



# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

April 18, 2013

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

Dear Mr. Potvin:

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

The valuation indicates that no employer contribution for the fiscal year ending June 30, 2015 is required to support the benefits of the System.

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

Sincerely yours,

Edward A. Macdonald, ASA, FCA, MAAA  
President

Cathy Turcot  
Principal and Managing Director

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

Enclosure

S:\Georgia Legislative\Pension\Valuation\2012\Valuation GA LRS DRAFT 3-18-13.docx

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Phone (678) 388-1700 • Fax (678) 388-1730

[www.CavMacConsulting.com](http://www.CavMacConsulting.com)

Offices in Englewood, CO • Kennesaw, GA • Bellevue, NE • Hilton Head Island, SC



**Cavanaugh Macdonald**  
CONSULTING, LLC

*The experience and dedication you deserve*



**EMPLOYEES'**  
**RETIREMENT SYSTEM**  
OF GEORGIA

**GEORGIA LEGISLATIVE RETIREMENT SYSTEM**

**REPORT OF THE ACTUARY ON THE VALUATION  
PREPARED AS OF JUNE 30, 2012**





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

April 18, 2013

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

Attention: Mr. James Potvin, Executive Director

Members of the Board:

Section 47-6-22 of the law governing the operation of the Georgia Legislative Retirement System provides that the actuary shall make periodic valuations of the contingent assets and liabilities of the Retirement System on the basis of regular interest and the tables last adopted by the Board of Trustees. We have submitted the report giving the results of the actuarial valuation of the System prepared as of June 30, 2012. The report indicates that no annual employer contributions for the fiscal year ending June 30, 2015 are required to support the benefits of the System.

Since the previous valuation, the one-time 1.75% increase on members' allowances made at retirement has been discontinued for all members who retire on or after July 1, 2013. In addition, the results of the valuation reflect that the Board did not grant the anticipated cost-of-living increases (COLAs) to retired members July 1, 2012 and January 1, 2013.

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 2012 session of the General Assembly.

The System is funded on an actuarial reserve basis. The actuarial assumptions recommended by the actuary and adopted by the Board are in the aggregate reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System. The assumptions and methods used for funding purposes meet the parameters set for the disclosures presented in the financial section by Governmental Accounting Standards Board (GASB) Statement Nos. 25 and 27. The funding objective of the plan is that contribution rates over time will remain level as a dollar per active member. 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 dollar per active member. Gains and losses are reflected in the unfunded accrued liability which is negative and being amortized as a level dollar per active member.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Phone (678) 388-1700 • Fax (678) 388-1730

[www.CavMacConsulting.com](http://www.CavMacConsulting.com)

Offices in Englewood, CO • Kennesaw, GA • Bellevue, NE • Hilton Head Island, SC



April 18, 2013  
Board of Trustees  
Page 2

The System is being funded in conformity with the minimum funding standard set forth in Code Section 47-20-10 of the Public Retirement Systems Standards Law. In our opinion the System is operating on an actuarially sound basis. Assuming that contributions to the System are made by the employer from year to year in the future at the rates recommended on the basis of the successive actuarial 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 retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'Edward Macdonald', with a stylized, cursive script.

Edward A. Macdonald, ASA, FCA, MAAA  
President

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

Cathy Turcot  
Principal and Managing Director

A handwritten signature in blue ink, appearing to read 'Edward J. Koebel', with a cursive script.

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



## TABLE OF CONTENTS

<u>Section</u>	<u>Item</u>	<u>Page No.</u>
I	Summary of Principal Results	1
II	Membership	2
III	Assets	3
IV	Comments on Valuation	4
V	Contributions Payable by Employers	5
VI	Accounting Information	6
VII	Experience	9
 <u>Schedule</u>		
A	Valuation Balance Sheet	10
B	Development of the Actuarial Value of Assets	11
C	Summary of Receipts and Disbursements	12
D	Outline of Actuarial Assumptions and Methods	13
E	Actuarial Cost Method	15
F	Summary of Main Plan Provisions as Interpreted for Valuation Purposes	16
G	Tables of Membership Data	18



**GEORGIA LEGISLATIVE RETIREMENT SYSTEM  
REPORT OF THE ACTUARY  
ON THE VALUATION  
PREPARED AS OF JUNE 30, 2012**

**SECTION I - SUMMARY OF PRINCIPAL RESULTS**

1. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below:

Valuation Date	June 30, 2012	June 30, 2011
Number of active members	220	218
Retired members and beneficiaries:		
Number	243	244
Annual allowances	\$ 1,773,960	\$ 1,789,758
Deferred Vested Members:		
Number	72	76
Annual allowances	\$ 361,400	\$ 384,294
Assets:		
Market Value	\$ 27,438,000	\$ 28,483,000
Actuarial Value	28,990,000	29,278,000
Unfunded actuarial accrued liability	\$ (4,024,398)	\$ (4,033,225)
Amortization period (years)	N/A*	N/A*
Funded Ratio	116.1%	116.0%
<b>For Fiscal Year Ending</b>	<b>June 30, 2015</b>	<b>June 30, 2014</b>
Total Normal Cost**	\$ 447,269	\$ 456,339
Less Member Contributions	<u>324,289</u>	<u>321,341</u>
Employer Paid Normal Cost**	\$ 122,980	\$ 134,998
Annual Required Employer Contribution Rates (ARC):		
Normal**	\$ 122,980	\$ 134,998
Accrued liability	<u>(122,980)</u>	<u>(134,998)</u>
Total	\$ 0	\$ 0
Employer contribution rate per active member:		
Normal**	\$ 559.00	\$ 619.26
Accrued liability	<u>(559.00)</u>	<u>(619.26)</u>
Total	\$ 0.00	\$ 0.00

\* If the annual required employer contribution (ARC) is based on 30 year amortization of the unfunded accrued liability as of June 30, 2012 and June 30, 2011, the ARC is less than \$0, which is not allowed under GASB 25/27. Therefore, the accrued liability contribution has been set to such that the total ARC equals \$0.

\*\* Estimated budgeted administrative expenses are included in the normal contribution.



2. The valuation takes into account the effect of amendments of the System enacted through the 2012 session of the General Assembly. The major benefit and contribution provisions of the System as reflected in the valuation are summarized in Schedule F. Since the previous valuation, the one-time 1.75% increase on members' allowances made at retirement has been discontinued for all members who retire on or after July 1, 2013. The valuation reflects that the Board did not grant the anticipated cost-of-living increases July 1, 2012 and January 1, 2013.
3. No changes have been made to the assumptions since the previous valuation. Schedule D of this report outlines the full set of actuarial assumptions and methods used to prepare the current valuation.
4. The entry age actuarial cost method was used to prepare the valuation. Schedule E contains a brief description of this method.
5. Comments on the valuation results as of June 30, 2012 are given in Section IV, and further discussion of the contributions is set out in Section V.

## **SECTION II - MEMBERSHIP**

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The valuation included 220 active members.
2. Data was provided by the Retirement System for inactive members who are eligible for deferred vested benefits. The valuation included 72 deferred vested members with annual allowances totaling \$361,400. In addition, there are 77 inactive non-vested members included in the valuation entitled to a refund of member contributions.
3. The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2012, together with the amount of their annual allowances payable under the System as of that date.



**THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF  
RETIRED MEMBERS AND BENEFICIARIES ON THE ROLL  
AS OF JUNE 30, 2012**

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Service Retirements	184	\$ 1,337,233
Disability Retirements	0	0
Beneficiaries of Deceased Members	<u>59</u>	<u>436,727</u>
Total	243	\$ 1,773,960

**SECTION III - ASSETS**

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

(a) Annuity Savings Fund

The Annuity Savings Fund is the fund to which are credited all contributions made by members together with regular interest thereon. When a member retires, or if a death benefit allowance becomes payable to his beneficiary, his accumulated contributions are transferred from the Annuity Savings Fund to the Pension Accumulation Fund. The portion of the allowance which these contributions provide is then paid from the Pension Accumulation Fund. On June 30, 2012 the value of assets credited to the Annuity Savings Fund amounted to \$4,648,000.

(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 member-contributed portion of the allowance. On June 30, 2012 the market value of assets credited to the Pension Accumulation Fund amounted to \$22,790,000.





2. As of June 30, 2012 the total market value of assets amounted to \$27,438,000 as reported by the Auditor of the System. The actuarial value of assets used for the current valuation was \$28,990,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2012.
3. Schedule C shows receipts and disbursements of the System for the two years preceding the valuation date and a reconciliation of the fund balances at market value.

#### **SECTION IV – COMMENTS ON VALUATION**

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2012. The valuation was prepared in accordance with the actuarial assumptions and methods set forth in Schedule D and the actuarial cost method which is described in Schedule E.
2. The valuation balance sheet shows that the System has total prospective liabilities of \$26,549,488, of which \$19,200,351 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits, and \$7,349,137 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 \$28,990,000 as of June 30, 2012. The difference of (\$2,440,512) between the total liabilities and the total present assets represents the present value of contributions to be made in the future. Of this amount, \$1,679,113 is the present value of future contributions expected to be made by or on behalf of members, and the balance of (\$4,119,625) represents the present value of future contributions payable by the employers to the Pension Accumulation Fund.
3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that annual employer normal contributions at the rate of \$(61.90) per active member are required to provide the currently accruing benefits of the System.
4. Prospective normal contributions at the rate of \$(61.90) have a present value of \$(95,227). When this amount is subtracted from (\$4,119,625), which is the present value of the total future



contributions to be made by the employers, the result is a prospective unfunded actuarial accrued liability of (\$4,024,398).

**SECTION V – CONTRIBUTIONS PAYABLE BY EMPLOYERS**

1. The contributions of employers consist of a normal contribution and an accrued liability contribution as determined by actuarial valuation.
2. The normal contribution rate is calculated as the level dollar which, if applied to each 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. On the basis of the valuation, the normal contribution rate was determined to be \$(61.90) per active member, or \$(13,618) based on 220 active members as of June 30, 2012.
3. An additional contribution of \$136,598, or \$620.90 per active member, is required for administrative expenses for the fiscal year ending June 30, 2015.
4. The total normal contribution including administrative expenses is, therefore, \$122,980, or \$559.00 per active member.
5. The annual accrued liability contribution determined by the June 30, 2012 valuation is (\$122,980), or (\$559.00) per active member.
6. The following table summarizes the employer contribution rates which were determined by the June 30, 2012 valuation and are recommended for use.

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

<b>CONTRIBUTION</b>	<b>PER ACTIVE MEMBER</b>	<b>ANNUAL AMOUNT</b>
Normal	\$ 559.00	\$ 122,980
Accrued Liability	<u>(559.00)</u>	<u>(122,980)</u>
Total	\$ 0.00	\$ 0



**SECTION VI – ACCOUNTING INFORMATION**

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED MEMBERS  
AS OF JUNE 30, 2012**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	243
Terminated employees entitled to benefits but not yet receiving benefits	149
Active plan members	<u>220</u>
Total	612

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

**SCHEDULE OF FUNDING PROGRESS**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age* (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2007*	\$ 30,049,000	\$ 24,357,156	\$ (5,691,845)	123.4%	\$ 3,688,131	(154.3)%
6/30/2008	30,706,000	24,453,929	(6,252,071)	125.6	3,778,686	(165.5)
6/30/2009	30,303,000	23,522,533	(6,780,467)	128.8	3,780,487	(179.4)
6/30/2010	29,581,000	25,002,906	(4,578,094)	118.3	3,745,803	(122.2)
6/30/2011	29,278,000	25,244,775	(4,033,225)	116.0	3,780,486	(106.7)
6/30/2012	28,990,000	24,965,602	(4,024,398)	116.1	3,815,170	(105.5)

\*Reflects increase in benefit accrual rate from \$32 to \$36.



3. The following shows the schedule of employer contributions.

<u>Year Ending</u>	<u>Annual Required Contribution</u>	<u>Amount Contributed</u>	<u>Percentage Contributed</u>
6/30/2007	\$ 0	\$ 62,000	N/A
6/30/2008	0	73,000	N/A
6/30/2009	0	71,000	N/A
6/30/2010	0	75,000	N/A
6/30/2011	0	75,000	N/A
6/30/2012	0	76,000	N/A

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2012. Since LRS is a cost sharing multiple employer pension plan, GASB 27 does not require the participating employers to disclose this information.

**Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2012**

(a) Employer annual required contribution	\$	0
(b) Interest on net pension obligation		(61,000)
(c) Adjustment to annual required contribution		<u>(69,000)</u>
(d) Annual pension cost (a) + (b) – (c)	\$	8,000
(e) Employer contributions made for fiscal year ending 6/30/2012		<u>76,000</u>
(f) Increase (decrease) in net pension obligation (d) – (e)	\$	(68,000)
(g) Net pension obligation beginning of fiscal year		<u>(817,000)</u>
(h) Net pension obligation end of fiscal year (f) + (g)	\$	(885,000)

**TREND INFORMATION**

<u>Year Ending</u>	<u>Annual Pension Cost (APC)</u>	<u>Percentage of APC Contributed</u>	<u>Net Pension Obligation</u>
June 30, 2010	\$ 7,000	1,071%	\$ (749,000)
June 30, 2011	7,000	1,071	(817,000)
June 30, 2012	8,000	950	(885,000)



5. The annual required contribution (ARC) of the employer in dollars, determined in accordance with the parameters of GASB 25/27 is shown below. If the accrued liability contribution is based on amortization of the unfunded accrued liability of (\$4,024,398) over a 30-year period from the valuation date, the total employer ARC would be less than \$0, which is not allowed under GASB 25/27. Therefore, the accrued liability contribution has been set such that the total ARC equals \$0.

**2014/2015 FISCAL YEAR  
ANNUAL REQUIRED CONTRIBUTION (ARC)  
BASED ON THE VALUATION AS OF JUNE 30, 2012**

ANNUAL REQUIRED CONTRIBUTION (ARC)	AMOUNT
Normal	\$ 122,980
Accrued Liability	<u>(122,980)</u>
Total	\$ 0

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

Valuation date	6/30/2012
Actuarial cost method	Entry age
Amortization method	Level dollar, open
Remaining amortization period	N/A*
Asset valuation method	7-year smoothed market
Actuarial assumptions:	
Investment rate of return**	7.50%
Projected salary increases**	N/A
Cost-of-living adjustments	3.00% Annually
**Includes inflation at	3.00%

\*If the annual required employer contribution (ARC) is based on 30 year amortization of the unfunded accrued liability, the ARC is less than \$0, which is not allowed under GASB 25/27. Therefore, the accrued liability contribution has been set to such that the total ARC equals \$0.



## SECTION VII – EXPERIENCE

1. Section 47-6-22 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 assumptions and methods were revised and 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 \$8,827 in the unfunded accrued liability from (\$4,033,225) to (\$4,024,398) during the fiscal year ending June 30, 2012.

### ANALYSIS OF THE INCREASE IN UNFUNDED ACCRUED LIABILITY

(in thousands of dollars)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	\$ (302.5)
Accrued liability contribution	33.9
Experience:	
Valuation asset growth	829.0
Pensioners' mortality	19.1
Turnover and retirements	(84.3)
New entrants	16.9
Method changes	0.0
Amendments	(81.1)
No 7/1/12, 1/1/13 COLAs	(468.6)
Assumption changes	0.0
Miscellaneous changes	<u>46.4</u>
Total	\$ 8.8



**SCHEDULE A**

**VALUATION BALANCE SHEET  
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF  
THE GEORGIA LEGISLATIVE RETIREMENT SYSTEM  
AS OF JUNE 30, 2012**

<b>ACTUARIAL LIABILITIES</b>		
(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	\$ 12,323,572
	- Death and survivor benefits	3,181,633
	- Deferred vested benefits	<u>3,695,146</u>
	Total	\$ 19,200,351
(2)	Present value of prospective benefits payable on account of present active members	<u>7,349,137</u>
(3)	TOTAL ACTUARIAL LIABILITIES	<u>\$ 26,549,488</u>
<b>PRESENT AND PROSPECTIVE ASSETS</b>		
(4)	Actuarial value of assets	\$ 28,990,000
(5)	Present value of total future contributions = (3)-(4)	\$ (2,440,512)
(6)	Present value of future member contributions	1,679,113
(7)	Present value of future employer contributions = (5)-(6)	\$ (4,119,625)
(8)	Prospective normal contributions	(95,227)
(9)	Prospective unfunded actuarial accrued liability contributions = (7)-(8)	<u>(4,024,398)</u>
(10)	TOTAL PRESENT AND PROSPECTIVE ASSETS	<u>\$ 26,549,488</u>



**SCHEDULE B**

**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS**

(1)	Actuarial Value Beginning of Year	\$	29,278,000
(2)	Market Value End of Year	\$	27,438,000
(3)	Market Value Beginning of Year	\$	28,483,000
(4)	Cash Flow		
	(a) Contributions	\$	399,000
	(b) Benefit Payments and Expenses		<u>(1,994,000)</u>
	(c) Net: (4)(a) + (4)(b)	\$	(1,595,000)
(5)	Investment Income		
	(a) Market Total: (2) – (3) – (4)(c)	\$	550,000
	(b) Assumed Rate		7.50%
	(c) Amount for Immediate Recognition: [(3) x (5)(b)] + [(4)(c) x (5)(b) x 0.5]	\$	2,076,000
	(d) Amount for Phased-In Recognition: (5)(a) – (5)(c)		(1,526,000)
(6)	Phased-In Recognition of Investment Income		
	(a) Current Year: (5)(d) / 7	\$	(218,000)
	(b) First Prior Year		484,000
	(c) Second Prior Year		127,000
	(d) Third Prior Year		(840,000)
	(e) Fourth Prior Year		(477,000)
	(f) Fifth Prior Year		302,000
	(g) Sixth Prior Year		<u>(147,000)</u>
	(h) Total Recognized Investment Gain	\$	(769,000)
(7)	Actuarial Value End of Year: (1) + (4)(c) + (5)(c) + (6)(h)	\$	28,990,000
(8)	Difference Between Market & Actuarial Values: (2) – (7)	\$	(1,552,000)
(9)	Rate of Return on Actuarial Value		4.59%





**SCHEDULE C**

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

	YEAR ENDING	
	June 30, 2012 (\$1,000's)	June 30, 2011 (\$1,000's)
<u>Receipts for the Year</u>		
Contributions:		
Members	\$ 323	\$ 320
Employer	<u>76</u>	<u>75</u>
Subtotal	\$ 399	\$ 395
Investment Earnings	550	5,194
Administrative Expense Allotment	<u>0</u>	<u>0</u>
TOTAL	\$ 949	\$ 5,589
<u>Disbursements for the Year</u>		
Benefit Payments	\$ 1,810	\$ 1,761
Refunds to Members	74	60
Administrative Expenses	<u>110</u>	<u>131</u>
TOTAL	\$ 1,994	\$ 1,952
<u>Excess of Receipts over Disbursements</u>	\$ (1,045)	\$ 3,637
<u>Reconciliation of Asset Balances</u>		
Asset Balance as of the Beginning of Year	\$ 28,483	\$ 24,846
Excess of Receipts over Disbursements	<u>(1,045)</u>	<u>3,637</u>
Asset Balance as of the End of Year	\$ <u>27,438</u>	\$ <u>28,483</u>
Rate of Return	1.99%	21.58%



**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:** None.

**SEPARATIONS BEFORE SERVICE RETIREMENT:** Representative values of the assumed annual rates of separation before service retirement are as follows:

Age	Annual Rates of			
	Withdrawal	Death		Disability
		Men	Women	
20	6.0%	.035%	.019%	.1%
25	6.0	.038	.021	.1
30	6.0	.044	.026	.2
35	6.0	.077	.048	.3
40	6.0	.108	.071	.4
45	7.5	.151	.112	.7
50	8.5	.214	.168	1.0
55	10.0	.362	.272	1.8
60	10.0	.675	.506	2.9
65	10.0	1.274	.971	-

**SERVICE RETIREMENT:** The assumed annual rates of retirement are shown below:

Age	Annual Rate	Age	Annual Rate
60-69	10%	73	25%
70	35%	74	40%
71	15%	75	100%
72	15%		

**DEATHS AFTER RETIREMENT:** The RP-2000 Combined Mortality Table is used for the period after retirement and for dependent beneficiaries. For the period after disability retirement, the RP-2000 Disabled Mortality Table set back 11 years for males is used. Representative values of the assumed annual rates of mortality after service retirement are as follows:

Age	Men	Women	Age	Men	Women
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 for the fiscal year are added to the normal cost.

**AMORTIZATION METHOD:** Level dollar amortization.

**ASSET METHOD:** The actuarial value of assets, 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 value of assets, based on the assumed valuation rate of return. The amount recognized each year is 1/7 of the difference between market value and expected market value.

**COST-OF-LIVING ALLOWANCE (COLA):** 1.5% semi-annually.

**PERCENT MARRIED:** 90% of active members are assumed to be married with the male three years older than his spouse.

**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 member's expected benefits at retirement or death is determined, based on age, service and sex. 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. 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, beneficiaries and members entitled to deferred vested benefits 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 unfunded actuarial accrued liability contribution.
3. The normal contribution is determined using the entry age actuarial cost method. Under this method, a calculation is made to determine the level amount which, if applied for the average 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 actuarial accrued liability contributions are determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets, from the present value of expected benefits to be paid from the System.



## **SCHEDULE F**

### **SUMMARY OF MAIN SYSTEM PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES**

The Georgia Legislative Retirement System (LRS) is a cost-sharing multiple employer defined benefit pension plan established by the Georgia General Assembly in 1979 for the purpose of providing retirement allowances and other benefits for all members of the Georgia General Assembly.

#### Normal Retirement Benefit

Eligibility	Age 65 and 8 years of creditable service or age 62 and 8 years of membership service (for eligible purposes, 4 legislative terms are equivalent to 8 years of membership service).
Benefit	Monthly benefit is \$36 multiplied by years of creditable service. For members with retirement dates prior to July 1, 2013, a one-time 1.75% increase is made at time of retirement.

#### Early Retirement Benefit

Eligibility	Age 60 and 8 years of membership service.
Benefit	Accrued benefit reduced by 5% for each year member is under age 62.

#### Disability Retirement Benefit

No special benefit. Benefit is same as early or normal retirement.

#### Involuntary Retirement Benefit

N/A

#### Deferred Vested Retirement Benefit

Eligibility	8 years of creditable service. Member contributions not withdrawn.
Benefit	Accrued benefit deferred to age 65 or reduced benefit payable at age 60.

#### Death Benefit

Eligibility	If less than 15 years of creditable service, a refund of accumulated contributions. If at least 15 years of creditable service or eligible for retirement, the benefit below.
Benefit	Benefit equal to retirement benefit immediately prior to death under 100% joint and survivorship option.

#### Termination Benefit

Eligibility	Termination with less than 8 years of creditable service.
Benefit	Return of the member's accumulated contributions.



Payment Options

- (1) Life annuity. Guaranteed payment of accumulated member contributions.
- (2) 100% joint and survivorship annuity.
- (3) 50% joint and survivorship annuity.

Post-Retirement Adjustments

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

Contributions

By Members

Members contribute 8 ½ % of salary.

By Employers

Employer contributions are actuarially determined and approved and certified by the Board to the legislative fiscal officer.



**SCHEDULE G**

**NUMBER OF ACTIVE MEMBERS  
BY AGE AND SERVICE AS OF JUNE 30, 2012**

Attained Age	Years of Service									Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	1	0	0	0	0	0	0	0	1
30 to 34	1	7	1	0	0	0	0	0	0	9
35 to 39	0	13	3	0	0	0	0	0	0	16
40 to 44	3	8	14	1	0	0	0	0	0	26
45 to 49	1	6	7	6	1	0	0	0	0	21
50 to 54	2	7	17	3	5	0	0	0	0	34
55 to 59	4	7	13	5	4	1	0	0	0	34
60 to 64	0	11	12	3	4	2	1	2	0	35
65 to 69	0	3	7	2	4	2	1	2	1	22
70 & Up	0	3	4	7	6	1	1	0	0	22
Total	11	66	78	27	24	6	3	4	1	220

Average Age: 54.2  
Average Service: 9.0



**SCHEDULE G**  
**(Continued)**

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

<b>Age</b>	<b>Number of Members</b>	<b>Total Annual Benefits</b>	<b>Average Annual Benefits</b>
Under 50	0	\$ 0	\$ 0
50 - 54	0	0	0
55 - 59	0	0	0
60 - 64	8	46,555	5,819
65 - 69	46	271,420	5,900
70 - 74	42	263,792	6,281
75 - 79	32	228,726	7,148
80 - 84	24	202,957	8,457
85 - 89	24	227,290	9,470
90 - 94	8	96,493	12,062
95 & Over	0	0	0
Total	184	\$ 1,337,233	\$ 7,268

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

<b>Age</b>	<b>Number of Members</b>	<b>Total Annual Benefits</b>	<b>Average Annual Benefits</b>
Under 50	3	\$ 11,049	\$ 3,683
50 - 54	1	5,100	5,100
55 - 59	1	7,161	7,161
60 - 64	3	10,115	3,372
65 - 69	7	23,124	3,303
70 - 74	6	48,104	8,017
75 - 79	8	38,607	4,826
80 - 84	15	129,081	8,605
85 - 89	9	104,884	11,654
90 - 94	4	42,344	10,586
95 & Over	2	17,158	8,579
Total	59	\$ 436,727	\$ 7,402





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

<b>Age</b>	<b>Number of Members</b>	<b>Total Annual Benefits</b>	<b>Average Annual Benefits</b>
Under 45	4	\$ 17,280	\$ 4,320
45-49	3	12,096	4,032
50-54	16	79,270	4,954
55-59	27	140,724	5,212
60-64	18	85,642	4,758
65-69	3	22,896	7,632
70-74	1	3,492	3,492
75-79	0	0	0
80 & Over	0	0	0
Total	72	\$ 361,400	\$ 5,019