REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS
RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1976

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

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February 15, 1978

State Budget and Control Board South Carolina Police Officers Retirement System Columbia, South Carolina

Gentlemen:

I transmit herewith our report on the actuarial valuation of the South Carolina Police Officers Retirement System prepared as of June 30, 1976.

The valuation indicates that the System remains actuarially sound and the sufficiency of retirement funds to provide the benefits called for by the System may be safely anticipated.

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

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

Ву

Consulting Actuary

REPORT ON AN ACTUARIAL VALUATION OF THE SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM PREPARED AS OF JUNE 30, 1976

The South Carolina Police Officers Retirement System was established as of July 1, 1962. Membership in the System is open to any police officer of the State or other employer (county, municipality or other political subdivision of the State and any agency or department thereof) that has been admitted to the System. A police officer whose period of active duty during a year is at least 1,600 hours and whose compensation for such service is at least \$2,000 per year is eligible to join. Membership is compulsory with employees who become police officers of the State or other employers after the employer's date of admission to the System. Police officers in service on the employer's date of admission become members as of such date unless they file elections not to become members of the System and execute a waiver of all present and prospective benefits which would otherwise inure to them on account of their participation in the System. Contributions to provide the benefits under the System are made jointly by the members and the employers.

This report presents the results of the actuarial valuation of the System prepared as of June 30, 1976. The report gives first a summary of the benefit and contribution provisions of the System and a statement of the membership as of June 30, 1976. Next, the valuation balance sheet showing the assets and liabilities of the System as of June 30, 1976 is presented, followed by recommendations regarding the contributions payable by the employers. Appended to the report is an outline of the actuarial assumptions and method employed as well as summaries of the membership data on which calculations were based.

The valuation took into account the amendments, effective July 1, 1977, increasing the flat dollar portion of the retirement allowance from \$8.00 to \$9.00 per month and providing for an unreduced retirement allowance after thirty years of credited service, regardless of age.

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

A summary of the main benefit and contribution provisions of the System as interpreted for the valuation is presented in the following digest. Credited service of a member includes all service as a police officer since he last became a member of the System and also includes, in the case of a member who became such on or before June 30, 1963, remains a member until death or retirement under the System and who immediately prior to his becoming a member was a participant in another fund, service which was credited to him under "Supplemental Allowance Program" is the Supplemental such other fund. Allowance Program established under the System as of July 1, 1966 and as in effect on June 30, 1974. There are two classes of members under the System. Class Two includes each member who was a participant in the Supplemental Allowance program as of June 30, 1974 and any other police officer who became a member prior to July 1, 1974 and is employed by the State or by an employer which was participating in the Supplemental Allowance Program as of June 30, 1974 or which elected to provide Class Two membership for police officers in its employ and elected by written notice filed with the board within 60 days after July 1, 1974 to become a Class Two member as of said date, provided that any such member who was not in service as of July 1, 1974 may make such election within 60 days after his return to service. Any police officer becoming a member on or after July 1, 1974 who is employed by the State or by an employer which has elected to provide Class Two membership for police officers in its employ and any member employed by an employer whose date of admission is on or after July 1, 1974 is a Class Two member. Any member who is not a Class Two member is a Class One member. "Class Two service" is credited service subsequent to June 30, 1974 as a Class Two member, and credited service prior to July 1, 1974, or date of membership, if later, with respect to which required contributions have been made. "Class One service" is credited service which is not "Class Two service". "Average final compensation" is the average annual compensation of a member during the three consecutive fiscal years of credited service producing the highest such average.

BENEFITS

Service Retirement Allowance

Condition for Allowance

A member may retire on a service retirement allowance upon the attainment of age 55 and the completion of 5 years of credited service, or at any age upon the completion of 30 years of credited service.

Amount of Allowance

Upon service retirement a member receives a service retirement allowance which is equal to:

- (1) A monthly retirement allowance equal to nine dollars multiplied by the number of years of his Class One service.
- (2) A monthly retirement allowance equal to one-twelfth of one and three-fourths per cent of his average final compensation multiplied by the number of years of his Class Two service.
- (3) An additional monthly retirement allowance which is the actuarial equivalent of the member's accumulated additional contributions at retirement.

The sum of the retirement allowances under (1) and (2) above is not to be less than the allowance which would have been provided under (1) if all of the member's credited service were Class One service. In the case of a police officer who became a member prior

to July 1, 1974 and who was a participant in the Supplemental Allowance Program, the portion of his service retirement allowance not provided by his accumulated contributions is not to be less than it would have been if the provisions of the System in effect on June 30, 1974 had continued in effect until his date of retirement.

Early Retirement Allowance

Condition for Allowance

A member who has completed 20 years of credited service may retire on an early retirement allowance.

Amount of Allowance

Upon early retirement a member is entitled to a deferred allowance commencing at age 55 which is equal to a service retirement allowance computed on the basis of his average final compensation and credited service at his early retirement date.

If the member has attained age 50 and completed 25 years of credited service at early retirement date, in lieu of such deferred allowance, he may elect to receive a reduced allowance commencing immediately which is equal to the deferred allowance computed on the basis of Class One and Class Two service reduced by 5/12 of 1% for each month by which his age at retirement is less than age 55, plus the actuarial equivalent of the member's accumulated additional contributions.

Disability Retirement Allowance

Condition for Allowance

A member who has completed 5 or more years of credited service and is permanently incapacitated for duty, mentally or physically, may retire or be retired on a disability retirement allowance.

Amount of Allowance

Upon disability retirement a member receives a disability retirement allowance computed as a service retirement allowance based on his average final compensation, his years of credited service and his accumulated additional contributions at disability retirement; however, for a member who at disability retirement has not completed 20

years of credited service, his disability retirement allowance is determined on the basis of either 20 years of credited service or the number of years of credited service the member would have completed had he remained in service until age 55, whichever is less, and, in either case, on the basis of the Average Final Compensation he would have had if he had continued in service without further change in compensation until the completion of said number of years of For the purpose of credited service. retirement disability the calculating allowance, the additional credited service so determined is either Class One service or service depending upon the Two classification of the member at time of retirement.

Return of Contributions

Should a member cease to be a police officer except by death or retirement his accumulated contributions are returned to him. Should a member die before retirement the amount of his accumulated contributions is paid to his designated beneficiary or estate.

Death Benefit

Upon the death of a member in service a lump sum amount is paid to his designated beneficiary or estate equal to:

- (1) The amount of his accumulated contributions, excluding any additional contributions, or \$1,000, whichever is greater; plus
- (2) The amount of his accumulated additional contributions.

Upon the death of a retired member who has not elected an option, the excess of his total accumulated contributions at the time his allowance commenced over the sum of the retirement allowance payments made to him is paid to his designated beneficiary or estate.

In the event of the death before retirement of a member who has attained age 55 and completed 20 or more years of credited service, his designated beneficiary may elect to receive in lieu of the lump sum settlement otherwise payable based on (1) above an allowance for life in the same amount as if the member had retired at the time of death and had chosen Option 1.

Pre-retirement Death Benefit Program

Accidental Death Benefit Program

Optional Allowances

Such beneficiary may elect to receive in lieu of the member's accumulated additional contributions, an allowance for life which is the actuarial equivalent of the amount of contributions left on deposit in the System.

Upon the death of a contributing member in service who had completed at least one full year of membership, a death benefit is payable to his designated beneficiary or estate, equal to the annual compensation of the member at the time his death occurs. Such death benefit is payable apart and separate from the payment of the member's accumulated contributions. Benefits under this program are to be provided in the form of group life insurance.

Upon the death in active service as a result of the actual performance of duty of a member whose employer participates under the Program, a pension equal to 50% of the member's compensation at the time of death is paid to his widow during her widowhood. If there is no eligible widow before the youngest child attains age 18 the pension is paid to surviving children under age 18 or, if at the time of the member's death there is no widow or child under age 18, the pension is paid to his surviving father or mother. Such death benefit is payable apart and separate from any other benefits payable upon death.

Until the first payment on account of a retirement allowance 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 after his death the reduced allowance will be continued to his designated beneficiary.

Option 2. A reduced retirement allowance payable during the retired member's life, with the provision that after his death one-half of the reduced allowance will be continued to his beneficiary.

Cost-of-Living Adjustments in Allowance

If the increase in the Consumer Price Index for the previous year ending December 31 equals or exceeds 3%, the retirement allowance, exclusive of any part thereof derived from accumulated additional contributions, of each beneficiary in receipt of an allowance 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

By Employers

Each Class One member contributes \$16 per month. Each Class Two member contributes 5% of compensation.

Each employer contributes 7.5% of the compensation of Class One members and 10% of the compensation of Class Two members in its employ. Such rates are subject to adjustment on the basis of actuarial valuations.

MEMBERSHIP OF THE SYSTEM

In order to obtain the aggregate liabilities and assets on account of members of the System as of June 30, 1976, 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.

ACTIVE MEMBERSHIP

Table I shows the number of active members included in the member-ship as of June 30, 1976.

TABLE I

NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
AS OF JUNE 30, 1976

GROUP	: NUMBER	ANNUAL COMPENSATION
Men	: 6,352	: \$ 59,865,000
Women	302	2,397,698
Total	6,654*	\$ 62,262,698 :

^{*}There are in addition 1,346 members not on the payroll as of June 30, 1976 but included in the individual accounts maintained by the System. The results of the valuation were adjusted to take these members into account. There were 429 members who withdrew their accumulated contributions of \$326,336 between July 1, 1976 and December 5, 1976. These members were excluded from the data and the valuation.

RETIRED MEMBERS

Table II shows the number and annual retirement allowances of beneficiaries on the roll as of June 30, 1976.

TABLE II

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES ON THE ROLL AS OF JUNE 30, 1976

V.I. 2			
GROUP	NUMBER	RE	ANNUAL TIREMENT LOWANCES
Service and Early Retirements: Men	: 691 : 14_	\$	1,700,240 28,817
Women Total	705	\$	1,729,057
Disability Retirements:	: 83	\$	188,292
Women Total	83	: : \$:	188,292
Beneficiaries of Deceased Members: Men Women	27 100	: : : :	79,745 153,909
Total	127	: -:	233,654
Grand Total	915	: : \$	2,151,003

VALUATION BALANCE SHEET

The following valuation balance sheet indicates the present and contingent assets and liabilities of the retirement system as of June 30, 1976. The amounts of the present assets shown on the balance sheet were taken from a statement furnished by the Director of the System and exclude reserve assets creditable to separate accounts for the Accidental and Group Life Insurance Pre-retirement Death Benefit Programs.

For valuation purposes the amount shown in the balance sheet for the Employee Annuity Savings Fund was adjusted on account of those members who had withdrawn their accumulated contributions between July 1, 1976 and December 5, 1976.

TABLE III

VALUATION BALANCE SHEET SHOWING THE ASSETS AND LIABILITIES OF THE SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM AS OF JUNE 30, 1976

		•
ASSETS		
Present assets of System creditable to:		
Employee Annuity Savings Fund Employer Annuity Accumulation Fund excluding \$1,071,151 creditable to Death Benefit Program Account	\$ 16,598,505 52,194,824	
Total Present Assets		\$ 68,793,329
Present value of prospective contributions to the Employer Annuity Accumulation Fund:		·
Normal contributions Accrued liability contributions	\$ 48,957,337 23,202,839	
Total Prospective Contributions		72,160,176
Total Assets		\$ 140,953,505
LIABILITIES Present value of benefits on account of		•
which contributions have been accumulated to date in the Employee Annuity Savings Fund		\$ 16,598,505
Present value of benefits payable on account of beneficiaries now drawing allow-ances from the Employer Annuity Accumulation Fund		19,170,689
Present value of benefits to active members to be paid by contributions of the employers into the Employer Annuity Accumulation Fund	 	98,846,411
Reserve for future increases in retirement allowances		6,337,900
Total Liabilities		\$ 140,953,505

RESULTS OF VALUATION

The valuation balance sheet indicates the following in regard 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 this fund to the Employer Annuity Accumulation Fund. The assets credited to the Employee Annuity Savings Fund on June 30, 1976, which represents the accumulated contributions of members to that date, amounted to \$16,598,505. 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, 1976, excluding reserve assets of \$1,071,151 creditable to separate accounts for the Accidental and Group Life Pre-retirement Death Benefit Programs, amounted to \$52,194,824. The liabilities on account of active members amounted to \$98,846,411. In addition, the balance sheet indicates liabilities of \$19,170,689 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 \$6,337,900 for future increases in retirement allowances to provide approximately five cost-of-living increases of 4 per cent per annum commencing The total liabilities therefore amounted to July 1, 1976. The difference between these liabilities and the \$124,355,000. present assets credited to this fund is \$72,160,176, which represents the present value of future contributions to be made by employers.

The retirement act provides that each employer shall contribute 7.5 per cent of compensation of Class One members in its employ and 10 per cent of compensation of Class Two members in its employ. The normal rate determined in the June 30, 1975 valuation on the basis of Class One service for the average new entrant was 3.51 per cent of compensation. On the basis of the June 30, 1976 valuation, it is recommended that this rate be continued. Therefore, if employers contribute 7.5 per cent of payroll for Class One members in their employ and 3.51 per cent is attributable to normal

contributions, then the resulting 3.99 per cent is attributable to accrued liability contributions. For Class Two service the normal rate for the average new entrant was determined to be 7.18 per cent of compensation based on the June 30, 1975 valuation. On the basis of the June 30, 1976 valuation, it is recommended that this rate also be continued. Subtracting 7.18 per cent from 10 per cent (the amount employers contribute for Class Two members in their employ) results in an accrued liability contribution of 2.82 per cent of compensation for Class Two members. Future normal contributions at the above rates have a present value of \$48,957,337. If this amount is subtracted from \$72,160,176, the present value of future contributions to be made by employers, \$23,202,839 remains as the present value of the unfunded accrued liability. On this basis, it is anticipated that the accrued liability of \$23,202,839 will be liquidated within a period of 23 years from the valuation date.

CONCLUSIONS AND RECOMMENDATIONS

The data did not differentiate Class One from Class Two service for members with both types of service prior to the valuation date. For these members all prior service was conservatively valued as Class Two service.

It is recommended that in accordance with the provisions of the retirement act each employer contribute 7.5 per cent of compensation of Class One members and 10 per cent of compensation of Class Two members (exclusive of the cost of Pre-retirement and Accidental Death Benefits). Based on these employer contribution rates the unfunded accrued liability will be liquidated within 23 years.

In addition, participating employers pay the cost of the Accidental and Pre-retirement Death Benefit Programs.

Employees may continue to contribute .55 per cent of compensation for pre-retirement lump sum death benefits, and .35 per cent of compensation for accidental death benefits.

The following table gives the rates of contribution payable by employers.

TABLE IV

RATES OF CONTRIBUTION RECOMMENDED FOR PAYMENT BY EMPLOYERS

RATES OF CONTRIBUTION	CLASS ONE	CLASS TWO
Regular Benefits	7.50%	10.00%
Pre-retirement Death Benefits*	55	.55
Accidental Death Benefits*	.35	35
Total	8.40%	10.90%

^{*}Payable by participating employers.

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 November 7, 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.

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 adopted annual rates of separation and annual rates of salary increases are as follows:

Annual Rate of					
Age	Withdrawal	Death	Disability	Service Retirement*	Salary Increases**
20 25 30 35 40 45 50 55 60 64	13.79% 12.83 9.12 5.61 3.43 2.33	.10% .13 .16 .20 .27 .40 .57 .88 1.42 2.03	.14% .16 .20 .26 .34 .50	6.50% 9.90 15.98	7.29% 6.39 5.01 3.29 2.50 2.21 1.80 1.60 1.40 1.30

DEATHS AFTER RETIREMENT: Combined Annuity Mortality Tables, Modified and Makehamized, for service retirement and dependent beneficiaries with a one year set back in ages. A special mortality table is used for disability retirements.

LOADING OR CONTINGENCY RESERVES:

- *A loading was included to cover additional liabilities on the basis of an expected increase in the rates of service retirement in conjunction with the improved benefits under the average final compensation formula.
- **Reserves were included to provide for an annual inflation factor of 2 per cent in the salary scale and the flat benefit formula.

VALUATION METHOD: Projected benefit method with level percentage entry age normal cost and open-end unfunded accrued laibility. 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.

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 for the valuation as of June 30, 1976 are given in the following tables.

THE DISTRIBUTION OF THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS BY AGE AS OF JUNE 30,1976

	MEN		WOMEN	
AGE	NUMBER	AMBUNT	NUMBER	A MOUNT
18	2 \$	5,449		
19	5	88,407	2 \$	6,707
20	11	70,466		
21	27	164,208	14	92,013
22	82	585 , 927	8	53,081
23	184	1,437,425	21	151,560
24	216	1,719,155	15	117,593
25	260	2,169,708	8	63.016
26	2 29	1,926,579	18	123.871
27	253	2,134,962	20	149,028
28	264	2,354,577	15	119,926
29	293	2,645,216	9	68,936
30	256	2,323,656	10	82,221
31	277	2,404,820	13	100,870
32	256	2,245,655	9	80,689
33	187	1,770,810	11	151,558
34	1 75	1,690,589	12	101,561
35	132	1,291,502	9	73,770
36	140	1,340,738	3	24,685
37	136	1,348,631	4	22,916
38	106	1,107,086	6	55,790
39	136	1,355,441	9	76,021
40	119	1,188,948	10	67,301
41	114	1,186,142	9	79, 983
42	139	1,380,871	5	40,985
43	1 53	1,480,732	2	14,532
44	121	1,175,323	5	37,254
45	137	1,461,008	3	28,170
46	1 63	1,615,570	3	23,206
47	111	1,096,421	2	15,423
48	118	1,219,902	1	9,285
49	133	1,345,101	5	37,997
50	101	1,024,633	3	24,703
51	104	1,063,231	4	35,532
52	138	1,426,673	4	42,441
53	81	832,684	5	44,006
54	109	1,193,897	3	21,378
55	93	1,006,159	4	28,135

THE DISTRIBUTION OF THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS BY AGE AS OF JUNE 30,1976

CONTINUED

		MEN	WOMEN		
AGE	NUMBER	TAUDMA	NUMBER	AMCUNT	
56	112 \$	1,120,196	2 \$	14,900	
57	90	899,770	1	7,297	
58	89	956,104	8	51,353	
59	73	753,195			
60	81	835,192			
61	68	750,149			
62	83	885,040	1	6,958	
63	47	477,723			
64	36	350,080	3	17,914	
65	26	222,589	3 1	20,700	
66	18	172,916	•		
67	19	166,529			
68	21	189, 138	2	. 12,433	
69	7	45,511			
70	7	66, 835			
71	2	12,714			
72	2	9,342			
73	4	36,447			
75	3	11,940			
77	1	10,413			
78		3,375			
79	1 .	11,500			
TOTAL	6,352 \$	59,865,000	302 \$	2,397,698	

SEE FOOTNOTE TABLE I

THE DISTRIBUTION OF THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS BY YEARS OF CREDITED SERVICE AS OF JUNE 30,1976

YEARS OF	MEN		WOMEN	
SERVICE	NUMBER	TNUOMA	NUMBER	AMOUNT
0	542 \$	3,497,172	48 \$	230,268
1	964	7,757,988	98	809,421
2	825	7,047,598	62	513,694
3	727	6,565,086	27	241,658
4	443	4,059,593	29	257,372
5	362	3,539,870	7	51,955
6	273	2,646,199	3	32,590
7	280	2.786.635	. 3	36,136
8	218	2,237,854	3	37,819
9	209	2,182,266	3 3 2 2 2	19,564
10	161	1,721,259	2	19,886
11	137	1,481,840	2	18,188
12	94	1,086,407		
13	123	1,368,013		•
14	124	1,369,424	3	23,135
15	92	978,548		
16	78	941,541		
17	34	355,258	2	13,011
18	60	723,780	2	13,180
19	72	839, 229	2	14,532
20	51	558,353	2	11,816
21	35	444,442		
22	60.	718,981		
23	38	416,333		
24	58	714,727	1	7,535
25	33	375,671	1	1,399
26	37	457,000	•	
27	21	271,272	1	20,700
28	45	575,198		
29	53	770,482		
30	23	305,780		
31	18	220,774	1	17,289
32	6	72,585		
33	3	31,499	1	6,550
34	7	94,688		
35	16	270,644		

THE DISTRIBUTION OF THE NUMBER AND ANNUAL COMPENSATION OF ACTIVE MEMBERS BY YEARS OF CREDITED SERVICE AS OF JUNE 30,1976

CONTINUED

YEARS	М	MEN		WOMEN	
OF SERVICE	NUMBER	AFOUNT	NUMBER	AMOUNT	
36	14 \$	165,988			
37	. 3	46,492			
38	2	28,724			
39	6	80,122			
41	2	18,932	•		
42	$\bar{1}$	18,969			
45	<u></u>	6,284			
57	ī	11,500			
TOTAL	6,352 \$ 5	9,865,000	302 \$	2,397,698	

SEE FOOTNOTE TABLE I

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES BY AGE AS OF JUNE 30-1976

SERVICE AND EARLY PETIREMENTS

	MEN		WOMEN	
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT
40	2 \$	3,705		•
48 50	1	3, 063		
52	3	8, 453		
55	2	5,635		
56	5	18,869	•	
57	11	25,959		
58	19	67,660		
59	20	40,387	1 \$	1,234
60	22	52,983		4
61	12	25,794		
62	24	39,722	2	4 • 209
63	38	99,700	1	1+956
64	46	122,288		
65	45	112,398	1	1,851
66	48	141,781	1	2,676
67	58	164,559		
68	52	119,559	2	2,878
69	47	118,516	1	4,168
70	30	68,874	1	2,742
71	43	103,070		4
72	22	47,098	_	2 250
73	35	83,730	1	3, 758
74	17	35, 092		2 020
75	13	27,155	1	2,030
76	26	63,560	•	702
77	10	19,061	1	792
78	14	27,795	•	523
79	9	19,082	1	243
80	4	9,578		
81	4 .	7, 235		
82	3	7,588		
83	2	1,997		
84	2	3,302		
86	1	499		
89	1	4,493		•
TOTAL	691 \$	1,700,240	14 \$	28,817
SUMM AR Y				
LIFE	14 14			
ANNUITY	571 \$	1,397,977	12 \$	25,874
100% J+S	52	86,403	2	2,943
50% J+S	68	215,860		
		_		

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES BY AGE AS OF JUNE 30+1976

DISABILITY RETIREMENTS

	M	MEN		WOMEN	
AGE	NUMBER	AMOUNT	NUMBER	ANDUNT	
34	1 \$	3,740			
36	1	561			
39	1	2,640		•	
40	4	10,841	•	•	
43	3	3,479			
44	-1	1,697			
45	3	12,380			
46	1	1,754			
47	2 2	1,723	4		
48	2	2,833			
49	1	3,397			
50	3	7,759		•	
51	9	17,861			
52	3	4,696			
53	3	6,132			
54	3	8,427			
55	6	13,020			
56	6	14,951			
57	10	21.360			
58	3	7,502			
59	4	5,997	•		
60	1,	809			
61	4	9,712			
62	2	7, 971			
63	ī	1,303	. *		
64	2	5,451			
66	· 1 .	6,343			
72	1	2,396		•	
76	1	1,557			
TOTAL	83 \$	188,292			
SUMMARY					
LIFE					
ANNUITY	56 \$	120,145	•		
100% J+S	14	21,633			
50% J+5	13	46,514			

TABLE 5

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES BY AGE AS OF JUNE 30,1976

BENEFICIARIES OF DECEASED ACTIVE AND RETIRED MEMBERS

	ME	N	WOMEN	
AGE	NUMBER	THUOMA	NUMBER	AMOUNT
46		,	1 \$	745
47			1	1,126
48			1	1,921
49			1	1,572
50			2	1,533
52			1	395
53			1	1,088
55		·	-6	11,946
56	1 \$	1,093	3 2	3,705
57	2	9,477	2	2,920
58	3	9,471	3	5,330
-59	1	655	1	1,490
60	1 .	5,742	4	8,207
61	1	5,400	6	8,094
62	1	3,099	7	11,677
63	. <u>1</u>	4,161	4	7,001
64	2	9,221	7	10,799
65	3	7,494	6	12,906
66	- .	·	3	4,494
67	3	7,157	4	4,246
68	_		5	5 +549
69			5 3	8,417
70	3	7,403	3	4,767
71	3 2	2,104	5 2 3	6+25 4
72	_		2	1,116
73			3	4,884
74	1	401	3	4,569
75	ī	2,244		
77	- 1	4,623	3	3.842
78			1	2,556
79			1	2, 522
80			1	3,222
81			1	1,633
82			1	849
83		•	1	1,443
87			1	1,091
TOTAL	27 \$	79,745	100 \$	153,909