

REPORT ON AN ACTUARIAL VALUATION
OF THE SOUTH CAROLINA POLICE
OFFICERS RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1981

March 1, 1982

BUCK
CONSULTANTS

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

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, 1981 made in accordance with this provision of the law.

The actuarial assumptions used in this 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 per cent and 10.30 per cent 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 5 years from June 30, 1981. The post-retirement cost-of-living increases are currently being met on a terminal reserve basis.

In addition, employer contributions at the rate of .40 per cent and .20 per cent of compensation for all members should be continued to cover the cost of the Pre-Retirement and Accidental Death Benefit Programs, respectively.

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

(Signed) THOMAS J. CAVANAUGH

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

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REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1981

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>	<u>6/30/81</u>	<u>6/30/80</u>
Number of active members:		
Men	7,765	7,548
Women	762	686
Total	8,527	8,234
Annual compensation of active members during year:		
Men	\$108,127,783	\$ 96,543,899
Women	8,398,532	6,902,293
Total	\$116,526,315	\$ 103,446,192
Number of inactive members	1,680	1,742
Number of retired members and beneficiaries	1,480	1,349
Annual retirement allowances	\$ 5,464,331	\$ 4,652,022
Assets for valuation purposes	\$153,844,301	\$ 130,193,012
Normal contribution as per cent of compensation:		
Class One Service	4.59%	4.44%
Class Two Service	5.77	5.77
Unfunded accrued liability (UAL)	\$ 21,221,371	\$ 20,844,375
Unfunded accrued liability contribution as per cent of payroll:		
Class One Service	3.21%	3.36%
Class Two Service	4.53	4.53
Unfunded accrued liability liquidation period (years)	5	6
Number of cost-of-living increases to be granted after valuation date included in UAL	5	5
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, 1981 are given in Section IV and further discussion of the contribution levels is set out in Section V. Two amendments were made to the provisions of the System since the June 30, 1980 valuation and were taken into account in this valuation. One provided for the election of a monthly benefit for life in lieu of the return of accumulated contributions plus the Group Life Insurance payment in the case of an active member who dies in service with at least 15 years of creditable service. The other amendment changes the definition of the compensation used to calculate disability benefits under the System to an average of the three highest consecutive fiscal years' compensation as of the date of disability.
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, 1981, 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, 1981 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, 1981 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 active members of the Retirement System together with the annual compensation as of June 30, 1981.

TABLE I
ACTIVE MEMBERSHIP OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
AS OF JUNE 30, 1981

GROUP	NUMBER	ANNUAL COMPENSATION
Men	7,765	\$ 108,127,783
Women	762	8,398,532
Total	8,527*	\$ 116,526,315

*There are in addition 1,680 members not on the payroll as of June 30, 1981 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, 1981 classified by sex and cause of retirement.

TABLE II
THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
BENEFICIARIES ON THE ROLL
AS OF JUNE 30, 1981

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Service and Early Retirements:		
Men	1031	\$ 3,921,763
Women	25	64,549
Total	1056	\$ 3,986,312
Disability Retirements:		
Men	219	\$ 906,675
Women	3	7,617
Total	222	\$ 914,292
Beneficiaries of Deceased Members:		
Men	66	\$ 181,806
Women	136	381,921
Total	202	\$ 563,727
Grand Total	1,480	\$ 5,464,331

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, 1981, these assets amounted to \$32,351,945.

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 \$121,492,356 as of June 30, 1981.

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, 1981. The following comments on the valuation are pertinent:

The schedule shows that the System has actuarial liabilities of \$322,912,821, of which \$44,622,130 is for the prospective benefits payable on account of present retired members and beneficiaries, \$268,178,652 is for the prospective benefits payable on account of present active and inactive members, and \$10,112,039 is the reserve required to provide five additional lifetime cost-of-living increases of 4 per cent per annum commencing July 1, 1981. Against these liabilities, the System has present assets of \$153,844,301 and anticipated future contributions by members of \$67,535,838 leaving a balance of \$101,532,682 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 determined to be 4.59 per cent of compensation. Therefore, if employers contribute 7.80 per cent of payroll for Class One members in their employ and 4.59 per cent is attributable to normal contributions, then the resulting 3.21 per cent is attributable to accrued liability contributions. For Class Two service the normal rate for the average new entrant was determined to be 5.77 per

cent of compensation. Subtracting 5.77 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 4.53 per cent of compensation for Class Two members. Future normal contributions at the above rates have a present value of \$80,311,311. If this amount is subtracted from \$101,532,682, the present value of future contributions to be made by employers, \$21,221,371 remains as the present value of the unfunded accrued liability. On this basis, it is anticipated that the accrued liability of \$21,221,371 will be liquidated within a period of 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 continue to 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). Based on these employer contribution rates the unfunded accrued liability will be liquidated within 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.

SECTION VII - ACCOUNTING INFORMATION

1. Opinion No. 8 of the Accounting Principles Board of the American Institute of Certified Public Accountants, as amended by Statement No. 36 of the Financial Accounting Standards Board, requires that certain items of information concerning retirement systems be furnished by the actuary for the State's audited financial statements.
2. Statement No. 35 of the Financial Accounting Standards Board requires that certain items of information be furnished by the actuary for the System's audited financial statements.

3. The information required by the amended Opinion No. 8 and Statement No. 35 includes the actuarial present value of accrued (accumulated) benefits as of the valuation date. The relevant amounts as of June 30, 1981 are:

Actuarial present value of accrued benefits:

Vested benefits

Participants currently receiving payments	\$ 45,540,827
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Other participants	<u>38,677,337</u>
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	\$ 84,218,164
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Nonvested benefits	<u>4,504,748</u>
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Total	\$ 88,722,912
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The actuarial present value of vested and nonvested accrued benefits is based on an interest rate of 10%. This rate represents the estimated constant equivalent rate of return for the periods during which payment of these benefits will be deferred based on the interest rates in use as of the valuation date to calculate the Pension Benefit Guaranty Corporation's annuity values for terminating plans covered by the Employee Retirement Income Security Act of 1974.

SCHEDULE A

RESULTS OF THE VALUATION AS OF JUNE 30, 1981

(1) Actuarial Liabilities

Present value of prospective benefits payable
in respect of:

(a) Present retired members and beneficiaries	\$ 44,622,130
(b) Present active and inactive members	268,178,652
(c) Five cost-of-living increases commencing 7/1/81	<u>10,112,039</u>
(d) Total actuarial liabilities	\$ 322,912,821
(2) Assets of the System	<u>153,844,301</u>
(3) Unfunded Value of Prospective Benefits = (1)(d) - (2)	\$ 169,068,520
(4) Present Value of Future Contributions By Members	<u>67,535,838</u>
(5) Total Prospective Contributions By Employers = (3) - (4)	\$ 101,532,682
(6) Present Values of 1 Per Cent of Future Compensation:	
(a) Class One Service	\$ 667,821
(b) Class Two Service	13,387,524
(7) Present Value of Future Normal Contributions By Employers At:	
(a) $4.59\% = (6)(a) \times 4.59$	\$ 3,065,298
(b) $5.77\% = (6)(b) \times 5.77$	<u>77,246,013</u>
(c) Total	\$ 80,311,311
(8) Present Value of Accrued Liability Contributions By Employers = (5) - (7)(c)	\$ 21,221,371
(9) Accrued Liability Rates:	
(a) Class One Service	3.21%
(b) Class Two Service	4.53
(10) Accrued Liability Liquidation Period	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: 7% per annum, compounded annually.

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

Age	<u>Annual Rate of</u>				<u>Salary Increases**</u>
	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Service Retirement*</u>	
20	13.79%	.10%	.14%		11.29%
25	12.83	.13	.16		10.39
30	9.12	.16	.20		9.01
35	5.61	.20	.26		7.29
40	3.43	.27	.34		6.50
45	2.33	.40	.50		6.21
50	1.74	.57	.84		5.80
55		.88		6.50%	5.60
60		1.42		9.90	5.40
64		2.03		15.98	5.30

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 5 per cent in 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 of 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 of 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 $\frac{5}{12}$ 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 or who is disabled as a result of an injury arising out of and in the course of the performance of his duties regardless of length of service and who 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 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. The compensation to be used for purposes of computing this benefit is the average final compensation as of the date of disability.

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

Death Benefit

before retirement the amount of his accumulated contributions is paid to his designated beneficiary or estate.

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.

Upon the death of a member before retirement who had 15 years of creditable service, the person nominated to receive the amount of the member's accumulated contribution may elect to receive, in lieu of such accumulated contributions and the Group Life Insurance payment, an allowance for life in an amount as if the member had retired on the date of his death and had elected for payment to commence at age 55 under Option 1 as described below. The compensation to be used for purposes of computing this benefit is the average final compensation as of the date of death.

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 allowance 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. In addition each employer contributes .60% of the compensation of both Class One and Class Two members to cover the cost of the Accidental

and Group Life Insurance Pre-Retirement
Death Benefit Programs.

TABLE 1

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30, 1981

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
19	13	\$ 109,662	6	\$ 27,265
20	14	137,604	2	9,561
21	38	338,950	6	49,030
22	90	894,334	17	141,582
23	161	1,654,712	32	331,138
24	230	2,490,318	38	391,053
25	259	3,061,917	42	412,378
26	291	3,465,031	51	543,846
27	313	3,784,336	46	501,267
28	342	4,240,022	44	497,490
29	268	3,612,730	39	426,872
30	331	4,378,870	26	303,740
31	258	3,990,454	33	356,599
32	300	4,042,029	44	577,280
33	324	4,543,026	30	334,872
34	314	4,458,247	27	269,839
35	264	3,832,567	23	229,973
36	231	3,397,977	17	186,229
37	198	2,771,159	14	168,049
38	204	2,994,175	15	163,270
39	196	2,977,693	22	265,892
40	159	2,315,429	19	222,978
41	155	2,282,716	14	147,169
42	170	2,530,202	11	129,543
43	139	2,106,679	20	236,990
44	148	2,261,948	12	144,600
45	151	2,217,751	13	151,673
46	152	2,304,503	15	188,355
47	150	2,252,180	13	168,005
48	182	2,589,239	3	23,209
49	135	2,028,738	4	53,920
50	136	2,218,876	4	52,524
51	169	2,564,931	5	56,966
52	119	1,674,360	5	62,619
53	140	2,113,206	3	27,324
54	141	2,286,911	7	81,201
55	91	1,393,707	4	38,952

TABLE 1

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30, 1981

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	98	\$ 1,550,844	6	\$ 82,169
57	116	1,830,854	6	61,656
58	65	1,016,137	4	50,787
59	81	1,267,963	4	48,060
60	75	1,227,440	5	49,583
61	88	1,364,450	1	12,079
62	64	966,870		
63	46	865,212	6	54,843
64	19	327,171		
65	35	570,340	1	12,552
66	16	233,965		
67	13	193,376		
68	10	165,428		
69	6	67,689		
70	3	33,256	1	34,920
71	2	36,822		
72	4	44,595		
73	5	26,311	2	18,630
74	2	14,533		
77	1	7,338		
TOTAL	7,765	\$108,127,783	762	\$ 8,398,532

SEE FOOTNOTE TABLE I

TABLE 2

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30, 1981

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	630	\$ 5,866,648	115	\$ 929,186
1	927	10,001,265	156	1,553,540
2	880	10,517,605	141	1,514,597
3	776	9,674,127	98	1,152,775
4	569	7,499,173	77	964,931
5	454	6,182,044	41	504,632
6	464	6,411,853	40	526,606
7	441	6,334,225	32	407,982
8	386	5,648,686	18	245,783
9	285	4,467,625	18	240,114
10	251	4,027,297	5	64,839
11	190	3,147,777	1	19,357
12	218	3,622,593	2	31,408
13	169	2,952,394	2	40,960
14	159	2,727,340	1	13,361
15	116	2,016,270	2	27,974
16	92	1,555,277	1	9,639
17	75	1,437,051		
18	86	1,637,245		
19	67	1,275,661	2	22,077
20	62	1,111,944		
21	59	1,185,423		
22	20	395,648		
23	46	906,556	2	18,460
24	59	1,214,917	1	8,615
25	38	716,338	2	19,250
26	22	443,819		
27	42	834,455		
28	20	460,077		
29	36	780,271	1	11,357
30	13	290,498	1	2,642
31	24	491,831		
32	5	131,141	1	34,920
33	25	645,288		
34	31	801,500		
35	10	222,628		

TABLE 2

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30, 1981

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	2 \$	71,193	1 \$	23,826
37	2	39,737		
38			1	9,701
40	4	81,340		
41	8	231,475		
46	1	16,801		
47	1	52,747		
TOTAL	7,765	\$108,127,783	762	\$ 8,398,532

SEE FOOTNOTE TABLE I

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1981

SERVICE AND EARLY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	1 \$	1,116		
41	1	3,172		
44	2	28,641		
50	1	3,512		
51	5	25,450		
52	2	11,286		
53	4	24,254		
54	3	27,810		
55	13	98,454		
56	11	44,704		
57	23	114,856	1 \$	3,025
58	13	86,533	2	6,906
59	24	154,371	1	659
60	19	96,314		
61	34	145,312	3	11,926
62	33	164,612	1	3,515
63	55	271,780	1	1,174
64	59	194,841	2	5,124
65	60	238,693		
66	50	242,395		
67	79	267,744	3	8,139
68	64	218,171	1	2,378
69	54	166,137	2	4,142
70	54	140,993	1	2,236
71	52	180,405	1	3,232
72	53	200,249		
73	51	177,908	2	3,490
74	36	104,245		
75	25	92,075		
76	34	94,979		
77	19	55,545		
78	27	77,287	1	4,551
79	13	28,730		
80	9	21,740	1	2,459

TABLE 3
THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1981

SERVICE AND EARLY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
81	16	\$ 47,328		
82	8	19,896	1	\$ 963
83	7	18,898		
84	6	14,791	1	630
85	2	3,146		
86	2	6,639		
87	1	3,640		
88	1	728		
89	1	2,383		
TOTAL	1,031	\$ 3,921,763	25	\$ 64,549

SUMMARY

LIFE				
ANNUITY	758	\$ 2,655,619	21	\$ 54,565
100% J+S	109	347,041	3	5,603
50% J+S	132	639,493		
LEVELING				
INCOME	32	279,610	1	4,381

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1981

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
31	3 \$	29,178		
33	1	3,530		
34	2	8,652		
35	1	7,977		
36	1	4,415		
37	2	21,740		
38	1	3,157		
39	5	25,533		
40	3	11,933		
41	8	56,022		
42	2	9,879		
43	4	14,874		
44	3	15,321		
45	11	59,957		
46	5	28,660		
47	4	24,320		
48	5	20,628		
49	5	16,937	1 \$	2,349
50	11	41,110		
51	7	35,427		
52	12	54,257	1	2,577
53	4	23,933		
54	10	46,667		
55	7	25,969		
56	12	38,932		
57	13	46,663		
58	7	14,872		
59	10	30,492		
60	9	18,069		

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1981

DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
61	7 \$	27,403		
62	12	31,453		
63	5	19,437	1 \$	2,691
64	11	44,433		
65	4	5,550		
66	5	17,765		
67	1	1,417		
68	2	3,683		
69	2	6,105		
71	1	7,413		
77	1	2,912		
TOTAL	219 \$	906,675	3 \$	7,617
SUMMARY				
LIFE				
ANNUITY	147 \$	642,418	3 \$	7,617
100% J+S	49	150,129		
50% J+S	23	114,128		

TABLE 5

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1981

BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	1 \$	2,846	1 \$	3,731
39			1	2,049
43			1	3,776
46			1	3,882
47	1	2,784	1	1,314
48	1	3,257	2	5,156
50			1	7,479
51	1	1,066	2	3,578
53	1	2,076	3	13,200
54	1	5,474	3	11,616
55			1	2,230
56			4	4,277
57			1	1,687
58	2	13,170	6	26,790
59			11	44,819
60	1	2,911	2	2,867
61	1	1,329	5	27,737
62	3	11,146	3	6,432
63	3	11,375	5	11,043
64	3	3,609	9	30,451
65	2	8,633	7	21,326
66	4	16,998	4	7,960
67	3	8,834	9	31,815
68	3	9,387	5	9,626
69	4	16,173	6	16,521
70	3	9,202	4	11,729
71	1	1,829	6	9,182
72	9	18,485	5	10,152
73	4	7,168	5	7,274
74	2	3,180	3	6,661
75	4	9,403	4	7,324
76	2	1,296	2	1,353
77			4	11,727
78			2	2,259
79	2	3,182		
80	2	3,805		
81	1	1,797		
82			2	3,081
83	1	1,391	1	1,580
85			1	3,916
86			1	1,971
87			1	1,031
92			1	1,319
TOTAL	66 \$	181,806	136 \$	381,921