

**REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS
RETIREMENT SYSTEM
PREPARED AS OF JULY 1, 1996**

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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 transmit herewith our report on the actuarial valuation of the South Carolina Police Officers Retirement System prepared as of July 1, 1996.

The valuation indicates that the total contribution rates may be continued at 7.80 percent of earnable compensation for Class One members and 10.30 percent of earnable compensation for Class Two members. The valuation results reflect a 4.00% cost of living adjustment to be provided effective July 1, 1997. This increase is in accordance with the law governing the operation of the System and the funding policy adopted by the Board of Control in 1996. On this basis, the liquidation period for the unfunded accrued liability is approximately 7 years from July 1, 1996. In addition, employer contributions at the rate of .20 percent of compensation to cover the cost of the Pre-retirement Death Benefit Program and at .20 percent of compensation to cover the cost of the Accidental Death Benefit Program should be continued.

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
Principal and Consulting Actuary

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SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
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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>7/1/96</u>	<u>7/1/95</u>
Number of active members	20,461	19,657
Annual compensation of active members during year	\$ 505,515,831	\$ 475,176,079
Number of retired members and beneficiaries	4,862	4,547
Annual retirement allowances	\$ 59,885,463	\$ 54,810,012
Assets at Market value	\$ 1,425,106,000	\$1,341,004,000
Assets for valuation purposes	\$ 1,367,549,000	\$1,236,610,000
Normal contribution as percent of compensation:		
Class One Service	4.59%	4.59%
Class Two Service	8.43	8.43
Unfunded accrued liability (UAL)	\$ 60,236,456	\$ 62,508,868
UAL liquidation period (years)	7	8
UAL contribution as percent of compensation:		
Class One Service	3.21%	3.21%
Class Two Service	1.87	1.87
Pre-retirement death benefit contribution as percent of compensation	.20%	.20%
Accidental death benefit contribution as percent of compensation	.20%	.20%
Total contribution as percent 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, 1996 are given in Section IV and further discussion of the contribution levels is set out in Section V.
3. Schedule D of this report outlines the full set of actuarial assumptions and methods employed. There have been no changes since the previous valuation.
4. The major benefit and contribution provisions of the System as reflected in the current valuation are summarized in Schedule E. The valuation takes into account a one-time 4% cost of living adjustment for retirees, effective July 1, 1997. There have been no other changes since the previous valuation.
5. The accounting information required by Statements 25 and 27 of the Governmental Accounting Standards Board is shown in Section VII.

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, 1996 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, 1996 classified by age. These tabulations are presented in Schedule F.
3. The following table shows the number and annual compensation of active members of the Retirement System as of July 1, 1996.

TABLE I
ACTIVE MEMBERSHIP OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
AS OF JULY 1, 1996

GROUP	NUMBER	ANNUAL COMPENSATION
Men	16,214	\$412,289,708
Women	<u>4,247</u>	<u>93,226,123</u>
Total	20,461	\$505,515,831

Note: There are in addition 4,855 members not on the payroll as of July 1, 1996 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, 1996.

TABLE II
THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
RETIRED MEMBERS AND BENEFICIARIES
AS OF JULY 1, 1996

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Service and Early Retirements:		
Men	3,250	\$ 44,591,988
Women	<u>251</u>	<u>1,930,052</u>
Total	3,501	\$ 46,522,040
Disability Retirements:		
Men	636	\$ 7,849,546
Women	<u>79</u>	<u>633,561</u>
Total	715	\$ 8,483,107
Beneficiaries of Deceased Members:		
Men	14	\$ 75,004
Women	<u>632</u>	<u>4,805,312</u>
Total	646	\$ 4,880,316
Grand Total	4,862	\$ 59,885,463

SECTION III - ASSETS

1. The amounts of the present 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.
2. The market value of assets as of July 1, 1996 amounted to \$1,425,106,000. The market related actuarial value of assets used for the current valuation was \$1,367,549,000. Included in these amounts are the assets of the employee annuity savings fund of \$284,655,000, which represent the accumulated contributions of active members together with interest thereon. Schedule C shows the development of the actuarial value of assets as of July 1, 1996.
3. During the year ended June 30, 1996, the investment rate of return on market value of assets was 4.99%.

SECTION IV - COMMENTS ON THE VALUATION

1. 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, 1996.
2. The schedule shows that the System has actuarial liabilities of \$2,211,398,432 of which \$565,404,489 is for the prospective benefits payable on account of present retired members and beneficiaries, and \$1,645,993,943 is for the prospective benefits payable on account of present active and inactive members. Future normal contributions by the employees and employers to cover the cost of benefits accruing in the future have a present value of \$783,612,976 leaving \$1,427,785,456 as the actuarial accrued liability for past benefits. Against this liability, the System has current assets of \$1,367,549,000. The balance of the liabilities, or \$60,236,456, represents the present value of unfunded actuarial accrued liability contributions.
3. The retirement act provides that the contributions of employers shall consist of a normal contribution to cover the liability on account of service currently rendered and an unfunded

accrued liability contribution on account of liabilities for past service which are not covered by present assets. The valuation indicates that level employer normal contributions at the rate of 4.59% of payroll for Class One members and 8.43% of payroll for Class Two members are required from the time of entry to the System, in addition to member contributions, to provide the benefits of the System for the average member.

4. The total contribution rates exclusive of the rates required for the pre-retirement and accidental lump sum death benefits are 7.80% for Class One members and 10.30% for Class Two members. Of the total rates, 4.59% for Class One members and 8.43% for Class Two members is attributable to normal contributions. The remaining unfunded accrued liability rates are therefore 3.21% for Class One members and 1.87% for Class Two members. On the basis of these unfunded accrued liability contribution rates and assuming that total active payroll will increase by 4.25% each year, it is anticipated that the unfunded accrued liability of \$60,236,456 will be liquidated within a period of approximately 7 years from the valuation date.
5. We recommend that participating employers continue to contribute 0.20% of compensation for pre-retirement death benefits and 0.20% of compensation for accidental death benefits.

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

RATE OF CONTRIBUTION	CLASS ONE	CLASS TWO
Normal	4.59%	8.43%
Unfunded Accrued Liability	<u>3.21%</u>	<u>1.87%</u>
Total	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.

SECTION VI - VALUATION BASIS

The valuation of the Retirement System was made on the basis of the 7.25% interest rate, active service tables and mortality tables adopted by the Board on April 23, 1996. An outline of the actuarial assumptions and methods employed is presented in Schedule D.

SECTION VII - ACCOUNTING INFORMATION

- Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary 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, 1996

<u>GROUP</u>	<u>NUMBER</u>
Retirees and beneficiaries currently receiving benefits	4,862
Terminated employees entitled to benefits but not yet receiving them	4,855
Active members	<u>20,461</u>
Total	30,178

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
07/01/95	1,236,610	1,299,119	62,509	95.2%	475,176	13.2%
07/01/96	1,367,549	1,427,785	60,236	95.8%	505,516	11.9%

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at July 1, 1996. Additional information as of the latest actuarial valuation follows.

Valuation date	07/01/96
Actuarial cost method	Entry age
Amortization method	Level percent open
Remaining amortization period	7 years
Asset valuation method	5 year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.25%
Projected salary increases*	5.05 - 11.15%
*Includes inflation at	4.25%
Cost-of-living adjustments	None

SCHEDULE A

RESULTS OF THE VALUATION AS OF JULY 1, 1996

(1)	Actuarial liabilities	
	Present value of prospective benefits payable in respect of:	
	(a) Present retired members and beneficiaries	\$ 565,404,489
	(b) Present active and inactive members	<u>1,645,993,943</u>
	(c) Total actuarial liabilities	\$ 2,211,398,432
(2)	Present value of future normal contributions	
	(a) Employee	\$ 341,165,194
	(b) Employer	<u>442,447,782</u>
	(c) Total future normal contributions	\$ 783,612,976
(3)	Actuarial accrued liability = (1)(c) - (2)(c)	\$ 1,427,785,456
(4)	Current Assets	<u>1,367,549,000</u>
(5)	Present value of unfunded actuarial accrued liability contributions = (3) - (4)	\$ 60,236,456
(6)	Unfunded accrued liability rates	
	(a) Class One Service	3.21%
	(b) Class Two Service	1.87
(7)	Unfunded accrued liability liquidation period	7 years
(8)	Pre-retirement death benefit contribution rate	.20%
(9)	Accidental death benefit contribution rate	.20%

SCHEDULE B

**VALUATION BALANCE SHEET
SHOWING THE ASSETS AND LIABILITIES OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
(in \$1,000s)**

	JULY 1, 1996	JULY 1, 1995
ASSETS		
Current assets:		
Employee Annuity Savings Fund	\$ 284,655	\$ 251,255
Employer Annuity Accumulation Fund	<u>1,082,894</u>	<u>985,355</u>
Total current assets	\$ 1,367,549	\$ 1,236,610
Future member contributions to Employee Annuity Savings Fund	\$ 341,165	\$ 323,147
Prospective contributions to Employer Annuity Accumulation Fund:		
Normal contributions	\$ 442,448	\$ 419,164
Accrued liability contributions	<u>60,236</u>	<u>62,509</u>
Total prospective employer contributions	\$ 502,684	\$ 481,673
Total Assets	<u>\$ 2,211,398</u>	<u>\$ 2,041,430</u>
LIABILITIES		
Employee Annuity Savings Fund:		
Past member contributions	\$ 284,655	\$ 251,255
Future member contributions	<u>341,165</u>	<u>323,147</u>
Total contributions to Employee Annuity Savings Fund	\$ 625,820	\$ 574,402
Employer Annuity Accumulation Fund:		
Benefits currently in payment	\$ 565,404	\$ 519,795
Benefits to be paid to current active members	<u>1,020,174</u>	<u>947,233</u>
Total benefits payable from Employer Annuity Accumulation Fund	\$ 1,585,578	\$ 1,467,028
Total Liabilities	<u>\$ 2,211,398</u>	<u>\$ 2,041,430</u>

SCHEDULE C

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS
 (All dollar amounts are \$1,000's)

(1)	Actuarial Value of Assets on July 1, 1995	\$ 1,236,610
(2)	1995/1996 Net Cash Flow	
	a. Contributions	91,356
	b. Disbursements	65,401
	c. Net Cash Flow	
	(2)a - (2)b	25,955
(3)	Expected Investment Return [(1) x .0725] + [(2)c x .03625]	90,595
(4)	Expected Actuarial Value of Assets on July 1, 1996 (1) + (2)c + (3)	1,353,160
(5)	Market Value of Assets on July 1, 1996	1,425,106
(6)	Excess of Market Value over Expected Actuarial Value (5) - (4)	71,946
(7)	20% Adjustment towards Market .20 x (6)	14,389
(8)	Actuarial Value of Assets on July 1, 1996 (4) + (7)	\$ 1,367,549

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

INTEREST RATE: 7.25% 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	6.96%	.10%	.14%		11.15%
25	6.96	.13	.16		10.25
30	4.20	.16	.20		6.85
35	3.42	.20	.26		6.05
40	2.64	.27	.34		5.45
45	2.82	.40	.50	10.00%	5.05
50	2.94	.57	.84	10.00	5.05
55		.88		10.00	5.05
60		1.42		15.00	5.05
64		2.03		25.00	5.05

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

DEATHS AFTER RETIREMENT: 1983 Group Annuity Mortality Tables for service retirement and dependent beneficiaries set forward two years. A special mortality table is used for disability retirements.

LOADING OR CONTINGENCY RESERVES: None.

COST-OF-LIVING INCREASES: None assumed.

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: Actuarial Value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected value. The actuarial value of assets is limited to a range between 80% and 120% of market value.

SCHEDULE E**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, may 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.

The allowance of a surviving annuitant of a beneficiary whose allowance is increased under this section is to be increased by the same percent, 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 F

TABLE 1

**THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY AGE
AS OF JULY 1, 1996**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
18	4	\$ 51,832	1	\$ 10,412
19	18	181,098	4	38,785
20	30	356,166	8	72,866
21	81	1,112,923	29	362,994
22	217	3,451,425	61	912,418
23	349	6,492,951	109	1,766,490
24	498	9,589,415	131	2,305,708
25	612	12,251,277	143	2,527,580
26	667	14,273,323	136	2,418,607
27	626	13,600,840	154	2,960,987
28	658	14,655,762	118	2,464,402
29	637	14,702,133	147	3,002,297
30	635	15,031,987	143	2,984,886
31	645	15,552,785	158	3,232,427
32	623	15,143,565	194	4,059,400
33	601	14,977,113	178	3,687,523
34	535	13,473,900	151	3,133,289
35	537	13,621,100	158	3,341,918
36	496	12,367,321	165	3,680,483
37	423	11,403,906	150	3,339,280
38	429	11,642,542	155	3,534,333
39	448	11,842,228	152	3,384,745
40	485	13,027,124	137	3,213,447
41	439	11,757,945	113	2,751,244
42	456	12,963,690	139	3,395,933
43	419	11,582,640	134	3,282,700
44	412	11,699,275	114	2,757,597
45	448	12,863,718	95	2,224,601
46	405	12,222,725	120	2,951,794
47	450	13,395,366	87	2,449,215
48	375	11,128,879	93	2,413,613
49	386	11,838,365	95	2,274,698
50	260	7,686,170	55	1,360,678
51	259	7,605,504	49	1,179,422
52	229	6,472,738	59	1,606,712
53	245	7,462,325	59	1,501,274
54	185	5,315,968	51	1,414,467

TABLE 1
THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY AGE
AS OF JULY 1, 1996
(CONTINUED)

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
55	153	\$ 4,280,635	35	\$ 880,738
56	135	4,020,174	29	718,273
57	131	3,943,469	28	690,869
58	125	3,706,108	31	771,485
59	95	2,642,027	20	494,307
60	94	2,791,589	16	424,209
61	79	2,513,702	17	438,302
62	52	1,651,693	6	186,806
63	33	962,142	5	127,732
64	23	742,645	5	118,584
65	17	633,172	4	242,853
66	15	500,093	2	45,554
67	11	294,107		
68	10	261,800	1	19,015
69	5	174,763		
70	4	67,209		
71	1	37,928	1	21,476
73	3	54,809		
74	3	99,352	1	24,692
75	3	114,267	1	22,003
TOTAL	16,214	\$ 412,289,708	4,247	\$ 93,226,123

TABLE 2

**THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY SERVICE
AS OF JULY 1, 1996**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	1,901	\$ 28,704,036	733	\$ 10,523,688
1	1,809	37,924,638	611	11,922,522
2	1,505	33,796,233	430	9,438,412
3	1,082	24,898,344	262	6,137,696
4	762	18,647,703	157	3,629,315
5	1,110	28,180,529	300	6,818,465
6	911	23,474,664	258	6,156,589
7	856	22,068,810	289	6,594,711
8	836	21,709,659	306	7,180,244
9	714	19,307,009	187	4,408,465
10	677	19,473,143	210	5,929,567
11	521	14,744,250	96	2,531,225
12	388	11,376,653	55	1,527,817
13	325	10,098,397	45	1,328,639
14	290	9,063,456	41	1,136,750
15	247	7,809,237	49	1,268,826
16	250	8,012,683	35	981,486
17	250	8,056,019	41	1,265,701
18	225	7,537,329	31	968,277
19	232	7,821,127	27	772,522
20	210	7,008,377	27	831,348
21	220	7,543,390	15	521,491
22	183	6,579,611	11	338,559
23	163	5,986,129	13	419,399
24	128	4,706,440	13	408,847
25	99	3,964,080	2	86,656
26	87	3,495,326	2	52,930
27	59	2,407,098		
28	54	2,349,894		
29	34	1,534,522		
30	20	822,064		

TABLE 2

**THE NUMBER AND ANNUAL COMPENSATION OF
ACTIVE MEMBERS DISTRIBUTED BY SERVICE
AS OF JULY 1, 1996
(CONTINUED)**

AGE	NUMBER	MEN		WOMEN	
		NUMBER	AMOUNT	NUMBER	AMOUNT
31	12		\$ 561,207	1	\$ 45,916
32	18		814,131		
33	9		392,205		
34	8		397,871		
35	5		275,763		
36	4		205,327		
37	1		49,795		
38	3		141,154		
39	2		124,398		
40	2		86,553		
43	1		85,658		
44	1		54,796		
TOTAL	16,214		\$ 412,289,708	4,247	\$ 93,226,123

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AS OF JULY 1, 1996

SERVICE AND EARLY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
42			1	\$ 127
44	4	\$ 58,840		
45	9	141,907		
46	9	182,428		
47	19	385,278	1	1,701
48	38	713,183	1	692
49	50	991,241	1	23,215
50	51	960,996	1	16,143
51	53	1,157,055	2	21,845
52	44	1,030,561	4	65,309
53	59	1,246,956	2	34,907
54	69	1,516,810	2	40,494
55	60	1,153,144	6	55,072
56	86	1,392,269	7	108,051
57	93	1,702,989	4	38,536
58	99	1,650,334	16	145,948
59	107	1,882,635	10	112,446
60	130	2,074,829	16	185,520
61	136	2,182,408	20	225,190
62	124	2,085,917	13	75,944
63	160	1,701,650	17	58,306
64	143	1,602,907	12	61,028
65	133	1,576,655	8	37,419
66	190	2,060,070	11	45,479
67	124	1,151,406	8	39,231
68	148	1,763,437	11	31,240
69	127	1,669,119	7	28,894
70	101	1,167,111	6	26,390
71	90	1,221,198	9	49,016
72	106	1,250,918	9	86,978
73	65	791,239	7	30,909
74	70	907,879	7	37,307
75	76	836,683	8	52,486
76	76	919,122	6	31,795
77	46	416,757	3	17,612
78	75	920,650	2	12,445
79	39	302,238	4	19,007
80	37	358,507	1	2,387

TABLE 3

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AS OF JULY 1, 1996**

**SERVICE AND EARLY RETIREMENTS
(CONTINUED)**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
81	30	\$ 264,040		
82	45	332,140	2	\$ 11,963
83	27	189,237	1	4,853
84	16	107,367		
85	21	107,139	2	70,553
86	16	116,883		
87	12	129,674		
88	17	99,391	3	23,634
89	9	51,367		
90	4	21,772		
92	2	14,061		
93	2	13,295		
94	1	6,382		
96	1	2,739		
98	1	9,175		
TOTAL	3,250	\$44,591,988	251	\$ 1,930,052

SUMMARY

Life Annuity	1,339	\$13,796,133	170	\$ 1,109,112
100% J&S	225	2,210,966	5	11,033
50% J&S	220	3,473,544	1	14,804
Soc. Sec. Leveling	971	17,638,531	64	725,862
100% Pop-Up	193	2,194,343	5	37,779
50% Pop-Up	302	5,278,471	6	31,462

TABLE 4

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AS OF JULY 1, 1996**

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
25	1	\$ 15,790		
26	1	15,547		
28			1	\$ 14,601
29			1	12,430
30	2	32,492	1	14,126
31	5	78,093	1	2,537
32	3	36,882	1	8,721
33	4	55,535	4	46,029
34	3	45,077	2	25,969
35	6	78,876	1	12,644
36	4	53,048	1	8,464
37	5	73,163	2	22,505
38	7	84,872	2	8,832
39	9	114,551	3	40,551
40	11	174,999	3	31,792
41	11	153,480	1	12,743
42	14	220,865	3	32,724
43	19	255,919	5	47,146
44	19	265,958	1	9,618
45	20	321,639	2	16,394
46	22	309,256	1	7,211
47	25	286,852	4	34,763
48	14	219,064	3	25,498
49	31	391,260	3	18,185
50	25	311,991	1	4,669
51	26	376,536	6	41,420
52	29	363,518	2	17,191
53	16	169,066	4	19,941
54	30	403,364	5	26,997
55	24	262,569	4	22,465
56	28	303,711	1	2,738
57	19	190,939	1	1,587
58	17	177,842	1	2,749
59	9	94,420	1	6,130
60	23	305,779	1	4,884
61	10	140,087	3	15,769
62	12	117,358	1	3,147
63	11	134,893		

TABLE 4
THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AS OF JULY 1, 1996

DISABILITY RETIREMENTS
(CONTINUED)

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
64	12	\$ 122,877	1	\$ 4,955
65	15	146,067		
66	9	130,568		
67	8	75,748	1	5,436
68	7	73,195		
69	7	64,016		
70	6	66,143		
71	10	120,443		
72	10	93,197		
73	4	11,016		
74	7	68,540		
75	6	46,135		
76	3	28,362		
77	4	25,794		
78	6	43,980		
79	3	58,482		
80	2	23,614		
82	1	12,154		
83	1	3,924		
TOTAL	636	\$ 7,849,546	79	\$ 633,561

SUMMARY

Life Annuity	466	\$ 5,941,555	67	\$ 541,720
100% J&S	64	521,344	4	28,061
50% J&S	42	530,942	4	25,955
100% Pop-Up	26	268,804		
50% Pop-Up	38	586,901	4	37,825

TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AS OF JULY 1, 1996**

**BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS**

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
10			2	\$ 11,898
15			1	11,490
20	1	\$ 9,098		
23			1	8,310
24	1	9,179	2	11,191
26			1	5,368
27	1	1,651	1	8,039
29			2	10,369
32			1	1,197
33			1	3,483
34			2	13,730
36	1	893	1	8,346
37	1	893	3	24,605
38			1	6,387
39	1	3,838	5	48,816
40			2	10,805
41			1	8,378
42	1	4,361	1	9,516
43			1	18,526
44	1	11,838	5	34,572
45			7	35,836
46			4	26,203
47	1	1,788	8	69,025
48			8	70,635
49			12	93,010
50			5	36,924
51			3	25,129
52			11	117,212
53			6	38,970
54			10	80,549
55			9	65,954
56			10	101,597
57			15	129,294
58	1	4,174	15	122,285
59			15	144,908
60			5	57,592
61			10	130,569

TABLE 5

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIRED MEMBERS
AS OF JULY 1, 1996

BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS
(CONTINUED)

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
62			13	\$ 77,448
63			14	109,700
64			11	129,989
65			18	209,753
66	1	\$ 893	20	158,609
67			12	116,156
68			29	188,314
69			18	185,545
70			19	149,925
71			19	117,582
72			22	124,534
73			22	152,830
74			14	92,295
75			27	189,293
76	1	2,110	11	82,464
77	1	17,581	20	181,843
78			22	133,323
79	1	6,707	14	90,232
80			24	189,193
81			20	140,227
82			17	85,437
83			12	87,086
84			10	46,621
85			7	41,451
86			7	34,251
87			7	29,778
88			7	31,092
89			2	5,896
90			3	12,080
91			3	10,450
106			1	1,197
TOTAL	14	\$ 75,004	632	\$ 4,805,312