Actuarial Analysis Summary – 2022 SB 32 GA

BR or Bill Ref. 2022 SB 32 GA

AA Statement 1 and 2 of 2

Date: 1/12/2022

Actuary: USI Consulting Group

Actuarial Analysis Conducted For:

☐ KERS NH ☐ KERS Haz ☐ SPRS ☐ TRS

☐ 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:

The bill contains a provision that changes the method for amortizing the unfunded actuarially accrued liability that makes the plan more actuarially sound. The new method follows actuarial best practices, while the current amortization method is not considered actuarially sound. Due to the plans' current strong funding positions, this change is not forecasted to have an impact on future costs or benefits. However, when or if an unfunded actuarial liability materializes, the proposed change in amortization method would strengthen the likelihood of paying that debt (i.e., provides for an actuarial sound method).

The remaining provisions of the bill have no impact on actuarial soundness as they either reflect current practice or are clarification items that have no actuarial impact.

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.

Section II: Financial Projections

	Combined Pension and Retiree Health Plan			
	JRP		LRP	
	Current	Proposed	Current	Proposed
Projected Employer Cost*				
30-Yr Nominal $				
30-Yr Net Present Value $				
Proj. Normal Cost for New Hire				

**Projected costs are for all employers and all fund sources for entire 30 year period. Proj. normal cost is the normal cost for new hires after taking into account employee contributions.*

	Pension Plan			
	JRP		LRP	
	Current	Proposed	Current	Proposed
Projected UAL ($)				
Baseline (Year 1)				
5 Years				
10 Years				
20 Years				
30 Years				
Projected Funding Ratio (%)				
Baseline (Year 1)				
5 Years				
10 Years				
20 Years				
30 Years				

	Retiree Health Plan			
	JRP		LRP	
	Current	Proposed	Current	Proposed
Projected UAL ($)				
Baseline (Year 1)				
5 Years				
10 Years				

20 Years				
30 Years				
Projected Funding Ratio (%)				
Baseline (Year 1)				
5 Years				
10 Years				
20 Years				
30 Years				

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

Section III: Brief Summary of Bill

It is our understanding that 2022 SB 32 makes the following changes to LRP and JRP:

Section 1. Starting with the 2023 actuarial valuation, the unfunded actuarially accrued liability will be amortized over a closed 20-year period. Any increase or decrease in the unfunded actuarially accrued liability will be amortized over a new closed 20-year period as part of each new calculation of the annual required contribution (every two years). If the plan has a surplus of assets over the actuarially accrued liability, all prior amortization bases will be eliminated, and the surplus will be amortized for the purpose of the contribution requirement calculation over an open 20-year period.

Section 2. Administrative expenses shall be contained in the biennial budget request. Currently, expected administrative expenses are included in the calculation of the annual required contribution; therefore, no changes are needed.

Sections 3 – 10. These sections are intended to clarify the law and have no actuarial impact.

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:

Section V: Comment from Actuary

Adopting the changes put forth under 2022 SB 32 will:

1. **Make the plan more actuarially sound by improving the method for amortizing any unfunded actuarially accrued liability. The current method has been noted in our valuation reports as actuarially unsound and this new method would satisfy those concerns.**

2. **Have no effect on the projected contributions, benefits, or plan participation. Regarding contributions, the plan is currently expected to have enough surplus assets in both LRP and JRP in 2023 that neither plan is forecasted to have a contribution requirement in the future, both before and after the changes in this bill. Please note that the projections assume all actuarial assumptions are met. Actuarial gains or losses in future years would impact whether or not annual required contribution calculations become needed.**

Section VI: Detailed Actuarial Analysis and Projections

(May be attached as Appendix) **n/a**

MEMORANDUM REPORT

ACTUARY: USI Consulting Group

DATE: January 12, 2022

RE: Actuarial Analysis of 2022 SB 32

Additional Assumption Notes

Future results will vary from projections to the extent future experience varies from the assumptions used in the projections. The longer the period of the forecast, the more variation is likely to occur and the less likely future results will match projections.

1. Except as mentioned herein, all data, assets and assumptions are consistent with the assumptions and methods used for the July 1, 2021 valuation report.
2. Future experience assumptions are consistent with the July 1, 2021 valuation assumptions.
3. The LRP and JRP Traditional Defined Benefit plans are closed to new entrants.
4. Since the changes under 2022 SB 32 are effective July 1, 2023, the first year impacted by a valuation recognizing the changes is July 1, 2023.
5. It is assumed that 100% of the recommended contribution will be made for each year in the current columns of the forecast.
6. In accordance with KRS 21.405, this study does not recognize cost of living increases effective after the most recent valuation date.
7. Certain changes under 2022 SB 32, may or may not be allowed under state law. Whether or not all changes under 2022 SB 32 are permissible is a legal issue, and we provide no opinion in this regard. For purposes of the attached projections, we have assumed such changes are allowable.
8. This report provides actuarial advice and does not constitute legal advice.

Additional Comments on Actuarially Soundness

A plan that has adopted a reasonable funding method, uses reasonable assumptions and contributes at a rate at or above the recommended contribution rate (based on these reasonable methods and assumptions), could be considered to be actuarially sound. If the changes in this study are adopted, the "actuarial soundness" of LRP and JRP will be improved.

In order to ensure LRP and JRP is funded in an "actuarially sound manner", we would recommend:

1. Revise the actuarial funding method to amortize all past unfunded as well as new liabilities over a period not more than 30 years (in accordance with currently applicable Governmental Accounting Standards 67 and 68) and amortize future gains and losses over a period not more than 15 years. In this bill, the unfunded actuarially accrued liability as well as all future gains and losses will be amortized over 20 years. Due to the perpetual nature of the government, it is our opinion that a 20 year amortization period is reasonable and would be considered actuarially sound.
2. Contributing at least the minimum recommended contribution each year.

Deviations from these recommendations could result in an "actuarially unsound" approach to funding LRP and JRP and may eventually result in LRP and JRP becoming insolvent – that is, exhausting assets at which time all future benefits would be made on a pay as you go basis.

Although the Actuarial Standards of Practice 4 “Measuring Pension Obligations” allows for plan liabilities to be calculated under a legally prescribed method, the statement goes on to say,

> “If, in the actuary’s professional judgment, such an actuarial cost method or amortization method is significantly inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming that all actuarial assumptions will be realized and that the plan sponsor or other contributing entity will make contributions when due, the actuary should disclose this.”

It is our professional actuarial opinion that the current legally prescribed method which requires contributions of normal cost plus interest on the unfunded liability plus 1% of the unfunded liability (per KRS 21.525 as currently written) is inconsistent with the plan accumulating adequate assets to make benefit payments when due, assuming all actuarial assumptions are realized.

ASOP 51 Risk Assessment

Risk Factor	Initial Risk Assessment Language
Investment	Due to the plan's substantial equity exposure, investment returns will likely be much more volatile than the measurements of plan liabilities. Therefore, there is a risk that the funded status of the plan, as well as required plan contributions, could be volatile.
Assumed Rate of Return	Due to the plan's estimated duration of 8 to 11, a 1% decrease in the assumed rate of investment return would increase the measurement of the liability by 8% to 11%.
Longevity	Since nearly all of the plan liability is projected to be paid as annuities, the plan is sensitive to changes in overall population longevity. As a result, the liabilities will fluctuate with changes in longevity. The ratio of retired life liability to total liability is 68%-72%, suggesting there is less sensitivity to long-term changes in overall mortality improvement than a less mature plan.
Other demographic factors	Due to the eligibility for unreduced and subsidized retirement benefits, employees continuing in service for longer than expected will accrue additional benefits which may or may not result in larger liabilities. Conversely, employees retiring sooner than anticipated will accrue smaller benefits which may or may not result in smaller liabilities.
Lump sums	No significant known risks. However, as the Hybrid Tier becomes a larger percentage of the total liability, this risk will become more significant. Since lump sum benefits are equal to the cash balance for the Hybrid Tier, lump sum payments have a comparable effect on both assets and liabilities.
Inflation	Inflation is a component of future interest rates and investment returns over a long period. As a result, changes to inflation can affect funded percentages.
Non-Legislative Salaries	For the Legislators Traditional Defined Benefit plan only, pension benefits can be increased by future non-legislative salaries and the liability for active and deferred vested participants has been increased by 40% to reflect his possibility. The effect of non-legislative salaries may have a larger or smaller impact than is reflected by the 40% load factor. Additionally, future legislation may eliminate or reduce the effect of this provision.
Other Factors	Due to recent and ongoing attempts to pass pension reform legislation at a state level, the plan could be modified in the future. Future legislation may affect benefit levels or future contribution levels and could result in increases or decreases in the plan liabilities or funding status.

USI Consulting Group can perform more detailed assessments of these risks as desired by the plan sponsor to provide a better understanding of the risks.

Definitions

Accrued Liability – based on the methods and assumptions used, the amount of assets that would be needed to satisfy future projected benefit payments based on service as of the valuation date.

Normal Cost – cost of benefits earned in the year following the valuation for current active members

Actuarial Asset Value – A smoothed asset value which smoothes in asset gains and losses over a 5 year period (for purposes of this study). For projection years 5 or more years in the future, the actuarial and market value would be the same (assuming assets earn the 6.5% rate of return, which is the assumption). As the Plan has experienced consistent gains over the past few years, the current Actuarial Asset Value is smaller than the market value since all prior gains have not yet been recognized.

Current – projections reflecting current rules and regulations, without regard to 2022 SB 32 Proposed

– projections reflecting 2022 SB 32

Professional Qualifications

This report has been prepared under the supervision of Matthew Widick. Matthew is a member of the American Academy of Actuaries, a Fellow of the Society of Actuaries, and a consulting actuary with USI Consulting Group, who has met the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions herein. To the best of my knowledge this report has been prepared in accordance with generally accepted actuarial standards, including the overall appropriateness of the analysis, assumptions, and results and conforms to appropriate Standards of Practice as promulgated from time to time by the Actuarial Standards Board, which standards form the basis for the actuarial report. I am not aware of any direct or material indirect financial interest or relationship, including investment management or other services that could create, or appear to create, a conflict of interest that would impair the objectivity of this work.

Matthew S. Widick
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Enrollment No. 20-08159
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January 12, 2022
Date

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