

#### SOUTH CAROLINA RETIREMENT SYSTEM (ALL RETIREMENT SYSTEMS)

ACCOUNTING VALUATION REPORT AS OF JUNE 30, 2014



5605 N. MacArthur Blvd. Suite 870 Irving, TX 75038-2631

September 29, 2014

South Carolina Public Employee Benefit Authority South Carolina Retirement System P.O. Box 11960 Columbia, SC 29211-1960

#### Subject: GASB 67 Reporting - Actuarial Information

Dear Members of the Board:

This report and the information provided herein contain certain information for each of the five retirement systems (i.e. the South Carolina Retirement System, Police Officers Retirement System, the Judges and Solicitors Retirement System, and General Assembly Retirement System, and the South Carolina National Guard Supplemental Retirement Plan) in connection with the Governmental Accounting Standards Board (GASB) Statement No. 67, "Financial Reporting for Pension Plans".

The calculation of the liability associated with the benefits referenced in this report was performed for the purpose of satisfying the requirements of GASB No. 67 and is not applicable for other purposes, such as determining the plans' funding requirements, as a calculation of the plan's liability for other purposes may produce significantly different results. This report may be provided to parties other than South Carolina Public Employee Benefit Authority (PEBA) only in its entirety and only with the permission of PEBA.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of July 1, 2013. The total pension liability was rolledforward from the valuation date to the plan's fiscal year ending June 30, 2014 using generally accepted actuarial principles. There were no assumption changes that required an adjustment to the roll-forward liabilities. Senate Bill 1008 was enacted during the 2014 legislative session that permits administrative Law Judges to elect to participate in the Retirement System for Judges and Solicitors (JSRS). However, as of June 30, 2014, there were no Administrative Law Judges that have elected to participate in the JSRS. Also, there was not any other legislation enacted during the fiscal year that had a material change in benefit provisions for any other system. As a result, we did not make any adjustment for changes in benefit provisions when calculating the roll-forward liability for each system. It is our opinion that the assumptions used for this purposes are internally consistent, reasonable, and comply with the requirements under GASB No. 67.

This report is based upon information, furnished to us by the South Carolina Public Employee Benefit Authority (PEBA), which includes benefit provisions, membership information, and financial data. We did not audit this data and information, but we did apply a number of tests and concluded that it was reasonable and consistent. GRS is not responsible for the accuracy or completeness of the information provided to us by PEBA.

Certain tables included in the Required Supplementary Information should include a 10-year history of information. As provided for in GASB No. 67, this historical information is only presented for the years in which the information was measured in conformity with the requirements of GASB No. 67. The historical information in this report will begin with the information presented for the fiscal year ending June 30, 2014.

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This report compliments the actuarial valuation report as of July 1, 2013, provided for plan funding purposes, which was also provided to the Board and should be considered together as a complete report for PEBA's fiscal year ending June 30, 2014. Please see the actuarial valuation report as of July 1, 2013, dated December 2, 2013, for additional discussion of the actuarial valuation that was used in for the basis of the roll-forward calculations, including information related to participant data, economic and demographic assumptions, and benefit provisions.

The net pension liability is measured as the Total Pension Liability, less the amount of the plan's Fiduciary Net Position. In actuarial terms, this will be the accrued liability less the market value of assets (not the smoothed actuarial value of assets that is often encountered in actuarial valuations based on the PEBA's adopted assumptions and methods). In accordance with paragraph 20 of GASB No. 67, and guidance provided by Q&A #37 of the Guide to Implementation of GASB No. 67, the outstanding balance of the Teacher and Employee Retention Incentive Program (TERI) is included in the Fiduciary Net Position and the Total Pension Liability.

A single discount rate of 7.50% was used to measure the total pension liability for the fiscal years ending June 30, 2013 and June 30, 2014. This single discount rate was based on the expected rate of return on pension plan investments of 7.50%. Based on the stated assumptions and the projection of cash flows as of each fiscal year ending, the pension plan's fiduciary net position and future contributions were sufficient to finance all the future benefit payments of the current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability for each system. The projection of cash flows used to determine the single discount rate for the South Carolina Retirement System and the Police Officers Retirement System assumed that the funding policy specified in the South Carolina State Code will remain unchanged in future years. Similarly, it is also assumed that the current funding policy for the Judges and Solicitors Retirement System, General Assembly Retirement System, and the South Carolina National Guard, will be maintained by PEBA in future years.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. The undersigned are independent actuaries and consultants. Both are Enrolled Actuaries and members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. Both consultants are experienced in performing valuations for large public retirement system.

Respectfully submitted,

Joseph P. Newton, FSA, MAAA, EA Senior Consultant

Attachments

Daniel J. White, FSA, MAAA, EA Senior Consultant

# Schedule of the Employers' Net Pension Liability

<u>System</u> (1)	Total Pension Liability (2)	Plan Fiduciary Net <u>Position</u> (3)	Employers' Net Pension Liability (Asset) (4)	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability (5)	Covered Employee Payroll <sup>1</sup> (6)	Net Pension Liability as a Percentage of Covered Employee Payroll (7)
	(-)		(1)		(0)	
South Carolina Retirement System (SCRS)	\$ 42,955,205,796	\$ 25,738,521,026	\$ 17,216,684,770	59.9%	\$ 7,434,820,403	231.6%
Police Officers Retirement System (PORS)	5,899,529,434	3,985,101,996	1,914,427,438	67.5%	1,033,188,717	185.3%
Retirement System for Judges and Solicitors (JSRS)	264,732,079	147,496,933	117,235,146	55.7%	20,407,314	574.5%
Retirement System for the General Assembly (GARS)	74,787,259	34,033,817	40,753,442	45.5%	2,687,800	1,516.2%
National Guard Supplemental Retirement Plan (SCNG)	61,530,088	22,557,522	38,972,566	36.7%	Not Applicable <sup>2</sup>	Not Applicable <sup>2</sup>

Note:

<sup>1</sup> The projected payroll for fiscal year 2014 is based on the actuarial valuation as of July 1, 2013.

 $^{2}$  The contributions and benefits associated with the SCNG are not determined as a function of payroll.

# Schedule of Changes in the Employer's Net Pension Liability

Change in the Net Pension Liability	 SCRS	PORS	JSRS	GARS	SCNG
(1)	 (2)	(3)	(4)	(5)	(6)
Total pension liability					
Service Cost	\$ 739,021,148	\$ 149,605,726	\$ 5,571,197	\$ 571,426	\$ 697,102
Interest	3,021,003,664	417,950,110	18,857,364	5,437,111	4,416,653
Benefit Changes	0	0	0	0	0
Difference between actual and expected experience	638,744,910	64,336,408	(3,240,126)	(2,584,556)	(262,144)
Assumption Changes	0	0	0	0	0
Benefit Payments	(2,571,048,582)	(331,783,332)	(16,684,799)	(6,860,752)	(4,247,651)
Net Change in Total Pension Liability	1,827,721,140	300,108,912	4,503,636	(3,436,771)	603,960
Total Pension Liability - Beginning	 41,127,484,656	5,599,420,522	260,228,443	78,224,030	60,926,128
Total Pension Liability - Ending (a)	\$ 42,955,205,796	\$ 5,899,529,434	\$ 264,732,079	\$ 74,787,259	\$ 61,530,088
Plan Fiduciary Net Position					
Contributions - Employer	\$ 962,798,170	\$ 155,608,079	\$ 9,658,751	\$ 4,063,001	\$ 4,585,560
Contributions - Member	652,630,491	96,004,134	2,448,706	384,203	0
Refunds of contributions to members	(90,250,597)	(16,183,410)	0	(40,990)	0
Retirement benefits	(2,461,557,940)	(311,593,217)	(16,674,799)	(6,799,384)	(4,247,651)
Death benefits	(19,240,045)	(4,006,705)	(10,000)	(20,378)	0
Net Investment Income	3,517,324,405	538,385,289	19,962,031	4,545,029	2,805,730
Administrative Expense	(11,765,475)	(1,820,433)	(67,716)	(16,520)	(10,016)
Net transfers to affiliated systems	(2,469,905)	2,260,246	194,580	15,078	0
Other	0	0	0	0	0
Net Change in Plan Fiduciary Net Position	2,547,469,104	458,653,983	15,511,553	2,130,039	3,133,623
Plan Fiduciary Net Position - Beginning	 23,191,051,922	3,526,448,013	131,985,380	31,903,778	19,423,899
Plan Fiduciary Net Position - Ending (b)	\$ 25,738,521,026	\$ 3,985,101,996	\$ 147,496,933	\$ 34,033,817	\$ 22,557,522
Net Pension Liability - Ending (a) - (b)	 17,216,684,770	1,914,427,438	117,235,146	40,753,442	38,972,566
Plan Fiduciary Net Position as a Percentage of					
the Total Pension Liability	59.9%	67.5%	55.7%	45.5%	36.7%
Covered Employee Payroll	\$ 7,434,820,403	\$ 1,033,188,717	\$ 20,407,314	\$ 2,687,800	N/A
Net Pension Liability as a Percentage of					
Covered Employee Payroll	231.6%	185.3%	574.5%	1,516.2%	N/A

## Schedule of the Employers' Contributions

#### Table 1. Schedule of Employer Contributions for SCRS, PORS, and JSRS

System	Actuarially Determined Contribution as a Percent of Covered Payroll <sup>1</sup>	Actual Rate Contributed by Participating Employers	Contribution Deficiency (Excess)	Total Employer Contributions for the Prior Fiscal Year <sup>2</sup>	Covered Employee Payroll <sup>3</sup>	
(1)	(2)	(3)	(4)	(5)	(6)	
South Carolina Retirement System (SCRS)	10.60%	10.60%	\$ -	\$ 962,798,170 \$	7,434,820,403	
Police Officers Retirement System (PORS)	12.84%	12.84%	-	155,608,079	1,033,188,717	
Retirement System for Judges and Solicitors (JSRS)	47.33%	47.33%	-	9,658,751	20,407,314	

#### Table 2. Schedule of Employer Contributions for GARS and the SCNG

System	Actuarially Determined Contribution <sup>4</sup>		Total Employer Contributions for the Prior Fiscal Year		Contribution Deficiency (Excess)		Covered Employee Payroll <sup>5</sup>	
(1)	(2)		(3)	(4)		(5)		
Retirement System for the General Assembly (GARS)	\$ 4,063,001	\$	4,063,001	\$	-	\$	2,687,800	
National Guard Supplemental Retirement Plan (SCNG)	4,585,560		4,585,560		-		N/A	

<sup>1</sup> The actuarially determined contribution rate for SCRS and PORS is determined in accordance with South Carolina State Code. The contribution rate for JSRS is based on the funding policy maintained by the South Carolina Public Employee Benefit Authority.

 $^2$  Includes employer contributions on the payroll of members in TERI and the State ORP.

<sup>3</sup> Projected payroll for Fiscal Year 2014, based on the actuarial valuation as of July 1, 2013.

<sup>4</sup> The actuarially determined contributions are based on the funding policy maintained by the South Carolina Public Employee Benefit Authority.

<sup>5</sup> GARS was closed to new members beginning with the 2012 general election. Contributions for members in the SCNG are not a function of pay.

#### Notes to Schedule of Employers' Contributions

The actuarially determined contribution rates documented in the schedule on the previous page are calculated as of July 1, 2011 (July 1, 2012 for the SCNG). The actuarial methods and assumptions were used to determine the contribution rates reported in that schedule:

Item	SCRS	PORS	JSRS	GARS	SCNG
(1)	(2)	(3)	(4)	(5)	(6)
Actuarial Cost Method:	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal	Entry Age Normal
Asset Valuation Method:	5-Year Smoothing	5-Year Smoothing	5-Year Smoothing	5-Year Smoothing	5-Year Smoothing
Amortization Method:	Level % of Pay	Level % of Pay	Level % of Pay	Level Dollar	Level Dollar
Amortization Period:	25 Years, Open	30 Years, Open	30 Years, Open	16 Years, Closed	20 Years, Closed
Investment Return:	7.50%	7.50%	7.50%	7.50%	7.50%
Inflation:	2.75%	2.75%	2.75%	2.75%	2.75%
Salary Increases:	3.50% plus step-rate increases for members with less than 25 years of service.	4.00% plus step-rate increases for members with less than 12 years of service.	3.00%	None.	None.
Mortality:	RP-2000 Mortality Table (White Collar Adjustment for Educators), projected at Scale AA from Year 2000. Male rates multiplied by 100% for non-educators and 110% for educators. Female rates multiplied by 90% for non-educators and 95% for educators.	RP-2000 Mortality Table with Blue Collar Adjustment, projected at Scale AA from Year 2000. Male and female rates are multiplied by 115%.	RP-2000 Mortality Table with White Collar Adjustment, projected at Scale AA from Year 2000. Male rates are multiplied by 110%. Female rates are multiplied by 95%.	RP-2000 Mortality Table, projected at Scale AA from Year 2000. Male rates are multiplied by 100%. Female rates are multiplied by 90%.	RP-2000 Mortality Table with Blue Collar Adjustment, projected at Scale AA from Year 2000. Male and female rates are multiplied by 115%.

#### **Other Comments:**

As a result of the enactment of Act 278, the member and employer contribution rates for SCRS and PORS are determined in accordance with Sections 9-1-1085 and 9-11-225 of the South Carolina Code, respectively. Contribution requirements for JSRS, GARS and the SCNG are determined in accordance with funding policies established and maintained by the Board. Contribution rates determined by an actuarial valuation are effective for the fiscal year beginning 24 months after the valuation date.

# Sensitivity of the Net Pension Liability to Changes in the Discount Rate

System		1.00% Decrease (6.50%)		Current Discount Rate (7.50%)		1.00% Increase (8.50% )
(1)	(2)		(3)			(4)
South Carolina Retirement System (SCRS)	\$	22,279,455,340	\$	17,216,684,770	\$	12,992,881,787
Police Officers Retirement System (PORS)		2,675,362,636		1,914,427,438		1,284,816,794
Retirement System for Judges and Solicitors (JSRS)		146,228,862		117,235,146		92,715,522
Retirement System for the General Assembly (GARS)		47,372,990		40,753,442		35,076,832
National Guard Supplemental Retirement Plan (SCNG)		46,386,123		38,972,566		32,838,136