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February 11, 2013

Mr. Tom Mann
Executive Director
Kansas City Public School Retirement System
4600 The Paseo
Kansas City, MO 64110

RE: 2013 Fiscal Impact Response Form

Dear Tom:

This letter is in response to the Request for Fiscal Note number 1235-01, bill number SB 223. We have analyzed the impact that this bill would have on the funding level for the Public School Retirement System of the School District of Kansas City, Missouri (KCPSRS).

Analysis Highlights

If implemented, the actuarially required contribution as a percentage of payroll would decrease annually starting in 2014. The impact on funded status would be a return to a fully funded position in less than 30 years, as compared to 45 years under the current statutes. A projection of funded status based on implementation of Bill Number SB 223 can be found at the end of the report.

Provisions of Bill Number SB 223

Fiscal Note number 1235-01, bill number SB 223 provides for the following:

- *Employees hired on or after January 1, 2014 will get a new tier of benefit as follows:*
  - *Monthly benefit determined based on 1.75% of average final compensation time years of service, subject to a maximum of 60%.Currently the monthly benefit for these members is determined based on **2.00%** of average final compensation time years of service, subject to a maximum of 60%.*
  - *Normal retirement age is the earlier of age 62 or Rule of 80. Currently normal retirement age for these members is the earlier of age **60** or Rule of **75**.*
- *Starting in 2014, the member and employer contribution rate will be determined from the actuarial valuation of the plan from the prior year, subject to the following:*
  - *The rate of employer contributions and member contributions for 2014 and for each subsequent calendar year shall be expressed as a level percentage of the annualized compensation of the members, subject to the following:*
  - *The rate of contribution for any calendar year shall be determined based on an actuarial valuation of the retirement system as of the first day of the prior calendar year. Such actuarial valuation shall be performed using the actuarial cost method and actuarial assumptions adopted by the board of trustees and in accordance with accepted actuarial standards of practice in effect at the time the valuation is performed, as promulgated by the actuarial standards board or its successor;*
  - *The target combined employer and member contribution rate shall be the amount actuarially required to cover the normal cost and amortize any unfunded actuarial accrued liability over a period that shall not exceed thirty years from the date of the valuation;*

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- *The target combined rate as so determined shall be allocated equally between the employer contribution rate and the member contribution rate, provided, however, that the level rate of contributions to be paid by the employers and the level rate of contributions to be deducted from the compensation of members for any calendar year shall each be limited by a contribution corridor as follows:*
  - *Contribution rate not less than 7.50%.*
  - *Contribution rate not more than 9.00%.*
  - *Change in contribution rate each year shall be in increments of 0.5%, with the increase or decrease each year not exceeding 0.5%.*
- *Note that the current funding policy includes a fixed contribution for members of **7.50%** and **no** contribution corridor for employers.*

Basis of the Analysis

This analysis is intended to describe the financial effect of the proposed plan changes on the Retirement System. Except as otherwise noted, potential effects on other benefit plans were not considered. To determine the impact, we have recast the results of the January 1, 2012 annual actuarial valuation with changes in the plan and funding policy parameters noted above. The actuarial assumptions and methods were consistent with those used in the regular actuarial valuation of the Retirement System on the valuation date, unless otherwise noted. A summary of the primary assumptions and methods includes:

- The use of the entry age normal level percent of pay actuarial cost method
- 30 year level dollar open amortization (the proposal changes this to level percent of payroll)
- An investment rate of return of 8.00%
- Projected salary increases of 5.00%
- We have updated the retirement rates to reflect the age 62 or rule of 80 provisions for the proposed new tier.

Outline of the Cost Statement

Following is an outline of the cost statement of proposed changes prepared by the actuary. Also attached is a summary of projected future actuarial valuation results, with and without this proposed legislation.

1. The level normal cost of the plan benefits currently in effect, which cost is expressed as a percent of active employee payroll.

   The total normal cost in 2012 was $16,423,797. Employee's portion of this is determined as 7.50% of covered payroll, which is $11,691,976. The employer normal cost amount in 2012 was $4,731,821. All of these figures are as of the beginning of the year. The total normal cost represents 10.54% of active employee payroll and the employer normal cost represents 3.04% of active employee payroll.

2. The contribution for unfunded accrued liabilities currently payable by the plan, which cost is expressed as a percent of active employee payroll and shall be over a period not to exceed thirty years.

The unfunded liability contribution amount in 2012 was $11,725,833, which is 7.52% of active employee payroll. The unfunded accrued liability is amortized over 30 years as a level dollar amount.

3. The total contribution rate expressed as a percent of active employees payroll, which contribution rate shall be the total of the normal cost percent plus the contribution percent for unfunded accrued liabilities.

   The total employer contribution amount in 2012 was $16,836,200, which is 10.80% of active employee payroll.

4. A statement as to whether the legislative body is currently paying the total contribution rate as defined in subdivision (3) of this subsection.

   The contributions to KCPSRS have historically covered the actuarially required amount. The contribution corridor introduced in this legislation will limit the contribution to an amount below the actuarially required amount. Over a longer time horizon, we project that the amount of contributions will be sufficient to fully fund KCPSRS.

5. The total contribution rate expressed as a percent of active employee payroll which would be sufficient to adequately fund the proposed change in benefits.

   With the proposed change in benefits and contributions, we expect the plan to return to fully funded status in 30 years. Each year the employer contribution rate and the member contribution rate will be set at the same rate. This rate will vary from between 7.50% and 9.00%. When combined with the change in benefits above, we expect that these projected employer and member contributions will get KCPSRS back to full funding in 30 years.

6. A statement as to whether such additional contributions are mandated by the proposed change.

   There is a strong likelihood that additional member contributions will be needed as a result of the proposed change. Starting in 2014, the employer annual required contribution will likely be less than under the current benefit and funding provisions.

7. A statement as to whether or not the proposed change would in any way impair the ability of the plan to meet the obligations thereof in effect at the time the proposal is made.

   The proposed change would be beneficial to the plan in its ability to meet obligations. Without any legislative or structural changes in the KCPSRS membership, we expect the plan to return to fully funded status through normal operations in approximately 45 years. With this legislation, the system would return to full funding in approximately 30 years.

   The last page of this response contains a chart showing the plan's projected funded status with and without the proposed legislation.

8. All assumptions relied upon to evaluate the present financial condition of the plan and all assumptions relied upon to evaluate the impact of the proposed change upon the financial condition of the plan, which shall be those assumptions used in preparing the most recent periodic actuarial valuation for the plan, unless the nature of the proposed change is such that alternative assumptions are clearly warranted, and shall be made and stated with respect to at least the following: a) Investment return, b) Pay increase, c) Mortality of employees and officials, and other persons who may receive benefits under the plan, d) Withdrawal, e)Disability, f)Retirement ages, g) Change in active employee group size.

   Other than updating the retirement rates to accommodate the proposed later retirement eligibility, the assumptions are the same as in the January 1, 2012 actuarial valuation report

9. The actuary shall certify that in the actuary's opinion the assumptions used for the valuation produce results which, in the aggregate, are reasonable.

   In my opinion, all assumptions currently being used for the valuation are reasonable, both individually and in the aggregate and fairly represent past and anticipated future experience.

10. A description of the actuarial funding method used in preparing the valuation including a description of the method used and period applied in amortizing unfunded actuarial accrued liabilities.

    Liabilities and contributions are computed using the Entry Age Actuarial Cost method of funding. Any funding surpluses or unfunded accrued liability is amortized over 30 years as a level dollar amount. However, in keeping with GASB requirements, the net amortization period will not exceed 30 years. Note that the proposal includes changing from a level dollar to a level percent of pay amortization.

    Projected pension and preretirement spouse's death benefits were determined for all active members. Cost factors designed to produce annual costs as a constant percentage of each member's expected compensation in each year for pension benefits from the assumed entry age to the assumed retirement age were applied to the projected benefits to determine the normal cost (the portion of the total cost of the plan allocated to the current year under the method). The normal cost is determined by summing intermediate results for active members and determining an average normal cost rate which is then related to the total payroll of active members. The actuarial accrued liability for active members (the portion of the total cost of the plan allocated to prior years under the method) was determined as the excess of the actuarial present value of projected benefits over the actuarial present value of future normal costs.

    The actuarial accrued liability for retired members and their beneficiaries currently receiving benefits, terminated vested members and disabled members not yet receiving benefits was determined as the actuarial present value of the benefits expected to be paid. No future normal costs are payable for these members.

    The actuarial accrued liability under this method at any point in time is the theoretical amount of the fund that would have been accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation

date). The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of plan assets measured on the valuation date.

Under this method, experience gains or losses, i.e., decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

11. The increase in the total contribution amount required to adequately fund the proposed change in benefits, expressed in annual dollars as determined by multiplying the increase in total contribution rate by the active employee annual payroll used for this valuation.

    The benefit reductions under the proposed change will result in lower total contributions. If this proposal were enacted, the actuarially required employer contribution would decrease annually starting in 2014 when compared to the current provisions. In 2014, the required contribution would decrease by approximately $30,000. The decrease in the required contribution will grow each year following – decreasing by approximately $190,000 in 2015 and $430,000 in 2016. That being said, the member contributions are projected to increase to 8.00% in 2014, 8.50% in 2015 and 9.00% in 2016. We project that by 2031, the member contribution rate will revert back to its current level of 7.50% of pay.

Comments

1. The long-term effect of the proposed changes is a decrease in total normal cost of 1.45% of payroll from the current 10.54% of payroll to 9.09%. This decrease would emerge over time as new employees replace the existing workforce.

2. The calculations are based upon assumptions regarding future events, which may or may not materialize. They are also based upon present and proposed plan provisions that are outlined in the report. If you have reason to believe that the assumptions that were used are unreasonable, that the plan provisions are incorrectly described, that important plan provisions relevant to this proposal are not described, or that conditions have changed since the calculations were made, you should contact the authors of this report prior to relying on information in the report.

3. A contribution policy should be a balance between the need for responsiveness to meet the actuarial needs of the Retirement System and the desire for contribution stability for those responsible for funding the Retirement System. This proposed legislation includes a contribution corridor which may periodically result in contributions that are less than those needed to sustain the Retirement System, and at other times will be more. This corridor should be closely monitored to make sure that the actuarial needs of the Retirement System are being met. While our projection shows that 100% funding is achieved under this proposed legislation, this is based on one reasonable scenario. As noted above, this analysis is based on assumptions that may or may not materialize.

4. Over the next few years the corridor is projected to limit the amount of contributions to the Retirement System.

Certification

The undersigned are Enrolled Actuaries, a Fellow or Associate of the Society of Actuaries and Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all Applicable Actuarial Standards of Practice. We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate.

Respectfully submitted,

BUCK CONSULTANTS, LLC

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Kansas City PSRS
Employer Funded Status Projections
Fiscal Note Response – Number 1235-01

Plan Year	With Legislation Funded Status		Without Legislation Funded Status	
	Dollar Amount	Percentage	Dollar Amount	Percentage
2014	(191,155,824)	78.6%	(191,155,824)	78.6%
2015	(202,310,601)	77.6%	(204,017,096)	77.4%
2016	(217,179,105)	76.2%	(222,431,880)	75.6%
2017	(219,601,250)	76.1%	(230,497,789)	75.0%
2018	(221,614,409)	76.2%	(238,739,090)	74.3%
2019	(223,148,704)	76.2%	(247,137,367)	73.7%
2020	(224,098,046)	76.4%	(255,656,713)	73.0%
2021	(224,390,167)	76.6%	(264,298,548)	72.4%
2022	(223,893,366)	76.8%	(273,011,363)	71.7%
2023	(222,535,623)	77.2%	(281,801,260)	71.2%
2024	(220,184,336)	77.7%	(290,625,506)	70.6%
2025	(216,738,446)	78.3%	(299,482,005)	70.0%
2026	(212,015,954)	79.0%	(308,300,120)	69.4%
2027	(205,906,215)	79.8%	(317,080,426)	69.0%
2028	(198,213,967)	80.9%	(325,751,489)	68.5%
2029	(188,766,500)	82.0%	(334,276,859)	68.2%
2030	(180,084,064)	83.1%	(342,607,595)	67.9%
2031	(172,423,530)	84.1%	(350,712,418)	67.7%
2032	(166,024,463)	85.0%	(358,488,929)	67.6%
2033	(158,129,946)	86.0%	(365,899,730)	67.6%
2034	(148,559,916)	87.2%	(372,855,745)	67.7%
2035	(137,158,698)	88.4%	(379,296,628)	67.9%
2036	(123,721,900)	89.9%	(385,125,994)	68.3%
2037	(108,017,686)	91.4%	(390,228,539)	68.8%
2038	(89,810,070)	93.1%	(394,500,642)	69.4%
2039	(68,872,985)	94.9%	(397,846,126)	70.1%
2040	(44,905,398)	96.8%	(400,114,539)	71.0%
2041	(17,607,865)	98.8%	(401,162,044)	71.9%
2042	13,357,566	100.9%	(400,825,392)	73.0%
2043	48,350,712	103.1%	(398,925,148)	74.1%