

Actuarial Analysis Summary

AA Statement 1 of 1.

BR or Bill Ref. SB 10 (25 RS BR 229)

Date: 2/13/2025

Actuary: GRS

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 actuarially determined contribution rate increases by 2.2% of pay for the CERS hazardous fund due to the proposed legislation. As long as employer contribution requirements are increased accordingly (after the proposed member contribution increases are applied), we do not believe this benefit change will impact the current actuarial soundness of the funds.

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					
	CERS Non-Hazardous*		CERS Hazardous*		N/A	
	Current	Proposed	Current	Proposed	Current	Proposed
Projected Employer Cost* (\$ in Millions)						
30-Yr Nominal \$	\$18,840	\$18,893	\$8,283	\$8,499	N/A	N/A
30-Yr Net Present Value \$	\$8,529	\$8,543	\$3,759	\$3,851	N/A	N/A
Proj. Normal Cost for New Hire	4.06% of pay	4.37% of pay	8.23% of pay	8.22% of pay	N/A	N/A

*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 subtracting employee contributions effective July 1, 2026.

	Pension Plan					
	CERS Non-Hazardous		CERS Hazardous		N/A	
	Current	Proposed	Current	Proposed	Current	Proposed
Projected UAL (\$ in Millions)						
Baseline (Year 1)	\$6,564	\$6,564	\$2,790	\$2,790	N/A	N/A
5 Years	\$5,965	\$5,965	\$2,545	\$2,545	N/A	N/A
10 Years	\$5,607	\$5,607	\$2,359	\$2,359	N/A	N/A
20 Years	\$3,572	\$3,572	\$1,414	\$1,414	N/A	N/A
30 Years	\$0	\$0	\$0	\$0	N/A	N/A
Projected Funding Ratio (%)						
Baseline (Year 1)	58%	58%	54%	54%	N/A	N/A
5 Years	65%	65%	62%	62%	N/A	N/A
10 Years	69%	69%	69%	69%	N/A	N/A
20 Years	83%	83%	86%	86%	N/A	N/A
30 Years	100%	100%	100%	100%	N/A	N/A

	Retiree Health Plan					
	CERS Non-Hazardous		CERS Hazardous		N/A	
	Current	Proposed	Current	Proposed	Current	Proposed
Projected UAL (\$ in Millions)						
Baseline (Year 1)	(\$648)	(\$527)	(\$8)	\$93	N/A	N/A
5 Years	(\$840)	(\$654)	(\$73)	\$37	N/A	N/A
10 Years	(\$953)	(\$655)	(\$17)	\$84	N/A	N/A
20 Years	(\$1,426)	(\$722)	\$114	\$190	N/A	N/A
30 Years	(\$2,341)	(\$862)	\$0	\$0	N/A	N/A
Projected Funding Ratio (%)						
Baseline (Year 1)	122%	117%	101%	95%	N/A	N/A
5 Years	126%	119%	104%	98%	N/A	N/A
10 Years	127%	117%	101%	96%	N/A	N/A
20 Years	133%	115%	94%	91%	N/A	N/A
30 Years	142%	113%	100%	100%	N/A	N/A

Section III: Brief Summary of Bill

The proposed legislation would increase the insurance benefit for members who began participating on or after July 1, 2003 to \$40 a month for non-hazardous CERS service and \$50 a month for hazardous CERS service, effective January 1, 2026. These increases are only payable when a member is not eligible for Medicare benefits and only if they have met certain year-of-service thresholds at retirement. In order for the member to be eligible for the proposed increase in the insurance dollar benefit, the member must meet the following career threshold requirements:

- (1) 20 years of service for a hazardous Tier 1 member;
- (2) 25 years of service for a hazardous Tier 2 or Tier 3 member; and

(3) 27 years of service for a non-hazardous member.

The legislation also increases the insurance member contribution rate for hazardous CERS members from 1% of pay to 2% of pay, effective July 1, 2026, and extends the required member contribution to CERS members hired on or after July 1, 2003 but prior to September 1, 2008 for both non-hazardous and hazardous members.

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:

N/A

Section V: Comment from Actuary

Hazardous fund: The proposed legislation increases the member contribution rate for the CERS hazardous fund to 2% of pay. The proposed legislation increases the contribution rate requirement for this insurance fund by 2.2% of pay, therefore about half of the cost of the proposed legislation is being paid by the employer and half by the member. Additional details are shown in Exhibit 1-2 of the attached detailed analysis.

Non-hazardous fund: Employers do not currently contribute to this fund and an immediate increase in the employer contribution requirement is not expected under the proposed legislation. However, the proposed benefit changes do increase the future liabilities of the plan and there is an increased likelihood of employer contributions being required for this fund in the future.

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

Please see attached.



February 13, 2025

Mr. Ryan Barrow
Executive Director
Kentucky Public Pensions Authority
1260 Louisville Road
Frankfort, KY 40601

Re: Actuarial Analysis of Proposed Legislation SB 10 (2025 RS BR 229) and its Financial Impact on the Systems Maintained by KPPA

Dear Mr. Barrow:

We have reviewed the proposed legislation SB 10 (2025 RS BR 229), and the purpose of this letter is to communicate the actuarial analysis of this legislation in regards to the five Systems administered by the Kentucky Public Pensions Authority (KPPA). Note, the proposed legislation only impacts service earned while a member in the County Employees Retirement System (CERS).

Summary of Provisions of Proposed Legislation and Fiscal Impact

The proposed legislation would increase the insurance benefit for members who began participating on or after July 1, 2003 to \$40 a month for non-hazardous CERS service and \$50 a month for hazardous CERS service, effective January 1, 2026. These increases are only payable when a member is not eligible for Medicare benefits and only if they have met certain year-of-service thresholds at retirement.

The legislation also increases the insurance member contribution rate for hazardous CERS members from 1% of pay to 2% of pay, effective July 1, 2026, and extends the required member contribution to CERS members hired on or after July 1, 2003 but prior to September 1, 2008 for both non-hazardous and hazardous members.

The impact of the proposed legislation on the unfunded actuarial accrued liability and the actuarially determined contribution requirement calculated as of June 30, 2024 are shown in the table below.

Increase in Unfunded Liability and Actuarially Determined Contribution Requirements (Employer and Employee Requirement Combined)

Plan	Increase in Unfunded Liability	Increase in Total Contribution Requirement	Increase in Total Contribution Rate	Increase in Member Rate
CERS Non-Hazardous	\$ 120,898,000	\$ 0	0.0%	0.0%
CERS Hazardous	101,093,000	16,676,000	2.2%	1.0%

The proposed legislation increases the actuarially determined contribution for the CERS non-hazardous insurance fund by 0.6% of pay; however, due to the overall funded ratio of this plan the actuarially determined contribution is still less than 0% of pay so the net impact is 0% of pay.

In order for the member to be eligible for the proposed increase in the insurance dollar benefit, the member must meet the following career threshold requirements:

- (1) 20 years of service for a hazardous Tier 1 member;
- (2) 25 years of service for a hazardous Tier 2 or Tier 3 member; and
- (3) 27 years of service for a non-hazardous member.

GRS Comments on the Proposed Legislation

The proposed legislation increases the normal cost rate for Tier 3 members, as well as the member contribution rate for the hazardous fund. The table below shows the increased normal cost rates and member contribution rates for Tier 3 members under the proposed legislation.

Plan	Tier 3 Normal Cost Rate	Expected Member Contribution Rate ¹	% of Benefit Paid by Member
CERS Non-Hazardous	1.92%	1.00%	52%
CERS Hazardous	3.39%	2.00%	59%

¹ Reflects projected member contribution rate effective July 1, 2026.

It is important to note that contributions made to the health insurance funds are not refundable like member contributions to pension plans. Therefore, members who do not retire with their respective system retiree health insurance benefits will not be refunded these contributions made to the retiree health insurance plan.

GRS Comments on the Proposed Legislation – CERS Hazardous Fund

The proposed legislation increases the member contribution rate for the CERS hazardous fund to 2% of pay. The proposed legislation also increases the contribution rate requirement for this fund by 2.2% of pay, therefore about half of the cost of the proposed legislation is being paid by the employer and half by the member. Additional details are shown in Exhibit 1-2.

GRS Comments on the Proposed Legislation – CERS Non-Hazardous Fund

Employers do not currently contribute to the CERS non-hazardous insurance fund and an immediate increase in the employer contribution requirement is not expected under the proposed legislation. However, the proposed benefit changes do increase the future liabilities of the plan and there is an increased likelihood of employer contributions being required for this fund in the future.



Basis of Calculations

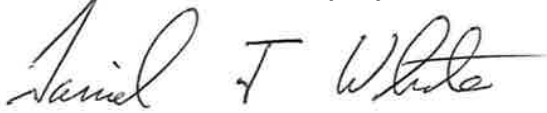
Except where noted, the calculations are based on the methods, assumptions, and plan provisions documented in the actuarial valuation as of June 30, 2024. Our calculations are based upon assumptions regarding future events, which may or may not materialize. Depending on actual plan experience, actual results could deviate significantly.

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. In instances we provide comment on certain provisions, our purpose is to educate stakeholders of possible unintended consequences based on our experience working with systems in other states.

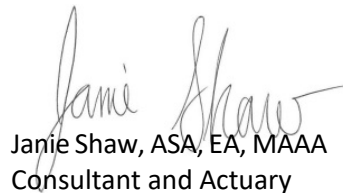
All three of the undersigned are members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. In addition, all three are independent of KPPA and are experienced in performing valuations for large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

Sincerely,

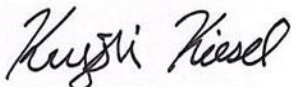
Gabriel, Roeder, Smith & Company



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



Jamie Shaw, ASA, EA, MAAA
Consultant and Actuary



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Actuarial Analysis of SB 10
Section 1.
Comparison of Fiscal Impact
Current Plan vs. Proposed Changes

Kentucky Public Pensions Authority
Exhibit 1-1
CERS Non-Hazardous Insurance Fund
Actuarial Analysis of SB 10
Comparison of Current Plan and Proposed Legislation
(\$ in Millions)

Fiscal Year Beginning July 1,	Unfunded Actuarial Accrued Liability			Funded Ratio			Employer Contributions			Member Contribution Rate			Employer Contribution Rate		
	Current	Proposed	Difference	Current	Proposed	Difference	Current	Proposed	Difference	Current	Proposed	Difference	Current	Proposed	Difference
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2024	\$ (648)	\$ (527)	\$ 121	122%	117%	-5%	\$ -	\$ -	\$ -	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2025	(732)	(594)	138	124%	119%	-5%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2026	(722)	(568)	154	123%	117%	-6%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2027	(792)	(622)	170	125%	118%	-7%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2028	(840)	(654)	186	126%	119%	-7%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2029	(855)	(651)	204	125%	118%	-7%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2030	(875)	(651)	224	126%	118%	-8%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2031	(898)	(652)	246	126%	117%	-9%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2032	(924)	(653)	271	126%	117%	-9%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2033	(953)	(655)	298	127%	117%	-10%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2034	(986)	(659)	327	127%	117%	-10%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2035	(1,022)	(662)	360	128%	116%	-12%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2036	(1,061)	(667)	394	128%	116%	-12%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2037	(1,103)	(672)	431	129%	116%	-13%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2038	(1,148)	(677)	471	130%	116%	-14%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2039	(1,196)	(681)	515	130%	115%	-15%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2040	(1,249)	(687)	562	131%	115%	-16%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2041	(1,304)	(693)	611	132%	115%	-17%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2042	(1,363)	(699)	664	132%	115%	-17%	-	17	17	1.0%	1.0%	0.0%	0.0%	0.4%	0.4%
2043	(1,426)	(722)	704	133%	115%	-18%	-	15	15	1.0%	1.0%	0.0%	0.0%	0.3%	0.3%
2044	(1,493)	(745)	748	134%	115%	-19%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2045	(1,565)	(753)	812	134%	115%	-19%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2046	(1,641)	(762)	879	135%	114%	-21%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2047	(1,723)	(770)	953	136%	114%	-22%	-	6	6	1.0%	1.0%	0.0%	0.0%	0.1%	0.1%
2048	(1,811)	(786)	1,025	137%	114%	-23%	-	15	15	1.0%	1.0%	0.0%	0.0%	0.3%	0.3%
2049	(1,903)	(812)	1,091	138%	114%	-24%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2050	(2,002)	(824)	1,178	139%	114%	-25%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2051	(2,107)	(836)	1,271	140%	114%	-26%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2052	(2,221)	(849)	1,372	141%	114%	-27%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%
2053	(2,341)	(862)	1,479	142%	113%	-29%	-	-	-	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%



Kentucky Public Pensions Authority
Exhibit 1-2
CERS Hazardous Insurance Fund
Actuarial Analysis of SB 10
Comparison of Current Plan and Proposed Legislation
(\$ in Millions)

Fiscal Year Beginning July 1,	Unfunded Actuarial Accrued Liability			Funded Ratio			Employer Contributions			Member Contribution Rate			Employer Contribution Rate		
	Current	Proposed	Difference	Current	Proposed	Difference	Current	Proposed	Difference	Current	Proposed	Difference	Current	Proposed	Difference
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2024	\$ (8)	\$ 93	\$ 101	101%	95%	-6%	\$ 16	\$ 16	\$ -	1.0%	1.0%	0.0%	2.1%	2.1%	0.0%
2025	(49)	66	115	103%	96%	-7%	13	13	-	1.0%	1.0%	0.0%	1.7%	1.7%	0.0%
2026	(40)	73	113	102%	96%	-6%	7	16	9	1.0%	2.0%	1.0%	1.0%	2.0%	1.0%
2027	(63)	49	112	104%	97%	-7%	6	15	9	1.0%	2.0%	1.0%	0.8%	1.9%	1.1%
2028	(73)	37	110	104%	98%	-6%	2	11	9	1.0%	2.0%	1.0%	0.3%	1.4%	1.1%
2029	(64)	43	107	104%	98%	-6%	-	9	9	1.0%	2.0%	1.0%	0.0%	1.1%	1.1%
2030	(53)	51	104	103%	97%	-6%	-	8	8	1.0%	2.0%	1.0%	0.0%	0.9%	0.9%
2031	(41)	62	103	102%	97%	-5%	-	7	7	1.0%	2.0%	1.0%	0.0%	0.8%	0.8%
2032	(30)	72	102	102%	96%	-6%	-	6	6	1.0%	2.0%	1.0%	0.0%	0.8%	0.8%
2033	(17)	84	101	101%	96%	-5%	-	6	6	1.0%	2.0%	1.0%	0.0%	0.7%	0.7%
2034	(4)	97	101	100%	95%	-5%	-	6	6	1.0%	2.0%	1.0%	0.0%	0.7%	0.7%
2035	9	111	102	100%	94%	-6%	-	6	6	1.0%	2.0%	1.0%	0.0%	0.6%	0.6%
2036	24	126	102	99%	94%	-5%	-	5	5	1.0%	2.0%	1.0%	0.0%	0.6%	0.6%
2037	40	143	103	98%	93%	-5%	-	5	5	1.0%	2.0%	1.0%	0.0%	0.5%	0.5%
2038	56	160	104	97%	92%	-5%	-	5	5	1.0%	2.0%	1.0%	0.0%	0.5%	0.5%
2039	74	179	105	96%	91%	-5%	-	5	5	1.0%	2.0%	1.0%	0.0%	0.5%	0.5%
2040	94	200	106	94%	90%	-4%	-	10	10	1.0%	2.0%	1.0%	0.0%	1.0%	1.0%
2041	114	216	102	93%	89%	-4%	4	22	18	1.0%	2.0%	1.0%	0.4%	2.2%	1.8%
2042	131	221	90	92%	89%	-3%	39	57	18	1.0%	2.0%	1.0%	3.7%	5.4%	1.7%
2043	114	190	76	94%	91%	-3%	37	56	19	1.0%	2.0%	1.0%	3.4%	5.2%	1.8%
2044	98	159	61	95%	93%	-2%	38	44	6	1.0%	2.0%	1.0%	3.4%	4.0%	0.6%
2045	80	138	58	96%	94%	-2%	44	50	6	1.0%	2.0%	1.0%	3.9%	4.5%	0.6%
2046	54	109	55	97%	95%	-2%	44	50	6	1.0%	2.0%	1.0%	3.9%	4.4%	0.5%
2047	27	78	51	99%	97%	-2%	49	55	6	1.0%	2.0%	1.0%	4.2%	4.7%	0.5%
2048	-	40	40	100%	98%	-2%	51	58	7	1.0%	2.0%	1.0%	4.3%	4.8%	0.5%
2049	-	-	-	100%	100%	0%	7	13	6	1.0%	2.0%	1.0%	0.5%	1.1%	0.6%
2050	-	-	-	100%	100%	0%	7	12	5	1.0%	2.0%	1.0%	0.5%	1.0%	0.5%
2051	-	-	-	100%	100%	0%	7	12	5	1.0%	2.0%	1.0%	0.5%	1.0%	0.5%
2052	-	-	-	100%	100%	0%	7	12	5	1.0%	2.0%	1.0%	0.6%	0.9%	0.3%
2053	-	-	-	100%	100%	0%	8	12	4	1.0%	2.0%	1.0%	0.6%	0.9%	0.3%



Actuarial Analysis of SB 10
Section 2.
Projected Cost of the Retirement and Insurance
Current Plan

Kentucky Public Pensions Authority
Exhibit 2-1
CERS Non-Hazardous Insurance Fund
Actuarial Analysis of SB 10
Current Plan
(\$ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution	Member Contribution as % of Covered Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2024	\$ 2,901	\$ 3,549	\$ (648)	122%	\$ -	\$ 21	\$ 3,107	0.00%	0.00%	1.00%
2025	3,009	3,741	(732)	124%	-	22	3,169	0.00%	0.00%	1.00%
2026	3,109	3,831	(722)	123%	-	24	3,232	0.00%	0.00%	1.00%
2027	3,201	3,993	(792)	125%	-	25	3,297	0.00%	0.00%	1.00%
2028	3,284	4,124	(840)	126%	-	27	3,363	0.00%	0.00%	1.00%
2029	3,360	4,215	(855)	125%	-	29	3,430	0.00%	0.00%	1.00%
2030	3,428	4,303	(875)	126%	-	30	3,499	0.00%	0.00%	1.00%
2031	3,489	4,387	(898)	126%	-	31	3,569	0.00%	0.00%	1.00%
2032	3,545	4,469	(924)	126%	-	33	3,640	0.00%	0.00%	1.00%
2033	3,599	4,552	(953)	127%	-	34	3,713	0.00%	0.00%	1.00%
2034	3,652	4,638	(986)	127%	-	36	3,787	0.00%	0.00%	1.00%
2035	3,706	4,728	(1,022)	128%	-	37	3,863	0.00%	0.00%	1.00%
2036	3,765	4,826	(1,061)	128%	-	38	3,940	0.00%	0.00%	1.00%
2037	3,829	4,932	(1,103)	129%	-	39	4,019	0.00%	0.00%	1.00%
2038	3,898	5,046	(1,148)	130%	-	40	4,099	0.00%	0.00%	1.00%
2039	3,973	5,169	(1,196)	130%	-	41	4,181	0.00%	0.00%	1.00%
2040	4,054	5,303	(1,249)	131%	-	42	4,265	0.00%	0.00%	1.00%
2041	4,142	5,446	(1,304)	132%	-	43	4,350	0.00%	0.00%	1.00%
2042	4,236	5,599	(1,363)	132%	-	44	4,437	0.00%	0.00%	1.00%
2043	4,336	5,762	(1,426)	133%	-	45	4,526	0.00%	0.00%	1.00%
2044	4,443	5,936	(1,493)	134%	-	46	4,616	0.00%	0.00%	1.00%
2045	4,555	6,120	(1,565)	134%	-	47	4,709	0.00%	0.00%	1.00%
2046	4,672	6,313	(1,641)	135%	-	48	4,803	0.00%	0.00%	1.00%
2047	4,792	6,515	(1,723)	136%	-	49	4,899	0.00%	0.00%	1.00%
2048	4,916	6,727	(1,811)	137%	-	50	4,997	0.00%	0.00%	1.00%
2049	5,043	6,946	(1,903)	138%	-	51	5,097	0.00%	0.00%	1.00%
2050	5,172	7,174	(2,002)	139%	-	52	5,199	0.00%	0.00%	1.00%
2051	5,302	7,409	(2,107)	140%	-	53	5,303	0.00%	0.00%	1.00%
2052	5,433	7,654	(2,221)	141%	-	54	5,409	0.00%	0.00%	1.00%
2053	5,566	7,907	(2,341)	142%	-	55	5,517	0.00%	0.00%	1.00%

Notes and assumptions:

The projection is based on the results of the June 30, 2024 actuarial valuation and assumes that all actuarial assumptions are realized, including the assumed annual asset return of 6.50%.

New active members are assumed to be hired as current active members are assumed to terminate employment or retire.

The total active population is assumed to remain level throughout the entire projection.

Covered payroll is assumed to increase 2% each year throughout the entire projection.

The Board certified contribution rate paid by employers is assumed to be equal to the full actuarially determined contribution rate, except as allowed by

House Bill 362 (passed during the 2018 legislative session), which limits the certified contribution rate to a 12% increase over the prior year rate for the period of July 1, 2018 to June 30, 2028.



Kentucky Public Pensions Authority
Exhibit 2-2
CERS Hazardous Insurance Fund
Actuarial Analysis of SB 10
Current Plan
(\$ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution	Member Contribution as % of Covered Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2024	\$ 1,668	\$ 1,676	\$ (8)	101%	\$ 16	\$ 5	\$ 739	2.12%	2.12%	1.00%
2025	1,691	1,740	(49)	103%	13	5	754	1.73%	1.73%	1.00%
2026	1,709	1,749	(40)	102%	7	6	769	0.95%	0.95%	1.00%
2027	1,719	1,782	(63)	104%	6	6	785	0.78%	0.78%	1.00%
2028	1,723	1,796	(73)	104%	2	7	800	0.26%	0.26%	1.00%
2029	1,723	1,787	(64)	104%	-	7	816	0.00%	0.00%	1.00%
2030	1,721	1,774	(53)	103%	-	7	833	0.00%	0.00%	1.00%
2031	1,716	1,757	(41)	102%	-	8	849	0.00%	0.00%	1.00%
2032	1,707	1,737	(30)	102%	-	8	866	0.00%	0.00%	1.00%
2033	1,697	1,714	(17)	101%	-	8	884	0.00%	0.00%	1.00%
2034	1,687	1,691	(4)	100%	-	9	901	0.00%	0.00%	1.00%
2035	1,676	1,667	9	100%	-	9	919	0.00%	0.00%	1.00%
2036	1,669	1,645	24	99%	-	9	938	0.00%	0.00%	1.00%
2037	1,666	1,626	40	98%	-	9	956	0.00%	0.00%	1.00%
2038	1,666	1,610	56	97%	-	10	976	0.00%	0.00%	1.00%
2039	1,671	1,597	74	96%	-	10	995	0.00%	0.00%	1.00%
2040	1,682	1,588	94	94%	-	10	1,015	0.00%	0.00%	1.00%
2041	1,697	1,583	114	93%	4	10	1,035	0.40%	0.40%	1.00%
2042	1,717	1,586	131	92%	39	11	1,056	3.65%	3.65%	1.00%
2043	1,742	1,628	114	94%	37	11	1,077	3.42%	3.42%	1.00%
2044	1,772	1,674	98	95%	38	11	1,099	3.44%	3.44%	1.00%
2045	1,806	1,726	80	96%	44	11	1,121	3.92%	3.92%	1.00%
2046	1,841	1,787	54	97%	44	11	1,143	3.85%	3.85%	1.00%
2047	1,878	1,851	27	99%	49	12	1,166	4.16%	4.16%	1.00%
2048	1,915	1,915	-	100%	51	12	1,189	4.31%	4.31%	1.00%
2049	1,953	1,953	-	100%	7	12	1,213	0.54%	0.54%	1.00%
2050	1,990	1,990	-	100%	7	12	1,237	0.54%	0.54%	1.00%
2051	2,027	2,027	-	100%	7	13	1,262	0.54%	0.54%	1.00%
2052	2,064	2,064	-	100%	7	13	1,287	0.56%	0.56%	1.00%
2053	2,101	2,101	-	100%	8	13	1,313	0.58%	0.58%	1.00%

Notes and assumptions:

The projection is based on the results of the June 30, 2024 actuarial valuation and assumes that all actuarial assumptions are realized, including the assumed annual asset return of 6.50%.

New active members are assumed to be hired as current active members are assumed to terminate employment or retire.

The total active population is assumed to remain level throughout the entire projection.

Covered payroll is assumed to increase 2% each year throughout the entire projection.

The Board certified contribution rate paid by employers is assumed to be equal to the full actuarially determined contribution rate, except as allowed by

House Bill 362 (passed during the 2018 legislative session), which limits the certified contribution rate to a 12% increase over the prior year rate for the period of July 1, 2018 to June 30, 2028.



Actuarial Analysis of SB 10
Section 3.
Projected Cost of the Retirement and Insurance
Proposed Legislation

Kentucky Public Pensions Authority
Exhibit 3-1
CERS Non-Hazardous Insurance Fund
Actuarial Analysis of SB 10
Proposed Legislation
(\$ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution	Member Contribution as % of Covered Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2024	\$ 3,022	\$ 3,549	\$ (527)	117%	\$ -	\$ 21	\$ 3,107	0.00%	0.00%	1.00%
2025	3,147	3,741	(594)	119%	-	22	3,169	0.00%	0.00%	1.00%
2026	3,264	3,832	(568)	117%	-	28	3,232	0.00%	0.00%	1.00%
2027	3,376	3,998	(622)	118%	-	29	3,297	0.00%	0.00%	1.00%
2028	3,480	4,134	(654)	119%	-	31	3,363	0.00%	0.00%	1.00%
2029	3,579	4,230	(651)	118%	-	32	3,430	0.00%	0.00%	1.00%
2030	3,672	4,323	(651)	118%	-	33	3,499	0.00%	0.00%	1.00%
2031	3,760	4,412	(652)	117%	-	34	3,569	0.00%	0.00%	1.00%
2032	3,844	4,497	(653)	117%	-	35	3,640	0.00%	0.00%	1.00%
2033	3,925	4,580	(655)	117%	-	36	3,713	0.00%	0.00%	1.00%
2034	4,004	4,663	(659)	117%	-	37	3,787	0.00%	0.00%	1.00%
2035	4,085	4,747	(662)	116%	-	38	3,863	0.00%	0.00%	1.00%
2036	4,168	4,835	(667)	116%	-	39	3,940	0.00%	0.00%	1.00%
2037	4,256	4,928	(672)	116%	-	40	4,019	0.00%	0.00%	1.00%
2038	4,349	5,026	(677)	116%	-	41	4,099	0.00%	0.00%	1.00%
2039	4,449	5,130	(681)	115%	-	42	4,181	0.00%	0.00%	1.00%
2040	4,556	5,243	(687)	115%	-	43	4,265	0.00%	0.00%	1.00%
2041	4,669	5,362	(693)	115%	-	43	4,350	0.00%	0.00%	1.00%
2042	4,790	5,489	(699)	115%	17	44	4,437	0.38%	0.38%	1.00%
2043	4,918	5,640	(722)	115%	15	45	4,526	0.33%	0.33%	1.00%
2044	5,052	5,797	(745)	115%	-	46	4,616	0.00%	0.00%	1.00%
2045	5,192	5,945	(753)	115%	-	47	4,709	0.00%	0.00%	1.00%
2046	5,336	6,098	(762)	114%	-	48	4,803	0.00%	0.00%	1.00%
2047	5,486	6,256	(770)	114%	6	49	4,899	0.12%	0.12%	1.00%
2048	5,640	6,426	(786)	114%	15	50	4,997	0.30%	0.30%	1.00%
2049	5,797	6,609	(812)	114%	-	51	5,097	0.00%	0.00%	1.00%
2050	5,957	6,781	(824)	114%	-	52	5,199	0.00%	0.00%	1.00%
2051	6,119	6,955	(836)	114%	-	53	5,303	0.00%	0.00%	1.00%
2052	6,283	7,132	(849)	114%	-	54	5,409	0.00%	0.00%	1.00%
2053	6,448	7,310	(862)	113%	-	55	5,517	0.00%	0.00%	1.00%

Notes and assumptions:

The analysis above is based on the same methods, assumptions, and benefit provisions as the analysis under the Current Plan, except for the proposed changes.



Kentucky Public Pensions Authority
Exhibit 3-2
CERS Hazardous Insurance Fund
Actuarial Analysis of SB 10
Proposed Legislation
(\$ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution	Member Contribution as % of Covered Payroll
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2024	\$ 1,769	\$ 1,676	\$ 93	95%	\$ 16	\$ 5	\$ 739	2.12%	2.12%	1.00%
2025	1,806	1,740	66	96%	13	5	754	1.73%	1.73%	1.00%
2026	1,837	1,764	73	96%	16	15	769	2.03%	2.03%	2.00%
2027	1,862	1,813	49	97%	15	15	785	1.88%	1.88%	2.00%
2028	1,880	1,843	37	98%	11	16	800	1.37%	1.37%	2.00%
2029	1,894	1,851	43	98%	9	16	816	1.05%	1.05%	2.00%
2030	1,906	1,855	51	97%	8	16	833	0.92%	0.92%	2.00%
2031	1,915	1,853	62	97%	7	17	849	0.82%	0.82%	2.00%
2032	1,920	1,848	72	96%	6	17	866	0.75%	0.75%	2.00%
2033	1,925	1,841	84	96%	6	18	884	0.69%	0.69%	2.00%
2034	1,929	1,832	97	95%	6	18	901	0.65%	0.65%	2.00%
2035	1,934	1,823	111	94%	6	18	919	0.60%	0.60%	2.00%
2036	1,941	1,815	126	94%	5	19	938	0.56%	0.56%	2.00%
2037	1,953	1,810	143	93%	5	19	956	0.54%	0.54%	2.00%
2038	1,969	1,809	160	92%	5	20	976	0.51%	0.51%	2.00%
2039	1,989	1,810	179	91%	5	20	995	0.49%	0.49%	2.00%
2040	2,015	1,815	200	90%	10	20	1,015	0.99%	0.99%	2.00%
2041	2,044	1,828	216	89%	22	21	1,035	2.17%	2.17%	2.00%
2042	2,078	1,857	221	89%	57	21	1,056	5.42%	5.42%	2.00%
2043	2,117	1,927	190	91%	56	22	1,077	5.18%	5.18%	2.00%
2044	2,160	2,001	159	93%	44	22	1,099	4.00%	4.00%	2.00%
2045	2,205	2,067	138	94%	50	22	1,121	4.48%	4.48%	2.00%
2046	2,251	2,142	109	95%	50	23	1,143	4.40%	4.40%	2.00%
2047	2,297	2,219	78	97%	55	23	1,166	4.68%	4.68%	2.00%
2048	2,343	2,303	40	98%	58	24	1,189	4.84%	4.84%	2.00%
2049	2,388	2,388	-	100%	13	24	1,213	1.05%	1.05%	2.00%
2050	2,433	2,433	-	100%	12	25	1,237	1.01%	1.01%	2.00%
2051	2,477	2,477	-	100%	12	25	1,262	0.98%	0.98%	2.00%
2052	2,521	2,521	-	100%	12	26	1,287	0.94%	0.94%	2.00%
2053	2,563	2,563	-	100%	12	26	1,313	0.91%	0.91%	2.00%

Notes and assumptions:

The analysis above is based on the same methods, assumptions, and benefit provisions as the analysis under the Current Plan, except for the proposed changes.

