

**EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA**

**REPORT OF ACTUARY**

**ON THE VALUATION**

**PREPARED AS OF JUNE 30, 2003**



June 17, 2004

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

Attention: Mr. Jim Larche, Interim 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, 2003. 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, 2005 are sufficient to support the benefits of the System. In addition, these contribution rates will be payable for the fiscal year ending June 30, 2006, due to a Board decision that changes the contribution period to which the valuation applies to the fiscal year which begins 24 months after the valuation date. The June 30, 2004 valuation will determine the contribution rates for the fiscal year ending June 30, 2007. 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. Since the previous valuation, the assumed interest rate has been increased from 7.00% to 7.25%, with a corresponding increase of 0.25% in the assumed salary scale at all ages. The valuation takes into account the effect of all amendments to the System enacted through the 2003 session of the General Assembly as well as the 1.5% Ad Hoc COLAs effective July 1, 2003 and January 1, 2004.

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 10-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

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**EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA  
REPORT OF ACTUARY  
ON THE VALUATION  
PREPARED AS OF JUNE 30, 2003**

**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, 2003	June 30, 2002
<b>Active members:</b>		
Number	73,251	71,790
Annual compensation	\$ 2,489,490	\$ 2,408,306
<b>Retired members and beneficiaries:</b>		
Number	28,570	27,229
Annual allowances	\$ 655,872	\$ 598,493
<b>Assets:</b>		
Market Value	\$ 11,697,607	\$ 11,558,373
Actuarial Value	12,428,736	12,124,414
Unfunded actuarial accrued liability	\$ (58,173)	\$ (129,564)
Amortization period	10 years	13 years
<b>For Fiscal Year Ending</b>		
	<b>June 30, 2005*</b>	<b>June 30, 2004</b>
<b>Annual required employer contribution rates (ARC):</b>		
<b>Old Plan</b>		
Normal	5.94%	6.21%
Accrued Liability	<u>(0.28)</u>	<u>(0.55)</u>
Total	5.66%	5.66%
<b>New Plan</b>		
Normal	5.94%	6.21%
Employer Pick-Up Contribution	4.75	4.75
Accrued Liability	<u>(0.28)</u>	<u>(0.55)</u>
Total	10.41%	10.41%

\*The ARC will also be payable for the fiscal year ending June 30, 2006, due to a Board decision that changes the contribution period to which the valuation applies to the fiscal year which begins 24 months after the valuation date.

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 2003 session of the General Assembly. The valuation reflects 1.5% Ad Hoc COLAs effective July 1, 2003 and January 1, 2004.

3. Since the previous valuation, the assumed interest rate has been increased from 7.00% to 7.25%, with a corresponding increase of 0.25% in the assumed salary scale at all ages. 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, 2003 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, 2003 on the basis of which the valuation was prepared.

#### **THE NUMBER, ANNUAL COMPENSATION AND AVERAGE ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF JUNE 30, 2003**

NUMBER	ANNUAL COMPENSATION (in thousands)	AVERAGE ANNUAL COMPENSATION
73,251	\$ 2,489,490	\$ 33,986

2. The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2003, 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, 2003**

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES (in thousands)
Service Retirements	20,282	\$ 511,207
Disability Retirements	3,963	94,100
Beneficiaries of Deceased Members	<u>4,325</u>	<u>50,565</u>
Total	28,570	\$ 655,872

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, 2003 the market value of assets credited to the Annuity Savings Fund amounted to \$785,683,000.

(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, 2003 the market value of assets credited to the Pension Accumulation Fund amounted to \$10,911,924,000.

2. As of June 30, 2003 the total market value of assets amounted to \$11,697,607,000 as reported by the independent auditor of the System. The actuarial value of assets used for the current valuation was \$12,428,736,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2003.
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, 2003 (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 \$15,292,561 of which \$6,241,345 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits and \$9,051,216 is for the prospective basic benefits payable on account of present active members. Against these liabilities, the System has total present assets of \$12,428,736 as of June 30, 2003. The difference of \$2,863,825 between the total liabilities and the total present assets represents the present value of contributions to be made in the future. Of this amount, \$1,444,405 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 \$1,419,420 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 5.94% of active members' compensation.
4. Prospective employer normal contributions at the rate of 5.94% have a present value of \$1,477,593. When this amount is subtracted from \$1,419,420, which is the present value of total future employer contributions, there remains (\$58,173) as the unfunded actuarial accrued liability.
5. The accrued liability contribution rate is (0.28%) of active members' compensation, which will liquidate the unfunded actuarial liability over a 10-year period, on the assumption that the total payroll of active members will increase by 3.75% each year.

#### **SECTION V - CONTRIBUTIONS PAYABLE BY EMPLOYERS**

The following table summarizes the employer contribution rates which were determined by the June 30, 2003 valuation and are recommended for use.

#### **ANNUAL REQUIRED EMPLOYER CONTRIBUTION RATES (ARC) FOR FISCAL YEAR ENDING JUNE 30, 2005\***

	Old Plan	New Plan
Normal	5.94%	5.94%
Employer paid for member	0.00	4.75
Accrued liability	<u>(0.28)</u>	<u>(0.28)</u>
Total	5.66%	10.41%

\*The ARC will also be payable for the fiscal year ending June 30, 2006, due to a Board decision that changes the contribution period to which the valuation applies to the fiscal year which begins 24 months after the valuation date.

**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, 2003**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	28,570
Terminated employees entitled to benefits but not yet receiving benefits	56,525
Active plan members	<u>73,251</u>
Total	<u>158,346</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)
6/30/98	\$ 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)
6/30/03	12,428,736	12,370,563	(58,173)	100.5	2,489,490	(2.3)

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>
6/30/98	\$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
6/30/03	246,172	100

4. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2003. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/03
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	10 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.25%
Projected salary increases*	5.45 – 9.25%
Cost-of-living adjustments	None
*Includes inflation at	3.75%

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

<b><u>Year</u> <u>Ending</u></b>	<b><u>Annual</u> <u>Pension</u> <u>Cost</u> <u>(APC)</u></b>	<b><u>Percentage</u> <u>Of</u> <u>APC</u> <u>Contributed</u></b>	<b><u>Net</u> <u>Pension</u> <u>Obligation</u> <u>(NPO)</u></b>
June 30, 2001	\$315,505	100%	\$0
June 30, 2002	233,229	100	0
June 30, 2003	246,172	100	0

**SCHEDULE A****VALUATION BALANCE SHEET**

**RESULTS OF THE VALUATION AS OF JUNE 30, 2003  
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	\$ 5,732,106	
	- Death and survivor benefits	453,239	
	- Deferred vested benefits	<u>56,000</u>	
	Total		\$ 6,241,345
(2)	Present value of prospective benefits payable on account of present active members		
	- Retirement and survivor allowances	\$ 8,991,369	
	- Refunds of members' contributions	<u>59,847</u>	
	Total		<u>9,051,216</u>
(3)	TOTAL ACTUARIAL LIABILITIES		<u>\$ 15,292,561</u>

**PRESENT AND PROSPECTIVE ASSETS**

(4)	Actuarial value of assets		\$ 12,428,736
(5)	Present value of total future contributions = (3)-(4)	\$ 2,863,825	
(6)	Present value of future member contributions and employer paid member contributions		1,444,405
(7)	Present value of future employer contributions = (5)-(6)	\$ 1,419,420	
(8)	Employer normal contribution rate	5.94%	
(9)	Present value of future payroll (1%)	\$ 248,753	
(10)	Prospective normal contributions = (8) x (9)		1,477,593
(11)	Prospective unfunded accrued liability contributions = (7)-(10)		<u>(58,173)</u>
(12)	TOTAL PRESENT AND PROSPECTIVE ASSETS		<u>\$ 15,292,561</u>

**SCHEDULE B****DEVELOPMENT OF JUNE 30, 2003 ACTUARIAL VALUE OF ASSETS**  
**(All dollar amounts are \$1,000's)**

(1)	Actuarial Value of Assets on June 30, 2002	\$	12,124,414
(2)	2002/2003 Net Cash Flow		
	a. Contributions		301,628
	b. Disbursements		<u>651,005</u>
	c. Net Cash Flow		
	(2)a - (2)b		(349,377)
(3)	Expected Investment Return [(1) x .07] + [(2)c x .035]		836,481
(4)	Expected Actuarial Value of Assets on June 30, 2003 (1) + (2)c + (3)		12,611,518
(5)	Market Value of Assets on June 30, 2003		11,697,607
(6)	Excess of Market Value over Expected Actuarial Value (5) - (4)		(913,911)
(7)	20% Adjustment towards Market .20 x (6)		(182,782)
(8)	Actuarial Value of Assets on June 30, 2003 (4) + (7)	\$	12,428,736

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

	Year Ending	
	June 30, 2003 (in \$ thousand)	June 30, 2002 (in \$ thousand)
<b><u>Receipts for the Year</u></b>		
Contributions:		
Members	\$ 55,456	\$ 57,920
Employers	<u>246,172</u>	<u>233,229</u>
Total	\$ 301,628	\$ 291,149
Investment earnings	<u>488,611</u>	<u>(488,398)</u>
TOTAL	\$ 790,239	\$ (197,249)
<b><u>Disbursements for the Year</u></b>		
Retirement allowances	\$ 637,243	\$ 574,602
Refunds to members	5,253	5,430
Administrative expense	<u>8,509</u>	<u>7,971</u>
TOTAL	\$ 651,005	\$ 588,003
<b><u>Excess of Receipts over Disbursements</u></b>	\$ 139,234	\$ (785,252)
<b><u>Reconciliation of Asset Balances - Market Value</u></b>		
Asset Balance as of the Beginning of Year	\$ 11,558,373	\$ 12,343,625
Excess of Receipts over Disbursements	<u>139,234</u>	<u>(785,252)</u>
Asset Balance as of the End of Year	<u>\$ 11,697,607</u>	<u>\$ 11,558,373</u>

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

Adopted by the Board June 20, 2002, with the exception of the valuation interest rate and rates of salary increases, which were adopted April 15, 2004.

VALUATION INTEREST RATE: 7.25% per annum, compounded annually.

SALARY INCREASES:

<u>Age</u>	<u>Annual Rate</u>	<u>Age</u>	<u>Annual Rate</u>
20	9.25%	45	5.45%
25	8.25	50	5.45
30	6.25	55	5.45
35	5.75	60	5.45
40	5.45	65	5.45

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>Years of Service</u>			
<u>Age</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>	<u>Male</u>	<u>Female</u>
	<u>Male</u>	<u>Female</u>			
50	75%	50%	5%	5%	5%
55	75	50	12	5	5
60	75	50	15	10	10
62	75	50	38	32	32
64	75	50	30	35	30
65	60	60		45	45
67	30	30		30	45
70	100	100		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 male 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.

**DEATH BENEFITS:** It is assumed that 100% of the membership will select a beneficiary with the male three years older than the female.

**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 7.25%), 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) = average final compensation

(B) = creditable service, and

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

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**

- | <u>Conditions</u>  | <u>Allowance</u>  |
|--|---|
| (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, 2003**

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
16			1	\$	8,301
18	1	\$ 11,807	1		24,794
19	32	631,326	17		313,961
20	104	2,129,779	59		1,141,721
21	165	3,502,484	121		2,444,741
22	226	4,925,919	221		4,714,521
23	327	7,728,349	422		9,580,468
24	338	8,220,927	553		13,424,601
25	413	10,976,404	764		19,401,475
26	505	13,591,474	879		22,752,587
27	474	13,338,810	860		22,835,416
28	500	14,210,137	936		25,424,266
29	621	17,961,702	999		27,377,808
30	650	19,118,781	988		27,749,443
31	684	21,019,164	1,006		28,833,610
32	734	23,417,362	1,047		29,636,800
33	719	22,829,100	1,048		30,233,230
34	724	23,920,379	1,062		30,908,013
35	730	24,484,242	1,066		31,525,213
36	708	24,465,080	1,039		31,235,908
37	739	25,561,447	1,098		32,555,179
38	778	25,908,466	1,162		34,705,077
39	789	27,164,882	1,250		38,050,657
40	828	28,295,850	1,241		38,570,180
41	859	31,426,444	1,290		40,041,451
42	802	29,078,534	1,323		42,062,546
43	909	32,540,431	1,342		42,183,592
44	903	33,868,546	1,401		46,270,832
45	818	30,409,304	1,410		46,507,481
46	895	34,205,496	1,397		46,863,900
47	894	34,960,958	1,454		49,558,263
48	903	35,066,667	1,506		52,706,426
49	906	36,718,381	1,431		49,941,886
50	973	38,431,604	1,413		50,443,109
51	976	41,683,808	1,425		52,582,434
52	880	37,324,121	1,327		47,921,547
53	858	37,683,263	1,352		49,582,014
54	897	40,042,038	1,218		45,416,635
55	846	36,856,364	1,258		45,320,237
56	820	35,450,766	1,039		38,940,228
57	637	28,270,681	893		32,271,291

**TABLE 1**  
**THE NUMBER AND ANNUAL COMPENSATION**  
**OF MEMBERS DISTRIBUTED BY**  
**AGE AS OF JUNE 30, 2003**

CONTINUED

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
58	474	\$ 20,538,595	726	\$ 26,464,566	
59	446	19,191,939	649	23,419,218	
60	438	19,772,744	570	19,736,985	
61	372	15,190,008	456	16,295,967	
62	267	12,183,349	354	12,036,794	
63	196	9,142,857	260	9,445,301	
64	123	6,094,347	164	5,525,278	
65	107	4,540,434	125	4,496,479	
66	67	2,845,830	95	3,208,597	
67	51	2,279,624	60	2,150,213	
68	50	2,295,787	41	1,387,479	
69	35	1,741,885	33	1,234,050	
70	27	1,410,862	23	703,508	
71	16	748,466	10	271,521	
72	17	705,634	10	321,540	
73	20	911,055	13	440,670	
74	14	825,852	9	272,927	
75	6	283,883	6	247,171	
76	3	142,434	5	205,272	
77	4	352,422	5	145,797	
78	4	232,821	3	105,013	
79	1	17,731	1	28,636	
80	2	81,007			
81	1	53,035			
82	1	45,795	2	67,769	
83			1	18,326	
84			1	35,657	
86	2	87,729			
87			1	15,646	
<b>TOTAL</b>	<b>29,309</b>	<b>\$ 1,079,147,402</b>	<b>43,942</b>	<b>\$ 1,410,342,222</b>	

TABLE 2

**THE NUMBER AND ANNUAL COMPENSATION  
OF MEMBERS DISTRIBUTED BY YEARS OF  
CREDITED SERVICE AS OF JUNE 30, 2003**

YEARS OF SERVICE	MEN		WOMEN	
	NUMBER	AMOUNT	NUMBER	AMOUNT
0	1,216	\$ 30,544,353	1,941	\$ 47,713,068
1	2,903	86,718,288	4,927	132,327,799
2	2,455	77,341,082	3,909	109,002,084
3	2,058	67,419,518	3,758	105,941,686
4	1,573	52,591,838	2,760	78,758,463
5	1,436	46,607,442	2,259	65,554,443
6	1,171	39,404,013	1,641	48,038,726
7	963	32,475,376	1,261	39,615,549
8	1,015	35,324,659	1,318	40,341,070
9	1,230	42,702,716	1,537	47,821,904
10	1,098	37,967,618	1,351	41,878,636
11	999	36,575,046	1,091	35,303,046
12	550	20,140,819	791	25,844,927
13	891	33,718,296	1,333	44,526,320
14	1,138	41,115,716	1,474	48,498,657
15	901	34,632,843	1,234	41,849,889
16	770	30,280,707	1,035	36,019,291
17	701	28,737,058	1,006	36,121,958
18	748	31,617,232	1,029	37,297,772
19	644	26,812,297	861	32,375,841
20	498	22,303,671	652	25,749,675
21	459	20,064,059	565	22,265,564
22	380	17,686,870	618	25,290,054
23	416	20,093,026	692	27,922,869
24	430	20,613,008	686	28,873,249
25	413	20,287,642	594	25,422,869
26	356	18,264,124	589	24,999,739
27	286	15,010,393	543	23,500,327
28	263	14,651,385	450	20,450,203
29	335	18,754,538	639	27,400,001
30	336	18,788,922	485	21,010,339
31	324	18,814,920	367	17,304,464
32	210	12,412,922	281	13,498,942
33	100	5,832,014	184	8,151,535
34	15	849,091	65	2,857,697
35	10	637,128	7	290,856
36	2	105,408	2	134,049
37	2	172,118	1	66,879
38	1	65,578		
39	6	316,655	3	190,755
40	3	267,338	1	60,052
41	1	104,910	1	27,803
42	2	214,518		
43	1	110,247	1	43,172
Total	29,309	\$ 1,079,147,402	43,942	\$ 1,410,342,222

TABLE 3

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2003**

**SERVICE RETIREMENTS**

AGE	NUMBER	MEN		WOMEN	
			AMOUNT	NUMBER	AMOUNT
42	1	\$	30,855		
44				1	\$ 8,521
45	3		34,226	1	7,510
46	1		12,620	7	113,096
47	6		108,441	3	41,548
48	7		155,110	5	89,027
49	19		421,450	12	205,684
50	30		956,151	27	576,960
51	43		1,574,727	44	1,063,004
52	72		2,965,213	78	2,544,856
53	82		3,666,936	108	3,594,257
54	146		6,829,476	155	5,521,814
55	225		10,897,276	197	6,901,263
56	292		14,260,357	240	8,879,173
57	269		13,056,273	217	7,885,581
58	251		11,968,072	200	6,786,443
59	271		12,872,904	227	8,308,518
60	307		13,691,151	265	8,708,302
61	342		14,289,480	368	9,252,546
62	398		15,637,410	349	8,247,678
63	416		14,412,543	435	9,389,601
64	452		14,732,709	463	9,252,131
65	419		13,839,206	449	8,505,635
66	437		14,048,592	441	8,292,649
67	405		12,057,766	417	7,378,576
68	420		11,640,297	383	6,289,223
69	410		11,541,587	403	6,615,793
70	381		10,794,439	398	6,533,834
71	361		9,537,848	374	5,541,049
72	344		8,886,760	369	5,616,160
73	297		7,009,293	327	4,709,534
74	298		6,942,239	303	4,078,450
75	278		6,603,550	279	4,072,010
76	262		6,140,586	300	4,381,207
77	227		5,473,001	282	4,145,793
78	232		5,105,545	299	4,141,125
79	206		4,725,129	264	3,650,548
80	185		3,279,814	235	3,093,224

TABLE 3

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2003**

**SERVICE RETIREMENTS**

CONTINUED

AGE	NUMBER	MEN		WOMEN	
			AMOUNT	NUMBER	AMOUNT
81	171	\$	3,417,680	238	\$ 3,052,047
82	165		2,992,862	211	2,524,950
83	143		3,102,743	203	2,417,392
84	114		1,897,738	155	1,769,067
85	96		1,777,442	129	1,420,980
86	67		1,161,958	116	1,161,511
87	53		906,747	111	1,365,767
88	46		692,384	77	762,241
89	48		843,178	68	722,565
90	30		675,458	44	517,158
91	28		503,618	50	610,835
92	17		290,611	33	270,464
93	16		253,941	31	412,316
94	9		125,332	21	126,521
95	7		96,963	16	212,041
96	6		71,030	16	186,672
97	6		33,999	4	18,903
98	1		37,482	4	27,123
99	1		26,940	3	11,210
100				5	71,000
102	1		5,587	1	5,513
104				1	5,763
<b>TOTAL</b>	<b>9,820</b>	<b>\$</b>	<b>309,112,725</b>	<b>10,462</b>	<b>\$ 202,094,362</b>

TABLE 4

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2003**

**DISABILITY RETIREMENTS**

AGE	NUMBER	MEN		WOMEN	
			AMOUNT	NUMBER	AMOUNT
33	1	\$	17,138		
35	1		16,471		
36				1	\$ 22,074
37	2		61,708		
38	4		98,837	2	46,169
39	11		229,755	5	122,238
40	5		110,605	5	99,503
41	16		403,071	8	123,402
42	15		331,764	9	185,951
43	24		653,603	15	327,133
44	17		551,596	16	360,169
45	23		526,700	21	430,057
46	36		962,966	29	662,343
47	32		990,586	38	905,358
48	42		1,247,491	34	776,108
49	68		2,034,001	51	1,252,263
50	60		1,803,591	63	1,322,174
51	71		2,148,655	74	2,032,710
52	84		2,758,698	85	1,901,551
53	112		3,648,913	76	1,793,570
54	120		3,894,771	81	1,852,118
55	124		4,057,799	78	1,842,945
56	149		4,503,408	101	2,259,108
57	110		3,160,528	110	2,494,924
58	94		2,504,529	76	1,462,414
59	93		2,381,971	100	1,927,951
60	94		2,559,791	101	1,691,538
61	83		2,274,599	96	1,715,936
62	71		1,720,496	73	1,370,712
63	62		1,680,638	71	1,347,337
64	47		1,112,940	57	917,708
65	58		1,317,619	54	757,223
66	44		1,000,588	41	553,433
67	38		726,508	33	445,635
68	27		602,577	31	463,807
69	23		527,957	29	369,433
70	31		662,165	17	244,261
71	29		616,481	21	229,074
72	13		298,351	19	295,005
73	22		452,722	8	183,876
74	16		336,533	17	202,394

TABLE 4

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2003**

**DISABILITY RETIREMENTS**

CONTINUED

AGE	NUMBER	MEN		WOMEN	
			AMOUNT	NUMBER	AMOUNT
75	19	\$	348,572	17	\$ 274,013
76	9		233,635	11	136,954
77	14		287,681	14	191,417
78	10		273,505	5	60,428
79	9		224,626	11	131,916
80	9		170,185	9	106,227
81	10		149,220	14	221,504
82	13		308,285	4	44,768
83	11		160,435	9	79,596
84	7		146,336	7	97,332
85	3		39,268	3	67,474
86	4		77,078	5	68,911
87	1		12,908	3	67,891
88				1	13,295
89	2		48,385	4	19,479
90				1	3,403
91				1	2,244
92				3	42,674
93				2	11,973
<b>TOTAL</b>	<b>2,093</b>	<b>\$</b>	<b>57,469,239</b>	<b>1,870</b>	<b>\$ 36,631,104</b>



TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2003**

**BENEFICIARIES OF DECEASED  
ACTIVE AND RETIRED MEMBERS**

AGE	NUMBER	MEN		WOMEN	
		AMOUNT	NUMBER	AMOUNT	NUMBER
19	1	\$ 7,484	3	\$ 20,221	
20			3	39,357	
21	2	27,779	2	20,128	
22	1	6,750	6	45,134	
23	7	35,150	2	16,598	
24	6	25,024	2	17,083	
25	3	12,339	5	73,750	
26	2	18,203	5	88,372	
27	7	73,835	1	1,998	
28	4	38,408	6	29,159	
29	3	26,976	5	40,033	
30	6	54,773	7	52,963	
31	9	45,816	6	34,602	
32	3	15,047	12	68,565	
33	8	63,809	9	48,317	
34	5	36,125	13	108,851	
35	7	112,214	14	50,941	
36	6	32,024	8	55,193	
37	11	41,827	15	41,866	
38	8	28,045	16	93,556	
39	11	91,459	17	113,927	
40	13	68,830	20	145,842	
41	5	67,584	13	96,422	
42	13	73,231	20	127,707	
43	11	39,518	12	179,418	
44	13	56,555	19	173,400	
45	6	22,804	26	244,269	
46	11	58,666	20	120,427	
47	3	17,941	20	150,665	
48	18	117,988	31	259,616	
49	12	60,538	20	202,589	
50	11	88,626	37	505,991	
51	13	133,275	34	458,348	
52	15	121,535	35	484,125	
53	12	108,986	33	558,238	
54	20	172,448	46	794,088	
55	19	137,912	45	692,968	
56	14	213,571	53	1,013,890	
57	21	240,301	50	860,818	
58	18	171,007	47	784,951	

TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2003**

**BENEFICIARIES OF DECEASED  
ACTIVE AND RETIRED MEMBERS**

CONTINUED

AGE	NUMBER	MEN		WOMEN	
			AMOUNT	NUMBER	AMOUNT
59	14	\$	180,854	64	\$ 1,097,769
60	14		168,024	62	926,305
61	16		222,403	50	968,681
62	11		139,224	63	1,148,433
63	13		185,337	54	647,587
64	13		130,177	63	906,417
65	20		231,990	73	1,054,291
66	11		162,381	75	1,141,628
67	14		232,629	88	1,332,815
68	13		82,099	90	1,230,265
69	11		131,005	91	1,152,868
70	15		181,555	85	1,127,497
71	11		139,064	88	1,226,794
72	11		136,014	101	1,372,646
73	12		115,080	113	1,382,933
74	12		164,007	89	1,239,136
75	13		147,128	114	1,428,742
76	7		51,703	119	1,539,559
77	7		124,724	115	1,574,788
78	18		214,696	117	1,463,390
79	8		87,984	101	1,215,452
80	6		28,386	130	1,441,267
81	5		48,394	113	1,146,017
82	6		67,304	130	1,227,913
83	2		10,572	104	945,504
84	11		122,270	105	1,036,816
85	6		41,951	74	772,582
86	7		64,787	64	608,432
87	2		8,325	74	653,882
88	2		18,925	54	467,785
89	4		45,951	55	396,902
90				38	255,302
91	2		21,866	44	380,434
92				27	164,105
93				22	77,266
94				22	115,461
95	1		7,491	9	64,364
96				13	104,909

TABLE 5

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIREES  
DISTRIBUTED BY AGE AS OF JUNE 30, 2003**

**BENEFICIARIES OF DECEASED  
ACTIVE AND RETIRED MEMBERS**

CONTINUED

AGE	NUMBER	MEN	AMOUNT	NUMBER	WOMEN	AMOUNT
97				5	\$	39,374
98				4		28,420
99				5		53,334
100				2		6,423
101				1		1,771
102				1		5,417
TOTAL	676	\$	6,478,703	3,649	\$	44,086,062