

REPORT ON AN ACTUARIAL VALUATION  
OF THE SOUTH CAROLINA POLICE  
OFFICERS RETIREMENT SYSTEM  
PREPARED AS OF JUNE 30, 1979

BUCK  
CONSULTANTS

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May 22, 1980

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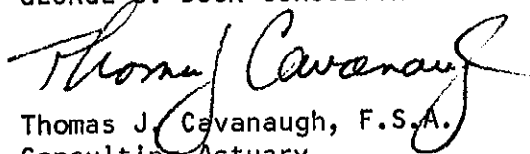
Mr. Purvis Collins, Director  
South Carolina Police Officers  
Retirement System  
P. O. Box 11960 - Capitol Station  
Columbia, South Carolina 29211

Dear Mr. Collins:

I am sending you herewith the signed bound copy of our "Report on an Actuarial Valuation of the South Carolina Police Officers Retirement System Prepared as of June 30, 1979".

Very truly yours,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

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

TJC:LS  
Enc.

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

April 2, 1980

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

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Gentlemen:

Subsection 9-11-30(6) of the law governing the operation of the South Carolina Police Officers Retirement System provides that the actuary shall make an annual valuation of the assets and liabilities of the funds of the System. We have the honor to submit herewith the results of the valuation as of June 30, 1979 made in accordance with this provision of the law.

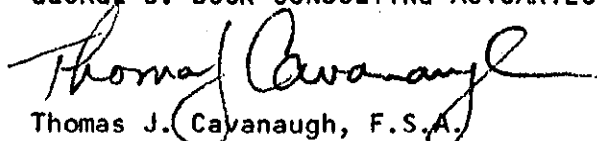
The actuarial assumptions used in the valuation are, in the aggregate, reasonable, and represent our best estimate of anticipated experience under the System. The actuarial cost method utilized is the projected benefit method with level percentage entry age normal cost and open-end accrued liability. This cost method is specifically recognized as an acceptable method by the Employee Retirement Income Security Act of 1974. The current assets applicable to the System were supplied by the Retirement System office. They are valued at adjusted amortized cost.

In our opinion, the Schedule of Valuation Results included in this report correctly presents the condition of the South Carolina Police Officers Retirement System as to those benefits which are funded on an actuarial reserve basis.

The results of the valuation indicate that the recommended rates of employer contribution, 7.80 percent and 10.30 percent of compensation for Class One and Class Two members, respectively, together with future contributions by members and the assets currently available are adequate to fund the actuarial liabilities on account of all benefits under the System except the post-retirement cost-of-living increases. The liquidation period for the unfunded accrued liability is 19.5 years from June 30, 1979. The post-retirement cost-of-living increases are currently being met on a terminal reserve basis.

Very truly yours,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

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

## TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Summary of Principal Results	1
II	Membership Data	2
III	Assets	4
IV	Comments on Valuation	5
V	Contributions Payable Under the System	6
VI	Valuation Basis	7
 <u>Schedule</u>		
A	Valuation Results	8
B	Outline of Actuarial Assumptions and Method	9
C	Summary of Main System Provisions as Interpreted for Valuation Purposes	10
D	Membership Data Tabulations	17

REPORT ON AN ACTUARIAL VALUATION OF THE  
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM  
PREPARED AS OF JUNE 30, 1979

SECTION I - SUMMARY OF PRINCIPAL RESULTS

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

<u>Valuation Date</u>	6/30/79	6/30/78
Number of active members:		
Men	7,409	7,144
Women	585	507
Total	7,994	7,651
Annual compensation of active members during year:		
Men	\$84,743,428	\$74,321,927
Women	5,291,175	4,267,267
Total	\$90,034,603	\$78,589,194
Number of inactive members	1,659	1,473
Number of retired members and beneficiaries	1,265	1,146
Annual retirement allowances	\$ 3,883,370	\$ 3,224,451
Assets for valuation purposes	\$110,296,996	\$94,324,533
Normal contribution as per cent of compensation:		
Class One Service	3.87%	3.87%
Class Two Service	6.59	6.59
Unfunded accrued liability (UAL)	\$40,477,096	\$23,425,224
Unfunded accrued liability contribution as per cent of payroll		
Class One Service	3.93%	3.63%
Class Two Service	3.71	3.41
Unfunded accrued liability liquidation period (years)	19-1/2	12
Number of cost-of-living increases to be granted after valuation date included in UAL	3	4
Pre-retirement death benefit contribution as per cent of payroll	.40%	.40%
Accidental death benefit contribution as per cent of payroll	.20%	.20%

2. Comments on the valuation results as of June 30, 1979 are given in Section IV and further discussion of the contribution levels is set out in Section V. The amendments, effective July 1, 1979, providing for the liberalization of vesting requirements from 20 years to 5 years and removal of the 20 year service credit limitation for disability retirements were recognized in this valuation.
3. Schedule B of this report outlines the full set of actuarial assumptions and method employed. The provisions of the System are summarized in Schedule C.

#### SECTION II - MEMBERSHIP DATA

1. In order to obtain the aggregate liabilities and assets on account of members of the System as of June 30, 1979, data were needed with respect to each active member and beneficiary of the System and also with respect to terminations during the valuation year. The data with respect to both active and terminated members and beneficiaries were furnished to the actuary by the Retirement System office on a magnetic tape.
2. From the data, tabulations were made showing as of June 30, 1979 the number and annual compensation of members classified by age and years of service and the number and retirement allowances of beneficiaries on the roll as of June 30, 1979 classified by age. These tabulations are presented in Schedule D.
3. 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.
4. The following table shows the number of members of the Retirement System together with the annual compensation as of June 30, 1979.

TABLE 1  
 ACTIVE MEMBERSHIP OF THE  
 SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM  
 AS OF JUNE 30, 1979

GROUP	NUMBER	ANNUAL COMPENSATION
Men	7,409	\$84,743,428
Women	585	5,291,175
Total	7,994*	\$90,034,603

\*There are in addition 1,659 members not on the payroll as of June 30, 1979 but included in the individual accounts maintained by the System. The results of the valuation were adjusted to take these members into account.

5. The following table shows the number and annual amount of retirement allowances of beneficiaries on the roll as of June 30, 1979, classified by sex and cause of retirement.

TABLE II  
 THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF  
 BENEFICIARIES ON THE ROLL  
 AS OF JUNE 30, 1979

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
<b>Service and Early Retirements:</b>		
Men	923	\$2,983,719
Women	16	32,608
Total	939	\$3,016,327
<b>Disability Retirements:</b>		
Men	161	\$ 490,471
Women	1	4,489
Total	162	\$ 494,960
<b>Beneficiaries of Deceased Members:</b>		
Men	52	\$ 139,930
Women	112	232,153
Total	164	\$ 372,083
Grand Total	1,265	\$3,883,370

### SECTION III - ASSETS

The amounts of the present assets taken into account in this valuation are at adjusted amortized cost. The values of the assets were taken from a statement furnished by the Director of the System and exclude reserve assets creditable to separate funds for the Accidental and Group Life Insurance Pre-retirement Death Benefit Programs.



Included in the valuation are the assets of the members' account which represent the accumulated contributions of members together with interest thereon. As of June 30, 1979, these assets amounted to \$24,434,475.

Also included in the valuation are the assets of the accumulation account to which the contributions made by employers are credited and from which are paid all benefits on account of retired members and their beneficiaries. The assets of the accumulation account amounted to \$85,862,521 as of June 30, 1979.

#### SECTION IV - COMMENTS ON THE VALUATION

Schedule A of this report contains the results of the valuation which show present and prospective assets and liabilities of the System as of June 30, 1979. The following comments on the valuation are pertinent:

The schedule shows that the System has actuarial liabilities of \$268,930,034, of which \$35,774,500 is for the prospective benefits payable on account of present retired members and beneficiaries, \$229,099,185 is for the prospective benefits payable on account of present active and inactive members, and \$4,056,349 is the reserve required to provide three additional lifetime cost-of-living increases of 4 per cent per annum commencing July 1, 1979. Against these liabilities, the System has present assets of \$110,296,996 and anticipated future contributions by members of \$50,400,173 leaving a balance of \$108,232,865 to be provided by future contributions of the Employer.

In accordance with the law each employer shall contribute 7.80 per cent of compensation of Class One members in its employ and 10.30 per cent of compensation of Class Two members in its employ. The normal rate on the basis of Class One service for the average new entrant was continued at 3.87 per cent of compensation. Therefore, if employers contribute 7.80 per cent of payroll for Class One members in their employ and 3.87 per cent is attributable to normal contributions, then the resulting 3.93 per cent is attributable to accrued liability contributions. For Class Two service the normal rate for the average new entrant was continued at 6.59 per cent of compensation. Subtracting 6.59 per cent from 10.30 per cent (the amount employers

contribute for Class Two members in their employ) results in an accrued liability contribution of 3.71 per cent of compensation for Class Two members. Future normal contributions at the above rates have a present value of \$67,755,769. If this amount is subtracted from \$108,232,865, the present value of future contributions to be made by employers, \$40,477,096 remains as the present value of the unfunded accrued liability. On this basis, it is anticipated that the accrued liability of \$40,477,096 will be liquidated within a period of 19.5 years from the valuation date.

If provision were made for four additional lifetime cost-of-living increases of 4 per cent per annum commencing July 1, 1979, the reserve required would be \$5,947,013. This exceeds the reserve mentioned above by \$1,890,664. It is anticipated that the resultant accrued liability of \$42,367,760 would be liquidated within a period of 21.5 years from the valuation date.

#### SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

It is recommended that in accordance with the provisions of the law each employer contribute 7.80 per cent of compensation of Class One members and 10.30 per cent of compensation of Class Two members (exclusive of the cost of Pre-retirement and Accidental Death Benefits), as compared to the rates of 7.50 per cent and 10.00 per cent, respectively, recommended last year. Based on these employer contribution rates the unfunded accrued liability will be liquidated within 19.5 years.

In addition, participating employers pay the cost of the Accidental and Pre-retirement Death Benefit Programs. It is recommended that Employers contribute .40 per cent of compensation for pre-retirement lump sum death benefits, and .20 per cent of compensation for accidental death benefits, the same rates as were recommended last year.

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	7.80%	10.30%
Pre-retirement Death Benefits*	.40	.40
Accidental Death Benefits*	.20	.20
Total	8.40%	10.90%

\*Payable by participating employers.

#### SECTION VI - VALUATION BASIS

The valuation of the Retirement System was based on the rates of separation, the salary scales and the mortality tables last adopted by the Board. An outline of the actuarial assumptions and method used is presented in Schedule B.

SCHEDULE A

## RESULTS OF THE VALUATION AS OF JUNE 30, 1979

## (1) Actuarial Liabilities

Present value of prospective benefits payable  
in respect of:

(a) Present retired members and beneficiaries	\$ 35,774,500
(b) Present active and inactive members	229,099,185
(c) Three cost-of-living increases commencing 7/1/79	<u>4,056,349</u>
(d) Total actuarial liabilities	\$ 268,930,034
(2) Assets of the System	<u>110,296,996</u>
(3) Unfunded Value of Prospective Benefits = (1)(d) - (2)	\$ 158,633,038
(4) Present Value of Future Contributions By Members	50,400,173
(5) Total Prospective Contributions By Employers = (3) - (4)	\$ 108,232,865
(6) Present Values of 1 Per Cent of Future Compensation	
(a) Class One Service	\$ 600,989
(b) Class Two Service	9,928,671
(7) Present Value of Future Normal Contributions By Employers At	
(a) 3.87% = (6)(a) x 3.87	\$ 2,325,827
(b) 6.59% = (6)(b) x 6.59	<u>65,429,942</u>
(c) Total	\$ 67,755,769
(8) Present Value of Accrued Liability Contributions By Employers = (5) - (7)(c)	\$ 40,477,096
(9) Accrued Liability Rates	
(a) Class One Service	3.93%
(b) Class Two Service	3.71
(10) Accrued Liability Liquidation Period	19.5 years
(11) Pre-Retirement Death Benefit Contribution Rate	.40%
(12) Accidental Death Benefit Contribution Rate	.20%

SCHEDULE B

## 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:

<u>Age</u>	<u>Withdrawal</u>	<u>Death</u>	<u>Annual Rate of Disability</u>	<u>Service Retirement*</u>	<u>Salary Increases**</u>
20	13.79%	.10%	.14%		7.29%
25	12.83	.13	.16		6.39
30	9.12	.16	.20		5.01
35	5.61	.20	.26		3.29
40	3.43	.27	.34		2.50
45	2.33	.40	.50		2.21
50	1.74	.57	.84		1.80
55		.88		6.50%	1.60
60		1.42		9.90	1.40
64		2.03		15.98	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 liability. Gains and losses are reflected in the period remaining to liquidate the unfunded accrued liability. Lump sum death benefits are provided on a one-year term cost basis.

SCHEDULE CSUMMARY OF MAIN SYSTEM PROVISIONS  
AS INTERPRETED FOR VALUATION PURPOSESBACKGROUND

The South Carolina Police Officers Retirement System was established as of July 1, 1962. Firemen were eligible to participate in the System on July 1, 1976. Membership in the System is open to any police officer or fireman 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 or fireman 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 or firemen of the State or other employers after the employer's date of admission to the System. Police officers and firemen 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.

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 or fireman 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 such other fund. "Supplemental Allowance Program" is the Supplemental 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 police officer or fireman who is a member and is 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 5 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 assuming no further change in compensation and the years of credited service the member would have completed had he remained in active service until age 55, and his accumulated additional contributions at disability retirement. For the purpose of calculating the disability retirement allowance, the additional credited service so determined is either Class One service or Class Two service depending upon the classification of the member at time of retirement.

### Return of Contributions

Should a member cease to be a police officer or fireman 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 Option 1 or Option 2, 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, or who, regardless of age, has completed 30 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.

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.

#### Pre-retirement Death Benefit Program

Upon the death of a contributing member in service who had completed at least one full year of membership or who had died as a result of an injury arising out of and in the course of the performance of his duties regardless of length of service, 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.

#### Accidental Death Benefit Program

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.

### Optional Allowances

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 designated beneficiary.

Option 3. 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.

### 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 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

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

By Employers

Each employer contributes 7.80% of the compensation of Class One members and 10.30% of the compensation of Class Two members in its employ. Such rates are subject to adjustment on the basis of actuarial valuations.

TABLE 1

THE DISTRIBUTION OF THE NUMBER AND  
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY  
AGE AS OF JUNE 30, 1979

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
19	6 \$	38,574	2 \$	9,715
20	15	91,999	3	21,211
21	46	381,138	11	81,222
22	143	1,151,846	24	181,534
23	196	1,814,163	26	206,376
24	259	2,388,290	36	328,168
25	287	2,764,801	39	327,468
26	340	3,350,013	39	339,620
27	260	2,649,080	33	294,485
28	333	3,572,303	17	146,874
29	283	3,003,993	32	279,809
30	295	3,162,280	41	396,434
31	328	3,677,463	28	255,019
32	310	3,533,716	15	122,574
33	263	3,039,070	22	216,422
34	227	2,725,523	13	110,372
35	191	2,204,600	13	137,387
36	196	2,313,106	10	97,557
37	186	2,400,154	16	158,915
38	151	1,890,806	14	135,531
39	157	1,900,742	12	105,497
40	163	2,039,723	9	85,206
41	129	1,611,688	12	123,647
42	145	1,875,087	10	103,635
43	151	1,781,659	12	101,875
44	142	1,768,788	15	149,813
45	152	1,808,471	12	113,035
46	175	2,070,698	2	18,309
47	131	1,616,477	5	46,013
48	138	1,786,766	4	39,881
49	173	2,126,007	3	28,193
50	116	1,362,144	2	17,892
51	130	1,673,570	3	22,046
52	136	1,846,720	5	46,777
53	102	1,269,624	3	18,771
54	103	1,362,138	7	74,297
55	129	1,643,601	5	54,915

THE DISTRIBUTION OF THE NUMBER AND  
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY  
AGE AS OF JUNE 30, 1979

## CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	66	\$ 897,111	5	\$ 60,375
57	97	1,218,928	3	28,961
58	72	913,926	6	53,931
59	97	1,229,665	2	17,634
60	83	985,909	1	8,938
61	76	1,006,623	7	53,982
62	49	651,432	1	8,718
63	51	677,632	1	9,881
64	26	348,575		
65	35	407,637	1	14,269
66	17	181,620		
67	16	215,850		
68	6	66,225	1	22,020
69	7	74,342		
70	5	29,632		
71	11	86,525	2	15,971
72	4	34,619		
75	1	5,300		
76	1	8,727		
78	1	2,420		
81	1	3,909		
TOTAL	7,409	\$ 84,743,428	585	\$ 5,291,175

SEE FOOTNOTE TABLE 1

THE DISTRIBUTION OF THE NUMBER AND  
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY  
YEARS OF CREDITED SERVICE  
AS OF JUNE 30, 1979

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	644	\$ 4,469,085	97	\$ 618,479
1	1,209	11,255,420	157	1,387,037
2	802	7,984,186	108	1,004,816
3	568	6,085,640	59	561,954
4	566	6,195,448	50	513,608
5	532	5,962,071	40	407,687
6	463	5,474,069	21	218,715
7	336	4,160,171	22	230,078
8	287	3,696,803	6	62,110
9	224	2,960,057	1	14,338
10	246	3,229,717	3	39,987
11	192	2,653,271	2	33,791
12	181	2,446,682	1	10,964
13	127	1,767,404	2	22,750
14	106	1,485,992	2	18,845
15	82	1,266,760		
16	104	1,583,764		
17	81	1,194,232	2	18,756
18	72	1,045,475		
19	71	1,140,035		
20	27	400,982	1	17,917
21	56	882,160	3	25,386
22	65	1,054,052	1	7,459
23	44	649,829	2	15,715
24	29	453,130		
25	49	822,629		
26	31	522,215		
27	42	794,411	1	8,762
28	20	333,563	1	2,290
29	25	383,962		
30	9	143,249	1	22,020
31	37	684,980		
32	35	698,528		
33	16	290,235		
34	7	105,744	1	19,470
35	3	49,749		

THE DISTRIBUTION OF THE NUMBER AND  
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY  
YEARS OF CREDITED SERVICE  
AS OF JUNE 30, 1979

## CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	1	\$ 13,218	1	\$ 8,241
37	2	28,122		
38	6	122,202		
39	8	182,804		
40	1	26,140		
42	1	9,655		
44	1	8,141		
45	1	27,446		
<b>TOTAL</b>	<b>7,409</b>	<b>\$ 84,743,428</b>	<b>585</b>	<b>\$ 5,291,175</b>

SEE FOOTNOTE TABLE 1



TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF BENEFICIARIES  
BY AGE AS OF JUNE 30, 1979

SERVICE AND EARLY RETIREMENTS				
AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
34	1	\$ 1,073		
42	1	16,252		
48	1	3,512		
49	1	10,068		
50	1	1,404		
51	2	12,331		
52	2	14,675		
53	5	33,015		
54	1	4,811		
55	9	39,793		
56	3	13,815		
57	14	60,656		
58	19	95,903		
59	24	88,723		
60	24	100,814		
61	36	154,715	1	\$ 1,087
62	38	109,693	1	1,389
63	46	160,577		
64	42	176,110		
65	63	210,073	2	4,734
66	60	184,496	1	2,201
67	60	162,719	2	3,835
68	57	151,597	1	2,075
69	53	172,197	1	3,000
70	59	198,914		
71	56	161,515	2	3,233
72	39	116,691		
73	32	93,625	1	3,079
74	37	98,861		
75	22	54,997		
76	32	88,234	1	4,219
77	13	28,493		
78	13	27,844	1	2,279
79	21	52,262		
80	10	23,722	1	891

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF BENEFICIARIES  
BY AGE AS OF JUNE 30, 1979

## SERVICE AND EARLY RETIREMENTS

## CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
81	8 \$	19,522		
82	9	19,627	1 \$	586
83	2	2,912		
84	2	6,154		
85	2	7,861		
86	1	674		
87	1	2,228		
89	1	561		
TOTAL	923 \$	2,983,719	16 \$	32,608

## SUMMARY

LIFE ANNUITY	721 \$	2,232,193	13 \$	27,423
100% J+S	80	218,703	3	5,185
50% J+S	111	441,505		
LEVEL INCOME	11	91,318		

THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF BENEFICIARIES  
BY AGE AS OF JUNE 30, 1979

## DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
29	1	\$ 4,036		
32	1	3,791		
34	1	4,086		
35	1	3,692		
37	2	7,534		
38	2	8,741		
39	5	22,833		
40	2	9,499		
41	4	14,301		
42	1	3,167		
43	7	22,520		
44	3	15,462		
45	4	15,512		
46	4	13,492		
47	1	1,909		
48	5	12,254		
49	2	5,832		
50	6	19,377	1	\$ 4,489
51	3	8,060		
52	8	27,145		
53	6	22,099		
54	12	35,177		
55	10	26,426		
56	7	26,523		
57	7	17,034		
58	8	13,010		
59	7	18,636		
60	9	21,155		

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF BENEFICIARIES  
BY AGE AS OF JUNE 30, 1979

## DISABILITY RETIREMENTS

## CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
61	7	\$ 24,166		
62	7	17,911		
63	3	4,148		
64	7	19,302		
65	1	1,312		
66	3	4,883		
67	2	5,890		
69	1	6,861		
75	1	2,695		
TOTAL	161	\$ 490,471	1	\$ 4,489
SUMMARY				
LIFE				
ANNUITY	107	\$ 325,756	1	\$ 4,489
100% J+S	32	79,660		
50% J+S	22	85,055		

TABLE 5

THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF BENEFICIARIES  
BY AGE AS OF JUNE 30, 1979

BENEFICIARIES OF DECEASED ACTIVE  
AND RETIRED MEMBERS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
34	1 \$	2,737		
37			1 \$	3,453
44			1	3,495
45			1	3,601
46			1	1,216
48			1	2,306
51	1	1,921	2	3,312
52	1	5,264	2	3,938
53			3	10,769
54			1	2,066
55			1	443
56	1	7,619	1	1,588
57			3	11,103
58			8	20,615
59	1	1,230	2	2,657
60	3	10,337	4	9,141
61	3	10,528	3	5,972
62	3	3,342	2	4,006
63	2	7,994	6	8,685
64	4	15,977	6	16,826
65	2	7,174	4	7,374
66	2	5,908	5	10,748
67	4	14,968	5	8,908
68	1	3,705	6	15,308
69	1	1,692	4	10,854
70	8	16,903	5	6,140
71	2	3,026	4	5,369
72	2	2,953	6	9,817
73	3	7,032	4	6,666
74	2	1,200	4	6,785
75			2	1,253
76			4	10,860
77	2	2,946	2	2,091
78	1	2,524		
79	1	1,663		
80			2	2,855
81	1	1,287	1	1,462
82			1	2,837
83			1	3,625
84			1	1,830
85			1	955
90			1	1,224
TOTAL	52 \$	139,930	112 \$	232,153