SOUTH CAROLINA RETIREMENT SYSTEM

REPORT OF THE ACTUARY ON

THE TWENTY-THIRD VALUATION

PREPARED AS OF JUNE 30, 1973

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

EMPLOYEE BENEFIT PLAN CONSULTANTS

TWO PENNSYLVANIA PLAZA, NEW YORK, NEW YORK 10001

AREA CODE 212 695-2800

CABLE ADDRESS SOUNDPLANS NEW YORK

June 12, 1974

Mr. Purvis 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-Third Valuation Prepared as of June 30, 1973".

Very truly yours,

Hugh Gillespie

Consulting Actuary

hg:pip enc.



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CABLE ADDRESS SOUNDPLANS NEW YORK

May 13, 1974

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

Gentlemen:

We transmit herewith our report on the twenty-third actuarial valuation of the South Carolina Retirement System, prepared as of June 30, 1973.

The valuation was prepared on the basis of the recommended changes in actuarial assumptions and an assumed interest rate of 5-1/4 per cent and 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 6.50 per cent of earnable compensation by the State and 5.65 per cent of earnable compensation by other employers. In addition, the contribution rates of participating employers should be increased by .40 per cent of payroll to provide the pre-retirement death benefits.

The valuation took into account the amendment effective July 1, 1972 which increased the rates used in computation of retirement benefits as well as all of the amendments to the present time which liberalized the eligibility and benefit provisions of the System, and includes sufficient reserves to cover approximately five lifetime cost-of-living increases of 4 per cent per annum commencing July 1, 1973, 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,

Hugh Gillespie

Consulting Actuary

REPORT OF THE ACTUARY ON THE TWENTY-THIRD VALUATION OF THE SOUTH CAROLINA RETIREMENT SYSTEM PREPARED AS OF JUNE 30, 1973

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, 1973, 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 elected, by written notice to the Board not later than

December 31, 1964, to participate and have their members participate under
the provisions of the System as amended effective July 1, 1964. If an
employer failed to file such a notice, it is considered as a Class One
employer, unless effective July 1, 1966 and for a three month period
thereafter, or on or after May 19, 1973 it elected to become a Class Two
employer provided such employer and employees in its employ make additional
required contributions.

The valuation took into account all of the amendments since the last valuation liberalizing the provisions of the System. The following summary reflects these amendments.

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 35 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

On service retirement, a Class One member receives a retirement allowance which consists of:

- (a) An employee annuity which is the actuarial equivalent of the member's accumulated contributions at the time of his retirement; and
- (b) An employer annuity equal to the employee annuity allowable at age 65, or at age of retirement, whichever is less, on the basis of contributions made prior to age 65; and
- (c) If the member has credit for service rendered prior to the date of establishment, an additional employer annuity allowable at age 65, or at age of retirement, whichever is less, equal to the employee annuity which would have been provided by twice the contributions which he would have made during such prior service had the System been in force and he contributed* thereunder during the period of such 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.

*In determining the contributions which would have been made during prior service, the Board is authorized to use, in lieu of the actual compensation received by the member, the compensation rates which on the basis of the salary scale adopted by the Board would have resulted in the actual average compensation received by the member during the five years immediately preceding the establishment of the System.

If a Class Two member has not attained age 65 or completed 35 years of creditable service at the 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 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.

If a Class One or Class Two member has credit for out-of-State service rendered prior to July 1, 1945, an additional special annuity is payable commencing at age 65, or at age of retirement, whichever is less, equal to the excess of:

- (i) an employer annuity computed on the basis of the part of his out-of-State service and his creditable service rendered prior to July 1, 1945 over
- (ii) an employer annuity computed on the basis of his creditable service rendered prior to July 1, 1945.

If the member's creditable service does not, at his retirement, exceed twice 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 twice 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, a Class One member who has attained age 65 receives a service retirement allowance, otherwise a disability retirement allowance which consists of:

- (a) An employee annuity which is the actuarial equivalent of the member's accumulated contributions at the time of retirement; and
- (b) An employer annuity equal to the employer annuity that would have been payable upon service retirement at age 65 had he continued in service to such date without further change in compensation.

Upon disability retirement, 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 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 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 one-half of the accumulated regular interest.

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 35 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.

Lump Sum Death Benefit

Upon the death of a contributing member in service after the completion of one year of membership service, 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

As of July 1, 1970 the allowances for beneficiaries on the roll as of December 31, 1968 were increased 4 per cent on the basis of a program whereby allowances are increased 4 per cent on July 1 if the increase in the Consumer Price Index for the previous year ending December 31, equals or exceeds 3 per cent. A similar procedure has been followed each July 1 thereafter. After the first five such increases future increases become effective only if the additional liabilities do not require an increase in the total employer rate of contribution.

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

The following table shows the number and annual earnable compensation of active members, as of June 30, 1973, on the basis of which the valuation was prepared.

TABLE I

THE NUMBER AND EARNABLE COMPENSATION OF ACTIVE MEMBERS
AS OF JUNE 30, 1973

	•	TOTAL :	TE	ACHERS	EM	PLOYEES
GROUP	: Number	: Earnable : Compensation :	Number	: Earnable : Compensation :	Number	: Earnable : Compensation
Men	: : 44,257	: :\$ 324,726,799:	11,866	: :\$ 93,473,799:	: 32,391	: :\$ 231,253,000
Women	63,838	362,938,942	38,161	: 228,451,700	25,677	134,487,242
Total	: 108,095 ³	: *:\$ 687,665,741:	50,027	:\$ 321,925,499:	58 ,0 68	: :\$ 365,740,242 :

*There are in addition 29,173 inactive members and 32,442 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 members as of June 30, 1973.

TABLE II

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 1973

GROUP	*** ** ***	: TOTAL ANNUAL : RETIREMENT : ALLOWANCES		
: Service	e Retiremen	: ts		
Teachers: Men Women	7.70	: :\$ 2,231,082 : 11,159,818		
Employees: Men Women	2 , 155 1 , 667	: \$ 4,659,263 : 2,759,794		
Total	10,423	: :\$ 20,809,957		
Disabili	ty Retireme	nts		
Teachers: Men Women	68 307	: :\$ 143,746 : 493,004		
Employees: Men Women	: : 282 : 116	: : 415,848 : 144,229		
Total	; ; 773	: :\$ 1,196,827 :		
Beneficiaries of Deceased Retired Members and Active Members				
Men Women	96 <u>795</u>	: :\$ 124,522 : 1,044,419		
Total	: : 891 :	: :\$ 1,168,941 :		
Grand Total	12,087	: :\$ 23,175,725 :		

VALUATION OF ASSETS AND LIABILITIES

The following valuation balance sheet shows the assets and liabilities of the System as of June 30, 1973. 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.

TABLE III

VALUATION BALANCE SHEET SHOWING THE ASSETS AND LIABILITIES OF THE SOUTH CAROLINA RETIREMENT SYSTEM AS OF JUNE 30, 1973

ASSETS	
Present assets of System creditable to:	
Employee Annuity Savings Fund \$ 199,3	311,875
Employer Annuity Accumulation Fund 500,0	045,968
Total Present Assets	\$ 699,357,843
Prospective contributions to the Employer Annuity Accumulation Fund:	·
Normal contributions \$ 248,8	36 7, 257
Accrued liability contributions 293,7	41,394
Total Prospective Contributions by Emp	loyers 542,608,651
Total Assets	\$ 1,241,966,494
LIABILITIES	
Present value of benefits on account of	
which contributions have been accumulated to date in the Employee Annuity Savings	
	\$ 199,311,875
to date in the Employee Annuity Savings	
to date in the Employee Annuity Savings Fund Present value of benefits payable on account of retired members or their beneficiaries now drawing benefits from the Employer Annuity	
to date in the Employee Annuity Savings Fund Present value of benefits payable on account of retired members or their beneficiaries now drawing benefits from the Employer Annuity Accumulation Fund Present value of benefits to active members and former members with vested rights to be paid by contributions of the employers into	2 13,571,7 85
Fund Present value of benefits payable on account of retired members or their beneficiaries now drawing benefits from the Employer Annuity Accumulation Fund 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 Reserve for future increases in retirement	213 , 5 7 1 ,7 85 769 , 739 , 962
Fund Present value of benefits payable on account of retired members or their beneficiaries now drawing benefits from the Employer Annuity Accumulation Fund 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 Reserve for future increases in retirement allowances	213,5 7 1, 7 85 769,739,962 59,342,872

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, 1973 which represent the accumulated contributions of members to that date, amounted to \$199,311,875. The liabilities of this fund are also shown as \$199,311,875. 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, 1973, amounted to \$500,045,968. The liabilities on account of active members and former members with vested rights amounted to \$769,739,962. In addition, the balance sheet indicates liabilities of \$213,571,785 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 \$59,342,872 for future increases in retirement allowances effective after the valuation date, including sufficient reserves to provide approximately five additional lifetime cost-of-living increases of 4 per cent per annum commencing July 1, 1973. The total liabilities, therefore, amounted to \$1,042,654,619. The difference between these liabilities and the present assets credited to this fund is \$542,608,651, which represents the present value of future contributions to be made by the employers. Of this amount \$248,867,257 represents the present value of prospective normal contributions by the employers and the balance of \$293,741,394 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 6.50 per cent payable by the State and 5.65 per cent by the other Class Two employers. The valuation indicates that normal rates of 3.89 per cent and 3.13 per cent are required to support the benefits for new entrant members of the State and other employers respectively. On this basis the accrued liability rates are 2.61 per cent for the State and 2.52 per cent for other employers and it is anticipated that the accrued liability of \$293,741,394 shown in the balance sheet will be liquidated within a period of 40 years from the valuation date.

The rate necessary to provide the pre-retirement lump sum death benefit on a one-year term basis may be continued at .40 per cent of earnable compensation. Employers participating in the Pre-retirement Death Benefit Program should contribute .40 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, 1973

RATES OF	:	CLASS	:	CLASS	S TWO
CONTRIBUTION	:_	ONE	:	State	Others
Normal	:	1.80%	:	3.89%	3.13%
Accrued Liability	:	1.70	:	2.61	2.52
Pre-retirement Death Benefit	: :	.40	:	.40	.40
Total	:	3.90%	:	6.90%	6.05%

BASIS FOR VALUATION

The valuation of the Retirement System was made on the basis of the revised service and mortality tables which are being submitted to the Board for adoption. An interest rate of 5-1/4 per cent per annum was used.

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.

TABLE 1

THE NUMBER AND EARNABLE COMPENSATION OF MEMBERS DISTRIBUTED BY AGE AS OF JUNE 30 1973

		MEN	1	WOMEN
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
20	1,566 \$	3,018,441	1,676 \$	4,277,262
21	760	2,238,465	1,246	4,034,629
22	857	2,817,962	1,811	6,984,374
23	1,272	5,143,456	2,932	13,840,250
24	1,472	7,411,115	3,249	17,000,933
25	1,478	7,834,415	3,096	16,981,433
26	1,616	9,572,418	3,141	17,515,109
27	1,401	8,733,201	2,365	13,144,810
28	1,160	7,757,738	1,744	9,795,804
29	1,155	8,327,043	1,597	9,078,401
30	1,167	8,988,047	1,595	9,230,061
31	1,073	8,742,235	1,355	7,529,055
32	1,029	8,359,872	1,234	6,843,103
33	956	8,041,545	1,188	6,605,103
34	874	7,478,715	1,187	6,422,619
35	892	7,765,399	1,132	6,203,583
36	755	6,609,840	1,158	6,320,498
37	834	7,242,115	1,066	5,711,110
38	774	6,839,467	1,184	6,608,778
39	842	7,856,562	1,155	6,528,826
40	847	7,507,310	1,265	7,119,033
41	973	8,518,345	1,259	7,050,705
42	826	7,490,762	1.214	7,295,247
43	927	7,716,195	1,219	7,433,246
44	921	8,085,848	1,316	7,874,792
45	900	7,653,300	1,310	8,003,868
46	882	7,165,677	1,420	8,840,882
47	896	7,518,771	1,269	7,885,586
48	921	7,775,840	1,403	8,609,596
49	912	8,130,019	1 + 314	8,018,324
50	935	7,886,404	1,203	7,516,921
51	963	8,369,587	1,279	8,045,421
52	1,033	8,721,716	1,256	7,866,158
53	916	7,698,794	1,237	7,922,607
54	901	7,345,681	1,176	7,413,334
55	936	7,553,152	1,066	6,782,771

TABLE 1

THE NUMBER AND EARNABLE COMPENSATION OF MEMBERS DISTRIBUTED BY AGE AS OF JUNE 30 1973

CONTINUED

		MEN	ħ	IOMEN
AGE	NUMBER	AMOUNT	NUMBER	TNUOMA
56	804 \$	6,535,858	1,022 \$	6,714,243
57	874	7,157,451	1,017	6,714,801
58	736	6,021,161	936	6,249,987
59	777	5,965,617	903	6,158,869
60	726	5,671,153	822	5,622,967
61	691	5,345,418	830	5,679,423
62	656	5,135,756	726	5,226,705
63	589	4,454,395	603	4,261,926
64	466	3,524,901	523	3,993,220
65	358	3,070,384	454	3,442,426
66	218	1,373,073	239	1,827,395
67	199	1,468,672	131	800,918
68	140	911,237	96	562,148
69	99	608,189	77	491,351
70	104	637,041	54	402,639
71	68	273,999	36	194,183
72	46	224,755	17	100,795
73	47	248,779	20	87,119
74	12	43,793	3	3,576
75	10	55,584	4	13,186
76	15	84,131	8	56,833

TEACHERS 11,866 \$ 93,473,799 38,161 \$228,451,700 EMPLOYEES 32,391 \$231,253,000 25,677 \$134,487,242

TOTAL 44,257 \$324,726,799 63,838 \$362,938,942

See Footnote Table I

SUMMARY

TABLE 2

THE NUMBER AND EARNABLE COMPENSATION OF MEMBERS DISTRIBUTED BY YEARS OF SERVICE AS OF JUNE 30 1973

YEARS	MEN		WOMEN		
OF SERVICE	NUMBER	AMOUNT	NUMBER	AMOUNT	
0	4,411 \$	14,866,333	4,419 \$	14,582,677	
1	7,889	37,450,548	11,694	48,534,458	
2	4.721	32,348,290	7,991	40,369,508	
3	3,648	27,257,782	5,989	30,824,271	
4	3,124	23,543,350	4,637	25,324,539	
5	2,320	18,705,625	3,529	19,778,956	
6	2,076	17,189,592	2,787	16,014,312	
7	1,824	15,607,319	2,577	14,626,636	
8	1,443	12,306,107	1,634	10,307,816	
9	1,214	10,184,740	1,998	12,383,539	
10	1,014	9,052,771	1,338	8,868,647	
1 1	921	8,487,096	1,193	8,040,020	
12	836	7,669,458	1,020	7,270,531	
13	754	7,062,930	945	6,747,864	
14	702	6,334,288	959	7,091,123	
15	621	6,090,313	824	6,252,663	
16	726	7,011,199	908	7,011,619	
17	626	5,947,666	826	6,341,059	
1.8	652	6,139,561	1,020	7,876,257	
19	521	4,986,083	724	5,820,229	
20	491	4,757,400	667	5,403,258	
21	426	4,048,829	580	4,683,417	
22	526	5,161,238	640	5,292,654	
23	415	4,479,956	527	4,350,877	
24	457	4,536,937	533	4,407,326	
25	264	3,078,283	273	2,420,074	
26	273	3,254,225	338	2,830,502	
27	198	2,499,369	274	2,387,297	
28	101	979,594	233	2,020,043	
29	79	823,373	184	1,621,043	
30	77	861,375	262	2,278,753	
31	81	951,052	241	2,120,948	
32	106	1,341,841	234	2,050,519	
33	101	1,419,694	218	1,989,508	
34	71	907,250	211	1,885,698	
35	89	1,242,306	214	2,099,818	

TABLE 2

THE NUMBER AND EARNABLE COMPENSATION
OF MEMBERS DISTRIBUTED BY
YEARS OF SERVICE AS OF JUNE 30 1973

CONTINUED

YEARS		MEN		WOMEN
OF SERVICE	NUMBER	AMOUNT	NUMBER	R AMOUNT
36 37 38 39 40 41 42 43	95 4 66 74 50 38 24 29 28	1,282,550 917,204 961,132 626,549 562,838 349,884 350,684 430,470	195 167 148 153 113 113 93 81	\$ 1,827,067 1,513,101 1,346,688 1,440,996 1,061,302 1,070,559 877,462 715,240
44 45 46 47 48 49 50 51 52	1.8 6 8 7 6 5 3 2	223,780 62,633 104,565 100,024 75,501 46,091 29,057 20,064	47 37 20 13 5 4 1 3 2	420,912 336,549 167,429 101,279 45,872 26,739 14,287 29,903 17,189 17,909
$T \cap T \wedge I$	AA 257 #	227 727 700	(2 020	*2/2 020 0/2

TOTAL 44,257 \$324,726,799 63,838 \$362,938,942

SUMMARY

TEACHERS 11,866 \$ 93,473,799 38,161 \$228,451,700 EMPLOYEES 32,391 \$231,253,000 25,677 \$134,487,242

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 1973

SERVICE RETIREMENTS AND BENEFICIARIES

	/ V)	EΝ	V	VOMEN
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
18 21	1. \$	2,794	1 \$	58 9
22	1	1,777	<u> </u>	
24	2	2,626	•	
25	2	855		
26	1.	923	1	1,684
27	,		2	402
28	1	1,925	2	1,141
29 30	1 2	114 2,810		
31	1	879	2	2,222
32	1.	909	3	1,378
34	д,	* ***	1	1,822
35			3 2	5,327
36				739
38	2	6,805	2	2,005
40	1	1,280	2	1,724
41 42	1	486	5 5	4,666 5,103
43	•		8	9,914
44			5	5,921
45	1	709	5 5	5,673
46	3	5,184	4	7,747
47	3 3	1,63.8	2	574
48	3	1,757	4	2,598
49 50	1 1	228	4 7	4,839
50 51	1 4	2,596 3,984	6	16,526 11,658
52	5	7,545	4	4,452
53	2	1,773	6	7,089
54	$\overline{1}$	512	11	18,100
55	4	13+234	11	12,106
56	3	6,974	14	25,125
57	3	17,199	20	31,792
58	6	27 , 993	20	51,961
59 60	7	33,656 43,796	36 65	87,264 132,988
60 61	15 31	86,600	92	204,669
62	41	103,549	119	233,585
63	99	219,012	250	580,371
64	117	296,070	315	674,231
65	148	365,101	369	785,495
66	213	547,741	502	1,243,981
67	245	597,565	547	1,245,231
68	254	596,650	581	1,288,212

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND BENEFICIARIES BY AGE AS OF JUNE 30 1973

SERVICE RETIREMENTS AND BENEFICIARIES

CONTINUED

		MEN		WOMEN
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 90 91 92 93 94 95 96 103 105	243 \$ 205 211 152 191 127 112 987 91 680 580 47 335 2216 19 7 44 3 3 2 1 3,184 \$	633,166 489,084 431,300 396,726 393,811 236,120 241,714 209,478 171,349 139,076 125,245 115,615 83,199 56,713 68,960 44,956 36,060 33,250 17,964 33,431 12,855 8,162 5,983 7,803 7,815 1,688 7,959	544 \$ 474 468 384 525 319 332 245 270 228 212 208 166 139 143 102 81 61 45 47 31 22 15 8 6 8 6 2 1	1.186,915 1.004,673 893,357 743,076 907,458 527,993 527,876 348,644 346,007 306,842 274,068 257,075 191,862 148,484 154,128 108,069 80,893 65,952 40,049 40,980 31,502 18,764 10,710 4,808 6,053 7,875 7,936 917 161
	5 + 104 B	7,014,001	0,150 \$	14,704,031
NO OPTION	1.345 \$	2,456,781	6,001 \$	11,151,687 2,170,140
OPTION 1 OPTION 2	767 467	1,863,150 869,843	1,004 133	194,125
OPTION 3 OPTION 4	498 11	1,638,754 61,817	185 12	358,362 45,298
BENEFIC IARIES	96	124,522	795	1,044,419

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY AGE AS OF JUNE 30 1973

DISABILITY RETIREMENTS

	ME	ΞN	WON	MEN
AGE	NUMBER	TNUOMA	NUMBER	AMOUNT
27	1 \$	1,106		
32	1	6,136		
34	1.	2,879		(15
35			1 \$	613
37	1	2,987		
38	2	5,511		
39	4	7,023	1	2,411
40			1 2	3,021
41	1	4,224	2	5,021
42	1	3,903		
43 44	2 2	1,820	3	3,754
45	4	9,837	1	1,204
46	4	2,549		
47	4	4,241	4	9,857
48	7	17,999	1	569
49	8	17,864	7	19,586
50	10	16,831	8	13,128
51	10	32,024	7	11,779
52	11	22,475	17	27,278
53	13	22,100	8	15,564
54	11	17,308	14	20,504
55	17	23,851	23	32,829 55,002
56	24	47,648	22	38,271
57	15	26,838	22 28	54,139
58 50	21 24	34,638 36,092	27	56,619
59	32	68,872	24	53,257
60 61	32 18	21,734	25	41,521
62	20	26,187	20	28,726
63	9	8,832	18	17,277
64	12	12,677	18	26,569
65	• 9	8,579	15	17,185
66	10	10,847	12	15,679
67		1,441	12	10,023
68	2 7	7,427	14	14,101
69	5 3	2,399	4	2,727
70	3	2,993	6	5,211

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS BY AGE AS OF JUNE 30 1973

DISABILITY RETIREMENTS

CONTINUED

	МЕ	N	MOM	IEN
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
71 72 73 74 75 76 77 78 79 80 81 82 86	3 \$ 4 6 1 2 2 1 1 1 1	1,961 3,828 7,688 927 687 971 481 1,123 525 739 278 514	8 \$ 6 9 5 5 5 3 9 2 2 2 2 2 1	6,904 6,217 7,525 2,371 3,993 2,479 1,431 4,573 800 282 1,137 895 222
TOTAL	350 \$	559 , 594	423 \$	637,233
SUMMARY NO OPTION	142 \$	225,405	307 \$	436,873
OPTION 1 OPTION 2 OPTION 3	70 98 40	116,727 130,237 87,225	77 26 13	137,231 43,437 19,692