

June 30, 2008

Mr. Michael Nehf Executive Director Employees' Retirement System of Georgia Two Northside 75, Suite 300 Atlanta, GA 30318-7778

Dear Mr. Nehf:

Enclosed are 40 bound copies and one unbound copy of the "Employees' Retirement System of Georgia Report of the Actuary on the Valuation Prepared as of June 30, 2007".

The valuation indicates that employer contributions for the fiscal year ending June, 30, 2010 at the rate 5.66% of compensation for Old Plan Members and 10.41% of compensation for New Plan Members are sufficient to support the benefits of the System. The valuation takes into account the effect of all amendments to the System enacted through the 2007 session of the General Assembly.

lucot

Cathy Turcot

Managing Director

Please let us know if there are any questions concerning the report.

Sincerely yours.

Edward A. Macdonald, ASA, FCA, MAAA

President

EAM:bdm

Enclosure

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EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA REPORT OF THE ACTUARY ON THE VALUATION PREPARED AS OF JUNE 30, 2007



The experience and dedication you deserve

June 30, 2008

Board of Trustees Employees' Retirement System of Georgia Two Northside 75, Suite 300 Atlanta, GA 30318-7778

Attention: Mr. Michael Nehf, 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 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 have submitted the report giving the results of the actuarial valuation of the System prepared as of June 30, 2007. The report indicates that annual employer contributions at the rate of 5.66% of compensation for Old Plan Members and 10.41% of compensation for New Plan Members for the fiscal year ending June 30, 2010 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 are reasonable as a basis for the valuation. The valuation takes into account the effect of all amendments to the System enacted through the 2007 session of the General Assembly. The valuation reflects a 1.5% Ad Hoc COLA effective July 1, 2007, a 0.5% Ad Hoc COLA effective January 1, 2008, and semi-annual 1% COLAs effective through January 1, 2010.

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 being amortized as a level percent of payroll within a 15-year period.



June 30, 2008 Board of Trustees Page 2

The 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 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.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA

President

EAM: bdm

Cathy Turcot

Managing Director



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#### EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA REPORT OF THE ACTUARY ON THE VALUATION PREPARED AS OF JUNE 30, 2007

### SECTION I - SUMMARY OF PRINCIPAL RESULTS

 For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below (all dollar amounts are in thousands):

Valuation Date	June 30, 2007	June 30, 2006	
Number of active members Annual earnable compensation	73,985 \$ 2,680,972	74,089 \$ 2,630,167	
Number of retired members and beneficiaries Annual allowances	34,174 \$ 936,278	32,839 \$ 842,157	
Assets: Market Value Actuarial Value	\$ 14,272,114 13,843,689	\$ 13,033,861 13,461,132	
Unfunded actuarial accrued liability	\$ 1,041,490	\$ 781,713	
Amortization period (years)	15	10	
Funded Percentage	93.0%	94.5%	
For Fiscal Year Ending	June 30, 2010	June 30, 2009	
Annual Required Employer Contribution Rates (ARC): Old Plan Initial Normal Rate Employer Paid on Behalf of Employee Normal Rate Accrued Liability Rate Total	6.83% (4.75) 2.08% 3.58% 5.66%	6.77% (4.75) 2.02% 3.64% 5.66%	
New Plan Normal Rate Accrued Liability Rate	6.83% _3.58%	6.77% <u>3.64</u> %	
Total	10.41%	10.41%	

2. The valuation takes into account the effect of amendments of the System enacted through the 2007 session of the General Assembly. The valuation reflects a 1.5% Ad Hoc COLA effective July 1, 2007, a 0.5% Ad Hoc COLA effective January 1, 2008, and semi-annual 1% COLAs effective through January 1, 2010.



- 3. Schedule D of this report outlines the full set of actuarial assumptions and methods used to prepare the current valuation. There have been no changes since the previous valuation.
- The entry age actuarial cost method was used to prepare the valuation. Schedule E contains a brief description of this method.
- Comments on the valuation results as of June 30, 2007 are given in Section IV and further discussion of the employer contribution levels is set out in Section V.

#### **SECTION II - MEMBERSHIP**

 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, 2007 on whose account benefits may be payable under the Retirement System.

THE NUMBER, ANNUAL COMPENSATION AND AVERAGE ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF JUNE 30, 2007

NUMBER	ANNUAL COMPENSATION (\$1,000's)	AVERAGE ANNUAL COMPENSATION
73,985	\$ 2,680,972	\$ 36,237



 The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2007, 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 RECEIVING BENEFITS AS OF JUNE 30, 2007

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES (\$1,000's)
Service Retirements	24,810	\$ 746,412
Disability Retirements	4,641	127,330
Beneficiaries of Deceased Active and Retired Members	4,723	62,536
Total	34,174	\$ 936,278

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

- The retirement law provides for the maintenance of two funds 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 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 annuity which these contributions provide is then paid from the Pension Accumulation Fund. On June 30, 2007 the value of assets credited to the Annuity Savings Fund amounted to \$706,440,000.



#### (b) Pension Accumulation Fund

The Pension Accumulation Fund is the fund to which all income from investments and all contributions made by employers of members of the System and by the State for members of local retirement funds 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 annuity portion of the allowance. On June 30, 2007 the market value of assets credited to the Pension Accumulation Fund amounted to \$13,565,674,000.

- 2. As of June 30, 2007 the total market value of assets available for valuation purposes amounted to \$14,272,114,000 as reported by the Auditor of the System. This does not include \$90,133,000 transferred from the State Employees' Assurance Department to the Survivors Benefit Fund in the Employees' Retirement System. These assets are not available for valuation purposes. The actuarial value of assets used for the current valuation was \$13,843,689,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2007.
- Schedule C shows 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

- 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, 2007 (all amounts are in thousands).
- The valuation balance sheet shows that the System has total prospective liabilities of \$16,547,509, of which \$9,020,890 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits, and \$7,526,619 is for the prospective benefits payable on account of present active members. Against these liabilities, the System has total present assets for valuation purposes of \$13,843,689 as of June 30, 2007. The difference of \$2,703,820 between the total liabilities and the total present assets represents the present value of contributions to be made in the future.



- 3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 2.08% (6.83% less 4.75% Employer paid on behalf of Employee) of payroll for Old Plan members and 6.83% for New Plan members are required.
- 4. Prospective employer and employee normal contributions have a present value of \$1,662,330.
  When this amount is subtracted from \$2,703,820, which is the present value of the total future contributions to be made in the future, there remains \$1,041,490 as the unfunded actuarial accrued liability.
- 5. The accrued liability contribution rate is 3.58% of active member's compensation, which will amortize the unfunded actuarial liability over a 15-year period, on the assumption that the total payroll of active members will increase by 3.75% per year.

#### SECTION V – CONTRIBUTIONS PAYABLE BY EMPLOYERS

 The following table summarizes the employer contribution rates, which were determined by the June 30, 2007 valuation and are recommended for use.

### ANNUAL REQUIRED EMPLOYER CONTRIBUTION RATES (ARC) FOR FISCAL YEAR ENDING JUNE 30, 2010

	Old Plan	New Plan
Normal Rate		
Initial Normal Rate	6.83%	6.83%
Employer Paid on behalf of Employee	(4.75)	(0.00)
Employer Normal Rate	2.08%	6.83%
Accrued Liability Rate	3.58%	3.58%
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, 2007

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	34,174
Terminated employees entitled to benefits but not yet receiving benefits	66,964
Active plan members	73,985
Total	175,123

2. Another such item is the schedule of funding progress as shown below.

#### SCHEDULE OF FUNDING PROGRESS

(Dollar amounts in thousands)

Actuarial Valuation <u>Date</u>	Actuarial Value of Assets <u>( a )</u>	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)
6/30/2002	\$ 12,124,414	\$ 11,994,850	\$ (129,564)	101.1%	\$ 2,408,306	(5.4)%
6/30/2003	12,428,736	12,370,563	(58,173)	100.5	2,489,490	(2.3)
6/30/2004	12,797,389	13,106,648	309,259	97.6	2,445,619	12.6
6/30/2005	13,134,472	13,512,773	378,301	97.2	2,514,430	15.0
6/30/2006	13,461,132	14,242,845	781,713	94.5	2,630,167	29.7
6/30/2007	13,843,689	14,885,179	1,041,490	93.0	2,680,972	38.8

All figures prior to 6/30/2005 were reported by the prior actuarial firm.



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

Annual Required Contribution	Percentage Contributed	
\$ 233,229	100%	
246,172	100	
245,388	100	
243,074	100	
	100	
	100	
	Contribution \$ 233,229	

All figures prior to 6/30/2005 were reported by the prior actuarial firm.

4. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2007. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2007	
Actuarial cost method	Entry age	
Amortization method	Level percent of pay, open	
Remaining amortization period	15 years	
Asset valuation method	7-year smoothed market	
Actuarial assumptions:		
Investment rate of return*	7.50%	
Projected salary increases*	5.45 – 9.25%	
Cost-of-living adjustments	None	
*Includes inflation at	3.75%	



#### TREND INFORMATION

(Dollar amounts in thousands)

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation
June 30, 2005	\$ 243,074	100%	\$ 0
June 30, 2006	258,482	100	0
June 30, 2007	270,141	100	0

#### **SECTION VII – EXPERIENCE**

Section 47-2-26 of the act governing the operation of the System provides that as an aid to the Board in adopting service and mortality tables, the actuary will prepare an experience investigation at least once in each five-year period. The last experience investigation was prepared for the four-year period ending June 30, 2004, and based on the results of the investigation, new rates of separation and mortality were adopted by the Board on April 20, 2006. The next experience investigation will be prepared for the period July 1, 2004 through June 30, 2009.



2. The following table shows the estimated gain or loss from various factors that resulted in an increase of \$259,777,000 in the unfunded accrued liability from \$781,713,000 to \$1,041,490,000 during the fiscal year ending June 30, 2007.

### ANALYSIS OF THE INCREASE IN UNFUNDED ACCRUED LIABILITY

(in millions of dollars)

ITEM		AMOUNT OF INCREASE/ (DECREASE)	
Interest (7.50) added to previous unfunded accrued liability Accrued liability contribution	\$	58.6 (35.3)	
Experience:  Valuation asset growth Pensioners' mortality Turnover and retirements New entrants Salary increases Method changes Amendments (COLAs) Assumption changes Miscellaneous changes Total	\$	(59.5) 51.0 115.7 35.7 (33.2) 0.0 5.9 0.0 120.9 259.8	



### **SCHEDULE A**

# VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA AS OF JUNE 30, 2007 (in thousands of dollars)

	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  - Death and survivor benefits  - Deferred vested benefits  Total	\$ 8,341,987 557,745 121,158	\$ 9,020,890			
(2)	Present value of prospective benefits payable on account of present active members		7,526,619			
(3)	TOTAL ACTUARIAL LIABILITIES		\$ 16,547,509			
	PRESENT AND PROSPECTIVE ASSETS					
(4)	Actuarial value of assets		\$ 13,843,689			
(5)	Present value of total future contributions = (3)-(4)	\$ 2,703,820				
(6)	Present value of future member contributions and employer normal contributions		1,662,330			
(7)	Prospective unfunded accrued liability contributions = (5)-(6)		1,041,490			
(8)	TOTAL PRESENT AND PROSPECTIVE ASSETS		\$ 16,547,509			



### SCHEDULE B

# DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS (Dollar amounts in thousands)

-			
(1)	Actu	arial Value Beginning of Year	\$ 13,461,132
(2)	Mark	et Value End of Year	\$ 14,272,114
(3)	Mark	ket Value Beginning of Year	\$ 13,033,861
(4)	Cash	Flow	
	(a)	Contributions	\$ 319,391
	(b)	Benefit Payments and Expenses	(950,251)
	(c)	Investment Expenses	 (1,963)
	(d)	Net: (4)(a) + (4)(b) + (4)(c)	\$ (632,823)
(5)	Inves	stment Income	
	(a)	Market Total: (2) - (3) - (4)(d)	\$ 1,871,076
	(b)	Assumed Rate	7.50%
	(c)	Amount for Immediate Recognition: $[(3) \times (5)(b)] + [\{(4)(a) + (4)(b)\} \times (5)(b) \times 0.5] - (4)(a)$	\$ 955,845
	(d)	Amount for Phased-In Recognition: (5)(a) - (5)(c)	915,231
(6)	Phas	ed-In Recognition of Investment Income	
	(a)	Current Year: (5)(d) / 7	\$ 130,747
	(b)	First Prior Year	(71,212)
	(c)	Second Prior Year	0
	(d)	Third Prior Year	0
	(e)	Fourth Prior Year	0
	(f)	Fifth Prior Year	0
	(g)	Sixth Prior Year	 0
	(h)	Total Recognized Investment Gain	\$ 59,535
(7)	Actua	arial Value End of Year: (1) + (4)(c) + (5)(c) + (6)(h)	\$ 13,843,689
(8)	Diffe	rence Between Market & Actuarial Values: (2) - (7)	\$ 428,425
(9)	Rate	of Return on Actuarial Value	7.71%



### SCHEDULE C

# SUMMARY OF RECEIPTS AND DISBURSEMENTS (Market Value)

	YEAR ENDING			
Receipts for the Year	June 30, 2007	June 30, 2006		
	(\$1,000's)	(\$1,000's)		
Contributions:  Members  Employer	\$ 49,250 270,141	\$ 50,963 258,482		
Subtotal	\$ 319,391	\$ 309,445		
Investment Earnings	1,869,113	774,724		
TOTAL	\$ 2,188,504	\$ 1,084,169		
Disbursements for the Year				
Benefit Payments	\$ 928,654	\$ 857,860		
Refunds to Members	6,696	6,978		
Administration Expense	14,901	10,596		
TOTAL	\$ 950,251	\$ 875,434		
Excess of Receipts over Disbursements	\$ 1,238,253	\$ 208,735		
Reconciliation of Asset Balances				
Asset Balance as of the Beginning of Year	\$ 13,033,861	\$ 12,825,126		
Excess of Receipts over Disbursements	1,238,253	208,735		
Asset Balance as of the End of Year	\$ 14,272,114	\$ 13,033,861		
Rate of Return	14.70%	6.18%		



#### SCHEDULE D

#### **OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS**

Adopted by the Board April 20, 2006, with the exception of the valuation interest rate and rates of salary increases which were adopted based on the valuation report dated October 11, 2005.

VALUATION INTEREST RATE: 7.50 per annum, compounded annually.

#### SALARY INCREASES:

<u>Age</u>	Annual Rate	<u>Age</u>	Annual Rate
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 for non-law enforcement officers are as follows. Special rates of separation apply to law enforcement officers.

	_	-
Annual	Patoc	nf.
Alliluai	Nates	OI

	Death	1	Disak	oility
	<u>Men</u>	Women	Men	Women
20	.06%	.03%	.05%	.05%
25	.07	.03	.05	.05
30	.08	.04	.05	.05
35	.09	.06	.10	.05
40	.13	.08	.35	.14
45	.19	.11	.77	.40
50	.32	.17	1.30	.70
55	.56	.29	2.00	1.20
60	1.02	.58		
65	1.80	1.08		===
69	2.60	1.50		



# Annual Rates of Withdrawal

		Years of Service	
<u>Age</u>	0-4	<u>5-9</u>	10 & Over
		<u>Males</u>	
20 25 30 35 40 45 50 55 60 65	30.00% 24.00 22.00 22.00 20.00 17.00 14.00 13.00 13.00	11.00% 9.00 8.00 8.00 7.00 6.00 5.00 5.00	6.00% 5.00 4.00 3.00 3.50 4.00 4.50
		<u>Females</u>	
20 25 30 35 40 45 50 55 60	28.00% 24.00 22.00 20.00 17.00 16.00 16.00 15.00 20.00	11.00% 11.00 9.00 8.00 7.00 6.00 6.00 6.00 11.00	8.00% 6.00 4.00 3.50 3.50 5.00 5.00



**RETIREMENT**: Representative values of the assumed annual rates of service retirement for non-law enforcement officers are as follows. Special retirement rates apply to law enforcement officers.

		Old F	New Plan <sup>2</sup>			
Age		more than years	Age 60 or 30 years			
	Male	Female	Male	Female	Male	Female
50	50%	50%	9.0%	7.5%	10%	10%
55	50	50	11.0	11.5	10	10
60	50	50	22.0	24.0	15	20
62	50	50	43.0	44.0	38	36
64	50	50	27.0	30.0	29	30
65	44	45			43	38
67	26	28			27	34
70	100	100			100	100

It is also assumed that 95% of active Old Plan members will retire during the year in which they attain 34 years of service. In addition, it is assumed that 3.5% of male members under age 55, 7.5% of male members ages 55 and over, 3.0% of female members under age 55 and 8.0% of female 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 RP-2000 Disabled Mortality Table set forward three years 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>	Males	<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 value of assets, based on the assumed valuation rate of return. The amount recognized each year is 1/7 of the difference between market value and expected market value.

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. In addition, it is assumed that 6.0% of male members under age 55, 6.5% of male members ages 55 and over, 5.0% of female members under age 55 and 10.0% of female members ages 55 and over will retire under early reduced retirement.



**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 7.50%), of each active member's expected benefit 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 and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
- The employer contributions required to support the 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 normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new 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 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 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 Service

#### Old 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 34<sup>th</sup> year and his or her 65<sup>th</sup> 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

- $(A) \times (B) \times (C)$ , where
- (A) = Average final compensation
- (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 Disability

#### Allowance

(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

<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** 

Conditions

(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.

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**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 members for the member's life with the final payment (for month of member's death) going to member's designated beneficiary.

Option 1

Full cash refund, paying a reduced retirement benefit to members 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% of 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 members' 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.
- (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 on 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

# The Number and Average Annual Compensation of Active Members by Age and Service as of June 30, 2007

					Yea	rs of Serv	rice								
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total				
<b>Under 25</b> Avg. Pay	1,670 \$22,932	1,606 \$25,342	30 \$27,702								3,306 \$24,146				
<b>25 to 29</b> Avg. Pay	1,889 \$25,459	4,199 \$29,372	1,115 \$30,535	19 \$32,945	_						7,222 \$28,537				
<b>30 to 34</b> Avg. Pay	1,286 \$26,784	3,393 \$31,400	2,843 \$33,988	679 \$35,811	8 \$36,358						8,209 \$31,943				
<b>35 to 39</b> Avg. Pay	1,193 \$27,116	2,871 \$32,878	2,520 \$35,446	1,940 \$38,207	701 \$39,514	32 \$39,026		1 \$48,456			9,258 \$34,477				
<b>40 to 44</b> Avg. Pay	954 \$28,168	2,491 \$33,208	2,143 \$34,783	1,729 \$36,646	1,873 \$41,283	976 \$42,959	46 \$43,382				10,212 \$36,109				
<b>45 to 49</b> Avg. Pay	806 \$28,689	2,140 \$32,962	2,095 \$35,164	1,526 \$37,174	1,721 \$40,063	1,827 \$45,543	955 \$47,346	75 \$46,945			11,145 \$38,129				
<b>50 to 54</b> Avg. Pay	610 \$30,667	1,866 \$34,939	1,840 \$36,009	1,550 \$38,135	1,565 \$40,035	1,533 \$43,974	1,595 \$51,723	731 \$50,615	1 \$46,150		11,291 \$40,641				
<b>55 to 59</b> Avg. Pay	438 \$32,586	1,421 \$37,959	1,409 \$36,706	1,177 \$38,173	1,361 \$40,368	1,114 \$44,202	1,005 \$51,011	732 \$54,807	15 \$66,798	2 \$73,339	8,674 \$41,685				
<b>60 to 64</b> Avg. Pay	126 \$32,605	653 \$40,156	730 \$39,168	580 \$40,882	577 \$41,164	451 \$45,391	315 \$50,060	205 \$52,759	19 \$76,902		3,656 \$42,370				
<b>65 to 69</b> Avg. Pay	26 \$29,743	100 \$39,661	207 \$40,699	153 \$43,709	102 \$42,517	70 \$47,577	60 \$51,782	35 \$62,084	10 \$69,132	7 \$73,988	770 \$44,166				
<b>70 &amp; up</b> Avg. Pay	11 \$24,585	30 \$34,482	43 \$43,427	54 \$49,509	47 \$39,725	23 \$37,368	14 \$56,810	14 \$48,673	1 \$54,014	5 \$95,932	242 \$43,730				
<b>Total</b> Avg. Pay	9,009 \$26,785	20,770 \$32,190	14,975 \$35,118	9,407 \$37,872	7,955 \$40,454	6,026 \$44,424	3,990 \$50,287	1,793 \$52,625	46 \$70,752	14 \$81,733	73,985 \$36,237				

Average Age: 43.8 Average Service: 9.8



# SCHEDULE G (Continued)

# NUMBER OF RETIRED MEMBERS AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	64	\$ 1,169,833	\$ 18,279
50-54	760	27,881,286	36,686
55-59	3,006	136,696,074	45,474
60-64	5,250	189,726,971	36,138
65-69	5,293	154,255,058	29,143
70-74	4,052	106,481,808	26,279
75-79	2,883	64,270,635	22,293
80-84	1,971	40,231,234	20,412
85-89	1,121	19,068,883	17,011
90-94	327	5,254,698	16,069
95+	83	1,375,932	16,577
Total	24,810	\$ 746,412,412	\$ 30,085

# NUMBER OF BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained	Number of	Total	Average
Age	Members	Annual Benefits	<b>Annual Benefits</b>
Under 50	666	\$ 5,500,356	\$ 8,259
50-54	241	2,960,121	12,283
55-59	352	5,486,457	15,587
60-64	436	7,753,462	17,783
65-69	505	8,232,771	16,303
70-74	580	8,463,012	14,591
75-79	629	9,140,139	14,531
80-84	615	7,979,209	12,974
85-89	443	4,723,455	10,662
90-94	195	1,872,955	9,605
95+	61	424,425	6,958
Total	4,723	\$ 62,536,362	\$ 13,241



### SCHEDULE G (Continued)

### NUMBER OF DISABLED RETIREES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits		
Under 50	473	\$ 12,025,337	\$ 25,424		
50-54	721	21,367,731	29,636		
55-59	1,246	39,033,097	31,327		
60-64	1,124	30,743,157	27,352		
65-69	588	14,364,401	24,429		
70-74	252	5,083,925	20,174		
75-79	126	2,477,879	19,666		
80-84	61	1,294,166	21,216		
85-89	41	796,017	19,415		
90-94	9	144,457	16,051		
95+	0	0	0		
Total	4,641	\$ 127,330,167	\$ 27,436		