Actuarial Analysis Summary

AA Statement 1 and 2 of 2

BR or Bill Ref.	HB 506 GA (23 RS BR 7)	**Actuarial Analysis Conducted For:**	
Date:	3/2/2023	☒ KERS NH ☒ KERS Haz ☒ SPRS ☐ TRS	
Actuary:	GRS	☒ CERS NH ☒ CERS Haz ☐ LRP ☐ JRP	

Section I: Executive Summary

In the opinion of the actuary, this bill would make the affected state-administered retirement system(s) actuarially:

☐ MORE SOUND ☐ LESS SOUND ☒ NO IMPACT

If actuarially MORE SOUND OR LESS SOUND, please summarize the factors leading to the actuary's opinion:

If enacted, the plan changes would increase the actuarially determined contribution rates by less than one basis point (i.e. 0.01% of pay) for the KERS and CERS hazardous systems and SPRS. The plan changes would increase the actuarially determined contribution rates for the CERS Non-Hazardous systems by exactly one basis point. For the KERS Non-Hazardous system, the normal cost would increase by 0.01% of pay and the amortization cost would increase by $0.4 million.

Does this bill increase or decrease employer costs?	☐ **INCREASE** ☐ **DECREASE** ☒ **NO IMPACT**
Does this bill increase or decrease benefits?	☐ **INCREASE** ☐ **DECREASE** ☒ **NO IMPACT**
Does this bill increase or decrease benefit participation?	☐ **INCREASE** ☐ **DECREASE** ☒ **NO IMPACT**

If the bill impacts employer costs, benefits, or benefit participation, please explain and estimate the impact in Sections II and VI.

The bill has very minimal fiscal cost for all systems maintained by KPPA. The reinstatement of the partial lump-sum option form of payment has no fiscal cost. The change to a one-month separation of service period for reemployed retirees in all systems has a fiscal impact of less than $1 million increase in the annual contribution requirement.

Section II: Financial Projections

	Combined Pension and Retiree Health Plan					
	N/A		**N/A**		**N/A**	
	Current	Proposed	Current	Proposed	Current	Proposed
Projected Employer Cost* ($ in Millions)						
30-Yr Nominal $	N/A	N/A	N/A	N/A	N/A	N/A
30-Yr Net Present Value $	N/A	N/A	N/A	N/A	N/A	N/A
Proj. Normal Cost for New Hire	N/A	N/A	N/A	N/A	N/A	N/A

**Projected costs for the KERS Non-Hazardous and CERS Non-Hazardous systems is less than $1 million per year.*
Proj. normal cost is the normal cost for new hires after subtracting employee contributions.

	Pension Plan					
	N/A		**N/A**		**N/A**	
	Current	Proposed	Current	Proposed	Current	Proposed
Projected UAL ($ in Millions)						
Baseline (Year 1)	N/A	N/A	N/A	N/A	N/A	N/A
5 Years	N/A	N/A	N/A	N/A	N/A	N/A
10 Years	N/A	N/A	N/A	N/A	N/A	N/A
20 Years	N/A	N/A	N/A	N/A	N/A	N/A
30 Years	N/A	N/A	N/A	N/A	N/A	N/A
Projected Funding Ratio (%)						
Baseline (Year 1)	N/A	N/A	N/A	N/A	N/A	N/A
5 Years	N/A	N/A	N/A	N/A	N/A	N/A
10 Years	N/A	N/A	N/A	N/A	N/A	N/A
20 Years	N/A	N/A	N/A	N/A	N/A	N/A
30 Years	N/A	N/A	N/A	N/A	N/A	N/A

	Retiree Health Plan					
	N/A		**N/A**		**N/A**	
	Current	Proposed	Current	Proposed	Current	Proposed
Projected UAL ($ in Millions)						
Baseline (Year 1)	N/A	N/A	N/A	N/A	N/A	N/A
5 Years	N/A	N/A	N/A	N/A	N/A	N/A
10 Years	N/A	N/A	N/A	N/A	N/A	N/A
20 Years	N/A	N/A	N/A	N/A	N/A	N/A
30 Years	N/A	N/A	N/A	N/A	N/A	N/A
Projected Funding Ratio (%)						
Baseline (Year 1)	N/A	N/A	N/A	N/A	N/A	N/A
5 Years	N/A	N/A	N/A	N/A	N/A	N/A
10 Years	N/A	N/A	N/A	N/A	N/A	N/A
20 Years	N/A	N/A	N/A	N/A	N/A	N/A
30 Years	N/A	N/A	N/A	N/A	N/A	N/A

* if necessary or plan administers more than one plan/system.

Section III: Brief Summary of Bill

The reinstatement of the Partial Lump-Sum Optional Form of payment, or PLSO, has no fiscal impact to the retirement system because the optional form of payment (both with and without survivor rights) will be actuarially equivalent to the basic form of payment. This proposed legislation will also adjust the minimum required separation period before a retiree may become reemployed and continue to receive their retirement allowance to be one month for all circumstances for each System maintained by KPPA.

Section IV: Statement of Assumptions and Methods

Did the analysis rely solely upon the same assumptions & methods previously established and utilized by the actuary in the retirement system's most recent actuarial valuation? ☐ **YES** ☒ **NO**

If NO, please describe each new assumption or method utilized, the basis for selecting the revised assumption or method, and whether each new assumption or method increased or decreased projected employer costs:

To analyze the fiscal impact of the change in the minimum separation period, we have assumed that there would be a 0.5% increase in the rate of retirement for each of the first two years a hazardous member becomes retirement eligible under the age of 60. Similarly, we have assumed that there would be an 1.0% increase in the rate of retirement for each of the first two years a non-hazardous member becomes retirement eligible under the age of 65.

Section V: Comment from Actuary

KRS Statutes previously provided a PLSO to members who retired on or before January 1, 2009. KPPA may wish to provide comment to the LRC on the popularity and remarks made by members when this optional form of payment was available.

The change in the minimum required separation period such that they are now all one-month will reduce KPPA's administration burden with respect to monitoring and verifying the continuation of retirement allowance for reemployed retirees. The reduction in the minimum separation from service from three months to one month is expected to have a minor impact on retirement behavior that is disclosed in the previous section.

Section VI: Detailed Actuarial Analysis and Projections *(May be attached as Appendix)*

Please see attached.

P: 469.524.0000 | www.grsconsulting.com

March 2, 2023

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

Re: Actuarial Analysis of Proposed Legislation HB 506 (23 RS BR 7) and its Financial Impact on the Systems Maintained by KPPA

Dear Mr. Eager:

We have reviewed the proposed legislation HB 506 (23 RS BR 7) and the purpose of this letter is to communicate the actuarial analysis of this proposed legislation in regards to the five Systems within the Kentucky Public Pensions Authority (KPPA).

Summary of Provisions of Proposed Legislation and Fiscal Impact

The proposed legislation has two significant provisions. The first amends KRS Statute Section 61.635 to reinstate the Partial Lump-Sum Optional Form of payment, or PLSO, for members who retire on and after January 1, 2024, with the lump-sum payment options expanded to include to 48 or 60 times the member's monthly retirement allowance. The following is an illustration of a hypothetical member in the Non-Hazardous System (CERS or KERS) who retires at age 60 with a basic annuity of $3,500 per month and is considering electing a PLSO with the lump-sum options being proposed under this legislation.

Table1. Illustration of PLSO Optional Form of Payment ($3,500 monthly basic annuity)

Optional Form	Lump-Sum Payment	Monthly Retirement Allowance Payable after Lump-Sum Payment
Basic Annuity	$0	$3,500
12-Month PLSO	$42,000	$3,249
24-Month PLSO	$84,000	$2,998
36-Month PLSO	$126,000	$2,747
48-Month PLSO	$168,000	$2,496
60-Month PLSO	$210,000	$2,245

Since this optional form of payment delivers a reduced, actuarial equivalent, monthly retirement allowance for members who elect a partial lump-sum option, this provision does not have a fiscal cost to any of the pension funds. An additional reduction in benefits will apply if the member chooses a benefit option with survivor rights.

The second major provision in this proposed legislation adjusts the minimum required separation period before a retiree may become reemployed and continue to receive their retirement allowance to one month for all circumstances for each System maintained by KPPA. This proposal is a minimal change for members in the KERS Hazardous, CERS Hazardous, and SPRS Systems, as the minimum separation period is currently one month for members who become reemployed on a full-time basis in a hazardous position and three months for members who become reemployed on a part-time basis in hazardous position or in any non-hazardous position.

Similarly, this is a relatively small change for future retirees in both Non-Hazardous systems, as the minimum separation period is currently three months in almost every circumstance and in our opinion, the decrease from a three-month separation period is not significantly different to the proposed one-month separation period. We have reviewed the anticipated change in retirement behavior on the fiscal cost of each system and have determined the fiscal cost on the CERS Hazardous, KERS Hazardous, and SPRS systems to be less than one basis point (i.e. less than 0.01% of pay) on the contribution rate. The fiscal impact on the CERS Non-Hazardous and KERS Non-Hazardous system is also relatively small, but relatively larger compared to the Hazardous Systems because the proposed change in the minimum separation period is expected to have a slightly larger change in retirement behavior for the Non-Hazardous systems compared to the Hazardous systems.

The following chart provides a summary of the impact on the unfunded actuarial accrued liability for the pension funds and the employer contribution requirement for each non-hazardous fund. A more detailed summary of the impact on the funds is provided in Exhibit 1.

Plan	Increase in the Unfunded Accrued Liability (Pension Fund)	Increase in the Contribution Rate	Increase in the Amortization Cost	Increase in Annual Contribution (Pension + Insurance)
CERS Non-Hazardous	$3.6 Million	0.01% of pay	N/A	$0.3 Million
KERS Non-Hazardous	$1.8 Million	0.01% of pay	$0.4 Million	$0.5 Million

Comments on Legislation

KRS Statutes previously provided a PLSO to members who retired on or before January 1, 2009. KPPA may wish to provide comment to the LRC on the popularity and remarks made by members when this optional form of payment was available.

The change in the minimum required separation period such that they are now all one-month will reduce KPPA's administration burden with respect to monitoring and verifying the continuation of retirement allowance for reemployed retirees. The reduction in the minimum separation from service from three months to one month is expected to have a minor impact on retirement behavior that is disclosed in the following section.

Basis of Calculations

GRS based the calculations and analysis in this letter on the member and financial data provided by KPPA for use in performing the actuarial valuation as of June 30, 2022. The projections summarized in the exhibits attached to the cover of this letter assume no actuarial gains or losses will occur in the future, and that members will terminate, become disabled, or die as anticipated by the actuarial assumptions used to perform the June 30, 2022 actuarial valuation. To analyze the fiscal impact of the change in the minimum separation period, we have assumed that there would be a 0.5% increase in the rate of retirement for each of the first two years a hazardous member becomes retirement eligible under the age of 60. Similarly, we have assumed that there would be an 1.0% increase in the rate of retirement for each of the first two years a non-hazardous member becomes retirement eligible under the age of 65. Our calculations are based upon assumptions regarding future events, which may or may not materialize. Depending on actual plan experience, actual results could deviate significantly from our projections.

We are not attorneys and we cannot provide a legal opinion regarding the changes in this proposed legislation. Nothing in this letter should be construed as providing legal, investment or tax advice.

Both of the undersigned are Enrolled Actuaries, 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, both of the undersigned are experienced in performing valuations for large public retirement systems.

Sincerely,
Gabriel, Roeder, Smith & Company

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

Janie Shaw, ASA, EA, MAAA
Consultant

Kentucky Public Pensions Authority

Estimated Financial Cost of Proposed Legislation

Exhibit 1: Actuarial Analysis of Proposed Legislation HB 506 (23 RS BR 7)

($ in Thousands)

	KERS Non-Hazardous		CERS Non-Hazardous	
	Current Plan June 30, 2022 Valuation	Proposed Legislation	Current Plan June 30, 2022 Valuation	Proposed Legislation
1. Covered Payroll	$ 1,355,267	$ 1,355,267	$ 2,744,994	$ 2,744,994
Liability and Assets - Pension Only				
2. Actuarial Accrued Liability	$ 16,576,631	$ 16,578,423	$ 15,674,220	$ 15,677,855
3. Actuarial Value of Assets	3,065,263	3,065,263	8,148,912	8,148,912
4. Unfunded Liability	$ 13,511,368	$ 13,513,160	$ 7,525,308	$ 7,528,943
5. Increase in Unfunded Liability		**$ 1,792**		**$ 3,635**
6. Funded Ratio	18.5%	18.5%	52.0%	52.0%
Liability and Assets - Insurance Only				
7. Actuarial Accrued Liability	$ 1,782,386	$ 1,784,426	$ 2,391,990	$ 2,395,190
8. Actuarial Value of Assets	1,409,553	1,409,553	3,160,084	3,160,084
9. Unfunded Liability	$ 372,833	$ 374,873	$ (768,094)	$ (764,894)
10. Increase in Unfunded Liability		**$ 2,040**		**$ 3,200**
11. Funded Ratio	79.1%	79.0%	132.1%	131.9%
Actuarially Determined Employer Contribution[1]				
12. Normal Cost Rate	7.74%	7.75%	6.06%	6.06%
13. Amortization Cost	N/A	N/A	17.28%	17.29%
14. Pension Employer Contribution Rate	7.74%	7.75%	23.34%	23.35%
15. Insurance Employer Contribution Rate	1.86%	1.86%	0.00%	0.00%
16. Total Employer Contribution Rate	9.60%	9.61%	23.34%	23.35%
17. Increase in Contribution Rate		**0.01%**		**0.01%**
18. Amortization Cost	$ 905,893	$ 906,240		
19. Increase in Amortization Cost		**$ 347**		
20. Estimated Contributions	$ 1,035,999	$ 1,036,481	$ 640,682	$ 640,956
21. Increase in Contributions		**$ 482**		**$ 274**

[1] Note, contribution rates reflect the actuarially determined rates calculated in the June 30, 2022 valuation.
The June 30, 2021 valuation set the contribution requirements for the KERS funds for FYE 2023 and FYE 2024.

Notes and Comments:

- Except where noted, analysis based on the results of the June 30, 2022 Actuarial Valuation. Please see the June 30, 2022 Actuarial Valuation report for a summary of the assumptions, methods, plan provisions and data used for this analysis.
- Projected payroll based on the June 30, 2022 valuation, assuming no increase in covered payroll for the KERS funds, and a 2% annual increase in covered payroll for CERS funds.