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

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May 7, 1997

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

### **SECTION I - SUMMARY OF PRINCIPAL RESULTS**

 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>	7/1/96	7/1/95
Number of active members Annual compensation of active	20,461	19,657
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 Assets for valuation purposes	\$ 1,425,106,000 \$ 1,367,549,000	\$1,341,004,000 \$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		
Class One Service	8.20%	8.20%
Class Two Service	10.70	10.70
as percent of compensation  Accidental death benefit contribution as percent of compensation  Total contribution as percent of compensation:  Class One Service	.20% 8.20%	.20% 8.20%



- 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**

- 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.

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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	4,247	93,226,123
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.

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

#### **SECTION III - ASSETS**

- 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**

- 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.
- 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

BUCS CONSULTANTS 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	3.21%	<u>1.87%</u>
Total	7.80%	10.30%
Pre-retirement Death Benefits*	.20	.20
Accidental Death Benefits*	20	20
Total	8.20%	10.70%

<sup>\*</sup>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**

1. 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

GROUP	<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

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#### **SCHEDULE OF FUNDING PROGRESS**

(Dollar amounts in thousands)

Actuarial Valuation <u>Date</u>	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)	Actua	arial liabilities		
		nt value of prospective benefits payable pect of:		
	(a)	Present retired members and beneficiaries	\$	565,404,489
	(b)	Present active and inactive members	1	,645,993,943
	(c)	Total actuarial liabilities	\$ 2	,211,398,432
(2)	Prese	nt value of future normal contributions		
	(a)	Employee	\$ .	341,165,194
	(b)	Employer		442,447,782
	(c)	Total future normal contributions	\$	783,612,976
(3)	Actua	rial accrued liability = (1)(c) - (2)(c)	\$ 1	,427,785,456
(4)	Curre	nt Assets	_1	,367,549,000
(5)		nt value of unfunded actuarial accrued liability butions = (3) - (4)	\$	60,236,456
(6)	Unfur	nded accrued liability rates		
	(a) (b)	Class One Service Class Two Service		3.21% 1.87
(7)	Unfun	ded accrued liability liquidation period		7 years
(8)	Pre-re	tirement death benefit contribution rate		.20%
(9)	Accid	ental 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	I I I I I			٠		
Current assets: Employee Annuity Savings Fund Employer Annuity Accumulation Fund	\$	284,655 1,082,894	\$	251,255 985,355		
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 Accrued liability contributions	\$	442,448 60,23 <u>6</u>	\$	419,164 62,509		
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 Future member contributions	\$	284,655 341,165	\$	251,255 323,147		
Total contributions to Employee Annuity Savings Fund	\$	625,820	\$	574,402		
Employer Annuity Accumulation Fund: Benefits currently in payment Benefits to be paid to current active	\$	565,404	\$	519,795		
members		1,020,174		947,233		
Total benefits payable from Employer Annuity Accumulation Fund	\$	<u>1,585,578</u>	\$	1,467,028 -		
Total Liabilities	\$	2,211,398	\$	<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	
	$[(1) \times .0725] + [(2)c \times .03625]$	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:

	Annual Rate of						
<u>Age</u>	<u>Withdrawal</u>	<u>Death</u> `	<u>Disabilitv</u>	Service <u>Retirement</u> *	Salary <u>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		

<sup>\*</sup>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.

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#### 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

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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

Amount of Allowance

Disability Retirement Allowance

Condition for Allowance

Amount of Allowance

A member who has completed 5 years of credited service may retire on an early retirement 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.

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.

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

#### Death Benefit

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.

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

Accidental Death Benefit Program

Optional Allowances

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.

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.

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

Each Class One member contributes \$21 per month. Each Class Two member contributes 6.5% of compensation.

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.

By Members

By Employers



### SCHEDULE F

TABLE 1

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

	MEN		WOMEN				
AGE	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)

	MEN			WOMEN			
AGE	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

	MEN		WOMEN			
AGE	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		<b>1,268,8</b> 26
16	250		8,012,683	35		981,486
17	250		8,056,019	41		<b>1,265,7</b> ∂1
18	225		7,537,329	31		968,277
19	232		7,821,127	27		<b>772,</b> 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, <b>656</b>
26	87		3,495,326	2		<b>52,930</b>
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)

		MEN		WOMEN		
AGE	NUMBER	AMOUNT		NUMBER AM		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	\$ 4	12,289,708	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

		MEN	WOMEN		
AGE	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	<b>3</b> 7,30 <b>7</b>	
75	76	836,683	8	<b>52,</b> 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)

	MEN			WOMEN			
AGE	NUMBER	A	MOUNT	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	4,591,988	251	\$	1,930,052	
			SUMMARY	<u>,</u>			
Life Annuity	1,339	\$1:	3,796,133	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	1	7,638,531	64		725,862	
100% Pop-Up	193		2,194,343	5		37,779	
50% Pop-Up	302	į	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**

	MEN		WOMEN		
AGE	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)

		N	WOMEN				
AGE	NUMBER	NUMBER AMOUNT			R AMOUNT		
64	12	\$	122,877	1	\$	4,955	
65	15		1.46,067			•	
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

		MEN	WOMEN		
AGE	NUMBER	AMOUNT	NUMBER	AMOUNT	
10			2	\$ 11,898	
15		1	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)

	MEN			WOMEN			
AGE	NUMBER AMOUNT			NUMBER	/	TNUOMA	
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	