

April 17, 2014

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, 2013".

The valuation indicates that employer contributions for the fiscal year ending June 30, 2016 at the rate 19.97% of compensation for Old Plan Members, 24.72% of compensation for New Plan Members and 21.69% of compensation 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 2013 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

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President

Cathy Turcot

Principal and Managing Director

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

Edward J. Hockel

**Enclosure** 

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The experience and dedication you deserve



EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA REPORT OF THE ACTUARY ON THE VALUATION PREPARED AS OF JUNE 30, 2013





The experience and dedication you deserve

April 17, 2014

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, 2013. The report indicates that annual employer contributions at the rate of 19.97% of compensation for Old Plan Members, 24.72% of compensation for New Plan Members, and 21.69% of compensation for GSEPS Members for the fiscal year ending June 30, 2016 are sufficient to support the benefits of the System.

Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule F of the report. In accordance with this funding policy, the actuarial value of assets was set equal to the market value of assets on June 30, 2013. Five-year smoothing of investment gains and losses will commence in subsequent years.

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 2013 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 total unfunded accrued liability which is being amortized on a level dollar basis in accordance with the funding policy adopted by the Board.



April 17, 2014 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 and the funding policy adopted by the Board. 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,

Edward A. Macdonald, ASA, FCA, MAAA

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President

Cathy Turcot

Principal and Managing Director

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, 2013

#### **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	J	June 30, 2013	,	June 30, 2012
Number of active members Annual earnable compensation	\$	61,550 2,335,773	\$	63,942 2,414,884
Number of retired members and beneficiaries Annual allowances	\$	44,348 1,260,701	\$	41,860 1,198,180
Number of deferred vested members Annual allowances	\$	5,260 59,601	\$	5,191 60,064
Assets:  Market Value  Actuarial Value*	\$	12,129,804 12,129,804	\$	11,537,408 12,260,595
Unfunded actuarial accrued liability	\$	4,852,645	\$	4,517,327
Amortization period (years)		25		30
Funding Ratio		71.4%		73.1%
For Fiscal Year Ending	J	lune 30, 2016		June 30, 2015
Annual Required Employer Contribution Rates (ARC): Old Plan (prior to 7/1/1982) Initial Normal Rate** Employer Paid on Behalf of Employee Normal Rate** Accrued Liability Rate Total		6.10% (4.75) 1.35% 18.62% 19.97%		6.14% (4.75) 1.39% 15.82% 17.21%
New Plan (7/1/1982 through 12/31/2008)  Normal Rate**  Accrued Liability Rate  Total  GSEPS (on and after 1/1/2009)		6.10% <u>18.62</u> % 24.72%		6.14% 15.82% 21.96%
Normal Rate** Accrued Liability Rate Total		3.07% 18.62% 21.69%		3.05% 15.82% 18.87%

<sup>\*</sup> Actuarial value of assets was set equal to market value on June 30, 2013. Five-year smoothing will commence in subsequent years.

<sup>\*\*</sup> The normal contribution includes administrative expenses.



- The major benefit and contribution provisions of the System are summarized in Schedule G. The
  valuation takes into account the effect of amendments of the System enacted through the 2013
  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. Since the previous valuation, the Board has adopted a funding policy, which is shown in Schedule F. In accordance with this funding policy, the actuarial value of assets was set equal to the market value of assets on June 30, 2013. Five-year smoothing of investment gains and losses will commence in subsequent years.
- 4. The entry age actuarial cost method was used to prepare the valuation. Schedule E contains a brief description of this method.
- Comments on the valuation results as of June 30, 2013 are given in Section IV and further discussion of the employer contribution levels is set out in Section V.
- 6. We have prepared the Solvency Test and the Schedule of Retirants Added to and Removed from Rolls for the System's Comprehensive Annual Financial Report. These tables are shown in Schedule J.

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

 Data regarding the membership of the System for use as a basis for the valuation were furnished by the Retirement System office. The following table shows the number of active members, their annual compensation and average annual compensation as of June 30, 2013 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, 2013

GROUP	NUMBER	ANNUAL COMPENSATION (\$1,000's)	AVERAGE ANNUAL COMPENSATION
Old Plan	679	\$ 35,741	\$ 52,638
New Plan	42,335	1,689,575	39,910
GSEPS	<u> 18,536</u>	610,457	32,934
Total	61,550	\$ 2,335,773	\$ 37,949

- 2. For the June 30, 2013 valuation, data was provided by the Retirement System for inactive members who are eligible for deferred vested benefits. The valuation included 5,260 deferred vested members with annual allowances totaling \$59,600,894. In addition, there are 73,706 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, 2013, 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, 2013

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES (\$1,000's)
Service Retirements	33,993	\$ 1,037,661
Disability Retirements	5,136	143,754
Beneficiaries of Deceased Active and Retired Members	<u>5,219</u>	<u>79,286</u>
Total	44,348	\$ 1,260,701



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

- The retirement law provides for the maintenance of two funds for the purpose of recording the financial transactions of the System; namely, the Annuity Savings Fund and the Pension Accumulation Fund.
  - (a) Annuity Savings Fund

The Annuity Savings Fund is the fund to which are credited all contributions made by members together with regular interest thereon. When a member retires, or if a death benefit allowance becomes payable to his beneficiary, his accumulated contributions are transferred from the Annuity Savings Fund to the Pension Accumulation Fund. The annuity which these contributions provide is then paid from the Pension Accumulation Fund. On June 30, 2013 the value of assets credited to the Annuity Savings Fund amounted to \$488,532,000.

(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, 2013 the market value of assets credited to the Pension Accumulation Fund amounted to \$11,641,272,000.

- 2. As of June 30, 2013 the total market value of assets amounted to \$12,129,804,000 as reported by the Auditor of the System. The actuarial value of assets as of June 30, 2013 was determined to be \$12,001,517,000 based on a seven year smoothing of investment gains and losses. However, the final actuarial value of assets used for the current valuation was set equal to the market value of assets of \$12,129,804,000 as of June 30, 2013. Five year smoothing of investment gains and losses will commence in subsequent years. Schedule B shows the development of the actuarial value of assets as of June 30, 2013.
- 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, 2013 (all amounts are in thousands).
- 2. The valuation balance sheet shows that the System has total prospective liabilities of \$17,991,622, of which \$11,935,364 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits, and \$6,056,258 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 \$12,129,804 as of June 30, 2013. The difference of \$5,861,818 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 1.35% (6.10% less 4.75% Employer paid on behalf of Employee) of compensation for Old Plan members, 6.10% of compensation for New Plan members, and 3.07% of compensation 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, 2016 are estimated to be 0.58% of payroll.
- 5. Prospective employer and employee normal contributions (excluding administrative expenses) have a present value of \$1,009,173. When this amount is subtracted from \$5,861,818, which is the present value of the total future contributions to be made in the future, there remains \$4,852,645 as the unfunded actuarial accrued liability. Of this amount, \$5,133 is attributable to the contribution shortfall for the tax commissioners, leaving \$4,847,512 to be paid by all employers.
- 6. The funding policy adopted by the Board, as shown in Schedule F, provides that the unfunded actuarial accrued liability as of June 30, 2013 (Transitional UAAL) will be amortized as a level dollar amount over a closed 25-year period. In each subsequent valuation all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the Page 5



- previous valuation will determine a New Incremental UAAL. Each New Incremental UAAL will be amortized as a level dollar amount over a closed 25-year period from the date it is established.
- 7. The accrued liability contribution rate on the basis of the Board's funding policy is 18.62% of active member's compensation.

#### SECTION V - CONTRIBUTIONS PAYABLE BY EMPLOYERS

 The following table summarizes the employer contribution rates, which were determined by the June 30, 2013 valuation and are recommended for use.

### ANNUAL REQUIRED EMPLOYER CONTRIBUTION RATES (ARC) FOR FISCAL YEAR ENDING JUNE 30, 2016

	Old Plan	New Plan	GSEPS
Normal Rate			
Initial Normal Rate	6.10%	6.10%	3.07%
Employer Paid on behalf of Employee	<u>(4.75)</u>	(0.00)	(0.00)
Employer Normal Rate	1.35%	6.10%	3.07%
Accrued Liability Rate	18.62%	18.62%	18.62%
Total	19.97%	24.72%	21.69%



 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
6/30/2013	11,365,919	11,981,862	(615,943)	5,132,862

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 I 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, 2013

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	44,348
Terminated employees entitled to benefits but not yet receiving benefits	78,966
Active plan members	61,550
Total	184,864

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

#### **SCHEDULE OF FUNDING PROGRESS**

(Dollar amounts in thousands)

Actuarial Valuation <u>Date</u>	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll ( <u>c</u> )	UAAL as a Percentage of Covered Payroll ((b-a)/c)
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
6/30/2013	12,129,804	16,982,449	4,852,645	71.4	2,335,773	207.8



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

Year <u>Ending</u>	Annual Required Contribution	Percentage <u>Contributed</u>
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
6/30/2013*	358,376	100.2

<sup>\*</sup> 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, 2013. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2013
Actuarial cost method	Entry age
Amortization method	Level dollar, closed
Remaining amortization period	25 years
Asset valuation method*	5-year smoothed market
Actuarial assumptions:	
Investment rate of return**	7.50%
Projected salary increases**	5.45% - 9.25%
Cost-of-living adjustments	None

<sup>\*</sup> Actuarial value of assets was set equal to the market value of assets on June 30, 2013. Five-year smoothing will commence in subsequent years.

\*\*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 \$335,318,000 in the unfunded accrued liability from \$4,517,327,000 to \$4,852,645,000 during the fiscal year ending June 30, 2013.

### ANALYSIS OF THE INCREASE IN UNFUNDED ACCRUED LIABILITY (in millions of dollars)

ITEM	AMOUNT OF INCREASE/ (DECREASE)		
Interest (7.50) added to previous unfunded accrued liability Accrued liability contribution	\$	338.8 (239.1)	
Experience: Valuation asset growth Pensioners' mortality Turnover and retirements New entrants Salary increases Method changes Amendments Assumption changes Programming Modification Data changes Miscellaneous changes		253.7 20.6 103.7 14.1 (46.8) (128.3) 0.0 0.0 0.0 18.7 (0.1)	
Total	\$	335.3	



#### **SCHEDULE A**

# VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA AS OF JUNE 30, 2013

(in thousands of dollars)

	ACTUADIAL LIADUSTICO		
	ACTUARIAL LIABILITIES		
(1)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits  - Service and disability benefits  - Death and survivor benefits  - Deferred vested benefits  Total	\$ 10,870,641 655,324 409,399	\$ 11,935,364
(2)	Present value of prospective benefits payable on account of present active members		6,056,258
(3)	TOTAL ACTUARIAL LIABILITIES		<u>\$17,991,622</u>
	PRESENT AND PROSPECTIVE ASS	ETS	
(4)	Actuarial value of assets		\$ 12,129,804
(5)	Present value of total future contributions = (3)-(4)	\$ 5,861,818	
(6)	Present value of future member contributions and employer normal contributions		1,009,173
(7)	Prospective unfunded accrued liability contributions = (5)-(6)		<u>4,852,645</u>
(8)	TOTAL PRESENT AND PROSPECTIVE ASSETS		<u>\$ 17,991,622</u>



#### **SCHEDULE B**

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

ı — —					
(1)	Actuarial Value Beginning of Year	\$	12,260,595		
(2)	Market Value End of Year	\$	12,129,804		
(3)	Market Value Beginning of Year	\$	11,537,408		
(4)	Cash Flow				
	(a) Contributions	\$	397,947		
	(b) Benefit Payments and Expenses		(1,289,480)		
	(c) Investment Expenses		<u>(1,449)</u>		
	(d) Net: (4)(a) + (4)(b) + (4)(c)	\$	(892,982)		
(5)	Investment Income				
	(a) Market Total: (2) – (3) – (4)(d)	\$	1,485,378		
	(b) Assumed Rate		7.50%		
	(c) Amount for Immediate Recognition:				
	$[(3) \times (5)(b)] + [\{(4)(a) + (4)(b)\} \times (5)(b) \times 0.5] -$		833,322		
	(d) Amount for Phased-In Recognition: (5)(a) – (5)	(c)	652,056		
(6)	Phased-In Recognition of Investment Income				
	(a) Current Year: (5)(d) / 7	\$	93,151		
	(b) First Prior Year	ļ	(93,256)		
	(c) Second Prior Year		209,878		
	(d) Third Prior Year		58,429		
	(e) Fourth Prior Year		(380,770)		
	(f) Fifth Prior Year		(217,597)		
	(g) Sixth Prior Year	<u> </u>	130,747		
	(h) Total Recognized Investment Gain	\$	(199,418)		
(7)	Actuarial Value End of Year: (1) + (4)(d) + (5)(c) + (6	)(h) \$	12,001,517		
(8)	Final Actuarial Value of Assets on June 30, 2013* \$ 12,129,804				
(9)	Difference Between Market & Actuarial Values: (2) -	(7) \$	0		
(10)	Rate of Return on Actuarial Value		6.47%		

<sup>\*</sup>Actuarial value of assets was set equal to market value on June 30, 2013. Five-year smoothing will commence in subsequent years.



#### **SCHEDULE C**

# SUMMARY OF RECEIPTS AND DISBURSEMENTS (Market Value)

	YEAR E	ENDING
Receipts for the Year	<u>June 30, 2013</u>	<u>June 30, 2012</u>
	(\$1,000's)	(\$1,000's)
Contributions:  Members  Employer	\$ 38,955 <u>358,992</u>	\$ 36,561 <u>274,034</u>
Subtotal	\$ 397,947	\$ 310,595
Investment Earnings	1,483,929	229,989
TOTAL	\$ 1,881,876	\$ 540,584
Disbursements for the Year		
Benefit Payments	\$ 1,269,201	\$ 1,216,738
Refunds to Members	7,390	7,767
Administration Expense	12,889	<u> 12,051</u>
TOTAL	\$ 1,289,480	\$ 1,236,556
Excess of Receipts over Disbursements	\$ 592,396	\$ (695,972)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of Year	\$ 11,537,408**	\$ 12,233,380*
Excess of Receipts over Disbursements	<u>592,396</u>	(695,972)
Asset Balance as of the End of Year	<u>\$ 12,129,804***</u>	<u>\$ 11,537,408**</u>
Rate of Return	13.38%	1.95%

<sup>\*</sup> Excludes assets in the Survivor Benefit Fund totaling \$102,030,000

<sup>\*\*</sup> Excludes assets in the Survivor Benefit Fund totaling \$91,099,000

<sup>\*\*\*</sup> Excludes assets in the Survivor Benefit Fund totaling \$98,010,000



#### 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	Assumed Annual Rate of Salary Increase
20	9.25%
25	8.25
30	6.25
35	5.75
40	5.45
45	5.45
50	5.45
55	5.45
60	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>Dea</u>	<u>ıth</u>	<u>Disa</u>	<u>bility</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			



	Aı	nnual Rates of Withdraw	al			
	Years of Service					
<u>Age</u>	<u>0-4</u>	<u>5-9</u>	10 & Over			
		<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>				
		<u>i emales</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 Ret	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 Re	tirement	Normal Re	etirement*		
	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		

<sup>\*</sup> 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. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on December 16, 2010, the numbers of expected future deaths are 7-9% less than the actual number of deaths that occurred during the study period for healthy retirees and 8-12% less than expected under the selected table for disabled retirees. 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 actuarial value was set equal to the market value as of June 30, 2013. The amount recognized each year beginning June 30, 2014 will be 20% 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**

#### **FUNDING POLICY OF THE ERS BOARD OF TRUSTEES**

The purpose of this Funding Policy is to state the overall objectives for the Employees' Retirement System of Georgia (System), the benchmarks that will be used to measure progress in achieving those goals, and the methods and assumptions that will be employed to develop the benchmarks. It is the intent of the ERS Board of Trustees that the Funding Policy outlined herein will remain unchanged until the objectives below are met.

#### I. Funding Objectives

The goal in requiring employer and member contributions to the System is to accumulate sufficient assets during a member's employment to fully finance the benefits the member is expected to receive throughout retirement. In meeting this objective, the System will strive to meet the following funding objectives:

- To develop a pattern of contribution rates expressed as a percentage of employer payroll and measured by valuations prepared in accordance with applicable State laws and the principles of practice prescribed by the Actuarial Standards Board.
- To maintain an increasing funded ratio (ratio of actuarial value of assets to actuarial accrued liabilities) that reflects a trend of improved actuarial condition. The long-term objective is to obtain a 100% funded ratio over a reasonable period of future years.
- To maintain adequate asset levels to finance the benefits promised to members and monitor the future demand for liquidity.
- To promote intergenerational equity for taxpayers with respect to contributions required for the benefits provided by the System.

#### II. Measures of Funding Progress

To track progress in achieving the System's funding objectives, the following measures will be determined annually as of the actuarial valuation date (with due recognition that a single year's results may not be indicative of long-term trends):

- Funded Ratio The funded ratio, defined as the actuarial value of assets divided by the actuarial accrued liability, should increase over time, before adjustments for changes in benefits, actuarial methods, and/or actuarial adjustments. The target funded ratio will be 100 percent within 25 years of the valuation date for the first valuation conducted following the adoption of this Policy (i.e. the June 30, 2013 valuation date).
- Unfunded Actuarial Accrued Liability (UAAL)
  - Transitional UAAL The UAAL established as of the initial valuation date for which this funding policy is adopted shall be known as the Transitional UAAL.
  - New Incremental UAAL Each subsequent valuation will produce a New Incremental UAAL consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuations.

#### UAAL Amortization Period

- The transitional UAAL will be amortized over a closed 25 year period beginning on the initial valuation date for which this funding policy is adopted.
- Each New Incremental UAAL shall be amortized over a closed 25 year period beginning with the year it is incurred.

#### • Employer Contribution Rates

- **Employer Normal Contribution Rate** the contribution rate determined as of the valuation date each year based on the provisions of Georgia Code Section 47-2-55 (1).
- o In each valuation subsequent to the adoption of this funding policy the required employer contribution rate will be determined as the summation of the employer Normal



Contribution Rate, a contribution rate for administrative expenses, the amortization rate for the Transitional UAAL and the individual amortization rate for each of the New Incremental UAAL bases.

- o In no event shall the employer contribution rate be less than 0%.
- The valuation methodology, including the amortization of the Unfunded Actuarial Accrued Liability (UAAL), would be expected to maintain reasonably stable contribution rates.

#### III. Methods and Assumptions

The annual actuarial valuations providing the measures to assess funding progress will utilize the actuarial methods and assumptions last adopted by the Board based upon the advice and recommendations of the actuary. These include the following primary methods and assumptions:

- The actuarial cost method used to develop the benchmarks will be the Entry Age Normal (EAN) actuarial cost method.
- The long-term annual investment rate of return assumption will be 7.50% net of investment expenses.
- The actuarial value of assets will be determined by recognizing the annual differences between actual and expected market value of assets over a five-year period, beginning with the June 30, 2013 actuarial valuation.
  - Prior to the June 30, 2013 valuation, the differences between actual and expected market value of assets were recognized over a seven-year period. For the June 30, 2013 valuation, all then-current deferred gains and losses will be recognized immediately, and the initial new five-year period will begin immediately thereafter.

The employer contribution rates determined in an annual actuarial valuation will be at least sufficient to satisfy the annual normal cost of the System and amortize the UAAL as a level dollar amount over a period not to exceed 25 years (for the UAAL as of the June 30, 2013 valuation date, and for each successive year of gains and losses incurred in years following the June 30, 2013 valuation date). However, in no event shall the employer contribution rate be less than 0%.

The actuary shall conduct an investigation into the System's experience at least every five years and utilize the results of the investigation to form the basis for recommended assumptions and methods. Any changes to the recommended assumptions and methods that are approved by the Board will be reflected in this Policy.

#### IV. Funding Policy Progress

The Board will periodically have actuarial projections of the valuation results performed to assess the current and expected future progress towards the overall funding goals of the System. These periodic projections will provide the expected valuation results over at least a 30-year period. The projected measures of funding progress and the recent historical trend provided in valuations will provide important information for the Board's assessment of the System's funding progress.



#### **SCHEDULE G**

### 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) =  $.0115 + .0003 \times (creditable service up to 35 years).$

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.

#### <u>GSEPS</u>

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

(1) 13 years 4 months to 18 years

#### <u>Benefit</u>

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

<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.

**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.

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 H**

# The Number and Average Annual Compensation of Active Members by Age and Service as of June 30, 2013

	Years of Service										
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	677	1,347	29								2,053
Avg. Pay	\$24,381	\$25,503	\$28,784								\$25,179
25 to 29	735	3,238	1,104	21							5,098
Avg. Pay	\$27,288	\$29,949	\$30,679	\$31,822							\$29,731
30 to 34	499	2,622	2,792	720	11						6,644
Avg. Pay	\$27,594	\$32,863	\$34,142	\$34,363	\$37,513						\$33,175
35 to 39	371	1,924	2,420	1,954	568	9					7,246
Avg. Pay	\$29,753	\$33,999	\$35,721	\$37,893	\$39,774	\$38,542					\$35,865
40 to 44	319	1,795	2,176	1,832	1,614	550	30				8,316
Avg. Pay	\$30,523	\$35,471	\$37,058	\$39,856	\$42,670	\$44,211	\$51,706				\$38,696
45 to 49	283	1,442	1,985	1,542	1,389	1,516	736	18			8,911
Avg. Pay	\$33,030	\$36,352	\$36,505	\$38,786	\$41,221	\$46,136	\$46,748	\$45,211			\$40,002
50 to 54	206	1,275	1,809	1,569	1,278	1,397	1,479	336	1		9,350
Avg. Pay	\$30,179	\$36,424	\$36,029	\$38,520	\$40,312	\$42,934	\$48,412	\$51,347	\$39,263		\$40,499
55 to 59	137	949	1,585	1,433	1,165	1,240	1,143	442	14		8,108
Avg. Pay	\$40,843	\$39,234	\$37,137	\$38,992	\$40,136	\$43,093	\$47,320	\$52,630	\$60,987		\$41,436
60 to 64	42	549	1.096	830	569	483	410	179	21	5	4,184
Avg. Pay	\$37,866	\$43,707	\$40,224	\$41,461	\$43,436	\$43,609	\$46,624	\$55,645	\$74,668	\$80,059	\$43,238
65 to 69	9	152	438	272	147	116	92	45	11	7	1,289
Avg. Pay	\$46,701	\$52,386	\$42,286	\$42,306	\$49,409	\$55,656	\$54,509	\$63,383	\$72,194	\$141,498	\$47,930
70 & up	2	33	107	76	51	40	20	17	2	3	351
Avg. Pay	\$50,169	\$55,028	\$45,494	\$47,285	\$53,401	\$38,806	\$40,104	\$49,952	\$38,529	\$88,570	\$47,429
Total	2 200	45 200	15 5 4 4	10.040	6.700	F 254	2.040	1.007	40	4.5	64 550
<b>Total</b> Avg. Pay	3,280 \$28,774	15,326 \$33,697	15,541 \$36,103	10,249 \$38,843	6,792 \$41,535	5,351 \$44,308	3,910 \$47,718	1,037 \$53,029	49 \$68,006	15 \$110,433	61,550 \$37,949

Average Age: 44.7 Average Service: 10.3



# SCHEDULE H (Continued)

# NUMBER OF RETIRED MEMBERS AND THEIR BENEFITS BY AGE

Attained	Number of	Total	Average
Age	Members	Annual Benefits	Annual Benefits
Under 50	140	\$ 3,206,348	\$ 22,902
50-54	955	30,556,600	31,996
55-59	2,752	110,356,086	40,100
60-64	7,677	250,110,805	32,579
65-69	8,552	264,843,391	30,969
70-74	5,848	173,833,017	29,725
75-79	3,801	106,863,576	28,115
80-84	2,355	58,228,238	24,725
85-89	1,267	27,934,738	22,048
90-94	522	9,519,318	18,236
95+	124	2,208,637	17,812
Total	33,993	\$ 1,037,660,754	\$ 30,526

# NUMBER OF BENEFICIARIES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	738	\$ 6,654,738	\$ 9,017
50-54	251	2,772,427	11,046
55-59	323	4,531,626	14,030
60-64	506	9,440,048	18,656
65-69	600	11,426,736	19,045
70-74	647	11,485,993	17,753
75-79	703	11,440,776	16,274
80-84	610	9,701,472	15,904
85-89	507	7,810,245	15,405
90-94	267	3,202,739	11,995
95+	67	818,929	12,223
Total	5,219	\$ 79,285,729	\$ 15,192



# SCHEDULE H (Continued)

# NUMBER OF DISABLED RETIREES AND THEIR BENEFITS BY AGE

Attained	Number of	Total	Average
Age	Members	Annual Benefits	Annual Benefits
Under 50	362	\$ 9,412,784	\$ 26,002
50-54	565	14,587,204	25,818
55-59	1,006	27,957,340	27,791
60-64	1,300	39,438,277	30,337
65-69	1,062	31,626,418	29,780
70-74	517	13,836,337	26,763
75-79	206	4,430,048	21,505
80-84	74	1,573,364	21,262
85-89	31	652,680	21,054
90-94	12	220,010	18,334
95+	1	19,333	19,333
Total	5,136	\$ 143,753,795	\$ 27,989

# NUMBER OF DEFERRED VESTED AND THEIR BENEFITS BY AGE

Attained	ned Number of Total		Average		
Age	Members	Annual Benefits	Annual Benefits		
Under 35	54	\$ 382,131	\$ 7,077		
35-39	289	2,567,330	8,883		
40-44	709	7,306,716	10,306		
45-49	1,075	11,731,045	10,913		
50-54	1,343	15,540,159	11,571		
55-59	1,364	16,671,222	12,222		
60-64	363	4,460,218	12,287		
65+	63	942,073	14,954		
Total	5,260	\$ 59,600,894	\$ 11,331		



#### SCHEDULE I

#### **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%	19.98%		
New Plan	3.79%	28.51%		
GSEPS	2.17%	23.86%		

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%	19.98%		
New Plan	0.06%	24.78%		
GSEPS	0.08%	21.77%		

Group that has Age 55 Retirement:

Special Investigators Department of Revenue #474

PLAN	Additional Rate	Total Rate
New Plan	3.73%	28.45%
GSEPS	2.09%	23.78%

Appellate Court Judges: Total rate equal to 49.84% of payroll

Group with Debt Repayment Schedule:

Tax Commissioners and Employees

Additional Flat Amount Due = \$615,943 annually



#### SCHEDULE J

#### **CAFR SCHEDULES**

GA ERS: Solvency Test									
	Actuarial Accrued Liability for:								
Actuarial			Active Members						
Valuation	Active Member	Retirants &	(Employer		Portior	n of Aggregate	Accrued		
as of 7/1	Contributions	Beneficiaries	Funded Portion)	Valuation Assets	Liabilities Covered by Assets				
	(1)	(2)	(3)	_	(1)	(2)	(3)		
2013	\$405,841	\$11,935,364	\$4,641,244	\$12,129,804	100%	98.2%	0.0%		
2012	460,861	11,420,011	4,897,050	12,260,595	100%	100.0%	7.8%		
2011	503,867	11,058,344	5,094,694	12,667,557	100%	100.0%	21.7%		
2010	551,607	10,652,040	5,091,705	13,046,193	100%	100.0%	36.2%		
2009	589,012	10,034,939	5,254,071	13,613,606	100%	100.0%	56.9%		
2008	616,177	9,756,529	5,308,151	14,017,346	100%	100.0%	68.7%		
2007	645,907	9,020,890	5,218,382	13,843,689	100%	100.0%	80.0%		
2006	672,679	8,462,884	5,107,282	13,461,132	100%	100.0%	84.7%		
All dollar	All dollar amounts are in thousands.								

GA ERS: Schedule of Retirants Added to and Removed from Rolls									
	Added to Rolls		Removed from Rolls		Roll End of Year		% Increase	Average	
		Annual Allowances		Annual Allowances		Annual Allowances	in Annual	Annual	
Year Ended	Number	(in thousands)	Number	(in thousands)	Number	(in thousands)	Allowances	Allowances	
July 1, 2013	3,664	\$88,855	1,176	\$26,334	44,348	\$1,260,701	5.2%	\$28,427	
July 1, 2012	2,956	71,464	1,305	27,696	41,860	1,198,180	3.8%	28,624	
July 1, 2011	2,797	69,031	1,170	25,347	40,209	1,154,412	3.9%	28,710	
July 1, 2010	2,665	70,383	1,051	22,413	38,582	1,110,728	4.5%	28,789	
July 1, 2009	2,444	85,329	1,055	20,194	36,968	1,062,758	6.5%	28,748	
July 1, 2008	2,422	82,644	1,017	21,299	35,579	997,623	6.6%	28,040	
July 1, 2007	2,410	114,719	1,075	20,598	34,174	936,278	11.2%	27,397	
July 1, 2006	2,338	84,982	854	16,270	32,839	842,157	8.9%	25,645	