

**REPORT ON AN ACTUARIAL VALUATION OF THE  
SOUTH CAROLINA POLICE OFFICERS  
RETIREMENT SYSTEM  
PREPARED AS OF JULY 1, 1993**

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March 2, 1994

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 System. We submitted herewith our report on the actuarial valuation of the South Carolina Police Officers Retirement System prepared as of July 1, 1993.

The valuation indicates that the total employer contribution rates for regular benefits should be 7.80 per cent of compensation for Class One members and 10.30 per cent of compensation for Class Two members. In addition, employer contributions at the rate of .20 per cent of compensation to cover the cost of the Pre-retirement Death Benefit Program and at .20 per cent of compensation to cover the cost of the Accidental Death Benefit Program should be continued. The liquidation period for the unfunded accrued liability is 9 years from July 1, 1993.

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.

Respectfully submitted,

(Signed) DONALD M. OVERHOLSER

Donald M. Overholser  
Consulting Actuary

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**REPORT ON AN ACTUARIAL VALUATION OF THE  
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM  
PREPARED AS OF JULY 1, 1993**

**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>7/1/93</u>	<u>7/1/92</u>
Number of active members:		
Men	14,377	14,159
Women	<u>3,383</u>	<u>3,307</u>
Total	17,760	17,466
Annual compensation of active members during year:		
Men	\$ 334,658,557	\$ 324,258,897
Women	<u>68,590,515</u>	<u>65,961,369</u>
Total	\$ 403,249,072	\$ 390,220,266
Number of retired members and beneficiaries	3,691	3,435
Annual retirement allowances	\$ 40,743,019	\$ 35,225,247
Assets for valuation purposes	\$ 981,524,000	\$ 870,615,000
Normal contribution as percent of compensation:		
Class One Service	4.59%	4.59%
Class Two Service	7.59	7.59
Unfunded accrued liability (UAL)	\$ 82,349,887	\$ 84,329,075
UAL contribution as per cent of compensation:		
Class One Service	3.21%	3.21%
Class Two Service	2.71	2.71
UAL liquidation period (years)	9	10
Pre-retirement death benefit contribution as percent of compensation	.20%	.20%
Accidental death benefit contribution as per cent of compensation	.20%	.20%
Total contribution as per cent of compensation:		
Class One Service	8.20%	8.20%
Class Two Service	10.70	10.70

2. Comments on the valuation results as of July 1, 1993 are given in Section IV and further discussion of the contribution levels is set out in Section V.
3. Schedule B of this report outlines the full set of actuarial assumptions and methods employed. The provisions of the System are summarized in Schedule C.

## SECTION II - MEMBERSHIP DATA

1. Data needed with respect to each active member, retired member and beneficiary of the System and also with respect to terminations during the valuation year were furnished to the actuary by the Retirement System office.
2. From the data, tabulations were made showing as of July 1, 1993 the number and annual compensation of members classified by age and years of service and the number and retirement allowances of retired members and beneficiaries as of July 1, 1993 classified by age. These tabulations are presented in Scheduled D.
3. The following table shows the number and annual compensation of active members of the Retirement System as of July 1, 1993.

**TABLE I**  
**ACTIVE MEMBERSHIP OF THE**  
**SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM**  
**AS OF JULY 1, 1993**

<u>GROUP</u>	<u>NUMBER</u>	<u>ANNUAL COMPENSATION</u>
Men	14,377	\$ 334,658,557
Women	<u>3,383</u>	<u>68,590,515</u>
Total	17,760	\$ 403,249,072

Note: There are in addition 5,493 members not on the payroll as of July 1, 1993 but included in the individual accounts maintained by the System. The results of the valuation were adjusted to take these members into account.

4. The following table shows the number and annual retirement allowances of retired members and beneficiaries as of July 1, 1993.

**TABLE II**  
**THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF**  
**RETIRED MEMBERS AND BENEFICIARIES**  
**AS OF JULY 1, 1993**

<u>GROUP</u>	<u>NUMBER</u>	<u>ANNUAL RETIREMENT ALLOWANCES</u>
Service and Early Retirements:		
Men	2,489	\$ 30,373,361
Women	<u>141</u>	<u>887,568</u>
Total	2,630	\$ 31,260,929
Disability Retirements:		
Men	507	\$ 5,712,932
Women	<u>39</u>	<u>276,272</u>
Total	546	\$ 5,989,204
Beneficiaries of Deceased Members:		
Men	9	\$ 54,039
Women	<u>506</u>	<u>3,438,847</u>
Total	515	\$ 3,492,886
Grand Total	3,691	\$ 40,743,019

### 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 July 1, 1993, these assets amounted to \$199,005,000. 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 \$782,519,000 as of July 1, 1993. The total value of assets as of July 1, 1993 amounted to \$981,524,000.

3. During the year ended June 30, 1993, the investment rate of return on assets was 9.48%. This compares with an investment rate of return of 9.71% during the previous year.

#### 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 July 1, 1993. The following comments on the valuation are pertinent:

The schedule shows that the System has actuarial liabilities of \$1,754,388,983 of which \$459,267,971 is for the prospective benefits payable on account of present retired members and beneficiaries, and \$1,295,121,012 is for the prospective benefits payable on account of present active and inactive members. These liabilities include the reserves for all current and future cost-of-living increases to current retired members and beneficiaries and active members currently eligible for service retirement. Against these liabilities, the System has present assets of \$981,524,000 and anticipated future contributions by members of \$318,439,661 leaving a balance of \$454,425,322 to be provided by future contributions of employers.

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 unfunded accrued liability contributions. For Class Two service the normal rate for the average new entrant was determined to be 7.59 per cent of compensation. Subtracting 7.59 per cent from 10.30 per cent (the amount employers contribute for Class Two members in their employ) results in an unfunded accrued liability contribution of 2.71 per cent of compensation for Class Two members. Future normal contributions at the above rates have a present value of \$372,075,435. If this amount is subtracted from \$454,425,322, the present value of future contributions to be made by employers, \$82,349,887 remains as the present value of the unfunded accrued liability contributions. On this basis and assuming that active payroll will increase by 4% each year, it is anticipated that the unfunded accrued liability of \$82,349,887 will be liquidated within a period of 9 years from the valuation date.

### SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

The following table gives the recommended rates of contribution payable by employers, as determined on the basis of the present valuation.

**TABLE III**  
**RATES OF CONTRIBUTION RECOMMENDED FOR**  
**PAYMENT BY EMPLOYERS**

<u>RATE OF CONTRIBUTION</u>	<u>CLASS ONE</u>	<u>CLASS TWO</u>
Regular Benefits	7.80%	10.30%
Pre-retirement Death Benefits*	.20	.20
Accidental Death Benefits*	<u>.20</u>	<u>.20</u>
Total	8.20%	10.70%

\*Payable by participating employers.

It is recommended that participating employers contribute .20 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.

### SECTION VI - VALUATION BASIS

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

### SECTION VII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statement No. 5 sets forth certain items of information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED MEMBERS  
AS OF JULY 1, 1993**

<u>GROUP</u>	<u>NUMBER</u>
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	9,184
Active members:	
Vested	8,456
Non-vested	<u>9,304</u>
Total active members	17,760

Another such item is the pension benefit obligation, a standardized measure of the System's liabilities. It is the amount owed for benefits allocated to employee service before the balance sheet date, when total projected benefits (including the effects of projected salary increases) are allocated equally over all years of employee service before and after the balance sheet date.

2. The pension benefit obligation, prepared in accordance with Governmental Accounting Standards Board Statement No. 5, and a comparison with net assets available for benefits as of July 1, 1993, are presented below.

Pension Benefit Obligation  
(in \$ thousand)

◦ Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving benefits	\$ 465,304
◦ Current employees:	
Accumulated contributions	199,005
Employer-financed vested	128,348
Employer-financed nonvested	<u>339,782</u>
Total Pension Benefit Obligation	\$ 1,132,439
◦ Net assets available for benefits	\$ 981,524
◦ Unfunded Pension Benefit Obligation	\$ 150,915

3. The following first eight years of the ten-year historical trend information, prepared in accordance with Governmental Accounting Standards Board Statement No. 5, provides information on progress made in accumulating sufficient assets to pay benefits when due. A purpose of the chart is to establish a consistent method for analyzing and making comparisons among different public retirement systems.

Required Supplementary Information Analysis of Funding Progress  
(in \$ thousand)

Fiscal Year Beginning	(1) Net Assets Available for Benefits	(2) Pension Benefit Obligation	(3) Percentage Funded (1) ÷ (2)	(4) Unfunded Pension Benefit Obligation (2) - (1)	(5) Annual Covered Payroll	(6) Unfunded PBO as % of Covered Payroll (4) ÷ (5)
7/1/86	\$353,269	\$397,165	88.9%	\$ 43,896	\$204,405	21.5%
7/1/87	414,685	445,158	93.2	30,473	239,527	12.7
7/1/88	475,020	540,583	87.9	65,563	269,171	24.4
7/1/89	553,732	682,164	81.2	128,432	304,752	42.1
7/1/90	666,699	808,887	82.4	142,188	355,760	40.0
7/1/91	765,510	920,553	83.2	155,043	375,706	41.3
7/1/92	870,615	1,019,872	85.4	149,257	390,220	38.2
7/1/93	981,524	1,132,439	86.7	150,915	403,249	37.4

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of the Retirement System's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the Retirement System.

SCHEDULE A

## RESULTS OF THE VALUATION AS OF JULY 1, 1993

(1)	Actuarial liabilities	
	Present value of prospective benefits payable in respect of:	
(a)	Present retired members and beneficiaries	\$ 459,267,971
(b)	Present active and inactive members	<u>1,295,121,012</u>
(c)	Total actuarial liabilities	\$ 1,754,388,983
(2)	Assets of the System	<u>981,524,000</u>
(3)	Present value of future contributions = (1)(c) - (2)	\$ 772,864,983
(4)	Present value of future contributions by members	<u>318,439,661</u>
(5)	Present value of future contributions by employers = (3) - (4)	\$ 454,425,322
(6)	Present value of future normal contributions by employers	\$ 372,075,435
(7)	Present value of unfunded accrued liability contributions by employers = (5) - (6)	\$ 82,349,887
(8)	Unfunded accrued liability rates:	
(a)	Class One Service	3.21%
(b)	Class Two Service	2.71%
(9)	Unfunded accrued liability liquidation period	9 years
(10)	Pre-retirement death benefit contribution rate	.20%
(11)	Accidental death benefit contribution rate	.20%

**SCHEDULE B****OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS**

INTEREST RATE: 8% 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:

<u>Age</u>	<u>Annual Rate of</u>				
	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Service Retirement*</u>	<u>Salary Increases</u>
20	3.45%	.10%	.14%		12.29%
25	3.21	.13	.16		11.39
30	2.28	.16	.20		10.01
35	1.40	.20	.26		8.29
40	.86	.27	.34		7.50
45	.58	.40	.50		7.10
50	.44	.57	.84	5.00%	6.80
55		.88		6.50	6.60
60		1.42		9.90	6.40
64		2.03		15.98	6.30

\*An additional 20% are assumed to retire when first eligible for unreduced service retirement.

DEATHS AFTER RETIREMENT: 1971 Group Annuity Mortality Tables for service retirement and dependent beneficiaries set forward two years. A special mortality table is used for disability retirements.

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.

ASSET VALUATION METHOD: Adjusted amortized cost.

SCHEDULE C**SUMMARY OF MAIN SYSTEM PROVISIONS  
AS INTERPRETED FOR VALUATION PURPOSES**BACKGROUND

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 twelve consecutive quarters 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 25 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 \$10.97 multiplied by the number of years of his Class One service.
- (2) A monthly retirement allowance equal to 1/12 of 2.14% 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.

#### 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 Contribution

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 25 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 contributions 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.

Option 4. A member may elect Option 1 or Option 2 with the added provision that in the event the designated beneficiary predeceases the member, the retirement allowance payable to the member after the designated beneficiary's death shall be equal to the retirement allowance which would have been payable had the member not elected the option.

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 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 \$21 per month. Each Class Two member contributes 6.5% 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 .40% 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.

SCHEDULE D

TABLE 1

THE NUMBER AND ANNUAL COMPENSATION OF  
ACTIVE MEMBERS DISTRIBUTED BY AGE  
AS OF JULY 1, 1993

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
16	1	\$ 11,074		
19	5	68,118	1	\$ 13,735
20	16	211,200	6	84,095
21	42	615,219	4	62,215
22	120	1,871,481	26	358,270
23	262	4,347,003	42	621,590
24	377	6,832,104	55	885,346
25	479	9,068,114	87	1,471,315
26	549	10,819,464	104	1,878,982
27	564	11,467,557	142	2,447,683
28	576	11,942,795	130	2,374,426
29	624	12,980,991	147	2,720,428
30	583	12,289,534	153	2,936,676
31	568	12,027,200	157	2,985,557
32	513	11,018,374	122	2,253,406
33	506	11,236,353	145	2,888,961
34	483	10,635,369	133	2,599,628
35	398	9,239,496	157	3,236,243
36	409	9,651,525	128	2,531,351
37	431	10,096,612	127	2,440,098
38	419	9,981,931	111	2,446,519
39	433	10,758,840	117	2,496,710
40	409	10,243,591	139	2,979,981
41	372	9,302,666	113	2,492,745
42	419	10,748,696	103	2,236,928
43	393	10,107,956	91	1,938,147
44	449	11,629,444	92	2,078,702
45	439	11,680,340	87	1,998,378
46	396	10,410,997	76	1,624,666
47	358	9,781,060	71	1,602,935
48	280	7,475,428	57	1,127,398
49	270	6,631,262	50	1,135,830
50	293	7,900,810	60	1,379,529
51	248	6,769,161	49	1,168,094
52	201	5,233,700	54	1,332,416
53	193	4,829,556	36	865,846
54	177	4,692,069	29	634,951
55	174	4,480,064	28	673,323

**TABLE 1**  
**THE NUMBER AND ANNUAL COMPENSATION OF**  
**ACTIVE MEMBERS DISTRIBUTED BY AGE**  
**AS OF JULY 1, 1993**

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	148	\$ 3,958,394	25	\$ 581,058
57	135	3,537,665	32	808,677
58	131	3,744,156	24	535,457
59	115	3,108,015	18	416,943
60	107	2,935,190	12	235,234
61	76	1,883,584	11	269,031
62	65	1,811,408	8	210,492
63	51	1,479,955	7	160,802
64	38	984,992	3	47,831
65	31	747,929	5	126,260
66	15	431,469	1	21,271
67	7	168,533		
68	6	193,305	2	48,628
69	1	36,192		
70	4	99,331		
71	5	98,548	5	109,236
72	7	143,962		
73	3	138,962	1	16,492
74	2	42,008		
75	1	27,805		
TOTAL	14,377	\$ 334,658,557	3,383	\$ 68,590,515

See footnote Table 1

TABLE 2

THE NUMBER AND ANNUAL COMPENSATION OF  
ACTIVE MEMBERS DISTRIBUTED BY SERVICE  
AS OF JULY 1, 1993

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	642	\$ 6,505,254	192	\$ 1,955,702
1	1,342	24,585,408	348	6,356,959
2	1,349	27,666,563	354	6,674,168
3	1,348	27,912,495	406	7,725,219
4	1,237	27,142,785	365	7,328,336
5	1,238	26,796,145	483	9,344,402
6	819	18,713,684	237	5,010,765
7	1,043	24,466,778	335	8,023,412
8	683	16,140,335	130	2,910,114
9	506	12,592,476	80	1,851,629
10	428	11,246,093	77	1,918,203
11	348	9,024,614	44	989,539
12	322	8,528,768	62	1,418,570
13	268	7,212,703	43	991,789
14	307	8,339,589	47	1,150,050
15	304	8,300,217	39	1,028,827
16	268	7,686,913	32	810,618
17	270	7,697,436	29	818,320
18	227	6,696,425	28	777,021
19	241	7,421,825	14	374,341
20	192	5,745,495	15	489,948
21	156	4,998,395	11	307,565
22	138	4,520,327	4	93,225
23	116	3,838,865	3	110,093
24	122	4,093,894	2	47,661
25	120	4,062,410	2	69,624
26	80	2,670,831		
27	50	1,751,571		
28	43	1,565,189		
29	34	1,292,377		
30	26	978,117		
31	25	980,245		
32	21	806,120		
33	16	651,627		
34	12	417,689		
35	9	355,602	1	14,415
36	10	454,666		
37	2	94,043		
38	2	81,221		
40	4	211,747		

**TABLE 2**  
**THE NUMBER AND ANNUAL COMPENSATION OF**  
**ACTIVE MEMBERS DISTRIBUTED BY SERVICE**  
**AS OF JULY 1, 1993**

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
41	2	\$ 77,680		
42	3	131,812		
43	2	82,181		
44	1	67,217		
49	1	52,730		
<b>TOTAL</b>	<b>14,377</b>	<b>\$ 334,658,557</b>	<b>3,383</b>	<b>\$ 68,590,515</b>

See footnote Table I

TABLE 3

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIRED MEMBERS  
BY AGE AS OF JULY 1, 1993**

**SERVICE AND EARLY RETIREMENTS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
43	2	\$ 21,672		
44	1	18,814		
45	2	39,560		
46	20	365,932		
47	17	272,370	1	\$ 15,081
48	20	412,143		
49	17	347,162	1	11,225
50	16	313,876	1	5,759
51	24	429,362		
52	28	572,421	1	7,692
53	35	642,985		
54	36	851,449		
55	30	553,721	3	28,924
56	59	1,108,379	3	18,735
57	75	1,170,852	7	54,134
58	78	1,257,299	10	112,292
59	81	1,419,382	7	50,826
60	87	1,257,350	5	43,220
61	97	1,495,479	3	8,334
62	90	1,298,466	4	19,643
63	148	1,472,373	7	24,024
64	95	933,288	7	29,953
65	136	1,481,210	5	9,942
66	133	1,607,012	9	44,564
67	105	1,125,363	6	24,485
68	93	1,145,737	8	41,552
69	118	1,265,953	9	79,957
70	72	822,008	8	35,254
71	75	876,012	4	19,780
72	81	810,981	7	22,199
73	90	895,121	6	29,255
74	57	475,003	3	16,228
75	82	913,866	2	11,467
76	49	333,924	4	17,514
77	49	389,774	1	2,200
78	40	338,349		
79	57	414,295	2	11,023

TABLE 3

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIRED MEMBERS  
BY AGE AS OF JULY 1, 1993**

**SERVICE AND EARLY RETIREMENTS**

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
80	35	\$ 205,617	1	\$ 4,471
81	22	164,125	1	1,047
82	32	160,474	2	65,011
83	24	157,427		
84	20	178,187		
85	25	152,085	3	21,777
86	10	51,023		
87	9	47,977		
88	2	15,750		
89	6	39,953		
90	4	21,908		
91	2	12,250		
93	2	9,188		
95	1	8,454		
TOTAL	2,489	\$ 30,373,361	141	\$ 887,568

SUMMARY

LIFE ANNUITY	1,120	\$ 10,229,007	105	\$ 587,372
100% J+S	196	1,798,290	3	9,658
50% J+S	207	2,798,103		
SOC. SEC. LEVELING	618	10,603,360	27	253,713
100% POP-UP	139	1,502,610	2	13,294
50% POP-UP	209	3,441,991	4	23,531

**TABLE 4**  
**THE DISTRIBUTION OF THE NUMBER AND ANNUAL**  
**RETIREMENT ALLOWANCES OF RETIRED MEMBERS**  
**BY AGE AS OF JULY 1, 1993**

**DISABILITY RETIREMENTS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
29			1	\$ 8,036
30			1	13,716
31	2	\$ 23,471	1	10,697
32	4	49,386	1	11,650
33	2	18,188	1	7,799
34	3	44,671		
35	1	10,230	1	6,848
36	4	58,097	1	15,801
37	6	89,488	1	10,062
38	5	58,987		
39	8	116,430		
40	13	180,108	1	12,645
41	10	112,183		
42	14	212,901		
43	13	172,091	1	6,644
44	16	185,089	2	17,024
45	7	87,707	2	18,264
46	19	243,430	2	12,265
47	21	243,560		
48	16	219,463	2	14,468
49	19	240,102	2	13,288
50	12	143,145	3	15,178
51	23	330,110	3	19,833
52	13	130,709	2	14,369
53	26	291,591		
54	17	175,452	1	1,462
55	18	166,026	1	2,533
56	12	121,748	1	5,648
57	24	289,707	2	11,039
58	10	129,074	3	14,530
59	13	118,033	1	2,899
60	13	143,445		
61	15	141,730	1	4,566
62	17	150,983		
63	10	127,744		
64	10	84,568	1	5,008

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIRED MEMBERS  
BY AGE AS OF JULY 1, 1993

## DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
65	8	\$ 71,527		
66	8	72,185		
67	8	74,951		
68	10	110,973		
69	12	94,345		
70	5	12,440		
71	7	63,156		
72	8	70,020		
73	4	42,324		
74	5	28,507		
75	7	43,051		
76	5	83,232		
77	2	21,759		
79	1	11,199		
80	1	3,616		
TOTAL	507	\$ 5,712,932	39	\$ 276,272

## SUMMARY

LIFE ANNUITY	362	\$ 4,265,177	35	\$ 254,276
100% J+S	56	419,965	1	4,251
50% J+S	33	378,837	1	3,289
100% POP-UP	24	229,769		
50% POP-UP	32	419,184	2	14,456

**TABLE 5**  
**THE DISTRIBUTION OF THE NUMBER AND ANNUAL**  
**RETIREMENT ALLOWANCES OF BENEFICIARIES**  
**BY AGE AS OF JULY 1, 1993**  
**BENEFICIARIES OF DECEASED ACTIVE**  
**AND RETIRED MEMBERS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
7			1	\$ 4,593
12	1	\$ 10,587		
21			2	12,753
24			1	7,407
30			1	3,209
33			1	7,690
35			1	5,885
36			4	31,323
38	1	7,719		
39			1	8,768
40			1	17,069
41	1	3,690	4	28,163
42			3	17,588
43	1	4,627	2	11,456
44			4	30,568
45	1	5,235	4	22,857
46			8	58,233
47			4	33,902
48			3	23,152
49	1	11,381	4	46,482
50			2	8,996
51	1	6,099	3	24,464
52			6	46,182
53			6	64,285
54			11	77,041
55			12	87,896
56			8	84,238
57			2	31,681
58			5	35,235
59			9	44,836
60			13	84,416
61			8	101,201
62	1	2,757	12	126,098

TABLE 5  
THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF BENEFICIARIES  
BY AGE AS OF JULY 1, 1993

BENEFICIARIES OF DECEASED ACTIVE  
AND RETIRED MEMBERS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
63			15	\$ 90,470
64			8	78,818
65			20	118,396
66			12	118,759
67			12	79,508
68			18	106,437
69			22	115,530
70			21	136,144
71			13	85,733
72			29	195,823
73	1	\$ 1,944	9	46,799
74			18	156,204
75			22	129,757
76			11	64,514
77			22	161,863
78			24	155,770
79			18	99,836
80			12	79,789
81			12	48,330
82			9	56,057
83			7	31,559
84			7	27,445
85			8	36,334
86			4	8,802
87			3	11,260
88			4	11,243
TOTAL	9	\$ 54,039	506	\$ 3,438,847