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April 18, 2013

Mr. James A. Potvin
Executive Director
Employees' Retirement System of Georgia
Two Northside 75, Suite 300
Atlanta, GA 30318-7701

Dear Mr. Potvin:

Enclosed is the "Employees' Retirement System of Georgia Report of the Actuary on the Valuation Prepared as of June 30, 2012".

The valuation indicates that employer contributions for the fiscal year ending June 30, 2015 at the rate 17.21% of compensation for Old Plan Members, 21.96% of compensation for New Plan Members and 18.87% 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 2012 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

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

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, 2012

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April 18, 2013

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

Attention: Mr. James Potvin, 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, 2012. The report indicates that annual employer contributions at the rate of 17.21% of compensation for Old Plan Members, 21.96% of compensation for New Plan Members, and 18.87% for GSEPS Members for the fiscal year ending June 30, 2015 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.

Since the previous valuation, the one-time 3% increase on the first $37,500 of members' allowances made at retirement has been discontinued for all members who retire on or after July 1, 2013.

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 2012 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 on a level dollar basis within a 30-year period.

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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,

Cathy Turcot

Edward A. Macdonald, ASA, FCA, MAAA
President

Cathy Turcot
Principal and Managing Director

Edward J. Koebel

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

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EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
REPORT OF THE ACTUARY
ON THE VALUATION
PREPARED AS OF JUNE 30, 2012

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, 2012**	**June 30, 2011**
Number of active members	63,942	66,081
Annual earnable compensation	$ 2,414,884	$ 2,486,780
Number of retired members and beneficiaries	41,860	40,209
Annual allowances	$ 1,198,180	$ 1,154,412
Number of deferred vested members	5,191	5,020
Annual allowances	$ 60,064	$ 57,664
Assets:		
Market Value	$ 11,537,408	$ 12,233,380
Actuarial Value	12,260,595	12,667,557
Unfunded actuarial accrued liability	$ 4,517,327	$ 3,989,348
Amortization period (years)	30	30
Funding Ratio	73.1%	76.0%
For Fiscal Year Ending	**June 30, 2015**	**June 30, 2014**
Annual Required Employer Contribution Rates (ARC):		
Old Plan (prior to 7/1/1982)		
Initial Normal Rate*	6.14%	6.26%
Employer Paid on Behalf of Employee	(4.75)	(4.75)
Normal Rate*	1.39%	1.51%
Accrued Liability Rate	15.82%	12.20%
Total	17.21%	13.71%
New Plan (7/1/1982 through 12/31/2008)		
Normal Rate*	6.14%	6.26%
Accrued Liability Rate	15.82%	12.20%
Total	21.96%	18.46%
GSEPS (on and after 1/1/2009)		
Normal Rate*	3.05%	2.98%
Accrued Liability Rate	15.82%	12.20%
Total	18.87%	15.18%

* The normal contribution includes administrative expenses.

2. The major benefit and contribution provisions of the System are summarized in Schedule F. Since the previous valuation, the one-time 3% increase on the first $37,500 of members' allowances made at retirement has been discontinued for all members who retire on or after July 1, 2013. The valuation takes into account the effect of amendments of the System enacted through the 2012 session of the General Assembly.

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, 2012 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, 2012 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, 2012

GROUP	NUMBER	ANNUAL COMPENSATION ($1,000's)	AVERAGE ANNUAL COMPENSATION
Old Plan	1,241	$ 65,381	$ 52,684
New Plan	47,455	1,853,811	39,065
GSEPS	15,246	495,692	32,513
Total	63,942	$ 2,414,884	$ 37,767

2. For the June 30, 2012 valuation, data was provided by the Retirement System for inactive members who are eligible for deferred vested benefits. The valuation included 5,191 deferred vested members with annual allowances totaling $60,063,752. In addition, there are 71,545 inactive non-vested members included in the valuation entitled to a refund of member contributions.

3. The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2012, 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, 2012

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES ($1,000's)
Service Retirements	31,662	$ 978,615
Disability Retirements	5,062	142,257
Beneficiaries of Deceased Active and Retired Members	5,136	77,308
Total	41,860	$ 1,198,180

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, 2012 the value of assets credited to the Annuity Savings Fund amounted to $538,856,000.

(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, 2012 the market value of assets credited to the Pension Accumulation Fund amounted to $10,998,552,000.

2. As of June 30, 2012 the total market value of assets amounted to $11,537,408,000 as reported by the Auditor of the System. The actuarial value of assets used for the current valuation was $12,260,595,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2012.

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, 2012 (all amounts are in thousands).

2. The valuation balance sheet shows that the System has total prospective liabilities of $17,822,757, of which $11,420,011 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits, and $6,402,746 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 $12,260,595 as of June 30, 2012. The difference of $5,562,162 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 1.39% (6.14% less 4.75% Employer paid on behalf of Employee) of payroll for Old Plan members, 6.14% for New Plan members, and 3.05% 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, 2015 are estimated to be 0.58% of payroll.

5. Prospective employer and employee normal contributions (excluding administrative expenses) have a present value of $1,044,835. When this amount is subtracted from $5,562,162, which is the present value of the total future contributions to be made in the future, there remains $4,517,327 as the unfunded actuarial accrued liability. Of this amount, $5,749 is attributable to the contribution shortfall for the tax commissioners, leaving $4,511,578 to be paid by all employers.

6. The accrued liability contribution rate is 15.82% of active member's compensation, which will amortize the portion of the unfunded actuarial liability over a 30-year period, on a level dollar amortization basis.

SECTION V – CONTRIBUTIONS PAYABLE BY EMPLOYERS

1. The following table summarizes the employer contribution rates, which were determined by the June 30, 2012 valuation and are recommended for use.

ANNUAL REQUIRED EMPLOYER CONTRIBUTION RATES (ARC)
FOR FISCAL YEAR ENDING JUNE 30, 2015

	Old Plan	New Plan	GSEPS
Normal Rate			
Initial Normal Rate	6.14%	6.14%	3.05%
Employer Paid on behalf of Employee	(4.75)	(0.00)	(0.00)
Employer Normal Rate	1.39%	6.14%	3.05%
Accrued Liability Rate	15.82%	15.82%	15.82%
Total	17.21%	21.96%	18.87%

2. 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 / (Contribution)	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
6/30/2012	5,749,648	6,160,277	(410,629)	5,748,805

In addition to the annual required contribution, this employer is remitting an additional $615,943 each year beginning October 1, 2011 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, 2012**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	41,860
Terminated employees entitled to benefits but not yet receiving benefits	76,736
Active plan members	63,942
Total	182,538

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)
6/30/2007	$ 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
6/30/2011	12,667,557	16,656,905	3,989,348	76.0	2,486,780	160.4
6/30/2012	12,260,595	16,777,922	4,517,327	73.1	2,414,884	187.1

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

Year Ending	Annual Required Contribution	Percentage Contributed
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
6/30/2011	261,132	100.0
6/30/2012*	273,623	100.2

*An employer group within ERS did not contribute the full ARC every year. This employer is making additional contributions to repay this shortfall.

4. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2012. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2012
Actuarial cost method	Entry age
Amortization method	Level dollar, open
Remaining amortization period	30 years
Asset valuation method	7-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.50%
Projected salary increases*	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 $527,979,000 in the unfunded accrued liability from $3,989,348,000 to $4,517,327,000 during the fiscal year ending June 30, 2012.

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	$ 299.2
Accrued liability contribution	(147.7)
Experience:	
Valuation asset growth	396.3
Pensioners' mortality	15.5
Turnover and retirements	93.8
New entrants	12.1
Salary increases	(74.2)
Method changes	0.0
Amendments	(118.8)
Assumption changes	0.0
Programming Modification	26.3
Data changes	12.9
Miscellaneous changes	12.6
Total	$ 528.0

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA
AS OF JUNE 30, 2012
(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	$ 10,357,407	
	- Death and survivor benefits	645,701	
	- Deferred vested benefits	416,903	
	Total		$ 11,420,011
(2)	Present value of prospective benefits payable on account of present active members		6,402,746
(3)	TOTAL ACTUARIAL LIABILITIES		$ 17,822,757
	PRESENT AND PROSPECTIVE ASSETS		
(4)	Actuarial value of assets		$ 12,260,595
(5)	Present value of total future contributions = (3)-(4)	$ 5,562,162	
(6)	Present value of future member contributions and employer normal contributions		1,044,835
(7)	Prospective unfunded accrued liability contributions = (5)-(6)		4,517,327
(8)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 17,822,757

SCHEDULE B

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

(1)	Actuarial Value Beginning of Year		$	12,667,557
(2)	Market Value End of Year		$	11,537,408
(3)	Market Value Beginning of Year		$	12,233,380
(4)	Cash Flow			
	(a)	Contributions	$	310,595
	(b)	Benefit Payments and Expenses		(1,236,556)
	(c)	Investment Expenses		(1,526)
	(d)	Net: (4)(a) + (4)(b) + (4)(c)	$	(927,487)
(5)	Investment Income			
	(a)	Market Total: (2) – (3) – (4)(d)	$	231,515
	(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)	$	884,306
	(d)	Amount for Phased-In Recognition: (5)(a) – (5)(c)		(652,791)
(6)	Phased-In Recognition of Investment Income			
	(a)	Current Year: (5)(d) / 7	$	(93,256)
	(b)	First Prior Year		209,878
	(c)	Second Prior Year		58,429
	(d)	Third Prior Year		(380,770)
	(e)	Fourth Prior Year		(217,597)
	(f)	Fifth Prior Year		130,747
	(g)	Sixth Prior Year		(71,212)
	(h)	Total Recognized Investment Gain	$	(363,781)
(7)	Actuarial Value End of Year: (1) + (4)(d) + (5)(c) + (6)(h)		$	12,260,595
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$	(723,187)
(9)	Rate of Return on Actuarial Value			4.25%

SCHEDULE C

SUMMARY OF RECEIPTS AND DISBURSEMENTS
(Market Value)

	YEAR ENDING	
Receipts for the Year	June 30, 2012 ($1,000's)	June 30, 2011 ($1,000's)
Contributions:		
Members	$ 36,561	$ 39,480
Employer	274,034	261,132
Subtotal	$ 310,595	$ 300,612
Investment Earnings	229,989	2,251,188
TOTAL	$ 540,584	$ 2,551,800
Disbursements for the Year		
Benefit Payments	$ 1,216,738	$ 1,168,822
Refunds to Members	7,767	7,515
Administration Expense	12,051	14,431
TOTAL	$ 1,236,556	$ 1,190,768
Excess of Receipts over Disbursements	$ (695,972)	$ 1,361,032
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of Year	$ 12,233,380**	$ 10,872,348*
Excess of Receipts over Disbursements	(695,972)	1,361,032
Asset Balance as of the End of Year	$ 11,537,408***	$ 12,233,380**
Rate of Return	1.95%	21.29%

* Excludes assets in the Survivor Benefit Fund totaling $83,948,000
** Excludes assets in the Survivor Benefit Fund totaling $102,030,000
*** Excludes assets in the Survivor Benefit Fund totaling $91,099,000

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			
	Death		Disability	
	Men	Women	Men	Women
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	--	--

Age	Annual Rates of Withdrawal Years of Service 0-4	5-9	10 & Over
	Males		
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	
	Females		
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 60 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: Level dollar amortization.

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 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 60 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 x (creditable service up to 35 years).

The minimum benefit is 2.00% of average final compensation times years of creditable service.

New Plan

2.00% of average final compensation multiplied by years of creditable service.

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, for members with retirement dates prior to July 1, 2013, a one-time 3.0% increase on the first $37,500 is made at time of retirement.

Early Retirement Benefit

Eligibility	A member is eligible for early retirement upon the attainment of 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

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	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

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% to 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, 2012

Age	*Years of Service*										
	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
Under 25	632	1,176	59								1,867
Avg. Pay	$24,134	$25,067	$25,804								$24,775
25 to 29	757	3,131	1,228	26							5,142
Avg. Pay	$27,486	$29,540	$30,023	$33,126							$29,371
30 to 34	499	2,612	3,001	807	14						6,933
Avg. Pay	$28,709	$31,869	$33,678	$34,782	$38,838						$32,778
35 to 39	369	1,967	2,506	2,095	554	9					7,500
Avg. Pay	$30,229	$33,554	$35,047	$37,905	$39,930	$42,323					$35,586
40 to 44	277	1,851	2,326	1,907	1,597	599	30				8,587
Avg. Pay	$32,074	$35,313	$36,085	$39,919	$42,568	$44,606	$47,155				$38,479
45 to 49	241	1,596	2,004	1,680	1,386	1,624	784	35			9,350
Avg. Pay	$31,576	$34,985	$35,968	$37,770	$40,812	$45,120	$47,290	$45,723			$39,304
50 to 54	239	1,359	1,854	1,649	1,295	1,483	1,499	501	2		9,881
Avg. Pay	$29,370	$35,420	$35,663	$37,550	$40,168	$43,148	$49,030	$51,385	$33,374		$40,331
55 to 59	119	995	1,628	1,462	1,221	1,201	1,171	615	15		8,427
Avg. Pay	$34,729	$39,603	$36,804	$39,071	$39,802	$43,204	$46,764	$53,336	$56,530		$41,471
60 to 64	49	561	1,166	865	604	580	462	226	28	6	4,547
Avg. Pay	$44,779	$41,579	$40,578	$40,642	$43,266	$43,505	$47,519	$54,031	$75,689	$49,093	$43,091
65 to 69	10	154	404	273	169	147	109	59	10	6	1,341
Avg. Pay	$44,673	$51,704	$42,881	$42,361	$49,244	$51,217	$56,389	$57,009	$81,895	$147,235	$47,995
70 & up	2	33	78	89	61	49	24	20	3	8	367
Avg. Pay	$43,852	$56,942	$44,127	$49,657	$47,110	$37,621	$36,562	$51,766	$42,552	$85,032	$47,046
Total	3,194	15,435	16,254	10,853	6,901	5,692	4,079	1,456	58	20	63,942
Avg. Pay	$28,777	$33,244	$35,525	$38,524	$41,321	$44,072	$47,983	$52,717	$68,631	$92,911	$37,767

Average Age: 44.9
Average Service: 10.5

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	104	$ 2,206,982	$ 21,221
50-54	746	24,697,591	33,107
55-59	2,686	111,097,820	41,362
60-64	7,386	251,460,912	34,046
65-69	7,630	238,972,335	31,320
70-74	5,401	159,863,268	29,599
75-79	3,623	99,789,420	27,543
80-84	2,239	52,608,145	23,496
85-89	1,226	26,851,718	21,902
90-94	515	9,258,171	17,977
95+	106	1,808,213	17,059
Total	31,662	$ 978,614,575	$ 30,908

NUMBER OF BENEFICIARIES
AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	736	$ 6,540,806	$ 8,887
50-54	251	2,937,195	11,702
55-59	336	5,086,652	15,139
60-64	497	9,163,312	18,437
65-69	582	11,061,245	19,006
70-74	647	11,345,058	17,535
75-79	681	10,788,458	15,842
80-84	606	9,537,707	15,739
85-89	497	7,432,294	14,954
90-94	238	2,742,363	11,523
95+	65	672,424	10,345
Total	5,136	$ 77,307,514	$ 15,052

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	356	$ 8,922,341	$ 25,063
50-54	592	15,585,077	26,326
55-59	1,045	29,858,915	28,573
60-64	1,323	41,276,034	31,199
65-69	993	28,645,938	28,848
70-74	468	12,146,635	25,954
75-79	165	3,496,054	21,188
80-84	76	1,400,302	18,425
85-89	29	664,830	22,925
90-94	14	251,847	17,989
95+	1	8,843	8,843
Total	5,062	$ 142,256,816	$ 28,103

NUMBER OF DEFERRED VESTED AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 35	54	$ 366,662	$ 6,790
35-39	278	2,471,494	8,890
40-44	705	7,028,893	9,970
45-49	1,061	11,600,202	10,933
50-54	1,292	14,979,327	11,594
55-59	1,316	16,709,126	12,697
60-64	421	6,024,633	14,310
65+	64	883,415	13,803
Total	5,191	$ 60,063,752	$ 11,571

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%	17.22%
New Plan	3.79%	25.75%
GSEPS	2.17%	21.04%

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%	17.22%
New Plan	0.06%	22.02%
GSEPS	0.08%	18.95%

Group that has Age 55 Retirement:

Special Investigators Department of Revenue #474

PLAN	Additional Rate	Total Rate
New Plan	3.73%	25.69%
GSEPS	2.09%	20.96%

Appellate Court Judges: Total rate equal to 50.00% of payroll

Group with Debt Repayment Schedule:

Tax Commissioner's and Employees

Additional Flat Amount Due = $615,943 annually