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June 14, 2021

Mr. David Eager
Kentucky Public Pensions Authority
1260 Louisville Road
Frankfort, KY 40601

Re: Impact of House Bill 8 on Contribution Requirements for Participating Employers in the KERS Non-Hazardous Retirement System

Dear Mr. Eager:

House Bill 8 changed the method for allocating the System's contribution requirement to each participating employer in the KERS Non-Hazardous Retirement System (KERS-NH). The purpose of this letter is to provide an explanation of how each employer's contribution will be determined for the fiscal year ending June 30, 2022, and subsequent years. The Kentucky Public Pensions Authority (KPPA) may share a copy of this letter to interested employers so they have a better understanding of how their required contribution is determined and how it may change in future years.

Actuarially Determined Contribution for the System

The actuarially determined contribution for the fiscal year ending June 30, 2022, is based on the actuarial valuation performed as of June 30, 2020. This contribution requirement consists of two components: a normal cost to fund benefits earned by the active members, and an amortization cost to finance the unfunded actuarial accrued liability.

The normal cost rate is the theoretical amount, as a percentage of payroll, that is required to fund an active member's benefit earned during the year. The normal cost rate paid by employers is a blended rate that reflects there are members earning different benefits (i.e. Tier 1, Tier 2, or Tier 3 benefits). Since members also make contributions to the System, the employer only makes contributions on the normal cost in excess of the member contribution.

The amortization cost component is the amount required to amortize (or finance) the unfunded actuarial accrued liability over the funding period specified in Section 61.565 of Kentucky Statute. The unfunded liability as of June 30, 2020 for both the pension and insurance fund is $15.5 billion. As required by Statute, the portion of the unfunded liability established as of June 30, 2019 is amortized over a closed 30-year period (with 29 years remaining as of June 30, 2020). All new changes in the unfunded liability (e.g. experience gains and losses) occurring after June 30, 2019 are financed over separately maintained bases that are each amortized over a closed 20-year period, often referred to as a layered amortization schedule.

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The following table provides the employer normal cost rate and aggregate amortization cost, determined separately for the retirement and insurance funds.

System's Actuarially Determined Employer Contribution for FYE 2022

Component	Retirement Fund	Insurance Fund	Total
Employer Normal Cost Rate	7.90% of pay	2.20% of pay	10.10% of pay
Amortization Cost	$935,656,758	$104,192,490	$1,039,849,248

Allocation of Actuarially Determined Contribution Amongst Participating Employers

Prior to the enactment of House Bill 8, the amortization cost was divided by covered payroll and converted to a single contribution rate payable by all employers. If House Bill 8 had not been enacted, the contribution rate would have been 85.03% of pay for FYE 2022, which is comprised of a 10.10% employer normal cost rate and a 74.93% amortization rate.

Due to a continual decline in the number of active members earning benefits in the System, the contribution rate, expressed as a percentage of covered payroll, was projected to continue to increase in future years, as covered payroll decreased. As a result, House Bill 8 was enacted to change how the amortization cost is allocated to each participating employer in KERS-NH such that it is no longer based on covered payroll. It is important to note that House Bill 8 did not change the actuarially determined contribution or the liabilities of KERS-NH but how the amortization cost will be allocated to each participating employer.

As a result of House Bill 8, a participating employer's contribution requirement is determined as follows:

> *Employer Normal Cost –* All participating employers contribute the same normal cost rate as a percentage of their covered payroll. For FYE 2022, the employer normal cost rate is 10.10% of pay.
>
> *Amortization Cost –* The $1,040 million amortization cost for FYE 2022 is allocated amongst the participating employers based on the percentage of the total actuarial accrued liability for KERS-NH that is attributable to the individual employer's current and former employees. For the purposes of this amortization cost allocation, the legislation specifies that this allocation be performed based on the actuarial accrued liability determined by the June 30, 2019 actuarial valuation.

Example Calculation under House Bill 8 for a Hypothetical Employer

The following is an example of how the contribution requirement for a hypothetical employer would be determined under House Bill 8.

1. Total Actuarially Accrued Liability for KERS-NH as of June 30, 2019	$19,127,526,963[1]
2. Liability attributed to Agency XYZ's Current and Former Employees	$20,000,000
3. Fixed Allocation of Amortization Cost [(2) / (1)]	0.10456%
4. Total Amortization Cost Determined as of June 30, 2020	$1,039,849,248
5. Annual Amortization Cost payable by Agency XYZ for FYE 2022 [(3) x (4)]	**$1,087,266**
6. Normal Cost payable by Agency XYZ for FYE 2022	**10.10% of pay**

[1] Excluding the liability attributed to employers who have voluntarily ceased participation in KERS-NH as of June 30, 2020.

The liability attributed to an employer's current and former employees (item 2, above) is a fixed amount based on the June 30, 2019 actuarial valuation and will not change from year to year. The amortization cost and normal cost for the System (items 4 and 6, above) are re-calculated each year to reflect actual demographic and investment experience. Because the System remains a cost-sharing retirement plan, individual unfunded liability balances are not maintained for individual agencies. Rather, demographic and investment gains and losses are calculated in total for the System each year and then allocated based on the fixed liability amount (item 3, above).

In general, the amortization cost is expected to remain relatively level from year to year but will increase or decrease each year based on actual experience. As an example, if investments earn more than expected during a given year, the amortization cost will decrease to reflect this experience for most employers. House Bill 8 exempts certain employers (e.g. certain local and district health departments, certain community mental health centers, and certain employers who are eligible to receive a distribution of general fund appropriations to assist in paying retirement cost) from annual fluctuations in the amortization cost. The amortization cost for these agencies' will only change after an experience study (a study that examines the actuarial assumptions) and at most every four years.

Because an employer's amortization cost (which is the largest component of an employer's pension cost) is a relatively fixed dollar amount and no longer tied to covered payroll, an employer will no longer have the ability to materially reduce their pension contribution requirement by reducing the number of employees earning benefits in KERS-NH. On the other hand, an employer can hire new employees or increase covered payroll without a significant increase in their pension contribution requirement, as the only contribution requirement payable on covered payroll under the new Statutes is the 10.10% of pay normal cost contribution.

Calculation of the Actuarial Accrued Liability

Each year when an actuarial valuation is performed, a liability amount (referred to as the actuarial accrued liability) is calculated for both the pension and insurance funds. The actuary collects information on all members who are entitled to a benefit from KERS-NH as of the valuation date. This includes employees currently earning benefits and former employees who either have earned a benefit that they can begin receiving once they reach retirement age, or are currently receiving their retirement benefit.

A liability amount is calculated for each of these members based on their demographic information (e.g. pay, service in the System, age, gender, benefit tier, and current benefit amount and elected form of payment for retired members). Next the actuary calculates a liability amount for each individual that is analogues to the present value of the individual's pension and insurance benefit, using various assumptions that include interest based on an assumed rate of investment return and mortality (i.e. how long the monthly benefit is expected to be paid to the member). A full listing of actuarial assumptions used to calculate a member's liability can be found in the annual actuarial valuation report. Finally, the calculated liability amounts for each member in the System is summed to identify the total actuarial accrued liability for the System.

House Bill 8 stipulates that KERS-NH's actuarially accrued liability be allocated to each participating employer in the System based on the June 30, 2019 actuarial valuation and by assigning each member's liability to their last participating employer. As a result, each employer's allocated liability includes: (1) the actuarial accrued liability attributable to their current employees, and (2) the liability attributable to their former employees if that member was employed by the employer immediately before their termination or retirement from KERS-NH. On the other hand, an employer is not allocated any liability attributable to a former employee that subsequently became employed with another participating employer in the System. There is also no liability for retirement benefits that a member may have earned while working with another employer that participates in a different retirement system, such as the County Employees Retirement System (CERS).

Both of the undersigned are members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. In addition, all of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,

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

Janie Shaw, ASA, MAAA, EA
Consultant