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November 3, 2011

Ms. Elizabeth Miller
Acting Executive Director and Chief
Investment Officer
Kansas Public Employees Retirement System
600 South Kansas Avenue, Suite 100
Topeka, KS 66603

RE: Follow-up “Stacked Hybrid” Plan Studies

Dear Liz:

At the September meeting of the Study Commission, we presented the results of our study on the cost of a “stacked hybrid” plan design with pay in the defined benefit plan capped at \$50,000 and indexed at 4% in future years. We have been asked to provide additional information to the Study Commission at their November meeting on two additional stacked hybrid plan designs for new hires. As with the prior cost study in September, this cost study is being performed on a “snapshot” basis for the State/School group. Using this approach, the coding of the December 31, 2010 actuarial valuation was modified to reflect the proposed plan design (stacked hybrid in this case) as if it had always been in place. The cost impact is determined using the current active members and measuring the change in the December 31, 2010 valuation results. Comparing the normal cost rate under this type of snapshot measurement provides a reasonable estimate of the long term cost impact of the proposed design versus the current design.

Stacked Hybrid Plan Design

A stacked hybrid plan consists of both a defined benefit plan and a defined contribution plan. The benefit from the defined benefit plan is based on wages up to some limit (called the covered wage base). The amount of the limit is set as part of the plan design. Contributions (both employee and employer) on wages above the covered wage base are made to the defined contribution plan.

Because the concept behind this plan design is that higher paid employees are in a better position to manage the various risks that reside with the employee in a defined contribution plan, typically the covered wage base is set fairly high. For purposes of the initial cost study for KPERS, the covered wage base was set at \$50,000 and indexed at 4% in future years (to maintain the relative value of the wage base in future years). The level at which the covered wage base is set impacts the allocation of contributions between the defined benefit and defined contribution plan. For the two current studies, we were asked to determine the amount of covered wage base that would result in approximately 33% of total payroll being allocated to the defined contribution plan and then also the amount of covered wage base that would result in approximately 66% of total payroll being allocated to the defined contribution plan. The resulting thresholds for the covered wage base are \$31,000 and \$14,000 respectively. These limits were indexed at 4% to ensure consistency with the assumed general wage increase assumption which is part of total salary increase assumption used in the actuarial valuation.

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The salary distributions in the State, School and Local groups are different so capping the covered wage base at different amounts impacts the three membership groups differently. The following table shows the percentage of members who have pay above the covered wage base (\$50,000, \$31,000 and \$14,000) and the percentage of total payroll in the defined contribution plan.

	State	School	Local
\$50,000 Covered Wage Base			
Percent With Pay > Limit	23%	22%	30%
Percent of Total Payroll in DC Plan	7%	11%	11%
\$31,000 Covered Wage Base			
Percent With Pay > Limit	76%	66%	62%
Percent of Total Payroll in DC Plan	28%	30%	34%
\$14,000 Covered Wage Base			
Percent With Pay > Limit	99%	97%	86%
Percent of Total Payroll in DC Plan	66%	66%	65%

Results of Cost Study

Using the December 31, 2010 actuarial valuation for the State/School group as the baseline for comparative purposes, we modified the benefit coding of our valuation software to reflect the cap on wages for purposes of benefits in the defined benefit plan. It was assumed that all employee contributions on wages above the wage base (as indexed in future years) would be deposited into the defined contribution plan and that an employer contribution of 3.86% on pay above the covered wage base would also be made to the defined contribution plan. This rate (3.86%) was selected because it reflects the current employer normal cost rate in the December 31, 2010 valuation. If the plan is designed for new hires, the employer normal cost rate for Tier 2 members could be used as the employer contribution to the defined contribution plan.

The pertinent measurement when analyzing this plan design for new hires is the normal cost rate (the ongoing cost of the benefit structure for active members). A summary of the cost impact of the stacked hybrid plan design, under the three different covered wage bases (\$14,000, \$31,000 and \$50,000) is shown in the exhibit attached to this letter.

These results were prepared using the same data, methods, assumptions, and provisions as were used in the December 31, 2010 valuation, except as noted. Depending upon the ultimate plan design and how the provisions are implemented, it is possible that assumptions, such as retirement rates, might ultimately change, possibly impacting these results.



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We, Patrice A. Beckham and Brent A. Banister, are members of the American Academy of Actuaries and meet the qualification standards to issue this actuarial opinion.

If you have any questions or additional information is needed, please let me know.

Sincerely,

A handwritten signature in blue ink that reads 'Patrice Beckham' in a cursive script.

Patrice A. Beckham, FSA, EA, FCA, MAAA
Consulting Actuary

A handwritten signature in blue ink that reads 'Brent A. Banister' in a cursive script.

Brent A. Banister, PhD, FSA, EA, FCA, MAAA
Senior Actuary



EXHIBIT A

Stacked Hybrid Plan Cost Analysis State/School Group (\$millions)

	Baseline:	\$50,000 Covered Wage Base		\$31,000 Covered Wage Base		\$14,000 Covered Wage Base	
	December 31, 2010 Valuation	Results	Difference	Results	Difference	Results	Difference
1. Normal Cost(DB plan only)	\$352.1	\$306.9	(\$45.2)	\$223.7	(\$128.4)	\$115.4	(\$236.6)
2. Member Contributions	182.8	164.7	(18.1)	122.5	(60.3)	62.8	(120.0)
3. Employer Normal Cost (1) – (2)	169.3	142.2	(27.1)	101.2	(68.1)	52.7	(116.6)
4. DB Capped Payroll	-	3,949.5		2,937.2		1,505.6	
5. DC Contribution (Employer)	-	16.8	16.8	55.9	55.9	111.1	111.1
6. Total Employer Contribution (3) + (5)	169.3	159.0	(10.3)	157.1	(12.2)	163.8	(5.5)
7. Total Payroll	4,384.4	4,384.4	-	4,384.4	-	4,384.4	-
8. Total Employer Contribution as % of Total Payroll (6) / (7)	3.86%	3.63%	-0.23%	3.58%	-0.28%	3.74%	-0.13%