



Cavanaugh Macdonald

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June 19, 2009

Ms. Pamela Pharris
Executive Director
Employees' Retirement System of Georgia
Two Northside 75, Suite 300
Atlanta, GA 30318-7778

Dear Ms. Pharris:

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, 2008".

The valuation indicates that employer contributions for the fiscal year ending June, 30, 2011 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 2008 session of the General Assembly.

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

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA
President

Cathy Turcot
Principal and Managing Director

EAM:bdm

Enclosure

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EMPLOYEES'
RETIREMENT SYSTEM
OF GEORGIA

**EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
REPORT OF THE ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2008**



Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

June 19, 2009

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

Attention: Ms. Pamela Pharris, 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, 2008. 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, 2011 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 2008 session of the General Assembly. The valuation reflects semi-annual 1.0% Ad Hoc COLAs effective through January 1, 2011.

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 26-year period.

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June 19, 2009
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 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,

A handwritten signature in black ink, appearing to read 'Edward A. Macdonald'.

Edward A. Macdonald, ASA, FCA, MAAA
President

A handwritten signature in black ink, appearing to read 'Cathy Turcot'.

Cathy Turcot
Principal and Managing Director

EAM:bdm



TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Summary of Principal Results	1
II	Membership	2
III	Assets	3
IV	Comments on Valuation	4
V	Contributions Payable by Employers	5
VI	Accounting Information	6
VII	Experience	9
 <u>Schedule</u>		
A	Valuation Balance Sheet	10
B	Development of Actuarial Value of Assets	11
C	Summary of Receipts and Disbursements	12
D	Outline of Actuarial Assumptions and Methods	13
E	Actuarial Cost Method	17
F	Summary of Main Plan Provisions as Interpreted for Valuation Purposes	18
G	Tables of Membership Data	23
H	Contribution Rates for Members with a Special Benefit	26



**EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
REPORT OF THE ACTUARY
ON THE VALUATION
PREPARED AS OF June 30, 2008**

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, 2008	June 30, 2007
Number of active members	75,293	73,985
Annual earnable compensation	\$ 2,809,199	\$ 2,680,972
Number of retired members and beneficiaries	35,579	34,174
Annual allowances	\$ 997,623	\$ 936,278
Assets:		
Market Value	\$ 13,080,653	\$ 14,272,114
Actuarial Value	14,017,346	13,843,689
Unfunded actuarial accrued liability	\$ 1,663,511	\$ 1,041,490
Amortization period (years)	26	15
Funding Ratio	89.4%	93.0%
For Fiscal Year Ending	June 30, 2011	June 30, 2010
Annual Required Employer Contribution Rates (ARC):		
Old Plan		
Initial Normal Rate	6.80%	6.83%
Employer Paid on Behalf of Employee	<u>(4.75)</u>	<u>(4.75)</u>
Normal Rate	2.05%	2.08%
Accrued Liability Rate	<u>3.61%</u>	<u>3.58%</u>
Total	5.66%	5.66%
New Plan		
Normal Rate	6.80%	6.83%
Accrued Liability Rate	<u>3.61%</u>	<u>3.58%</u>
Total	10.41%	10.41%

2. The valuation takes into account the effect of amendments of the System enacted through the 2008 session of the General Assembly. The valuation reflects semi-annual 1.0% Ad Hoc COLAs through January 1, 2011.



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.
4. The entry age actuarial cost method was used to prepare the valuation. Schedule E contains a brief description of this method.
5. Comments on the valuation results as of June 30, 2008 are given in Section IV and further discussion of the employer contribution levels is set out in Section V.

SECTION II - MEMBERSHIP

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, 2008 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, 2008

NUMBER	ANNUAL COMPENSATION (\$1,000's)	AVERAGE ANNUAL COMPENSATION
75,293	\$ 2,809,199	\$ 37,310



2. The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2008, 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, 2008**

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES (\$1,000's)
Service Retirements	26,076	\$ 800,423
Disability Retirements	4,674	130,591
Beneficiaries of Deceased Active and Retired Members	<u>4,829</u>	<u>66,609</u>
Total	35,579	\$ 997,623

SECTION III - ASSETS

1. 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, 2008 the value of assets credited to the Annuity Savings Fund amounted to \$678,377,000.



(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, 2008 the market value of assets credited to the Pension Accumulation Fund amounted to \$12,402,276,000.

2. As of June 30, 2008 the total market value of assets amounted to \$13,080,653,000 as reported by the Auditor of the System. The actuarial value of assets used for the current valuation was \$14,017,346,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2008.
3. 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

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, 2008 (all amounts are in thousands).
2. The valuation balance sheet shows that the System has total prospective liabilities of \$17,410,730, of which \$9,756,529 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits, and \$7,654,201 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 \$14,017,346 as of June 30, 2008. The difference of \$3,393,384 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 2.05% (6.80% less 4.75% Employer paid on behalf of Employee) of payroll for Old Plan members and 6.80% for New Plan members are required.



- Prospective employer and employee normal contributions have a present value of \$1,729,873. When this amount is subtracted from \$3,393,384, which is the present value of the total future contributions to be made in the future, there remains \$1,663,511 as the unfunded actuarial accrued liability.
- The accrued liability contribution rate is 3.61% of active member's compensation, which will amortize the unfunded actuarial liability over a 26-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, 2008 valuation and are recommended for use.

ANNUAL REQUIRED EMPLOYER CONTRIBUTION RATES (ARC) FOR FISCAL YEAR ENDING JUNE 30, 2011

	Old Plan	New Plan
Normal Rate		
Initial Normal Rate	6.80%	6.80%
Employer Paid on behalf of Employee	<u>(4.75)</u>	<u>(0.00)</u>
Employer Normal Rate	2.05%	6.80%
Accrued Liability Rate	3.61%	3.61%
Total	5.66%	10.41%

- Effective January 1, 2009 all new state employees will become members of the Georgia State Employee's Pension and Savings Plan (GSEPS). The employer normal rate for GSEPS members has been estimated at 2.94% of payroll. The unfunded accrued liability rate is 3.61% for a total employer rate of 6.55% for fiscal year ending June 30, 2011.



- Schedule H summarizes the contribution rates required for groups of members with special benefits.

SECTION VI – ACCOUNTING INFORMATION

- 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, 2008**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	35,579
Terminated employees entitled to benefits but not yet receiving benefits	68,815
Active plan members	<u>75,293</u>
Total	179,687



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)
6/30/2003	\$ 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
6/30/2008	14,017,346	15,680,857	1,663,511	89.4	2,809,199	59.2

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).

Year Ending	Annual Required Contribution	Percentage Contributed
6/30/2003	\$ 246,172	100%
6/30/2004	245,388	100
6/30/2005	243,074	100
6/30/2006	258,482	100
6/30/2007	270,141	100
6/30/2008	286,256	100

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, 2008. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2008
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	26 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)

<u>Year Ending</u>	<u>Annual Pension Cost (APC)</u>	<u>Percentage of APC Contributed</u>	<u>Net Pension Obligation</u>
June 30, 2006	\$ 258,482	100%	\$ 0
June 30, 2007	270,141	100	0
June 30, 2008	286,256	100	0



SECTION VII – EXPERIENCE

1. 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 \$622,021,000 in the unfunded accrued liability from \$1,041,490,000 to \$1,663,511,000 during the fiscal year ending June 30, 2008.

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	\$ 78.1
Accrued liability contribution	(86.3)
Experience:	
Valuation asset growth	129.3
Pensioners' mortality	51.3
Turnover and retirements	103.0
New entrants	22.9
Salary increases	(22.7)
Method changes	0.0
Amendments (COLAs)	188.8
Assumption changes	0.0
Miscellaneous changes (includes lawsuit)	<u>157.6</u>
Total	\$ 622.0



SCHEDULE A

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
AS OF JUNE 30, 2008
(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	\$ 9,040,826
-	Death and survivor benefits	591,303
-	Deferred vested benefits	<u>124,400</u>
	Total	\$ 9,756,529
(2)	Present value of prospective benefits payable on account of present active members	<u>7,654,201</u>
(3)	TOTAL ACTUARIAL LIABILITIES	<u>\$ 17,410,730</u>
PRESENT AND PROSPECTIVE ASSETS		
(4)	Actuarial value of assets	\$ 14,017,346
(5)	Present value of total future contributions = (3)-(4)	\$ 3,393,384
(6)	Present value of future member contributions and employer normal contributions	1,729,873
(7)	Prospective unfunded accrued liability contributions = (5)-(6)	<u>1,663,511</u>
(8)	TOTAL PRESENT AND PROSPECTIVE ASSETS	<u>\$ 17,410,730</u>



SCHEDULE B

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

(1)	Actuarial Value Beginning of Year	\$	13,843,689
(2)	Market Value End of Year	\$	13,080,653
(3)	Market Value Beginning of Year	\$	14,272,114
(4)	Cash Flow		
	(a) Contributions	\$	334,580
	(b) Benefit Payments and Expenses		(1,046,570)
	(c) Investment Expenses		<u>(1,685)</u>
	(d) Net: (4)(a) + (4)(b) + (4)(c)	\$	(713,675)
(5)	Investment Income		
	(a) Market Total: (2) – (3) – (4)(d)	\$	(477,786)
	(b) Assumed Rate		7.50%
	(c) Amount for Immediate Recognition: [(3) x (5)(b)] + [(4)(a) + (4)(b)} x (5)(b) x 0.5] – (4)(c)	\$	1,045,394
	(d) Amount for Phased-In Recognition: (5)(a) – (5)(c)		(1,523,180)
(6)	Phased-In Recognition of Investment Income		
	(a) Current Year: (5)(d) / 7	\$	(217,597)
	(b) First Prior Year		130,747
	(c) Second Prior Year		(71,212)
	(d) Third Prior Year		0
	(e) Fourth Prior Year		0
	(f) Fifth Prior Year		0
	(g) Sixth Prior Year		<u>0</u>
	(h) Total Recognized Investment Gain	\$	(158,062)
(7)	Actuarial Value End of Year: (1) + (4)(d) + (5)(c) + (6)(h)	\$	14,017,346
(8)	Difference Between Market & Actuarial Values: (2) – (7)	\$	(936,693)
(9)	Rate of Return on Actuarial Value		6.57%



SCHEDULE C

**SUMMARY OF RECEIPTS AND DISBURSEMENTS
(Market Value)**

	YEAR ENDING	
	June 30, 2008 (\$1,000's)	June 30, 2007 (\$1,000's)
<u>Receipts for the Year</u>		
Contributions:		
Members	\$ 48,324	\$ 49,250
Employer	<u>286,256</u>	<u>270,141</u>
Subtotal	\$ 334,580	\$ 319,391
Investment Earnings	<u>(479,471)</u>	<u>1,869,113</u>
TOTAL	\$ (144,891)	\$ 2,188,504
<u>Disbursements for the Year</u>		
Benefit Payments	\$ 1,019,950	\$ 928,654
Refunds to Members	7,815	6,696
Administration Expense	<u>18,805</u>	<u>14,901</u>
TOTAL	\$ 1,046,570	\$ 950,251
<u>Excess of Receipts over Disbursements</u>	\$ (1,191,461)	\$ 1,238,253
<u>Reconciliation of Asset Balances</u>		
Asset Balance as of the Beginning of Year	\$ 14,272,114*	\$ 13,033,861
Excess of Receipts over Disbursements	<u>(1,191,461)</u>	<u>1,238,253</u>
Asset Balance as of the End of Year	\$ <u>13,080,653**</u>	\$ <u>14,272,114*</u>
Rate of Return	(3.45)%	14.70%

* Excludes assets in the Survivor Benefit Fund totaling \$90,333,000

** Excludes assets in the Survivor Benefit Fund totaling \$87,125,000



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:

Age	Annual Rate	Age	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 Rates of			
	<u>Death</u>		<u>Disability</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
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	--	--



<u>Annual Rates of Withdrawal</u>			
<u>Years of Service</u>			
<u>Age</u>	<u>0-4</u>	<u>5-9</u>	<u>10 & Over</u>
<u>Males</u>			
20	30.00%		
25	24.00	11.00%	
30	22.00	9.00	6.00%
35	22.00	8.00	5.00
40	20.00	8.00	4.00
45	17.00	7.00	3.00
50	14.00	6.00	3.50
55	13.00	5.00	4.00
60	13.00	5.00	4.50
65	16.00	10.00	4.50
<u>Females</u>			
20	28.00%		
25	24.00	11.00%	
30	22.00	11.00	8.00%
35	20.00	9.00	6.00
40	17.00	8.00	4.00
45	16.00	7.00	3.50
50	16.00	6.00	3.50
55	15.00	6.00	5.00
60	15.00	6.00	5.00
65	20.00	11.00	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.

Age	Old Plan ¹				New Plan ²	
	Age 65 or more than 34 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

¹ 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.

² 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.

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:

Age	Males	Females	Age	Males	Females
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 1/7 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 7.50%), 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.
2. 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 benefits 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.

Normal Retirement Benefit

Eligibility

A member is eligible for normal retirement upon the attainment of age 65 and 10 years of creditable service (prior service plus membership service plus purchased service plus forfeited leave – minimum 960 hours) or 30 years of creditable service regardless of age.

Benefit

Old Plan

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

(A) = 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)

(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 benefits.

With both plans, a one-time 3.0% increase is made at time of retirement.



Early Retirement Benefit

Eligibility 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.

Benefit The annual early retirement benefit is determined in the same manner as the normal retirement benefit based on creditable service and average final compensation as of the early retirement date. If the member is less than age 60, the retirement benefit 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 benefits.

Disability Retirement Benefit

Eligibility 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.

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

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

Service at Disability

Benefit

- | | |
|---|--|
| (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 Benefit

Eligibility	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.
Benefit	Computed as for disability retirement.

Deferred Vested Retirement Benefit

Eligibility	10 years of creditable service. Member contributions not withdrawn.
Benefit	Accrued benefit deferred to age 60.

Death Benefit

<u>Eligibility</u>	<u>Benefit</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 Benefit

Eligibility	Termination with less than 10 years creditable service.
Benefit	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.

Payment Options

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 benefit for life with the same benefit continuing for life of beneficiary upon member's death.
Option 3	Joint and 50% to survivor. Member receives a reduced benefit for life with one-half members' benefit continuing to beneficiary for life upon member's death.
Other Options	Other options are available with certain restrictions.

Post-Retirement Adjustments

The Board may from time to time grant a Cost of Living Adjustment.



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 1.25% 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 1.25% 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, 2008**

Age	Years of Service										Total	
	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		
Under 25	1,798	1,784	38									3,620
Avg. Pay	\$23,892	\$25,753	\$29,295									\$24,866
25 to 29	1,928	4,378	1,068	15								7,389
Avg. Pay	\$26,245	\$30,402	\$31,537	\$36,736								\$29,494
30 to 34	1,311	3,455	2,723	686	10							8,185
Avg. Pay	\$27,467	\$32,396	\$35,382	\$37,546	\$39,215							\$33,040
35 to 39	1,198	3,085	2,503	1,919	650	35						9,390
Avg. Pay	\$28,719	\$33,677	\$37,178	\$39,885	\$41,272	\$46,520						\$35,820
40 to 44	1,055	2,579	2,072	1,714	1,778	924	36					10,158
Avg. Pay	\$29,544	\$33,812	\$36,518	\$39,011	\$42,730	\$44,781	\$46,714					\$37,402
45 to 49	875	2,251	2,074	1,566	1,732	1,910	870	75				11,353
Avg. Pay	\$28,995	\$33,534	\$36,474	\$37,902	\$41,408	\$46,443	\$49,360	\$47,703				\$39,003
50 to 54	651	1,943	1,891	1,485	1,486	1,613	1,492	675				11,236
Avg. Pay	\$31,378	\$35,338	\$36,945	\$38,738	\$41,507	\$45,383	\$52,893	\$52,840				\$41,469
55 to 59	479	1,516	1,466	1,196	1,317	1,258	993	675	21			8,921
Avg. Pay	\$34,215	\$39,924	\$38,444	\$40,151	\$41,405	\$44,276	\$52,604	\$56,587	\$56,609			\$42,949
60 to 64	139	722	819	607	618	476	330	201	18	1		3,931
Avg. Pay	\$37,487	\$39,921	\$40,399	\$41,455	\$43,864	\$46,748	\$51,397	\$57,671	\$85,663	\$63,356		\$43,704
65 to 69	31	134	225	154	119	71	53	35	6	5		833
Avg. Pay	\$41,834	\$41,643	\$44,529	\$43,370	\$46,677	\$45,144	\$53,269	\$61,543	\$68,379	\$101,339		\$45,893
70 & up	7	38	52	50	62	26	19	12	3	8		277
Avg. Pay	\$52,835	\$36,903	\$44,578	\$50,085	\$41,407	\$38,569	\$54,772	\$43,248	\$82,309	\$80,886		\$45,553
Total	9,472	21,885	14,931	9,392	7,772	6,313	3,793	1,673	48	14		75,293
Avg. Pay	\$27,893	\$33,015	\$36,645	\$39,284	\$41,991	\$45,474	\$51,833	\$54,815	\$70,582	\$86,939		\$37,310

Average Age: 43.8
Average Service: 9.6



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	59	\$ 1,302,609	\$ 22,078
50-54	694	24,885,719	35,858
55-59	2,952	132,669,431	44,942
60-64	5,842	212,932,716	36,449
65-69	5,657	170,205,852	30,088
70-74	4,223	115,619,658	27,379
75-79	3,041	71,823,828	23,618
80-84	2,001	43,086,157	21,532
85-89	1,151	20,001,718	17,378
90-94	370	6,323,831	17,091
95+	86	1,571,885	18,278
Total	26,076	\$ 800,423,404	\$ 30,696

**NUMBER OF BENEFICIARIES
AND THEIR BENEFITS BY AGE**

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	665	\$ 5,598,507	\$ 8,419
50-54	238	2,800,576	11,767
55-59	376	6,529,779	17,366
60-64	451	7,959,293	17,648
65-69	510	8,631,605	16,925
70-74	603	9,440,174	15,655
75-79	624	9,191,579	14,730
80-84	621	8,706,955	14,021
85-89	483	5,355,298	11,088
90-94	200	2,000,188	10,001
95+	58	394,614	6,804
Total	4,829	\$ 66,608,568	\$ 13,793



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	430	\$ 10,937,488	\$ 25,436
50-54	673	19,856,460	29,504
55-59	1,183	37,214,753	31,458
60-64	1,204	34,848,034	28,944
65-69	649	16,593,921	25,568
70-74	287	6,131,178	21,363
75-79	124	2,533,620	20,432
80-84	69	1,421,467	20,601
85-89	46	890,666	19,362
90-94	9	163,290	18,143
95+	0	0	0
Total	4,674	\$ 130,590,877	\$ 27,940



SCHEDULE H

CONTRIBUTION RATES FOR MEMBERS WITH SPECIAL BENEFITS

Groups that have Age 55 Retirement and Line-of-Duty Disability Benefits:

- Public Safety #466
- Revenue Agents #474
- DNR Conservation Rangers #462
- GBI Officers/Agents #471

PLAN	Additional Rate	Total Rate
Old Plan	0.03%	5.69%
New Plan	1.48%	11.89%
GSEPS	0.65%	7.20%

Groups that have Line-of-Duty Disability Benefits:

- Deputy DNR Conservation Rangers #462
- Special Investigators Department of Revenue #474
- Probation Officers #467
- Parole Officers – Pardons and Paroles #465

PLAN	Additional Rate	Total Rate
Old Plan	0.03%	5.69%
New Plan	0.08%	10.49%
GSEPS	0.12%	6.67%

Appellate Court Judges: Total rate equal to 36.24% of payroll