

April 16, 2015

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, 2014".

The valuation indicates that employer contributions for the fiscal year ending June 30, 2017 at the rate 19.94% of compensation for Old Plan Members, 24.69% 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 2014 session of the General Assembly.

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

Sincerely yours,

1 Muldel

Edward A. Macdonald, ASA, FCA, MAAA President

Edward J. Hockel

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

atty Turcot

Cathy Turcot Principal and Managing Director

Enclosure

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144 Phone (678) 388-1700 • Fax (678) 388-1730 www.CavMacConsulting.com Offices in Englewood, CO • Kennesaw, GA • Bellevue, NE



The experience and dedication you deserve



# EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA REPORT OF THE ACTUARY ON THE VALUATION PREPARED AS OF JUNE 30, 2014



www.CavMacConsulting.com



April 16, 2015

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, 2014. The report indicates that annual employer contributions at the rate of 19.94% of compensation for Old Plan Members, 24.69% of compensation for New Plan Members, and 21.69% of compensation for GSEPS Members for the fiscal year ending June 30, 2017 are sufficient to support the benefits of the System.

In preparing the valuation, the actuary relied on data provided by the System. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. Our firm, as actuary, is responsible for all of the actuarial trend data in the financial section of the annual report and the supporting schedules in the actuarial section of the annual report.

In our opinion, the valuation is complete and accurate, and the methodology and assumptions are reasonable as a basis for the valuation. The valuation takes into account the effect of all amendments to the System enacted through the 2014 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 No. 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.

Effective this fiscal year, the Plan was required to comply with the financial reporting requirements of GASB Statement No. 67. The necessary disclosure information has been provided in a separate supplemental report.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144 Phone (678) 388-1700 • Fax (678) 388-1730 www.CavMacConsulting.com Offices in Englewood, CO • Kennesaw, GA • Bellevue, NE



April 16, 2015 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,

ul Mulde

Edward A. Macdonald, ASA, FCA, MAAA President

I derand & Hocke

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

athy Turcot

Cathy Turcot Principal and Managing Director



# TABLE OF CONTENTS

<u>Section</u>	ltem	Page No.
I	Summary of Principal Results	1
П	Membership	2
Ш	Assets	4
IV	Comments on Valuation	5
V	Contributions Payable by Employers	7
VI	Accounting Information	9
VII	Experience	11

# Schedule

Valuation Balance Sheet	12
Development of Actuarial Value of Assets	13
Summary of Receipts and Disbursements	14
Outline of Actuarial Assumptions and Methods	15
Actuarial Cost Method	19
Board Funding Policy	20
Amortization of UAAL	22
Summary of Main Plan Provisions as Interpreted for Valuation Purposes	24
Tables of Membership Data	29
Contribution Rates for Members with a Special Benefit	32
CAFR Schedules	33
	Development of Actuarial Value of Assets Summary of Receipts and Disbursements Outline of Actuarial Assumptions and Methods Actuarial Cost Method Board Funding Policy Amortization of UAAL Summary of Main Plan Provisions as Interpreted for Valuation Purposes Tables of Membership Data Contribution Rates for Members with a Special Benefit



#### EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA REPORT OF THE ACTUARY ON THE VALUATION PREPARED AS OF JUNE 30, 2014

#### **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	une 30, 2014	J	une 30, 2013
Number of active members Annual earnable compensation	\$	60,486 2,315,625	\$	61,550 2,335,773
Number of retired members and beneficiaries Annual allowances	\$	45,729 1,288,882	\$	44,348 1,260,701
Number of deferred vested members Annual allowances	\$	5,603 65,067	\$	5,260 59,601
Assets: Market Value Actuarial Value	\$	13,291,531 12,376,120	\$	12,129,803* 12,129,803*
Unfunded actuarial accrued liability	\$	4,615,843	\$	4,852,645
Blended Amortization period (years)		22.6		25
Funding Ratio		72.8%		71.4%
For Fiscal Year Ending	J	une 30, 2017	J	une 30, 2016
Actuarially Determined Employer Contribution Rates (ADEC): Old Plan (prior to 7/1/1982) Initial Normal Rate** Employer Paid on Behalf of Employee Normal Rate** Accrued Liability Rate Total		6.13% <u>(4.75)</u> 1.38% <u>18.56</u> % 19.94%		6.10% <u>(4.75)</u> 1.35% <u>18.62</u> % 19.97%
New Plan (7/1/1982 through 12/31/2008) Normal Rate** Accrued Liability Rate Total GSEPS (on and after 1/1/2009)		6.13% <u>18.56</u> % 24.69%		6.10% <u>18.62</u> % 24.72%
Normal Rate** Accrued Liability Rate Total		3.13% <u>18.56</u> % 21.69%		3.07% <u>18.62</u> % 21.69%

\* This amount has been adjusted since the previous valuation to reflect the KPMG audit report.

\*\* The normal contribution includes administrative expenses.



- 2. The major benefit and contribution provisions of the System are summarized in Schedule H. The valuation takes into account the effect of amendments of the System enacted through the 2014 session of the General Assembly. There have been no changes since the previous valuation.
- Schedule D of this report outlines the full set of actuarial assumptions and methods used to prepare the current valuation. There have been no changes since the previous valuation. The Board Funding Policy is shown in Schedule F.
- 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, 2014 are given in Section IV and further discussion of the employer contribution levels is set out in Section V.
- 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 K.

#### **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, 2014 on whose account benefits may be payable under the Retirement System.



GROUP	NUMBER	ANNUAL COMPENSATION (\$1,000's)	AVERAGE ANNUAL COMPENSATION
Old Plan	382	\$ 20,816	\$ 54,492
New Plan	38,241	1,568,896	41,027
GSEPS	<u>    21,863 </u>	725,913	33,203
Total	60,486	\$ 2,315,625	\$ 38,284

## THE NUMBER, ANNUAL COMPENSATION AND AVERAGE ANNUAL COMPENSATION OF ACTIVE MEMBERS AS OF JUNE 30, 2014

- 2. Data was provided by the Retirement System for inactive members who are eligible for deferred vested benefits. The valuation included 5,603 deferred vested members with annual allowances totaling \$65,067,352. In addition, there are 76,018 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, 2014, together with the amount of their annual retirement allowances payable under the System as of that date.

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES (\$1,000's)
Service Retirements	35,123	\$ 1,061,251
Disability Retirements	5,232	145,263
Beneficiaries of Deceased Active and Retired Members	5,374	<u>      82,368</u>
Total	45,729	\$ 1,288,882

#### THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND BENEFICIARIES RECEIVING BENEFITS AS OF JUNE 30, 2014



#### **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, 2014 the value of assets credited to the Annuity Savings Fund amounted to \$470,420,000.

(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, 2014 the market value of assets credited to the Pension Accumulation Fund amounted to \$12,821,111,000.

- 2. As of June 30, 2014, the total market value of assets amounted to \$13,291,531,000 as reported by the Auditor of the System. The actuarial value of assets used for the current valuation was determined to be \$12,376,120,000 based on a five-year smoothing of investment gains and losses. Schedule B shows the development of the actuarial value of assets as of June 30, 2014.
- 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, 2014 (all amounts are in thousands).
- 2. The valuation balance sheet shows that the System has total prospective liabilities of \$17,958,466, of which \$12,108,737 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits, and \$5,849,729 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 \$12,376,120 as of June 30, 2014. The difference of \$5,582,346 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 1.38% (6.13% less 4.75% Employer paid on behalf of Employee) of compensation for Old Plan members, 6.13% of compensation for New Plan members, and 3.13% of compensation for GSEPS members are required.
- 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, 2017 are estimated to be 0.61% of payroll.
- 5. Prospective employer and employee normal contributions (excluding administrative expenses) have a present value of \$966,503. When this amount is subtracted from \$5,582,346, which is the present value of the total future contributions to be made in the future, there remains \$4,615,843 as the unfunded actuarial accrued liability. Of this amount, \$4,363 is attributable to the contribution shortfall for the tax commissioners, leaving \$4,611,480 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 previous valuation will determine a New Incremental UAAL. Each New Incremental UAAL will be amortized as a level dollar as a level dollar amount over a closed 25-year period from the date it is established.
- 7. The funding policy also states that the employer contribution rates determined in an actuarial valuation will be at least sufficient to satisfy the 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).
- 8. We have determined that an accrued liability contribution rate of 18.56% of active member's compensation will comply with the Board's funding policy.
- 9. The Transitional UAAL as of June 30, 2013 was \$4,847,512. This excludes the portion of the UAAL attributable to the contribution shortfall for the tax commissioners. The remaining balance of the Transitional UAAL as of June 30, 2014 of \$4,776,202 was determined by adding interest at 7.50% and subtracting the expected annual amortization payment of \$434,874. The new Incremental UAAL of \$(164,722) as of June 30, 2014 is determined by subtracting the remaining balance of the Transitional UAAL from the total UAAL of \$4,611,480 as of June 30, 2014. Schedule H of this report shows the amortization schedules for the Transitional UAAL and the New Incremental UAAL as of June 30, 2014.



10. The following table shows the components of the total UAAL and the derivation of the UAAL

contribution rate in accordance with the funding policy (all dollar amounts are in thousands):

	(1)		
	UAAL	Remaining Amortization <u>Period (years)</u>	Amortization <u>Payment</u>
Transitional New Incremental 6/30/2014 Total UAAL	\$4,776,202 ( <u>164,722)</u> \$4,611,480*	22.7 25.0	\$444,599 <u>(14,777)</u> \$429,822
Blended Amortization Period (ye Estimated Payroll UAAL Contribution Rate	ears)		22.6 \$2,315,625 18.56%

# TOTAL UAAL AND UAAL CONTRIBUTION RATE (\$1,000's)

\* An additional UAAL amount of \$4,363 is attributable to the contribution shortfall for the tax commissioners. Additional contributions are made to amortize this shortfall.

## SECTION V - CONTRIBUTIONS PAYABLE BY EMPLOYERS

1. The following table summarizes the employer contribution rates, which were determined by the

June 30, 2014 valuation and are recommended for use.

#### ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION RATES (ADEC) FOR FISCAL YEAR ENDING JUNE 30, 2017

	Old Plan	New Plan	GSEPS
Normal Rate			
Initial Normal Rate	6.13%	6.13%	3.13%
Employer Paid on behalf of Employee	<u>(4.75)</u>	<u>(0.00)</u>	<u>(0.00)</u>
Employer Normal Rate	1.38%	6.13%	3.13%
Accrued Liability Rate	18.56%	18.56%	18.56%
Total	19.94%	24.69%	21.69%



 An employer group within ERS representing tax commissioners did not contribute the full ADEC every year. The following is a schedule by year of the contribution shortfalls and the accumulated repayment amounts.

Fiscal Year Ending	Actuarially Determined Employer 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
6/30/2014	10,038,596	10,808,525	(769,929)	4,362,933

In addition to the actuarially determined employer 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 J summarizes the contribution rates required for groups of members with special benefits.



## **SECTION VI – ACCOUNTING INFORMATION**

Governmental Accounting Standards Board (GASB) has issued Statement No. 67 which replaces Statement 25 for plan years beginning after June 15, 2013. The information required under GASB 67 was issued in a separate report. The following information is provided for informational purposes and for disclosure in the financial statements of the employer under GASB 27.

1. The following is a distribution of the number of employees by type of membership.

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	45,729
Terminated employees entitled to benefits but not yet receiving benefits	81,621
Active plan members	<u>   60,486</u>
Total	187,836

#### NUMBER OF ACTIVE AND RETIRED MEMBERS AS OF JUNE 30, 2014

2. The schedule of funding progress is shown below.

## SCHEDULE OF FUNDING PROGRESS

(Dollar amounts in thousands)

Actuarial Valuation <u>Date</u>	Actuarial Value of Assets <u>( a )</u>	Actuarial Accrued Liability (AAL) - Entry Age <u>( b )</u>	Unfunded AAL (UAAL) <u>(b – a)</u>	Funded Ratio <u>( a / b )</u>	Covered Payroll <u>( c )</u>	UAAL as a Percentage of Covered Payroll <u>((b – a)/c)</u>
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
6/30/2014	12,376,120	16,991,963	4,615,843	72.8	2,315,625	199.3



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

Year <u>Ending</u>	Actuarially Determined Employer <u>Contribution</u>	Percentage <u>Contributed</u>
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
6/30/2014*	429,136	100.1

An employer group within ERS did not contribute the full ADEC 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, 2014. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2014
Actuarial cost method	Entry age
Amortization method	Level dollar, closed
Remaining amortization period	22.6 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

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.
- The following table shows the estimated gain or loss from various factors that resulted in a decrease of \$236,802,000 in the unfunded accrued liability from \$4,852,645,000 to \$4,615,843,000 during the fiscal year ending June 30, 2014.

ITEM	AMOUNT OF INCREASE/ (DECREASE)		
Interest (7.50) added to previous unfunded accrued liability Accrued liability contribution	\$	363.9 (321.7)	
Experience: Valuation asset growth Pensioners' mortality Turnover and retirements New entrants Salary increases Method changes Amendments Assumption changes Programming Modification Data changes Miscellaneous changes		(228.9) 60.4 45.5 9.3 (159.4) 0.0 0.0 0.0 0.0 (6.0) <u>0.1</u>	
Total	\$	(236.8)	

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



## SCHEDULE A

#### VALUATION BALANCE SHEET SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF THE EMPLOYEES' RETIREMENT SYSTEM OF GEORGIA AS OF JUNE 30, 2014 (Dollar amounts in thousands)

	ACTUARIAL LIABILITIES		
(1)	<ul> <li>Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits</li> <li>Service and disability benefits</li> <li>Death and survivor benefits</li> <li>Deferred vested benefits <ul> <li>Total</li> </ul> </li> </ul>	\$ 10,978,452 674,084 456,201	\$ 12,108,737
(2)	Present value of prospective benefits payable on account of present active members		5,849,729
(3)	TOTAL ACTUARIAL LIABILITIES		<u>\$ 17,958,466</u>
	PRESENT AND PROSPECTIVE ASSE	TS	
(4)	Actuarial value of assets		\$ 12,376,120
(5)	Present value of total future contributions = $(3)$ - $(4)$	\$ 5,582,346	
(6)	Present value of future member contributions and employer normal contributions		966,503
(7)	Prospective unfunded accrued liability contributions = (5)-(6)		4,615,843
(8)	TOTAL PRESENT AND PROSPECTIVE ASSETS		<u>\$ 17,958,466</u>



## SCHEDULE B

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

		*	40.400.000	
(1)	Actuarial Value Beginning of Year*	\$	12,129,803	
(2)	Market Value End of Year	\$	13,291,531	
(3)	Market Value Beginning of Year*	\$	12,129,803	
(4)	Cash Flow			
	(a) Contributions	\$	462,175	
	(b) Benefit Payments		(1,314,755)	
	(c) Administrative Expenses		(7,440)	
	(d) Investment Expenses		<u>(6,859)</u>	
	(e) Net: $(4)(a) + (4)(b) + (4)(c) + (4)(d)$	\$	(866,879)	
(5)	Investment Income			
	(a) Market Total: (2) – (3) – (4)(e)	\$	2,028,607	
	(b) Assumed Rate		7.50%	
	(c) Amount for Immediate Recognition:			
	$[(3) \times (5)(b)] + [{(4)(a) + (4)(b) + (4)(c)} \times (5)(b) \times 0.5] - (4)(d)$	\$	884,343	
	(d) Amount for Phased-In Recognition: (5)(a) – (5)(c)		1,144,264	
(6)	Phased-In Recognition of Investment Income			
	(a) Current Year: (5)(d) / 5	\$	228,853	
	(b) First Prior Year		0	
	(c) Second Prior Year		0	
	(d) Third Prior Year			
	(e) Fourth Prior Year			
	(f) Total Recognized Investment Gain	\$	228,853	
(7)	Actuarial Value End of Year: (1) + (4)(e) + (5)(c) + (6)(f)	\$	12,376,120	
(8)	Difference Between Market & Actuarial Values: (2) – (7)	\$	915,411	
(9)	Rate of Return on Actuarial Value		9.46%	

\* This amount has been adjusted since the previous valuation to reflect the KPMG audit report.



## SCHEDULE C

## SUMMARY OF RECEIPTS AND DISBURSEMENTS (Market Value)

	YEAR ENDING		
Receipts for the Year	<u>June 30, 2014</u>	<u>June 30, 2013</u>	
	(\$1,000's)	(\$1,000's)	
Contributions: Members Non-employer Employer	\$ 32,423 10,945 <u>418,807</u>	\$  38,955 N/A <u>358,992</u>	
Subtotal	\$ 462,175	\$ 397,947	
Net Investment Earnings	2,021,748	<u> </u>	
TOTAL	\$ 2,483,923	\$ 1,881,876	
Disbursements for the Year			
Benefit Payments	\$ 1,305,998	\$ 1,269,201	
Refunds to Members	8,757	7,390	
Administration Expense	7,440	12,889	
TOTAL	\$ 1,322,195	\$ 1,289,480	
Excess of Receipts over Disbursements	\$ 1,161,728	\$ 592,396	
Reconciliation of Asset Balances			
Asset Balance as of the Beginning of Year	\$ 12,129,803***	\$ 11,537,408*	
Excess of Receipts over Disbursements	1,161,728	<u> </u>	
Asset Balance as of the End of Year	<u>\$ 13,291,531</u>	<u>\$ 12,129,804**</u>	
Rate of Return	17.28%	13.38%	

\* Excludes assets in the Survivor Benefit Fund totaling \$91,099,000.

\*\* Excludes assets in the Survivor Benefit Fund totaling \$98,010,000.

\*\*\* This amount has been adjusted since the previous valuation to reflect the KPMG audit report.



## 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 investment 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>Death</u>		<u>Disal</u>	<u>oility</u>		
	Men	<u>Women</u>	<u>Men</u>	<u>Women</u>		
20	.035%	.019%	.05%	.02%		
25	.038	.021	.05	.02		
30	.044	.026	.05	.02		
35	.077	.048	.05	.02		
40	.108	.071	.25	.10		
45	.151	.112	.50	.25		
50	.214	.168	.75	.50		
55	.362	.272	1.10	.82		
60	.675	.506				
65	1.274	.971				
69	1.980	1.486				



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



	Old Plan							
Age	Early Ret	irement	Age 60 or	r 30 years	34 y	ears	More tha	n 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

**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.

	New Plan and GSEPS				
Age	Early Retirement		Normal R	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	

\* 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 is 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).
  - 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.

- 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

# AMORTIZATION OF UAAL (Dollar amounts in thousands)

		Balance of	Annual
	Amortization	Transitional	Amortization
Valuation Date	Period	UAAL	Payment Payment
6/30/2013	25	\$4,847,512	\$434,874
6/30/2014	22.7	4,776,202	444,599
6/30/2015	21.7	4,689,818	444,599
6/30/2016	20.7	4,596,955	444,599
6/30/2017	19.7	4,497,127	444,599
6/30/2018	18.7	4,389,813	444,599
6/30/2019	17.7	4,274,450	444,599
6/30/2020	16.7	4,150,434	444,599
6/30/2021	15.7	4,017,117	444,599
6/30/2022	14.7	3,873,802	444,599
6/30/2023	13.7	3,719,738	444,599
6/30/2024	12.7	3,554,119	444,599
6/30/2025	11.7	3,376,079	444,599
6/30/2026	10.7	3,184,686	444,599
6/30/2027	9.7	2,978,938	444,599
6/30/2028	8.7	2,757,759	444,599
6/30/2029	7.7	2,519,992	444,599
6/30/2030	6.7	2,264,392	444,599
6/30/2031	5.7	1,989,622	444,599
6/30/2032	4.7	1,694,245	444,599
6/30/2033	3.7	1,376,714	444,599
6/30/2034	2.7	1,035,368	444,599
6/30/2035	1.7	668,422	444,599
6/30/2036	0.7	273,954	294,501
6/30/2037	0	0	0
6/30/2038	0	0	0



AMORTIZATION OF UA	AAL (continued)
(Dollar amounts in	thousands)

		Balance of	Annual
	Amortization	New Incremental	Amortization
Valuation Date	Period	UAAL 6/30/2014	Payment
6/30/2014	25	(\$164,722)	(\$14,777)
6/30/2015	24	(162,299)	(14,777)
6/30/2016	23	(159,694)	(14,777)
6/30/2017	22	(156,894)	(14,777)
6/30/2018	21	(153,883)	(14,777)
6/30/2019	20	(150,647)	(14,777)
6/30/2020	19	(147,168)	(14,777)
6/30/2021	18	(143,429)	(14,777)
6/30/2022	17	(139,409)	(14,777)
6/30/2023	16	(135,087)	(14,777)
6/30/2024	15	(130,441)	(14,777)
6/30/2025	14	(125,447)	(14,777)
6/30/2026	13	(120,078)	(14,777)
6/30/2027	12	(114,307)	(14,777)
6/30/2028	11	(108,102)	(14,777)
6/30/2029	10	(101,433)	(14,777)
6/30/2030	9	(94,263)	(14,777)
6/30/2031	8	(86,555)	(14,777)
6/30/2032	7	(78,270)	(14,777)
6/30/2033	6	(69,362)	(14,777)
6/30/2034	5	(59,787)	(14,777)
6/30/2035	4	(49,494)	(14,777)
6/30/2036	3	(38,429)	(14,777)
6/30/2037	2	(26,534)	(14,777)
6/30/2038	1	(13,746)	(14,777)
6/30/2039	0	0	0



#### SCHEDULE H

#### 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

<u>Old Plan</u>

(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.

#### <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:	
	<ul><li>(i) 7% for each year by which his age is less than</li><li>60, and</li></ul>	
	<ul> <li>(ii) 7% for each year by which his creditable service at retirement is less than 30.</li> </ul>	
	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	



<u>GSEPS</u>	
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
<ul><li>(1) Before retirement, before age 60, before completing 13 years 4 months service</li></ul>	Refund of all employee contributions plus allowable interest.
<ul><li>(2) Before retirement, before age 60, after completing 13 years 4 months service</li></ul>	Benefit equal to disability retirement immediately prior to death under Option 2.
<ul> <li>(3) Before retirement, after age 60, more than 10 years creditable service (5 years service if member prior to July 1, 1968)</li> </ul>	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.
<u>GSEPS</u>	
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

## Old Plan By Members 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 I

## The Number and Average Annual Compensation of Active Members by Age and Service as of June 30, 2014

	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
<b>Under 25</b> Avg. Pay	699 \$24,120	1,519 \$25,629	15 \$29,048								2,233 \$25,180
<b>25 to 29</b> Avg. Pay	777 \$27,023	3,707 \$30,161	760 \$31,031	24 \$32,323							5,268 \$29,833
<b>30 to 34</b> Avg. Pay	503 \$28,974	2,899 \$32,652	2,341 \$35,283	688 \$35,852	17 \$40,340						6,448 \$33,682
<b>35 to 39</b> Avg. Pay	408 \$31,411	2,094 \$33,971	2,175 \$36,692	1,779 \$39,044	569 \$40,197	7 \$37,057					7,032 \$36,454
<b>40 to 44</b> Avg. Pay	373 \$31,420	1,925 \$35,473	1,821 \$37,444	1,777 \$40,113	1,599 \$42,776	545 \$44,415	40 \$49,637				8,080 \$38,869
<b>45 to 49</b> Avg. Pay	302 \$31,669	1,575 \$36,068	1,715 \$37,477	1,482 \$40,705	1,312 \$42,692	1,438 \$46,552	775 \$47,127	17 \$44,549			8,616 \$40,762
<b>50 to 54</b> Avg. Pay	213 \$28,880	1,380 \$36,436	1,609 \$36,719	1,512 \$38,918	1,207 \$40,911	1,258 \$43,171	1,543 \$48,350	267 \$50,883			8,989 \$40,743
<b>55 to 59</b> Avg. Pay	136 \$37,879	1,005 \$39,073	1,347 \$37,992	1,379 \$40,597	1,130 \$41,015	1,137 \$42,759	1,237 \$46,957	395 \$53,720	12 \$66,491	1 \$66,811	7,779 \$41,999
<b>60 to 64</b> Avg. Pay	63 \$34,645	612 \$41,785	988 \$40,388	879 \$41,939	608 \$43,767	513 \$45,410	479 \$45,648	186 \$54,463	25 \$67,142	5 \$57,890	4,358 \$43,229
<b>65 to 69</b> Avg. Pay	13 \$39,310	155 \$49,900	371 \$42,015	334 \$47,034	143 \$48,670	122 \$54,426	90 \$54,632	50 \$70,228	14 \$79,326	7 \$97,898	1,299 \$48,781
<b>70 &amp; up</b> Avg. Pay	3 \$56,395	42 \$53,947	102 \$43,020	80 \$46,431	57 \$50,639	38 \$53,806	36 \$38,411	17 \$51,170	4 \$44,602	5 \$167,592	384 \$48,796
<b>Total</b> Avg. Pay	3,490 \$28,853	16,913 \$33,509	13,244 \$36,923	9,934 \$40,026	6,642 \$42,179	5,058 \$44,743	4,200 \$47,468	932 \$53,727	55 \$68,462	18 \$104,417	60,486 \$38,284

Average Age: 44.6 Average Service: 10.2



## SCHEDULE I (Continued)

#### NUMBER OF RETIRED MEMBERS AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	108	\$ 2,234,141	\$ 20,686
50-54	931	28,295,228	30,392
55-59	2,737	104,518,828	38,187
60-64	7,331	234,386,509	31,972
65-69	9,252	283,816,320	30,676
70-74	6,194	184,611,704	29,805
75-79	4,045	115,795,236	28,627
80-84	2,517	65,124,278	25,874
85-89	1,317	29,134,158	22,122
90-94	558	10,907,443	19,547
95+	133	2,427,617	18,253
Total	35,123	\$ 1,061,251,462	\$ 30,215

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

Attained	Number of	Total	Average
Age	Members	Annual Benefits	Annual Benefits
Under 50	741	\$ 6,564,051	\$ 8,858
50-54	268	2,899,520	10,819
55-59	326	4,434,451	13,603
60-64	490	8,786,632	17,932
65-69	645	12,121,202	18,793
70-74	649	12,222,145	18,832
75-79	747	12,379,506	16,572
80-84	647	10,402,263	16,078
85-89	518	7,918,112	15,286
90-94	263	3,593,651	13,664
95+	80	1,046,374	13,080
Total	5,374	\$ 82,367,907	\$ 15,327



## SCHEDULE I (Continued)

## NUMBER OF DISABLED RETIREES AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	346	\$ 8,861,452	\$ 25,611
50-54	579	14,524,516	25,086
55-59	940	25,006,199	26,602
60-64	1,287	37,971,223	29,504
65-69	1,133	35,002,574	30,894
70-74	594	16,237,241	27,335
75-79	231	5,230,521	22,643
80-84	75	1,528,481	20,380
85-89	35	659,519	18,843
90-94	10	184,485	18,449
95+	2	56,912	28,456
Total	5,232	\$ 145,263,123	\$ 27,764

## NUMBER OF DEFERRED VESTED AND THEIR BENEFITS BY AGE

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 35	54	\$ 393,599	\$ 7,289
35-39	308	2,726,524	8,852
40-44	677	7,034,931	10,391
45-49	1,092	12,277,166	11,243
50-54	1,406	16,641,332	11,836
55-59	1,532	18,979,234	12,389
60-64	467	6,068,545	12,995
65+	67	946,021	14,120
Total	5,603	\$ 65,067,352	\$ 11,613



## SCHEDULE J

## 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%	19.53%
New Plan	3.79%	28.06%
GSEPS	2.17%	23.44%

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%	19.53%
New Plan	0.06%	24.33%
GSEPS	0.08%	21.35%

Group that has Age 55 Retirement:

Special Investigators Department of Revenue #474

PLAN	Additional Rate	Total Rate
New Plan	3.73%	28.00%
GSEPS	2.09%	23.36%

Appellate Court Judges: Total rate equal to 49.90% of payroll

Group with Debt Repayment Schedule:

Tax Commissioners and Employees

Additional Flat Amount Due = \$615,943 annually



## <u>SCHEDULE K</u>

# CAFR SCHEDULES

			GA ERS: So	olvency Test			
	Actua	rial Accrued Liat	bility for:				
Actuarial			Active Members				
Valuation	Active Member Retirants & (Employer Portion of Age						Accrued
as of 6/30	Contributions	Beneficiaries	Funded Portion)	Valuation Assets	Liabiliti	ties Covered by Assets	
	(1)	(2)	(3)	_	(1)	(2)	(3)
2014	\$385,058	\$12,108,737	\$4,498,168	\$12,376,120	100%	99.0%	0.0%
2013	405,841	11,935,364	4,641,244	12,129,803 *	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%

 $^{\ast}$  This amount has been adjusted since the previous valuation to reflect the KPMG audit report.

	Added to Rolls		Removed from Rolls		Roll End of Year			
		Annual Allowances		Annual Allowances		Annual Allowances	% Increase in Annual	Average Annual
Year Ended	Number	(in thousands)	Number	(in thousands)	Number	(in thousands)	Allowances	Allowances
June 30, 2014	2,440	\$51,178	1,059	\$22,997	45,729	\$1,288,882	2.2%	\$28,185
June 30, 2013	3,664	88,855	1,176	26,334	44,348	1,260,701	5.2%	28,427
June 30, 2012	2,956	71,464	1,305	27,696	41,860	1,198,180	3.8%	28,624
June 30, 2011	2,797	69,031	1,170	25,347	40,209	1,154,412	3.9%	28,710
June 30, 2010	2,665	70,383	1,051	22,413	38,582	1,110,728	4.5%	28,789
June 30, 2009	2,444	85,329	1,055	20,194	36,968	1,062,758	6.5%	28,748
June 30, 2008	2,422	82,644	1,017	21,299	35,579	997,623	6.6%	28,040
June 30, 2007	2,410	114,719	1,075	20,598	34,174	936,278	11.2%	27,397
June 30, 2006	2,338	84,982	854	16,270	32,839	842,157	8.9%	25,645