

EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA

REPORT OF ACTUARY

ON THE VALUATION

PREPARED AS OF JUNE 30, 2002



200 Galleria Parkway, N.W., Suite 1900
Atlanta, Georgia 30339-5945

May 30, 2003

Board of Trustees
Employees' Retirement System of Georgia
Two Northside 75, Suite 300
Atlanta, GA 30318

Attention: Ms. Cecelia Corbin Hunter, Executive Director

Members of the Board:

Section 47-2-26 of the law governing the operation of the Employees' Retirement System of Georgia provides that the actuary shall make periodic valuations of the contingent assets and liabilities of the Retirement System on the basis of regular interest and the tables last adopted by the Board of Trustees. We have submitted the report giving the results of the actuarial valuation of the System prepared as of June 30, 2002. The report indicates that annual employer contributions at the rate of 5.66% of active payroll for Old Plan members and 10.41% of active payroll for New Plan members for the fiscal year ending June 30, 2004 are sufficient to support the benefits of the System. In preparing the valuation, the actuary relied on data provided by the System. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. Our firm, as actuary, is responsible for all of the actuarial trend data in the financial section of the annual report and the supporting schedules in the actuarial section of the annual report.

In our opinion, the valuation is complete and accurate, and the methodology and assumptions used are reasonable as a basis for the valuation. The valuation takes into account the effect of all amendments to the System enacted through the 2002 session of the General Assembly as well as the 1.5% Ad Hoc COLAs effective July 1, 2002 and January 1, 2003.

The System is funded on an actuarial reserve basis. The actuarial assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System. The assumptions and methods used for funding purposes meet the parameters set for the disclosures presented in the financial section by Governmental Accounting Standards Board (GASB) Statement Nos. 25 and 27. The funding objective of the plan is that contribution rates over time will remain level as a percent of payroll. The valuation method used is the entry age normal cost method. The normal contribution rate to cover current cost has been determined as a level percent of payroll. Gains and losses are reflected in the unfunded accrued liability which is negative and being amortized as a level percent of payroll within a 13-year period.

The Retirement System is being funded in conformity with the minimum funding standard set forth in Code Section 47-20-10 of the Public Retirement Systems Standards Law. In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Sincerely,

A handwritten signature in black ink, appearing to read "Ed Macdonald", written in a cursive style.

Edward A. Macdonald
Principal, Consulting Actuary

EAM:sr

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	3
IV	Comments on Valuation	4
V	Contributions Payable by Employers	5
VI	Accounting Information	6

Schedule

A	Valuation Balance Sheet	9
B	Development of Actuarial Value of Assets	10
C	Summary of Receipts and Disbursements	11
D	Outline of Actuarial Assumptions and Methods	12
E	Actuarial Cost Method	15
F	Summary of Main System Provisions as Interpreted for Valuation Purposes	16
G	Tables of Membership Data	22

**EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
REPORT OF ACTUARY
ON THE VALUATION
PREPARED AS OF JUNE 30, 2002**

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 (all dollar amounts are in thousands).

Valuation Date	June 30, 2002	June 30, 2001
Active members:		
Number	71,790	75,132
Annual compensation	\$ 2,408,306	\$ 2,397,169
Retired members and beneficiaries:		
Number	27,229	25,889
Annual allowances	\$ 598,493	\$ 538,890
Assets:		
Market Value	\$ 11,558,373	\$ 12,343,625
Actuarial Value	12,124,414	11,750,624
Unfunded actuarial accrued liability	\$ (129,564)	\$ (193,369)
Amortization period	13 years	20 years
For Fiscal Year Ending	June 30, 2004	June 30, 2003
Annual required employer contribution rates (ARC):		
Old Plan		
Normal	6.21%	6.24%
Accrued Liability	<u>(0.55)</u>	<u>(0.58)</u>
Total	5.66%	5.66%
New Plan		
Normal (includes 4.75% paid for member)	10.96%	10.99%
Accrued Liability	<u>(0.55)</u>	<u>(0.58)</u>
Total	10.41%	10.41%

2. The major benefit and contribution provisions of the System as reflected in the valuation are summarized in Schedule F. The valuation takes into account the effect of amendments to the System enacted through the 2002 session of the General Assembly. The valuation reflects 1.5% Ad Hoc COLAs effective July 1, 2002 and January 1, 2003.

3. Schedule D of this report outlines the full set of actuarial assumptions and methods used. There have been no changes since the previous valuation.
4. The entry age actuarial cost method was used to prepare the valuation. Schedule E contains a brief description of the actuarial cost method.
5. Comments on the valuation results as of June 30, 2002 are given in Section IV and further discussion of the contributions is set out in Section V.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis for the valuation were furnished by the Retirement System office. The following table shows the number of active members, their annual compensation and average annual compensation as of June 30, 2002 on the basis of which the valuation was prepared.

**THE NUMBER, ANNUAL COMPENSATION
AND AVERAGE ANNUAL COMPENSATION OF
ACTIVE MEMBERS AS OF JUNE 30, 2002**

NUMBER	ANNUAL COMPENSATION (in thousands)	AVERAGE ANNUAL COMPENSATION
71,790	\$ 2,408,306	\$ 33,547

2. The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2002, together with the amount of their annual retirement allowances payable under the System as of that date.

**THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF
RETIRED MEMBERS AND BENEFICIARIES ON THE ROLL
AS OF JUNE 30, 2002**

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES (in thousands)
Service Retirements	19,302	\$ 467,732
Disability Retirements	3,650	84,142
Beneficiaries of Deceased Members	<u>4,277</u>	<u>46,619</u>
Total	27,229	\$ 598,493

3. Tables 1 and 2 of Schedule G give the distributions by age and by years of creditable service of the number and annual compensation of active members included in the valuation, while Tables 3, 4 and 5 give the number and annual retirement allowances of retired members and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. Two funds are maintained for the purpose of recording the financial transactions of the System, namely, the Annuity Savings Fund and the Pension Accumulation Fund.

(a) Annuity Savings Fund

The Annuity Savings Fund is the fund to which are credited all contributions made by or on behalf of members together with regular interest thereon. When a member retires, or if a death benefit allowance becomes payable to his beneficiary, his accumulated contributions are transferred from the Annuity Savings Fund to the Pension Accumulation Fund. The portion of the allowance which these contributions provide is then paid from the Pension Accumulation Fund. On June 30, 2002 the market value of assets credited to the Annuity Savings Fund amounted to \$791,983,000.

(b) Pension Accumulation Fund

The Pension Accumulation Fund is the fund to which all income from investments and all contributions made by employers are credited. All retirement allowance and death benefit allowance payments are disbursed from this fund. Upon the retirement of a member, or upon his death if a death benefit allowance is payable, his accumulated contributions are transferred from the Annuity Savings Fund to this fund to provide the member-contributed portion of the allowance. On June 30, 2002 the market value of assets credited to the Pension Accumulation Fund amounted to \$10,766,390,000.

2. As of June 30, 2002 the total market value of assets amounted to \$11,558,373,000 as reported by the independent auditor of the System. The actuarial value of assets used for the current valuation was \$12,124,414,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2002.
3. Schedule C shows the receipts and disbursements of the System for the two years preceding the valuation date and a reconciliation of the fund balances at market value.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2002 (all dollar amounts are in thousands). The valuation was prepared in accordance with the actuarial assumptions set forth in Schedule D and the actuarial cost method which is described in Schedule E.
2. The valuation balance sheet shows that the System has total prospective liabilities of \$14,882,416 of which \$5,790,380 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits and \$9,092,036 is for the prospective basic benefits payable on account of present active members. Against these liabilities, the System has total present assets of \$12,124,414 as of June 30, 2002. The difference of \$2,758,002 between the total liabilities and the total present assets represents the present value of contributions to be made in the future. Of this amount, \$1,394,843 is the present value of future contributions expected to be made by or on behalf of members, including employer paid member contributions of 4.75% of compensation for New Plan members. The balance of \$1,363,159 represents the present value of future contributions payable by the employers.

3. The employer contributions to the System consist of normal contributions and accrued liability contributions. The normal contribution rate is calculated as the level percentage rate which, if applied to the compensation of the average member during the entire period of his anticipated covered service, would be required in addition to the contributions by or on behalf of the member to meet the cost of all basic benefits (i.e., benefits other than post-retirement supplements) payable on his behalf. The valuation indicates that the employer normal contribution rate is 6.21% of active members' compensation.
4. Prospective employer normal contributions at the rate of 6.21% have a present value of \$1,492,723. When this amount is subtracted from \$1,363,159, which is the present value of total future employer contributions, there remains (\$129,564) as the unfunded actuarial accrued liability.
5. The accrued liability contribution rate is (0.55%) of active members' compensation, which will liquidate the unfunded actuarial liability over a 13 year period, on the assumption that the total payroll of active members will increase by 3.50% each year.

SECTION V - CONTRIBUTIONS PAYABLE BY EMPLOYERS

The following table summarizes the employer contribution rates which were determined by the June 30, 2002 valuation and are recommended for use.

ANNUAL REQUIRED EMPLOYER CONTRIBUTION RATES (ARC) FOR FISCAL YEAR ENDING JUNE 30, 2004

	Old Plan	New Plan
Normal	6.21%	6.21%
Employer paid for member	0.00	4.75
Accrued liability	<u>(0.55)</u>	<u>(0.55)</u>
Total	5.66%	10.41%

SECTION VI - 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 JUNE 30, 2002**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	27,229
Terminated employees entitled to benefits but not yet receiving benefits	59,796
Active plan members	<u>71,790</u>
Total	<u>158,815</u>

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)
6/30/97	\$ 7,432,306	\$ 8,159,345	\$ 727,039	91.1%	\$1,977,928	36.8%
6/30/98	8,613,575	9,093,758	480,183	94.7	2,055,966	23.4
6/30/99	9,848,723	9,695,614	(153,109)	101.6	2,152,072	(7.1)
6/30/00	10,999,901	10,573,408	(426,493)	104.0	2,304,289	(18.5)
6/30/01	11,750,624	11,557,255	(193,369)	101.7	2,397,169	(8.1)
6/30/02	12,124,414	11,994,850	(129,564)	101.1	2,408,306	(5.4)

3. The following shows the schedule of employer contributions (dollar amounts in thousands):

<u>Year Ending</u>	<u>Annual Required Contribution</u>	<u>Percent Contributed</u>
6/30/97	\$282,249	100%
6/30/98	286,794	100
6/30/99	304,461	100
6/30/00	302,332	100
6/30/01	315,505	100
6/30/02	233,229	100

4. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2002. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/02
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	13 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.00%
Projected salary increases*	5.20 – 9.00%
Cost-of-living adjustments	None
*Includes inflation at	3.50%

TREND INFORMATION
(\$ in 1,000's)

Year Ending	Annual Pension Cost (APC)	Percentage Of APC Contributed	Net Pension Obligation (NPO)
June 30, 2000	\$302,332	100%	\$0
June 30, 2001	315,505	100	0
June 30, 2002	233,229	100	0

SCHEDULE A

VALUATION BALANCE SHEET

**RESULTS OF THE VALUATION AS OF JUNE 30, 2002
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
OF THE EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
(All dollar amounts are in thousands)**

ACTUARIAL LIABILITIES

(1)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service and disability benefits	\$ 5,260,707	
	- Death and survivor benefits	428,033	
	- Deferred vested benefits	<u>101,640</u>	
	Total		\$ 5,790,380
(2)	Present value of prospective benefits payable on account of present active members		
	- Retirement and survivor allowances	\$ 9,032,941	
	- Refunds of members' contributions	<u>59,095</u>	
	Total		<u>9,092,036</u>
(3)	TOTAL ACTUARIAL LIABILITIES		<u>\$ 14,882,416</u>

PRESENT AND PROSPECTIVE ASSETS

(4)	Actuarial value of assets		\$ 12,124,414
(5)	Present value of total future contributions = (3)-(4)	\$ 2,758,002	
(6)	Present value of future member contributions and employer paid member contributions		1,394,843
(7)	Present value of future employer contributions = (5)-(6)	\$ 1,363,159	
(8)	Employer normal contribution rate	6.21%	
(9)	Present value of future payroll (1%)	\$ 240,374	
(10)	Prospective normal contributions = (8) x (9)		1,492,723
(11)	Prospective unfunded accrued liability contributions = (7)-(10)		<u>(129,564)</u>
(12)	TOTAL PRESENT AND PROSPECTIVE ASSETS		<u>\$ 14,882,416</u>

SCHEDULE B**DEVELOPMENT OF JUNE 30, 2002 ACTUARIAL VALUE OF ASSETS**
(All dollar amounts are \$1,000's)

(1)	Actuarial Value of Assets on June 30, 2001	\$ 11,750,624
(2)	2001/2002 Net Cash Flow	
	a. Contributions	291,149
	b. Disbursements	<u>588,003</u>
	c. Net Cash Flow	
	(2)a - (2)b	(296,854)
(3)	Expected Investment Return [(1) x .07] + [(2)c x .035]	812,154
(4)	Expected Actuarial Value of Assets on June 30, 2002 (1) + (2)c + (3)	12,265,924
(5)	Market Value of Assets on June 30, 2002	11,558,373
(6)	Excess of Market Value over Expected Actuarial Value (5) - (4)	(707,551)
(7)	20% Adjustment towards Market .20 x (6)	(141,510)
(8)	Actuarial Value of Assets on June 30, 2002 (4) + (7)	\$ 12,124,414

SCHEDULE C
SUMMARY OF RECEIPTS AND DISBURSEMENTS
(MARKET VALUE)

	Year Ending	
	<u>June 30, 2002</u> (in \$ thousand)	<u>June 30, 2001</u> (in \$ thousand)
<u>Receipts for the Year</u>		
Contributions:		
Members	\$ 57,920	\$ 55,887
Employers	<u>233,229</u>	<u>315,505</u>
Total	\$ 291,149	\$ 371,392
Investment earnings	<u>(488,398)</u>	<u>(795,683)</u>
TOTAL	\$ (197,249)	\$ (424,291)
<u>Disbursements for the Year</u>		
Retirement allowances	\$ 574,602	\$ 518,734
Refunds to members	5,430	7,563
Administrative expense	<u>7,971</u>	<u>6,950</u>
TOTAL	\$ 588,003	\$ 533,247
<u>Excess of Receipts over Disbursements</u>	\$ (785,252)	\$ (957,538)
<u>Reconciliation of Asset Balances - Market Value</u>		
Asset Balance as of the Beginning of Year	\$ 12,343,625	\$ 13,301,163
Excess of Receipts over Disbursements	<u>(785,252)</u>	<u>(957,538)</u>
Asset Balance as of the End of Year	<u>\$ 11,558,373</u>	<u>\$ 12,343,625</u>

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

Adopted by the Board June 20, 2002.

VALUATION INTEREST RATE: 7.0% per annum, compounded annually.

SALARY INCREASES:

<u>Age</u>	<u>Annual Rate</u>	<u>Age</u>	<u>Annual Rate</u>
20	9.0%	45	5.2%
25	8.0	50	5.2
30	6.0	55	5.2
35	5.5	60	5.2
40	5.2	65	5.2

SEPARATIONS BEFORE RETIREMENT: Representative values of the assumed annual rates of separation other than retirement are as follows:

	<u>Annual Rates of</u>			
	<u>Death</u>		<u>Disability</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
20	.04%	.02%	.05%	.05%
25	.04	.02	.05	.05
30	.06	.02	.10	.05
35	.06	.02	.15	.05
40	.06	.03	.30	.17
45	.10	.05	.70	.30
50	.15	.06	1.00	.60
55	.25	.10	1.50	1.50
60	.44	.17	--	--
65	.81	.34	--	--
69	1.26	.54	--	--

Annual Rates of Withdrawal

<u>Age</u>	<u>Years of Service</u>		
	<u>0-4</u>	<u>5-9</u>	<u>10 & Over</u>
	<u>Males</u>		
20	26.50%	12.00%	6.00%
25	22.00	10.50	6.00
30	21.00	8.25	5.50
35	20.00	6.75	3.75
40	18.00	6.00	3.00
45	15.50	5.00	2.25
50	13.00	4.00	1.75
55	12.00	3.00	1.50
60	13.00	3.00	1.50
65	15.00	3.00	1.50
	<u>Females</u>		
20	23.00%	12.00%	7.00%
25	20.50	10.50	7.00
30	18.50	8.25	6.75
35	16.50	6.25	4.50
40	15.50	5.00	3.00
45	14.50	4.50	2.25
50	14.00	4.00	2.00
55	11.50	3.00	1.50
60	13.00	3.00	1.50
65	15.00	3.00	1.50

RETIREMENT: Representative values of the assumed annual rates of service retirement are as follows:

<u>Age</u>	<u>Old Plan¹</u>		<u>New Plan²</u>
	<u>Age 65 or more than 34 years</u>	<u>Age 60 or 30 years</u>	
50	75%	5%	5%
55	75	12	5
60	75	15	10
62	75	38	32
64	75	30	35
65	60		45
67	30		30
70	100		100

¹It is also assumed that 95% of active Old Plan members will retire during the year in which they attain 34 years of service and 2% of eligible males and 1% of eligible female Old Plan members will retire on involuntary separation each year.

²An additional 10% of active New Plan members less than age 65 are expected to retire in the year in which they attain 30 years of service.

It is also assumed that 0.5% of members under age 55 and 2% of members ages 55 and over will retire under early reduced retirement.

DEATHS AFTER RETIREMENT: The 1994 Group Annuity Table rated forward two years is used for the period after service retirement and for dependent beneficiaries. The 1994 Group Annuity Table rated forward 10 years for males and 8 years for females is used for the period after disability retirement.

Representative values of the assumed annual rates of mortality after service retirement are as follows:

<u>Age</u>	<u>Males</u>	<u>Females</u>	<u>Age</u>	<u>Males</u>	<u>Females</u>
40	.125%	.082%	65	1.803%	1.076%
45	.190	.111	70	2.848	1.651
50	.321	.173	75	4.517	2.837
55	.558	.292	80	7.553	4.915
60	1.015	.583	85	11.567	8.402

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial 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 actuarial value.

VALUATION METHOD: Entry age actuarial cost method. See Schedule E for a brief description of this method.

SPOUSES: It is assumed that 85% of the membership is married with the husband three years older than his wife.

SCHEDULE E**ACTUARIAL COST METHOD**

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (currently 7.0%), of each member's expected basic benefit (i.e. benefits other than post-retirement adjustments after the valuation date) at retirement or death is determined, based on his age, service, sex, and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases are also anticipated. The present value of the expected basic benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries to obtain the present value of all expected basic benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the basic benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level percentage rate which, if applied to the compensation of the average member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all basic benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected basic benefits to be paid from the System.

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

The Employees' Retirement System of Georgia (ERS) was established February 3, 1949 to provide retirement allowances and other benefits to employees of the State of Georgia. The commencement date was January 1, 1950. "Old Plan" means the plan applicable to members beginning employment prior to July 1, 1982, while "New Plan" means the plan applicable to members employed on or after July 1, 1982. The following summary describes the main provisions of the System.

1 - DEFINITIONS**Member**

An employee of a department participating in ERS. Membership is a condition of employment.

Prior Service

Service rendered as an employee prior to January 1, 1954.

For employees of departments which became participants in ERS after the date of establishment (1950), any service prior to January 1, 1954.

Some active duty military service before January 1, 1954 may be included as prior service for employees who were members of the System prior to April 1, 1972, provided that service was not used for military or other government retirement.

Membership Service

Service after January 1, 1954 as a contributing member of a participating department.

For employees of departments which became participants in ERS after the date of establishment (1950), any service which is purchased by the employee between January 1, 1954 and the date of participation by the department.

Some service as a teacher in the public schools of Georgia may be included provided that service is not being used for teacher retirement and contributions are left on deposit.

Forfeited Leave

Six months or more of forfeited annual or sick leave for which a member is not eligible for payment at retirement. Each 20 days of such forfeited leave is equivalent to one month of service.

Creditable ServiceOld Plan

Prior service plus membership service plus forfeited leave. Upon retirement, a member with 34 years of service will receive credit for the 34 years plus membership credit for the period between the 34th year and his or her 65th birthday.

New Plan

Service for which employee and employer contributions have been paid.

Average Final Compensation

The average annual compensation of a member during the 24 consecutive calendar months of his creditable service that will yield the highest average. An adjustment will be made to allow for any contribution previously made by the member which is now made by the State.

2 - BENEFITS

Normal Retirement Allowance

Condition for Retirement

A member is eligible for normal retirement upon the attainment of age 65 and 10 years of creditable service (age 65 and 5 years service if a member before July 1, 1968), or 30 years of creditable service regardless of age.

Amount of Allowance

Old Plan

(A) x (B) x (C), where

(A) = 60% of average final compensation up to \$4,200 plus 100% of average final compensation over \$4,200.

(B) = creditable service, and

(C) = $.0115 + .0003 \times$ (creditable service up to 35 years).

The minimum benefit is 2.00% of average final compensation times years of creditable service.

New Plan

2.00% of average final compensation multiplied by years of creditable service.

Uniform division and judicial members may be eligible for additional minimum allowances.

Early Retirement Allowance

Condition for Early Retirement

A member is eligible for early retirement upon the attainment of age 60 and 10 years of creditable service or 25 years of creditable service regardless of age.

Amount of Allowance

The annual early retirement allowance is determined in the same manner as the normal retirement allowance based on creditable service and average final compensation as of the early retirement date. If the member is less than age 60, the retirement allowance is reduced by the lesser of:

- (i) 7% for each year by which his age is less than 60, and
- (ii) 7% for each year by which his creditable service at retirement is less than 30.

Uniform division and judicial members may be eligible for additional minimum allowances.

Disability Retirement Allowance

Condition for Disability Retirement

A member is eligible for disability retirement after having at least 13 years and 4 months of service and being certified by the medical board as permanently disabled for the further performance of the duties of the position held at the time of disability.

Amount of Allowance

The annual disability retirement allowance is an immediate benefit with the amount depending upon service at the time of disability.

Uniform division members may be eligible for an additional allowance if disabled in line of duty.

Service at DisabilityAllowance

- | | |
|--|--|
| (1) 13 years 4 months
to 18 years | 75% of what the normal retirement benefit would have been had the member continued to work until age 60 with no further change in compensation |
| (2) over 18 years
to 22 years 9 months | 100% of age 60 benefit |
| (3) over 22 years 9 months
to 27 years 6 months | 75% of age 65 benefit |
| (4) over 27 years 6 months | 100% of age 65 benefit |

Involuntary Retirement

Condition for Involuntary Retirement

Member prior to April 1, 1972, termination is involuntary and without prejudice, and member has more than 18 years of membership service.

For members prior to February 13, 1962, the service requirement is more than 18 years of creditable service.

Amount of Allowance

Computed as for disability retirement.

Death Benefit

ConditionsAllowance

- | | |
|--|---|
| (1) Before retirement, before age 60, before completing 13 years 4 months service | Refund of all employee contributions plus allowable interest. |
| (2) Before retirement, before age 60, after completing 13 years 4 months service | Benefit equal to disability retirement immediately prior to death under Option 2. |
| (3) Before retirement, after age 60, more than 10 years creditable service (5 years service if member prior to July 1, 1968) | Benefit equal to retirement immediately prior to death under Option 2. |
| (4) After retirement | Payments continued to spouse as determined by options (if any) elected before retirement. |

Termination Benefits

Conditions

- (1) Termination with less than 10 years membership service
- (2) Termination with 10 years or more membership service

Allowance

Return of all member contributions and employer contributions made on behalf of member with allowable interest. Life insurance premiums paid by the employee are not refundable.

Refund of contributions plus interest as above or, if contributions retained in fund, a deferred retirement benefit at age 60 or later for early or normal retirement. Life insurance premiums paid by the employee are not refundable.

Optional Benefits

At application for retirement, a member must choose one of the following methods of payment. All forms are of equivalent actuarial value.

Maximum Benefit

Life annuity, payable to member for the member's life with the final payment (for month of member's death) going to member's designated beneficiary.

Option 1

Modified cash refund, paying a reduced retirement benefit to member so that, upon member's death, the beneficiary receives a lump sum cash settlement equal to the difference between the member's accumulated contributions at retirement and the benefit payments due to member contributions received prior to member's death.

Option 2

Joint and 100% to survivor. Member receives a reduced allowance for life with the same allowance continuing for life of beneficiary upon member's death.

Option 3

Joint and 50% to survivor. Member receives a reduced allowance for life with one-half member's allowance continuing to beneficiary for life upon member's death.

Other Options

Other optional forms are available with certain restrictions.

Post-Retirement Adjustments

Conditions for Adjustments

Retiree must have been receiving benefits for the previous seven months and (1) be age 45, (2) have 30 or more years of service, or (3) have a disability entitlement from the Social Security Administration. Members retiring on service retirement with less than 30 years of service or before age 60 are not eligible for adjustments until the earlier of such time as the member reaches age 60 or would have obtained 30 years of service.

Amount of Adjustment

(1) Semi-annual cost-of-living adjustments may be made in January and July of each year upon the recommendation of the Board of Trustees.

Each adjustment in the year preceding the valuation was 1-1/2% of the base retirement allowance (original allowance before deductions plus previous cost-of-living adjustments).

(2) Supplemental adjustments, when authorized, are made in January of each year.

3 - CONTRIBUTIONS

By Members

Old Plan

4% of annual compensation up to \$4,200 plus 6% of annual compensation over \$4,200. A member with 34 or more years of service may cease contributing until age 65, when he must resume contributing if he continues employment and wishes to receive additional service credit. The State pays member contributions except for 1-1/4% of annual compensation. These State contributions paid in behalf of members are included in the member's account for refund purposes. Covered tax officials and their employees and covered employees of State Courts continue to pay their full member contributions.

New Plan

Member contributions are 1-1/4% of annual compensation.

By Employers

The employers contribute at a specified percentage of active member payroll determined annually by actuarial valuation. The State contribution is not subject to refund upon member termination.

SCHEDULE G

TABLE 1

**THE NUMBER AND ANNUAL COMPENSATION
OF MEMBERS DISTRIBUTED BY
AGE AS OF JUNE 30, 2002**

AGE	NUMBER	MEN		WOMEN	
		NUMBER	AMOUNT	NUMBER	AMOUNT
18				2	\$ 34,969
19	31		\$ 636,061	13	245,603
20	108		2,248,489	61	1,164,158
21	172		3,674,909	120	2,463,850
22	263		5,919,197	250	5,191,708
23	270		6,312,977	352	8,004,935
24	350		8,963,115	590	14,360,961
25	440		11,416,194	733	18,307,166
26	435		11,807,028	748	19,169,815
27	464		12,665,893	850	22,545,983
28	616		17,099,121	949	24,814,862
29	602		17,039,996	931	24,900,482
30	654		19,185,144	1004	27,954,832
31	712		21,540,569	986	26,944,548
32	734		22,240,358	998	28,095,885
33	718		22,897,931	1015	28,874,731
34	742		23,876,032	990	28,486,306
35	712		23,532,484	991	28,662,987
36	725		24,413,773	1048	30,192,124
37	774		25,166,501	1125	33,038,831
38	784		26,253,331	1214	35,692,204
39	799		26,729,977	1166	35,685,408
40	830		29,454,242	1253	37,651,950
41	791		27,739,840	1285	39,595,562
42	903		31,844,105	1294	39,570,427
43	906		33,159,810	1340	43,113,989
44	805		29,335,261	1369	43,859,732
45	900		33,108,540	1364	45,096,420
46	877		33,296,288	1410	46,966,494
47	896		33,805,142	1481	50,741,553
48	906		35,737,161	1400	47,516,692
49	957		37,278,102	1395	48,310,565
50	1008		41,692,129	1429	51,324,905
51	885		37,449,076	1334	47,504,348
52	872		38,097,663	1382	49,762,738
53	932		41,336,658	1267	46,307,306
54	904		39,490,104	1291	46,136,713

TABLE 1
THE NUMBER AND ANNUAL COMPENSATION
OF MEMBERS DISTRIBUTED BY
AGE AS OF JUNE 30, 2002

CONTINUED

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
55	887	\$ 38,783,874	1093	\$ 41,031,177	
56	664	29,219,727	942	33,967,166	
57	520	22,188,821	752	26,774,126	
58	480	20,680,706	680	23,980,010	
59	473	21,020,093	638	21,967,303	
60	393	15,756,655	556	19,572,507	
61	324	14,147,207	419	13,966,628	
62	256	10,921,516	333	11,567,992	
63	143	6,935,820	224	7,373,521	
64	128	5,420,216	162	5,786,500	
65	90	3,955,428	129	4,101,981	
66	65	2,865,426	71	2,204,348	
67	65	3,133,990	56	1,817,896	
68	45	2,262,468	42	1,503,944	
69	32	1,721,758	27	809,016	
70	20	869,893	13	467,544	
71	19	843,844	15	483,963	
72	21	999,458	17	509,748	
73	16	850,163	11	323,176	
74	6	278,477	6	242,206	
75	4	291,277	7	272,312	
76	4	338,772	7	193,248	
77	5	264,395	4	131,370	
78	3	144,396	3	93,715	
79	2	79,225			
80	2	79,058			
81	2	155,955	2	66,150	
82			1	17,922	
83			1	34,873	
84					
85	2	85,798			
86			1	16,617	
TOTALS	29,148	\$ 1,060,737,621	42,642	\$ 1,347,568,701	

TABLE 2

**THE NUMBER AND ANNUAL COMPENSATION
OF MEMBERS DISTRIBUTED BY YEARS OF
CREDITED SERVICE AS OF JUNE 30, 2002**

YEARS OF SERVICE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
0	1,294	\$ 36,829,749	2,038	\$ 50,811,391	
1	3,037	89,330,514	4,705	124,369,985	
2	2,393	74,163,624	4,337	117,521,107	
3	1,765	55,971,498	3,105	85,430,861	
4	1,573	49,652,828	2,465	69,201,307	
5	1,307	41,923,138	1,785	50,446,635	
6	1,009	32,739,485	1,281	38,692,039	
7	1,102	37,259,589	1,423	42,122,771	
8	1,310	43,474,515	1,609	48,350,386	
9	1,184	39,454,467	1,448	43,413,572	
10	1,049	36,671,535	1,155	35,793,392	
11	565	19,968,947	830	26,463,383	
12	937	34,126,956	1,370	43,857,774	
13	1,205	42,229,710	1,564	50,181,557	
14	947	35,012,819	1,271	41,574,811	
15	803	30,462,833	1,092	36,956,490	
16	739	29,522,050	1,050	36,397,203	
17	781	31,774,327	1,066	37,253,528	
18	668	27,210,531	906	33,099,930	
19	536	23,067,494	665	25,547,249	
20	483	20,671,900	597	22,721,017	
21	401	18,460,354	652	26,026,306	
22	432	20,264,558	705	27,363,501	
23	467	21,581,396	721	29,259,689	
24	433	20,907,405	619	25,833,757	
25	368	18,305,990	638	26,102,168	
26	297	15,146,743	564	23,450,105	
27	280	15,214,777	466	20,426,854	
28	381	20,510,551	678	28,319,388	
29	371	20,011,959	562	23,323,404	
30	373	20,912,037	434	19,284,960	
31	327	18,752,996	329	15,140,548	
32	209	11,881,111	274	12,283,164	
33	75	4,107,601	170	7,564,661	
34	23	1,446,360	55	2,250,172	
35	2	103,089	5	290,749	
36	3	226,922	3	155,375	
37	4	247,897			
38	7	370,626	3	186,557	
39	3	258,835	1	58,731	
40	1	102,362			
41	2	205,961			
42	2	199,584	1	42,222	
TOTALS	29,148	\$ 1,060,737,621	42,642	\$ 1,347,568,701	

TABLE 3

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIREES
DISTRIBUTED BY AGE AS OF JUNE 30, 2002**

SERVICE RETIREMENTS						
AGE	NUMBER	MEN		WOMEN		AMOUNT
			AMOUNT	NUMBER		
41	1	\$	29,950			
43				1	\$	10,889
44	3		37,067			
45				4		76,575
46	5		72,715	4		63,366
47	4		59,364	3		53,412
48	9		129,007	7		96,672
49	14		355,543	19		405,134
50	22		718,482	25		559,416
51	44		1,709,242	48		1,434,685
52	59		2,554,773	74		2,199,746
53	110		4,802,822	96		3,243,734
54	167		7,669,804	146		4,714,649
55	232		10,749,986	182		6,338,347
56	242		11,268,260	161		5,557,900
57	217		9,855,231	178		5,931,608
58	245		11,537,015	204		7,466,211
59	275		12,360,754	198		7,182,550
60	282		12,861,407	233		7,167,480
61	355		14,414,763	280		7,010,740
62	362		13,342,857	357		8,162,664
63	438		14,343,544	415		8,556,543
64	409		13,558,769	419		8,127,250
65	423		13,521,672	410		7,784,674
66	403		11,955,193	415		7,306,464
67	414		11,541,525	373		6,130,103
68	413		11,420,839	399		6,641,613
69	380		10,579,728	395		6,461,529
70	365		9,430,197	377		5,502,638
71	355		8,904,774	376		5,715,559
72	303		7,046,417	330		4,764,686
73	304		6,914,898	307		4,160,903
74	285		6,625,239	283		4,083,497
75	273		6,059,568	311		4,460,804
76	239		5,585,588	286		4,114,232
77	247		5,352,672	309		4,192,947
78	218		4,786,409	268		3,687,840
79	198		3,406,083	246		3,195,164
80	184		3,514,077	246		3,038,597

TABLE 3

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIREES
DISTRIBUTED BY AGE AS OF JUNE 30, 2002**

SERVICE RETIREMENTS

CONTINUED

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
81	187	\$ 3,291,672	222	\$ 2,539,552	
82	158	3,188,806	212	2,438,049	
83	123	1,971,300	169	1,891,486	
84	108	1,968,169	141	1,504,858	
85	74	1,275,528	128	1,292,475	
86	63	1,176,867	118	1,409,226	
87	54	766,908	89	859,853	
88	52	873,864	81	823,821	
89	38	804,906	48	535,817	
90	32	579,330	59	695,852	
91	28	605,792	39	314,129	
92	25	348,263	36	441,578	
93	10	124,980	30	265,024	
94	8	99,216	18	220,044	
95	7	71,425	22	248,035	
96	7	94,021	7	79,078	
97	1	36,383	9	76,346	
98	1	26,150	4	15,205	
99			6	72,271	
100					
101	1	5,423	2	17,418	
102					
103			1	5,594	
TOTAL	9,476	\$ 286,385,234	9,826	\$ 181,346,530	

TABLE 4

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIREES
DISTRIBUTED BY AGE AS OF JUNE 30, 2002**

DISABILITY RETIREMENTS

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
37	2	\$ 54,896	2	\$ 45,094	
38	6	102,577	3	76,716	
39	3	72,924	5	96,583	
40	9	228,624	6	94,794	
41	10	204,817	9	177,249	
42	15	325,936	10	185,317	
43	12	340,014	14	295,785	
44	18	419,490	12	244,674	
45	26	705,480	23	516,064	
46	24	689,519	27	601,278	
47	39	1,080,978	30	659,560	
48	60	1,704,128	42	1,007,165	
49	52	1,508,556	50	1,082,241	
50	61	1,760,401	64	1,851,359	
51	71	2,308,716	69	1,489,923	
52	93	2,898,751	66	1,532,569	
53	107	3,360,708	76	1,690,647	
54	110	3,684,100	70	1,658,955	
55	129	3,907,229	89	1,930,314	
56	104	2,947,156	98	2,195,649	
57	83	2,272,127	67	1,326,499	
58	84	2,191,302	86	1,614,589	
59	85	2,362,498	92	1,531,318	
60	84	2,269,932	90	1,610,057	
61	73	1,724,170	75	1,419,079	
62	64	1,726,798	74	1,360,992	
63	48	1,100,789	58	943,646	
64	59	1,312,521	57	794,996	
65	46	1,016,356	41	555,897	
66	38	712,267	35	507,779	
67	30	679,377	31	455,257	
68	23	512,470	30	379,644	
69	35	690,335	18	245,232	
70	30	604,387	22	246,151	
71	14	313,016	23	308,691	
72	26	502,319	8	178,659	
73	16	326,699	17	196,455	

TABLE 4

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIREES
DISTRIBUTED BY AGE AS OF JUNE 30, 2002**

DISABILITY RETIREMENTS

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
74	21	\$ 371,287	17	\$ 266,049
75	11	259,852	11	134,466
76	15	305,183	14	185,800
77	14	347,717	5	59,271
78	13	259,569	11	128,181
79	10	174,663	9	103,110
80	11	162,740	14	215,126
81	13	299,532	4	43,739
82	11	155,727	10	80,438
83	7	142,869	8	119,166
84	4	58,946	6	109,146
85	6	96,333	5	67,138
86	1	12,529	5	86,972
87			2	25,046
88	2	46,965	4	19,212
89			1	3,303
90			1	2,178
91			3	41,422
92			2	11,622
93				
94			1	17,569
Total	1,928	\$ 51,316,280	1,722	\$ 32,825,830

TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIREES
DISTRIBUTED BY AGE AS OF JUNE 30, 2002**

**BENEFICIARIES OF DECEASED
ACTIVE AND RETIRED MEMBERS**

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
19			2	\$	17,898
20	2	\$	27,779	2	20,128
21	1		6,750	5	34,169
22	7		35,150	1	4,793
23	6		25,023	2	17,083
24	2		7,438	4	52,332
25	1		11,980	4	75,675
26	6		67,740	1	1,998
27	3		32,272	4	25,314
28	3		26,976	4	26,622
29	5		39,971	6	50,413
30	8		36,324	5	28,280
31	3		15,046	12	68,567
32	7		61,085	9	48,317
33	3		13,503	12	88,520
34	7		112,215	13	38,306
35	6		32,024	8	55,193
36	11		41,789	14	41,145
37	8		28,045	16	93,502
38	11		91,438	14	74,187
39	13		68,810	18	87,452
40	5		60,088	13	96,420
41	13		73,209	18	108,195
42	9		26,449	12	179,417
43	12		51,652	18	162,418
44	6		22,782	24	219,483
45	10		54,879	19	113,131
46	4		20,538	20	146,298
47	17		99,638	28	211,134
48	12		58,762	17	120,316
49	10		74,348	36	461,908
50	13		129,365	31	381,379
51	14		90,549	34	467,951
52	12		105,787	31	472,391
53	20		114,840	42	704,895
54	18		123,047	42	625,791

TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIREES
DISTRIBUTED BY AGE AS OF JUNE 30, 2002**

**BENEFICIARIES OF DECEASED
ACTIVE AND RETIRED MEMBERS**

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
55	14	\$ 181,151	51	\$ 917,093
56	19	215,737	49	819,731
57	17	159,056	44	706,401
58	14	175,549	54	880,011
59	13	156,390	60	889,045
60	15	211,858	43	721,296
61	10	120,030	59	993,561
62	12	159,777	48	575,906
63	12	106,164	59	750,299
64	18	206,016	69	902,924
65	10	133,258	72	1,035,523
66	13	194,168	85	1,132,809
67	12	73,446	84	1,140,039
68	11	127,161	90	1,085,977
69	14	171,730	86	1,109,387
70	11	135,060	87	1,107,613
71	12	137,734	100	1,196,461
72	12	113,244	109	1,335,258
73	11	156,687	88	1,132,253
74	14	131,110	113	1,357,401
75	6	37,752	118	1,431,414
76	6	77,908	112	1,462,033
77	16	191,717	113	1,302,987
78	7	72,045	98	1,130,784
79	7	33,191	136	1,399,962
80	4	28,880	116	1,062,067
81	7	74,648	134	1,181,924
82	1	6,810	103	869,841
83	10	105,698	108	1,034,984
84	8	50,420	83	779,522
85	7	62,886	70	657,281
86	2	8,081	77	664,890
87	1	2,111	66	532,827
88	5	47,474	62	460,629
89	2	7,897	47	329,155

TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL
RETIREMENT ALLOWANCES OF RETIREES
DISTRIBUTED BY AGE AS OF JUNE 30, 2002**

**BENEFICIARIES OF DECEASED
ACTIVE AND RETIRED MEMBERS**

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
90	3	\$ 21,978	54	\$ 434,161
91			36	203,301
92			28	125,635
93			32	228,166
94	1	7,271	11	70,059
95			13	101,832
96			6	40,040
97			5	30,468
98			6	67,316
99			3	7,519
100			1	1,719
101			1	5,258
102			2	3,774
Total	645	\$ 5,789,384	3,632	\$ 40,829,555