

REPORT ON AN ACTUARIAL VALUATION
OF THE SOUTH CAROLINA POLICE
OFFICERS RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1984

April 12, 1985

BUCK
CONSULTANTS

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

Gentlemen:

Subsection 9-11-30(6) of the law governing the operation of the South Carolina Police Officers Retirement System provides that the actuary shall make an annual valuation of the assets and liabilities of the funds of the System. We have the honor to submit herewith the results of the valuation as of June 30, 1984 made in accordance with this provision of the law.

The actuarial assumptions used in this valuation are, in the aggregate, reasonable, and represent our best estimate of anticipated experience under the System. The actuarial cost method utilized is the projected benefit method with level percentage entry age normal cost and open-end accrued liability. This cost method is specifically recognized as an acceptable method by the Employee Retirement Income Security Act of 1974. The current assets applicable to the System were supplied by the Retirement System office. They are valued at adjusted amortized cost.

In our opinion, the Schedule of Valuation Results included in this report correctly presents the condition of the South Carolina Police Officers Retirement System as to those benefits which are funded on an actuarial reserve basis.

The results of the valuation indicate that the recommended rates of employer contribution, 7.80 per cent and 10.30 per cent of compensation for Class One and Class Two members, respectively, together with future contributions by members and the assets currently available are adequate to fund the actuarial liabilities on account of all benefits under the System, including all current and future post-retirement cost-of-living increases in the allowances of current retired members and beneficiaries and active members currently eligible for service retirement. The liquidation period for the unfunded accrued liability is 5 years from June 30, 1984.

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

Respectfully submitted,

GEORGE B. BUCK CONSULTING ACTUARIES, INC.

(Signed) DONALD M. OVERHOLSER

Donald M. Overholser
Consulting Actuary

TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Summary of Principal Results	1
II	Membership Data	2
III	Assets	4
IV	Comments on the Valuation	5
V	Contributions Payable Under the System	6
VI	Valuation Basis	7
VII	Accounting Information	7
 <u>Schedule</u>		
A	Valuation Results	9
B	Outline of Actuarial Assumptions and Methods	10
C	Summary of Main System Provisions as Interpreted for Valuation Purposes	11
D	Membership Data Tabulations	19

REPORT ON AN ACTUARIAL VALUATION OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
PREPARED AS OF JUNE 30, 1984

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below:

<u>Valuation Date</u>	<u>6/30/84</u>	<u>6/30/83</u>
Number of active members:		
Men	8,531	8,038
Women	989	856
Total	9,520	8,894
Annual compensation of active members during year:		
Men	\$ 134,740,307	\$ 124,440,268
Women	12,982,360	11,115,933
Total	\$ 147,722,667	\$ 135,556,201
Number of inactive members	1,714	1,703
Number of retired members and beneficiaries	1,803	1,701
Annual retirement allowances	\$ 8,673,021	\$ 7,444,676
Assets for valuation purposes	\$ 247,185,088	\$ 211,736,248
Normal contribution as per cent of compensation:		
Class One Service	4.59%	4.59%
Class Two Service	6.19	5.97
Unfunded accrued liability (UAL)	\$ 25,894,843	\$ 8,889,407
Unfunded accrued liability contribution as per cent of compensation:		
Class One Service	3.21%	3.21%
Class Two Service	4.11	4.33
Unfunded accrued liability liquidation period (years)	5	2
Number of cost-of-living increases to be granted after valuation date included in UAL	*	5

(Continued)

<u>Valuation Date</u>	<u>6/30/83</u>	<u>6/30/84</u>
Pre-retirement death benefit contribution as per cent of compensation	.40%	.40%
Accidental death benefit contribution as per cent of compensation	.20%	.20%

*All current and future cost-of-living increases in retirement allowances for current retirees and beneficiaries and active members currently eligible for service retirement.

2. Comments on the valuation results as of June 30, 1984 are given in Section IV and further discussion of the contribution levels is set out in Section V. There were no amendments made to the provisions of the System since the June 30, 1983 valuation which affected the valuation results. A resolution was adopted by the Board on March 26, 1985 which resolved that the cost of all current and future cost-of-living adjustments in the retirement allowances of all retirees and beneficiaries and active members currently eligible for service retirement be reflected in the valuation results of this System beginning June 30, 1984.
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. In order to obtain the aggregate liabilities and assets on account of members of the System as of June 30, 1984, data were needed with respect to each active member and beneficiary of the System and also with respect to terminations during the valuation year. The data with

respect to both active and terminated members and beneficiaries were furnished to the actuary by the Retirement System office on a magnetic tape.

2. From the data, tabulations were made showing as of June 30, 1984 the number and annual compensation of members classified by age and years of service and the number and retirement allowances of beneficiaries on the roll as of June 30, 1984 classified by age. These tabulations are presented in Schedule D.
3. The data did not differentiate Class One from Class Two service for members with both types of service prior to the valuation date. For these members all prior service was conservatively valued as Class Two service.
4. The following table shows the number of active members of the Retirement System together with the annual compensation as of June 30, 1984.

TABLE I

ACTIVE MEMBERSHIP OF THE
SOUTH CAROLINA POLICE OFFICERS RETIREMENT SYSTEM
AS OF JUNE 30, 1984

GROUP	NUMBER	ANNUAL COMPENSATION
Men	8,531	\$ 134,740,307
Women	989	12,982,360
Total	9,520*	\$ 147,722,667

*There are in addition 1,714 members not on the payroll as of June 30, 1984 but included in the individual accounts maintained by the System. The results of the valuation were adjusted to take these members into account.

5. The following table shows the number and annual amount of retirement allowances of beneficiaries on the roll as of June 30, 1984 classified by sex and cause of retirement.

TABLE II
THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
BENEFICIARIES ON THE ROLL
AS OF JUNE 30, 1984

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Service and Early Retirements:		
Men	1,236	\$ 6,203,753
Women	44	154,746
Total	1,280	\$ 6,358,499
Disability Retirements:		
Men	268	\$ 1,453,711
Women	7	27,810
Total	275	\$ 1,481,521
Beneficiaries of Deceased Members:		
Men	10	\$ 25,641
Women	238	807,360
Total	248	\$ 833,001
Grand Total	1,803	\$ 8,673,021

SECTION III - ASSETS

The amounts of the present assets taken into account in this valuation are at adjusted amortized cost. The values of the assets were taken from a statement furnished by the director of the System and exclude reserve assets creditable to separate funds for the Accidental and Group Life Insurance Pre-retirement Death Benefit Programs.

Included in the valuation are the assets of the members' account which represent the accumulated contributions of members together with interest thereon. As of June 30, 1984, these assets amounted to \$49,245,783.

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 \$197,939,305 as of June 30, 1984.

SECTION IV - COMMENTS ON THE VALUATION

Schedule A of this report contains the results of the valuation which show present and prospective assets and liabilities of the System as of June 30, 1984. The following comments on the valuation are pertinent:

The schedule shows that the System has actuarial liabilities of \$476,786,617, of which \$99,105,227 is for the prospective benefits payable on account of present retired members and beneficiaries, and \$377,681,390 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 \$247,185,088 and anticipated future contributions by members of \$90,991,929 leaving a balance of \$138,609,600 to be provided by future contributions of the Employer.

In accordance with the law each employer shall contribute 7.80 per cent of compensation of Class One members in its employ and 10.30 per cent of compensation of Class Two members in its employ. The normal rate on the basis of Class One service for the average new entrant was determined to be 4.59 per cent of compensation. Therefore, if employers contribute 7.80 per cent of payroll for Class One members in their employ and 4.59 per cent is attributable to normal contributions, then the resulting 3.21 per cent is attributable to accrued liability contributions. For Class Two

service the normal rate for the average new entrant was determined to be 6.19 per cent of compensation. Subtracting 6.19 per cent from 10.30 per cent (the amount employers contribute for Class Two members in their employ) results in an accrued liability contribution of 4.11 per cent of compensation for Class Two members. Future normal contributions at the above rates have a present value of \$112,714,757. If this amount is subtracted from \$138,609,600, the present value of future contributions to be made by employers, \$25,894,843 remains as the present value of the unfunded accrued liability. On this basis, it is anticipated that the accrued liability of \$25,894,843 will be liquidated within a period of 5 years from the valuation date.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

It is recommended that in accordance with the provisions of the law each employer continue to contribute 7.80 per cent of compensation of Class One members and 10.30 per cent of compensation of Class Two members (exclusive of the cost of Pre-retirement and Accidental Death Benefits). Based on these employer contribution rates the unfunded accrued liability will be liquidated within 5 years.

In addition, participating employers pay the cost of the Accidental and Pre-retirement Death Benefit Programs. It is recommended that Employers contribute .40 per cent of compensation for pre-retirement lump sum death benefits, and .20 per cent of compensation for accidental death benefits, the same rates as were recommended last year. In view of the development of reserve assets of \$3,334,713 creditable to the Group Life Insurance Fund and \$1,823,169 creditable to the Accidental Death Fund, consideration should be given to reducing these rates in the near future.

The following table gives the rates of contribution payable by employers.

TABLE III
RATES OF CONTRIBUTION RECOMMENDED FOR
PAYMENT BY EMPLOYERS

RATES OF CONTRIBUTION	CLASS ONE	CLASS TWO
Regular Benefits	7.80%	10.30%
Pre-retirement Death Benefits*	.40	.40
Accidental Death Benefits*	.20	.20
Total	8.40%	10.90%

*Payable by participating employers.

SECTION VI - VALUATION BASIS

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

SECTION VII - ACCOUNTING INFORMATION

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

3. The information required by the amended Opinion No. 8 and Statement No. 35 includes the actuarial present value of accrued (accumulated) benefits as of the valuation date. The relevant amounts as of June 30, 1984 are:

Actuarial present value of accrued benefits:

Vested benefits

Participants currently receiving payments	\$ 80,843,404
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Other participants	<u>60,222,675</u>
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	\$ 141,066,079
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Nonvested benefits	<u>8,016,620</u>
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Total	\$ 149,082,699
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The actuarial present value of vested and nonvested accrued benefits is based on an interest rate of 9-1/2 per cent. This rate represents the estimated constant equivalent rate of return for the periods during which payment of these benefits will be deferred based on the interest rates in use as of the valuation date to calculate the Pension Benefit Guaranty Corporation's annuity values for terminating plans covered by the Employee Retirement Income Security Act of 1974.

SCHEDULE A

RESULTS OF THE VALUATION AS OF JUNE 30, 1984

(1) Actuarial Liabilities

Present value of prospective benefits payable
in respect of:

(a) Present retired members and beneficiaries	\$ 99,105,227
(b) Present active and inactive members	<u>377,681,390</u>
(c) Total actuarial liabilities	\$ 476,786,617
(2) Assets of the System	<u>247,185,088</u>
(3) Unfunded Value of Prospective Benefits = (1)(c) - (2)	\$ 229,601,529
(4) Present Value of Future Contributions by Members	<u>90,991,929</u>
(5) Total Prospective Contributions by Employers = (3) - (4)	\$ 138,609,600
(6) Present Values of 1 Per Cent of Future Compensation:	
(a) Class One Service	\$ 74,303
(b) Class Two Service	18,154,072
(7) Present Value of Future Normal Contributions by Employers at:	
(a) 4.59% = (6)(a) x 4.59	\$ 341,051
(b) 6.19% = (6)(b) x 6.19	<u>112,373,706</u>
(c) Total	\$ 112,714,757
(8) Present Value of Accrued Liability Contributions by Employers = (5) - (7)(c)	\$ 25,894,843
(9) Accrued Liability Rates:	
(a) Class One Service	3.21%
(b) Class Two Service	4.11%
(10) Accrued Liability Liquidation Period	5 years
(11) Pre-retirement Death Benefit Contribution Rate	.40%
(12) Accidental Death Benefit Contribution Rate	.20%

SCHEDULE B

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: 7% per annum, compounded annually.

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

Age	<u>Annual Rate of</u>				
	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Service Retirement*</u>	<u>Salary Increases**</u>
20	13.79%	.10%	.14%		11.29%
25	12.83	.13	.16		10.39
30	9.12	.16	.20		9.01
35	5.61	.20	.26		7.29
40	3.43	.27	.34		6.50
45	2.33	.40	.50		6.10
50	1.74	.57	.84		5.80
55		.88		6.50%	5.60
60		1.42		9.90	5.40
64		2.03		15.98	5.30

DEATHS AFTER RETIREMENT: Combined Annuity Mortality Tables, Modified and Makehamized, for service retirement and dependent beneficiaries with a one-year setback in ages. A special mortality table is used for disability retirements.

LOADING OR CONTINGENCY RESERVES:

*A loading was included to cover additional liabilities on the basis of an expected increase in the rates of service retirement in conjunction with the improved benefits under the average final compensation formula.

**Reserves were included to provide for an annual inflation factor of 5 per cent in the flat benefit formula.

VALUATION METHOD: Projected benefit method with level percentage entry age normal cost and open-end unfunded accrued liability. Gains and losses are reflected in the period remaining to liquidate the unfunded accrued liability. Lump sum death benefits are provided on a one-year term cost basis.

ASSET VALUATION METHOD: Adjusted amortized cost.

SCHEDULE CSUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSESBACKGROUND

The South Carolina Police Officers Retirement System was established as of July 1, 1962. Firemen were eligible to participate in the System on July 1, 1976. Membership in the System is open to any police officer or fireman of the State or other employer (county, municipality or other political subdivision of the State and any agency 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 three consecutive fiscal years of credited service producing the highest such average.

BENEFITS

Service Retirement Allowance

Condition for Allowance

A member may retire on a service retirement allowance upon the attainment of age 55 and the completion of 5 years of credited service, or at any age upon the completion of 30 years of credited service.

Amount of Allowance

Upon service retirement a member receives a service retirement allowance which is equal to:

- (1) A monthly retirement allowance equal to nine dollars multiplied by the number of years of his Class One service.
- (2) A monthly retirement allowance equal to $1/12$ of $1-3/4\%$ of his average final compensation multiplied by the number of years of his Class Two service.
- (3) An additional monthly retirement allowance which is the actuarial equivalent of the member's accumulated additional contributions at retirement.

The sum of the retirement allowances under (1) and (2) above is not to be less than the allowance which would have been provided under (1) if all of the member's credited service were Class One service. In the case of a police officer who became a member prior to July 1, 1974 and who was a participant in the Supplemental Allowance Program, the portion of his service retirement allowance not provided by his accumulated contributions is not to be less than it would have been if the provisions of the System in effect on June 30, 1974 had continued in effect until his date of retirement.

Early Retirement Allowance

Condition for Allowance

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

Amount of Allowance

Upon early retirement a member is entitled to a deferred allowance commencing at age 55 which is equal to a service retirement allowance computed on the basis of his average final compensation and credited service at his early retirement date.

If the member has attained age 50 and completed 25 years of credited service at early retirement date, in lieu of such deferred allowance, he may elect to receive a reduced allowance commencing immediately which is equal to the deferred allowance computed on the basis of Class One and Class Two service reduced by $\frac{5}{12}$ of 1% for each month by which his age at retirement is less than age 55, plus the actuarial equivalent of the member's accumulated additional contributions.

Disability Retirement Allowance

Condition for Allowance

A member who has completed 5 or more years of credited service or who is disabled as a result of an injury arising out of and in the course of the performance of his duties regardless of length of service and who is permanently incapacitated for duty, mentally or physically, may retire or be retired on a disability retirement allowance.

Amount of Allowance

Upon disability retirement a member receives a disability retirement allowance computed as a service retirement allowance based on the years of credited service the member would have completed had he remained in active service until age 55, and his accumulated additional contributions at disability retirement. For the purpose of calculating the disability retirement allowance, the additional credited service so determined is either Class One service or Class Two service depending upon the classification of the member at time of retirement. The compensation to be used for purposes of computing this benefit is the average final compensation as of the date of disability.

Return of 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 30 or more years of credited service, his designated beneficiary may elect to receive in lieu of the lump sum settlement otherwise payable based on (1) above an allowance for life in the same amount as if the member had retired at the time of death and had chosen Option 1.

Upon the death of a member before retirement who had 15 years of creditable service, the person nominated to receive the amount of the member's accumulated 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 \$16 per month. Each Class Two member contributes 5% of compensation.

By Employers

Each employer contributes 7.80% of the compensation of Class One members and 10.30% of the compensation of Class Two members in its employ. Such rates are subject to adjustment on the basis of actuarial valuations. In addition each employer contributes .60% of the compensation of both Class One and Class Two members to cover the cost of the Accidental and Group Life Insurance Pre-retirement Death Benefit Programs.

SCHEDULE D

TABLE 1

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30, 1984

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
18	1	\$ 4,324		
19	3	40,061	2	\$ 12,605
20	8	95,689	3	27,653
21	31	327,227	9	94,676
22	126	1,379,469	21	211,936
23	184	2,161,839	26	284,378
24	254	3,114,063	49	546,931
25	253	3,331,079	43	512,290
26	251	3,359,822	59	734,802
27	305	4,140,850	55	698,629
28	306	4,261,282	43	529,249
29	318	4,460,724	44	622,972
30	336	4,854,215	61	788,889
31	360	5,396,903	59	789,034
32	308	4,653,345	40	561,713
33	330	5,133,868	31	382,772
34	318	4,962,815	34	444,756
35	298	4,952,994	44	604,625
36	330	5,537,830	27	388,542
37	330	5,456,187	30	418,874
38	302	5,004,706	29	396,918
39	243	4,178,660	22	287,964
40	201	3,333,641	22	316,533
41	214	3,702,308	19	270,722
42	220	3,738,529	25	370,960
43	169	2,854,305	23	317,629
44	176	2,854,990	15	197,371
45	170	2,936,183	15	204,196
46	134	2,368,562	19	282,025
47	155	2,749,477	14	184,089
48	155	2,596,337	17	235,225
49	149	2,707,924	19	254,072
50	157	2,711,447	15	187,548
51	162	2,729,157	3	38,248
52	129	2,320,466	5	76,311
53	126	2,359,977	6	93,756
54	164	2,883,249	6	87,260
55	106	1,745,359	4	47,827

TABLE 1

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
AGE AS OF JUNE 30, 1984

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
56	118	\$ 2,145,726	2	\$ 26,058
57	121	2,271,171	6	95,311
58	77	1,274,424	4	47,061
59	72	1,337,600	4	68,086
60	92	1,604,114	3	28,028
61	57	983,554	3	46,690
62	54	987,762	5	61,954
63	39	747,559	2	29,808
64	43	745,211	1	15,444
65	35	559,220		
66	13	286,098		
67	3	54,185		
68	8	94,258		
69	4	54,199		
70	7	126,466		
71	4	51,431		
72	1	2,627		
73	1	14,839	1	59,940
TOTAL	8,531	\$134,740,307	989	\$ 12,982,360

SEE FOOTNOTE TABLE I

TABLE 2

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30, 1984

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	550	\$ 5,795,559	89	\$ 818,777
1	1,051	13,108,538	209	2,495,577
2	840	10,776,459	105	1,245,247
3	826	11,631,083	155	1,974,595
4	498	7,072,842	82	1,066,703
5	600	8,993,403	94	1,324,236
6	529	8,227,469	72	1,016,737
7	448	7,364,535	47	715,510
8	430	7,160,197	32	489,643
9	337	5,797,684	28	461,487
10	366	6,373,895	28	467,137
11	295	5,334,356	17	308,285
12	238	4,473,409	14	244,851
13	204	3,903,263	4	68,048
14	161	3,163,713	2	45,414
15	149	3,040,028	2	41,086
16	129	2,618,438	1	24,133
17	129	2,564,108	1	19,983
18	71	1,470,726	1	17,035
19	69	1,440,027	2	43,437
20	64	1,384,365		
21	72	1,562,597		
22	49	1,061,151	1	11,724
23	63	1,401,463		
24	41	927,916		
25	33	732,161		
26	39	883,775	1	11,017
27	43	1,007,260	1	11,758
28	30	731,781		
29	24	522,565		
30	29	771,113		
31	10	260,036		
32	30	796,709		
33	13	390,211		
34	12	291,129		
35	9	248,247	1	59,940

TABLE 2

THE DISTRIBUTION OF THE NUMBER AND
ANNUAL COMPENSATION OF ACTIVE MEMBERS BY
YEARS OF CREDITED SERVICE
AS OF JUNE 30, 1984

CONTINUED

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
36	8	\$ 243,544		
37	6	160,457		
38	6	167,587		
39	8	220,360		
40	10	309,455		
41	6	176,340		
42	5	130,397		
43	1	49,956		
TOTAL	8,531	\$134,740,307	989	\$ 12,982,360

SEE FOOTNOTE TABLE I

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1984

SERVICE AND EARLY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
39	1 \$	1,279		
44	1	3,707		
47	2	32,505		
50	2	15,435		
51	2	20,262		
52	1	8,464		
53	4	42,761		
54	6	45,787		
55	4	25,043		
56	25	226,419	1 \$	1,058
57	20	197,979	1	1,508
58	29	201,234		
59	25	203,654	2	12,640
60	42	315,102	4	29,699
61	21	155,214	3	10,254
62	44	289,918	3	13,214
63	51	261,548	3	3,646
64	73	386,924	3	9,337
65	55	277,144	1	3,826
66	85	480,857	3	11,944
67	65	272,487	5	13,623
68	84	412,193	1	1,273
69	55	308,627		
70	70	298,072	2	6,380
71	62	233,029	2	5,469
72	52	194,071	2	4,838
73	50	153,504	1	2,606
74	46	198,053	1	3,767
75	46	206,162		
76	49	190,165	4	13,621
77	31	103,287		
78	23	91,353		
79	25	88,393		
80	13	46,697		

TABLE 3

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1984

SERVICE AND EARLY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
81	18 \$	54,623	1 \$	5,310
82	11	29,926		
83	7	17,800		
84	12	36,740		
85	7	22,060		
86	4	14,522		
87	6	21,467	1	733
88	2	3,676		
89	2	7,746		
90	1	4,254		
91	1	851		
92	1	2,759		
TOTAL	1,236 \$	6,203,753	44 \$	154,746

SUMMARY

LIFE				
ANNUITY	809 \$	3,453,475	35 \$	121,217
100% J+S	124	480,958	3	5,703
50% J+S	155	923,768		
LEVELING				
INCOME	98	985,474	6	27,826
100%				
POP-UP	21	112,367		
50%				
POP- UP	29	247,711		

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1984

DISABILITY RETIREMENTS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
27	1 \$	5,157		
32	1	8,171		
33	1	7,123		
34	5	37,273		
35	1	7,273		
36	1	3,818	1 \$	6,631
37	3	13,612		
38	2	20,512		
39	4	41,561	1	5,554
40	4	24,615		
41	1	3,415		
42	5	27,515		
43	4	15,481	1	4,598
44	9	59,591		
45	6	41,463		
46	4	17,052		
47	3	19,184		
48	15	100,100		
49	6	50,068	1	2,460
50	8	58,331		
51	10	55,335		
52	10	48,562	1	2,642
53	13	67,161		
54	12	77,217		
55	11	54,870	1	2,898
56	6	31,632		
57	8	40,229		
58	8	42,304		
59	13	78,041		
60	15	68,713		

TABLE 4

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1984

DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
61	6 \$	11,482		
62	10	47,107		
63	9	38,015		
64	12	69,714		
65	11	31,176		
66	7	32,362	1 \$	3,027
67	11	65,569		
68	2	1,981		
69	3	5,807		
70	1	1,656		
71	2	4,264		
72	2	7,134		
74	1	8,662		
80	1	3,403		
TOTAL	268 \$	1,453,711	7 \$	27,810

SUMMARY

LIFE				
ANNUITY	172 \$	967,274	6 \$	25,350
100% J+S	54	221,132	1	2,460
50% J+S	32	210,516		
100%				
POP-UP	3	12,407		
50%				
POP-UP	7	42,382		

TABLE 5

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1984

BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
19			1	\$ 3,745
35			1	815
36			1	3,263
38			1	7,053
39			1	1,125
40			1	1,300
42			1	4,360
44			2	9,315
45			2	9,167
46			3	12,292
47			1	3,999
48			1	12,145
49			1	4,412
50			2	5,774
51			4	9,705
52			2	7,145
53	1	\$ 1,595	4	30,539
54			4	18,078
55			2	13,828
56	1	2,426	3	5,394
57			2	11,908
58			5	33,313
59	1	7,370	4	12,670
60	1	2,678	7	7,787

TABLE 5

THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF BENEFICIARIES
BY AGE AS OF JUNE 30, 1984

BENEFICIARIES OF DECEASED ACTIVE
AND RETIRED MEMBERS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
61			3 \$	7,135
62			7	38,716
63			16	60,643
64	1 \$	1,125	2	4,059
65			9	44,608
66			9	25,873
67			6	16,372
68			16	59,337
69			16	45,471
70	2	5,066	13	33,972
71			12	35,678
72	1	1,625	10	35,425
73			10	48,069
74			5	15,219
75			7	15,161
76			9	31,494
77			4	4,142
78			5	11,886
79			5	8,855
80			2	1,579
81			3	12,014
82	1	569		
83	1	3,187	2	6,202
84			10	15,865
86			1	453
TOTAL	10 \$	25,641	238 \$	807,360