

**REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS
RETIREMENT SYSTEM
PREPARED AS OF JULY 1, 1990**

**BUCK
CONSULTANTS**

200 Galleria Parkway, N.W. Suite 1200
Atlanta, Georgia 30339

February 20, 1991

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 have the honor to submit herewith the results of the valuation as of July 1, 1990 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 unfunded 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, including all current and future post-retirement cost-of-living increases to current retired members and beneficiaries and active members currently eligible for service retirement. The liquidation period for the unfunded accrued liability is 10 years from July 1, 1990.

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.

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, 1990**

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>7/1/90</u>	<u>7/1/89</u>
Number of active members:		
Men	13,716	12,433
Women	<u>3,280</u>	<u>2,982</u>
Total	16,996	15,415
Annual compensation of active members during year:		
Men	\$ 295,230,368	\$ 252,501,002
Women	<u>60,529,343</u>	<u>52,250,564</u>
Total	\$ 355,759,711	\$ 304,751,566
Number of retired members and beneficiaries	2,910	2,603
Annual retirement allowances	\$ 26,872,417	\$ 20,965,752
Assets for valuation purposes	\$ 666,699,000	\$ 553,732,000
Normal contribution as percent of compensation:		
Class One Service	4.59%	4.59%
Class Two Service	7.35	7.19
Unfunded accrued liability (UAL)	\$ 82,390,470	\$ 57,661,140
UAL contribution as per cent of compensation:		
Class One Service	3.21%	3.21%
Class Two Service	2.95	3.11
UAL liquidation period (years)	10	7
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, 1990 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 on a magnetic tape.
2. From the data, tabulations were made showing as of July 1, 1990 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, 1990 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, 1990.

TABLE I

ACTIVE MEMBERSHIP OF THE SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM AS OF JULY 1, 1990

<u>GROUP</u>	<u>NUMBER</u>	<u>ANNUAL COMPENSATION</u>
Men	13,716	\$ 295,230,368
Women	<u>3,280</u>	<u>60,529,343</u>
Total	16,996	\$ 355,759,711

Note: There are in addition 5,134 members not on the payroll as of July 1, 1990 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, 1990.

TABLE II
THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
RETIRED MEMBERS AND BENEFICIARIES
AS OF JULY 1, 1990

<u>GROUP</u>	<u>NUMBER</u>	<u>ANNUAL RETIREMENT ALLOWANCES</u>
Service and Early Retirements:		
Men	1,991	\$ 19,932,615
Women	<u>77</u>	<u>427,048</u>
Total	2,068	\$ 20,359,663
Disability Retirements:		
Men	405	\$ 3,882,350
Women	<u>21</u>	<u>133,647</u>
Total	426	\$ 4,015,997
Beneficiaries of Deceased Members:		
Men	6	\$ 27,112
Women	<u>410</u>	<u>2,469,645</u>
Total	416	\$ 2,496,757
Grand Total	2,910	\$ 26,872,417

Note: The retirement allowances shown do not include the increase effective July 1, 1990. However, the improvement was included in the liability determination.

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, 1990, these assets amounted to \$126,946,000.

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 \$539,753,000 as of July 1, 1990.

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, 1990. The following comments on the valuation are pertinent:

The schedule shows that the System has actuarial liabilities of \$1,369,030,747 of which \$292,941,865 is for the prospective benefits payable on account of present retired members and beneficiaries, and \$1,076,088,882 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 \$666,699,000 and anticipated future contributions by members of \$290,578,436 leaving a balance of \$411,753,311 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 7.35 per cent of compensation. Subtracting 7.35 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 2.95 per cent of compensation for Class Two members. Future normal contributions at the above rates have a present value of \$329,362,841. If this amount is subtracted from \$411,753,311, the present value of future contributions to be made by employers, \$82,390,470 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 \$82,390,470 will be liquidated within a period of 10 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 revised 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, 1990**

<u>GROUP</u>	<u>NUMBER</u>
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	8,044
Active members:	
Vested	7,009
Non-vested	9,987
Total active members	16,996

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, 1990, are presented on the following page.

Pension Benefit Obligation
(in \$ thousand)

◦ Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving benefits	\$ 302,029
◦ Current employees:	
Accumulated contributions	122,402
Employer-financed vested	113,710
Employer-financed nonvested	<u>270,746</u>
Total Pension Benefit Obligation	\$ 808,887
◦ Net assets available for benefits	\$ 666,699
◦ Unfunded Pension Benefit Obligation	\$ 142,188

3. The following first five 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

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, 1990**

(1) Actuarial liabilities		
Present value of prospective benefits payable in respect of:		
(a)	Present retired members and beneficiaries	\$ 292,941,865
(b)	Present active and inactive members	<u>1,076,088,882</u>
(c)	Total actuarial liabilities	\$ 1,369,030,747
(2)	Assets of the System	<u>666,699,000</u>
(3)	Present value of future contributions = (1)(c) - (2)	\$ 702,331,747
(4)	Present value of future contributions by members	<u>290,578,436</u>
(5)	Present value of future contributions by employers = (3) - (4)	\$ 411,753,311
(6)	Present value of future normal contributions by employers	\$ 329,362,841
(7)	Present value of unfunded accrued liability contributions by employers = (5) - (6)	\$ 82,390,470
(8) Unfunded accrued liability rates:		
(a)	Class One Service	3.21%
(b)	Class Two Service	2.95%
(9)	Unfunded accrued liability liquidation period	10 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 DISTRIBUTION OF THE NUMBER
AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
BY AGE AS OF JULY 1, 1990**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
18	2 \$	13,360		
19	5	63,124	4 \$	48,271
20	19	233,970	5	60,450
21	68	971,568	5	68,665
22	203	2,946,539	36	493,605
23	373	5,770,562	76	1,094,015
24	485	8,182,734	128	1,943,792
25	530	9,319,085	124	1,952,661
26	589	10,742,706	143	2,418,524
27	583	10,699,702	148	2,549,840
28	543	10,337,817	169	2,855,875
29	527	10,195,110	121	1,954,896
30	528	10,349,361	140	2,444,729
31	471	9,327,239	152	2,677,594
32	400	8,155,324	154	2,864,256
33	438	9,183,985	141	2,562,927
34	430	9,200,419	125	2,319,450
35	414	9,010,444	112	2,151,974
36	435	9,729,790	119	2,297,442
37	403	9,244,781	148	2,904,220
38	365	8,228,189	106	2,015,275
39	401	9,551,652	111	2,177,935
40	366	8,695,392	88	1,669,887
41	434	10,321,669	96	1,924,647
42	421	10,241,314	87	1,752,897
43	431	10,533,931	77	1,517,200
44	385	9,347,658	74	1,477,254
45	302	7,442,945	53	1,015,236
46	270	6,233,271	56	1,207,243
47	304	7,504,784	58	1,174,062
48	280	6,887,064	60	1,318,433
49	205	4,916,564	56	1,149,237
50	210	4,852,308	36	733,803
51	207	5,108,412	33	633,071
52	192	4,655,934	34	737,241
53	186	4,566,379	28	564,661
54	178	4,213,609	32	728,703
55	179	4,568,363	34	726,656

TABLE 1

**THE DISTRIBUTION OF THE NUMBER
AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
BY AGE AS OF JULY 1, 1990**

AGE	CONTINUED			
	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	155 \$	3,842,699	21 \$	462,781
57	141	3,452,186	17	325,252
58	104	2,581,973	13	288,230
59	108	2,590,493	9	216,326
60	119	2,959,365	15	355,130
61	89	2,175,528	7	131,869
62	79	1,955,526	7	125,354
63	53	1,349,089	7	136,251
64	16	366,250	2	34,370
65	27	721,483	3	52,636
66	17	439,712	1	33,334
67	11	322,181	1	16,235
68	9	221,311	5	94,942
69	13	306,475	1	15,822
70	7	257,408	1	16,640
71	6	141,631	1	37,544
TOTAL	13,716 \$	295,230,368	3,280 \$	60,529,343

SEE FOOTNOTE TABLE I

TABLE 2

THE DISTRIBUTION OF THE NUMBER
AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
BY YEARS OF CREDITED SERVICE
AS OF JULY 1, 1990

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	917	\$ 12,365,066	309	\$ 4,203,436
1	1,956	33,524,528	624	10,128,344
2	1,755	32,550,121	725	12,526,677
3	1,127	22,420,828	340	6,240,127
4	1,368	28,674,900	467	9,921,155
5	869	18,263,096	168	3,296,660
6	652	14,051,816	111	2,263,149
7	514	12,093,519	100	2,175,901
8	413	9,429,924	47	957,206
9	398	9,328,033	81	1,689,473
10	320	7,519,154	53	1,063,052
11	377	9,081,710	59	1,318,628
12	351	8,635,431	45	1,035,462
13	313	8,053,809	36	812,004
14	321	8,156,075	31	755,949
15	277	7,386,297	27	672,845
16	274	7,412,489	16	379,209
17	234	6,320,129	13	350,854
18	182	5,316,137	14	349,181
19	158	4,504,266	4	94,754
20	132	3,880,859	3	99,795
21	122	3,659,533	2	44,386
22	124	3,747,712	3	99,116
23	99	3,063,401		
24	79	2,398,452		
25	61	1,860,125	1	38,947
26	50	1,673,466		
27	46	1,533,268		
28	31	1,097,482		
29	37	1,255,935		
30	25	849,568		
31	26	852,390		
32	19	681,879	1	13,033
33	23	867,259		
34	13	521,006		
35	13	469,213		

TABLE 2

THE DISTRIBUTION OF THE NUMBER
AND ANNUAL COMPENSATION OF ACTIVE MEMBERS
BY YEARS OF CREDITED SERVICE
AS OF JULY 1, 1990

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	8	\$ 355,586		
37	6	288,041		
38	11	469,953		
39	6	254,107		
40	5	182,898		
41	2	92,139		
43	1	48,734		
47	1	40,034		
TOTAL	13,716	\$ 295,230,368	3,280	\$ 60,529,343

SEE FOOTNOTE TABLE I

TABLE 3

THE DISTRIBUTION OF THE NUMBER
AND ANNUAL RETIREMENT ALLOWANCES
OF RETIRED MEMBERS
BY AGE AS OF JULY 1, 1990

SERVICE AND EARLY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
40	1 \$	7,206		
43	1	17,114		
44	2	37,292		
45	6	99,149		
46	4	89,735		
47	2	37,877	1 \$	5,120
48	12	173,854		
49	12	214,089	1	6,838
50	18	293,149		
51	19	357,115		
52	13	191,361	1	334
53	21	348,845		
54	22	404,057	1	6,956
55	30	529,442		
56	42	635,339	1	10,722
57	57	730,539	1	6,816
58	61	875,114	1	2,953
59	58	841,138	2	13,801
60	90	1,079,620	4	9,113
61	54	604,872		
62	84	948,649	1	1,563
63	105	1,117,402	4	26,460
64	95	931,961	3	8,425
65	84	943,537	6	30,817
66	112	1,064,361	8	66,787
67	69	699,179	7	27,791
68	79	773,445	4	17,584
69	76	649,323	6	17,328
70	99	849,379	6	25,616
71	59	430,960	2	10,026
72	85	808,471	3	18,348
73	57	327,827	3	14,086
74	66	469,817	1	1,956
75	47	363,449		
76	65	401,722	2	9,799
77	47	237,399	1	3,975
78	32	202,638	1	931
79	40	188,700	2	57,801

TABLE 3

THE DISTRIBUTION OF THE NUMBER
AND ANNUAL RETIREMENT ALLOWANCES
OF RETIRED MEMBERS
BY AGE AS OF JULY 1, 1990

SERVICE AND EARLY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
80	32 \$	204,216	1 \$	5,743
81	28	211,366		
82	32	176,207	3	19,359
83	19	84,725		
84	12	84,295		
85	10	48,151		
86	9	48,778		
87	5	25,799		
88	4	15,697		
90	4	13,648		
91	2	3,512		
92	2	11,142		
93	2	12,198		
96	1	6,535		
98	1	3,256		
104	1	1,559		
105	1	6,405		
TOTAL	1,991 \$	19,932,615	77 \$	427,048

SUMMARY

LIFE ANNUITY	989 \$	7,512,713	60 \$	342,774
100% J+S	162	1,154,299	2	5,107
50% J+S	171	1,845,642		
SOC. SEC.				
LEVELING	420	6,398,145	11	55,391
100% POP-UP	103	949,397	2	11,818
50% POP-UP	146	2,072,419	2	11,958

TABLE 4

THE DISTRIBUTION OF THE NUMBER
AND ANNUAL RETIREMENT ALLOWANCES
OF RETIRED MEMBERS
BY AGE AS OF JULY 1, 1990

DISABILITY RETIREMENTS

AGE	NUMBER	MEN		WOMEN	
		NUMBER	AMOUNT	NUMBER	AMOUNT
11	1		\$ 8,761		
29				1	\$ 10,771
31	1		11,402		
33	2		16,298	1	14,047
34	2		25,192		
35	1		11,085		
36	4		77,486		
37	3		44,430		
38	7		56,875		
39	8		106,603		
40	10		123,176		
41	7		76,149	2	15,134
42	5		42,464	1	10,187
43	12		127,919		
44	10		114,334		
45	7		75,414	1	8,204
45	7		75,414	1	8,204
46	11		148,963	1	8,406
47	6		64,478	1	5,445
48	13		159,865	2	12,667
49	8		76,725	2	12,774
50	21		221,043		
51	13		126,957		
52	13		125,171		
53	9		90,643	1	5,021
54	23		289,437	2	7,113
55	10		114,659	2	8,140
56	15		109,332	1	2,577
57	15		135,222		
58	17		139,122	1	4,059
59	20		146,903		
60	11		122,410		

TABLE 4
THE DISTRIBUTION OF THE NUMBER
AND ANNUAL RETIREMENT ALLOWANCES
OF RETIRED MEMBERS
BY AGE AS OF JULY 1, 1990

DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
61	13 \$	96,262	1 \$	4,452
62	9	70,110		
63	7	53,364		
64	10	85,134		
65	13	121,249		
66	14	98,590		
67	5	11,057		
68	7	56,150		
69	8	62,256		
70	7	52,976		
71	8	33,484		
72	7	38,279	1	4,650
73	6	74,982		
74	2	19,343		
75	1	1,796		
76	1	9,956		
77	1	3,214		
103	1	5,630		
TOTAL	405 \$	3,882,350	21 \$	133,647

SUMMARY

ANNUITY	277 \$	2,763,249	19 \$	122,923
100% J+S	54	375,090	1	3,779
50% J+S	28	286,999		
100% POP-UP	19	162,813		
50% POP-UP	27	294,199	1	6,945

TABLE 5

THE DISTRIBUTION OF THE NUMBER
AND ANNUAL RETIREMENT ALLOWANCES
OF BENEFICIARIES
BY AGE AS OF JULY 1, 1990

BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
18			2 \$	11,337
27			1	2,853
30			1	6,836
32			1	5,232
33			3	21,431
37			1	15,175
38	1 \$	3,280	3	23,845
39			1	7,950
40	1	4,113		
41			3	12,956
42			3	14,192
43			2	5,072
44			3	18,623
45			2	19,088
46	1	10,118		
47			1	6,895
48	1	5,422	2	17,919
49			4	18,797
50			3	31,517
51			9	59,180
52			8	54,912
53			4	26,019
54			1	18,657
55			5	23,914
56			6	31,751
57			11	65,522
58			5	81,587
59	1	2,451	8	107,791
60			13	75,182

TABLE 5

THE DISTRIBUTION OF THE NUMBER
AND ANNUAL RETIREMENT ALLOWANCES
OF BENEFICIARIES
BY AGE AS OF JULY 1, 1990

BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
61			6 \$	50,683
62			10	62,550
63			9	78,130
63			9	78,130
64			9	60,687
65			12	53,632
66			18	79,405
67			19	117,636
68			11	70,965
69			24	145,805
70	1 \$	1,728	9	41,614
71			20	139,007
72			20	112,702
73			10	53,951
74			19	119,946
75			23	135,606
76			16	72,777
77			11	63,118
78			11	40,236
79			10	57,858
80			7	31,741
81			7	24,412
82			8	27,338
83			5	13,399
84			3	10,010
85			5	14,487
86			1	687
89			1	7,030
TOTAL	6 \$	27,112	410 \$	2,469,645