

South Carolina
PUBLIC EMPLOYEE BENEFIT AUTHORITY

PEBA

David K. Avant
Interim Executive Director
Retirement Benefits

April 15, 2013

The Honorable Nikki Haley, Governor
and
Members of the General Assembly
State of South Carolina

Dear Governor and Members of the General Assembly:

Act 278 requires the Public Employee Benefit Authority (PEBA) to perform a study on the impact of costs to the South Carolina Retirement System (SCRS) and the South Carolina Police Officers Retirement System (PORS) of compensation "spiking" on the average final compensation for retirees of those systems. Further, Act 278 requires that PEBA provide the report generated from the study to both the Governor and Members of the General Assembly by April 15, 2013.

In compliance with these requirements, PEBA retained our independent actuarial firm, Gabriel Roeder Smith & Company (GRS), to perform an actuarial analysis of spiking and to produce a report detailing the prevalence and cost of such practices. PEBA is committed to continuing to monitor spiking issues regarding retirement benefits and may make policy recommendations to address spiking issues in the future.

Respectfully Submitted,



David K. Avant
Interim Executive Director
SC Public Employee Benefit Authority



March 18, 2013

David K. Avant
Executive Director
South Carolina Retirement Systems
PO Box 11960
Columbia, SC 29211-1960

Re: Analysis of Members in SCRS and PORS Experiencing Large Salary Increases Prior to Retirement

Dear David:

Act 278 requires the Public Employee Benefit Authority to perform an investigation to identify the impact on the Retirement System from salary spiking. The purpose of this letter is to document the results of this investigation and to quantify the cost of this behavior on the Retirement System.

Salary spiking is defined as an employee's behavior that intentionally increases their compensation during their final years of service for the purpose of increasing their pension benefit. The most common forms of salary spiking include full-time employees increasing their overtime hours, and part-time and dual-employment employees increasing the number of hours they work. While employees who change jobs or earn promotions close to retirement also often experience a unusually large salary increase, we do not consider these members to salary spike their pension benefit because the increased compensation is associated with increased responsibility with their employer.

Summary

Based on an investigation of members who retired between July 1, 2007 and June 30, 2012, an estimated 4% to 5% of the retirees in SCRS and PORS salary spike their pension benefit before retiring and, on average, increase their monthly pension benefit by \$188 in SCRS and \$182 in PORS. This represents a 9.3% and 7.9% increase in their total monthly pension benefit, respectively. Based on a review of a random sample of retirees, the most common behavior to abnormally increase compensation in SCRS was due to part-time employees moving to a full-time status prior to retirement in SCRS. The majority of the salary spiking in PORS was attributable to increased overtime.

Based on our assessment, the membership's employment behavior to increase their pension benefit is increasing the actuarial accrued liability in SCRS by \$8.6 million per year, or about 0.02% of the plan's total actuarial accrued liability. Similarly, this behavior in PORS is

increasing the actuarial accrued liability by \$1.6 million per year, which is 0.03% of the plan's total actuarial accrued liability.

If legislation was enacted that substantially eliminated current spiking behaviors, there would be a long-term 3 to 5 basis point (0.03% to 0.05%) reduction in the actuarially calculated employer rate for SCRS and a 5 to 7 basis point (0.05% to 0.07%) reduction in the actuarially calculated employer contribution rate for PORS. Changes in the actuarially determined contribution rates would not be immediate, but would occur gradually over the next 10 to 15 years as actuarial losses due to salary spiking are reduced. Note that this projected change in the contribution rate does not reflect the requirement in the State Code that employer and member contribution rates are maintained until the plan attains a 90% funded ratio. There is no change in the projected year either plan is expected to attain a 100% funded ratio.

Based on this analysis, we do not consider there to be a rampant behavior salary spiking or these actions having a significant financial impact on the Retirement Systems. However, it may be appropriate from a policy standpoint to explore modifications that would reduce the prevalence and severity of this behavior.

Background

Salary spiking activity can have a negative impact on contribution rates since the pension benefits for members are based on their highest average salaries prior to retirement. A member's average final compensation (AFC) is the monthly average of their highest 12 consecutive quarters of earnable compensation (i.e. a three-year final average pay). Earnable compensation includes extraordinary compensation, such as overtime.

Members who are employed on a part-time basis can potentially spike their pension benefit by increasing the number of hours they work during the last few years of employment. For example, a member could work for 27 years as a part-time employee and work on a full-time basis their last three years. In this situation, the pension benefit would be based on the member's 30 years of service and an AFC that is determined using their much larger compensation earned in their final years of employment as a full-time employee.

The AFC for Class two members, members hired prior to July 1, 2012, will also include up to 45 days pay for unused annual leave at their termination from employment. However, since the plan specifically permits this remuneration, it is not considered salary spiking and is excluded from the compensation used in this analysis. The actuarial valuation includes an assumption for increased AFC attributable to unused annual leave. Also, not all unusual increases in compensation are considered to be salary spiking behaviors. The most common examples of these instances where the pay increases are associated with an increase in duties and responsibilities, such as promotions and job changes. Therefore, the investigation included a review of a random sample of retirees with unusual salary increases to understand the reason for the increase in salary (job change, promotion, overtime, additional duties, dual employment, etc.).

Analysis

The Retirement System provided GRS a list of all members who retired from SCRS and PORS in the five year period between July 1, 2007 and June 30, 2012. For purposes of this analysis, a member participating in TERI is considered to be retired as of his/her TERI entry date since the member's pension benefit is based on the member's AFC at the time they enter TERI. In other words, a member is unable to salary spike their pension benefit after entering TERI.

The analysis excluded the following retirees:

- Members who retired with less than 10 years of credited service because they have not been employed for a sufficient amount of time to materially spike their pension benefit.
- Members who retired with less than \$15,000 in annual salary for each of their last ten years of employment because the actuarial accrued liability associated with these retirees is relatively small. This compensation threshold was selected because it is approximately equal to earnings of a full-time employee earning minimum wage.
- Members who had an extended break in their employment in the last 10 years of their employment. For this purpose, an extended service break was identified by not having any compensation in at least one of their last 10 fiscal years of employment.
- Members who retired on disability retirement.

There were 32,582 members who retired from SCRS in the last five years. 11,213 members were removed due to meeting at least one of the exclusion criteria described above, leaving 21,369 retirees to review in the analysis. Similarly, 1,835 of the 4,894 members who retired in PORS over the last five years were also removed before conducting the analysis for PORS.

An AFC for each retiree was estimated by calculating the three-year average of the member's compensation earned each fiscal year during each of their last 10 years of employment. To identify members who potentially salary spiked their pension benefit, the member's AFC at retirement was compared to their AFC three years, five years, and seven years prior to retirement. If the member's actual AFC exceeded their expected AFC, adjusted for expected annual salary increases at the rate of 4.00% per annum, then they have potentially salary spiked their benefit.

The retirees were sorted into four categories according to the increase in the AFC during their final years of employment. The categories were established as follows:

Category	Category Description	Actual % increase in AFC compared to Expected
0	No salary spiking	% increase in AFC less than 2 times the expected increase.
1	Mild salary spiking	% increase in AFC between 2 times and 4 times the expected.
2	Moderate salary spiking	% increase in AFC between 4 times and 6 times the expected.
3	Severe salary spiking	% increase in AFC is more than 6 times the expected increase.

The analysis shows that about 12% of the members who retired in SCRS and 16% of the members who retired in PORS over the last five years had unusual salary increases. A summary

of the results of this analysis is as follows. Note, the summary below includes all members with unusual salary increases, which includes members who changed jobs or experienced a promotion.

Retirement System	Salary Spiking Category				Total
	0	1	2	3	
SCRS	18,849	2,205	188	127	21,369
PORS	2,579	429	41	10	3,059

The relative number of retirees with higher than expected salary increases in SCRS was evenly distributed among local government and school district employers, but the relative percentage of retirees in categories 1-3 from higher education employers was noticeably higher. Retirees from State employers had the fewest number of retirees in categories 1-3 (in absolute number and on relative percentage basis). While there was not a significant difference in the number of retirees from local government and state employers in PORS, there were approximately twice as many retirees from local government employers in categories 1-3. Please refer to the attached Exhibit 1. for additional detail regarding the number of retirees by employer type and spiking category.

Next, the Retirement System researched a sample of 100 retirees (61 in SCRS and 39 in PORS) to understand the reasons for the unusual salary increases (e.g. job change, promotion, overtime, additional duties, dual employment, etc.). Approximately 50% of the unusual increases in AFC were due to job changes and promotions, 20% were the result of increased overtime, and 30% were due to a change from part-time to full-time status or increased hours due to dual employment. Members in PORS were significantly more likely to salary spike their benefit due to overtime than going from part-time to full-time employment. Spiking incidences in PORS were more prevalent with local employers than State employers. Please review to Exhibit 2., attached, for more detailed information regarding the results of the research performed by the Retirement System.

Of those members who are salary spiking their benefits in SCRS, their monthly benefit is increasing, on average, from \$2,019 to \$2,206, or about 9.3%. Likewise, members in PORS who spiked their pension benefit are increasing their monthly pension benefit, on average, from \$2,317 to 2,499, a 7.9% increase.

Actuarial Impact on Contribution Rates

In order to measure the fiscal impact of salary spiking, which includes spiking due to changing from part-time to full-time status, we calculated the retiree's benefit liability based on their actual pension benefit and a hypothetical pension benefit assuming there had been plan provisions in place that limited the increase in the member's AFC to the maximum increase considered to be a Category 0 retiree (i.e. a percentage increase that is equal to 2 times the assumed 4.00% annual salary increase).

Based on the random sample research conducted by the Retirement System, we have assumed that 50% of the individuals on the spiking list in each category are a result of salary spiking

behavior, such as overtime, part-time to full-time employment, and dual employment. We calculate that each cohort of members retiring from SCRS each fiscal year with a salary spiked benefit is costing the Retirement System \$709,000 in increased annual benefits, which corresponds to an \$8.6 million increase in the actuarial accrued liability. Similarly, each cohort of members retiring from PORS each fiscal year with a salary spiked benefit costs the Retirement System \$131,000 in increased annual benefits, which corresponds to a \$1.6 million increase in the actuarial accrued liability.

If legislation is enacted to substantially eliminate salary spiking behaviors, there would likely be a 3 to 5 basis point (0.03% to 0.05%) reduction in the actuarially calculated employer rate for SCRS and a 5 to 7 basis point (0.05% to 0.07%) reduction in the actuarially calculated employer contribution rate for PORS. Changes in the contribution rates would not be immediate, but would occur gradually over the next 10 to 15 years as actuarial losses due to salary spiking are reduced. This projected change in the contribution rate is without regard to the requirement in the State Code that requires a maintenance of the employer and member contribution rates until the plan attains a 90% funded ratio. This change is not significant enough to change the projected year either plan is expected to attain a 100% funded ratio.

Other Comments

The analysis shows that employees spiking their salary in their final years of employment are not a significant cost burden to the Retirement System. However, there may be prudent, policy reasons for limiting an employee's ability to salary spike their pension benefit. Recent provisions intended to reduce the rate of incidence and severity of salary spiking include the provision in Act 278 that requires compensation related to overtime earned after 2012 for members in SCRS to be excluded for purposes of determining a member's AFC unless that overtime is mandated by the employer. Overtime compensation continues to be included on an unrestricted basis for determining the AFC for members in PORS.

This pension reform bill requires the AFC for all employees who become members in SCRS and PORS after June 30, 2012, be determined using a 20-quarter averaging period (i.e. a five year average).

The most common salary spiking occurrences in SCRS are attributable to part-time employees. Current provisions allow part-time employees who earn at least \$100 per month to participate in the Retirement System. Employees below this threshold may also voluntarily participate. Increasing the current earnings threshold or changing the eligibility requirements to a more common, minimum-hours based threshold may reduce the rate of incidence and the severity of pension spiking among part-time employees. The Retirement System could allow part-time employees that do not satisfy a more stringent eligibility to participate in the State Optional Retirement Program (State ORP) to ensure they are still earning retirement benefits. The Retirement System may have other comments regarding issues related to the administration of benefits to part-time members.

A few retirement systems have utilized other methods to address salary spiking issues. This includes limiting a member's annual increase in compensation for purposes of determining their

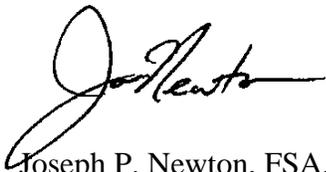
AFC. For example, a member's compensation that exceeds their pay for the prior year by more than a certain percentage, such as 15%, is excluded in determining the member's AFC. Exceptions could be considered for job changes and promotions. A few retirement systems charge employers a "surcharge" equal to the increase in the unfunded liability attributable to employees who retire from them with a salary spiked benefit.

We recommend that legal, administrative, and human resource issues be explored and reviewed before enacting legislation that impacts current member benefits.

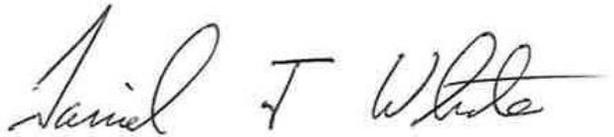
Nothing in this letter should be construed as providing legal, tax, or investment advice. Our calculations are based upon assumptions regarding future events, which may or may not materialize. Please bear in mind that actual results could deviate significantly from our estimates, depending on actual plan experience.

If you have any questions about the above information please do not hesitate to contact us.

Sincerely,



Joseph P. Newton, FSA, EA
Senior Consultant



Daniel J. White, FSA, EA
Senior Consultant

Enclosure

cc: Mr. Steven Van Camp
Mr. Justin Werner

k:\3285\2013\cons\salary_spiking_study\final_salaryspiking_analysys_20130318.docx

Exhibit 1. Summary of Salary Spiking Experience (Retirements from July 1, 2007 to June 30, 2012)

Table 1. Salary spiking categories selected for the analysis

Category	Description	Range of Actual % Increase in the AFC
0	No spiking	% increase in AFC is less than 2 times the expected % increase
1	Mild spiking	% increase in AFC is between 2 times and 4 times the expected % increase
2	Moderate spiking	% increase in AFC is between 4 times and 6 times the expected % increase
3	Severe spiking	% increase in AFC is more than 6 times the expected % increase

Table 2. Retirees by salary spiking category and employer type for SCRS and PORS

	SCRS - Counts by Spiking Category				
	0	1	2	3	Total
Higher ED	2,119	360	22	19	2,520
Local Gov	3,418	400	33	37	3,888
School Districts	9,109	1,103	114	61	10,387
State	4,203	342	19	10	4,574
Total	18,849	2,205	188	127	21,369

	PORS - Counts by Spiking Category				
	0	1	2	3	Total
Higher ED	34	16	2	0	52
Local Gov	1,315	278	33	7	1,633
School Districts	3	1	0	0	4
State	1,227	134	6	3	1,370
Total	2,579	429	41	10	3,059

Table 3. Relative distribution of salary spiking by category for SCRS and PORS

Spiking Category by Relative Percentage		
Category	SCRS	PORS
0	88.2%	84.4%
1	10.3%	14.0%
2	0.9%	1.3%
3	0.6%	0.3%
Total	100.0%	100.0%

Note: The experience shown in the tables above includes experience due to all reasons for unusual salary increases which include: (1) overtime, (2) dual employment, (3) Part-time to full-time employment, (4) promotion, and (5) job changes. Some of the causes for unusual salary increases, such as promotions and job changes, may not be considered to be “salary spiking”.

**Exhibit 2. Review of a Random Sample of Retirees
With Unusual Salary Increases
(Retirements from July 1, 2007 to June 30, 2012)**

Table 1. Summary of investigation on a random sample of retirees in SCRS

Reason for Unusual Salary Increase	Employer Type				Total
	State	Local Gov	School Districts	Higher Education	
1. Salary Spiking Occurance					
a. Dual Employment	0	4	1	4	9
b. Overtime	1	2	6	0	9
c. Part-Time/Full-Time	0	1	8	4	13
d. Total	1	7	15	8	31
2. Non Salary Spiking Occurance					
a. Promotions	3	4	12	0	19
b. Job Changes	2	2	3	4	11
c. Total	5	6	15	4	30
3. Total Occurances Reviewed	6	13	30	12	61

Table 2. Summary of investigation on a random sample of retirees in PORS

Reason for Unusual Salary Increase	Employer Type		
	State	Local Gov	Total
1. Salary Spiking Occurance			
a. Dual Employment	0	1	1
b. Overtime	2	13	15
c. Part-Time/Full-Time	1	1	2
d. Total	3	15	18
2. Non Salary Spiking Occurance			
a. Promotions	6	14	20
b. Job Changes	1	0	1
c. Total	7	14	21
3. Total Occurances Reviewed	10	29	39