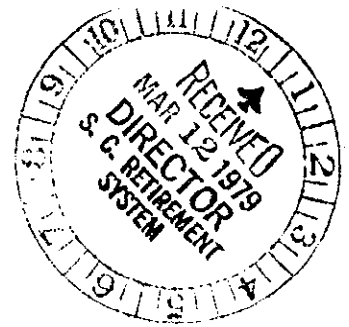


SOUTH CAROLINA RETIREMENT SYSTEM
REPORT OF THE ACTUARY ON
THE TWENTY-EIGHTH VALUATION
PREPARED AS OF JUNE 30, 1978

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



March 5, 1979

BUCK
CONSULTANTS

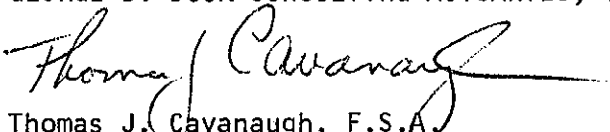
Mr. Purvis W. Collins, Director
South Carolina Retirement System
P.O. Box 11960 - Capitol Station
Columbia, South Carolina 29211

Dear Mr. Collins:

I am sending you herewith the signed bound copy of the "South Carolina Retirement System Report of the Actuary on the Twenty-Eighth Valuation Prepared as of June 30, 1978".

Very truly yours,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.


Thomas J. Cavanaugh, F.S.A.
Associate Consulting Actuary

TJC:YEH
Enc.

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

January 26, 1979

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

BUCK
CONSULTANTS

Gentlemen:

We transmit herewith our report on the twenty-eighth actuarial valuation of the South Carolina Retirement System, prepared as of June 30, 1978.

The valuation indicates that exclusive of the pre-retirement death benefit, for Class One employers the total contribution rate payable may be continued at 3.50 per cent of earnable compensation, and for Class Two employers the contribution rates 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-of-living increase of 4 per cent per annum commencing July 1, 1978, in accordance with Section 61-128 of the act.

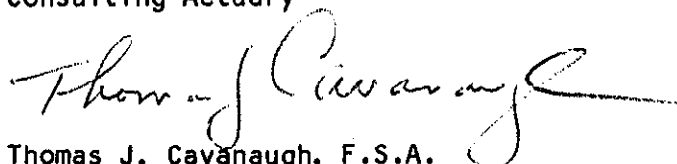
We trust that the report is in satisfactory form for use by the Board.

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.



Hugh Gillespie
Consulting Actuary



Thomas J. Cavanaugh, F.S.A.
Associate Consulting Actuary

REPORT OF THE ACTUARY ON THE TWENTY-EIGHTH VALUATION OF
THE SOUTH CAROLINA RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1978

The South Carolina Retirement System was established as of July 1, 1945. The System is supported by the joint contributions of members and employers. The contributions to be made by employers are set from time to time on the basis of periodic actuarial valuations.

This report presents the results of an actuarial valuation of the contingent assets and liabilities of the System as of June 30, 1978, and gives the percentage rates of contribution payable by Class One and Class Two employers. At the end of the report are tables showing the distribution of the members classified by age and by years of service, and of retired members and beneficiaries classified by age.

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.

The amendment, effective July 1, 1978, decreasing the service requirement for optional death benefits from 35 to 30 years was taken into account in this valuation.

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

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.

An employee must retire at age 70 except that with the approval of both his employer and the Board, an employee may remain in service to age 72, or for such period of time as may be necessary for such employee to qualify for coverage under the old age and survivors insurance provision of Title II of the Federal Social Security Act, as amended.

A teacher must retire at age 65 or upon the completion of the scholastic year in which he attains age 65, except that with the approval of his employer, a teacher may remain in service to age 72.

On and after July 1, 1971, it is mandatory for an employee or teacher to retire no later than 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 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 $\frac{5}{12}$ 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

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 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

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 15 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 $\frac{5}{12}$ 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.

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 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.

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 such increase in allowances after the first five such increases becomes effective only if the additional liabilities on account of such increase in allowances do not require an increase in the employer rate of contribution. Any increase in allowance granted hereunder 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 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. 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.

MEMBERSHIP OF THE SYSTEM

In order to obtain the aggregate liabilities and assets on account of members of the System as of June 30, 1978, data were needed with respect to each active member and beneficiary of the System and also with respect to terminations during the valuation year. These data were furnished to the actuary by the Retirement System office on a magnetic tape.

The following table shows the number and annual earnable compensation of active members, as of June 30, 1978, on the basis of which the valuation was prepared.

TABLE I
THE NUMBER AND EARNABLE COMPENSATION OF ACTIVE MEMBERS
AS OF JUNE 30, 1978

GROUP	TOTAL		TEACHERS		EMPLOYEES	
	Number	Earnable Compensation	Number	Earnable Compensation	Number	Earnable Compensation
Men	51,596	\$ 575,916,967	11,667	\$ 137,166,979	39,929	\$ 438,749,988
Women	82,236	679,258,128	41,840	355,791,748	40,396	323,466,380
Total	133,832	\$1,255,175,095	53,507	\$ 492,958,727	80,325	\$ 762,216,368

There are in addition 28,271 inactive members and 47,376 active members not on the payroll as of the valuation date. The results of the valuation were adjusted to take these members into account.

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, 1978.

TABLE 11

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
RETIRED MEMBERS AND BENEFICIARIES ON THE ROLL
AS OF JUNE 30, 1978

GROUP	NUMBER	TOTAL ANNUAL RETIREMENT ALLOWANCES
Service Retirements		
Teachers:		
Men	1,679	\$ 6,309,391
Women	8,677	26,950,848
Employees:		
Men	3,535	11,447,157
Women	2,654	6,712,973
Total	16,545	\$ 51,420,369
Disability Retirements		
Teachers:		
Men	215	\$ 803,892
Women	710	2,120,474
Employees:		
Men	799	2,198,045
Women	345	816,997
Total	2,069	\$ 5,939,408
Beneficiaries of Deceased Retired Members and Active Members		
Men	152	\$ 294,679
Women	1,194	2,394,117
Total	1,346	\$ 2,688,796
Grand Total	19,960	\$ 60,048,573

VALUATION OF ASSETS AND LIABILITIES

The following valuation balance sheet shows the assets and liabilities of the System as of June 30, 1978. The amounts of the present assets shown at book value on the balance sheet were taken from financial information submitted by the Director of the System and exclude reserve assets creditable to the Group Life Insurance Fund for pre-retirement lump sum death benefits. Liabilities for the death benefits are not shown on the balance sheet since they are provided on a one-year term cost basis.

TABLE III

VALUATION BALANCE SHEET SHOWING THE ASSETS AND LIABILITIES OF
THE SOUTH CAROLINA RETIREMENT SYSTEM
AS OF JUNE 30, 1978

ASSETS	
Present assets of System creditable to:	
Employee annuity savings fund	\$ 393,901,596
Employer annuity accumulation fund	<u>969,820,812</u>
Total Present Assets	\$ 1,363,722,408
Prospective contributions to the employer annuity accumulation fund:	
Normal contributions	\$ 543,552,359
Accrued liability contributions	<u>445,770,567</u>
Total Prospective Contributions by Employers	<u>989,322,926</u>
Total Assets	<u><u>\$ 2,353,045,334</u></u>
LIABILITIES	
Present value of benefits on account of which contributions have been accumulated to date in the employee annuity savings fund	
	\$ 393,901,596
Present value of benefits payable on account of retired members or their beneficiaries now drawing benefits from the employer annuity accumulation fund	
	563,664,620
Present value of benefits to active members and former members with vested rights to be paid by contributions of the employers into the employer annuity accumulation fund	
	1,372,932,533
Reserve for future increases in retirement allowances	
	<u>22,546,585</u>
Total Liabilities	<u><u>\$ 2,353,045,334</u></u>

RESULTS OF VALUATION

The valuation balance sheet gives the following information with respect to the funds of the System.

Employee Annuity Savings Fund

The employee annuity savings fund is the fund to which are credited the contributions made by members together with interest thereon. When a member retires, the amount of his accumulated contributions is transferred from the employee annuity savings fund to the employer annuity accumulation fund and his annuity is paid from the latter fund. The assets credited to the employee annuity savings fund on June 30, 1978, which represent the accumulated contributions of members to that date, amounted to \$393,901,596. The liabilities of this fund are also shown as \$393,901,596. Future contributions into this fund and benefits payable from such contributions are considered to be of equivalent value and hence are not shown in the balance sheet.

Employer Annuity Accumulation Fund

The employer annuity accumulation fund is the 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 present assets creditable to the employer annuity accumulation fund on June 30, 1978 amounted to \$969,820,812. The liabilities on account of active members and former members with vested rights amounted to \$1,372,932,533. In addition, the balance sheet indicates liabilities of \$563,664,620 on account of all benefits payable to retired members or their beneficiaries from the employer annuity accumulation fund. The balance sheet also shows a reserve of \$22,546,585 for future increases in retirement allowances effective after the valuation date to provide one additional lifetime cost-of-living increase of 4 per cent per annum commencing July 1, 1978. The total liabilities, therefore, amounted to \$1,959,143,738. The difference between these liabilities and the present assets credited to this fund is \$989,322,926, which represents the present value of future contributions to be made by the employers. Of this amount \$543,552,359 represents the present value of prospective normal contributions by the employers and the balance of \$445,770,567 represents the present value of prospective 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 1.80 per cent is attributable to the normal contribution and 1.70 per cent is attributable to the accrued liability contribution.

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, 4.12 per cent and 3.34 per cent are attributable to normal contributions of the State and other employers respectively. The accrued liability rates are 2.68 per cent for the State and 2.61 per cent for other employers. It is anticipated that the accrued liability of \$445,770,567 shown in the balance sheet will be liquidated within a period of 23.5 years from the valuation date.

If provision were made for two additional lifetime cost-of-living increases of 4 per cent per annum commencing July 1, 1978, the reserve required would be \$47,399,636. This exceeds the reserve shown in the balance sheet by \$24,853,051. The resultant accrued liability of \$470,623,618 would be liquidated within a period of 23.5 years from the valuation date if the accrued liability contribution rates were increased by .15 per cent of earnable compensation.

The rate necessary to provide the pre-retirement lump sum death benefit on a one-year term cost basis may be continued at last year's rate of .30 per cent of earnable compensation, on the basis of the valuation and in view of the development of reserve assets of \$6,944,126 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.

RATES OF PAYMENT TO EMPLOYER ANNUITY ACCUMULATION FUND

The valuation balance sheet gives the basis for determining the percentage rates for fixing the contributions to be made by employers to the employer annuity accumulation fund under the provisions of the retirement act. The following table gives the rates of contribution payable by employers, as determined on the basis of the present valuation.

TABLE IV

RATES OF CONTRIBUTION RECOMMENDED FOR PAYMENT BY EMPLOYERS ON THE BASIS OF THE VALUATION AS OF JUNE 30, 1978

RATES OF CONTRIBUTION	CLASS ONE	CLASS TWO	
		State	Others
Normal	1.80%	4.12%	3.34%
Accrued Liability	1.70	2.68	2.61
Pre-retirement Death Benefit	.30	.30	.30
Total	3.80%	7.10%	6.25%

BASIS FOR VALUATION

The valuation of the Retirement System was made on the basis of the rates of separation, salary scale and mortality tables which were adopted by the Board on June 11, 1974. An interest rate of 5-1/4 per cent per annum was used. An outline of the actuarial assumptions and method employed is included on the following page.

A detailed record of each member of the System on the valuation date was required as a basis for determining the contingent assets and liabilities of the System. Summaries of the tabulations of the data submitted are given in the following tables.

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHOD

INTEREST RATE: 5-1/4% per annum, compounded annually.

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

Age	With- drawal	Death	Disa- bility	Annual Rate of		Death	Disa- bility	Service Retirement
				Service Retirement	With- drawal			
<u>Men Teachers</u>				<u>Women Teachers</u>				
20	11.11%	.04%	.01%		13.79%	.03%	.02%	
25	9.97	.05	.01		12.83	.03	.03	
30	7.91	.08	.02		9.12	.04	.04	
35	6.06	.12	.03		5.61	.06	.04	
40	4.67	.18	.06		3.43	.08	.07	
45	3.67	.25	.11		2.33	.13	.12	
50	2.83	.35	.20	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

	<u>With- drawal</u>	<u>Death</u>	<u>Disa- bility</u>	<u>Service Retirement</u>	<u>Salary Increase</u>
	<u>Employees</u>				<u>Teachers and Employees</u>
20	11.11%	.07%	.04%		8.31%
25	9.97	.09	.04		7.40
30	7.91	.11	.06		6.00
35	6.06	.14	.08		4.30
40	4.67	.18	.10		3.51
45	3.67	.28	.15		3.10
50	2.83	.46	.25	2.00%	2.80
55	2.03	.75	.40	3.50	2.60
60		1.08	.61	5.00	2.40
64		1.36	.85	17.50	2.30

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.

TABLE 1

THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
AGE AS OF JUNE 30, 1978

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
17	34	\$ 100,630	13	\$ 27,229
18	92	329,187	94	307,488
19	358	1,424,746	422	1,882,445
20	617	2,750,755	690	3,287,443
21	768	3,749,757	1,089	5,593,695
22	970	5,388,953	1,650	9,686,555
23	1,195	7,302,362	2,738	18,393,306
24	1,346	9,344,015	3,470	25,020,514
25	1,566	11,891,699	3,613	27,604,255
26	1,699	13,943,750	3,746	30,158,856
27	1,709	15,201,464	3,641	29,926,136
28	1,797	16,774,783	3,459	29,117,487
29	1,876	18,935,528	3,274	27,942,663
30	1,809	19,336,987	3,026	26,420,093
31	1,954	21,676,939	3,158	27,513,134
32	1,727	20,022,413	2,641	22,796,494
33	1,445	17,011,849	2,033	17,221,375
34	1,352	16,874,924	2,014	17,104,584
35	1,343	17,302,561	2,045	17,597,873
36	1,207	15,688,672	2,014	16,823,295
37	1,145	15,388,746	1,724	14,486,500
38	1,109	14,682,579	1,662	13,724,814
39	986	13,087,378	1,610	13,364,382
40	1,043	13,925,903	1,574	13,237,431
41	891	12,081,236	1,523	12,600,934
42	993	13,082,004	1,455	11,924,632
43	969	12,469,112	1,545	12,793,169
44	998	13,382,211	1,490	12,480,297
45	1,000	13,295,538	1,493	12,835,966
46	1,085	14,590,599	1,577	13,243,990
47	942	12,497,423	1,433	12,798,758
48	1,038	13,322,026	1,454	12,989,397
49	1,009	13,051,270	1,530	13,284,389
50	1,002	12,648,010	1,515	13,435,340
51	976	12,318,784	1,588	14,339,003
52	918	11,550,656	1,388	12,229,340
53	969	12,134,847	1,489	13,356,535
54	939	12,104,381	1,391	12,375,817
55	963	12,287,600	1,240	11,333,760

THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
AGE AS OF JUNE 30, 1978

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	972	\$ 12,220,639	1,303	\$ 11,843,195
57	986	12,480,735	1,219	11,031,406
58	916	11,068,356	1,177	10,746,675
59	840	10,049,346	1,082	9,544,776
60	855	9,924,075	910	8,249,359
61	694	8,295,218	801	7,173,019
62	645	8,033,606	685	5,977,661
63	426	5,203,900	457	4,253,539
64	406	4,513,642	401	3,598,304
65	315	3,833,494	254	2,233,528
66	199	2,458,930	153	1,213,749
67	114	1,262,355	93	733,325
68	89	978,115	57	424,907
69	87	836,967	45	325,676
70	58	558,478	35	273,354
71	48	307,013	13	99,619
72	44	454,111	22	139,157
73	16	177,992	12	81,091
74	16	102,614	1	10,896
75	11	50,041	1	10,362
76	6	21,596	2	20,984
77	7	39,692	1	2,173
79	3	29,029		
80	2	45,653		
81	2	19,093	1	11,999
TOTAL	51,596	\$575,916,967	82,236	\$679,258,128

SUMMARY

TEACHERS	11,667	\$137,166,979	41,840	\$355,791,748
EMPLOYEES	39,929	\$438,749,988	40,396	\$323,466,380

SEE FOOTNOTE TABLE I

THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
YEARS OF SERVICE AS OF JUNE 30, 1978

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	4,557	\$ 34,525,188	6,429	\$ 45,208,584
1	8,542	62,597,169	13,995	88,397,346
2	4,864	45,904,301	8,911	63,131,036
3	3,844	39,987,705	6,563	47,914,914
4	3,935	42,025,605	6,877	52,674,460
5	3,465	39,782,069	5,394	44,197,862
6	2,685	33,180,268	4,430	37,568,950
7	2,278	28,828,002	3,898	34,098,467
8	2,024	26,071,476	3,431	29,790,864
9	1,904	24,301,427	2,854	26,288,005
10	1,456	19,942,734	2,395	22,479,277
11	1,334	18,336,175	1,920	18,204,880
12	1,241	17,646,777	1,871	17,335,056
13	976	13,707,433	1,236	12,607,499
14	828	11,318,906	1,362	13,617,403
15	707	10,045,006	1,014	10,916,181
16	645	9,565,781	920	9,654,332
17	596	8,715,117	768	8,733,583
18	555	8,236,548	702	7,836,978
19	518	7,575,320	717	8,278,560
20	475	7,304,565	577	6,679,390
21	514	7,919,101	654	7,776,796
22	453	6,748,415	599	7,063,834
23	458	6,781,684	676	7,960,356
24	369	5,485,688	472	5,868,553
25	345	5,075,342	458	5,609,145
26	291	4,320,139	385	4,702,192
27	371	5,621,571	427	5,233,656
28	309	5,111,449	348	4,201,681
29	285	4,603,853	359	4,388,231
30	171	3,118,924	208	2,794,484
31	167	3,017,080	229	2,886,007
32	102	1,976,533	176	2,264,323
33	43	610,519	150	1,902,016
34	36	610,968	116	1,523,050
35	36	608,485	148	1,995,044

THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
YEARS OF SERVICE AS OF JUNE 30, 1978

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	34	\$ 629,634	129	\$ 1,679,128
37	47	1,000,649	106	1,375,997
38	41	943,119	85	1,092,810
39	22	474,045	71	919,751
40	23	536,675	58	843,985
41	20	457,324	44	599,884
42	11	280,269	27	382,092
43	9	194,752	14	159,617
44	5	101,866	13	182,289
45			8	111,225
46	1	22,650	3	35,041
47	3	34,621	4	43,436
48	1	34,000	2	8,195
51			1	21,774
52			2	19,909

TOTAL 51,596 \$575,916,967 82,236 \$679,258,128

SUMMARY

TEACHERS 11,667 \$137,166,979 41,840 \$355,791,748
EMPLOYEES 39,929 \$438,749,988 40,396 \$323,466,380

SEE FOOTNOTE TABLE 1

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JUNE 30, 1978

SERVICE RETIREMENTS AND BENEFICIARIES

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
19			1 \$	3,022
22			1	156
23	3 \$	7,553	1	416
25	1	5,098		
26	1	811	1	716
27	1	1,998	2	1,052
29	3	10,860		
30	2	1,040	1	3,495
31	1	1,123	2	4,143
32	1	644	3	2,123
33	2	2,562	4	6,716
34	1	139		
35	4	5,879		
36	1	1,069	4	6,872
37	1	1,106	3	1,656
38	1	916	1	2,001
39			4	7,547
40	2	1,050	3	5,090
41	1	3,288	2	900
42	3	5,124	2	1,242
43	2	7,961	3	7,693
44	2	3,985	2	2,904
45	3	5,247	3	5,630
46	1	592	10	18,707
47	2	5,365	8	10,188
48	1	5,882	15	28,636
49	1	626	10	18,063
50	4	14,378	13	35,506
51	4	15,482	12	36,118
52	4	5,582	12	53,432
53	13	42,363	22	69,847
54	11	41,471	25	75,699
55	12	75,668	41	166,743

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JUNE 30, 1978

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	20	\$ 95,702	52	\$ 232,193
57	27	167,174	70	322,720
58	31	201,313	94	403,095
59	31	212,375	100	482,624
60	55	376,150	131	573,847
61	58	300,159	205	881,566
62	105	499,652	294	1,084,282
63	182	800,943	371	1,364,618
64	214	800,019	458	1,622,338
65	265	968,515	524	1,775,835
66	358	1,211,271	716	2,308,336
67	417	1,430,253	702	2,254,223
68	430	1,466,903	758	2,349,285
69	367	1,266,350	750	2,480,133
70	330	1,171,065	748	2,272,667
71	278	879,816	709	2,288,896
72	301	1,020,955	621	1,748,725
73	282	882,021	631	1,741,103
74	227	723,045	585	1,612,778
75	220	612,550	480	1,309,989
76	188	459,657	476	1,117,178
77	128	446,509	376	892,417
78	143	391,411	467	995,204
79	94	223,518	295	614,181
80	74	203,835	294	590,131
81	83	214,984	201	351,702
82	71	169,437	209	334,968
83	76	149,005	183	302,352
84	54	127,822	154	260,822
85	50	95,515	147	227,568
86	33	66,846	114	164,433
87	11	19,614	92	129,755
88	19	36,067	91	123,899
89	17	22,101	63	81,846
90	7	11,619	53	65,165

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AND BENEFICIARIES BY AGE AS OF JUNE 30, 1978

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
91	12 \$	19,740	33 \$	44,229
92	5	7,983	19	22,353
93	5	8,256	19	21,443
94	2	6,459	10	11,706
95	3	5,311	2	3,436
96			7	5,660
97	2	3,952	2	1,278
99	1	288	3	3,114
100			1	2,689
105			1	3,694
107			1	177
108			2	972
110	1	165		
TOTAL	5,366 \$	18,051,227	12,525 \$	36,057,938

SUMMARY

LIFE				
ANNUITY	2,386 \$	6,537,816	8,828 \$	24,860,661
CASH				
REFUND	1,020	3,657,224	1,623	5,412,321
100% J+S	825	2,193,000	297	702,868
50% J+S	897	4,748,064	350	1,198,958
SOC. SEC.				
LEVELING	86	620,444	233	1,489,013
BENEFIC				
IARIES	152	294,679	1,194	2,394,117

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY
AGE AS OF JUNE 30, 1978

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
23			1 \$	1,914
26	1 \$	1,175		
27			1	2,082
28	2	2,962		
29			1	2,750
30			2	5,297
31	1	3,430	2	5,688
32	1	3,041	1	1,778
34	7	16,757	1	2,720
35	3	10,676	3	6,382
36	2	4,992	1	3,571
37	4	10,953	2	9,680
38	5	17,682	1	4,576
39	3	8,662	3	9,679
40	1	4,666	3	4,501
41	4	16,063	4	11,152
42	4	29,943	2	6,065
43	4	15,713	4	6,714
44	14	35,614	5	15,967
45	8	52,469	11	31,432
46	11	38,796	11	39,170
47	8	30,289	14	46,658
48	12	36,033	11	35,375
49	26	92,427	16	41,060
50	21	101,031	11	43,935
51	12	35,754	14	30,173
52	21	80,917	33	99,777
53	38	120,161	14	57,790
54	33	108,876	28	117,968
55	34	105,161	34	106,984
56	42	142,892	33	99,426
57	48	182,163	49	136,022
58	49	179,944	53	190,187
59	48	122,148	57	166,156
60	55	128,491	66	171,788
61	74	244,487	65	238,502
62	78	220,683	74	215,543
63	69	197,966	79	243,804
64	71	169,151	67	183,950
65	61	189,822	54	149,770
66	47	77,860	50	120,852
67	23	45,060	38	87,161
68	21	44,312	26	48,278
69	9	13,011	20	40,172
70	7	13,792	14	18,475

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY
AGE AS OF JUNE 30, 1978

DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
71	11 \$	13,889	10 \$	15,041
72			9	8,048
73	6	8,627	12	15,264
74	2	830	4	3,318
75	2	3,391	4	4,920
76	1	278	6	5,916
77	3	3,363	3	3,609
78	2	3,309	5	6,409
79			4	2,334
80			3	3,119
81	1	286	4	2,323
82			1	599
83	1	1,366	6	3,295
84			1	376
85			1	150
86	1	338	1	738
87	2	10,235	2	1,088
TOTAL	1,014 \$	3,001,937	1,055 \$	2,937,471

SUMMARY

LIFE				
ANNUITY	454 \$	1,435,775	788 \$	2,201,651
CASH				
REFUND	172	591,908	153	450,574
100% J+S	235	454,890	75	171,918
50% J+S	152	518,504	38	108,033
SOC. SEC.				
LEVELING	1	860	1	5,295