



# Cavanaugh Macdonald

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April 10, 2012

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

Dear Mr Potvin:

Enclosed is a copy of the "Georgia Public School Employees Retirement System Report of the Actuary on the Valuation Prepared as of June 30, 2011".

Based on a monthly benefit accrual rate of \$14.75, the valuation indicates that employer contributions for the fiscal year ending June 30, 2014 of \$27,160,000 or \$692.00 per active member are sufficient 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

EAM:mjn

Enclosure

S:\Georgia Public Schools\Valuations\6-30-2011\PSERS 06-30-11 Valuation Report 04-10-2012.FINAL

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**EMPLOYEES'  
RETIREMENT SYSTEM  
OF GEORGIA**

**GEORGIA PUBLIC SCHOOL EMPLOYEES  
RETIREMENT SYSTEM**

**REPORT OF THE ACTUARY ON THE VALUATION  
PREPARED AS OF JUNE 30, 2011**





# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

April 10, 2012

Board of Trustees  
Georgia Public School Employees Retirement System  
Two Northside 75, Suite 300  
Atlanta, GA 30318

Attention: James A. Potvin, Executive Director

Members of the Board:

Section 47-4-60 of the law governing the operation of the Georgia Public School Employees Retirement System provides that the employer contribution shall be actuarially determined and approved 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, 2011. Based on a monthly benefit accrual rate of \$14.75, the valuation indicates that annual employer contributions of \$27,160,000 or \$692.00 per active member for the fiscal year ending June 30, 2014 are sufficient to support the benefits of the System.

The results of the valuation reflect that the Board did not grant the anticipated cost-of-living increases (COLAs) to retired members July 1, 2011 and January 1, 2012.

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 2011 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 dollar per active member. Gains and losses are reflected in the unfunded accrued liability which is being amortized as a level dollar per active member within a 30-year period.

The System is currently 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 currently 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.

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April 10, 2012  
Board of Trustees  
Page 2

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', written in a cursive style.

Edward A. Macdonald, ASA, FCA, MAAA  
President

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

Cathy Turcot  
Principal and Managing Director

EAM:mjn



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**GEORGIA PUBLIC SCHOOL EMPLOYEES RETIREMENT SYSTEM  
REPORT OF THE ACTUARY  
ON THE VALUATION  
PREPARED AS OF JUNE 30, 2011**

**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, 2011	June 30, 2010
Number of active members	39,249	39,962
Retired members and beneficiaries:		
Number	14,600	14,157
Annual allowances	\$ 53,758,977	\$ 53,662,860
Deferred Vested Members:		
Number	3,565	3,468
Annual allowances	\$ 9,234,438	\$ 8,961,815
Assets:		
Market Value	\$ 696,096,000	\$ 615,333,000
Actuarial Value	719,601,000	737,406,000
Unfunded actuarial accrued liability	\$ 166,325,823	\$ 137,990,093
Amortization period (years)	30	30
Funded Ratio	81.2%	84.2%
<b>For Fiscal Year Ending</b>	<b>June 30, 2014</b>	<b>June 30, 2013</b>
Employer contribution rate per active member:		
Normal <sup>1</sup>	\$ 333.19	\$ 328.93
Accrued liability	358.81	292.38
Total	\$ 692.00	\$ 621.31
Annual Required Employer Contribution (ARC):		
Normal <sup>1</sup>	\$ 13,077,000	\$ 13,145,000
Accrued liability	14,083,000	11,684,000
Total	\$ 27,160,000	\$ 24,829,000

<sup>1</sup> The normal contribution includes administrative expenses.



2. The valuation takes into account the effect of amendments of the System enacted through the 2011 session of the General Assembly. The major benefit and contribution provisions of the System as reflected in the valuation are summarized in Schedule F. The valuation reflects that the Board did not grant the anticipated cost-of-living increases July 1, 2011 and January 1, 2012.
3. Schedule D of this report outlines the full set of actuarial assumptions used to prepare the current valuation. There have been no changes since the previous valuation.
4. The entry age actuarial cost method was used to prepare the valuation. Schedule E contains a brief description of this method.
5. Comments on the valuation results as of June 30, 2011 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 39,249 active members.
2. For the June 30, 2011 valuation, data was provided by the Retirement System for inactive members who are eligible for deferred vested benefits. The valuation included 3,565 deferred vested members with annual allowances totaling \$9,234,438.
3. The following table shows the number of retired members and beneficiaries on the roll as of June 30, 2011, 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, 2011**

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES
Service Retirements	12,694	\$ 46,519,608
Disability Retirements	1,097	5,385,207
Beneficiaries of Deceased Members	<u>809</u>	<u>1,854,162</u>
Total	14,600	\$ 53,758,977





### **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, 2011 the value of assets credited to the Annuity Savings Fund amounted to \$24,719,000.

(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, 2011 the market value of assets credited to the Pension Accumulation Fund amounted to \$671,377,000.

2. As of June 30, 2011 the total market value of assets amounted to \$696,096,000 as reported by the Auditor of the System. The actuarial value of assets used for the current valuation was \$719,601,000. Schedule B shows the development of the actuarial value of assets as of June 30, 2011.

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, 2011. 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 \$946,773,695, of which \$532,509,247 is for the prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits, and \$414,264,448 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 \$719,601,000 as of June 30, 2011. The difference of \$227,172,695 between the total liabilities and the total present assets represents the present value of contributions to be made in the future. Of this amount, \$7,386,300 is the present value of future contributions expected to be made by or on behalf of members, and the balance of \$219,786,395 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 \$274.84 per active member are required to provide the currently accruing benefits of the System. An additional \$58.35 per active member is required to fund the administrative expenses of the System.
4. Prospective normal contributions (net of expenses) have a present value of \$53,460,572. When this amount is subtracted from \$219,786,395, 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 \$166,325,823.



**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 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. On the basis of the valuation, the normal contribution rate was determined to be \$274.84 per active member, or \$10,787,000 based on 39,249 active members as of June 30, 2011. An additional \$2,290,000, or \$58.35 per active member, is required to fund the administrative expenses of the System
3. The accrued liability contribution is the level annual amount which will be sufficient to amortize the unfunded actuarial accrued liability within 30 years following the valuation date. The annual accrued liability contribution determined on this basis by the June 30, 2011 valuation is \$14,083,000, or \$358.81 per active member.
4. The following table summarizes the employer contribution rates which were determined by the June 30, 2011 valuation and are recommended for use.

**ANNUAL REQUIRED EMPLOYER CONTRIBUTION (ARC)  
FOR FISCAL YEAR ENDING JUNE 30, 2014**

<b>CONTRIBUTION</b>	<b>PER ACTIVE MEMBER</b>	<b>ANNUAL AMOUNT</b>
Normal	\$ 333.19	\$ 13,077,000
Accrued Liability	<u>358.81</u>	<u>14,083,000</u>
Total	\$ 692.00	\$ 27,160,000

5. Schedule H shows the allocation of the annual required contribution for fiscal year ending June 30, 2014 by school system.



**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, 2011**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	14,600
Terminated employees entitled to benefits but not yet receiving benefits	72,508
Active plan members	<u>39,249</u>
Total	126,357

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

**SCHEDULE OF FUNDING PROGRESS**  
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2006	\$ 766,277	\$ 691,651	\$ (74,626)	110.8%	N/A	N/A
6/30/2007*	785,460	746,078	(39,382)	105.3	N/A	N/A
6/30/2008	791,855	770,950	(20,905)	102.7	N/A	N/A
6/30/2009	769,618	823,232	53,614	93.5	N/A	N/A
6/30/2010	737,406	875,396	137,990	84.2	N/A	N/A
6/30/2011	719,601	885,927	166,326	81.2	N/A	N/A

\*Reflects increase in benefit accrual rate to \$14.75.



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

<u>Year Ending</u>	<u>Annual Required Contribution</u>	<u>Percentage Contributed</u>
6/30/2006	\$ 3,634	100%
6/30/2007	6,484	100
6/30/2008	2,866	100
6/30/2009	5,529	100
6/30/2010	5,529	100
6/30/2011	7,509	100

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2011. Since PSERS is a cost sharing multiple employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

**Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2011**

(a)	Employer annual required contribution	\$ 7,509,000
(b)	Interest on net pension obligation	(1,103,000)
(c)	Adjustment to annual required contribution	<u>(2,142,000)</u>
(d)	Annual pension cost (a) + (b) – (c)	\$ 8,548,000
(e)	Employer contributions made for fiscal year ending 06/30/11	<u>7,509,000</u>
(f)	Increase (decrease) in net pension obligation (d) – (e)	\$ 1,039,000
(g)	Net pension obligation beginning of fiscal year	<u>(14,701,000)</u>
(h)	Net pension obligation end of fiscal year (f) + (g)	\$ (13,662,000)

**TREND INFORMATION**  
(Dollar amounts in thousands)

<u>Year Ending</u>	<u>Annual Pension Cost (APC)</u>	<u>Percentage of APC Contributed</u>	<u>Net Pension Obligation</u>
June 30, 2009	\$ 5,890	94%	\$ (15,286)
June 30, 2010	6,115	90	(14,701)
June 30, 2011	8,548	88	(13,662)



5. The annual required contribution (ARC) of the employer in dollars, determined in accordance with the parameters of GASB 25/27 is shown below. The accrued liability rate is based on amortization of the unfunded accrued liability of \$166,325,823 within a 30-year period from the valuation date.

**2013/2014 FISCAL YEAR  
ANNUAL REQUIRED CONTRIBUTION (ARC)  
BASED ON THE VALUATION AS OF JUNE 30, 2011**

ANNUAL REQUIRED CONTRIBUTION (ARC)	AMOUNT
Normal	\$ 13,077,000
Accrued Liability	<u>14,083,000</u>
Total	\$ 27,160,000

6. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2011. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2011
Actuarial cost method	Entry age
Amortization method	Level dollar, open
Remaining amortization period	30 years
Asset valuation method	7-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.50%
Projected salary increases*	N/A
Cost-of-living adjustments	1.50% semi-annually
*Includes inflation at	3.00%



**SECTION VII – EXPERIENCE**

1. 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 \$28,335,730 in the unfunded accrued liability from \$137,990,093 to \$166,325,823 during the fiscal year ending June 30, 2011.

**ANALYSIS OF THE INCREASE IN UNFUNDED ACCRUED LIABILITY**  
(in thousands of dollars)

<b>ITEM</b>	<b>AMOUNT OF INCREASE/ (DECREASE)</b>
Interest (7.50%) added to previous unfunded accrued liability	\$ 10,349.3
Accrued liability contribution	4,022.8
Experience:	
Valuation asset growth	24,002.0
Pensioners' mortality	(3,000.5)
Turnover and retirements	3,403.6
New entrants	3,167.0
Method changes	0.0
Assumption changes	0.0
No 7/1/2011, 1/1/2012 COLAs	(16,603.6)
Expense Deficit	2,122.7
Miscellaneous	<u>872.4</u>
Total	\$ 28,335.7



**SCHEDULE A**

**VALUATION BALANCE SHEET  
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES OF  
THE GEORGIA PUBLIC SCHOOL EMPLOYEES RETIREMENT SYSTEM  
AS OF JUNE 30, 2011**

<b><u>ACTUARIAL LIABILITIES</u></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	\$ 449,659,072
-	Death and survivor benefits	18,280,085
-	Deferred vested benefits	<u>64,570,090</u>
	Total	\$ 532,509,247
(2)	Present value of prospective benefits payable on account of present active members	<u>414,264,448</u>
(3)	TOTAL ACTUARIAL LIABILITIES	<u>\$ 946,773,695</u>
<b><u>PRESENT AND PROSPECTIVE ASSETS</u></b>		
(4)	Actuarial value of assets	\$ 719,601,000
(5)	Present value of total future contributions = (3)-(4)	\$ 227,172,695
(6)	Present value of future member contributions	7,386,300
(7)	Present value of future employer contributions = (5)-(6)	\$ 219,786,395
(8)	Prospective normal contributions	53,460,572
(9)	Prospective unfunded actuarial accrued liability contributions = (7)-(8)	<u>166,325,823</u>
(10)	TOTAL PRESENT AND PROSPECTIVE ASSETS	<u>\$ 946,773,695</u>





**SCHEDULE B**

**DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS**

(1)	Actuarial Value Beginning of Year	\$ 737,406,000
(2)	Market Value End of Year	\$ 696,096,000
(3)	Market Value Beginning of Year	\$ 615,333,000
(4)	Cash Flow	
	(a) Contributions	\$ 8,960,000
	(b) Benefit Payments and Expenses	<u>(56,293,000)</u>
	(c) Net: (4)(a) + (4)(b)	\$ (47,333,000)
(5)	Investment Income	
	(a) Market Total: (2) – (3) – (4)(c)	\$ 128,096,000
	(b) Assumed Rate	7.50%
	(c) Amount for Immediate Recognition: [(3) x (5)(b)] + [(4)(c) x (5)(b) x 0.5]	\$ 44,375,000
	(d) Amount for Phased-In Recognition: (5)(a) - (5)(c)	83,721,000
(6)	Phased-In Recognition of Investment Income	
	(a) Current Year: (5)(d) / 7	\$ 11,960,000
	(b) First Prior Year	3,346,000
	(c) Second Prior Year	(21,566,000)
	(d) Third Prior Year	(12,324,000)
	(e) Fourth Prior Year	7,502,000
	(f) Fifth Prior Year	(3,765,000)
	(g) Sixth Prior Year	<u>0</u>
	(h) Total Recognized Investment Gain	\$ (14,847,000)
(7)	Actuarial Value End of Year: (1) + (4)(c) + (5)(c) + (6)(h)	\$ 719,601,000
(8)	Difference Between Market & Actuarial Values: (2) – (7)	\$ (23,505,000)
(9)	Rate of Return on Actuarial Value	4.14%



**SCHEDULE C**

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

<u>Receipts for the Year</u>	<b>YEAR ENDING</b>	
	<u>June 30, 2011</u> (\$1,000's)	<u>June 30, 2010</u> (\$1,000's)
Contributions:		
Members	\$ 1,451	\$ 1,483
Employer	<u>7,509</u>	<u>5,530</u>
Subtotal	\$ 8,960	\$ 7,013
Investment Earnings	128,096	66,404
Administrative Expense Allotment	<u>0</u>	<u>0</u>
<b>TOTAL</b>	<b>\$ 137,056</b>	<b>\$ 73,417</b>
<u>Disbursements for the Year</u>		
Benefit Payments	\$ 53,980	\$ 53,195
Refunds to Members	267	251
Administrative Expenses	<u>2,046</u>	<u>1,956</u>
<b>TOTAL</b>	<b>\$ 56,293</b>	<b>\$ 55,402</b>
<u>Excess of Receipts over Disbursements</u>	<b>\$ 80,763</b>	<b>\$ 18,015</b>
<u>Reconciliation of Asset Balances</u>		
Asset Balance as of the Beginning of Year	\$ 615,333	\$ 597,318
Excess of Receipts over Disbursements	<u>80,763</u>	<u>18,015</u>
Asset Balance as of the End of Year	<b>\$ 696,096</b>	<b>\$ 615,333</b>
Rate of Return	21.65%	11.59%



**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.

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

Age	Annual Rates of Withdrawal		
	Years of Service		
	<u>0-4</u>	<u>5-9</u>	<u>10 &amp; Over</u>
<b><u>Males</u></b>			
20	35.0%		
25	30.0	17.0%	
30	27.0	16.0	14.0%
35	24.0	14.0	9.0
40	21.0	12.0	7.0
45	20.0	11.0	6.5
50	18.0	11.0	6.5
55	15.0	9.0	6.0
60	13.0	9.0	
<b><u>Females</u></b>			
20	34.0%		
25	29.0	19.0%	
30	24.0	15.0	11.0%
35	20.0	13.0	10.0
40	17.0	12.0	8.0
45	16.0	10.0	7.0
50	14.0	9.0	6.5
55	12.0	8.0	6.0
60	11.0	7.0	



Age	Annual Rates of		Disability
	Death		
	Males	Females	
20	0.036%	0.019%	0.00%
25	0.038	0.021	0.00
30	0.050	0.026	0.00
35	0.084	0.048	0.00
40	0.114	0.071	0.01
45	0.162	0.112	0.04
50	0.245	0.168	0.09
55	0.420	0.272	0.23
60	0.778	0.506	0.35
65	1.441	0.971	0.00

**RETIREMENT:**

Age	Annual Rate	Age	Annual Rate
60	15%	68	25%
61	15	69	25
62	22	70	25
63	18	71	25
64	18	72	25
65	28	73	25
66	25	74	25
67	25	75 & Over	100

**DEATHS AFTER RETIREMENT:** The RP-2000 Combined Table set forward one year for males is used for the period after service retirement and for beneficiaries of deceased members. The RP-2000 Disabled Mortality Table set back 2 years for males and set forward one year for females is used for the period after disability retirement. Representative values of the assumed annual rates of mortality for service retirements and beneficiaries are as follows:

Age	Men	Women	Age	Men	Women
40	0.114%	0.071%	65	1.441%	0.971%
45	0.162	0.112	70	2.457	1.674
50	0.245	0.168	75	4.217	2.811
55	0.420	0.272	80	7.204	4.588
60	0.768	0.506	85	12.280	7.745



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

**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 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.

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

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

**TERMINATING VESTED MEMBERS:** 75% of active vested members who terminate are assumed to elect a refund in lieu of a benefit. Benefits are assumed to begin at age 65.



## **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 Public School Employees' Retirement System (PSERS) is a cost-sharing multiple employer defined benefit pension plan established by the Georgia General Assembly in 1969 for the purpose of providing retirement allowances and other benefits for public school employees who are not eligible for membership in the Teachers Retirement System of Georgia.

#### Normal Retirement Benefit

Eligibility	Age 65 and 10 years of creditable service.
Benefit	Monthly benefit is \$14.75 multiplied by years of creditable service. A one-time 1.75% increase is made at time of retirement.

#### Early Retirement Benefit

Eligibility	Age 60 and 10 years of creditable service.
Benefit	Accrued benefit reduced by 6% for each year member is under age 65.

#### Disability Retirement Benefit

Eligibility	15 years of creditable service.
Benefit	Accrued benefit payable immediately.

#### Deferred Vested Retirement Benefit

Eligibility	10 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	Death in service and the member is at least age 60 and has at least 10 years of creditable service.
Benefit	Benefit payable to beneficiary under the joint and survivor annuity payment option.

If the member dies in service under age 60 or with less than 10 years of creditable service his beneficiary receives a refund of the member's accumulated contributions.



Termination Benefit

Eligibility

Less than 10 years of creditable service.

Benefit

Return of the member's accumulated contributions.

Payment Options

(1) Life annuity. Guaranteed payment of accumulated member contributions.

(2) Joint and survivorship annuity.

(3) Certain and life annuity.

Post-Retirement Adjustments

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

Contributions

By Members

Members contribute \$4 per month.

By Employers

Employer contributions are actuarially determined and approved and certified by the Board.





**SCHEDULE G**

**NUMBER OF ACTIVE MEMBERS  
BY AGE AND SERVICE AS OF JUNE 30, 2011**

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	152	306	18	0	0	0	0	0	0	476
25 to 29	146	627	181	7	0	0	0	0	0	961
30 to 34	194	918	444	109	3	0	0	0	0	1,668
35 to 39	236	1,397	926	328	74	3	0	0	0	2,964
40 to 44	273	1,758	1,460	783	198	81	9	0	0	4,562
45 to 49	327	1,942	1,849	1,215	548	246	88	17	0	6,232
50 to 54	311	1,900	1,802	1,228	700	397	170	76	9	6,593
55 to 59	210	1,686	1,543	977	637	515	266	159	50	6,043
60 to 64	154	1,368	1,450	865	467	409	250	189	90	5,242
65 to 69	61	783	943	456	217	142	101	67	61	2,831
70 & Up	23	325	635	382	119	88	33	30	42	1,677
Total	2,087	13,010	11,251	6,350	2,963	1,881	917	538	252	39,249

Average Age: 51.7  
Average Service: 8.6



**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	1,078	2,692,065	2,497
65 – 69	2,624	8,031,036	3,061
70 – 74	3,003	10,446,849	3,479
75 – 79	2,569	9,976,067	3,883
80 – 84	1,836	7,877,442	4,291
85 – 89	1,040	4,811,779	4,627
90 – 94	422	2,097,508	4,970
95 & Over	122	586,862	4,810
Total	12,694	\$ 46,519,608	\$ 3,665

**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	121	\$ 171,654	\$ 1,419
50 – 54	57	101,373	1,778
55 – 59	67	140,264	2,093
60 – 64	61	119,687	1,962
65 – 69	92	206,337	2,243
70 – 74	118	283,529	2,403
75 – 79	99	265,959	2,686
80 – 84	99	280,026	2,829
85 – 89	56	177,729	3,174
90 – 94	23	70,209	3,053
95 & Over	16	37,395	2,337
Total	809	\$ 1,854,162	\$ 2,292



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

**NUMBER OF DISABLED RETIREES  
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	15	\$ 52,147	\$ 3,476
50 – 54	63	249,775	3,965
55 – 59	146	597,960	4,096
60 – 64	235	1,064,121	4,528
65 – 69	253	1,275,232	5,040
70 – 74	206	1,131,607	5,493
75 – 79	112	609,036	5,438
80 – 84	45	268,627	5,969
85 – 89	14	86,156	6,154
90 – 94	8	50,546	6,318
95 & Over	0	0	0
Total	1,097	\$ 5,385,207	\$ 4,909

**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 35	5	\$ 9,852	\$ 1,970
35 – 39	52	109,346	2,103
40 – 44	190	426,879	2,247
45 – 64	513	1,250,430	2,437
50 – 54	818	2,060,178	2,519
55 – 59	1,031	2,773,876	2,690
60 – 64	680	1,834,766	2,698
65 – 69	178	481,520	2,705
70 – 74	60	175,431	2,924
75 & Over	38	112,160	2,952
Total	3,565	\$ 9,234,438	\$ 2,590



**SCHEDULE H**

**ALLOCATION OF 2013-2014  
ANNUAL REQUIRED CONTRIBUTION BY SCHOOL SYSTEM**

<b>System Number</b>	<b>System Name</b>	<b>Contribution</b>
1	Appling	\$ 51,899
2	Atkinson	22,836
3	Bacon	27,680
4	Baker	6,920
5	Baldwin	96,187
6	Banks	60,895
7	Barrow	208,290
8	Bartow	258,113
9	Ben Hill	50,515
10	Berrien	40,828
11	Bibb	447,027
12	Bleckley	63,663
13	Brantley	73,351
14	Brooks	51,899
15	Bryan	108,643
16	Bulloch	217,286
17	Burke	105,875
18	Butts	89,959
19	Calhoun	17,992
20	Camden	155,006
21	Candler	37,368
22	Carroll	289,945
23	Catoosa	224,205
24	Charlton	37,368
25	Chatham	327,312
26	Chattahoochee	22,836
27	Chattooga	45,671
28	Cherokee	625,561
29	Clarke	312,088
30	Clay	8,996
31	Clayton	886,442
32	Clinch	19,376
33	Cobb	1,701,605
34	Coffee	130,787
35	Colquitt	175,074
36	Columbia	429,727
37	Cook	71,967
38	Coweta	469,863
39	Crawford	34,600



**SCHEDULE H**  
**(continued)**

**ALLOCATION OF 2013-2014**  
**ANNUAL REQUIRED CONTRIBUTION BY SCHOOL SYSTEM**

<b>System Number</b>	<b>System Name</b>	<b>Contribution</b>
40	Crisp	\$ 92,727
41	Dade	39,444
42	Dawson	67,123
43	Decatur	113,487
44	Dekalb	1,569,434
45	Dodge	69,199
46	Dooly	40,136
47	Dougherty	331,464
48	Douglas	478,859
49	Early	43,596
50	Echols	13,148
51	Effingham	189,606
52	Elbert	68,507
53	Emanuel	85,115
54	Evans	35,292
55	Fannin	66,431
56	Fayette	300,325
57	Floyd	167,462
58	Forsyth	609,645
59	Franklin	89,267
61	Gilmer	71,275
62	Glascok	13,840
63	Glynn	245,657
64	Gordon	110,027
65	Grady	78,887
66	Greene	43,596
67	Gwinnett	2,723,676
68	Habersham	142,550
69	Hall	469,863
70	Hancock	40,136
71	Haralson	60,203
72	Harris	90,651
73	Hart	76,811
74	Heard	39,444
75	Henry	617,257
76	Houston	499,618
77	Irwin	26,988
78	Jackson	144,626



**SCHEDULE H**  
**(continued)**

**ALLOCATION OF 2013-2014**  
**ANNUAL REQUIRED CONTRIBUTION BY SCHOOL SYSTEM**

<b>System Number</b>	<b>System Name</b>	<b>Contribution</b>
79	Jasper	\$ 49,823
80	Jeff Davis	57,435
81	Jefferson	70,583
82	Jenkins	30,448
83	Johnson	21,452
84	Jones	100,339
85	Lamar	58,819
86	Lanier	19,376
87	Laurens	124,559
88	Lee	124,559
89	Liberty	225,589
90	Lincoln	31,832
91	Long	54,667
92	Lowndes	204,138
93	Lumpkin	87,883
94	Macon	47,055
95	Madison	117,639
96	Marion	21,452
97	McDuffie	80,271
98	McIntosh	42,212
99	Meriwether	82,347
100	Miller	24,220
101	Mitchell	38,060
102	Monroe	105,875
103	Montgomery	22,144
104	Morgan	58,819
105	Murray	150,162
106	Muscogee	652,549
107	Newton	369,524
108	Oconee	135,630
109	Oglethorpe	46,363
110	Paulding	480,935
111	Peach	99,647
112	Pickens	99,647
113	Pierce	56,743
114	Pike	60,895
115	Polk	121,099
116	Pulaski	29,064
117	Putnam	78,887



**SCHEDULE H**  
**(continued)**

**ALLOCATION OF 2013-2014**  
**ANNUAL REQUIRED CONTRIBUTION BY SCHOOL SYSTEM**

<b>System Number</b>	<b>System Name</b>	<b>Contribution</b>
118	Quitman	\$ 6,228
119	Rabun	57,435
120	Randolph	31,832
121	Richmond	594,421
122	Rockdale	345,996
123	Schley	15,916
124	Screven	53,283
125	Seminole	31,832
126	Spalding	231,125
127	Stephens	106,567
128	Stewart	20,068
129	Sumter	119,023
130	Talbot	14,532
131	Taliaferro	7,612
132	Tattnell	67,815
133	Taylor	39,444
134	Telfair	31,140
135	Terrell	33,216
136	Thomas	80,271
137	Tift	100,339
138	Toombs	56,743
139	Towns	24,912
140	Treutlen	17,300
141	Troup	276,105
142	Turner	29,064
143	Twiggs	23,528
144	Union	65,047
145	Upton	103,107
146	Walker	202,754
147	Walton	240,121
148	Ware	111,411
149	Warren	20,760
150	Washington	53,975
151	Wayne	110,719
152	Webster	7,612
153	Wheeler	17,300
154	White	82,347
155	Whitfield	199,294
156	Wilcox	24,220



**SCHEDULE H**  
**(continued)**

**ALLOCATION OF 2013-2014**  
**ANNUAL REQUIRED CONTRIBUTION BY SCHOOL SYSTEM**

<b>System Number</b>	<b>System Name</b>	<b>Contribution</b>
157	Wilkes	\$ 42,904
158	Wilkinson	33,216
159	Worth	64,355
205	Bremen	21,452
206	Buford	40,136
207	Calhoun	31,832
209	Carrollton	76,119
210	Cartersville	44,979
212	Chickamauga	13,840
214	Commerce	28,372
216	Dalton	80,963
217	Decatur	40,136
219	Dublin	35,984
221	Gainesville	73,351
224	Jefferson	41,520
226	Marietta	128,019
230	Pelham	17,300
232	Rome	62,971
247	Social Circle	22,836
236	Thomasville	26,988
239	Trion	17,300
240	Valdosta	150,162
241	Vidalia	29,756
	Atlanta Metropolitan College	73,351
	Brighten Academy	692
	Charter Conservatory for L and T	692
	DeKalb Technical College	692
	Fulton Educational Services Inc	692
	Fulton Science Academy CS	692
	Georgia Magnet Charter School	1,384
	Georgia Military College	31,832
	International Community School	1,384
	Kidspace School of Georgia	3,460
	Kipp Metro Atlanta Collaborative Inc	6,228
	Kipp South Fulton Academy	2,768
	University Community Academy	3,460