

SC PUBLIC EMPLOYEE BENEFIT AUTHORITY  
BOARD OF DIRECTORS MEETING

Wednesday, July 8, 2015 1:30 p.m. Minutes Approved 7.15.15  
200 Arbor Lake Drive, Columbia SC, Main Conference Room 2nd Floor

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**Board Members Present:**

Chairman Art Bjontegard  
Vice Chairman Joe "Rocky" Pearce  
Mr. Audie Penn  
Mr. Steve Matthews  
Mr. Steve Heisler  
Mr. Frank Fusco  
Mr. Steve Osborne  
Mr. John Sowards  
Mr. David Tigges  
Ms. Stacy Kubu  
Sheriff Leon Lott (via telephone)

**Others present for all or a portion of the meeting:**

Peggy Boykin, Tom Cone, Sarah Corbett, Ariail Kirk, Heather Muller, Tammy Nichols, Laura Smoak, Rob Tester, Travis Turner, Stephen Van Camp, Justin Werner, and Heather Young from the South Carolina Public Employee Benefit Authority (PEBA); Brooks Goodman from Blue Cross Blue Shield of South Carolina; Wayne Pruitt from the State Retirees Association of South Carolina; Danny White from Gabriel, Roeder, Smith & Company; and Thompson Kinney from Milliken Law Firm.

**1. CALL TO ORDER**

Chairman Art Bjontegard called the PEBA Board of Director's (Board) meeting to order at 1:00 p.m., and stated that the public meeting notice was posted in compliance with the Freedom of Information Act.

**2. ADOPTION OF PROPOSED AGENDA**

Mr. Steve Matthews made a motion, which was seconded by Mr. Steve Heisler, and approved unanimously, to adopt the proposed Board meeting agenda.

**3. EXECUTIVE SESSION TO RECEIVE LEGAL ADVICE CONCERNING FIDUCIARY DUTY**

At 1:32 p.m., Mr. Rocky Pearce made a motion, which was seconded by Mr. Steve Osborne, and passed unanimously, to recede into executive session to receive legal advice concerning fiduciary duty of Board members pursuant to S.C. Code Ann. § 30-4-70.

The Board reconvened in open session at 2:00 p.m. Chairman Bjontegard announced that no action was taken by the Board while in executive session.

**4. RETIREMENT SYSTEMS ACTUARIAL RATE OF RETURN**

Ms. Peggy Boykin, PEBA's Executive Director, explained the statutory requirement of conducting an experience study every five years, and stated that PEBA provides a recommendation to the General Assembly on the actuarial rate of return based on the results of the experience study conducted by Gabriel, Roeder, Smith & Company (GRS). Ms. Boykin added that the General Assembly ultimately determines the Retirement Systems Actuarial Rate of Return.

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Mr. Danny White from GRS, explained the valuation process including the actuarial assumptions used in the valuation of the Retirement Systems, and the professional standards governing the preparation of the actuarial valuations and experience study.

**5. ADJOURNMENT**

There being no further business, and upon motion by Mr. Fusco, which was seconded by Mr. John Sowards, and approved unanimously, the Board meeting adjourned at 2:54 p.m.

# **SC Public Employee Benefit Authority - Board of Directors**

200 Arbor Lake Drive, Columbia SC, 29223 2<sup>nd</sup> Floor Conference Room

PEBA's Mission: To recommend, offer and administer competitive programs of retirement and insurance benefits for SC public employers, employees and retirees.

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**Wednesday, July 8, 2015 – 1:30 p.m.**

## **AGENDA**

- I. Call to Order**
- II. Adoption of Proposed Agenda**
- III. Executive Session Pursuant to SC Code of Laws §30-4-70**
  - A. To Receive Legal Advice Concerning Fiduciary Duty**
- IV. Retirement Systems Actuarial Rate of Return**
- V. Adjournment**

### **NOTICE OF PUBLIC MEETING**

This notice is given to meet the requirements of the S.C. Freedom of Information Act and the Americans with Disabilities Act. Furthermore, this facility is accessible to individuals with disabilities, and special accommodations will be provided if requested in advance.

**PUBLIC EMPLOYEE BENEFIT AUTHORITY AGENDA ITEM  
BOARD MEETING**

**Meeting Date: June 17, 2015**

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**1. Subject:** Retirement Systems Actuarial Rate of Return

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**2. Summary:** Retirement Systems Actuarial Rate of Return

**Background Information:**

**3. What is the Board asked to do?** Receive as information

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**4. Supporting Documents:**

- (a) List those attached:
  - 1. Expected Rate of Return Issue Brief
  - 2. FY2015 Return Cost Scenarios
  - 3. Pro Forma Interest Rate Information

## Issue Brief

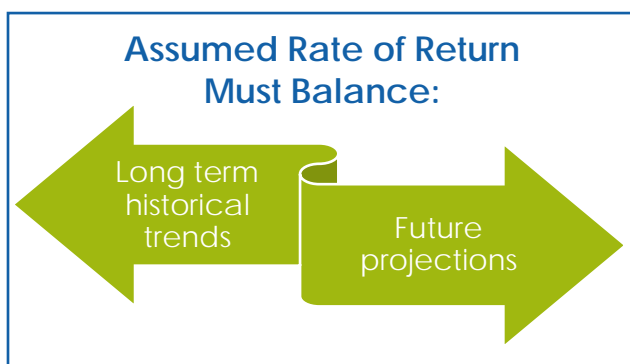
# South Carolina Retirement Systems' Assumed Rate of Return

### Things to Know About How the Systems Are Funded

1. There are three sources of income to provide benefits in the Retirement Systems: investment income, employee contributions and employer contributions.
2. If any source of funding is reduced, the other sources must be increased, or benefits reduced, to keep the Systems sound.

### Actuary's Role

- PEBA's current external actuary, Gabriel Roeder Smith (GRS), makes assumptions about life expectancy, salary increases, employee turnover and many other things. One of the most important assumptions the actuary makes is the long-term rate of return on investments.
- The actuary conducts an annual valuation of the Systems to ensure they are prudently funded. The actuary looks at past experience and future expectations to select the assumptions used in the actuarial valuation.
- The assumptions the actuaries use to calculate the funding of the Systems are reviewed and updated (if necessary) once every five years during an experience study. The next experience study is scheduled to be conducted beginning in July 2015.
- To increase the stability in the contribution rate for employers and employees, the actuarial assumptions used in the valuation, including the investment return assumption, are generally updated once every five years.
- The South Carolina General Assembly currently has the authority to set the assumed investment rate of return for the Systems.



### Investment Consultant's Role

- The Retirement System Investment Commission (RSIC) is responsible for investing the Systems' assets and hires an investment consultant to advise the RSIC about how to invest the assets.
- The current investment consultant, Hewitt Ennis Knupp (HEK), updates its capital market expectations (the consultant's assumptions about the investment rate of return) quarterly to reflect the constant change in financial markets. Capital market expectations are forward-facing analyses.
- It is useful for investment decision making for HEK to update its capital market expectations frequently because investment decisions are made on a daily basis.

### What is an assumed rate of return?

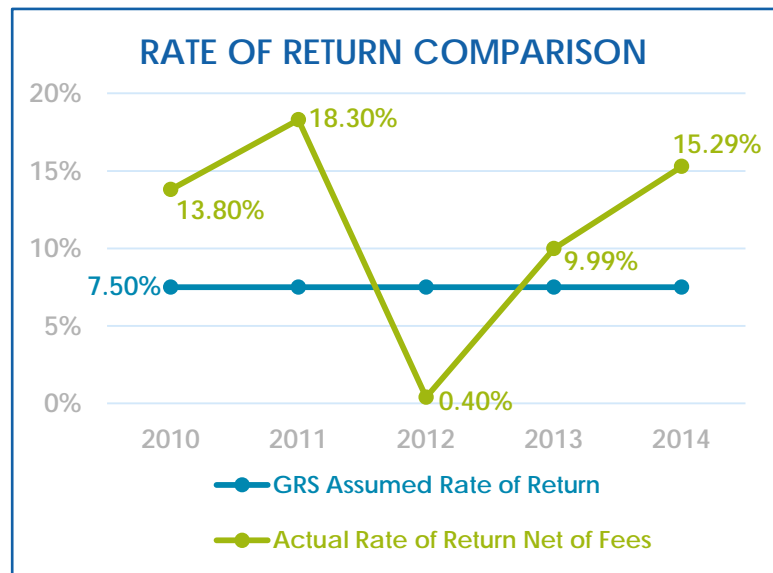
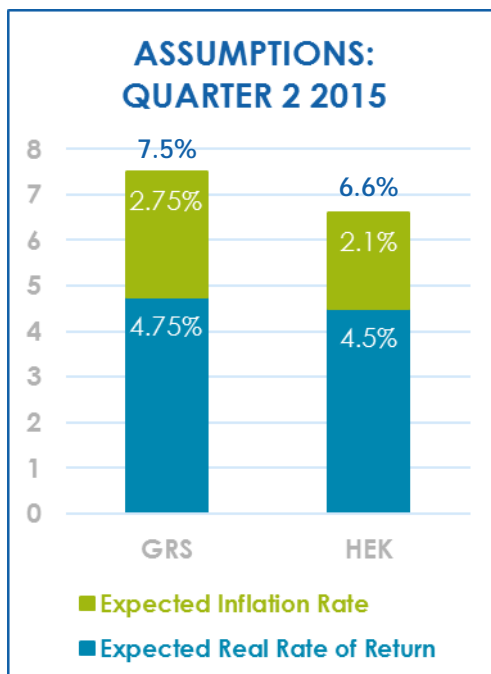
The assumed rate of return is made up of two components – the *expected real rate of return* and the *expected rate of return due to inflation*.

- The current assumed rate of return used by GRS was set at 7.5 percent in 2011 following the last experience study, which was conducted in 2010.
- As of Quarter 2 2015 (Q22015), HEK data for our current investment portfolio shows a median expected rate of over the next 30 years of 6.6 percent.
- As of Q12015, both GRS and HEK expect approximately the same *real rate of return* in the future.
- As of Q12015, GRS and HEK have different opinions on the *inflation assumption*.
  - GRS' inflation assumption is 2.75%.
  - HEK's inflation assumption is 2.1%.
  - The actuary's inflation assumption affects both the assets and the future growth of the liabilities, or money the Systems are expected to pay out over time.
  - The investment consultant's inflation assumption only affects the assets.
  - There will almost always be differences in the actuary and investment consultant's inflation assumptions because HEK updates its assumptions quarterly and GRS updates its assumptions every five years.

### What does this mean?

All investment consulting firms, like HEK, make projections, or capital market expectations, about what the financial markets will do in the future. The projections are based on educated opinions and it is highly unlikely that any one firm's opinion will be completely correct. So, while capital market expectations are a standard component of projecting future returns, they are opinions and opinions differ.

The timing of HEK releasing its Q22015 median expected rate of return for the next 30 years of 6.6 percent coincides with GRS being on deck to conduct the Systems' next five-year experience study beginning in July 1, 2015. That study will include an extensive review and will make a recommendation about what the Systems' assumed rate of return should be. GRS' analysis will take into account HEK's projections, including its assumed inflation rate, as well as projections from other investment consulting firms. The analysis will be presented to the General Assembly for review. PEBA will keep all other stakeholders informed as well.



# South Carolina Public Employee Benefit Authority

## Exhibit 1.

### Valuation Interest Assumption Sensitivity Information

#### South Carolina Retirement System (SCRS)

Item	Pro Forma Illustration based on the 2014 Actuarial Valuation				
	Current Assumption	Alternative 1.	Alternative 2.	Alternative 3.	Alternative 4.
	7.50% Interest Rate 2.75% Inflation	7.25% Interest Rate 2.75% Inflation	7.25% Interest Rate 2.50% Inflation	7.00% Interest Rate 2.50% Inflation	6.75% Interest Rate 2.25% Inflation
(1)	(2)	(3)	(4)	(5)	(6)
1. Plan Assets					
a. Market Value of Assets	\$25,739	\$25,739	\$25,739	\$25,739	\$25,739
b. Actuarial Value of Assets	26,911	26,911	26,911	26,911	26,911
2. Actuarial Accrued Liability					
a. Active Members	\$14,032	\$14,608	\$14,385	\$14,995	\$15,400
b. Inactive Members	915	927	927	940	955
c. Retirees and Beneficiaries	27,943	28,521	28,521	29,123	29,749
d. Total Actuarial Accrued Liability	\$42,890	\$44,056	\$43,833	\$45,058	\$46,104
3. Unfunded Actuarial Accrued Liability (2.d. - 1.b.)	\$15,979	\$17,145	\$16,922	\$18,147	\$19,193
4. Funding Ratio (1.b. / 2.d.)	62.7%	61.1%	61.4%	59.7%	58.4%
5. Funding Period Based on Current Rates	30 Years	36 Years	35 Years	43 Years	56 Years
6. Contribution Rates Necessary to Maintain a 30-Year Funding Period					
a. Member Contribution Rate	8.16%	8.61%	8.58%	9.08%	9.56%
b. Employer Contribution Rate	11.06%	11.51%	11.48%	11.98%	12.46%
7. Projected Contributions for FY 2017					
a. Projected Member Contributions	\$749	\$791	\$782	\$828	\$865
b. Projected Employer Contributions	1,090	1,137	1,125	1,177	1,218
c. Total Contributions	\$1,839	\$1,928	\$1,907	\$2,005	\$2,083

\$ in millions

Notes and assumptions:

- The cost and liabilities are determined using asset and census information used to prepared the actuarial valuation as of January 1, 2014.
- Alternative 1. assumes the real rate of return is decreased by 0.25% to 4.50%.
- Alternative 2. assumes the inflation assumption is decreased by 0.25% to 2.50%. The change in the inflation assumption also decreases the salary increase assumption and payroll growth rate by 0.25%.
- Alternative 3. assumes the real rate of return is decreased by 0.25% to 4.50% and the inflation assumption is decreased by 0.25% to 2.50%. The change in the inflation assumption also decreases the salary increase assumption and payroll growth rate by 0.25%.
- Alternative 4. assumes the real rate of return is decreased by 0.25% to 4.50% and the inflation assumption is decreased by 0.50% to 2.25%. The change in the inflation assumption also decreases the salary increase assumption and payroll growth rate by 0.50%.

# South Carolina Public Employee Benefit Authority

## Exhibit 2.

### Valuation Interest Assumption Sensitivity Information

#### Police Officers Retirement System (PORS)

Pro Forma Illustration based on the 2014 Actuarial Valuation

Item	Current Assumption 7.50% Interest Rate 2.75% Inflation	Alternative 1. 7.25% Interest Rate 2.75% Inflation	Alternative 2. 7.25% Interest Rate 2.50% Inflation	Alternative 3. 7.00% Interest Rate 2.50% Inflation	Alternative 4. 6.75% Interest Rate 2.25% Inflation
(1)	(2)	(3)	(4)	(5)	(6)
1. Plan Assets					
a. Market Value of Assets	\$3,985	\$3,985	\$3,985	\$3,985	\$3,985
b. Actuarial Value of Assets	4,105	4,105	4,105	4,105	4,105
2. Actuarial Accrued Liability					
a. Active Members	\$2,277	\$2,372	\$2,338	\$2,437	\$2,505
b. Inactive Members	139	143	143	147	151
c. Retirees and Beneficiaries	3,490	3,568	3,568	3,649	3,734
d. Total Actuarial Accrued Liability	\$5,906	\$6,083	\$6,049	\$6,233	\$6,390
3. Unfunded Actuarial Accrued Liability (2.d. - 1.b.)	\$1,801	\$1,978	\$1,944	\$2,128	\$2,285
4. Funding Ratio (1.b. / 2.d.)	69.5%	67.5%	67.9%	65.9%	64.2%
5. Funding Period Based on Current Rates	27 Years	37 Years	35 Years	52 Years	101 Years
6. Contribution Rates Necessary to Maintain a 30-Year Funding Period					
a. Member Contribution Rate	8.74%	9.20%	9.09%	9.85%	10.48%
b. Employer Contribution Rate	13.74%	14.20%	14.09%	14.85%	15.48%
7. Projected Contributions for FY 2017					
a. Projected Member Contributions	\$113	\$119	\$117	\$127	\$134
b. Projected Employer Contributions	178	184	181	191	197
c. Total Contributions	\$291	\$303	\$298	\$318	\$331

\$ in millions

Notes and assumptions:

- The cost and liabilities are determined using asset and census information used to prepared the actuarial valuation as of January 1, 2014.
- Alternative 1. assumes the real rate of return is decreased by 0.25% to 4.50%.
- Alternative 2. assumes the inflation assumption is decreased by 0.25% to 2.50%. The change in the inflation assumption also decreases the salary increase assumption and payroll growth rate by 0.25%.
- Alternative 3. assumes the real rate of return is decreased by 0.25% to 4.50% and the inflation assumption is decreased by 0.25% to 2.50%. The change in the inflation assumption also decreases the salary increase assumption and payroll growth rate by 0.25%.
- Alternative 4. assumes the real rate of return is decreased by 0.25% to 4.50% and the inflation assumption is decreased by 0.50% to 2.25%. The change in the inflation assumption also decreases the salary increase assumption and payroll growth rate by 0.50%.



**Projection of Contribution Rates and Cost  
Under Different Investment Return Scenarios for FY 2015  
(\$ in millions)**

**South Carolina Retirement System**

FY Ending June 30,	<u>7.50% Return (Baseline)</u>		<u>0.00% Return</u>		<u>2.00% Return</u>		<u>4.00% Return</u>	
	Applicable Employer Contribution Rate	Projected Employer Contributions	Applicable Employer Contribution Rate	Projected Employer Contributions	Applicable Employer Contribution Rate	Projected Employer Contributions	Applicable Employer Contribution Rate	Projected Employer Contributions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2015	10.90%	\$ 1,002	10.90%	\$ 1,002	10.90%	\$ 1,002	10.90%	\$ 1,002
2016	11.06%	1,040	11.06%	1,040	11.06%	1,040	11.06%	1,040
2017	11.06%	1,069	11.06%	1,069	11.06%	1,069	11.06%	1,069
2018	11.09%	1,098	11.14%	1,106	11.11%	1,103	11.09%	1,101
2019	11.12%	1,128	11.26%	1,150	11.20%	1,143	11.13%	1,136
2020	11.12%	1,163	11.40%	1,198	11.30%	1,186	11.20%	1,175
2021	11.12%	1,203	11.55%	1,253	11.41%	1,236	11.27%	1,220
2022	11.12%	1,240	11.70%	1,310	11.52%	1,288	11.34%	1,266

**Police Officers Retirement System**

FY Ending June 30,	<u>7.50% Return (Baseline)</u>		<u>0.00% Return</u>		<u>2.00% Return</u>		<u>4.00% Return</u>	
	Applicable Employer Contribution Rate	Projected Employer Contributions	Applicable Employer Contribution Rate	Projected Employer Contributions	Applicable Employer Contribution Rate	Projected Employer Contributions	Applicable Employer Contribution Rate	Projected Employer Contributions
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2015	13.41%	\$ 162	13.41%	\$ 162	13.41%	\$ 162	13.41%	\$ 162
2016	13.74%	167	13.74%	167	13.74%	167	13.74%	167
2017	13.74%	171	13.74%	171	13.74%	171	13.74%	171
2018	13.74%	176	13.74%	176	13.74%	176	13.74%	176
2019	13.74%	181	13.74%	181	13.74%	181	13.74%	181
2020	13.74%	187	13.74%	187	13.74%	187	13.74%	187
2021	13.74%	192	13.80%	193	13.74%	192	13.74%	192
2022	13.74%	198	13.91%	200	13.74%	198	13.74%	198

Notes and Comments:

Projected employer contributions include the contributions made on the payroll of members who are in TERI and working retirees.

Projected costs are based on the July 1, 2014 actuarial valuation and assume the investment return for FY 2016 and beyond is 7.50% per annum.