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April 11, 2011

Ms. Pamela Pharris
Executive Director
Employees' Retirement System of Georgia
Two Northside 75, Suite 300
Atlanta, GA 30318-7701

Dear Ms. Pharris:

Enclosed is the "Employees' Retirement System of Georgia Report of the Actuary on the Valuation Prepared as of June 30, 2010".

The valuation indicates that employer contributions for the fiscal year ending June 30, 2013 at the rate 10.15% of compensation for Old Plan Members, 14.90% of compensation for New Plan Members and 11.54% for GSEPS 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 2010 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, 2010**





Cavanaugh Macdonald

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April 11, 2011

Board of Trustees
Employees' Retirement System of Georgia
Two Northside 75, Suite 300
Atlanta, GA 30318-7701

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, 2010. The report indicates that annual employer contributions at the rate of 10.15% of compensation for Old Plan Members, 14.90% of compensation for New Plan Members, and 11.54% for GSEPS Members for the fiscal year ending June 30, 2013 are sufficient to support the benefits of the System.

Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2009.

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 2010 session of the General Assembly.

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 30-year period.

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April 11, 2011
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. However, since the previous valuation it has come to our attention that an employer group within ERS did not contribute the full ARC every year. It is our understanding that ERS is working with this group to facilitate repayment of this debt. 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 blue ink, appearing to read 'Edward Macdonald', written in a cursive style.

Edward A. Macdonald, ASA, FCA, MAAA
President

A handwritten signature in blue ink, appearing to read 'Cathy Turcot', written in a cursive style.

Cathy Turcot
Principal and Managing Director

EAM:bdm



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**EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
REPORT OF THE ACTUARY
ON THE VALUATION
PREPARED AS OF JUNE 30, 2010**

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, 2010	June 30, 2009
Number of active members	68,566	71,272
Annual earnable compensation	\$ 2,571,042	\$ 2,674,155
Number of retired members and beneficiaries	38,582	36,968
Annual allowances	\$ 1,110,728	\$ 1,062,758
Number of deferred vested members	4,621	4,104
Annual allowances	\$ 48,952	\$ 42,391
Assets:		
Market Value	\$ 10,872,348	\$ 10,550,357
Actuarial Value	13,046,193	13,613,606
Unfunded actuarial accrued liability	\$ 3,249,159	\$ 2,264,416
Amortization period (years)	30	30
Funding Ratio	80.1%	85.7%
For Fiscal Year Ending	June 30, 2013	June 30, 2012
Annual Required Employer Contribution Rates (ARC):		
Old Plan (prior to 7/1/1982)		
Initial Normal Rate*	6.32%	6.96%
Employer Paid on Behalf of Employee	<u>(4.75)</u>	<u>(4.75)</u>
Normal Rate*	1.57%	2.21%
Accrued Liability Rate	<u>8.58%</u>	<u>4.67%</u>
Total	10.15%	6.88%
New Plan (7/1/1982 through 12/31/2008)		
Normal Rate*	6.32%	6.96%
Accrued Liability Rate	<u>8.58%</u>	<u>4.67%</u>
Total	14.90%	11.63%
GSEPS (on and after 1/1/2009)		
Normal Rate*	2.96%	2.75%
Accrued Liability Rate	<u>8.58%</u>	<u>4.67%</u>
Total	11.54%	7.42%

* Beginning with July 1, 2010 valuation, estimated budgeted administrative expenses are included in the normal rate.



2. The major benefit and contribution provisions of the System are summarized in Schedule F. The valuation takes into account the effect of amendments of the System enacted through the 2009 session of the General Assembly.
3. Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five year period ending June 30, 2009. These revised assumptions were adopted by the Board on December 16, 2010 and are summarized below. Schedule D of this report outlines the full set of actuarial assumptions used to prepare the current valuation.

Summary of Assumptions and Methods	
Economic Assumptions	
Salary	Composed of Inflation component, Real Rate of Salary Increase component and Merit/Promotion Scale
Inflation	Changed annual rate of inflation assumption from 3.75% to 3.00%.
Real Rate of Wage Inflation	Changed annual real rate of wage inflation assumption to 0.75%.
Merit/Promotion Scale	Changed from current single rate of salary increase to a table that varies by year.
Investment Rate of Return	Composed of Inflation component (3.00% from above) and Real Rate of Return component.
Real Rate of Investment Return	Changed to a 4.50% assumption resulting in no change to the 7.50% net investment return assumption.
Payroll Growth	Changed assumption.
Demographic Assumptions	
Withdrawal	Changed assumed rates.
Disability	Changed assumed rates.
Retirement	Changed assumed rates.
Mortality	Changed assumed rates.
Other Actuarial Methods and Assumptions	
Administrative Expenses	Changed assumption.
Amortization Method	Changed method.
Asset Smoothing	No change to current method.
Option Factors	Changed option factors to reflect change in mortality rate table.
Unused Sick Leave	Changed assumption.
All Others	No change to other actuarial methods.



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, 2010 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, 2010 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, 2010

GROUP	NUMBER	ANNUAL COMPENSATION (\$1,000's)	AVERAGE ANNUAL COMPENSATION
Old Plan	2,668	\$ 139,980	\$ 52,466
New Plan	59,059	2,219,205	37,576
GSEPS	<u>6,839</u>	<u>211,857</u>	30,978
Total	68,566	\$ 2,571,042	\$ 37,497

2. For the June 30, 2010 valuation, data was provided by the Retirement System for inactive members who are eligible for deferred vested benefits. The valuation included 4,621 deferred vested members with annual allowances totaling \$48,951,800.



3. The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2010, 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, 2010**

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES (\$1,000's)
Service Retirements	28,679	\$ 898,185
Disability Retirements	4,872	138,423
Beneficiaries of Deceased Active and Retired Members	<u>5,031</u>	<u>74,120</u>
Total	38,582	\$ 1,110,728

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, 2010 the value of assets credited to the Annuity Savings Fund amounted to \$619,389,000.



(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, 2010 the market value of assets credited to the Pension Accumulation Fund amounted to \$10,252,959,000.

2. As of June 30, 2010 the total market value of assets amounted to \$10,872,348,000 as reported by the Auditor of the System. The actuarial value of assets used for the current valuation was \$13,046,193,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2010.
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, 2010 (all amounts are in thousands).
2. The valuation balance sheet shows that the System has total prospective liabilities of \$17,444,898, of which \$10,652,040 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits, and \$6,792,858 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 \$13,046,193 as of June 30, 2010. The difference of \$4,398,705 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 1.57% (6.32% less 4.75% Employer paid on behalf of Employee) of payroll for Old Plan members, 6.32% for New Plan members, and 2.96% for GSEPS members are required.



4. Beginning with the July 1, 2010 valuation, estimated budgeted administrative expenses are included in the normal rates. The expenses for the fiscal year ending June 30, 2013 are estimated to be 0.45% of payroll.
5. Prospective employer and employee normal contributions (excluding administrative expenses) have a present value of \$1,149,546. When this amount is subtracted from \$4,398,705, which is the present value of the total future contributions to be made in the future, there remains \$3,249,159 as the unfunded actuarial accrued liability. Of this amount, \$6,159 is attributable to the contribution shortfall for the tax commissioners, leaving \$3,243,000 to be paid by all employers.
6. The accrued liability contribution rate is 8.58% of active member's compensation, which will amortize the portion of the unfunded actuarial liability attributable to the tax commissioners' contribution shortfall over a 30-year period, on the assumption that the total payroll of active members will increase by 2.00% per year.

SECTION V – CONTRIBUTIONS PAYABLE BY EMPLOYERS

1. The following table summarizes the employer contribution rates, which were determined by the June 30, 2010 valuation and are recommended for use.

**ANNUAL REQUIRED EMPLOYER CONTRIBUTION RATES (ARC)
FOR FISCAL YEAR ENDING JUNE 30, 2013**

	Old Plan	New Plan	GSEPS
Normal Rate			
Initial Normal Rate	6.32%	6.32%	2.96%
Employer Paid on behalf of Employee	<u>(4.75)</u>	<u>(0.00)</u>	<u>(0.00)</u>
Employer Normal Rate	1.57%	6.32%	2.96%
Accrued Liability Rate	8.58%	8.58%	8.58%
Total	10.15%	14.90%	11.54%



2. Since the previous valuation, it has come to our attention that an employer group within ERS representing tax commissioners did not contribute the full ARC every year. The following is a schedule by year of the contribution shortfalls and the accumulated repayment amounts.

Fiscal Year Ending	Annual Required Contribution	Actual Contribution	Annual Deficit	Accumulated Repayment Balance
6/30/1997				\$990,312
6/30/1998	\$3,532,157	\$2,219,575	\$1,312,582	2,302,894
6/30/1999	3,986,055	2,301,608	1,684,447	3,987,341
6/30/2000	4,469,144	3,194,110	1,275,034	5,262,375
6/30/2009	4,971,153	4,074,094	897,059	6,159,434

In addition to the annual required contribution, this employer should remit an additional \$615,943 each year over a ten year period in order to repay this shortfall.

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



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, 2010**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	38,582
Terminated employees entitled to benefits but not yet receiving benefits	68,290
Active plan members	<u>68,566</u>
Total	175,438

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)
6/30/2005	\$ 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
6/30/2009	13,613,606	15,878,022	2,264,416	85.7	2,674,155	84.7
6/30/2010	13,046,193	16,295,352	3,249,159	80.1	2,571,042	126.4



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

<u>Year Ending</u>	<u>Annual Required Contribution</u>	<u>Percentage Contributed</u>
6/30/2005	\$ 243,074	100.0%
6/30/2006	258,482	100.0
6/30/2007	270,141	100.0
6/30/2008	286,256	100.0
6/30/2009*	282,103	99.9
6/30/2010	263,064	100.0

*Since the previous valuation it has come to our attention that an employer group within ERS did not contribute the full ARC every year. The amounts shown have been revised from the previous valuation to reflect the difference between the ARC and the actual contributions made.

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2010. Since ERS is a cost sharing multiple employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2010*
(Dollar amounts in thousands)

(a)	Employer annual required contribution	\$	263,385
(b)	Interest on net pension obligation		355
(c)	Adjustment to annual required contribution		<u>(414)</u>
(d)	Annual pension cost (a) + (b) – (c)	\$	263,326
(e)	Employer contributions made for fiscal year ending 06/30/10		<u>263,064</u>
(f)	Increase (decrease) in net pension obligation (d) – (e)	\$	262
(g)	Net pension obligation beginning of fiscal year		<u>4,732</u>
(h)	Net pension obligation end of fiscal year (f) + (g)	\$	4,994

*Since the previous valuation it has come to our attention that an employer group within ERS did not contribute the full ARC every year. The annual pension cost and net pension obligation shown have been revised from the previous valuation to reflect the difference between the ARC and the actual contributions made.



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, 2008	\$ 285,742	100.2%	\$ 4,020
June 30, 2009	281,918	100.1	4,732
June 30, 2010	263,326	100.0	4,994

*Since the previous valuation it has come to our attention that an employer group within ERS did not contribute the full ARC every year. The amounts shown have been revised from the previous valuation to reflect the difference between the ARC and the actual contributions made.

5. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2010
Actuarial cost method	Entry age
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	7-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.50%
Projected salary increases*	0.00% for FY 2011 2.725% - 4.625% for FY 2012-2013 5.45% - 9.25% for FY 2014+
Cost-of-living adjustments	None
*Includes inflation at	3.00%



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 five-year period ending June 30, 2009, and based on the results of the investigation, various new assumptions and methods were adopted by the Board on December 16, 2010. The next experience investigation will be prepared for the period July 1, 2009 through June 30, 2014.
2. The following table shows the estimated gain or loss from various factors that resulted in an increase of \$984,743,000 in the unfunded accrued liability from \$2,264,416,000 to \$3,249,159,000 during the fiscal year ending June 30, 2010.

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	\$ 169.8
Accrued liability contribution	(89.4)
Experience:	
Valuation asset growth	710.1
Pensioners' mortality	49.2
Turnover and retirements	118.4
New entrants	15.0
Salary increases	(259.2)
Method changes	0.0
Amendments (COLAs)	0.0
Assumption changes	250.7
Lawsuit	0.0
Data changes	(2.4)
Miscellaneous changes	<u>22.5</u>
Total	\$ 984.7



SCHEDULE A

**VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF
THE EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
AS OF JUNE 30, 2010
(in thousands of dollars)**

<u>ACTUARIAL LIABILITIES</u>		
(1)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits	
	- Service and disability benefits	\$ 9,702,857
	- Death and survivor benefits	626,348
	- Deferred vested benefits	<u>322,835</u>
	Total	\$ 10,652,040
(2)	Present value of prospective benefits payable on account of present active members	<u>6,792,858</u>
(3)	TOTAL ACTUARIAL LIABILITIES	<u>\$ 17,444,898</u>
<u>PRESENT AND PROSPECTIVE ASSETS</u>		
(4)	Actuarial value of assets	\$ 13,046,193
(5)	Present value of total future contributions = (3)-(4)	\$ 4,398,705
(6)	Present value of future member contributions and employer normal contributions	1,149,546
(7)	Prospective unfunded accrued liability contributions = (5)-(6)	<u>3,249,159</u>
(8)	TOTAL PRESENT AND PROSPECTIVE ASSETS	<u>\$ 17,444,898</u>



SCHEDULE B

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

(1)	Actuarial Value Beginning of Year	\$	13,613,606
(2)	Market Value End of Year	\$	10,872,348
(3)	Market Value Beginning of Year	\$	10,550,357
(4)	Cash Flow		
	(a) Contributions	\$	305,116
	(b) Benefit Payments and Expenses		(1,151,657)
	(c) Investment Expenses		<u>(1,343)</u>
	(d) Net: (4)(a) + (4)(b) + (4)(c)	\$	(847,884)
(5)	Investment Income		
	(a) Market Total: (2) – (3) – (4)(d)	\$	1,169,875
	(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)	\$	760,874
	(d) Amount for Phased-In Recognition: (5)(a) – (5)(c)		409,001
(6)	Phased-In Recognition of Investment Income		
	(a) Current Year: (5)(d) / 7	\$	58,429
	(b) First Prior Year		(380,770)
	(c) Second Prior Year		(217,597)
	(d) Third Prior Year		130,747
	(e) Fourth Prior Year		(71,212)
	(f) Fifth Prior Year		0
	(g) Sixth Prior Year		<u>0</u>
	(h) Total Recognized Investment Gain	\$	(480,403)
(7)	Actuarial Value End of Year: (1) + (4)(d) + (5)(c) + (6)(h)	\$	13,046,193
(8)	Difference Between Market & Actuarial Values: (2) – (7)	\$	(2,173,845)
(9)	Rate of Return on Actuarial Value		(2.12)%



SCHEDULE C

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

	YEAR ENDING	
	<u>June 30, 2010</u>	<u>June 30, 2009</u>
	<u>(\$1,000's)</u>	<u>(\$1,000's)</u>
<u>Receipts for the Year</u>		
Contributions:		
Members	\$ 42,052	\$ 43,978
Employer	<u>263,064</u>	<u>281,206</u>
Subtotal	\$ 305,116	\$ 325,184
Investment Earnings	<u>1,168,532</u>	<u>(1,714,916)</u>
TOTAL	\$ 1,473,648	\$ (1,389,732)
<u>Disbursements for the Year</u>		
Benefit Payments	\$ 1,130,669	\$ 1,117,158
Refunds to Members	6,483	6,597
Administration Expense	<u>14,505</u>	<u>16,809</u>
TOTAL	\$ 1,151,657	\$ 1,140,564
<u>Excess of Receipts over Disbursements</u>	\$ 321,991	\$ (2,530,296)
<u>Reconciliation of Asset Balances</u>		
Asset Balance as of the Beginning of Year	\$ 10,550,357**	\$ 13,080,653*
Excess of Receipts over Disbursements	<u>321,991</u>	<u>(2,530,296)</u>
Asset Balance as of the End of Year	<u>\$ 10,872,348***</u>	<u>\$ 10,550,357**</u>
Rate of Return	11.54%	(13.53)%

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

** Excludes assets in the Survivor Benefit Fund totaling \$75,738,000

*** Excludes assets in the Survivor Benefit Fund totaling \$83,948,000



SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

Adopted by the Board December 16, 2010.

VALUATION INTEREST RATE: 7.50 per annum, compounded annually, net of expenses, composed of a 3.00% inflation assumption and a 4.50% real rate of investment return assumption.

SALARY INCREASES:

Age	FY 2011	FY 2012-2013	FY 2014+
20	0%	4.625%	9.25%
25	0	4.125	8.25
30	0	3.125	6.25
35	0	2.875	5.75
40	0	2.725	5.45
45	0	2.725	5.45
50	0	2.725	5.45
55	0	2.725	5.45
60	0	2.725	5.45
65	0	2.725	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	.035%	.019%	.05%	.02%
25	.038	.021	.05	.02
30	.044	.026	.05	.02
35	.077	.048	.05	.02
40	.108	.071	.25	.10
45	.151	.112	.50	.25
50	.214	.168	.75	.50
55	.362	.272	1.10	.82
60	.675	.506	--	--
65	1.274	.971	--	--
69	1.980	1.486	--	--



<u>Annual Rates of Withdrawal</u>			
<u>Age</u>	<u>Years of Service</u>		
	<u>0-4</u>	<u>5-9</u>	<u>10 & Over</u>
<u>Males</u>			
20	31.00%		
25	26.00	17.00%	
30	22.50	12.00	7.50%
35	21.00	10.00	7.00
40	19.00	9.50	5.00
45	18.00	9.00	3.75
50	15.50	7.00	3.75
55	13.00	6.50	4.00
60	15.00	7.00	
65	15.00	9.50	
<u>Females</u>			
20	31.00%		
25	24.00	19.00%	
30	21.00	13.00	7.75%
35	19.50	10.50	6.75
40	17.50	9.00	4.50
45	15.50	8.00	3.50
50	15.00	7.00	3.50
55	12.50	6.50	4.00
60	12.50	6.50	
65	17.00	10.00	



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 Plan								
Age	Early Retirement		Age 60 or 30 years		34 years		More than 34 years	
	Male	Female	Male	Female	Male	Female	Male	Female
55	3.0%	4.0%	11.5%	9.0%	100.0%	100.0%	90.0%	90.0%
56	3.5	6.0	12.0	11.0	100.0	100.0	70.0	70.0
57	4.0	6.0	12.0	13.0	100.0	100.0	70.0	70.0
58	5.0	6.0	13.0	15.0	95.0	95.0	70.0	70.0
59	6.0	6.0	16.0	16.0	95.0	95.0	70.0	70.0
60			17.0	20.0	95.0	95.0	50.0	60.0
62			37.0	40.0	90.0	90.0	50.0	60.0
64			20.0	30.0	90.0	90.0	15.0	60.0
66			30.0	35.0	30.0	35.0	30.0	35.0
68			20.0	25.0	20.0	25.0	20.0	25.0
70			45.0	35.0	45.0	35.0	45.0	35.0
75			100.0	100.0	100.0	100.0	100.0	100.0

New Plan and GSEPS				
Age	Early Retirement		Normal Retirement*	
	Male	Female	Male	Female
55	10.0%	8.0%	50.0%	40.0%
56	10.0	8.0	50.0	40.0
57	10.0	9.0	50.0	40.0
58	10.0	10.0	30.0	40.0
59	10.0	15.0	30.0	40.0
60			17.0	20.0
62			38.0	36.0
64			25.0	28.0
66			35.0	35.0
68			20.0	25.0
70			20.0	25.0
75			100.0	100.0

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



DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table is used for the period after service retirement and for dependent beneficiaries. The RP-2000 Disabled Mortality Table set back eleven years for males 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	.108%	.071%	65	1.274%	.971%
45	.151	.112	70	2.221	1.674
50	.214	.168	75	3.783	2.811
55	.362	.272	80	6.437	4.588
60	.675	.506	85	11.076	7.745

ADMINISTRATIVE EXPENSES: Budgeted administrative expenses are added to the normal contribution rate.

AMORTIZATION METHOD AND PAYROLL GROWTH ASSUMPTION: Phase in from level percentage of payroll to level dollar amortization. Payroll growth assumption for June 30, 2010 valuation is 2%.

ASSET METHOD: 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.

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

SICK LEAVE: Assumed load on service at retirement for the practice of allowing members to convert forfeited sick leave is as follows:

- Old Plan members who retire with 34 years of service – 4.0%
- Old Plan members who retire on normal retirement – 2.5%
- All New Plan retirements and Old Plan early retirement – 2.0%

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



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, "New Plan" means the plan applicable to members employed on or after July 1, 1982 and before January 1, 2009, and "GSEPS" means the plan applicable to members employed on or after January 1, 2009. 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) = $.0115 + .0003 \times$ (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.

GSEPS

1.00% of average final compensation multiplied by years of creditable service.

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

With all 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	<p>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:</p> <ul style="list-style-type: none"> (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. <p>Uniform division and judicial members may be eligible for additional minimum benefits.</p>

Disability Retirement Benefit

Old Plan and New Plan

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	<p>The annual disability retirement benefit is an immediate benefit with the amount depending upon service at the time of disability.</p> <p>Uniform division members may be eligible for an additional benefit if disabled in line of duty.</p>

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



GSEPS

Eligibility A member is eligible for disability retirement after having at least 15 years 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 equal to 1.00% of average final compensation multiplied by years of credited service at disability.

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

Old Plan and New Plan

Eligibility

Benefit

(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.

GSEPS

Eligibility

15 years of creditable service.

Benefit

Benefit equal to disability retirement immediately prior to death under Option 2.

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 and GSEPS

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, 2010**

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	974	1,313	36									2,323
Avg. Pay	\$24,246	\$24,620	\$28,421									\$24,522
25 to 29	1,030	4,008	1,022	26								6,086
Avg. Pay	\$27,553	\$29,397	\$30,990	\$33,101								\$29,368
30 to 34	706	3,379	2,538	729	9							7,361
Avg. Pay	\$28,955	\$31,604	\$34,872	\$35,683	\$35,256							\$32,885
35 to 39	595	2,878	2,442	1,978	608	35						8,536
Avg. Pay	\$30,674	\$33,008	\$36,025	\$38,750	\$40,528	\$43,993						\$35,620
40 to 44	514	2,423	1,951	1,619	1,660	914	36					9,117
Avg. Pay	\$31,155	\$33,889	\$37,145	\$39,242	\$42,631	\$43,726	\$47,833					\$38,015
45 to 49	462	2,180	1,980	1,523	1,428	1,994	819	78				10,464
Avg. Pay	\$33,064	\$33,617	\$36,476	\$38,041	\$40,442	\$44,261	\$48,617	\$48,018				\$39,019
50 to 54	351	1,831	1,760	1,469	1,349	1,691	1,426	659				10,536
Avg. Pay	\$35,276	\$34,424	\$37,492	\$37,969	\$40,740	\$44,124	\$50,734	\$51,442				\$41,097
55 to 59	248	1,408	1,532	1,203	1,180	1,353	979	638	20	1		8,562
Avg. Pay	\$36,635	\$37,052	\$38,864	\$39,076	\$40,188	\$42,326	\$49,567	\$53,880	\$63,395	\$61,554		\$41,664
60 to 64	108	752	1,006	621	609	627	356	225	19	3		4,326
Avg. Pay	\$41,822	\$37,333	\$41,687	\$40,311	\$43,602	\$45,066	\$49,699	\$58,683	\$72,262	\$72,955		\$43,195
65 to 69	21	148	290	182	110	100	57	33	7	4		952
Avg. Pay	\$52,431	\$41,409	\$43,358	\$44,479	\$45,938	\$46,258	\$54,343	\$51,165	\$116,363	\$93,405		\$45,748
70 & up	7	44	61	54	54	38	22	14	3	6		303
Avg. Pay	\$39,232	\$43,089	\$46,789	\$46,934	\$49,785	\$35,257	\$45,054	\$60,041	\$48,078	\$109,870		\$46,939
Total	5,016	20,364	14,618	9,404	7,007	6,752	3,695	1,647	49	14		68,566
Avg. Pay	\$29,772	\$32,343	\$36,719	\$38,647	\$41,409	\$43,819	\$49,850	\$53,281	\$73,463	\$93,804		\$37,497

Average Age: 44.7
Average Service: 10.4



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	73	\$ 1,660,356	\$ 22,745
50-54	650	22,949,102	35,306
55-59	2,836	122,781,242	43,294
60-64	6,871	249,251,016	36,276
65-69	6,319	196,248,550	31,057
70-74	4,746	137,475,823	28,967
75-79	3,334	86,742,788	26,018
80-84	2,076	46,933,162	22,607
85-89	1,232	24,347,445	19,763
90-94	439	7,997,872	18,218
95+	103	1,797,719	17,454
Total	28,679	\$ 898,185,075	\$ 31,319

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

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	719	\$ 6,293,561	\$ 8,753
50-54	234	2,916,564	12,464
55-59	369	6,149,045	16,664
60-64	473	8,916,003	18,850
65-69	558	10,540,442	18,890
70-74	620	10,351,352	16,696
75-79	638	9,654,853	15,133
80-84	658	10,045,035	15,266
85-89	481	6,275,103	13,046
90-94	218	2,405,020	11,032
95+	63	573,271	9,100
Total	5,031	\$ 74,120,249	\$ 14,733



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	377	\$ 9,359,265	\$ 24,826
50-54	614	17,985,023	29,292
55-59	1,102	33,149,004	30,081
60-64	1,366	42,672,277	31,239
65-69	770	20,763,980	26,966
70-74	377	9,040,507	23,980
75-79	147	3,079,633	20,950
80-84	66	1,258,284	19,065
85-89	40	924,790	23,120
90-94	11	140,694	12,790
95+	2	49,614	24,807
Total	4,872	\$ 138,423,071	\$ 28,412

**NUMBER OF DEFERRED VESTED
AND THEIR BENEFITS BY AGE**

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 35	40	\$ 281,421	\$ 7,036
35-39	269	2,357,502	8,764
40-44	688	6,690,818	9,725
45-49	962	9,798,165	10,185
50-54	1,137	12,344,131	10,857
55-59	1,149	13,259,016	11,540
60-64	292	3,489,956	11,952
65+	84	730,791	8,700
Total	4,621	\$ 48,951,800	\$ 10,593



SCHEDULE H

SPECIAL CONTRIBUTION RATES

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	0.01%	10.16%
New Plan	3.79%	18.69%
GSEPS	2.17%	13.71%

Groups that have Line-of-Duty Disability Benefits:

- Deputy DNR Conservation Rangers #462
- Probation Officers #467
- Parole Officers – Pardons and Paroles #465

PLAN	Additional Rate	Total Rate
Old Plan	0.01%	10.16%
New Plan	0.06%	14.96%
GSEPS	0.08%	11.62%

Group that has Age 55 Retirement:

- Special Investigators Department of Revenue #474

PLAN	Additional Rate	Total Rate
New Plan	3.73%	18.63%
GSEPS	2.09%	13.63%

Appellate Court Judges: Total rate equal to 43.65% of payroll

Group with Debt Repayment Schedule:

- Tax Commissioner's and Employees
- Additional Flat Amount Due = \$615,943 annually