the preceding valuation's results are summarized below:

Valuation Date	6/30/80	6/30/78
Number of active members: Men	52,326 : 88,563 :	51,596 82,236
Women		133,832
Total	140,889	177,072
Annual earnable compensation of active members during year: Men Women	\$ 712,727,129 902,491,868	\$ 575,916,967 679,258,128
Total	: \$1,615,218,997	\$1,255,175,095
Number of retired members and beneficiaries Annual retirement allowances	22,833 22,833 5,924,224	: : 19,960 : \$ 60,048,573
Assets for valuation purposes	: \$1,780,539,829 :	: \$1,363,722,408 :
Normal contribution as per cent of compensation: Class One Service	: : : 2.11%	: : : 1.80
Class Two Service: State Others	2.98 2.49	4.12 3.34
Unfunded accrued liability (UAL)	\$ 458,637,583	: \$ 445,770,567 :
Unfunded accrued liability contribu- tion as per cent of payroll* Class One Service	: : 1.39%	: : : 1.70
Class Two Service: State Others	3.82 3.46	2.68
Unfunded accrued liability liquidation period (years)	n: : 12	: : 23-1/2
Number of cost-of-living increases to be granted after valuation date included in UAL	: : :	: : :
Pre-retirement death benefit contribution as per cent of payrol!	: : .30%	.3 : rease special fu

^{*}Includes .30% to be diverted to post-retirement increase special fund effective July 1, 1981.

- Comments on the valuation results as of June 30, 1980 are given in Section
 IV and further discussion of the contribution levels is set out in Section
 V. The amendment, effective June 4, 1979, lowering the eligibility for a
 deferred retirement allowance from 15 years of service to 5 years of
 service was recognized in this valuation.
- 3. Schedule B of this report outlines the full set of actuarial assumptions and method employed. The results of this valuation reflect the change in assumptions adopted by the Board. These changes consisted of an increase in the valuation interest rate from 5-1/4% to 7% and a strengthening of the assumed rates of salary increase. The provisions of the System are summarized in Schedule C.

SECTION 11 - MEMBERSHIP DATA

- 1. In order to obtain the aggregate liabilities and assets on account of members of the System as of June 30, 1980, 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, 1980 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, 1980 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, 1980.

TABLE I

THE NUMBER AND EARNABLE COMPENSATION OF ACTIVE MEMBERS
AS OF JUNE 30, 1980

	TOTAL		TEACHERS		EMPLOYEES	
GROUP :	Number	: Earnable : Compensation	<u>Number</u>	Earnable Compensation	Number	Earnable Compensation
Men	52,326	: :\$ 712,727,129	: :12,529	: :\$ 169,615,033	: :39,797	\$ 543,112,096
Women	. <u>88,563</u>	: :902,491,868	:46,924	480,088,683	41,639	422,403,185
Total	: :140,889 :	: :\$1,615,218,997 :	: :59,453 :	: :\$ 649,703,716 :	81,436	\$ 965,515,281

There are in addition 28,036 inactive members and 52,945 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, 1980.

TABLE II

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND BENEFICIARIES ON THE ROLL

AS OF JUNE 30, 1980

GROUP	NUMBER :	TOTAL ANNUAL RETIREMENT ALLOWANCES			
Service	Retirements				
Teachers: Men Women	1,884 9,430	\$ 8,077,642 33,759,880			
Employees: Men Women	4,143 3,138	15,424,754 9,155,794			
Total	•	\$ 66,418,070			
Disabilit	y Retirement	5			
Teachers: Men Women	: 265 : 860	: \$ 1,099,403 : 3,067,343			
Employees: Men Women	: : 1,010 : 529	; 3,160,666 ; 1,544,462			
Total	2,664	\$ 8,871,874			
Beneficiaries of Deceased Retired Members and Active Members					
Men Women	: 181 : 1,393	\$ 415,874 3,218,406			
Total	: 1,574	\$ 3,634,280			
Grand Total	22,833	\$ 78,924,224			

SECTION III - ASSETS

The amounts of the present assets taken into account in this valuation are at book value. 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, 1980, these assets amounted to \$516,679,204.

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 \$1,263,860,625 as of June 30, 1980.

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, 1980. The following comments on the valuation are pertinent:

The schedule shows that the System has actuarial liabilities of \$3,911,874,139, of which \$653,183,603 is for the prospective benefits payable on account of present retired members and beneficiaries, \$3,239,473,852 is for the prospective benefits payable on account of \$3,239,473,852 is for the prospective benefits payable on account of present active and inactive members, and \$19,216,684 is the reserve required to provide one additional lifetime cost-of-living increase of 4 per cent per annum commencing July 1, 1980. Against these liabilities, the System has present assets of \$1,780,539,829 and anticipated future contributions by members of \$1,094,364,003 leaving a balance of \$1,036,970,307 to be provided by future contributions of the employers. Of this amount, \$578,332,724 represents the present value of normal contributions by the employers and the balance of \$458,637,583 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:

For Class One employers, the total employer contribution rate may be continued at 3.50 per cent of earnable compensation of which 2.11 per cent is attributable to the normal contribution and 1.39 per cent is attributable to the accrued liability contribution for the period July 1, 1980 to June 30, 1981. It was assumed that, effective July 1, 1981, .30 per cent of compensation would be diverted to the new post-retirement increase special fund. This diversion would reduce the accrued liability contribution rate to 1.09 per cent effective July 1, 1981.

For Class Two employers, the total contribution rates may be continued at 6.80 per cent payable by the State and 5.95 per cent by the other Class Two employers. Of the total rates, 2.98 per cent and 2.49 per cent are attributable to normal contributions of the State and The accrued liability rates are other employers, respectively. therefore 3.82 per cent for the State and 3.46 per cent for other employers for the period July 1, 1980 to June 30, 1981. assumed that, effective July 1, 1981, .30 per cent of compensation would be diverted to the new post-retirement increase special fund. This diversion would reduce the accrued liability contribution rates to 3.52 per cent for the State and 3.16 per cent for other employers effective July 1, 1981. On this basis it is anticipated that the accrued liability of \$458,637,583 shown in the valuation balance sheet will be liquidated within a period of 12 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 \$11,322,258 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.

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.

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RATES OF	: CLASS :	CLASS	TWO
CONTRIBUTION	: ONE :	State	: Others
Normal	: 2.11%	2.98%	2.49%
Accrued Liability	1.39*	3.82*	3.46*
Pre-retirement Death Benefit	30	.30	.30
Total	3.80%	7.10%	: : 6.25%

^{*}Reduced by .30% effective July 1, 1981.

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 method employed is presented in Schedule B.

.30%

SCHEDULE A

RESULTS OF THE VALUATION AS OF JUNE 30, 1980

(1)	Actuarial Liabilities	
	Present value of prospective benefits payable in respect of:	
	(a) Present retired members and beneficiaries	\$ 653,183,603
	(b) Present active and inactive members	3,239,473,852
	(c) One cost-of-living increase commencing 7/1/80	19,216,684
	(d) Total actuarial liabilities	\$3,911,874,139
(2)	Assets of the System	1,780,539,829
(3)	Unfunded Value of Prospective Benefits = $(1)(d)$ - (2)	\$2,131,334,310
(4)	Present Value of Future Contributions By Members	1,094,364,003
(5)	Total Prospective Contributions by Employers = (3) - (4)	\$1,036,970,307
(6)	Present Values of 1 Per Cent of Future Compensation	
	(a) Class One Service(b) Class Two Service: State(c) Class Two Service: Others	\$ 1,152,707 172,186,088 25,215,249
(7)	Present Value of Future Normal Contributions By Employers At	
	(a) $2.11\% = (6)(a) \times 2.11$ (b) $2.98\% = (6)(b) \times 2.98$ (c) $2.49\% = (6)(c) \times 2.49$	\$ 2,432,212 513,114,542 62,785,970
	(d) Total	\$ 578,332,724
(8)	Present Value of Accrued Liability Contributions By Employers = $(5) - (7)(d)$	\$ 458,637,583
(9)	Accrued Liability Rates (effective 7/1/81)	
	(a) Class One Service(b) Class Two Service: State(c) Class Two Service: Others	1.09% 3.52 3.16
(10)	Accrued Liability Liquidation Period	12 years

(11) Pre-Retirement Death Benefit Contribution Rate

SCHEDULE B OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHOD

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:

<u>Age</u>	With- drawal	<u>Death</u>	Disa- bility	Annual Rat Service Retirement	With-	Death	Disa- bility	Service Retirement
		Men T	eachers			Women	Teachers	
20 25 30 35 40 45 50 60 64	11.11% 9.97 7.91 6.06 4.67 3.67 2.83 2.03	.04% .05 .08 .12 .18 .25 .35 .50 .70	.01% .01 .02 .03 .06 .11 .20 .34 .59	4.00% 5.50 7.50 20.00	13.79% 12.83 9.12 5.61 3.43 2.33 1.74 1.18	.03% .03 .04 .06 .08 .13 .20 .29 .45	.02% .03 .04 .04 .07 .12 .20 .35 .61	4.00% 6.00 8.00 35.00
	With- drawal	Death	Disa- bility	Service Retirement	·	<u>Sala</u>	ry Incre	ease
		<u>En</u>	ployees			Teacher	s and Em	ployees
20 25 30 35 40 45 50 560 64	11.11% 9.97 7.91 6.06 4.67 3.67 2.83 2.03	.07% .09 .11 .14 .18 .28 .46 .75 1.08	.04% .04 .06 .08 .10 .15 .25 .40 .61	2.00% 3.50 5.00 17.50			11.31% 10.40 9.00 7.30 6.51 6.10 5.80 5.60 5.40 5.30	

DEATHS AFTER RETIREMENT: Combined Annuity Mortality Tables, Modified and Makehamized, for service retirement and dependent beneficiaries with a 2 year set back in ages for men employees, a 3 year set back for women employees, men teachers and men dependents and a 4 year set back for women teachers and women dependents. A special mortality table is used for disability retirements.

LOADING OR CONTINGENCY RESERVES: None.

VALUATION METHOD: Projected benefit method 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.

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 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

Amount of 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.

Effective July 1, 1976 on service retirement, a Class One member receives a retirement allowance equal to 1 per cent of the portion of his average final compensation not in excess of \$4,800, plus 1.30 per cent 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 per cent of the portion of his average final compensation not in excess of \$4,800, plus 1.65 per cent 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 5/12 of 1 per cent 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 per cent 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

Amount of 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.

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 without further change in compensation to age 65, minus the actuarial equivalent of the contributions he would have made during such continued service.

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

Amount of Allowance

Supplemental Minimum Allowance

Return of Contributions and Optional Death Benefit

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.

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.

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 per cent 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.

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 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.

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.

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-

Lump Sum Death Benefit

Optional Allowance

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.

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%. 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 per cent, 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. "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 valuations if benefits are subsequent Such rate may be decreased if increased. the actuary engaged by the Board certifies that such reduction will not impair the 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 per cent of payroll will be diverted from the accrued liability rate to the post-retirement increase special fund and employers will make an additional .20 per cent of payroll contribution to that fund.

SCHEDULE D

TABLE 1

THE NUMBER AND EARNABLE COMPENSATION OF MEMBERS DISTRIBUTED BY AGE AS OF JUNE 30,1980

MEN			WOMEN		
	·			AMOUNT	
AGE	NUMBER	AMOUNT	NUMBER	ANOUNT	
	74	37,186	6\$	42,535	
16	7\$	50,757	7	27,749	
17	15	324,665	65	237,890	
18	91	1,617,648	296	1,496,597	
19	317	2,914,572	582	3,245,544	
20	513	4,272,279	964	6,319,223	
21	663	5,725,478	1,316	9,182,490	
22	821	7,949,327	2,481	19,470,051	
23	1:047	10,512,560	3.025	26,376,114	
24	1,260	12,370,649	3,300	30,731,792	
25	1,369	14,397,865	3,576	34,481,857	
26	1,507	16,421,054	3,651	35,871,807	
27	1,602	18,359,201	3,736	38,295,767	
28	1,669	19,972,126	3,591	37,360,906	
29	1,727	21,692,000	3,451	36,512,280	
30	1,793	23,912,754	3,264	35,042,356	
31	1,859	24,065,146	3,149	34,048,154	
32	1.782	26,925,727	3,320	35,734,311	
33	1,928	24,841,078	2.857	30,372,708	
34	1,722	21,361,364	2,240	23,555,178	
35	1,435	21,528,271	2,224	23,436,018	
36	1,404	21,568,089	2,271	23,811,727	
37	1,350	19,562,466	2,200	22,650,536	
38	1,207	18,484,403	1,903	20,225,649	
39	1,146	17,985,281	1,803	18,863,790	
40	1,100	16,591,261	1,757	18,159,091	
41	1.022	17,393,115	1,706	18,036,176	
42	1,064	14, 896, 895	1,672	16,959,688	
43	932	16,172,405	1,550	16,051,572	
44	1,021	16,060,240	1,663	17,023,497	
45	1,015	16,753,182	1,595	16,660,455	
46	1,034 996	16,189,538	1,542	16,413,550	
47		17,798,295	1,642	17,214,361	
48	1,118	15,102,159	1,516	16,488,236	
49	945	15,894,820	1,461	15,934,103	
50	1,018 989	15,814,313	1,556	16,482,600	
51 52	991	15,090,371	1,528	16,724,092	
52 53	961	14,674,405	_	17,686,808	
53 54	913	14,147,281	1,393	14,978,189	
54 55		14,088,014		15,780,728	
55	938	Tak cool or	- •		

THE NUMBER AND EARNABLE COMPENSATION OF MEMBERS DISTRIBUTED BY AGE AS OF JUNE 30,1980

CONTINUED

	MEN		WOMEN		
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT	
56	907\$	14,171,223	1,398\$	15,250,768	
57	925	14,040,052	1,168	12,850,064	
58	945	13,930,950	1,256	13,802,159	
59	949	14,680,764	1,145	12,415,059	
60	841	12,484,723	1,090	12,084,242	
61	731	10,600,314	917	9,886,488	
62	709	10,190,194	731	8,094,418	
63	488	7,542,999	568	6,166,271	
64	438	6,823,841	464	5,026,094	
65	294	4,525,797	306	3,356,284	
66	217	2,946,769	217	2,202,982	
67	151	2,102,472	137	1,229,207	
68	131	1,768,269	86	646,274	
69	73	839,751	66	510 , 943	
70	60	723,110	43	370,097	
71	52	643,932	18	184,396	
72	32	294,994	21	214,326	
73	28	258,094	7	87,708	
74	24	248,171	8	61,738	
75	9	100,359	4	27,387	
76	12	112,262	1	11,795	
77	8	70,306	1	13,344	
78	1	4,740	1	10,198	
79	6	47,776	1	3,451	
81	1	19,810		•	
82	1	15,000			
83	2	22,217			
TOTAL	52,326\$	712,727,129	88,563\$	902,491,868	

SUMMARY

TEACHERS 12,529\$ 169,615,033 46,924\$ 480,088,683 EMPLOYEES 39,797\$ 543,112,096 41,639\$ 422,403,185

SEE FOOTNOTE TABLE I

THE NUMBER AND EARNABLE COMPENSATION OF MEMBERS DISTRIBUTED BY YEARS OF SERVICE AS OF JUNE 30,1980

OF SERVICE NUMBER AMOUNT NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER AMOUNT NUMBER OF SERVICE NUMBER OF SERVICE NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER AMOUNT NUMBER AMOUNT NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER AMOUNT NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER AMOUNT NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER AMOUNT NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER AMOUNT NUMBER AMOUNT NUMBER OF SERVICE NUMBER AMOUNT NUMBER NU	
1 8,612 76,648,516 14,859 111,231,11,2 2 5,836 70,203,270 11,479 107,700,94,3,079 40,523,251 5,925 58,853,74,4,777 47,423,49,52,688 37,858,744 4,777 47,423,49,62,646,68,68,68,68,68,68,68,68,68,68,68,68,68	ſ
1 8,612 76,648,516 14,859 111,231,112 2 5,836 70,203,270 11,479 107,700,94 3 4,266 53,504,866 8,098 79,693,91 4 3,079 40,523,251 5,925 58,853,74 5 2,688 37,858,744 4,777 47,423,49 6 2,892 40,814,382 5,297 54,780,89 7 2,705 40,112,191 4,272 46,363,94 8 2,221 34,938,274 3,672 40,460,91 9 1,871 30,135,326 3,303 37,332,63 10 1,696 27,563,500 2,961 33,269,89 11 1,619 26,098,227 2,516 29,758,94 12 1,233 20,987,133 2,114 25,095,71 12 1,233 19,835,554 1,723 20,746,68 14 1,070 18,864,418 1,663 19,628,88 15 872 15,373,472 1,103 14,145,82 16 719 12,235,367 1,206 15,092,64	
2 5.836 70,203,270 11,479 107,700,94 3 4,266 53,504,866 8,098 79,693,91 4 3,079 40,523,251 5,925 58,853,74 5 2,688 37,858,744 4,777 47,423,49 6 2,892 40,814,382 5,297 54,780,89 7 2,705 40,112,191 4,272 46,363,94 8 2,221 34,938,274 3,672 40,460,91 9 1,871 30,135,326 3,303 37,332,63 10 1,696 27,563,500 2,961 33,269,89 11 1,619 26,098,227 2,516 29,758,94 12 1,233 20,987,133 2,114 25,095,71 12 1,233 19,835,554 1,723 20,746,68 14 1,070 18,864,418 1,663 19,628,88 15 872 15,373,472 1,103 14,145,82 16 719 12,235,367 1,206 15,092,64	
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4 3,079 40,523,251 5,925 58,853,74 5 2,688 37,858,744 4,777 47,423,49 6 2,892 40,814,382 5,297 54,780,89 7 2,705 40,112,191 4,272 46,363,94 8 2,221 34,938,274 3,672 40,460,91 9 1,871 30,135,326 3,303 37,332,63 10 1,696 27,563,500 2,961 33,269,89 11 1,619 26,098,227 2,516 29,758,94 12 1,233 20,987,133 2,114 25,095,71 13 1,138 19,835,554 1,723 20,746,68 14 1,070 18,864,418 1,663 19,628,88 15 872 15,373,472 1,103 14,145,82 16 719 12,235,367 1,206 15,092,64 17 612 10,861,981 932 12,393,91	
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11 1,619 26,098,227 2,516 29,758,94 12 1,233 20,987,133 2,114 25,095,71 13 1,138 19,835,554 1,723 20,746,68 14 1,070 18,864,418 1,663 19,628,88 15 872 15,373,472 1,103 14,145,82 16 719 12,235,367 1,206 15,092,64	
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15 872 15,373,472 1,103 14,145,82 16 719 12,235,367 1,206 15,092,64	
16 719 12,235,367 1,206 15,092,64	
17 612 10.861.981 932 12.393.91	
)	
18 566 10,345,579 835 10,898,72	
19 507 9,283,053 692 9,569,13	
20 496 9-004-231 617 8,512,44	
21 458 8,334,277 649 9,169,62	
22 422 7,810,468 508 7,153,8	
33 459 8.652.967 586 8.482.9	
24 387 7,140,833 519 7,317,93	
399 7,305,347 578 8,200,30	
326 6.029.214 409 6.027.69	
37 308 5.648.341 414 6.141.30	
28 243 4.326.140 338 4.949.7	
324 6.065.634 358 5.316.9	
256 5.239.468 309 4,530,5	
31 221 4,401,513 299 4,367,2	
3.157.888 171 2.691.9	
23 124 2,671,726 187 2,741,3	
84 1.999,687 138 2,081,3	
35 34 583,708 125 1,896,2	52

THE NUMBER AND EARNABLE COMPENSATION OF MEMBERS DISTRIBUTED BY YEARS OF SERVICE AS OF JUNE 30,1980

CONTINUED

YEARS		MEN	WOMEN		
OF SERVICE	NUMBER	AMOUNT	NUMBER	AMOUNT	
24	25\$	529,954	94\$	1,458,647	
36 37	23	463,982	115	1,784,929	
37	20	489,429	90	1,399,437	
38	31	724,643	68	1,053,321	
39	28	718,000	52	816,735	
40 41	15	409,802	46	690,869	
41	13	378,183	31	518,374	
42	10	280,986	23	375,512	
43	7	184,504	11	196,675	
44	7	164,637	7	80,285	
45	i	26,825	5	75,399	
46	1	20,023	5	89,475	
47	1	27,948	2	31,876	
48	1 2	19,511	2	25,277	
49	2	134711	ī	11,795	
54			•	,	
TOTAL	52,326\$	712,727,129	88,563\$	902,491,868	

SUMMARY

TEACHERS 12,529\$ 169,615,033 46,924\$ 480,088,683 EMPLOYEES 39,797\$ 543,112,096 41,639\$ 422,403,185

SEE FOOTNOTE TABLE I

TABLE 3

THE DISTRIBUTION OF THE YUMBER AND ARNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND BENEFICIARIES BY AGE AS OF JUNE 30,1980

SERVICE RETIREMENTS AND BENEFICIARIES

	M	EN	WOMEN		
AGE	NUMBER	THUUNA	NUMBER	AMOUNT	
14			1 \$	1,369	
19	2 \$	8 , 65 8	1	414	
20	1	1,515	1	433	
21			1	3,268	
23	2	5,065			
24			2	1,778	
25	3	8,169	3	8,523	
27	1	5,098		*	
28	2	3,740	3	8,362	
29	2	5,041	5	2,567	
30		-	1	1,710	
31	3	6,493			
32	4	5,701	1	3,635	
33	i	1,214	2 .	4,481	
34	ī	670	2 . 3	2,297	
35	$\bar{2}$	2,771	5	8,340	
36	ĩ	151			
37	5	5,899	1	335	
38	1	1,156	5	8,017	
39	2	1,854	4	3,874	
40	2	1,576	3	10,962	
41		-,	4	7,961	
42	2	1,136	5	14,995	
43	1	3,556	3	1,949	
44	4	5,756	4	4,677	
45	ż	8,611	5	15,876	
46	2	4,310	4	10,567	
47	7	11,102	6	20,055	
48	2	8,836	12	31,348	
49	3	16,659	11	15,675	
50	4	19,044	25	81,467	
51	4	29,241	17	56,762	
52	6	25,279	24	97,156	
52 53	11	80,257	30	139,172	
55 54	14	103,235	38	216,424	
55	29	196,945	47	244,862	
99	£ 2	7,01,.2	• •	· · · ·	

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND BENEFICIARIES BY AGE AS OF JUNE 30,1980

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

	;	MEN		VIONEN	
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT	
56	22 \$	115,524	64 \$	333,452	
57	31	266,968	70	409,565	
58	36	265,130	98	570,073	
59	49	429,267	120	713,660	
60	50	348,287	179	1,020,982	
61	08	521,174	237	1,166,872	
62	128	772,318	317	1,323,974	
63	204	762,006	439	1,724,043	
64	276	1,238,790	537	1,967,520	
65	309	1,316,421	555	2,177,434	
66	379	1,495,970	673	2,547,964	
67	432	1,650,672	692	2,533,494	
68	405	1,521,132	784	2,714,499	
69	434	1,630,550	744	2,619,290	
70	426	1,630,137	772	2,547,175	
71	3 7 0	1,407,791	763	2,733,699	
72	328	1,277,849	743	2,439,658	
73	267	926,034	708	2,473,127	
74	284	1,035,155	613	1,903,781	
75	254	877,554	616	1,839,471	
76	212	736,523	570	1,702,808	
77	193	578,340	463	1,366,164	
7ε	165	420,061	435	1,119,509	
79	116	461,098	354	924,316	
80	132	401,953	430	1,007,383	
81	85	216,760	264	600,398	
82	61	192,456	263	573,002	
83	66	183,793	182	362,776	
84	60	150,562	175	318,103.	
85	62	131,364	166	300,100	
86	39	91,939	137	257,620	
87	41	97,455	125	210,001	
88	27	65,77 9	92	146,036	
89	6	13,476	72	117,302	
90	16	34, 347	77	128,291	

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND BENEFICIARIES BY AGE AS OF JUNE 30,1980

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

		MEN		WOMEN
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
91	12 \$	17,632	50 \$	73,212
S 2	3	9,147	35	47,751
93	10	17,659	24	30,803
94	3	6,271	13	15,952
95	4	7,179	12	18,171
96	1	3,275	7	10,364
97	1	776	2	3,717
98			3	1,037
93	1	3,022	3 2 2	1,382
101	1	311	2	650
102			1 .	2,908
107			1	3,995
109			1	184
110			2	1,051
112	1	179	_	
TOTAL	6,208 \$	23,918,270	13,961 \$	46,134,080
SUMMARY				
LIFE				
ANNUITY	2,615 \$	8,189,073	8,358 \$	27,938,490
CASH				
REFUND	1,070	4,299,263	1,637	6,065,676
100% J+S	1,113	3,473,618	1,342	3,422,477
50% J+S	1,049	6,026,335	770	2,204,342
SGC. SEC.				
LEVELING BENEFIC	180	1,514,107	461	3,284,189
IARIES	181	415,874	1,393	3,218,406

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY AGE AS OF JUNE 30,1980

DISABILITY RETIREMENTS

ř		EM .	NOMEN	
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
25			1 \$	1,990
26			1	2,044
28	1 \$	1,222	_	6,617
29	1	2,548	3	4,424
50	4	7,563	2	4,495
31	2	5,340	2	10.242
32			3 2	6,059
33	2	6,563	3	9,945
34		52 55 4 TH	4	15,243
35	2	8,867	3	8,391
36	6	31,238	5 5	16,913
37	4	13,255	9	30,585
58	2	5,333		24,535
39	7	20,972	6 2	6,944
40	8	50,221		13,680
41	5	13,792	5 6	13,068
42	7	23,976	7	21,200
43	7	26,552	è	20,041
44	7	22,111	8	23,474
45	g	28,449	9	39,104
46	17	47,632	19	54,389
47	17	91,782	14	50,106
48	20	79,149	17	72,919
49	17	102,210	18	69,405
50	17	63,491	25	76,892
51	33	100,837	23	105,141
52	31	131,857	27	85,642
53	27	125,660 105,175	47	177,340
54	28	148,540	41	198,125
55	47	145,485	39	154,798
56	42	210,034	55	224,181
5 7	49	213,664		211,541
58	58 73	277,106	77	295,010
59	72 45	254,940		305,643
60	65	231,819		320,834
61	80	264,147		282,434
62	81 ∴4	262,625		339,518
63	ိုင် ၈၈	306,866		284,454
64	90 71	209,611		259,796
65	71	184,037		207,837
56		159,352		164,522
67	56 42	30,268	_	130,414
68	21	44,074		87,135
69 70	20	47,44	-	52,076
70	20			

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY AGE AS OF JUNE 30,1980

DISABILITY RETIREMENTS

CONTINUED

	MEN		WOMEN	
AGE	NUMBER	AMCUNT	NUMBER	AMOUNT
	9 \$	14,073	19 \$	41,178
71	5 5	7,460	13	17,746
72	g	12,876	9	14,065
73	7	10,000	. 8	7 + 443
74 75	5	6,564	10	14,081
7 5	í	533	4	3,589
76 77	2	3,669	4	5,323
77	1	300	5	4,936
78 70	3	3,637	1	1,610
79	1	1,924	5	6,249
80		-,	4	2,523
81			2	1,354
82	1	309	4	2,512
83	T.	•	. 1	647
84	1	1,477	5	3,022
85			1	406
86	1	366	1	798
88	2	11,071	2	1,177
3 9			1 200 \$	4,611,805
TOTAL	1,275 \$	4,260,069	1,389 \$	4,011,000
SUMMARY				
LIFE ANNUITY	632 \$	2,338,665	1,085 \$	3,667,361
CASH	1.00	679,064	155	530,118
REFUND	189	598,209	98	244,821.
100% J+S	277	644, 131	50	163,777
50% J+S	177	0444 771		
SOC. SEC. LEVELING			1.	5 , 728