

**EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA**

**REPORT OF ACTUARY**

**ON THE VALUATION**

**PREPARED AS OF JUNE 30, 2001**



A Mellon Consulting Company

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

August 6, 2002

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

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 annual 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 are pleased to submit herewith the results of the actuarial valuation prepared as of June 30, 2001. In our opinion the valuation is complete and accurate, and the methodology and assumptions used are reasonable as a basis for the valuation. On the basis of the recommended employer contribution rates, the Retirement System is being funded in conformity with the minimum funding standards set forth in Code Section 47-20-10 of the Public Retirement Systems Standards Law.

Since the previous valuation, the actuarial assumptions have been revised to reflect the results of the experience investigation adopted by the Board on June 20, 2002. The employer contribution rate has been determined to be 5.66% of active payroll for Old Plan members and 10.41% of active payroll for New Plan members. 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 Ad Hoc COLAs effective July 1, 2002 and January 1, 2003.

The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution rates (ARC) of the employer under GASB for the fiscal year ending June 30, 2003 are 5.66% of active payroll for Old Plan members and 10.41% of active payroll for New Plan members, which will liquidate the unfunded accrued liability over a 20-year period.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the Retirement System.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

Edward A. Macdonald  
Principal, Consulting Actuary

EAM:sr

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**EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA  
REPORT OF ACTUARY  
ON THE VALUATION  
PREPARED AS OF JUNE 30, 2001**

**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).

<b>Valuation Date</b>	<b>June 30, 2001</b>	<b>June 30, 2000</b>
Active members:		
Number	75,132	75,318
Annual compensation	\$ 2,397,169	\$ 2,304,289
Retired members and beneficiaries:		
Number	25,889	24,488
Annual allowances	\$ 538,890	\$ 480,380
Assets:		
Market Value	\$ 12,343,625	\$ 13,301,163
Actuarial Value	11,750,624	10,999,901
Unfunded actuarial accrued liability	\$ (193,369)	\$ (426,493)
Amortization period	20 years	40 years
<b>For Fiscal Year Ending</b>	<b>June 30, 2003</b>	<b>June 30, 2002</b>
Annual required employer contribution rates (ARC):		
Old Plan		
Normal	6.24%	6.51%
Accrued Liability	<u>(0.58)</u>	<u>(0.85)</u>
Total	5.66%	5.66%
New Plan		
Normal (includes 4.75% paid for member)	10.99%	11.26%
Accrued Liability	<u>(0.58)</u>	<u>(0.85)</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. Since the previous valuation, the actuarial assumptions have been revised to reflect the results of the experience investigation that was adopted by the Board on June 20, 2002. Schedule D of this report outlines the full set of actuarial assumptions and methods used.
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, 2001 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, 2001 on the basis of which the valuation was prepared.

#### **THE NUMBER, ANNUAL COMPENSATION AND AVERAGE ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF JUNE 30, 2001**

NUMBER	ANNUAL COMPENSATION (in thousands)	AVERAGE ANNUAL COMPENSATION
75,132	\$ 2,397,169	\$ 31,906

2. The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2001, 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, 2001**

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES (in thousands)
Service Retirements	18,400	\$ 423,487
Disability Retirements	3,319	72,567
Beneficiaries of Deceased Members	<u>4,170</u>	<u>42,836</u>
Total	25,889	\$ 538,990

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, 2001 the market value of assets credited to the Annuity Savings Fund amounted to \$786,929,000.

(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, 2001 the market value of assets credited to the Pension Accumulation Fund amounted to \$11,556,696,000.

2. As of June 30, 2001 the total market value of assets amounted to \$12,343,625,000 as reported by the independent auditor of the System. The actuarial value of assets used for the current valuation was \$11,750,624,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2001.
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, 2001 (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 \$14,460,062 of which \$5,421,632 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits and \$9,038,430 is for the prospective basic benefits payable on account of present active members. Against these liabilities, the System has total present assets of \$11,750,624 as of June 30, 2001. The difference of \$2,709,438 between the total liabilities and the total present assets represents the present value of contributions to be made in the future. Of this amount, \$1,398,006 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 \$1,311,432 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 6.24% of active members' compensation.
4. Prospective employer normal contributions at the rate of 6.24% have a present value of \$1,504,801. When this amount is subtracted from \$1,311,432, which is the present value of total future employer contributions, there remains (\$193,369) as the unfunded actuarial accrued liability.
5. The accrued liability contribution rate is (0.58%) of active members' compensation, which will liquidate the unfunded actuarial liability over a 20 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, 2001 valuation and are recommended for use.

#### **ANNUAL REQUIRED EMPLOYER CONTRIBUTION RATES (ARC) FOR FISCAL YEAR ENDING JUNE 30, 2003**

	Old Plan	New Plan
Normal	6.24%	6.24%
Employer paid for member	-	4.75
Accrued liability	<u>(0.58)</u>	<u>(0.58)</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, 2001**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	25,889
Terminated employees entitled to benefits but not yet receiving benefits	51,717
Active plan members	<u>75,132</u>
Total	<u>152,738</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)
6/30/96	\$6,140,080	\$7,243,105	\$1,103,025	84.8%	\$1,968,714	56.0%
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)

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

4. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2001. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/01
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	20 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)

<u>Year Ending</u>	<u>Annual Pension Cost (APC)</u>	<u>Percentage Of APC Contributed</u>	<u>Net Pension Obligation (NPO)</u>
June 30, 1999	\$304,461	100%	\$0
June 30, 2000	302,332	100	0
June 30, 2001	315,505	100	0

SCHEDULE A

## VALUATION BALANCE SHEET

**RESULTS OF THE VALUATION AS OF JUNE 30, 2001  
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES  
OF THE EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA  
(All dollar amounts are in thousands)**

<u>ACTUARIAL LIABILITIES</u>		
(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	\$ 4,875,973
	- Death and survivor benefits	407,503
	- Deferred vested benefits	<u>138,156</u>
	Total	\$ 5,421,632
(2)	Present value of prospective benefits payable on account of present active members	
	- Retirement and survivor allowances	\$ 8,977,154
	- Refunds of members' contributions	<u>61,276</u>
	Total	<u>9,038,430</u>
(3)	TOTAL ACTUARIAL LIABILITIES	<u>\$ 14,460,062</u>
<u>PRESENT AND PROSPECTIVE ASSETS</u>		
(4)	Actuarial value of assets	\$ 11,750,624
(5)	Present value of total future contributions = (3)-(4)	\$ 2,709,438
(6)	Present value of future member contributions and employer paid member contributions	1,398,006
(7)	Present value of future employer contributions = (5)-(6)	\$ 1,311,432
(8)	Employer normal contribution rate	6.24%
(9)	Present value of future payroll (1%)	\$ 241,154
(10)	Prospective normal contributions = (8) x (9)	1,504,801
(11)	Prospective unfunded accrued liability contributions = (7)-(10)	<u>(193,369)</u>
(12)	TOTAL PRESENT AND PROSPECTIVE ASSETS	<u>\$ 14,460,062</u>

**SCHEDULE B****DEVELOPMENT OF JUNE 30, 2001 ACTUARIAL VALUE OF ASSETS**  
(All dollar amounts are \$1,000's)

(1)	Actuarial Value of Assets on June 30, 2000	\$ 10,999,901
(2)	2000/2001 Net Cash Flow	
	a. Contributions	371,392
	b. Disbursements	<u>533,247</u>
	c. Net Cash Flow	
	(2)a - (2)b	(161,855)
(3)	Expected Investment Return [(1) x .07] + [(2)c x .035]	764,328
(4)	Expected Actuarial Value of Assets on June 30, 2001 (1) + (2)c + (3)	11,602,374
(5)	Market Value of Assets on June 30, 2001	12,343,625
(6)	Excess of Market Value over Expected Actuarial Value (5) - (4)	741,251
(7)	20% Adjustment towards Market .20 x (6)	148,250
(8)	Actuarial Value of Assets on June 30, 2001 (4) + (7)	\$ 11,750,624

**SCHEDULE C****SUMMARY OF RECEIPTS AND DISBURSEMENTS  
(MARKET VALUE)**

	Year Ending	
	June 30, 2001 (in \$ thousand)	June 30, 2000 (in \$ thousand)
<u>Receipts for the Year</u>		
Contributions:		
Members	\$ 55,887	\$ 55,735
Employers	<u>315,505</u>	<u>302,332</u>
Total	\$ 371,392	\$ 358,067
Investment earnings	<u>(795,683)</u>	<u>845,370</u>
TOTAL	\$ (424,291)	\$ 1,203,437
<u>Disbursements for the Year</u>		
Retirement allowances	\$ 518,734	\$ 460,358
Refunds to members	7,563	7,417
Administrative expense	<u>6,950</u>	<u>7,099</u>
TOTAL	\$ 533,247	\$ 474,874
<u>Excess of Receipts over Disbursements</u>	\$ (957,538)	\$ 728,563
<u>Reconciliation of Asset Balances - Market Value</u>		
Asset Balance as of the Beginning of Year	\$ 13,301,163	\$ 12,572,600
Excess of Receipts over Disbursements	<u>(957,538)</u>	<u>728,563</u>
Asset Balance as of the End of Year	<u>\$ 12,343,625</u>	<u>\$ 13,301,163</u>

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

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	--	--

<u>Annual Rates of Withdrawal</u>			
<u>Age</u>	<u>Years of Service</u>		
	<u>0-4</u>	<u>5-9</u>	<u>10 &amp; 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 Plan<sup>1</sup></u>		<u>New Plan<sup>2</sup></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

<sup>1</sup>It 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.

<sup>2</sup>An 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 x (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<br>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<br>to 22 years 9 months          | 100% of age 60 benefit   |
| (3) over 22 years 9 months<br>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

<u>Conditions</u>	<u>Allowance</u>
(1) Termination with less than 10 years membership service	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.
(2) Termination with 10 years or more membership service	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, 2001**

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
17			1	\$	16,812
18	1	\$	22,044	2	30,042
19	58		1,152,295	36	719,980
20	110		2,251,208	93	1,789,924
21	198		4,084,425	202	4,040,099
22	235		4,949,030	245	5,007,363
23	334		7,479,966	460	10,134,690
24	388		9,177,010	656	15,032,413
25	436		10,507,341	766	17,890,333
26	460		11,297,768	882	21,511,611
27	625		15,681,913	942	22,994,655
28	645		16,720,226	942	23,020,145
29	679		18,167,917	1,081	27,684,187
30	731		20,380,498	1,024	26,248,742
31	770		21,404,954	1,087	28,442,027
32	741		21,623,430	1,088	29,239,134
33	784		23,377,935	1,031	27,665,992
34	747		22,619,435	1,034	28,451,910
35	768		24,200,750	1,105	30,375,972
36	806		24,307,667	1,157	32,037,868
37	811		25,652,964	1,241	34,559,623
38	818		25,540,279	1,200	34,886,142
39	872		28,842,588	1,289	36,831,041
40	834		27,786,534	1,286	37,543,367
41	931		30,768,411	1,341	39,001,410
42	941		31,790,294	1,387	42,220,194
43	853		29,549,691	1,402	42,464,678
44	933		32,065,784	1,406	44,042,556
45	906		32,790,966	1,451	45,572,870
46	906		32,793,721	1,512	49,133,277
47	965		35,981,553	1,470	47,360,029
48	996		36,888,848	1,437	46,966,389
49	1,046		41,514,411	1,454	49,969,319
50	933		37,494,674	1,437	48,523,439
51	943		39,133,738	1,440	49,271,036
52	986		41,876,754	1,348	47,390,298
53	979		41,559,643	1,399	48,086,463
54	988		40,986,920	1,217	43,599,044

**TABLE 1**  
**THE NUMBER AND ANNUAL COMPENSATION**  
**OF MEMBERS DISTRIBUTED BY**  
**AGE AS OF JUNE 30, 2001**

CONTINUED

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
55	746	\$ 31,388,870	1,029	\$ 35,338,017	
56	564	23,276,056	840	28,590,937	
57	525	22,267,698	765	26,186,682	
58	510	21,673,947	698	22,962,975	
59	440	17,463,082	665	22,164,259	
60	374	15,539,951	502	16,086,186	
61	310	12,337,018	419	13,891,275	
62	240	10,237,692	344	11,278,265	
63	167	6,487,848	214	7,323,015	
64	112	4,747,162	165	5,159,974	
65	92	3,900,444	106	3,313,315	
66	80	3,524,205	73	2,257,472	
67	57	2,627,737	59	1,885,177	
68	44	2,038,868	32	950,645	
69	27	1,212,176	24	846,398	
70	24	1,029,485	18	567,156	
71	22	929,093	21	598,878	
72	19	898,884	12	328,399	
73	6	268,619	6	233,826	
74	5	312,529	12	444,008	
75	6	435,094	8	226,321	
76	7	349,844	6	191,441	
77	4	175,390	2	56,729	
78	3	97,484	2	77,328	
79	4	255,370	1	38,466	
80	2	150,680	4	153,620	
81			1	17,316	
82			1	33,693	
83	1	51,924	1	16,980	
84	2	82,897			
85			1	10,995	
<b>TOTALS</b>	<b>30,550</b>	<b>\$ 1,056,183,632</b>	<b>44,582</b>	<b>\$ 1,340,984,822</b>	

TABLE 2

**THE NUMBER AND ANNUAL COMPENSATION  
OF MEMBERS DISTRIBUTED BY YEARS OF  
CREDITED SERVICE AS OF JUNE 30, 2001**

YEARS OF SERVICE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
0	2,045	\$ 49,870,059	3,015	\$ 71,599,667	
1	3,216	88,444,887	5,840	144,050,303	
2	2,191	63,529,752	3,836	99,086,247	
3	1,848	54,639,606	2,979	78,452,748	
4	1,519	45,406,022	2,096	55,745,319	
5	1,134	34,731,825	1,441	40,673,996	
6	1,208	38,728,239	1,644	45,886,566	
7	1,430	44,942,094	1,749	49,903,619	
8	1,272	39,839,709	1,609	45,377,261	
9	1,135	37,669,627	1,253	36,605,056	
10	653	22,078,949	960	28,633,806	
11	1,045	36,356,926	1,569	48,213,509	
12	1,314	44,002,497	1,707	51,816,966	
13	1,046	36,651,141	1,386	43,217,244	
14	891	32,075,420	1,198	38,641,271	
15	801	30,193,493	1,148	37,342,056	
16	836	32,465,967	1,151	38,002,758	
17	722	27,930,338	971	33,669,287	
18	581	23,508,481	719	26,172,420	
19	527	21,248,113	640	23,263,988	
20	435	18,977,967	693	26,256,461	
21	469	20,877,849	753	27,811,767	
22	496	21,849,637	775	29,818,619	
23	470	21,368,422	656	25,960,594	
24	392	18,562,927	662	25,922,054	
25	330	16,073,917	627	24,694,062	
26	313	16,043,759	493	20,486,181	
27	401	20,475,753	743	29,085,386	
28	415	21,322,667	608	23,972,691	
29	423	21,958,235	526	21,838,650	
30	370	20,197,415	385	16,660,906	
31	316	17,208,569	302	13,080,355	
32	175	9,407,366	242	10,438,433	
33	86	4,660,895	152	6,349,226	
34	19	1,112,695	41	1,626,097	
35	4	265,839	6	285,305	
36	5	279,658	1	40,003	
37	8	439,460	4	206,406	
38	4	300,242	1	56,745	
39	1	98,904	0	0	
40	2	192,430	0	0	
41	2	195,881	1	40,794	
<b>TOTALS</b>	<b>30,550</b>	<b>\$ 1,056,183,632</b>	<b>44,582</b>	<b>\$ 1,340,984,822</b>	

TABLE 3

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2001**

**SERVICE RETIREMENTS**

AGE	NUMBER	MEN		WOMEN	
			AMOUNT	NUMBER	AMOUNT
43	2	\$	29,410		
44				1	\$ 12,051
45	2		19,058	1	13,317
46	2		27,200	2	34,186
47	3		37,243	5	69,221
48	9		150,418	11	225,601
49	11		271,659	17	378,755
50	28		958,152	30	759,834
51	40		1,409,420	38	995,271
52	80		3,428,095	59	1,785,251
53	124		5,391,651	107	3,256,057
54	184		8,291,955	133	4,464,064
55	195		8,346,587	130	4,322,203
56	194		8,463,367	140	4,664,654
57	220		9,826,757	162	5,734,305
58	259		11,366,185	182	6,537,282
59	241		11,173,184	165	5,589,518
60	298		12,861,378	192	5,493,536
61	315		12,096,482	288	6,877,037
62	356		12,745,551	308	6,722,650
63	386		12,882,141	385	7,400,177
64	418		13,027,132	382	7,254,888
65	382		11,257,486	385	6,549,831
66	408		11,174,268	367	5,905,777
67	411		11,023,025	393	6,349,464
68	384		10,305,408	393	6,233,791
69	372		9,321,141	378	5,320,179
70	360		8,779,490	377	5,533,269
71	312		7,065,959	329	4,592,970
72	311		6,780,716	312	4,148,372
73	298		6,651,129	291	4,086,555
74	286		6,127,497	315	4,380,121
75	247		5,563,446	290	4,050,748
76	254		5,388,343	323	4,219,040
77	229		4,844,086	279	3,733,804
78	216		3,617,940	252	3,104,651
79	198		3,557,359	255	3,045,339
80	198		3,408,471	235	2,570,743

TABLE 3

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2001**

**SERVICE RETIREMENTS**

CONTINUED

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
81	174	3,277,952	222	2,479,033	
82	136	2,117,377	176	1,900,199	
83	123	2,156,125	156	1,617,444	
84	83	1,367,441	138	1,359,562	
85	80	1,413,829	125	1,459,679	
86	62	873,423	97	924,789	
87	55	860,526	89	843,793	
88	45	969,570	57	636,571	
89	42	657,059	66	766,381	
90	32	614,916	44	343,262	
91	32	458,450	40	472,721	
92	17	151,883	33	293,216	
93	13	142,618	21	237,078	
94	10	89,063	32	330,283	
95	7	91,026	13	129,178	
96	4	120,773	10	75,056	
97	1	25,383	4	14,759	
98	1	2,669	7	74,026	
99	1	939			
100	2	16,802	2	16,680	
101			1	5,892	
102			1	5,430	
103			1	9,763	
<b>TOTAL</b>	<b>9,153</b>	<b>\$ 263,076,616</b>	<b>9,247</b>	<b>\$ 160,409,305</b>	

TABLE 4

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2001**

DISABILITY RETIREMENTS						
AGE	NUMBER	MEN		WOMEN		
		AMOUNT	NUMBER	AMOUNT	NUMBER	
37	5	\$ 84,179	2	\$ 53,074		
38	2	52,726	5	93,957		
39	5	119,288	4	57,201		
40	8	121,180	6	118,730		
41	11	218,740	7	134,370		
42	6	173,979	11	207,849		
43	13	276,649	10	190,682		
44	14	362,713	21	456,836		
45	19	525,232	22	480,599		
46	31	815,692	26	552,371		
47	43	1,211,765	35	802,024		
48	40	1,093,838	45	871,539		
49	52	1,408,525	48	1,187,508		
50	66	2,082,843	52	1,053,595		
51	78	2,339,646	52	1,181,444		
52	93	2,875,257	62	1,276,791		
53	90	2,872,515	54	1,211,936		
54	108	3,249,263	69	1,442,310		
55	98	2,731,646	86	1,839,986		
56	74	2,011,016	59	1,115,699		
57	78	2,021,136	73	1,291,662		
58	79	2,237,158	76	1,198,206		
59	77	1,986,712	73	1,246,219		
60	74	1,715,960	77	1,393,384		
61	64	1,680,499	75	1,328,623		
62	51	1,102,040	61	966,033		
63	61	1,300,651	60	798,434		
64	48	1,031,195	41	539,588		
65	41	755,502	37	502,809		
66	32	695,358	31	441,900		
67	23	497,436	31	379,281		
68	36	693,839	18	238,038		
69	32	615,324	22	238,930		
70	17	363,583	26	320,553		
71	27	527,466	8	173,417		
72	17	351,247	17	190,691		
73	23	418,262	18	270,487		

TABLE 4

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2001**

**DISABILITY RETIREMENTS**

AGE	CONTINUED		WOMEN NUMBER	WOMEN AMOUNT
	MEN NUMBER	MEN AMOUNT		
74	12	289,516	11	130,521
75	16	326,428	14	180,349
76	16	394,326	5	57,532
77	13	251,954	12	131,292
78	12	182,407	9	100,085
79	14	226,788	15	221,292
80	14	297,521	5	54,393
81	14	184,006	10	78,077
82	8	159,819	9	120,689
83	4	57,217	7	115,559
84	6	93,507	5	65,169
85	2	40,056	6	90,920
86	1	4,071	3	33,342
87	2	45,587	5	21,640
88	2	40,460	1	3,206
89			1	2,115
90			4	55,610
91	1	8,919	3	17,320
93			1	17,054
Total	1,773	\$ 45,222,643	1,546	\$ 27,342,921

TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2001**

**BENEFICIARIES OF DECEASED  
ACTIVE AND RETIRED MEMBERS**

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
19	2	\$ 27,779	2	\$ 20,128	
20	1	6,750	5	34,147	
21	5	18,202	1	4,793	
22	5	14,126	2	17,083	
23	2	7,438	4	52,332	
24	1	11,980	3	41,335	
25	4	49,420	1	1,998	
26	3	32,272	3	13,214	
27	3	26,976	4	26,622	
28	5	39,971	5	36,385	
29	8	36,324	4	25,009	
30	3	15,046	11	50,552	
31	6	57,655	8	44,052	
32	4	17,756	10	81,031	
33	8	93,636	10	22,606	
34	6	32,024	6	44,827	
35	10	42,323	10	32,291	
36	9	29,645	13	79,864	
37	10	90,688	12	67,612	
38	13	54,815	16	78,997	
39	7	63,422	8	58,136	
40	12	72,510	17	101,023	
41	9	26,449	12	179,417	
42	13	55,142	16	136,311	
43	7	30,631	21	180,119	
44	9	47,895	18	108,134	
45	4	20,052	19	141,479	
46	15	69,985	25	175,946	
47	12	57,038	16	107,187	
48	9	32,076	31	360,145	
49	12	114,239	30	366,492	
50	14	87,892	31	438,032	
51	12	102,684	30	447,209	
52	20	123,298	37	518,426	
53	16	82,020	37	521,328	
54	15	188,709	42	726,135	



TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2001**

**BENEFICIARIES OF DECEASED  
ACTIVE AND RETIRED MEMBERS**

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
55	18	184,008	47	757,550
56	16	140,992	41	638,953
57	14	170,399	49	735,810
58	11	122,205	57	824,278
59	16	236,841	37	594,083
60	10	116,509	53	792,244
61	11	154,232	44	493,065
62	13	122,440	56	652,592
63	14	169,138	65	788,587
64	10	129,348	68	957,983
65	15	230,772	80	982,776
66	12	71,152	79	1,017,311
67	10	119,153	85	878,351
68	15	168,518	79	944,177
69	10	112,854	83	1,020,106
70	10	116,274	99	1,136,553
71	12	109,921	107	1,279,020
72	11	152,090	84	1,029,342
73	14	110,836	111	1,263,135
74	8	67,269	110	1,249,791
75	7	78,608	108	1,399,192
76	16	186,284	114	1,292,262
77	8	88,746	99	1,070,810
78	7	32,218	133	1,333,862
79	5	30,259	117	973,497
80	7	70,529	127	1,064,503
81	1	6,610	107	863,649
82	9	100,517	106	971,871
83	8	48,941	88	755,550
84	8	87,309	71	640,376
85	1	3,908	80	628,116
86	3	11,818	73	561,678
87	6	49,469	72	455,203
88	2	7,665	49	341,628
89	3	21,333	61	485,048

TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2001**

**BENEFICIARIES OF DECEASED  
ACTIVE AND RETIRED MEMBERS**

CONTINUED

AGE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
90			41	\$ 230,397
91			33	189,649
92			41	254,743
93	1	\$ 7,058	12	75,717
94			15	144,379
95			9	55,268
96			8	44,047
97			6	65,341
98			4	13,083
99			3	25,565
100			1	5,103
101			2	3,663
Total	636	\$ 5,515,091	3,534	\$ 37,320,305