



November 13, 2020

Mr. David Eager
Executive Director
Kentucky Retirement Systems
1260 Louisville Road
Frankfort, KY 40601

Re: Actuarial Analysis of Proposed Legislation BR424 and its Financial Impact on the Kentucky Employees Retirement System (Non-Hazardous funds)

Dear Mr. Eager:

We have reviewed the proposed legislation BR 424 and the purpose of this letter is to communicate the actuarial analysis of this proposed legislation on the KERS Non-Hazardous System.

Provisions of Proposed Legislation

Beginning with the 2021/2022 fiscal year, the proposed legislation would change the method for allocating the contribution requirement related to the amortization of the unfunded actuarial accrued liability among employers in the KERS Non-Hazardous System. Currently employers contribute a percentage of their covered payroll. The proposed legislation would allocate a dollar contribution amount that is based on the percentage of the System's total actuarial accrued liability (calculated as of the June 30, 2019 valuation) that is attributable to each employer's current and former employees. Employers would continue contributing a normal cost as a percentage of their employees' covered payroll.

Additionally, the proposed legislation changes the method for amortizing the unfunded liability. The unfunded liability as of June 30, 2019 would continue to be amortized over a closed 30-year period. However, gains and losses incurring after June 30, 2019 would be included in this closed 30-year amortization base rather than being amortized as new, separate 20-year bases.

Summary of Cost Impact

The change in the amortization method increases the employer contribution by \$4 million (retirement and insurance funds combined) for the 2021/2022 fiscal year (or an increase from 85.03% of pay to 85.34% of pay). The change to the method of allocating the contribution requirement among employers would have no fiscal impact to the Retirement System as a whole; **however, we believe this legislation will significantly reduce the System's risk of receiving insufficient contributions because employers will no longer be able to reduce their pension cost by reducing their covered payroll. In summary, we believe this legislation will result in an improved and sustainable funding policy for the KERS Non-Hazardous System.**

Cost Impact on Individual Employers

While the proposed legislation slightly increases the employer contributions to the System in total, the proposed legislation modifies the method for allocating the total contribution requirement to the participating employers in the System from being based on covered payroll to the employer's share of the System's actuarial accrued liability. As a result, each participating employer's contribution requirement could increase or decrease.

Below is a table summarizing the expected magnitude of the change in the contribution requirement by employer type.

**Table 1. Comparison of Contribution Effort for FY 2021/2022
 under Current and Proposed Funding Method
 (\$ in Millions)**

Agency Type	Projected FY 21/22 Payroll	Effective Contribution Rate		Estimated Required Contribution	
		Current	Proposed	Current	Proposed
(1)	(2)	(3)	(4)	(5)	(6)
Health Department	\$83.9	85.03%	93.52%	\$71.3	\$78.4
Non-P1 State Assoc/Corp	28.3	85.03%	52.93%	24.0	15.0
Non-P1 State Agencies	10.7	85.03%	29.44%	9.1	3.1
Reg Mental Health Units	80.1	85.03%	88.77%	68.1	71.1
Universities	88.8	85.03%	77.19%	75.5	68.6
County Attorneys	8.6	85.03%	69.73%	7.3	6.0
Legislative Branch	21.4	85.03%	97.58%	18.2	20.9
Judicial Branch	60.3	85.03%	52.56%	51.3	31.7
Executive Branch	<u>1,005.7</u>	<u>85.03%</u>	<u>88.45%</u>	<u>855.1</u>	<u>889.5</u>
Total for all employers*	\$1,387.8	85.03%	85.34%	\$1,180.0	\$1,184.3

*Total may not add due to rounding

Please refer to Exhibits 1. and 2. for the expected fiscal impact of the proposed legislation on all agencies in the System.

Sections 3., 4., and 5. provide 30-year projections of the liability and contribution requirements of the pension and insurance funds under the current and proposed funding, as well as a summary of the fiscal impact of the proposed legislation.



Comments regarding the Proposed Legislation

Amortization Period Change – The proposed legislation changes the method for amortizing the unfunded liability. The unfunded liability as of June 30, 2019 would continue to be amortized over a closed 30-year period. However, gains and losses incurring after June 30, 2019 would be included in this closed 30-year amortization base rather than being amortized as new, separate 20-year bases. This change does not change the liability of or the projected benefit payments to be paid from the retirement and insurance funds. Rather it changes calculation the amortization cost, resulting in a slight increase in the contribution requirement for fiscal year 2021/2022.

The unfunded liability as of June 30, 2020 was less than expected for the funds. Under the proposed legislation, this gain would be recognized, or amortized, over 29 years rather than the 20 years under the current funding methodology. Because this gain is being spread over more years, the immediate contribution requirement will be slightly greater under the proposed legislation.

Allocation of Contributions to Employers – Currently KRS collects contributions from participating employers based on the employer's total payroll of employees who are earning benefits in KERS (i.e. covered payroll). The actuarially determined contribution rate is comprised of two components: (1) the normal cost rate (to pay for the benefits accruing in the next year) and (2) the unfunded amortization (to pay for the benefits accrued by members in previous years). The unfunded amortization is calculated by first determining the dollar amount necessary to pay for the unfunded liability based on KRS's funding policy and then by dividing that dollar amount by expected covered payroll to convert that contribution requirement to a percentage of payroll (i.e. a contribution rate). Based on the June 30, 2020 actuarial valuation (and the current amortization methodology), the contribution rate for the KERS Non-Hazardous System beginning July 1, 2021 will be 85.03% of pay (pension and insurance) which is comprised of a 10.10% normal cost rate and a 74.93% amortization cost rate.

Under the funding methodology, an employer can decrease their pension cost by \$850.30 for every \$1,000 reduction in their reported payroll to the System. Consequently, it is not surprising to see many employers participating in KRS performing deliberate workforce actions to reduce their payroll reported to the System (e.g. through use of technology improvements, or contractors and outsourcing agencies) in order to reduce their pension cost. The reported payroll and active membership in the KERS Non-Hazardous System has decreased from \$1.732 billion in payroll and 46.6 thousand active members in 2011 to \$1.388 billion in payroll and 31.7 thousand active members in 2020. This is a 20% decrease in covered payroll and a 32% reduction in active membership over the last nine years. This decrease in the covered payroll requires subsequent increases in the unfunded amortization contribution rate in order to maintain the same contribution dollars to the System.

Under the proposed legislation, employers would continue contributing a normal cost rate (10.10% of pay) times the payroll of their employees earning benefits in KERS plus an allocated portion of the System's annual amortization cost. The amortization cost will be based on the percentage of



the System's total actuarial accrued liability (calculated as of the June 30, 2019 valuation) that is attributable to each employer's current and former employees. Since the amortization cost is no longer tied to employer payroll, the System would be expected to receive the entire contribution requirement regardless of employer workforce actions to reduce covered payroll. Also, since an employer's allocated portion of the amortization cost is fixed as a percentage of the System's total amortization cost, an employer can increase their payroll without seeing large increases in their pension contributions. In other words, the employers pension cost would increase by \$101.00 for every \$1,000 increase in covered payroll (versus the current \$850.30).

Based on historic employer behavior and the current contribution rates, we believe employers will continue reducing their covered payroll in future years if the current method for collecting contributions on covered payroll remains unchanged, which will result in contribution rates continuing to increase in future years, thereby further increasing employers' incentive to reduce covered payroll. Maintaining the current method poses a significant risk to the KERS Non-Hazardous System of receiving insufficient contributions. This proposed legislation is expected to significantly reduce this risk by reducing employers' ability to control their pension contribution requirement through covered payroll reduction. In summary, we believe the proposed legislation will result in a more sustainable funding outlook compared to the current payroll based contribution method.

In general, the dollar amount of the employer's amortization cost will increase or decrease from year-to-year, depending the System's liability and investment experience, but is expected to remain relatively level during the duration of the funding period, which would be 29 years as of July 1, 2020 under the proposed legislation. For certain employers, the proposed legislation would only allow the amortization cost to be adjusted upon the completion of an actuarial investigation and only every four years.

The basis for determining each employer's required amortization cost is a policy decision, but it is relatively easy to reason that this allocation method is fair because the contributions from each employer are more directly linked to the liability attributable to their current and former employees. **However, the change in allocation method will result in a number of employers experiencing a significant increase or decrease in their pension contribution requirement at July 1, 2021. This could be a significant fiscal budgeting problem for those employers experiencing an increase in pension cost.** Please refer to Exhibit 2. for a list of the expected changes in the contribution requirements for individual employers.

Basis of Calculations

GRS based the calculations and analysis in this letter on the member and financial data provided by KRS for use in performing the actuarial valuation as of June 30, 2019 and June 30, 2020. The projections assume no actuarial gains or losses will occur in the future, and that members will terminate, retire, become disabled, or die as anticipated by the actuarial assumptions used to perform the June 30, 2020 actuarial valuation. The analysis and projections were performed



without regard to HB 1 that was enacted during the 2019 special legislative session (and amended by SB 249 passed during the 2020 legislative session) as individual employer elections regarding their future cessation from participating in KERS is unknown at this time.

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.

Closing

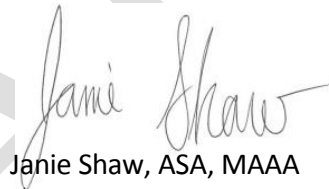
We are not attorneys and we cannot provide a legal opinion regarding the changes in this proposed legislation. Nothing in this letter should be construed as providing legal, investment or tax advice.

Mr. White is an Enrolled Actuary. Both of the undersigned are members of the American Academy of Actuaries and we 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,



Daniel J. White, FSA, MAAA, EA



Jamie Shaw, ASA, MAAA

Enclosures



**Kentucky Employees Retirement Plan (Non-Hazardous) - Retirement and Insurance Combined
Actuarial Analysis of BR424**

Exhibit 1. Calculation of Employer Required Contributions under Proposed Legislation

Agency Name ³	Agency Classification ³	Projected Payroll FY 21/22	Fixed Percentage of the Total Amortization Cost		Required Contribution ¹			Effective Employer Contribution Rate ² Required Contribution / Payroll		
			Accrued Liability based on June 30, 2019 Valuation	Fixed Allocation of Amortization Cost	Normal Cost Contributions	Amortization Cost	Total Required Contribution	Normal Cost Contributions	Amortization Cost	Total Estimated Required Contribution as a % of Projected Pay
(1)	(2)	(3)	(4)	(5) = (4) / \$19,128M	(6) = (3) x 10.10%	(7) = (5) x \$1,044M	(8) = (6) + (7)	(9) = (6) / (3)	(10) = (7) / (3)	(11) = (8) / (3)
LEGISLATIVE BRANCH AGENCIES	LEGISLATIVE BRANCH	21,425,535	343,338,931	1.79500%	2,163,979	18,742,516	20,906,495	10.10%	87.48%	97.58%
JUDICIAL BRANCH AGENCIES	JUDICIAL BRANCH	60,337,522	469,266,488	2.45336%	6,094,090	25,616,790	31,710,880	10.10%	42.46%	52.56%
EXECUTIVE BRANCH AGENCIES	EXECUTIVE BRANCH	1,005,690,168	14,434,001,594	75.46198%	101,574,707	787,937,249	889,511,956	10.10%	78.35%	88.45%
LEX FAYETTE CO HLTH DEPT	Health Departments	6,352,348	89,050,918	0.46556%	641,587	4,861,151	5,502,738	10.10%	76.53%	86.63%
LAKE CUMBERLAND DISTRICT	Health Departments	5,091,437	73,620,021	0.38489%	514,235	4,018,834	4,533,069	10.10%	78.93%	89.03%
BARREN RVR DIST HLTH DEPT	Health Departments	3,155,170	68,855,538	0.35998%	318,672	3,758,736	4,077,408	10.10%	119.13%	129.23%
GREEN RVR DIST HLTH DEPT	Health Departments	5,613,414	82,561,808	0.43164%	566,955	4,506,975	5,073,930	10.10%	80.29%	90.39%
NORTHERN KY DIST HLTH DEP	Health Departments	5,952,172	54,194,473	0.28333%	601,169	2,958,394	3,559,563	10.10%	49.70%	59.80%
LINCOLN TRL DIST HLTH DEP	Health Departments	3,303,056	67,158,260	0.35111%	333,609	3,666,120	3,999,729	10.10%	110.99%	121.09%
KY RIVER DIST HEALTH DEPT	Health Departments	2,506,336	70,590,492	0.36905%	253,140	3,853,440	4,106,580	10.10%	153.75%	163.85%
MADISON CO HEALTH DEP	Health Departments	3,408,628	53,565,044	0.28004%	344,271	2,924,041	3,268,312	10.10%	85.78%	95.88%
CUMBERLAND VLY DIST HEALT	Health Departments	1,686,688	89,949,862	0.47026%	170,355	4,910,226	5,080,581	10.10%	291.12%	301.22%
WEDCO DIST HEALTH DEPT	Health Departments	2,553,392	28,173,710	0.14729%	257,893	1,537,930	1,795,823	10.10%	60.23%	70.33%
FRANKLIN CO HEALTH DEPT	Health Departments	2,258,366	22,689,496	0.11862%	228,095	1,238,572	1,466,667	10.10%	54.84%	64.94%
WHITLEY CO HEALTH DEPT	Health Departments	1,584,248	28,890,387	0.15104%	160,009	1,577,086	1,737,095	10.10%	99.55%	109.65%
PIKE CO HEALTH DEPT	Health Departments	1,694,765	25,165,288	0.13157%	171,171	1,373,790	1,544,961	10.10%	81.06%	91.16%
THREE RIVERS DIST HLTH	Health Departments	1,603,709	22,852,018	0.11947%	161,975	1,247,448	1,409,423	10.10%	77.79%	87.89%
KNOX CO HEALTH DEPT	Health Departments	1,572,717	28,079,768	0.14680%	158,844	1,532,814	1,691,658	10.10%	97.46%	107.56%
PURCHASE DIST HLTH DEPT	Health Departments	1,565,332	44,833,499	0.23439%	158,099	2,447,386	2,605,485	10.10%	156.35%	166.45%
CLARK CO HEALTH DEPT	Health Departments	1,296,765	17,846,746	0.09330%	130,973	974,139	1,105,166	10.10%	75.12%	85.22%
GATEWAY DIST HEALTH DEPT	Health Departments	2,108,078	25,855,364	0.13517%	212,916	1,411,379	1,624,295	10.10%	66.95%	77.05%
N CENTRAL DIST HLTH DEPT	Health Departments	1,373,203	21,562,812	0.11273%	138,694	1,177,072	1,315,766	10.10%	85.72%	95.82%
BREATHITT CO HEALTH DEPT	Health Departments	1,181,013	18,565,852	0.09706%	119,282	1,013,453	1,132,735	10.10%	85.81%	95.91%
PENNYRILE DIST HLTH DEPT	Health Departments	1,123,919	16,344,611	0.08545%	113,516	892,227	1,005,743	10.10%	79.39%	89.49%
MARSHALL CO HEALTH DEPT	Health Departments	1,089,849	17,193,457	0.08989%	110,075	938,588	1,048,663	10.10%	86.12%	96.22%
CHRISTIAN CO HEALTH DEPT	Health Departments	1,300,943	13,360,854	0.06985%	131,395	729,340	860,735	10.10%	56.06%	66.16%
MONTGOMERY CO HEALTH DEPT	Health Departments	1,276,491	11,887,257	0.06215%	128,926	648,940	777,866	10.10%	50.84%	60.94%
HOPKINS CO HEALTH DEPT	Health Departments	1,525,626	17,815,060	0.09314%	154,088	972,523	1,126,611	10.10%	63.75%	73.85%
JOHNSON CO HEALTH DEPT	Health Departments	1,188,756	15,484,079	0.08095%	120,064	845,240	965,304	10.10%	71.10%	81.20%
FLOYD CO HEALTH CENTER	Health Departments	974,974	12,800,870	0.06692%	98,472	698,746	797,218	10.10%	71.67%	81.77%
ASHLAND BOYD CO HEALTH DP	Health Departments	996,910	17,780,422	0.09296%	100,688	970,643	1,071,331	10.10%	97.37%	107.47%
LAUREL CO HEALTH DEPT	Health Departments	1,097,868	14,475,341	0.07568%	110,885	790,214	901,099	10.10%	71.98%	82.08%
BULLITT CO HEALTH DEPT	Health Departments	1,226,387	13,823,739	0.07227%	123,865	754,608	878,473	10.10%	61.53%	71.63%
BELL CO HEALTH DEPT	Health Departments	882,868	10,731,667	0.05611%	89,170	585,873	675,043	10.10%	66.36%	76.46%
GREENUP CO HLTH DEPT	Health Departments	890,487	11,509,071	0.06017%	89,939	628,266	718,205	10.10%	70.55%	80.65%
JESSAMINE CO HEALTH DEPT	Health Departments	890,093	8,686,531	0.04541%	89,899	474,149	564,048	10.10%	53.27%	63.37%
GRAVES CO HEALTH CENTER	Health Departments	1,036,104	6,110,503	0.03195%	104,647	333,606	438,253	10.10%	32.20%	42.30%
HARLAN CO HEALTH DEPT	Health Departments	651,241	7,218,470	0.03774%	65,775	394,063	459,838	10.10%	60.51%	70.61%
OLDHAM CO HEALTH DEPT	Health Departments	967,052	10,480,598	0.05479%	97,672	572,091	669,763	10.10%	59.16%	69.26%
ALLEN CO HEALTH DEPT	Health Departments	856,279	7,911,333	0.04136%	86,484	431,861	518,345	10.10%	50.43%	60.53%
BUFFALO TRACE HEALTH DEPT	Health Departments	667,333	10,788,599	0.05640%	67,401	588,901	656,302	10.10%	88.25%	98.35%
MUHLENBERG CO.HEALTH DEPT	Health Departments	690,447	7,886,100	0.04123%	69,735	430,504	500,239	10.10%	62.35%	72.45%
MERCER CO HEALTH DEPT	Health Departments	469,848	10,106,660	0.05284%	47,455	551,730	599,185	10.10%	117.43%	127.53%
LAWRENCE CO HEALTH DEPT	Health Departments	705,934	3,868,705	0.02023%	71,299	211,232	282,531	10.10%	29.92%	40.02%
WOODFORD CO HEALTH DEPT	Health Departments	440,222	5,453,322	0.02851%	44,462	297,688	342,150	10.10%	67.62%	77.72%
CALLOWAY CO HEALTH DEPT	Health Departments	586,271	4,137,638	0.02163%	59,213	225,850	285,063	10.10%	38.52%	48.62%
MAGOFFIN CO HEALTH DEPT	Health Departments	473,550	6,467,092	0.03381%	47,829	353,028	400,857	10.10%	74.55%	84.65%
MARTIN CO HEALTH DEPT	Health Departments	414,117	5,286,010	0.02764%	41,826	288,603	330,429	10.10%	69.69%	79.79%
BOYLE CO HEALTH DEPT	Health Departments	483,047	6,346,920	0.03318%	48,788	346,449	395,237	10.10%	71.72%	81.82%
BOURBON CO HEALTH CENTER	Health Departments	545,937	10,577,403	0.05530%	55,140	577,416	632,556	10.10%	105.77%	115.87%
ANDERSON CO HEALTH DEPT	Health Departments	359,508	5,076,042	0.02654%	36,310	277,118	313,428	10.10%	77.08%	87.18%
LEWIS CO HEALTH DEPT	Health Departments	448,079	3,061,131	0.01600%	45,256	167,064	212,320	10.10%	37.28%	47.38%
ESTILL CO HEALTH DEPT	Health Departments	223,878	5,579,547	0.02917%	22,612	304,579	327,191	10.10%	136.05%	146.15%
LINCOLN CO HEALTH DEPT	Health Departments	451,096	4,897,375	0.02560%	45,561	267,303	312,864	10.10%	59.26%	69.36%
BRECKINRIDGE CO HEALTH BD	Health Departments	432,068	7,704,261	0.04028%	43,639	420,584	464,223	10.10%	97.34%	107.44%
GRAYSON COUNTY HEALTH DEPT	Health Departments	483,387	4,598,067	0.02404%	48,822	251,014	299,836	10.10%	51.93%	62.03%
LITTLE SANDY DIST HEALTH	Health Departments	-	7,237,775	0.03784%	-	395,107	395,107	N/A	N/A	N/A
GARRARD COUNTY HEALTH DPT	Health Departments	330,436	3,926,271	0.02053%	33,374	214,364	247,738	10.10%	64.87%	74.97%



**Kentucky Employees Retirement Plan (Non-Hazardous) - Retirement and Insurance Combined
Actuarial Analysis of BR424**

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(1)	(2)	(3)	(4)	(5) = (4) / \$19,128M	(6) = (3) x 10.10%	(7) = (5) x \$1,044M	(8) = (6) + (7)	(9) = (6) / (3)	(10) = (7) / (3)	(11) = (8) / (3)
TODD CO HEALTH DEPT	Health Departments	299,524	4,687,868	0.02451%	30,252	255,921	286,173	10.10%	85.44%	95.54%
FLEMING CO HEALTH DEP	Health Departments	329,868	4,386,549	0.02293%	33,317	239,424	272,741	10.10%	72.58%	82.68%
MONROE CO HEALTH DEPT	Health Departments	255,878	3,137,459	0.01640%	25,844	171,241	197,085	10.10%	66.92%	77.02%
BRACKEN CO HEALTH DEPT	Health Departments	343,433	2,410,616	0.01260%	34,687	131,563	166,250	10.10%	38.31%	48.41%
POWELL CO HEALTH DEPT	Health Departments	249,359	4,200,545	0.02196%	25,185	229,296	254,481	10.10%	91.95%	102.05%
CARTER CO HEALTH DEPT	Health Departments	339,213	1,936,351	0.01012%	34,261	105,668	139,929	10.10%	31.15%	41.25%
KY HIGHER ED STUD LN CORP	Non-P1 State Assoc/Corp.	11,328,215	81,896,904	0.42816%	1,144,150	4,470,638	5,614,788	10.10%	39.46%	49.56%
KENTUCKY HOUSING CORP	Non-P1 State Assoc/Corp.	10,513,748	98,280,874	0.51382%	1,061,889	5,365,058	6,426,947	10.10%	51.03%	61.13%
CSG HEADQUARTERS	Non-P1 State Assoc/Corp.	3,569,873	19,274,916	0.10077%	360,557	1,052,191	1,412,748	10.10%	29.47%	39.57%
KET FOUNDATION	Non-P1 State Assoc/Corp.	1,672,922	15,066,238	0.07877%	168,965	822,478	991,443	10.10%	49.16%	59.26%
ASST OF COMMONWEALTH ATTY	Non-P1 State Assoc/Corp.	1,040,758	5,807,856	0.03036%	105,117	317,004	422,121	10.10%	30.46%	40.56%
HIGHSCHOOL ATHLETIC ASSOC	Non-P1 State Assoc/Corp.	135,887	1,413,847	0.00739%	13,725	77,163	90,888	10.10%	56.78%	66.88%
O A S I S	Non-P1 State Agencies	738,979	2,304,549	0.01205%	74,637	125,820	200,457	10.10%	17.03%	27.13%
KDVA	Non-P1 State Agencies	777,016	2,431,059	0.01271%	78,479	132,712	211,191	10.10%	17.08%	27.18%
B.R.A.S.S.	Non-P1 State Agencies	600,869	2,132,362	0.01155%	60,688	116,423	177,111	10.10%	19.38%	29.48%
BLUEGRASS RAPE CRISIS CTR	Non-P1 State Agencies	738,605	2,744,493	0.01435%	74,599	149,836	224,435	10.10%	20.29%	30.39%
SAFE HARBOR	Non-P1 State Agencies	857,090	1,312,696	0.00686%	86,566	71,629	158,195	10.10%	8.36%	18.46%
SANCTUARY INC	Non-P1 State Agencies	502,831	2,510,255	0.01312%	50,786	136,993	187,779	10.10%	27.24%	37.34%
LOTUS	Non-P1 State Agencies	791,779	1,074,054	0.00562%	79,970	58,681	138,651	10.10%	7.41%	17.51%
BETHANY HOUSE ABUSE SHEL	Non-P1 State Agencies	483,249	1,675,224	0.00876%	48,808	91,468	140,276	10.10%	18.93%	29.03%
SPRINGHAVEN INC	Non-P1 State Agencies	497,101	1,527,812	0.00799%	50,207	83,428	133,635	10.10%	16.78%	26.88%
KASAP	Non-P1 State Agencies	487,251	943,862	0.00493%	49,212	51,477	100,689	10.10%	10.56%	20.66%
SILVERLEAF	Non-P1 State Agencies	402,324	2,017,711	0.01055%	40,635	110,158	150,793	10.10%	27.38%	37.48%
WOMEN AWARE	Non-P1 State Agencies	228,407	975,811	0.00510%	23,069	53,252	76,321	10.10%	23.31%	33.41%
D.O.V.E.S.	Non-P1 State Agencies	447,458	1,319,147	0.00690%	45,193	72,046	117,239	10.10%	16.10%	26.20%
NURSING HOME OMBUDSMAN	Non-P1 State Agencies	237,582	879,808	0.00460%	23,996	48,031	72,027	10.10%	20.22%	30.32%
HOPE HARBOR INC	Non-P1 State Agencies	501,864	824,202	0.00431%	50,688	45,003	95,691	10.10%	8.97%	19.07%
KY OFFICE OF BAR ADMISSIO	Non-P1 State Agencies	155,606	2,552,890	0.01335%	15,716	139,394	155,110	10.10%	89.58%	99.68%
CHILD WATCH ADVOCACY CTR	Non-P1 State Agencies	230,995	759,321	0.00397%	23,330	41,453	64,783	10.10%	17.95%	28.05%
FRANKLIN CO COUNCIL AGING	Non-P1 State Agencies	116,388	2,147,140	0.01123%	11,755	117,258	129,013	10.10%	100.75%	110.85%
JUDI'S PLACE FOR KIDS, INC.	Non-P1 State Agencies	315,584	777,468	0.00406%	31,874	42,393	74,267	10.10%	13.43%	23.53%
CUMBERLAND V C A CENTER	Non-P1 State Agencies	267,641	821,917	0.00430%	27,032	44,899	71,931	10.10%	16.78%	26.88%
KY ASSOC OF REGIONAL PROG	Non-P1 State Agencies	118,750	1,817,343	0.00950%	11,994	99,194	111,188	10.10%	83.53%	93.63%
BARREN RIVER CHILD ADVOCA	Non-P1 State Agencies	352,179	406,450	0.00212%	35,570	22,136	57,706	10.10%	6.29%	16.39%
CHILD ADV CTR OF GRN RVR	Non-P1 State Agencies	84,400	572,517	0.00299%	8,524	31,220	39,744	10.09%	36.99%	47.09%
MUN ELEC POW ASSOC OF KY	Non-P1 State Agencies	135,853	1,745,743	0.00913%	13,721	95,331	109,052	10.10%	70.17%	80.27%
KY RIVER CHILD ADVOCACY	Non-P1 State Agencies	137,637	290,885	0.00152%	13,901	15,871	29,772	10.10%	11.53%	21.63%
PENNYRILE CHILD ADV CTR	Non-P1 State Agencies	156,216	460,162	0.00241%	15,778	25,164	40,942	10.10%	16.11%	26.21%
LAKE CUMB CHILD ADV CTR	Non-P1 State Agencies	153,294	545,959	0.00285%	15,483	29,758	45,241	10.10%	19.41%	29.51%
BUFFALO TR CHILD ADV INC	Non-P1 State Agencies	161,504	252,189	0.00132%	16,312	13,783	30,095	10.10%	8.53%	18.63%
NEW VISTA OF THE BLUEGRASS, INC.	Reg Mental Hlth Units	33,781,037	375,801,295	1.96471%	3,411,885	20,514,545	23,926,430	10.10%	60.73%	70.83%
CUMBERLAND RIVER MHMR	Reg Mental Hlth Units	9,268,064	98,266,354	0.51374%	936,074	5,364,223	6,300,297	10.10%	57.88%	67.98%
LIFESKILLS INC	Reg Mental Hlth Units	13,349,097	143,816,131	0.75188%	1,348,259	7,850,765	9,199,024	10.10%	58.81%	68.91%
COMMUNICARE INC	Reg Mental Hlth Units	5,182,445	66,588,437	0.34813%	523,427	3,635,004	4,158,431	10.10%	70.14%	80.24%
ADANTA/BEHAVIORAL HLTH SR	Reg Mental Hlth Units	3,640,830	89,023,918	0.46542%	367,724	4,859,689	5,227,413	10.10%	133.48%	143.58%
MOUNTAIN COMP CARE CENTER	Reg Mental Hlth Units	4,932,808	45,921,039	0.24008%	498,214	2,506,798	3,005,012	10.10%	50.82%	60.92%
GREEN RVR REG MHMR BD	Reg Mental Hlth Units	2,396,182	32,599,922	0.17043%	242,014	1,779,547	2,021,561	10.10%	74.27%	84.37%
NORTHERN KY REG MHMR BD	Reg Mental Hlth Units	135,991	57,312,274	0.29963%	13,735	3,128,591	3,142,326	10.10%	2300.59%	2310.69%
WESTERN KY REG MHMR ADV	Reg Mental Hlth Units	3,236,123	35,526,557	0.18574%	326,848	1,939,407	2,266,255	10.10%	59.93%	70.03%
COMPREHEND INC REG MHMR B	Reg Mental Hlth Units	4,212,094	29,064,447	0.15195%	425,421	1,586,588	2,012,009	10.10%	37.67%	47.77%
SEVEN CO SERVICES INC	Reg Mental Hlth Units	-	154,213,520	0.80624%	-	8,418,365	8,418,365	N/A	N/A	N/A
KY RIVER COMM CARE INC	Reg Mental Hlth Units	-	26,687,511	0.13952%	-	1,456,800	1,456,800	N/A	N/A	N/A
NORTHERN KY UNIVERSITY	Universities	34,069,223	216,716,312	1.13301%	3,440,992	11,830,339	15,271,331	10.10%	34.72%	44.82%
EASTERN KY UNIV	Universities	5,200,717	239,050,334	1.24977%	525,272	13,049,490	13,574,762	10.10%	250.92%	261.02%
KCTCS	Universities	17,933,365	156,357,525	0.81745%	1,811,270	8,535,415	10,346,685	10.10%	57.70%	67.80%
WESTERN KENTUCKY UNIV	Universities	15,052,063	180,798,950	0.94523%	1,520,258	9,869,631	11,389,889	10.10%	65.57%	75.67%
MURRAY STATE UNIV	Universities	8,180,790	133,053,240	0.69561%	826,260	7,263,221	8,089,481	10.10%	88.78%	98.88%
MOREHEAD STATE UNIVERSITY	Universities	3,798,957	121,265,619	0.63398%	383,695	6,619,710	7,003,405	10.10%	174.25%	184.35%
KENTUCKY STATE UNIVERSITY	Universities	4,582,383	44,391,511	0.23208%	462,821	2,423,266	2,886,087	10.10%	52.88%	62.98%

**Kentucky Employees Retirement Plan (Non-Hazardous) - Retirement and Insurance Combined
Actuarial Analysis of BR424**

Exhibit 1. Calculation of Employer Required Contributions under Proposed Legislation

Agency Name ³	Agency Classification ³	Projected Payroll FY 21/22	Fixed Percentage of the Total Amortization Cost		Required Contribution ¹			Effective Employer Contribution Rate ² Required Contribution / Payroll		
			Accrued Liability based on June 30, 2019 Valuation	Fixed Allocation of Amortization Cost	Normal Cost Contributions	Amortization Cost	Total Required Contribution	Normal Cost Contributions	Amortization Cost	Total Estimated Required Contribution as a % of Projected Pay
(1)	(2)	(3)	(4)	(5) = (4) / \$19,128M	(6) = (3) x 10.10%	(7) = (5) x \$1,044M	(8) = (6) + (7)	(9) = (6) / (3)	(10) = (7) / (3)	(11) = (8) / (3)
ALLEN COUNTY ATTORNEY	County Attorneys	219,811	1,658,981	0.00867%	22,201	90,528	112,729	10.10%	41.18%	51.28%
ANDERSON COUNTY ATTORNEY	County Attorneys	106,316	1,971,500	0.01031%	10,738	107,652	118,390	10.10%	101.26%	111.36%
BARREN COUNTY ATTORNEY	County Attorneys	132,522	2,875,029	0.01503%	13,385	156,936	170,321	10.10%	118.42%	128.52%
BATH COUNTY ATTORNEY	County Attorneys	-	2,729	0.00001%	-	104	104	N/A	N/A	N/A
BELL COUNTY ATTORNEY	County Attorneys	118,560	1,931,690	0.01010%	11,975	105,459	117,434	10.10%	88.95%	99.05%
BOONE COUNTY ATTORNEY	County Attorneys	433,417	5,092,956	0.02663%	43,775	278,057	321,832	10.10%	64.15%	74.25%
BOYLE COUNTY ATTORNEY	County Attorneys	-	155,378	0.00081%	-	8,458	8,458	N/A	N/A	N/A
BRECKINRIDGE CO ATTORNEY	County Attorneys	165,146	1,029,674	0.00538%	16,680	56,175	72,855	10.10%	34.02%	44.12%
BULLITT COUNTY ATTORNEY	County Attorneys	-	703,350	0.00368%	-	38,425	38,425	N/A	N/A	N/A
CALLOWAY COUNTY ATTORNEY	County Attorneys	-	54,643	0.00029%	-	3,028	3,028	N/A	N/A	N/A
CARROLL COUNTY ATTORNEY	County Attorneys	35,254	873,614	0.00457%	3,561	47,718	51,279	10.10%	135.35%	145.46%
CASEY COUNTY ATTORNEY	County Attorneys	168,437	947,428	0.00495%	17,012	51,685	68,697	10.10%	30.69%	40.78%
CHILD SUPPORT ENFORCEMENT	County Attorneys	323,558	255,979	0.00134%	32,679	13,992	46,671	10.10%	4.32%	14.42%
CHRISTIAN COUNTY ATTORNEY	County Attorneys	-	984,086	0.00514%	-	53,669	53,669	N/A	N/A	N/A
CLARK COUNTY ATTORNEY	County Attorneys	354,031	1,322,750	0.00692%	35,757	72,255	108,012	10.10%	20.41%	30.51%
CRITTENDEN CO ATTORNEY	County Attorneys	131,795	365,437	0.00191%	13,311	19,943	33,254	10.10%	15.13%	25.23%
DAVISS COUNTY ATTORNEY	County Attorneys	186,658	1,578,350	0.00825%	18,852	86,142	104,994	10.10%	46.15%	56.25%
EDMONSON COUNTY ATTORNEY	County Attorneys	186,741	474,886	0.00248%	18,861	25,895	44,756	10.10%	13.87%	23.97%
FAYETTE CO ATTORNEY OFF	County Attorneys	-	3,136,743	0.01640%	-	171,241	171,241	N/A	N/A	N/A
FLOYD COUNTY ATTORNEY	County Attorneys	126,787	1,121,075	0.00586%	12,805	61,187	73,992	10.10%	48.26%	58.36%
FRANKLIN COUNTY ATTORNEY	County Attorneys	160,098	4,833,960	0.02527%	16,170	263,857	280,027	10.10%	164.81%	174.91%
GARRARD COUNTY ATTORNEY	County Attorneys	49,239	988,761	0.00517%	4,973	53,983	58,956	10.10%	109.63%	119.73%
GRANT COUNTY CHILD SUPPOR	County Attorneys	-	363,477	0.00190%	-	19,839	19,839	N/A	N/A	N/A
GRAVES COUNTY ATTORNEY	County Attorneys	492,798	3,272,663	0.01711%	49,773	178,654	228,427	10.10%	36.25%	46.35%
HANCOCK COUNTY ATTORNEY	County Attorneys	-	386,098	0.00202%	-	21,092	21,092	N/A	N/A	N/A
HARRISON COUNTY ATTORNEY	County Attorneys	36,600	114,873	0.00060%	3,697	6,265	9,962	10.10%	17.12%	27.22%
HICKMAN COUNTY ATTORNEY	County Attorneys	184,874	1,028,593	0.00538%	18,672	56,175	74,847	10.10%	30.39%	40.49%
HOPKINS COUNTY ATTORNEY	County Attorneys	241,200	1,751,470	0.00916%	24,361	95,644	120,005	10.10%	39.65%	49.75%
JACKSON COUNTY ATTORNEY	County Attorneys	-	700,551	0.00366%	-	38,216	38,216	N/A	N/A	N/A
JEFFERSON CO ATTORNEY	County Attorneys	128,215	17,151,984	0.08967%	12,950	936,290	949,240	10.10%	730.25%	740.35%
JOHNSON COUNTY ATTORNEY	County Attorneys	-	230,506	0.00121%	-	12,634	12,634	N/A	N/A	N/A
KENTON COUNTY ATTORNEY	County Attorneys	-	1,021,997	0.00534%	-	55,758	55,758	N/A	N/A	N/A
KNOTT COUNTY ATTORNEY	County Attorneys	287,101	900,207	0.00471%	28,997	49,180	78,177	10.10%	17.13%	27.23%
KNOX COUNTY ATTORNEY	County Attorneys	-	5,454	0.00003%	-	313	313	N/A	N/A	N/A
LARUE COUNTY ATTORNEY	County Attorneys	261,000	1,041,769	0.00545%	26,361	56,906	83,267	10.10%	21.80%	31.90%
LAUREL COUNTY ATTORNEY	County Attorneys	72,261	353,526	0.00185%	7,298	19,317	26,615	10.10%	26.73%	36.83%
LAWRENCE COUNTY ATTORNEY	County Attorneys	-	144	0.00000%	-	-	-	N/A	N/A	N/A
LEE COUNTY ATTORNEY	County Attorneys	29,344	888,298	0.00464%	2,964	48,449	51,413	10.10%	165.11%	175.21%
LOGAN COUNTY ATTORNEY	County Attorneys	74,500	1,781,059	0.00931%	7,525	97,210	104,735	10.10%	130.48%	140.58%
MADISON COUNTY ATTORNEY	County Attorneys	306,724	6,472,384	0.03384%	30,979	353,341	384,320	10.10%	115.20%	125.30%
MAGOFFIN CO ATTORNEY	County Attorneys	77,059	195,563	0.00102%	7,783	10,650	18,433	10.10%	13.82%	23.92%
MCCRACKEN COUNTY ATTORNEY	County Attorneys	-	1,092,697	0.00571%	-	59,621	59,621	N/A	N/A	N/A
MCCRERY COUNTY ATTORNEY	County Attorneys	227,087	1,920,823	0.01004%	22,936	104,833	127,769	10.10%	46.16%	56.26%
MEADE COUNTY ATTORNEY	County Attorneys	192,938	1,485,282	0.00777%	19,487	81,131	100,618	10.10%	42.05%	52.15%
MENIFEE COUNTY ATTORNEY	County Attorneys	-	568,840	0.00297%	-	31,011	31,011	N/A	N/A	N/A
MERCER COUNTY ATTORNEY	County Attorneys	68,616	507,084	0.00265%	6,930	27,670	34,600	10.10%	40.33%	50.43%
MONROE CO ATTORNEY	County Attorneys	-	617,699	0.00323%	-	33,726	33,726	N/A	N/A	N/A
MONTGOMERY CO ATTORNEY	County Attorneys	154,822	1,684,951	0.00881%	15,637	91,990	107,627	10.10%	59.42%	69.52%
MORGAN COUNTY ATTORNEY	County Attorneys	276,181	1,815,404	0.00949%	27,894	99,090	126,984	10.10%	35.88%	45.98%
OLDHAM COUNTY ATTORNEY	County Attorneys	294,858	1,690,959	0.00884%	29,781	92,303	122,084	10.10%	31.30%	41.40%
OWEN COUNTY ATTORNEY	County Attorneys	154,599	490,212	0.00256%	15,614	26,730	42,344	10.10%	17.29%	27.39%
PENDLETON COUNTY ATTORNEY	County Attorneys	-	155,600	0.00081%	-	8,458	8,458	N/A	N/A	N/A
POWELL COUNTY ATTORNEY	County Attorneys	-	26,895	0.00014%	-	1,462	1,462	N/A	N/A	N/A
PULASKI COUNTY ATTORNEY	County Attorneys	587,791	1,602,159	0.00838%	59,367	87,500	146,867	10.10%	14.89%	24.99%
ROCKCASTLE CO ATTORNEY	County Attorneys	27,040	774,276	0.00405%	2,731	42,288	45,019	10.10%	156.39%	166.49%
ROWAN COUNTY ATTORNEY	County Attorneys	115,827	820,120	0.00429%	11,699	44,794	56,493	10.10%	38.67%	48.77%
SHELBY COUNTY ATTORNEY	County Attorneys	64,845	400,120	0.00209%	6,549	21,823	28,372	10.10%	33.65%	43.75%
SIMPSON COUNTY ATTORNEY	County Attorneys	35,224	521,989	0.00273%	3,558	28,505	32,063	10.10%	80.92%	91.03%



**Kentucky Employees Retirement Plan (Non-Hazardous) - Retirement and Insurance Combined
Actuarial Analysis of BR424**

Exhibit 1. Calculation of Employer Required Contributions under Proposed Legislation

Agency Name ³ (1)	Agency Classification ³ (2)	Projected Payroll FY 21/22 (3)	Fixed Percentage of the Total Amortization Cost		Required Contribution ¹			Effective Employer Contribution Rate ² Required Contribution / Payroll		
			Accrued Liability based on June 30, 2019 Valuation (4)	Fixed Allocation of Amortization Cost (5) = (4) / \$19,128M	Normal Cost Contributions (6) = (3) x 10.10%	Amortization Cost (7) = (5) x \$1,044M	Total Required Contribution (8) = (6) + (7)	Normal Cost Contributions (9) = (6) / (3)	Amortization Cost (10) = (7) / (3)	Total Estimated Required Contribution as a % of Projected Pay (11) = (8) / (3)
SPENCER COUNTY ATTORNEY	County Attorneys	342,597	1,200,709	0.00628%	34,602	65,573	100,175	10.10%	19.14%	29.24%
TRIGG COUNTY ATTORNEY	County Attorneys	48,208	933,350	0.00488%	4,869	50,955	55,824	10.10%	105.70%	115.80%
TRIMBLE COUNTY ATTORNEY	County Attorneys	37,077	749,934	0.00392%	3,745	40,931	44,676	10.10%	110.39%	120.50%
UNION COUNTY ATTORNEY	County Attorneys	47,550	293,278	0.00153%	4,803	15,976	20,779	10.10%	33.60%	43.70%
WAYNE COUNTY ATTORNEY	County Attorneys	-	668,657	0.00350%	-	36,545	36,545	N/A	N/A	N/A
WEBSTER COUNTY ATTORNEY	County Attorneys	457,980	1,413,256	0.00739%	46,256	77,163	123,419	10.10%	16.85%	26.95%
WHITLEY COUNTY ATTORNEY	County Attorneys	333,255	2,013,956	0.01053%	33,659	109,949	143,608	10.10%	32.99%	43.09%
Total		1,387,760,907	19,127,526,963	100.00000%	140,163,855	1,044,151,306	1,184,315,161	10.10%	75.24%	85.34%
Agencies that have ceased participation in the System:										
KENTUCKY BAR ASSOCIATION	Non-P1 State Agencies	-	9,726,855	N/A	N/A	N/A	N/A	N/A	N/A	N/A
KENTUCKY ASSOCIATION OF CHILDREN'S ADVOCACY CI	Non-P1 State Agencies	-	14,508	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COMMONWEALTH CREDIT UNION	Non-P1 State Agencies	-	46,950,704	N/A	N/A	N/A	N/A	N/A	N/A	N/A
KENTUCKY EMPLOYERS MUTUAL INSURANCE	Non-P1 State Agencies	-	15,220,243	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GATEWAY CHILD ADVOCACY	Non-P1 State Agencies	-	53,228	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		1,387,760,907	19,199,492,501	100.00000%	140,163,855	1,044,151,306	1,184,315,161	10.10%	75.24%	85.34%

Summary of Above Information by Agency Classification

Agency Classification ³	Projected Payroll FY 21/22	Fixed Percentage of the Total Amortization Cost		Required Contribution ¹			Effective Employer Contribution Rate ² Required Contribution / Payroll		
		Accrued Liability based on June 30, 2019 Valuation	Fixed Allocation of Amortization Cost	Normal Cost Contributions	Amortization Cost	Total Required Contribution	Normal Cost Contributions	Amortization Cost	Total Estimated Required Contribution as a % of Projected Pay
Health Departments	83,859,117	1,281,433,525	6.69938%	8,469,772	69,951,665	78,421,437	10.10%	83.42%	93.52%
Non-P1 State Assoc./Corp.	28,261,403	221,740,635	1.15927%	2,854,403	12,104,532	14,958,935	10.10%	42.83%	52.93%
Non-P1 State Agencies	10,678,452	37,823,029	0.19775%	1,078,523	2,064,811	3,143,334	10.10%	19.34%	29.44%
Reg Mental Hlth Units	80,134,671	1,154,821,405	6.03747%	8,093,601	63,040,322	71,133,923	10.10%	78.67%	88.77%
Universities	88,817,498	1,091,633,491	5.70713%	8,970,568	59,591,072	68,561,640	10.10%	67.09%	77.19%
County Attorneys	8,556,541	93,467,865	0.48866%	864,212	5,102,349	5,966,561	10.10%	59.63%	69.73%
Legislative Branch	21,425,535	343,338,931	1.79500%	2,163,979	18,742,516	20,906,495	10.10%	87.48%	97.58%
Judicial Branch	60,337,522	469,266,488	2.45336%	6,094,090	25,616,790	31,710,880	10.10%	42.46%	52.56%
Executive Branch	1,005,690,168	14,434,001,594	75.46198%	101,574,707	787,937,249	889,511,956	10.10%	78.35%	88.45%
Total	1,387,760,907	19,127,526,963	100.00000%	140,163,855	1,044,151,306	1,184,315,161	10.10%	75.24%	85.34%

Notes and Assumptions

¹ Actual normal cost contributions will be based on an employer's actual salary for the fiscal year 2021/2022 multiplied by 10.10%.

² Required contribution as a percentage of pay shown for illustrative purposes only. Actual required contributions will be equal to 10.10% of an employer's actual payroll for fiscal year 2021/2022 plus the amortization cost shown in column (7).

³ Agency names and classification information has been provided to GRS by KRS. We have reviewed this data for consistency but did not audit the data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

**Kentucky Employees Retirement Plan (Non-Hazardous) - Retirement and Insurance Combined
Actuarial Analysis of BR424**

Exhibit 2. Impact of Proposed Legislation on Employer Contribution Rates

Agency Name ¹ (1)	Agency Classification ¹ (2)	Projected Payroll FY 21/22 (3)	Required Contribution			Effective Employer Contribution Rate Required Contribution / Payroll		
			Current Funding Arrangement	Proposed Legislation ²	Increase/(Decrease) due to Legislation	Current Funding Arrangement	Proposed Legislation ²	Increase/(Decrease) due to Legislation
			(4) = (3) x 85.03%	(5) = Exhibit 1, Column (8)	(6) = (5) - (4)	(7) = (4) / (3)	(8) = Exhibit 1, Column (11)	(9) = (8) - (7)
LEGISLATIVE BRANCH AGENCIES	LEGISLATIVE BRANCH	21,425,535	18,218,132	20,906,495	2,688,363	85.03%	97.58%	12.55%
JUDICIAL BRANCH AGENCIES	JUDICIAL BRANCH	60,337,522	51,304,995	31,710,880	(19,594,115)	85.03%	52.56%	-32.47%
EXECUTIVE BRANCH AGENCIES	EXECUTIVE BRANCH	1,005,690,168	855,138,350	889,511,956	34,373,606	85.03%	88.45%	3.42%
LEX FAYETTE CO HLTH DEPT	Health Departments	6,352,348	5,401,402	5,502,738	101,336	85.03%	86.63%	1.60%
LAKE CUMBERLAND DISTRICT	Health Departments	5,091,437	4,329,249	4,533,069	203,820	85.03%	89.03%	4.00%
BARREN RVR DIST HLTH DEPT	Health Departments	3,155,170	2,682,841	4,077,408	1,394,567	85.03%	129.23%	44.20%
GREEN RVR DIST HLTH DEPT	Health Departments	5,613,414	4,773,086	5,073,930	300,844	85.03%	90.39%	5.36%
NORTHERN KY DIST HLTH DEP	Health Departments	5,952,172	5,061,132	3,559,563	(1,501,569)	85.03%	59.80%	-25.23%
LINCOLN TRL DIST HLTH DEP	Health Departments	3,303,056	2,808,589	3,999,729	1,191,140	85.03%	121.09%	36.06%
KY RIVER DIST HEALTH DEPT	Health Departments	2,506,336	2,131,138	4,106,580	1,975,442	85.03%	163.85%	78.82%
MADISON CO HEALTH DEP	Health Departments	3,408,628	2,898,356	3,268,312	369,956	85.03%	95.88%	10.85%
CUMBERLAND VLY DIST HEALT	Health Departments	1,686,688	1,434,191	5,080,581	3,646,390	85.03%	301.22%	216.19%
WEDCO DIST HEALTH DEPT	Health Departments	2,553,392	2,171,149	1,795,823	(375,326)	85.03%	70.33%	-14.70%
FRANKLIN CO HEALTH DEPT	Health Departments	2,258,366	1,920,289	1,466,667	(453,622)	85.03%	64.94%	-20.09%
WHITLEY CO HEALTH DEPT	Health Departments	1,584,248	1,347,086	1,737,095	390,009	85.03%	109.65%	24.62%
PIKE CO HEALTH DEPT	Health Departments	1,694,765	1,441,059	1,544,961	103,902	85.03%	91.16%	6.13%
THREE RIVERS DIST HLTH	Health Departments	1,603,709	1,363,634	1,409,423	45,789	85.03%	87.89%	2.86%
KNOX CO HEALTH DEPT	Health Departments	1,572,717	1,337,281	1,691,658	354,377	85.03%	107.56%	22.53%
PURCHASE DIST HLTH DEPT	Health Departments	1,565,332	1,331,002	2,605,485	1,274,483	85.03%	166.45%	81.42%
CLARK CO HEALTH DEPT	Health Departments	1,296,765	1,102,639	1,105,166	2,527	85.03%	85.22%	0.19%
GATEWAY DIST HEALTH DEPT	Health Departments	2,108,078	1,792,499	1,624,295	(168,204)	85.03%	77.05%	-7.98%
N CENTRAL DIST HLTH DEPT	Health Departments	1,373,203	1,167,635	1,315,766	148,131	85.03%	95.82%	10.79%
BREATHITT CO HEALTH DEPT	Health Departments	1,181,013	1,004,215	1,132,735	128,520	85.03%	95.91%	10.88%
PENNYRILE DIST HLTH DEPT	Health Departments	1,123,919	955,668	1,005,743	50,075	85.03%	89.49%	4.46%
MARSHALL CO HEALTH DEPT	Health Departments	1,089,849	926,699	1,048,663	121,964	85.03%	96.22%	11.19%
CHRISTIAN CO HEALTH DEPT	Health Departments	1,300,943	1,106,192	860,735	(245,457)	85.03%	66.16%	-18.87%
MONTGOMERY CO HEALTH DEPT	Health Departments	1,276,491	1,085,400	777,866	(307,534)	85.03%	60.94%	-24.09%
HOPKINS CO HEALTH DEPT	Health Departments	1,525,626	1,297,240	1,126,611	(170,629)	85.03%	73.85%	-11.18%
JOHNSON CO HEALTH DEPT	Health Departments	1,188,756	1,010,799	965,304	(45,495)	85.03%	81.20%	-3.83%
FLOYD CO HEALTH CENTER	Health Departments	974,974	829,020	797,218	(31,802)	85.03%	81.77%	-3.26%
ASHLAND BOYD CO HEALTH DP	Health Departments	996,910	847,673	1,071,331	223,658	85.03%	107.47%	22.44%
LAUREL CO HEALTH DEPT	Health Departments	1,097,868	933,517	901,099	(32,418)	85.03%	82.08%	-2.95%
BULLITT CO HEALTH DEPT	Health Departments	1,226,387	1,042,797	878,473	(164,324)	85.03%	71.63%	-13.40%
BELL CO HEALTH DEPT	Health Departments	882,868	750,703	675,043	(75,660)	85.03%	76.46%	-8.57%
GREENUP CO HLTH DEPT	Health Departments	890,487	757,181	718,205	(38,976)	85.03%	80.65%	-4.38%
JESSAMINE CO HEALTH DEPT	Health Departments	890,093	756,846	564,048	(192,798)	85.03%	63.37%	-21.66%
GRAVES CO HEALTH CENTER	Health Departments	1,036,104	880,999	438,253	(442,746)	85.03%	42.30%	-42.73%
HARLAN CO HEALTH DEPT	Health Departments	651,241	553,750	459,838	(93,912)	85.03%	70.61%	-14.42%
OLDHAM CO HEALTH DEPT	Health Departments	967,052	822,284	669,763	(152,521)	85.03%	69.26%	-15.77%
ALLEN CO HEALTH DEPT	Health Departments	856,279	728,094	518,345	(209,749)	85.03%	60.53%	-24.50%
BUFFALO TRACE HEALTH DEPT	Health Departments	667,333	567,433	656,302	88,869	85.03%	98.35%	13.32%
MUHLINBERG CO.HEALTH DEPT	Health Departments	690,447	587,087	500,239	(86,848)	85.03%	72.45%	-12.58%
MERCER CO HEALTH DEPT	Health Departments	469,848	399,512	599,185	199,673	85.03%	127.53%	42.50%
LAWRENCE CO HEALTH DEPT	Health Departments	705,934	600,256	282,531	(317,725)	85.03%	40.02%	-45.01%
WOODFORD CO HEALTH DEPT	Health Departments	440,222	374,321	342,150	(32,171)	85.03%	77.72%	-7.31%
CALLOWAY CO HEALTH DEPT	Health Departments	586,271	498,506	285,063	(213,443)	85.03%	48.62%	-36.41%
MAGOFFIN CO HEALTH DEPT	Health Departments	473,550	402,660	400,857	(1,803)	85.03%	84.65%	-0.38%
MARTIN CO HEALTH DEPT	Health Departments	414,117	352,124	330,429	(21,695)	85.03%	79.79%	-5.24%
BOYLE CO HEALTH DEPT	Health Departments	483,047	410,735	395,237	(15,498)	85.03%	81.82%	-3.21%
BOURBON CO HEALTH CENTER	Health Departments	545,937	464,210	632,556	168,346	85.03%	115.87%	30.84%
ANDERSON CO HEALTH DEPT	Health Departments	359,508	305,690	313,428	7,738	85.03%	87.18%	2.15%
LEWIS CO HEALTH DEPT	Health Departments	448,079	381,002	212,320	(168,682)	85.03%	47.38%	-37.65%
ESTILL CO HEALTH DEPT	Health Departments	223,878	190,363	327,191	136,828	85.03%	146.15%	61.12%
LINCOLN CO HEALTH DEPT	Health Departments	451,096	383,567	312,864	(70,703)	85.03%	69.36%	-15.67%
BRECKINRIDGE CO HEALTH BD	Health Departments	432,068	367,387	464,223	96,836	85.03%	107.44%	22.41%
GRAYSON COUNTY HEALTH DEPT	Health Departments	483,387	411,024	299,836	(111,188)	85.03%	62.03%	-23.00%
LITTLE SANDY DIST HEALTH	Health Departments	-	-	395,107	395,107	N/A	N/A	N/A
GARRARD COUNTY HEALTH DPT	Health Departments	330,436	280,970	247,738	(33,232)	85.03%	74.97%	-10.06%

**Kentucky Employees Retirement Plan (Non-Hazardous) - Retirement and Insurance Combined
Actuarial Analysis of BR424**

Exhibit 2. Impact of Proposed Legislation on Employer Contribution Rates

Agency Name ¹	Agency Classification ¹	Projected Payroll FY 21/22	Required Contribution			Effective Employer Contribution Rate Required Contribution / Payroll			
			Current Funding Arrangement	Proposed Legislation ²	Increase/(Decrease) due to Legislation	Current Funding Arrangement	Proposed Legislation ²	Increase/(Decrease) due to Legislation	
			(4) = (3) x 85.03%	(5) = Exhibit 1, Column (8)	(6) = (5) - (4)	(7) = (4) / (3)	(8) = Exhibit 1, Column (11)	(9) = (8) - (7)	
(1)	(2)	(3)							
TODD CO HEALTH DEPT	Health Departments	299,524	254,685	286,173	31,488	85.03%	95.54%	10.51%	
FLEMING CO HEALTH DEP	Health Departments	329,868	280,487	272,741	(7,746)	85.03%	82.68%	-2.35%	
MONROE CO HEALTH DEPT	Health Departments	255,878	217,573	197,085	(20,488)	85.03%	77.02%	-8.01%	
BRACKEN CO HEALTH DEPT	Health Departments	343,433	292,021	166,250	(125,771)	85.03%	48.41%	-36.62%	
POWELL CO HEALTH DEPT	Health Departments	249,359	212,030	254,481	42,451	85.03%	102.05%	17.02%	
CARTER CO HEALTH DEPT	Health Departments	339,213	288,433	139,929	(148,504)	85.03%	41.25%	-43.78%	
KY HIGHER ED STUD LN CORP	Non-P1 State Assoc/Corp.	11,328,215	9,632,381	5,614,788	(4,017,593)	85.03%	49.56%	-35.47%	
KENTUCKY HOUSING CORP	Non-P1 State Assoc/Corp.	10,513,748	8,939,840	6,426,947	(2,512,893)	85.03%	61.13%	-23.90%	
CSG HEADQUARTERS	Non-P1 State Assoc/Corp.	3,569,873	3,035,463	1,412,748	(1,622,715)	85.03%	39.57%	-45.46%	
KET FOUNDATION	Non-P1 State Assoc/Corp.	1,672,922	1,422,486	991,443	(431,043)	85.03%	59.26%	-25.77%	
ASST OF COMMONWEALTH ATTY	Non-P1 State Assoc/Corp.	1,040,758	884,957	422,121	(462,836)	85.03%	40.56%	-44.47%	
HIGHSCHOOL ATHLETIC ASSOC	Non-P1 State Assoc/Corp.	135,887	115,545	90,888	(24,657)	85.03%	66.88%	-18.15%	
O A S I S	Non-P1 State Agencies	738,979	628,354	200,457	(427,897)	85.03%	27.13%	-57.90%	
KDVA	Non-P1 State Agencies	777,016	660,697	211,191	(449,506)	85.03%	27.18%	-57.85%	
B.R.A.S.S.	Non-P1 State Agencies	600,869	510,919	177,111	(333,808)	85.03%	29.48%	-55.55%	
BLUEGRASS RAPE CRISIS CTR	Non-P1 State Agencies	738,605	628,036	224,435	(403,601)	85.03%	30.39%	-54.64%	
SAFE HARBOR	Non-P1 State Agencies	857,090	728,784	158,195	(570,589)	85.03%	18.46%	-66.57%	
SANCTUARY INC	Non-P1 State Agencies	502,831	427,557	187,779	(239,778)	85.03%	37.34%	-47.69%	
LOTUS	Non-P1 State Agencies	791,779	673,250	138,651	(534,599)	85.03%	17.51%	-67.52%	
BETHANY HOUSE ABUSE SHEL	Non-P1 State Agencies	483,249	410,907	140,276	(270,631)	85.03%	29.03%	-56.00%	
SPRINGHAVEN INC	Non-P1 State Agencies	497,101	422,685	133,635	(289,050)	85.03%	26.88%	-58.15%	
KASAP	Non-P1 State Agencies	487,251	414,310	100,689	(313,621)	85.03%	20.66%	-64.37%	
SILVERLEAF	Non-P1 State Agencies	402,324	342,096	150,793	(191,303)	85.03%	37.48%	-47.55%	
WOMEN AWARE	Non-P1 State Agencies	228,407	194,214	76,321	(117,893)	85.03%	33.41%	-51.62%	
D.O.V.E.S.	Non-P1 State Agencies	447,458	380,474	117,239	(263,235)	85.03%	26.20%	-58.83%	
NURSING HOME OMBUDSMAN	Non-P1 State Agencies	237,582	202,016	72,027	(129,989)	85.03%	30.32%	-54.71%	
HOPE HARBOR INC	Non-P1 State Agencies	501,864	426,735	95,691	(331,044)	85.03%	19.07%	-65.96%	
KY OFFICE OF BAR ADMISSIO	Non-P1 State Agencies	155,606	132,312	155,110	22,798	85.03%	99.68%	14.65%	
CHILD WATCH ADVOCACY CTR	Non-P1 State Agencies	230,995	196,415	64,783	(131,632)	85.03%	28.05%	-56.98%	
FRANKLIN CO COUNCIL AGING	Non-P1 State Agencies	116,388	98,965	129,013	30,048	85.03%	110.85%	25.82%	
JUDI'S PLACE FOR KIDS, INC.	Non-P1 State Agencies	315,584	268,341	74,267	(194,074)	85.03%	23.53%	-61.50%	
CUMBERLAND V C A CENTER	Non-P1 State Agencies	267,641	227,575	71,931	(155,644)	85.03%	26.88%	-58.15%	
KY ASSOC OF REGIONAL PROG	Non-P1 State Agencies	118,750	100,973	111,188	10,215	85.03%	93.63%	8.60%	
BARREN RIVER CHILD ADVOCA	Non-P1 State Agencies	352,179	299,458	57,706	(241,752)	85.03%	16.39%	-68.64%	
CHILD ADV CTR OF GRN RVR	Non-P1 State Agencies	84,400	71,765	39,744	(32,021)	85.03%	47.09%	-37.94%	
MUN ELEC POW ASSOC OF KY	Non-P1 State Agencies	135,853	115,516	109,052	(6,464)	85.03%	80.27%	-4.76%	
KY RIVER CHILD ADVOCACY	Non-P1 State Agencies	137,637	117,033	29,772	(87,261)	85.03%	21.63%	-63.40%	
PENNYRILE CHILD ADV CTR	Non-P1 State Agencies	156,216	132,830	40,942	(91,888)	85.03%	26.21%	-58.82%	
LAKE CUMB CHILD ADV CTR	Non-P1 State Agencies	153,294	130,346	45,241	(85,105)	85.03%	29.51%	-55.52%	
BUFFALO TR CHILD ADV INC	Non-P1 State Agencies	161,504	137,327	30,095	(107,232)	85.03%	18.63%	-66.40%	
NEW VISTA OF THE BLUEGRASS, INC.	Reg Mental Hlth Units	33,781,037	28,724,016	23,926,430	(4,797,586)	85.03%	70.83%	-14.20%	
CUMBERLAND RIVER MHMR	Reg Mental Hlth Units	9,268,064	7,880,635	6,300,297	(1,580,338)	85.03%	67.98%	-17.05%	
LIFESKILLS INC	Reg Mental Hlth Units	13,349,097	11,350,737	9,199,024	(2,151,713)	85.03%	68.91%	-16.12%	
COMMUNICARE INC	Reg Mental Hlth Units	5,182,445	4,406,633	4,158,431	(248,202)	85.03%	80.24%	-4.79%	
ADANTA/BEHAVIORAL HLTH SR	Reg Mental Hlth Units	3,640,830	3,095,798	5,227,413	2,131,615	85.03%	143.58%	58.55%	
MOUNTAIN COMP CARE CENTER	Reg Mental Hlth Units	4,932,808	4,194,367	3,005,012	(1,189,355)	85.03%	60.92%	-24.11%	
GREEN RVR REG MHMR BD	Reg Mental Hlth Units	2,396,182	2,037,474	2,021,561	(15,913)	85.03%	84.37%	-0.66%	
NORTHERN KY REG MHMR BO	Reg Mental Hlth Units	135,991	115,633	3,142,326	3,026,693	85.03%	2310.69%	2225.66%	
WESTERN KY REG MHMR ADV	Reg Mental Hlth Units	3,236,123	2,751,675	2,266,255	(485,420)	85.03%	70.03%	-15.00%	
COMPREHEND INC REG MHMR B	Reg Mental Hlth Units	4,212,094	3,581,544	2,012,009	(1,569,535)	85.03%	47.77%	-37.26%	
SEVEN CO SERVICES INC	Reg Mental Hlth Units	-	-	8,418,365	8,418,365	N/A	N/A	N/A	
KY RIVER COMM CARE INC	Reg Mental Hlth Units	-	-	1,456,800	1,456,800	N/A	N/A	N/A	
NORTHERN KY UNIVERSITY	Universities	34,069,223	28,969,060	15,271,331	(13,697,729)	85.03%	44.82%	-40.21%	
EASTERN KY UNIV	Universities	5,200,717	4,422,170	13,574,762	9,152,592	85.03%	261.02%	175.99%	
KCTCS	Universities	17,933,365	15,248,740	10,346,685	(4,902,055)	85.03%	57.70%	-27.33%	
WESTERN KENTUCKY UNIV	Universities	15,052,063	12,798,769	11,389,889	(1,408,880)	85.03%	75.67%	-9.36%	
MURRAY STATE UNIV	Universities	8,180,790	6,956,126	8,089,481	1,133,355	85.03%	98.88%	13.85%	
MOREHEAD STATE UNIVERSITY	Universities	3,798,957	3,230,253	7,003,405	3,773,152	85.03%	184.35%	99.32%	
KENTUCKY STATE UNIVERSITY	Universities	4,582,383	3,896,400	2,886,087	(1,010,313)	85.03%	62.98%	-22.05%	



**Kentucky Employees Retirement Plan (Non-Hazardous) - Retirement and Insurance Combined
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Exhibit 2. Impact of Proposed Legislation on Employer Contribution Rates

Agency Name ¹	Agency Classification ¹	Projected Payroll FY 21/22	Required Contribution			Effective Employer Contribution Rate Required Contribution / Payroll			
			Current Funding Arrangement	Proposed Legislation ²	Increase/(Decrease) due to Legislation	Current Funding Arrangement	Proposed Legislation ²	Increase/(Decrease) due to Legislation	
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(1)	(2)	(3)							
ALLEN COUNTY ATTORNEY	County Attorneys	219,811	186,905	112,729	(74,176)	85.03%	51.28%	-33.75%	
ANDERSON COUNTY ATTORNEY	County Attorneys	106,316	90,400	118,390	27,990	85.03%	111.36%	26.33%	
BARREN COUNTY ATTORNEY	County Attorneys	132,522	112,683	170,321	57,638	85.03%	128.52%	43.49%	
BATH COUNTY ATTORNEY	County Attorneys	-	-	104	104	N/A	N/A	N/A	
BELL COUNTY ATTORNEY	County Attorneys	118,560	100,812	117,434	16,622	85.03%	99.05%	14.02%	
BOONE COUNTY ATTORNEY	County Attorneys	433,417	368,534	321,832	(46,702)	85.03%	74.25%	-10.78%	
BOYLE COUNTY ATTORNEY	County Attorneys	-	-	8,458	8,458	N/A	N/A	N/A	
BRECKINRIDGE CO ATTORNEY	County Attorneys	165,146	140,424	72,855	(67,569)	85.03%	44.12%	-40.91%	
BULLITT COUNTY ATTORNEY	County Attorneys	-	-	38,425	38,425	N/A	N/A	N/A	
CALLOWAY COUNTY ATTORNEY	County Attorneys	-	-	3,028	3,028	N/A	N/A	N/A	
CARROLL COUNTY ATTORNEY	County Attorneys	35,254	29,976	51,279	21,303	85.03%	145.46%	60.43%	
CASEY COUNTY ATTORNEY	County Attorneys	168,437	143,222	68,697	(74,525)	85.03%	40.78%	-44.25%	
CHILD SUPPORT ENFORCEMENT	County Attorneys	323,558	275,121	46,671	(228,450)	85.03%	14.42%	-70.61%	
CHRISTIAN COUNTY ATTORNEY	County Attorneys	-	-	53,669	53,669	N/A	N/A	N/A	
CLARK COUNTY ATTORNEY	County Attorneys	354,031	301,033	108,012	(193,021)	85.03%	30.51%	-54.52%	
CRITTENDEN CO ATTORNEY	County Attorneys	131,795	112,065	33,254	(78,811)	85.03%	25.23%	-59.80%	
DAVISS COUNTY ATTORNEY	County Attorneys	186,658	158,715	104,994	(53,721)	85.03%	56.25%	-28.78%	
EDMONSON COUNTY ATTORNEY	County Attorneys	186,741	158,786	44,756	(114,030)	85.03%	23.97%	-61.06%	
FAYETTE CO ATTORNEY OFF	County Attorneys	-	-	171,241	171,241	N/A	N/A	N/A	
FLOYD COUNTY ATTORNEY	County Attorneys	126,787	107,807	73,992	(33,815)	85.03%	58.36%	-26.67%	
FRANKLIN COUNTY ATTORNEY	County Attorneys	160,098	136,131	280,027	143,896	85.03%	174.91%	89.88%	
GARRARD COUNTY ATTORNEY	County Attorneys	49,239	41,868	58,956	17,088	85.03%	119.73%	34.70%	
GRANT COUNTY CHILD SUPPOR	County Attorneys	-	-	19,839	19,839	N/A	N/A	N/A	
GRAVES COUNTY ATTORNEY	County Attorneys	492,798	419,026	228,427	(190,599)	85.03%	46.35%	-38.68%	
HANCOCK COUNTY ATTORNEY	County Attorneys	-	-	21,092	21,092	N/A	N/A	N/A	
HARRISON COUNTY ATTORNEY	County Attorneys	36,600	31,121	9,962	(21,159)	85.03%	27.22%	-57.81%	
HICKMAN COUNTY ATTORNEY	County Attorneys	184,874	157,198	74,847	(82,351)	85.03%	40.49%	-44.54%	
HOPKINS COUNTY ATTORNEY	County Attorneys	241,200	205,092	120,005	(85,087)	85.03%	49.75%	-35.28%	
JACKSON COUNTY ATTORNEY	County Attorneys	-	-	38,216	38,216	N/A	N/A	N/A	
JEFFERSON CO ATTORNEY	County Attorneys	128,215	109,021	949,240	840,219	85.03%	740.35%	655.32%	
JOHNSON COUNTY ATTORNEY	County Attorneys	-	-	12,634	12,634	N/A	N/A	N/A	
KENTON COUNTY ATTORNEY	County Attorneys	-	-	55,758	55,758	N/A	N/A	N/A	
KNOTT COUNTY ATTORNEY	County Attorneys	287,101	244,122	78,177	(165,945)	85.03%	27.23%	-57.80%	
KNOX COUNTY ATTORNEY	County Attorneys	-	-	313	313	N/A	N/A	N/A	
LARUE COUNTY ATTORNEY	County Attorneys	261,000	221,928	83,267	(138,661)	85.03%	31.90%	-53.13%	
LAUREL COUNTY ATTORNEY	County Attorneys	72,261	61,444	26,615	(34,829)	85.03%	36.83%	-48.20%	
LAWRENCE COUNTY ATTORNEY	County Attorneys	-	-	-	-	N/A	N/A	N/A	
LEE COUNTY ATTORNEY	County Attorneys	29,344	24,951	51,413	26,462	85.03%	175.21%	90.18%	
LOGAN COUNTY ATTORNEY	County Attorneys	74,500	63,347	104,735	41,388	85.03%	140.58%	55.55%	
MADISON COUNTY ATTORNEY	County Attorneys	306,724	260,807	384,320	123,513	85.03%	125.30%	40.27%	
MAGOFFIN CO ATTORNEY	County Attorneys	77,059	65,523	18,433	(47,090)	85.03%	23.92%	-61.11%	
MCCRACKEN COUNTY ATTORNEY	County Attorneys	-	-	59,621	59,621	N/A	N/A	N/A	
MCCREARY COUNTY ATTORNEY	County Attorneys	227,087	193,092	127,769	(65,323)	85.03%	56.26%	-28.77%	
MEADE COUNTY ATTORNEY	County Attorneys	192,938	164,055	100,618	(63,437)	85.03%	52.15%	-32.88%	
MENIFEE COUNTY ATTORNEY	County Attorneys	-	-	31,011	31,011	N/A	N/A	N/A	
MERCER COUNTY ATTORNEY	County Attorneys	68,616	58,344	34,600	(23,744)	85.03%	50.43%	-34.60%	
MONROE CO ATTORNEY	County Attorneys	-	-	33,726	33,726	N/A	N/A	N/A	
MONTGOMERY CO ATTORNEY	County Attorneys	154,822	131,645	107,627	(24,018)	85.03%	69.52%	-15.51%	
MORGAN COUNTY ATTORNEY	County Attorneys	276,181	234,837	126,984	(107,853)	85.03%	45.98%	-39.05%	
OLDHAM COUNTY ATTORNEY	County Attorneys	294,858	250,718	122,084	(128,634)	85.03%	41.40%	-43.63%	
OWEN COUNTY ATTORNEY	County Attorneys	154,599	131,456	42,344	(89,112)	85.03%	27.39%	-57.64%	
PENDLETON COUNTY ATTORNEY	County Attorneys	-	-	8,458	8,458	N/A	N/A	N/A	
POWELL COUNTY ATTORNEY	County Attorneys	-	-	1,462	1,462	N/A	N/A	N/A	
PULASKI COUNTY ATTORNEY	County Attorneys	587,791	499,799	146,867	(352,932)	85.03%	24.99%	-60.04%	
ROCKCASTLE CO ATTORNEY	County Attorneys	27,040	22,992	45,019	22,027	85.03%	166.49%	81.46%	
ROWAN COUNTY ATTORNEY	County Attorneys	115,827	98,488	56,493	(41,995)	85.03%	48.77%	-36.26%	
SHELBY COUNTY ATTORNEY	County Attorneys	64,845	55,138	28,372	(26,766)	85.03%	43.75%	-41.28%	
SIMPSON COUNTY ATTORNEY	County Attorneys	35,224	29,951	32,063	2,112	85.03%	91.03%	6.00%	



**Kentucky Employees Retirement Plan (Non-Hazardous) - Retirement and Insurance Combined
Actuarial Analysis of BR424**

Exhibit 2. Impact of Proposed Legislation on Employer Contribution Rates

Agency Name ¹ (1)	Agency Classification ¹ (2)	Projected Payroll FY 21/22 (3)	Required Contribution			Effective Employer Contribution Rate Required Contribution / Payroll		
			Current Funding Arrangement	Proposed Legislation ²	Increase/(Decrease) due to Legislation	Current Funding Arrangement	Proposed Legislation ²	Increase/(Decrease) due to Legislation
			(4) = (3) x 85.03%	(5) = Exhibit 1, Column (8)	(6) = (5) - (4)	(7) = (4) / (3)	(8) = Exhibit 1, Column (11)	(9) = (8) - (7)
SPENCER COUNTY ATTORNEY	County Attorneys	342,597	291,310	100,175	(191,135)	85.03%	29.24%	-55.79%
TRIGG COUNTY ATTORNEY	County Attorneys	48,208	40,991	55,824	14,833	85.03%	115.80%	30.77%
TRIMBLE COUNTY ATTORNEY	County Attorneys	37,077	31,527	44,676	13,149	85.03%	120.50%	35.47%
UNION COUNTY ATTORNEY	County Attorneys	47,550	40,432	20,779	(19,653)	85.03%	43.70%	-41.33%
WAYNE COUNTY ATTORNEY	County Attorneys	-	-	36,545	36,545	N/A	N/A	N/A
WEBSTER COUNTY ATTORNEY	County Attorneys	457,980	389,420	123,419	(266,001)	85.03%	26.95%	-58.08%
WHITLEY COUNTY ATTORNEY	County Attorneys	333,255	283,367	143,608	(139,759)	85.03%	43.09%	-41.94%
Total	Total	1,387,760,907	1,180,013,103	1,184,315,161	4,302,058	85.03%	85.34%	0.31%

Summary of Above Information by Agency Classification

Agency Classification ¹	Projected Payroll FY 21/22	Required Contribution			Effective Employer Contribution Rate Required Contribution / Payroll		
		Current Funding Arrangement	Proposed Legislation	Increase/(Decrease) due to Legislation	Current Funding Arrangement	Proposed Legislation	Increase/(Decrease) due to Legislation
		(4) = (3) x 85.03%	(5) = Exhibit 1, Column (8)	(6) = (5) - (4)	(7) = (4) / (3)	(8) = Exhibit 1, Column (11)	(9) = (8) - (7)
Health Departments	83,859,117	71,305,410	78,421,437	7,116,027	85.03%	93.52%	8.49%
Non-P1 State Assoc/Corp.	28,261,403	24,030,672	14,958,935	(9,071,737)	85.03%	52.93%	-32.10%
Non-P1 State Agencies	10,678,452	9,079,890	3,143,334	(5,936,556)	85.03%	29.44%	-55.59%
Reg Mental Hlth Units	80,134,671	68,138,512	71,133,923	2,995,411	85.03%	88.77%	3.74%
Universities	88,817,498	75,521,518	68,561,640	(6,959,878)	85.03%	77.19%	-7.84%
County Attorneys	8,556,541	7,275,624	5,966,561	(1,309,063)	85.03%	69.73%	-15.30%
Legislative Branch	21,425,535	18,218,132	20,906,495	2,688,363	85.03%	97.58%	12.55%
Judicial Branch	60,337,522	51,304,995	31,710,880	(19,594,115)	85.03%	52.56%	-32.47%
Executive Branch	1,005,690,168	855,138,350	889,511,956	34,373,606	85.03%	88.45%	3.42%
Total	1,387,760,907	1,180,013,103	1,184,315,161	4,302,058	85.03%	85.34%	0.31%

Notes and Assumptions

¹ Agency names and classification information has been provided to GRS by KRS. We have reviewed this data for consistency but did not audit the data. GRS is not responsible for the accuracy or completeness of the information provided to us by KRS.

² Required contribution as a percentage of pay shown for illustrative purposes only. Actual required contributions will be equal to 10.10% of an employer's actual payroll for fiscal year 2021/2022 plus the amortization cost shown in column (7) on Exhibit (1).

**Actuarial Analysis of BR 424
Section 3.
Comparison of Fiscal Impact
Current Plan vs. Proposed Changes**

Kentucky Retirement Systems
Exhibit 3-1
KERS Non-Hazardous Retirement Fund
Actuarial Analysis of BR 424
Comparison of Current Plan and Proposed Legislation
(\$ in Millions)

Fiscal Year Beginning July 1,	Unfunded Actuarial Accrued Liability			Funded Ratio			Employer Contributions			Employer Contribution Rate		
	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)
2020	\$ 14,026	\$ 14,026	\$ -	14%	14%	0%	\$ 923	\$ 923	\$ -	66.5%	66.5%	0.0%
2021	13,915	13,915	-	15%	15%	0%	1,036	1,036	-	75.3%	75.4%	0.1%
2022	13,695	13,694	(1)	16%	16%	0%	1,034	1,034	-	75.6%	75.7%	0.1%
2023	13,470	13,469	(1)	17%	17%	0%	1,028	1,029	1	75.6%	75.7%	0.1%
2024	13,236	13,233	(3)	19%	19%	0%	1,030	1,030	-	76.0%	76.0%	0.0%
2025	12,971	12,968	(3)	20%	20%	0%	1,026	1,026	-	76.0%	76.0%	0.0%
2026	12,691	12,688	(3)	21%	21%	0%	1,025	1,025	-	76.2%	76.2%	0.0%
2027	12,395	12,392	(3)	23%	23%	0%	1,022	1,022	-	76.2%	76.2%	0.0%
2028	12,083	12,079	(4)	24%	24%	0%	1,019	1,019	-	76.3%	76.3%	0.0%
2029	11,754	11,750	(4)	25%	25%	0%	1,017	1,017	-	76.3%	76.3%	0.0%
2030	11,409	11,405	(4)	27%	27%	0%	1,015	1,015	-	76.2%	76.3%	0.1%
2031	11,044	11,040	(4)	28%	28%	0%	1,014	1,014	-	76.2%	76.3%	0.1%
2032	10,659	10,654	(5)	30%	30%	0%	1,011	1,011	-	76.1%	76.1%	0.0%
2033	10,255	10,250	(5)	32%	32%	0%	1,011	1,011	-	76.1%	76.1%	0.0%
2034	9,827	9,821	(6)	34%	34%	0%	1,007	1,007	-	75.8%	75.8%	0.0%
2035	9,379	9,373	(6)	36%	36%	0%	1,008	1,008	-	75.8%	75.8%	0.0%
2036	8,904	8,898	(6)	38%	38%	0%	1,006	1,006	-	75.4%	75.4%	0.0%
2037	8,406	8,399	(7)	40%	40%	0%	1,010	1,009	(1)	75.4%	75.4%	0.0%
2038	7,878	7,871	(7)	43%	43%	0%	1,005	1,004	(1)	74.7%	74.7%	0.0%
2039	7,325	7,319	(6)	46%	46%	0%	1,009	1,009	-	74.7%	74.7%	0.0%
2040	6,739	6,733	(6)	50%	50%	0%	1,005	1,001	(4)	74.1%	73.8%	-0.3%
2041	6,126	6,124	(2)	53%	54%	1%	1,009	1,005	(4)	74.1%	73.8%	-0.3%
2042	5,475	5,477	2	58%	58%	0%	1,003	997	(6)	73.3%	72.9%	-0.4%
2043	4,798	4,806	8	62%	62%	0%	1,006	1,000	(6)	73.3%	72.9%	-0.4%
2044	4,080	4,094	14	67%	67%	0%	997	992	(5)	72.5%	72.1%	-0.4%
2045	3,334	3,354	20	73%	73%	0%	1,000	995	(5)	72.5%	72.1%	-0.4%
2046	2,546	2,572	26	79%	79%	0%	995	988	(7)	71.9%	71.4%	-0.5%
2047	1,720	1,754	34	86%	85%	-1%	997	990	(7)	71.9%	71.4%	-0.5%
2048	849	892	43	93%	92%	-1%	993	978	(15)	71.5%	70.4%	-1.1%
2049	-	-	-	100%	100%	0%	52	52	-	3.8%	3.8%	0.0%
2050	-	-	-	100%	100%	0%	52	52	-	3.8%	3.8%	0.0%



Kentucky Retirement Systems
Exhibit 3-2
KERS Non-Hazardous Insurance Fund
Actuarial Analysis of BR 424
Comparison of Current Plan and Proposed Legislation
(\$ in Millions)

Fiscal Year Beginning July 1,	Unfunded Actuarial Accrued Liability			Funded Ratio			Employer Contributions			Employer Contribution Rate		
	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)
2020	\$ 1,469	\$ 1,469	\$ -	43%	43%	0%	\$ 146	\$ 146	\$ -	10.6%	10.6%	0.0%
2021	1,446	1,446	-	45%	45%	0%	132	136	4	9.7%	10.0%	0.3%
2022	1,442	1,438	(4)	47%	47%	0%	131	135	4	9.7%	10.0%	0.3%
2023	1,438	1,431	(7)	48%	48%	0%	131	134	3	9.7%	10.0%	0.3%
2024	1,430	1,419	(11)	49%	50%	1%	131	134	3	9.7%	10.0%	0.3%
2025	1,409	1,393	(16)	51%	51%	0%	130	133	3	9.7%	10.0%	0.3%
2026	1,385	1,365	(20)	52%	53%	1%	128	131	3	9.6%	9.9%	0.3%
2027	1,361	1,336	(25)	54%	55%	1%	127	131	4	9.6%	9.9%	0.3%
2028	1,333	1,303	(30)	55%	56%	1%	124	127	3	9.4%	9.6%	0.2%
2029	1,305	1,270	(35)	56%	58%	2%	124	127	3	9.4%	9.6%	0.2%
2030	1,274	1,234	(40)	57%	59%	2%	120	124	4	9.2%	9.4%	0.2%
2031	1,244	1,198	(46)	58%	60%	2%	120	123	3	9.2%	9.4%	0.2%
2032	1,210	1,158	(52)	59%	61%	2%	118	121	3	9.0%	9.2%	0.2%
2033	1,174	1,116	(58)	61%	62%	1%	118	121	3	9.0%	9.2%	0.2%
2034	1,137	1,072	(65)	62%	64%	2%	116	119	3	8.8%	9.0%	0.2%
2035	1,099	1,026	(73)	63%	65%	2%	116	119	3	8.8%	9.0%	0.2%
2036	1,057	976	(81)	64%	66%	2%	114	117	3	8.6%	8.9%	0.3%
2037	1,013	925	(88)	65%	68%	3%	114	117	3	8.6%	8.9%	0.3%
2038	966	869	(97)	66%	70%	4%	113	116	3	8.5%	8.7%	0.2%
2039	918	812	(106)	68%	71%	3%	113	116	3	8.5%	8.7%	0.2%
2040	865	749	(116)	69%	73%	4%	135	115	(20)	10.1%	8.6%	-1.5%
2041	787	683	(104)	72%	76%	4%	135	116	(19)	10.1%	8.6%	-1.5%
2042	704	614	(90)	75%	78%	3%	132	114	(18)	9.8%	8.5%	-1.3%
2043	617	541	(76)	78%	80%	2%	133	114	(19)	9.8%	8.5%	-1.3%
2044	526	463	(63)	81%	83%	2%	129	113	(16)	9.5%	8.4%	-1.1%
2045	431	381	(50)	84%	86%	2%	130	114	(16)	9.5%	8.4%	-1.1%
2046	330	293	(37)	88%	89%	1%	129	113	(16)	9.5%	8.3%	-1.2%
2047	223	201	(22)	92%	93%	1%	129	113	(16)	9.5%	8.3%	-1.2%
2048	109	103	(6)	96%	96%	0%	129	111	(18)	9.4%	8.1%	-1.3%
2049	-	-	-	100%	100%	0%	3	3	-	0.2%	0.2%	0.0%
2050	-	-	-	100%	100%	0%	3	3	-	0.2%	0.2%	0.0%



Actuarial Analysis of BR 424
Section 4.
Projected Cost of the Retirement and Insurance
Current Plan

Kentucky Retirement Systems
Exhibit 4-1
KERS Non-Hazardous Retirement Fund
Actuarial Analysis of BR 424
Current Plan
(\$ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Total Employer Contribution	Member Contribution	Covered Payroll	Total Employer Contribution as % of Covered Payroll	Employer Actuarial Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2020	\$ 16,349	\$ 2,323	\$ 14,026	14%	\$ 923	\$ 69	\$ 1,388	66.51%	73.28%
2021	16,361	2,446	13,915	15%	1,036	69	1,375	75.32%	75.32%
2022	16,351	2,656	13,695	16%	1,034	68	1,367	75.61%	75.61%
2023	16,321	2,851	13,470	17%	1,028	68	1,360	75.61%	75.80%
2024	16,271	3,035	13,236	19%	1,030	68	1,354	76.02%	76.02%
2025	16,202	3,231	12,971	20%	1,026	67	1,349	76.02%	76.17%
2026	16,112	3,421	12,691	21%	1,025	67	1,345	76.22%	76.22%
2027	16,003	3,608	12,395	23%	1,022	67	1,340	76.22%	76.23%
2028	15,874	3,791	12,083	24%	1,019	67	1,337	76.26%	76.26%
2029	15,726	3,972	11,754	25%	1,017	67	1,333	76.26%	76.26%
2030	15,561	4,152	11,409	27%	1,015	67	1,331	76.24%	76.24%
2031	15,385	4,341	11,044	28%	1,014	66	1,330	76.24%	76.20%
2032	15,195	4,536	10,659	30%	1,011	66	1,329	76.07%	76.07%
2033	14,993	4,738	10,255	32%	1,011	66	1,329	76.07%	75.95%
2034	14,779	4,952	9,827	34%	1,007	66	1,329	75.78%	75.78%
2035	14,556	5,177	9,379	36%	1,008	67	1,331	75.78%	75.63%
2036	14,325	5,421	8,904	38%	1,006	67	1,334	75.41%	75.41%
2037	14,090	5,684	8,406	40%	1,010	67	1,339	75.41%	75.12%
2038	13,855	5,977	7,878	43%	1,005	67	1,345	74.73%	74.73%
2039	13,622	6,297	7,325	46%	1,009	68	1,351	74.73%	74.33%
2040	13,394	6,655	6,739	50%	1,005	68	1,357	74.09%	74.09%
2041	13,171	7,045	6,126	53%	1,009	68	1,362	74.09%	73.76%
2042	12,953	7,478	5,475	58%	1,003	68	1,368	73.32%	73.32%
2043	12,743	7,945	4,798	62%	1,006	69	1,372	73.32%	72.87%
2044	12,539	8,459	4,080	67%	997	69	1,376	72.45%	72.45%
2045	12,344	9,010	3,334	73%	1,000	69	1,380	72.45%	72.18%
2046	12,157	9,611	2,546	79%	995	69	1,383	71.92%	71.92%
2047	11,978	10,258	1,720	86%	997	69	1,387	71.92%	71.69%
2048	11,809	10,960	849	93%	993	69	1,390	71.47%	71.47%
2049	11,651	11,651	-	100%	52	70	1,393	3.76%	3.76%
2050	11,503	11,503	-	100%	52	70	1,396	3.75%	3.75%

Notes and assumptions:

The projection is based on the results of the June 30, 2020 actuarial valuation and assumes that all actuarial assumptions are realized, including the assumed annual asset return of 5.25%.

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

The total active population is assumed to decrease 2% each year for each of the next 30 years.

The contribution rate established in the Commonwealth's biennium budget is assumed to be equal to the full actuarially determined contribution rate.

The 2020 legislative session did not set the employer contribution rates for FYE 2022. Employer contribution rates for FYE 2022 are assumed to be based on the June 30, 2020 actuarial valuation.

The 66.51% employer contribution rate for FYE 2021 is the effective contribution rate after reflecting HB 352 (passed during the 2020 legislative session) which allowed

Regional Mental Health/Mental Retardation Boards, Local and District Health Departments, State Universities, Community Colleges and any other agency eligible to voluntarily cease participating in KERS to contribute 41.06% of pay to the pension fund for FY 2021. Collectively these entities reflect approximately 21% of the covered payroll in the System.



Kentucky Retirement Systems
Exhibit 4-2
KERS Non-Hazardous Insurance Fund
Actuarial Analysis of BR 424
Current Plan
(\$ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Total Employer Contribution	Member Contribution	Covered Payroll	Total Employer Contribution as % of Covered Payroll	Employer Actuarial Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2020	\$ 2,565	\$ 1,096	\$ 1,469	43%	\$ 146	\$ 6	\$ 1,377	10.57%	11.15%
2021	2,633	1,187	1,446	45%	132	6	1,364	9.71%	9.71%
2022	2,700	1,258	1,442	47%	131	7	1,355	9.70%	9.70%
2023	2,763	1,325	1,438	48%	131	7	1,348	9.70%	9.70%
2024	2,820	1,390	1,430	49%	131	8	1,342	9.73%	9.73%
2025	2,870	1,461	1,409	51%	130	8	1,336	9.73%	9.71%
2026	2,913	1,528	1,385	52%	128	9	1,332	9.61%	9.61%
2027	2,948	1,587	1,361	54%	127	9	1,327	9.61%	9.50%
2028	2,973	1,640	1,333	55%	124	10	1,322	9.38%	9.38%
2029	2,989	1,684	1,305	56%	124	10	1,319	9.38%	9.28%
2030	2,996	1,722	1,274	57%	120	10	1,316	9.15%	9.15%
2031	2,995	1,751	1,244	58%	120	11	1,314	9.15%	9.05%
2032	2,987	1,777	1,210	59%	118	11	1,313	8.96%	8.96%
2033	2,973	1,799	1,174	61%	118	11	1,313	8.96%	8.88%
2034	2,955	1,818	1,137	62%	116	12	1,313	8.80%	8.80%
2035	2,933	1,834	1,099	63%	116	12	1,314	8.80%	8.72%
2036	2,909	1,852	1,057	64%	114	12	1,317	8.64%	8.64%
2037	2,885	1,872	1,013	65%	114	13	1,321	8.64%	8.59%
2038	2,862	1,896	966	66%	113	13	1,327	8.50%	8.50%
2039	2,840	1,922	918	68%	113	13	1,333	8.50%	8.44%
2040	2,819	1,954	865	69%	135	13	1,339	10.06%	10.06%
2041	2,800	2,013	787	72%	135	13	1,344	10.06%	9.95%
2042	2,784	2,080	704	75%	132	13	1,349	9.80%	9.80%
2043	2,770	2,153	617	78%	133	13	1,353	9.80%	9.66%
2044	2,759	2,233	526	81%	129	13	1,357	9.53%	9.53%
2045	2,749	2,318	431	84%	130	14	1,361	9.53%	9.50%
2046	2,741	2,411	330	88%	129	14	1,364	9.46%	9.46%
2047	2,732	2,509	223	92%	129	14	1,367	9.46%	9.44%
2048	2,723	2,614	109	96%	129	14	1,370	9.42%	9.42%
2049	2,713	2,713	-	100%	3	14	1,373	0.24%	0.24%
2050	2,701	2,701	-	100%	3	14	1,376	0.24%	0.24%

Notes and assumptions:

The projection is based on the results of the June 30, 2020 actuarial valuation and assumes that all actuarial assumptions are realized, including the assumed annual asset return of 6.25%.

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

The total active population is assumed to decrease 2% each year for each of the next 30 years.

The contribution rate established in the Commonwealth's biennium budget is assumed to be equal to the full actuarially determined contribution rate.

The 2020 legislative session did not set the employer contribution rates for FYE 2022. Employer contribution rates for FYE 2022 are assumed to be based on the June 30, 2020 actuarial valuation.

The 10.57% employer contribution rate for FYE 2021 is the effective contribution rate after reflecting HB 352 (passed during the 2020 legislative session) which allowed

Regional Mental Health/Mental Retardation Boards, Local and District Health Departments, State Universities, Community Colleges and any other agency eligible to voluntarily cease participating in KERS to contribute 8.41% of pay to the insurance fund for FY 2021. Collectively these entities reflect approximately 21% of the covered payroll in the System.



**Actuarial Analysis of BR 424
Section 5.
Projected Cost of the Retirement and Insurance
Proposed Legislation**

Kentucky Retirement Systems
Exhibit 5-1
KERS Non-Hazardous Retirement Fund
Actuarial Analysis of BR 424
Proposed Legislation
(\$ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Total Employer Contribution	Member Contribution	Covered Payroll	Total Employer Contribution as % of Covered Payroll	Employer Actuarial Determined Contribution Rate
(1)	1	0	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2020	\$ 16,349	\$ 2,323	\$ 14,026	14%	\$ 923	\$ 69	\$ 1,388	66.51%	73.28%
2021	16,361	2,446	13,915	15%	1,036	69	1,375	75.37%	75.37%
2022	16,351	2,657	13,694	16%	1,034	68	1,367	75.66%	75.66%
2023	16,321	2,852	13,469	17%	1,029	68	1,360	75.66%	75.84%
2024	16,271	3,038	13,233	19%	1,030	68	1,354	76.04%	76.04%
2025	16,202	3,234	12,968	20%	1,026	67	1,349	76.04%	76.18%
2026	16,112	3,424	12,688	21%	1,025	67	1,345	76.23%	76.23%
2027	16,003	3,611	12,392	23%	1,022	67	1,340	76.23%	76.24%
2028	15,874	3,795	12,079	24%	1,019	67	1,337	76.26%	76.26%
2029	15,726	3,976	11,750	25%	1,017	67	1,333	76.26%	76.27%
2030	15,561	4,156	11,405	27%	1,015	67	1,331	76.25%	76.25%
2031	15,385	4,345	11,040	28%	1,014	66	1,330	76.25%	76.21%
2032	15,195	4,541	10,654	30%	1,011	66	1,329	76.08%	76.08%
2033	14,993	4,743	10,250	32%	1,011	66	1,329	76.08%	75.96%
2034	14,779	4,958	9,821	34%	1,007	66	1,329	75.79%	75.79%
2035	14,556	5,183	9,373	36%	1,008	67	1,331	75.79%	75.62%
2036	14,325	5,427	8,898	38%	1,006	67	1,334	75.40%	75.40%
2037	14,090	5,691	8,399	40%	1,009	67	1,339	75.40%	75.10%
2038	13,855	5,984	7,871	43%	1,004	67	1,345	74.69%	74.69%
2039	13,622	6,303	7,319	46%	1,009	68	1,351	74.69%	74.27%
2040	13,394	6,661	6,733	50%	1,001	68	1,357	73.78%	73.78%
2041	13,171	7,047	6,124	54%	1,005	68	1,362	73.78%	73.37%
2042	12,953	7,476	5,477	58%	997	68	1,368	72.90%	72.90%
2043	12,743	7,937	4,806	62%	1,000	69	1,372	72.90%	72.53%
2044	12,539	8,445	4,094	67%	992	69	1,376	72.11%	72.11%
2045	12,344	8,990	3,354	73%	995	69	1,380	72.11%	71.82%
2046	12,157	9,585	2,572	79%	988	69	1,383	71.41%	71.41%
2047	11,978	10,224	1,754	85%	990	69	1,387	71.41%	71.09%
2048	11,809	10,917	892	92%	978	69	1,390	70.36%	70.36%
2049	11,651	11,651	-	100%	52	70	1,393	3.76%	3.76%
2050	11,503	11,503	-	100%	52	70	1,396	3.75%	3.75%

Notes and assumptions:

The projection is based on the same methods and assumptions as the projection under the Current Plan (Exhibit 4-1), except that the amortization methodology has been updated to reflect the proposed legislation. All gains and losses are amortized as one base over the closed 30-year period beginning July 1, 2019.



Kentucky Retirement Systems
Exhibit 5-2
KERS Non-Hazardous Insurance Fund
Actuarial Analysis of BR 424
Proposed Legislation
(\$ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Total Employer Contribution	Member Contribution	Covered Payroll	Total Employer Contribution as % of Covered Payroll	Employer Actuarial Determined Contribution Rate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2020	\$ 2,565	\$ 1,096	\$ 1,469	43%	\$ 146	\$ 6	\$ 1,377	10.57%	11.15%
2021	2,633	1,187	1,446	45%	136	6	1,364	9.97%	9.97%
2022	2,700	1,262	1,438	47%	135	7	1,355	9.96%	9.96%
2023	2,763	1,332	1,431	48%	134	7	1,348	9.96%	9.96%
2024	2,820	1,401	1,419	50%	134	8	1,342	9.97%	9.97%
2025	2,870	1,477	1,393	51%	133	8	1,336	9.97%	9.94%
2026	2,913	1,548	1,365	53%	131	9	1,332	9.85%	9.85%
2027	2,948	1,612	1,336	55%	131	9	1,327	9.85%	9.74%
2028	2,973	1,670	1,303	56%	127	10	1,322	9.62%	9.62%
2029	2,989	1,719	1,270	58%	127	10	1,319	9.62%	9.52%
2030	2,996	1,762	1,234	59%	124	10	1,316	9.39%	9.39%
2031	2,995	1,797	1,198	60%	123	11	1,314	9.39%	9.30%
2032	2,987	1,829	1,158	61%	121	11	1,313	9.20%	9.20%
2033	2,973	1,857	1,116	62%	121	11	1,313	9.20%	9.12%
2034	2,955	1,883	1,072	64%	119	12	1,313	9.04%	9.04%
2035	2,933	1,907	1,026	65%	119	12	1,314	9.04%	8.96%
2036	2,909	1,933	976	66%	117	12	1,317	8.88%	8.88%
2037	2,885	1,960	925	68%	117	13	1,321	8.88%	8.83%
2038	2,862	1,993	869	70%	116	13	1,327	8.74%	8.74%
2039	2,840	2,028	812	71%	116	13	1,333	8.74%	8.66%
2040	2,819	2,070	749	73%	115	13	1,339	8.60%	8.60%
2041	2,800	2,117	683	76%	116	13	1,344	8.60%	8.53%
2042	2,784	2,170	614	78%	114	13	1,349	8.45%	8.45%
2043	2,770	2,229	541	80%	114	13	1,353	8.45%	8.41%
2044	2,759	2,296	463	83%	113	13	1,357	8.35%	8.35%
2045	2,749	2,368	381	86%	114	14	1,361	8.35%	8.32%
2046	2,741	2,448	293	89%	113	14	1,364	8.25%	8.25%
2047	2,732	2,531	201	93%	113	14	1,367	8.25%	8.20%
2048	2,723	2,620	103	96%	111	14	1,370	8.10%	8.10%
2049	2,713	2,713	-	100%	3	14	1,373	0.24%	0.24%
2050	2,701	2,701	-	100%	3	14	1,376	0.24%	0.24%

Notes and assumptions:

The projection is based on the same methods and assumptions as the projection under the Current Plan (Exhibit 4-2), except that the amortization methodology has been updated to reflect the proposed legislation. All gains and losses are amortized as one base over the closed 30-year period beginning July 1, 2019.

