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GASB STATEMENT NO. 68 REPORT
FOR THE
TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
PREPARED AS OF JUNE 30, 2020





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

June 22, 2021

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Presented in this report is information to assist the Teachers' Retirement System of the State of Kentucky (TRS) in meeting the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 68 and to identify the information to be provided by the actuary, Cavanaugh Macdonald Consulting (CMC). This report has been prepared as of June 30, 2020 (the Measurement Date).

GASB Statement Number 68 established accounting and financial reporting requirements for governmental employers that provide pension benefits to their employees through a trust.

The annual actuarial valuation used as a basis for much of the information presented in this report was performed as of June 30, 2019. The valuation was based upon data, furnished by the TRS staff, for active, inactive and retired members along with pertinent financial information. While not verifying data at the source, the actuary performed tests for consistency and reasonableness.

We note that as we are preparing this report, the world is in the midst of a pandemic. We have considered available information, but do not believe that there is yet sufficient data to warrant the modification of any of our assumptions prior to the next experience study.

In order to prepare the results in this report, we have utilized appropriate actuarial models that were developed for this purpose. These models use assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial principles and practices, as well as in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board. The calculations are based on the current provisions of the Plan, and on actuarial assumptions that are, internally consistent and individually reasonable based on the actual experience of the Plan. In addition, the calculations were completed in compliance with the laws governing the Plan and, in our opinion, meet the requirements of GASB 68. The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



Board of Trustees
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These results are only for financial reporting and may not be appropriate for funding purposes or other types of analysis. Calculations for purposes other than satisfying the requirements of GASB 67 and GASB 68 may produce significantly different results. Future actuarial results may differ significantly from the current results presented in this report due to such factors as changes in plan experience or changes in economic or demographic assumptions.

Sincerely yours,

A handwritten signature in blue ink that reads 'Edward J. Koebel'.

Edward J. Koebel, EA, FCA, MAAA
Chief Executive Officer

A handwritten signature in blue ink that reads 'Alisa Bennett'.

Alisa Bennett, FSA, EA, FCA, MAAA
President

A handwritten signature in blue ink that reads 'Cathy Turcot'.

Cathy Turcot
Principal and Managing Director



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Section I – Introduction

The Governmental Accounting Standards Board issued Statement No. 68 (GASB 68), *“Accounting and Financial Reporting For Pensions”* in June 2012. The Teachers’ Retirement System of the State of Kentucky (TRS) is a cost-sharing multiple employer defined benefit pension plan.

This report, prepared as of June 30, 2020 (the Measurement Date), presents information to assist the employers participating in TRS in meeting the requirements of GASB 68 for the fiscal year ending June 30, 2021 (Reporting Date). Much of the material provided in this report is based on the data, assumptions and results of the annual actuarial valuation of TRS as of June 30, 2019. The results of that valuation were detailed in a report dated November 15, 2019.

The NPL shown in the GASB Statement No. 67 Report for the Teachers’ Retirement System of the State of Kentucky Prepared as of June 30, 2020 and submitted November 5, 2020 is the collective NPL used for purposes of GASB 68. Please refer to that report for the derivation of the collective NPL.

Pension Expense (PE) includes amounts for service cost (the normal cost under the Entry Age Normal actuarial cost method for the year), interest on the Total Pension Liability (TPL), changes in benefit structure, amortization of increases/decreases in liability due to actuarial experience and actuarial assumption changes, and amortization of investment gains/losses. The actuarial experience and assumption change impacts are amortized over the average expected remaining service life of the Plan membership as of the Measurement Date, and investment gains/losses are amortized over five years. The development of the collective PE is shown in Section IV.

The unamortized portions of each year’s experience, assumption changes and investment gains/losses are used to develop deferred inflows and outflows, which also must be included in the employer’s financial statements. The development of the collective deferred inflows and outflows is shown in Section III.

These collective amounts have been allocated based on actual contributions made to TRS during the measurement period to determine the proportionate share to each participating employer. In addition, TRS receives contributions directly from the State of Kentucky for all participating employers. These employers are considered to be in a special funding situation as defined by GASB 68 and the State is treated as a non-employer contributing entity in TRS.

Schedule A of this report shows the total amount of employer contributions for the year ending June 30, 2020 from each participating employer, the amount of contributions from the State associated with each employer in special funding situation and the total amount of State contributions. Schedule A also shows the proportionate share percentages that have been determined based on these contributions.

Based on these percentages we have determined the proportionate share amounts of the NPL, PE and Deferred Inflows and Outflows for each participating employer. These amounts are shown in Schedule B. The proportionate share amounts of each of these items associated with each employer in a special funding situation, and the total proportionate share amounts of each item for the State are also provided.

Section II of this report is a summary of the principal results of the collective amounts under GASB 68. Section III provides the results of all the necessary calculations, presented in the order laid out in GASB 68 for note disclosure and Required Supplementary Information (RSI).



Section II – Summary of Collective Amounts

(\$ IN THOUSANDS)

	2020
Valuation Date:	June 30, 2019
Prior Measurement Date:	June 30, 2019
Measurement Date:	June 30, 2020
Reporting Date:	June 30, 2021
Single Equivalent Interest Rate (SEIR):	
Long-Term Expected Rate of Return	7.50%
Municipal Bond Index Rate at Prior Measurement Date	3.50%
Municipal Bond Index Rate at Measurement Date	2.19%
Fiscal Year in which Plan's Fiduciary Net Position is projected to be depleted from future benefit payments for current members	N/A
Single Equivalent Interest Rate at Prior Measurement Date	7.50%
Single Equivalent Interest Rate at Measurement Date	7.50%
Net Pension Liability:	
Total Pension Liability (TPL)	\$35,552,041
Fiduciary Net Position (FNP)	<u>20,717,000</u>
Net Pension Liability (NPL = TPL – FNP)	\$ 14,835,041
FNP as a percentage of TPL	58.27%
Pension Expense (PE):	(\$1,649,184)
Deferred Outflows of Resources:	\$518,063
Deferred Inflows of Resources:	\$4,745,800



Section III – Notes to the Financial Statements

The material presented herein will follow the order presented in GASB 68. Paragraph numbers are provided for ease of reference. Amounts are shown in aggregate. Please refer to Schedule B of this report for the proportionate share of certain pension amounts as required by GASB 68.

Paragraphs 77 and 78(a)-(e): These paragraphs require information to be disclosed regarding the actuarial assumptions used to measure the TPL. The complete set of actuarial assumptions utilized in developing the TPL are outlined in Schedule C. The TPL was determined by an actuarial valuation as of June 30, 2019, using the following key actuarial assumptions:

Inflation	3.00 percent
Salary increases, including inflation	3.50 – 7.30 percent
Long-Term Investment Rate of Return, net of pension plan investment expense, including inflation	7.50 percent
Municipal Bond Index Rate	
Prior Measurement Date	3.50 percent
Measurement Date	2.19 percent
Year FNP is projected to be depleted	N/A
Single Equivalent Interest Rate, net of pension plan investment expense, including inflation	
Prior Measurement Date	7.50 percent
Measurement Date	7.50 percent
Post-Retirement Benefit Increases	1.50% annually

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on a projection of Scale BB to 2025, set forward two years for males and one year for females.

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period July 1, 2010 – June 30, 2015 adopted by the Board on November 19, 2016.

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.



Section III – Notes to the Financial Statements

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Equity	40.0%	4.6%
International Equity	22.0%	5.6%
Fixed Income	15.0%	0.0%
Additional Categories*	7.0%	2.5%
Real Estate	7.0%	4.3%
Private Equity	7.0%	7.7%
Cash	2.0%	-0.5%
Total	100.00%	

**Includes High Yield, Non-US Developed Bonds and Private Credit Strategies*

Discount rate. The discount rate used to measure the TPL as of the Measurement Date was 7.50%. The projection of cash flows used to determine the discount rate was performed in accordance with GASB 67. We assumed that Plan member contributions will be made at the current contribution rates and that Employer contributions will be made at the Actuarially Determined Contribution rates for all fiscal years in the future. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Paragraph 78 (g): This paragraph requires disclosure of the sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the System, calculated using the discount rate of 7.50 percent, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.50 percent) or 1-percentage-point higher (8.50 percent) than the current rate (\$ thousands):

	1% Decrease (6.50%)	Current Discount Rate (7.50%)	1% Increase (8.50%)
System's net pension liability	\$18,868,453	\$14,835,041	\$11,439,108



Section III – Notes to the Financial Statements

Paragraph 80(a): This paragraph requires disclosure of the employer's proportionate share of the collective NPL and if an employer has a special funding situation the portion of the non-employer contributing entities' proportional share of the collective NPL that is associated with the employer. These amounts are shown in Schedule B.

Paragraph 80(b): This paragraph requires disclosure of the employer's proportion (percentage) of the collective NPL and the changes in proportion since the prior measurement date. These amounts are shown for all entities in Schedule A.

Paragraph 80(c): June 30, 2019 is the actuarial valuation date upon which the TPL is based. An expected TPL is determined as of June 30, 2020 using standard roll forward techniques. The procedure used to determine the TPL as of June 30, 2020 is shown on page 5 of the GASB 67 report for TRS submitted on November 5, 2020.

Paragraph 80(g): Please see Section IV of this report for the development of the collective pension expense. The PE for each employer is shown in Schedule B.

Paragraph 80(h): Since certain expense items are amortized over closed periods each year, the deferred portions of these items must be tracked annually. If the amounts serve to reduce pension expense they are labeled deferred inflows. If they will increase pension expense they are labeled deferred outflows. The amortization of these amounts is accomplished on a level dollar basis, with no interest included in the deferred amounts. Experience gains/losses and the impact of changes in actuarial assumptions or other inputs, if any, are amortized over the average expected remaining service life of the active and inactive Plan members at the beginning of the fiscal year. Investment gains and losses are amortized over a fixed five-year period.



Section III – Notes to the Financial Statements

The table below provides a summary of the collective deferred inflows and outflows as of the Measurement Date. The allocation of the collective deferred inflows and outflows is provided in Schedule B.

	Collective Deferred Outflows of Resources (\$ thousands)	Collective Deferred Inflows of Resources (\$ thousands)
Differences between expected and actual experience	\$72,130	\$76,062
Changes of actuarial assumptions or other inputs	366,439	4,669,738
Net difference between projected and actual earnings on plan investments	<u>79,494</u>	<u>0</u>
Total	<u>\$518,063</u>	<u>\$4,745,800</u>

Paragraph 80(i): Collective amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Deferred Amounts to be Recognized in Fiscal Years Following the Reporting Date: (\$ thousands)	
Year 1	(\$3,236,769)
Year 2	(1,240,337)
Year 3	167,703
Year 4	81,666
Year 5	0
Thereafter	<u>0</u>

The allocation of these deferred amounts for each participating employer is shown in Schedule C.



Section III – Notes to the Financial Statements

Collective Deferred Outflows and Inflows for Differences between Expected and Actual Experience (\$ thousands)											
	Initial Balance of Losses / Deferred Outflow	Initial Balance of Gains / Deferred Inflow	Amortization Period	Beginning Balance Deferred Outflows (a)	Beginning Balance Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in Pension Expense / Deferred Outflow (e)	Amounts Recognized in Pension Expense / Deferred Inflow (f)	Ending Balance Deferred Outflows (a) + (c) - (e)	Ending Balance Deferred Inflows (b) + (d) - (f)
2020	\$10,661	\$0	4.2	\$0	\$0	\$10,661	\$0	\$2,538	\$0	\$8,123	\$0
2019	\$93,650	0	4.3	71,871	0	0	0	21,779	0	50,092	0
2018	0	222,473	4.4	0	121,349	0	0	0	50,562	0	70,787
2017	199,471	0	4.3	60,304	0	0	0	46,389	0	13,915	0
2016	0	58,035	5.5	0	15,827	0	0	0	10,552	0	5,275
2015	0	323,868	5.2	0	12,458	0	0	0	12,458	0	0
2014	0	0	5.8	0	0	0	0	0	0	0	0
Total				<u>\$132,175</u>	<u>\$149,634</u>	<u>\$10,661</u>	<u>\$0</u>			<u>\$72,130</u>	<u>\$76,062</u>



Section III – Notes to the Financial Statements

Collective Deferred Outflows and Inflows for Differences from Assumption Changes or Other Inputs (\$ thousands)											
	Initial Balance of Losses / Deferred Outflow	Initial Balance of Gains / Deferred Inflow	Amortization Period	Beginning Balance Deferred Outflows (a)	Beginning Balance Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in Pension Expense / Deferred Outflow (e)	Amounts Recognized in Pension Expense / Deferred Inflow (f)	Ending Balance Deferred Outflows (a) + (c) - (e)	Ending Balance Deferred Inflows (b) + (d) - (f)
2020	\$0	\$0	4.2	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	\$0	0	4.3	0	0	0	0	0	0	0	0
2018	\$0	14,167,315	4.4	0	7,727,627	0	0	0	3,219,844	0	4,507,783
2017	\$0	2,321,327	4.3	0	701,798	0	0	0	539,843	0	161,955
2016	4,030,834	0	5.5	1,099,318	0	0	0	732,879	0	366,439	0
2015	1,835,828	0	5.2	70,608	0	0	0	70,608	0	0	0
2014	0	353,043	5.8	0	0	0	0	0	0	0	0
Total				<u>\$1,169,926</u>	<u>\$8,429,425</u>	<u>\$0</u>	<u>\$0</u>			<u>\$366,439</u>	<u>\$4,669,738</u>



Section III – Notes to the Financial Statements

Collective Deferred Outflows and Inflows for Differences in Investment Experience (\$ thousands)											
	Initial Balance of Losses / Deferred Outflow	Initial Balance of Gains / Deferred Inflow	Amortization Period	Beginning Balance Deferred Outflows (a)	Beginning Balance Deferred Inflows (b)	Losses / Deferred Outflows (c)	Gains / Deferred Inflows (d)	Amounts Recognized in Pension Expense / Deferred Outflow (e)	Amounts Recognized in Pension Expense / Deferred Inflow (f)	Ending Balance Deferred Outflows (a) + (c) - (e)	Ending Balance Deferred Inflows (b) + (d) - (f)
2020	\$405,785	\$0	5.0	\$0	\$0	\$405,785	\$0	\$81,157	\$0	\$324,628	\$0
2019	387,374	0	5.0	309,899	0	0	0	77,475	0	232,424	0
2018	0	576,610	5.0	0	345,366	0	0	0	115,122	0	230,244
2017	0	1,236,574	5.0	0	494,629	0	0	0	247,315	0	247,314
2016	1,561,734	0	5.0	312,346	0	0	0	312,346	0	0	0
2015	460,803	0	5.0	0	0	0	0	0	0	0	0
2014	0	1,627,260	5.0	0	0	0	0	0	0	0	0
Total				<u>\$622,245</u>	<u>\$839,995</u>	<u>\$405,785</u>	<u>\$0</u>			<u>\$557,052</u>	<u>\$477,558</u>
Net difference between projected and actual earnings on investments										\$79,494	\$0



Section III – Notes to the Financial Statements

Paragraph 80(j): The amount of revenue recognized for the support provided by non-employer contributing entities for the participating employers is provided in Schedule B.

Paragraphs 81(a)-(b): CMC was not required to supply this information.



Section IV – Pension Expense

As noted earlier, the collective Pension Expense (PE) consists of a number of different items. GASB 68 refers to the first as Service Cost which is the Normal Cost using the Entry Age Normal actuarial funding method. The second item is interest on the beginning Total Pension Liability (TPL) and the cash flow during the year at the SEIR rate of return in effect as of the previous measurement date.

The next three items refer to any changes that occurred in the TPL due to:

- benefit changes, or
- actual versus expected experience, or
- changes in actuarial assumptions or other inputs.

Benefit changes, which are reflected immediately in PE, can be positive, if there is a benefit improvement for existing Plan members, or negative if there is a benefit reduction. For the year ended June 30, 2019, there were no benefit changes to be recognized.

The next item to be recognized is the portion of current year changes in TPL due to actual versus expected Plan experience for the year. The portion to recognize in the current year is determined by spreading the total change over the average expected remaining service life of the entire Plan membership determined at the beginning of the year. The average expected remaining service life of active members is the average number of years the active members are expected to remain active. For the year ended June 30, 2020, the average expected remaining service life for the active members is 10.6 years. The average expected remaining service life of the inactive members is zero. The number of years to use for the amortization is the weighted average for all active and inactive members, or 4.2 years.

The last item under changes in TPL are changes in actuarial assumptions or other inputs. There was a change in assumptions or other inputs since the last measurement date due to the change in discount rate. Changes in actuarial assumptions or other inputs are recognized over the average expected remaining service life of the plan membership.

Member contributions for the year and projected earnings on the Fiduciary Net Position (FNP), again at the discount rate used to calculate the liabilities, are subtracted from the amount determined thus far. One-fifth of current period differences between projected and actual investment earnings on the FNP are recognized in the pension expense.

The current year portions of previously determined experience, assumption and earnings amounts, recognized as deferred outflows and inflows (see Section V) are included also. Deferred outflows are added to the PE while deferred inflows are subtracted from the PE. Finally, administrative expenses and other miscellaneous items are included.



Section IV – Pension Expense

The calculation of the Collective Pension Expense determined as of the measurement date is shown in the following table:

Collective Pension Expense Determined as of the Measurement Date (\$ thousands)	
Service Cost at end of year	\$552,625
Interest on the TPL and net cash flow	2,517,671
Current-period benefit changes	0
Expensed portion of current-period difference between expected and actual experience in the total pension liability	2,538
Expensed portion of current-period changes of assumptions or other inputs	0
Member contributions	(324,664)
Projected earnings on plan investments	(1,499,808)
Expensed portion of current-period differences between projected and actual earnings on plan investments	81,157
Administrative expense	12,167
Other	(56,650)
Recognition of beginning deferred outflows of resources as pension expense	899,039
Recognition of beginning deferred inflows of resources as pension expense	<u>(3,833,259)</u>
Collective Pension Expense	<u>(\$1,649,184)</u>



Section V – Required Supplemental Information

Paragraphs 82:

Changes of benefit terms.

- None

Changes of assumptions.

- In 2014, the calculation of the Single Equivalent Interest Rate (SEIR) resulted in an assumption change from 5.16% to 5.23%.
- In 2015, the calculation of the Single Equivalent Interest Rate (SEIR) resulted in an assumption change from 5.23% to 4.88%.
- In the 2016 valuation, rates of withdrawal, retirement, disability and mortality were adjusted to more closely reflect actual experience. In the 2016 valuation, the Assumed Salary Scale, Price Inflation, and Wage Inflation were adjusted to reflect a decrease. In addition, the calculation of the Single Equivalent Interest Rate (SEIR) resulted in an assumption change from 4.88% to 4.20%.
- In 2017, the calculation of the Single Equivalent Interest Rate (SEIR) resulted in an assumption change from 4.20% to 4.49%.
- In 2018, the calculation of the Single Equivalent Interest Rate (SEIR) resulted in an assumption change from 4.49% to 7.50%.



Schedule A – Schedule of Employer Allocations as of June 30, 2020

Code	University Employers	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
263	Eastern Kentucky University	\$ 7,084,752	\$ 7,450,917	\$ 14,535,669	13.6851%	14.3923%	28.0774%
266	Kentucky State University	1,937,803	2,037,956	3,975,759	3.7431%	3.9366%	7.6797%
269	Morehead State University	3,890,983	4,092,083	7,983,066	7.5159%	7.9044%	15.4203%
270	Murray State University	3,956,138	4,160,605	8,116,743	7.6418%	8.0367%	15.6785%
273	Western Kentucky University	6,248,445	6,571,387	12,819,832	12.0696%	12.6934%	24.7630%
500	KCTCS Central Office - University	<u>2,114,799</u>	<u>2,224,099</u>	<u>4,338,898</u>	<u>4.0850%</u>	<u>4.2961%</u>	<u>8.3811%</u>
	Total University Contributions	\$ 25,232,920	\$ 26,537,047	\$ 51,769,967	48.7405%	51.2595%	100.0000%



Schedule A (continued)

Code	Non-University Employers	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
400	KCTCS Central Office	\$ 1,614,723	\$ 2,292,022	\$ 3,906,745	0.1574%	0.2234%	0.3808%
801	KY High School Athletic Association	100,037	141,998	242,035	0.0097%	0.0139%	0.0236%
805	KY School Boards Association	163,402	231,941	395,343	0.0159%	0.0226%	0.0385%
806	KY Education Association	24,702	35,063	59,765	0.0024%	0.0034%	0.0058%
807	KY Academic Association	15,945	22,633	38,578	0.0016%	0.0022%	0.0038%
809	Jefferson County Teachers' Association	7,309	10,375	17,684	<u>0.0007%</u>	<u>0.0010%</u>	<u>0.0017%</u>
		\$ 1,926,118	\$ 2,734,032	\$ 4,660,150	0.1877%	0.2665%	0.4542%

Code	State Agencies	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
301	Technical Education District - Madisonville	\$ 760,729	\$ 1,079,818	\$ 1,840,547	0.0742%	0.1053%	0.1795%
302	Technical Education District - Bowling Green	812,396	1,153,157	1,965,553	0.0792%	0.1124%	0.1916%
303	Technical Education District - Elizabethtown	-	-	-	0.0000%	0.0000%	0.0000%
304	Technical Education District - Frankfort	609,329	864,913	1,474,242	0.0594%	0.0843%	0.1437%
305	Technical Education District - Hazard	750,482	1,065,273	1,815,755	0.0732%	0.1038%	0.1770%
308	Adult Education - Workforce Investment	41,402	58,768	100,170	0.0040%	0.0057%	0.0097%
316	Office of Career and Technical Education	275,127	390,530	665,657	0.0268%	0.0381%	0.0649%
317	Office of Secretary of Workforce Investment	-	-	-	0.0000%	0.0000%	0.0000%
318	Department for Vocational Rehabilitation	1,260,072	1,788,612	3,048,684	0.1228%	0.1744%	0.2972%
320	School for the Blind	331,304	470,270	801,574	0.0323%	0.0458%	0.0781%
330	School for the Deaf	190,534	270,454	460,988	0.0186%	0.0264%	0.0450%
345	Department of Education	1,779,809	2,526,354	4,306,163	0.1735%	0.2463%	0.4198%
728	Department of Corrections	7,495	10,639	18,134	0.0007%	0.0010%	0.0017%
896	Education Professional Standards Board	-	-	-	<u>0.0000%</u>	<u>0.0000%</u>	<u>0.0000%</u>
		\$ 6,818,679	\$ 9,678,788	\$ 16,497,467	0.6647%	0.9435%	1.6082%



Schedule A (continued)

Code	Local School Districts and Educational Cooperatives	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
1	Adair County Schools	\$ -	\$ 3,304,593	\$ 3,304,593	0.0000%	0.3221%	0.3221%
2	Allen County Schools	-	3,795,659	3,795,659	0.0000%	0.3700%	0.3700%
3	Anderson County Schools	-	4,677,462	4,677,462	0.0000%	0.4560%	0.4560%
4	Ballard County Schools	-	1,543,392	1,543,392	0.0000%	0.1504%	0.1504%
5	Barren County Schools	-	6,541,406	6,541,406	0.0000%	0.6377%	0.6377%
6	Bath County Schools	-	2,412,504	2,412,504	0.0000%	0.2352%	0.2352%
7	Bell County Schools	-	3,341,025	3,341,025	0.0000%	0.3257%	0.3257%
8	Boone County Schools	-	32,941,699	32,941,699	0.0000%	3.2111%	3.2111%
9	Bourbon County Schools	-	3,505,747	3,505,747	0.0000%	0.3417%	0.3417%
10	Boyd County Schools	-	4,665,669	4,665,669	0.0000%	0.4548%	0.4548%
11	Boyle County Schools	-	4,360,668	4,360,668	0.0000%	0.4251%	0.4251%
12	Bracken County Schools	-	1,647,938	1,647,938	0.0000%	0.1606%	0.1606%
13	Breathitt County Schools	-	2,306,930	2,306,930	0.0000%	0.2249%	0.2249%
14	Breckinridge County Schools	-	3,507,343	3,507,343	0.0000%	0.3419%	0.3419%
15	Bullitt County Schools	-	18,460,984	18,460,984	0.0000%	1.7996%	1.7996%
16	Butler County Schools	-	2,751,161	2,751,161	0.0000%	0.2682%	0.2682%
17	Caldwell County Schools	-	2,298,945	2,298,945	0.0000%	0.2241%	0.2241%
18	Calloway County Schools	-	3,934,871	3,934,871	0.0000%	0.3836%	0.3836%
19	Campbell County Schools	-	7,344,855	7,344,855	0.0000%	0.7160%	0.7160%
20	Carlisle County Schools	-	1,044,339	1,044,339	0.0000%	0.1018%	0.1018%
21	Carroll County Schools	-	3,015,055	3,015,055	0.0000%	0.2939%	0.2939%
22	Carter County Schools	-	5,256,633	5,256,633	0.0000%	0.5124%	0.5124%
23	Casey County Schools	-	2,712,787	2,712,787	0.0000%	0.2644%	0.2644%
24	Christian County Schools	-	10,377,613	10,377,613	0.0000%	1.0116%	1.0116%
25	Clark County Schools	-	7,501,718	7,501,718	0.0000%	0.7313%	0.7313%
26	Clay County Schools	-	4,223,775	4,223,775	0.0000%	0.4117%	0.4117%
27	Clinton County Schools	-	2,190,360	2,190,360	0.0000%	0.2135%	0.2135%
28	Crittenden County Schools	-	1,680,867	1,680,867	0.0000%	0.1638%	0.1638%
29	Cumberland County Schools	-	1,309,731	1,309,731	0.0000%	0.1277%	0.1277%



Schedule A (continued)

Code	Local School Districts and Educational Cooperatives	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
30	Daviess County Schools	-	16,371,096	16,371,096	0.0000%	1.5958%	1.5958%
31	Edmonson County Schools	-	2,384,108	2,384,108	0.0000%	0.2324%	0.2324%
32	Elliott County Schools	-	1,401,411	1,401,411	0.0000%	0.1366%	0.1366%
33	Estill County Schools	-	2,914,083	2,914,083	0.0000%	0.2841%	0.2841%
34	Fayette County Schools	-	79,120,515	79,120,515	0.0000%	7.7126%	7.7126%
35	Fleming County Schools	-	2,780,980	2,780,980	0.0000%	0.2711%	0.2711%
36	Floyd County Schools	-	6,897,071	6,897,071	0.0000%	0.6723%	0.6723%
37	Franklin County Schools	-	9,267,259	9,267,259	0.0000%	0.9034%	0.9034%
38	Fulton County Schools	-	907,449	907,449	0.0000%	0.0885%	0.0885%
39	Gallatin County Schools	-	2,228,346	2,228,346	0.0000%	0.2172%	0.2172%
40	Garrard County Schools	-	3,391,316	3,391,316	0.0000%	0.3306%	0.3306%
41	Grant County Schools	-	4,632,653	4,632,653	0.0000%	0.4516%	0.4516%
42	Graves County Schools	-	5,326,893	5,326,893	0.0000%	0.5193%	0.5193%
43	Grayson County Schools	-	5,142,668	5,142,668	0.0000%	0.5013%	0.5013%
44	Green County Schools	-	2,203,986	2,203,986	0.0000%	0.2148%	0.2148%
45	Greenup County Schools	-	3,680,634	3,680,634	0.0000%	0.3588%	0.3588%
46	Hancock County Schools	-	2,409,201	2,409,201	0.0000%	0.2348%	0.2348%
47	Hardin County Schools	-	20,558,995	20,558,995	0.0000%	2.0041%	2.0041%
48	Harlan County Schools	-	4,335,841	4,335,841	0.0000%	0.4227%	0.4227%
49	Harrison County Schools	-	3,624,199	3,624,199	0.0000%	0.3533%	0.3533%
50	Hart County Schools	-	3,121,567	3,121,567	0.0000%	0.3043%	0.3043%
51	Henderson County Schools	-	10,020,844	10,020,844	0.0000%	0.9768%	0.9768%
52	Henry County Schools	-	2,830,352	2,830,352	0.0000%	0.2759%	0.2759%
53	Hickman County Schools	-	1,160,880	1,160,880	0.0000%	0.1132%	0.1132%
54	Hopkins County Schools	-	8,562,293	8,562,293	0.0000%	0.8346%	0.8346%
55	Jackson County Schools	-	2,961,280	2,961,280	0.0000%	0.2887%	0.2887%
56	Jefferson County Schools	-	201,244,686	201,244,686	0.0000%	19.6166%	19.6166%
57	Jessamine County Schools	-	11,874,490	11,874,490	0.0000%	1.1575%	1.1575%
58	Johnson County Schools	-	4,896,170	4,896,170	0.0000%	0.4773%	0.4773%



Schedule A (continued)

Code	Local School Districts and Educational Cooperatives	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
59	Kenton County Schools	-	19,915,692	19,915,692	0.0000%	1.9414%	1.9414%
60	Knott Counts Schools	-	2,959,208	2,959,208	0.0000%	0.2885%	0.2885%
61	Knox County Schools	-	5,782,070	5,782,070	0.0000%	0.5636%	0.5636%
62	Larue County Schools	-	3,376,030	3,376,030	0.0000%	0.3291%	0.3291%
63	Laurel County Schools	-	11,203,571	11,203,571	0.0000%	1.0921%	1.0921%
64	Lawrence County Schools	-	3,352,910	3,352,910	0.0000%	0.3268%	0.3268%
65	Lee County Schools	-	998,496	998,496	0.0000%	0.0973%	0.0973%
66	Leslie County Schools	-	2,191,499	2,191,499	0.0000%	0.2136%	0.2136%
67	Letcher County Schools	-	4,115,428	4,115,428	0.0000%	0.4012%	0.4012%
68	Lewis County Schools	-	2,648,432	2,648,432	0.0000%	0.2582%	0.2582%
69	Lincoln County Schools	-	4,404,132	4,404,132	0.0000%	0.4293%	0.4293%
70	Livingston County Schools	-	1,705,378	1,705,378	0.0000%	0.1662%	0.1662%
71	Logan County Schools	-	4,577,912	4,577,912	0.0000%	0.4463%	0.4463%
72	Lyon County Schools	-	1,154,463	1,154,463	0.0000%	0.1125%	0.1125%
73	Madison County Schools	-	14,229,819	14,229,819	0.0000%	1.3871%	1.3871%
74	Magoffin County Schools	-	2,437,979	2,437,979	0.0000%	0.2377%	0.2377%
75	Marion County Schools	-	4,750,243	4,750,243	0.0000%	0.4630%	0.4630%
76	Marshall County Schools	-	6,456,602	6,456,602	0.0000%	0.6294%	0.6294%
77	Martin County Schools	-	2,133,369	2,133,369	0.0000%	0.2080%	0.2080%
78	Mason County Schools	-	3,793,268	3,793,268	0.0000%	0.3698%	0.3698%
79	McCracken County Schools	-	9,723,878	9,723,878	0.0000%	0.9479%	0.9479%
80	McCreary County Schools	-	3,538,976	3,538,976	0.0000%	0.3450%	0.3450%
81	McLean County Schools	-	2,123,725	2,123,725	0.0000%	0.2070%	0.2070%
82	Meade County Schools	-	6,078,940	6,078,940	0.0000%	0.5926%	0.5926%
83	Menifee County Schools	-	1,390,827	1,390,827	0.0000%	0.1356%	0.1356%
84	Mercer County Schools	-	3,980,978	3,980,978	0.0000%	0.3881%	0.3881%
85	Metcalf County Schools	-	1,701,029	1,701,029	0.0000%	0.1658%	0.1658%
86	Monroe County Schools	-	2,502,428	2,502,428	0.0000%	0.2439%	0.2439%
87	Montgomery County Schools	-	5,723,140	5,723,140	0.0000%	0.5579%	0.5579%



Schedule A (continued)

Code	Local School Districts and Educational Cooperatives	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
88	Morgan County Schools	-	2,432,621	2,432,621	0.0000%	0.2371%	0.2371%
89	Muhlenberg County Schools	-	6,299,904	6,299,904	0.0000%	0.6141%	0.6141%
90	Nelson County Schools	-	6,454,103	6,454,103	0.0000%	0.6291%	0.6291%
91	Nicholas County Schools	-	1,211,468	1,211,468	0.0000%	0.1181%	0.1181%
92	Ohio County Schools	-	5,041,830	5,041,830	0.0000%	0.4915%	0.4915%
93	Oldham County Schools	-	18,731,003	18,731,003	0.0000%	1.8259%	1.8259%
94	Owen County Schools	-	2,204,418	2,204,418	0.0000%	0.2149%	0.2149%
95	Owsley County Schools	-	867,518	867,518	0.0000%	0.0846%	0.0846%
96	Pendleton County Schools	-	2,759,436	2,759,436	0.0000%	0.2690%	0.2690%
97	Perry County Schools	-	4,767,333	4,767,333	0.0000%	0.4647%	0.4647%
98	Pike County Schools	-	10,525,964	10,525,964	0.0000%	1.0261%	1.0261%
99	Powell County Schools	-	2,785,294	2,785,294	0.0000%	0.2715%	0.2715%
100	Pulaski County Schools	-	10,110,849	10,110,849	0.0000%	0.9856%	0.9856%
101	Robertson County Schools	-	521,168	521,168	0.0000%	0.0508%	0.0508%
102	Rockcastle County Schools	-	3,834,212	3,834,212	0.0000%	0.3738%	0.3738%
103	Rowan County Schools	-	3,951,325	3,951,325	0.0000%	0.3852%	0.3852%
104	Russell County Schools	-	3,688,730	3,688,730	0.0000%	0.3596%	0.3596%
105	Scott County Schools	-	13,078,723	13,078,723	0.0000%	1.2749%	1.2749%
106	Shelby County Schools	-	10,654,031	10,654,031	0.0000%	1.0385%	1.0385%
107	Simpson County Schools	-	4,161,367	4,161,367	0.0000%	0.4056%	0.4056%
108	Spencer County Schools	-	4,081,628	4,081,628	0.0000%	0.3979%	0.3979%
109	Taylor County Schools	-	3,484,537	3,484,537	0.0000%	0.3397%	0.3397%
110	Todd County Schools	-	2,285,517	2,285,517	0.0000%	0.2228%	0.2228%
111	Trigg County Schools	-	3,050,577	3,050,577	0.0000%	0.2974%	0.2974%
112	Trimble County Schools	-	1,503,088	1,503,088	0.0000%	0.1465%	0.1465%
113	Union County Schools	-	2,926,470	2,926,470	0.0000%	0.2853%	0.2853%
114	Warren County Schools	-	20,754,031	20,754,031	0.0000%	2.0231%	2.0231%
115	Washington County Schools	-	2,462,127	2,462,127	0.0000%	0.2400%	0.2400%
116	Wayne County Schools	-	4,041,684	4,041,684	0.0000%	0.3940%	0.3940%



Schedule A (continued)

Code	Local School Districts and Educational Cooperatives	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
117	Webster County Schools	-	2,757,413	2,757,413	0.0000%	0.2688%	0.2688%
118	Whitley County Schools	-	5,679,865	5,679,865	0.0000%	0.5537%	0.5537%
119	Wolfe County Schools	-	1,849,822	1,849,822	0.0000%	0.1803%	0.1803%
120	Woodford County Schools	-	5,605,892	5,605,892	0.0000%	0.5465%	0.5465%
122	Anchorage City Schools	-	1,157,963	1,157,963	0.0000%	0.1129%	0.1129%
124	Ashland City Schools	-	4,639,454	4,639,454	0.0000%	0.4522%	0.4522%
125	Augusta City Schools	-	454,368	454,368	0.0000%	0.0443%	0.0443%
126	Barbourville City Schools	-	931,339	931,339	0.0000%	0.0908%	0.0908%
127	Bardstown City Schools	-	4,488,819	4,488,819	0.0000%	0.4376%	0.4376%
128	Beechwood Independent Schools	-	2,140,960	2,140,960	0.0000%	0.2087%	0.2087%
129	Bellevue City Schools	-	1,035,026	1,035,026	0.0000%	0.1009%	0.1009%
131	Berea City Schools	-	1,706,523	1,706,523	0.0000%	0.1664%	0.1664%
134	Bowling Green City Schools	-	6,201,265	6,201,265	0.0000%	0.6045%	0.6045%
136	Burgin City Schools	-	762,245	762,245	0.0000%	0.0743%	0.0743%
140	Campbellsville City Schools	-	1,762,128	1,762,128	0.0000%	0.1718%	0.1718%
144	Caverna City Schools	-	1,063,269	1,063,269	0.0000%	0.1036%	0.1036%
147	Cloverport City Schools	-	483,584	483,584	0.0000%	0.0471%	0.0471%
150	Corbin City Schools	-	3,961,182	3,961,182	0.0000%	0.3861%	0.3861%
151	Covington City Schools	-	6,677,814	6,677,814	0.0000%	0.6509%	0.6509%
154	Danville City Schools	-	3,626,641	3,626,641	0.0000%	0.3535%	0.3535%
155	Dawson Springs City Schools	-	857,229	857,229	0.0000%	0.0836%	0.0836%
156	Dayton City Schools	-	1,421,256	1,421,256	0.0000%	0.1385%	0.1385%
158	East Bernstadt City Schools	-	670,218	670,218	0.0000%	0.0653%	0.0653%
160	Elizabethtown City Schools	-	3,634,117	3,634,117	0.0000%	0.3543%	0.3543%
161	Eminence Independent Schools	-	1,296,310	1,296,310	0.0000%	0.1264%	0.1264%
162	Erlanger-Elsmere City Schools	-	3,665,529	3,665,529	0.0000%	0.3573%	0.3573%
163	Fairview Independent Schools	-	817,489	817,489	0.0000%	0.0797%	0.0797%
166	Fort Thomas Independent Schools	-	4,919,854	4,919,854	0.0000%	0.4796%	0.4796%
167	Frankfort City Schools	-	1,443,420	1,443,420	0.0000%	0.1407%	0.1407%



Schedule A (continued)

Code	Local School Districts and Educational Cooperatives	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
170	Fulton City Schools	-	534,625	534,625	0.0000%	0.0521%	0.0521%
173	Glasgow City Schools	-	3,305,960	3,305,960	0.0000%	0.3223%	0.3223%
180	Harlan City Schools	-	919,353	919,353	0.0000%	0.0896%	0.0896%
182	Hazard Independent Schools	-	1,368,350	1,368,350	0.0000%	0.1334%	0.1334%
190	Jackson City Schools	-	353,452	353,452	0.0000%	0.0345%	0.0345%
191	Jenkins City Schools	-	673,714	673,714	0.0000%	0.0657%	0.0657%
206	Ludlow City Schools	-	1,312,296	1,312,296	0.0000%	0.1279%	0.1279%
210	Mayfield City Schools	-	2,255,257	2,255,257	0.0000%	0.2198%	0.2198%
214	Middlesboro City Schools	-	1,577,947	1,577,947	0.0000%	0.1538%	0.1538%
221	Murray City Schools	-	2,460,253	2,460,253	0.0000%	0.2398%	0.2398%
222	Newport City Schools	-	2,956,102	2,956,102	0.0000%	0.2882%	0.2882%
224	Owensboro City Schools	-	8,111,506	8,111,506	0.0000%	0.7907%	0.7907%
226	Paducah City Schools	-	4,364,481	4,364,481	0.0000%	0.4254%	0.4254%
227	Paintsville City Schools	-	1,224,636	1,224,636	0.0000%	0.1194%	0.1194%
228	Paris City Schools	-	950,947	950,947	0.0000%	0.0927%	0.0927%
230	Pikeville City Schools	-	2,134,922	2,134,922	0.0000%	0.2081%	0.2081%
231	Pineville City Schools	-	757,014	757,014	0.0000%	0.0738%	0.0738%
235	Raceland City Schools	-	1,382,906	1,382,906	0.0000%	0.1348%	0.1348%
238	Russell City Schools	-	3,285,737	3,285,737	0.0000%	0.3203%	0.3203%
239	Russellville City Schools	-	1,462,041	1,462,041	0.0000%	0.1425%	0.1425%
240	Science Hill City Schools	-	540,749	540,749	0.0000%	0.0527%	0.0527%
245	Silver Grove City Schools	-	-	-	0.0000%	0.0000%	0.0000%
246	Somerset City Schools	-	2,327,114	2,327,114	0.0000%	0.2268%	0.2268%
247	Southgate City Schools	-	389,011	389,011	0.0000%	0.0379%	0.0379%
258	Walton-Verona Independent Schools	-	2,633,506	2,633,506	0.0000%	0.2567%	0.2567%
259	West Point City Schools	-	228,596	228,596	0.0000%	0.0223%	0.0223%
260	Williamsburg City Schools	-	1,020,420	1,020,420	0.0000%	0.0995%	0.0995%
261	Williamstown City Schools	-	1,028,542	1,028,542	0.0000%	0.1003%	0.1003%
870	Ohio Valley Educational Cooperative	-	713,172	713,172	0.0000%	0.0695%	0.0695%



Schedule A (continued)

Code	Local School Districts and Educational Cooperatives	Contributions			Allocation Percentage		
		Employer	State	Total	Employer	State	Total
871	West Kentucky Educational Cooperative	-	361,494	361,494	0.0000%	0.0352%	0.0352%
872	Southeast South-Central Educational Cooperative	-	123,125	123,125	0.0000%	0.0120%	0.0120%
890	Green River Regional Educational Cooperative	-	250,480	250,480	0.0000%	0.0244%	0.0244%
891	Central KY Special Education Cooperative	-	100,492	100,492	0.0000%	0.0098%	0.0098%
892	KY Valley Educational Cooperative	-	288,043	288,043	0.0000%	0.0281%	0.0281%
894	KY Educational Development Corporation	-	550,437	550,437	0.0000%	0.0537%	0.0537%
895	Northern KY Cooperative for Educational Services	-	517,167	517,167	0.0000%	0.0504%	0.0504%
		\$ -	\$ 1,004,703,214	1,004,703,214	0.0000%	97.9376%	97.9376%
	Total Non-University Contributions	<u>8,744,797</u>	<u>1,017,116,034</u>	<u>1,025,860,831</u>	<u>0.8524%</u>	<u>99.1476%</u>	<u>100.0000%</u>



Schedule B – Schedule of Pension Amounts by Employer as of and for the fiscal year ended June 30, 2020

Code	Employer				Deferred Outflows of Resources				
		June 30, 2020			Difference Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources
		Employer's Proportionate Share of Net Pension Liability	State's Proportionate Share of Net Pension Liability	Total Net Pension Liability					
<u>University Employers</u>									
263	Eastern Kentucky University	\$ 90,619,732	\$ 95,303,278	\$ 185,923,010	\$ (1,080,156)	\$ 2,362,011	\$ 836,917	\$ 4,689,055	\$ 6,807,827
266	Kentucky State University	24,786,076	26,067,110	50,853,186	(295,442)	646,051	228,911	4,114,192	4,693,712
269	Morehead State University	49,768,834	52,341,065	102,109,899	(593,228)	1,297,229	459,639	2,320,197	3,483,837
270	Murray State University	50,602,220	53,217,519	103,819,739	(603,161)	1,318,951	467,336	2,461,359	3,644,485
273	Western Kentucky University	79,922,679	84,053,378	163,976,057	(952,651)	2,083,191	738,125	1,974,749	3,843,414
500	KCTCS Central Office - University	27,049,997	28,448,031	55,498,028	(322,427)	705,060	249,820	433,779	1,066,232
	Total University	\$ 322,749,538	\$ 339,430,381	\$ 662,179,919	\$ (3,847,065)	\$ 8,412,493	\$ 2,980,748	\$ 15,993,331	\$ 23,539,507

CodeEmployer		Deferred Inflows of Resources									
							Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions				
		Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Net Employer Pension Expense	Revenue State Support	Proportionate Share of Plan Pension Expense	Total Pension Expense	
<u>University Employers</u>											
263	Eastern Kentucky University	\$ 2,968,045	\$ 26,084,018	\$ -	\$ 20,233,960	\$ 49,286,023	\$ (10,480,181)	\$ (11,021,833)	\$ (21,502,014)	\$ (28,241,206)	\$ (49,743,220)
266	Kentucky State University	811,812	7,134,434	-	3,124,981	11,071,227	(2,866,512)	(3,014,664)	(5,881,176)	(4,947,030)	(10,828,206)
269	Morehead State University	1,630,066	14,325,480	-	10,079,202	26,034,748	(5,755,770)	(6,053,249)	(11,809,019)	(15,628,981)	(27,438,000)
270	Murray State University	1,657,362	14,565,362	-	16,029,488	32,252,212	(5,852,152)	(6,154,611)	(12,006,763)	(20,808,246)	(32,815,009)
273	Western Kentucky University	2,617,687	23,004,974	-	35,786,274	61,408,935	(9,243,065)	(9,720,781)	(18,963,846)	(38,079,112)	(57,042,958)
500	KCTCS Central Office - University	885,962	7,786,081	-	3,371,853	12,043,896	(3,128,335)	(3,290,017)	(6,418,352)	(9,065,289)	(15,483,641)
Total University		\$ 10,570,934	\$ 92,900,349	\$ -	\$ 88,625,758	\$ 192,097,041	\$ (37,326,015)	\$ (39,255,155)	\$ (76,581,170)	\$ (116,769,864)	\$ (193,351,034)



Schedule B (continued)

CodeEmployer		June 30, 2020			Deferred Outflows of Resources					
					Difference Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	
		Employer's Proportionate Share of Net Pension Liability	State's Proportionate Share of Net Pension Liability	Total Net Pension Liability						
<u>Non-University Employers</u>										
400	KCTCS Central Office	\$ 22,308,365	\$ 31,665,429	\$ 53,973,794	\$ 125,960	\$ 549,616	\$ 115,499	\$ -	\$ 791,075	
801	KY High School Athletic Association	1,382,137	1,961,807	3,343,944	7,804	34,052	7,156	117,177	166,189	
805	KY School Boards Association	2,257,453	3,204,342	5,461,795	12,746	55,617	11,688	80,566	160,617	
806	KY Education Association	341,282	484,428	825,710	1,927	8,408	1,767	27,516	39,618	
807	KY Academic Association	220,246	312,653	532,899	1,244	5,426	1,140	6,943	14,753	
809	Jefferson County Teachers' Association	100,911	143,288	244,199	570	2,486	522	5,317	8,895	
	Total - Other Employers	\$ 26,610,394	\$ 37,771,947	\$ 64,382,341	\$ 150,251	\$ 655,605	\$ 137,772	\$ 237,519	\$ 1,181,147	

		Deferred Inflows of Resources					Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions				
		Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Net Employer Pension Expense	Revenue State Support	Proportionate Share of Plan Pension Expense	Employer Contributions and Proportionate Share of Contributions	Total Pension Expense
Code	Employer										
<u>Non-University Employers</u>											
400	KCTCS Central Office	\$ 85,586	\$ 7,050,245	\$ -	\$ 14,957,728	\$ 22,093,559	\$ (2,475,306)	\$ (3,513,554)	\$ (5,988,860)	\$ (23,421,940)	\$ (29,410,800)
801	KY High School Athletic Association	5,303	436,805	-	139,073	581,181	(153,360)	(217,680)	(371,040)	(403,093)	(774,133)
805	KY School Boards Association	8,661	713,436	-	1,075,391	1,797,488	(250,484)	(355,550)	(606,034)	(1,447,072)	(2,053,106)
806	KY Education Association	1,309	107,858	-	76,851	186,018	(37,868)	(53,752)	(91,620)	(150,062)	(241,682)
807	KY Academic Association	845	69,606	-	40,633	111,084	(24,438)	(34,692)	(59,130)	(92,122)	(151,252)
809	Jefferson County Teachers' Association	387	31,891	-	18,862	51,140	(11,197)	(15,899)	(27,096)	(39,080)	(66,176)
	Total - Other Employers	\$ 102,091	\$ 8,409,841	\$ -	\$ 16,308,538	\$ 24,820,470	\$ (2,952,653)	\$ (4,191,127)	\$ (7,143,780)	\$ (25,553,369)	\$ (32,697,149)



Schedule B (continued)

					Deferred Outflows of Resources						
					June 30, 2020		Difference Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of	Total Deferred Outflows of Resources
		Code	Employer	Employer's Proportionate Share of Net Pension Liability	State's Proportionate Share of Net Pension Liability	Total Net Pension Liability					
State Agencies											
301	Technical Education District - Madisonville	\$ 10,509,884	\$ 14,918,353	\$ 25,428,237	\$ 59,342	\$ 258,934	\$ 54,414	\$ 634,047	\$ 1,006,737		
302	Technical Education District - Bowling Green	11,223,771	15,931,570	27,155,341	63,373	276,522	58,110	352,404	750,409		
303	Technical Education District - Elizabethtown	-	-	-	-	-	-	-	-		
304	Technical Education District - Frankfort	8,418,254	11,949,280	20,367,534	47,532	207,402	43,584	173,036	471,554		
305	Technical Education District - Hazard	10,368,298	14,717,381	25,085,679	58,543	255,446	53,681	333,685	701,355		
308	Adult Education - Workforce Investment	572,017	811,963	1,383,980	3,230	14,093	2,962	-	20,285		
316	Office of Career and Technical Education	3,801,019	5,395,466	9,196,485	21,462	93,646	19,679	1,048,360	1,183,147		
317	Office of Secretary of Workforce Investment	-	-	-	-	-	-	-	-		
318	Department for Vocational Rehabilitation	17,408,666	24,710,665	42,119,331	98,295	428,901	90,131	723,796	1,341,123		
320	School for the Blind	4,577,125	6,497,123	11,074,248	25,844	112,768	23,697	357,641	519,950		
330	School for the Deaf	2,632,325	3,736,533	6,368,858	14,863	64,853	13,629	-	93,345		
345	Department of Education	24,589,062	34,903,077	59,492,139	138,838	605,806	127,307	1,144,594	2,016,545		
728	Department of Corrections	103,604	146,973	250,577	585	2,553	536	8,490	12,164		
896	Education Professional Standards Board	-	-	-	-	-	-	-	-		
	Total - State Agencies	\$ 94,204,025	\$ 133,718,384	\$ 227,922,409	\$ 531,907	\$ 2,320,924	\$ 487,730	\$ 4,776,053	\$ 8,116,614		



Schedule B (continued)

CodeEmployer		Deferred Inflows of Resources					Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions				
		Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Net Employer Pension Expense	Revenue State Support	Proportionate Share of Plan Pension Expense	Deferred Contributions and Proportionate Share of Contributions	Total Pension Expense
State Agencies											
301	Technical Education District - Madisonville	\$ 40,321	\$ 3,321,501	\$ -	\$ 2,713,584	\$ 6,075,406	\$ (1,166,162)	\$ (1,655,321)	\$ (2,821,483)	\$ (2,663,752)	\$ (5,485,235)
302	Technical Education District - Bow ling Green	43,060	3,547,115	-	1,677,461	5,267,636	(1,245,375)	(1,767,746)	(3,013,121)	(2,820,947)	(5,834,068)
303	Technical Education District - Elizabethtow n	-	-	-	1,993,481	1,993,481	-	-	-	(6,159,412)	(6,159,412)
304	Technical Education District - Frankfort	32,297	2,660,471	-	2,276,411	4,969,179	(934,078)	(1,325,876)	(2,259,954)	(4,562,511)	(6,822,465)
305	Technical Education District - Hazard	39,778	3,276,755	-	2,053,601	5,370,134	(1,150,452)	(1,633,021)	(2,783,473)	(3,562,707)	(6,346,180)
308	Adult Education - Workforce Investment	2,195	180,778	-	351,788	534,761	(63,471)	(90,094)	(153,565)	(612,893)	(766,458)
316	Office of Career and Technical Education	14,583	1,201,259	-	647,860	1,863,702	(421,756)	(598,674)	(1,020,430)	(646,885)	(1,667,315)
317	Office of Secretary of Workforce Investment	-	-	-	-	-	-	-	-	-	-
318	Department for Vocational Rehabilitation	66,789	5,501,764	-	4,299,793	9,868,346	(1,931,643)	(2,741,862)	(4,673,505)	(9,452,914)	(14,126,419)
320	School for the Blind	17,560	1,446,536	-	1,564,374	3,028,470	(507,872)	(720,912)	(1,228,784)	(2,481,760)	(3,710,544)
330	School for the Deaf	10,099	831,909	-	4,689,902	5,531,910	(292,079)	(414,601)	(706,680)	(4,592,007)	(5,298,687)
345	Department of Education	94,336	7,771,027	-	6,800,156	14,665,519	(2,728,369)	(3,872,799)	(6,601,168)	(11,730,147)	(18,331,315)
728	Department of Corrections	397	32,742	-	50,823	83,962	(11,496)	(16,308)	(27,804)	(49,378)	(77,182)
896	Education Professional Standards Board	-	-	-	-	-	-	-	-	-	-
Total - State Agencies		\$ 361,415	\$ 29,771,857	\$ -	\$ 29,119,234	\$ 59,252,506	\$ (10,452,753)	\$ (14,837,214)	\$ (25,289,967)	\$ (49,335,313)	\$ (74,625,280)



Schedule B (continued)

					Deferred Outflows of Resources				
					Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments		Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions		Total Deferred Outflows of Resources
		Employer's Proportionate Share of Net Pension Liability	State's Proportionate Net Pension Liability	Total Net Pension Liability			Difference Between Expected and Actual Experience	Change of Assumptions	
Code	Employer								
Local School Districts and Educational Cooperatives									
1	Adair County Schools	\$ -	\$ 45,654,893	\$ 45,654,893					
2	Allen County Schools	-	52,439,157	52,439,157					
3	Anderson County Schools	-	64,621,864	64,621,864					
4	Ballard County Schools	-	21,322,785	21,322,785					
5	Barren County Schools	-	90,373,242	90,373,242					
6	Bath County Schools	-	33,330,173	33,330,173					
7	Bell County Schools	-	46,158,171	46,158,171					
8	Boone County Schools	-	455,108,537	455,108,537					
9	Bourbon County Schools	-	48,433,907	48,433,907					
10	Boyd County Schools	-	64,458,876	64,458,876					
11	Boyle County Schools	-	60,245,143	60,245,143					
12	Bracken County Schools	-	22,767,282	22,767,282					
13	Breathitt County Schools	-	31,871,503	31,871,503					
14	Breckinridge County Schools	-	48,456,017	48,456,017					
15	Bullitt County Schools	-	255,049,121	255,049,121					
16	Butler County Schools	-	38,008,918	38,008,918					
17	Caldwell County Schools	-	31,761,238	31,761,238					
18	Calloway County Schools	-	54,362,556	54,362,556					
19	Campbell County Schools	-	101,473,426	101,473,426					
20	Carlisle County Schools	-	14,428,113	14,428,113					
21	Carroll County Schools	-	41,654,744	41,654,744					
22	Carter County Schools	-	72,623,436	72,623,436					
23	Casey County Schools	-	37,478,711	37,478,711					
24	Christian County Schools	-	143,372,653	143,372,653					
25	Clark County Schools	-	103,640,598	103,640,598					
26	Clay County Schools	-	58,353,917	58,353,917					
27	Clinton County Schools	-	30,261,041	30,261,041					
28	Crittenden County Schools	-	23,222,090	23,222,090					
29	Cumberland County Schools	-	18,094,632	18,094,632					
30	Daviess County Schools	-	226,176,171	226,176,171					
31	Edmonson County Schools	-	32,937,869	32,937,869					
32	Elliott County Schools	-	19,361,261	19,361,261					
33	Estill County Schools	-	40,259,710	40,259,710					
34	Fayette County Schools	-	1,093,095,583	1,093,095,583					
35	Fleming County Schools	-	38,420,781	38,420,781					
36	Floyd County Schools	-	95,286,973	95,286,973					
37	Franklin County Schools	-	128,032,516	128,032,516					
38	Fulton County Schools	-	12,536,887	12,536,887					
39	Gallatin County Schools	-	30,785,862	30,785,862					
40	Garrard County Schools	-	46,852,924	46,852,924					



Schedule B (continued)

Code	Employer	June 30, 2020			Deferred Outflows of Resources				
		Employer's	State's	Total	Difference Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources
		Proportionate Share of Net Pension Liability	Proportionate Share of Net Pension Liability	Net Pension Liability					
41	Grant County Schools	-	64,002,794	64,002,794					
42	Graves County Schools	-	73,594,135	73,594,135					
43	Grayson County Schools	-	71,048,973	71,048,973					
44	Green County Schools	-	30,449,398	30,449,398					
45	Greenup County Schools	-	50,850,096	50,850,096					
46	Hancock County Schools	-	33,284,537	33,284,537					
47	Hardin County Schools	-	284,034,463	284,034,463					
48	Harlan County Schools	-	59,902,160	59,902,160					
49	Harrison County Schools	-	50,070,447	50,070,447					
50	Hart County Schools	-	43,126,313	43,126,313					
51	Henderson County Schools	-	138,443,757	138,443,757					
52	Henry County Schools	-	39,102,921	39,102,921					
53	Hickman County Schools	-	16,038,292	16,038,292					
54	Hopkins County Schools	-	118,293,068	118,293,068					
55	Jackson County Schools	-	40,911,803	40,911,803					
56	Jefferson County Schools	-	2,780,312,359	2,780,312,359					
57	Jessamine County Schools	-	164,052,982	164,052,982					
58	Johnson County Schools	-	67,643,376	67,643,376					
59	Kenton County Schools	-	275,146,804	275,146,804					
60	Knott County Schools	-	40,883,174	40,883,174					
61	Knox County Schools	-	79,882,633	79,882,633					
62	Larue County Schools	-	46,641,749	46,641,749					
63	Laurel County Schools	-	154,783,789	154,783,789					
64	Lawrence County Schools	-	46,322,434	46,322,434					
65	Lee County Schools	-	13,794,870	13,794,870					
66	Leslie County Schools	-	30,276,772	30,276,772					
67	Letcher County Schools	-	56,856,979	56,856,979					
68	Lewis County Schools	-	36,589,648	36,589,648					
69	Lincoln County Schools	-	60,845,647	60,845,647					
70	Livingston County Schools	-	23,560,821	23,560,821					
71	Logan County Schools	-	63,246,530	63,246,530					
72	Lyon County Schools	-	15,949,570	15,949,570					
73	Madison County Schools	-	196,593,160	196,593,160					
74	Magoffin County Schools	-	33,682,085	33,682,085					
75	Marion County Schools	-	65,627,287	65,627,287					
76	Marshall County Schools	-	89,201,714	89,201,714					
77	Martin County Schools	-	29,473,738	29,473,738					
78	Mason County Schools	-	52,406,134	52,406,134					
79	McCracken County Schools	-	134,340,998	134,340,998					
80	McCreary County Schools	-	48,892,966	48,892,966					



Schedule B (continued)

Code	Employer	June 30, 2020			Deferred Outflows of Resources				
		Employer's	State's	Total	Difference Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources
		Proportionate Share of Net Pension Liability	Proportionate Share of Net Pension Liability	Net Pension Liability					
81	McLean County Schools	-	29,340,513	29,340,513					
82	Meade County Schools	-	83,984,117	83,984,117					
83	Menifee County Schools	-	19,215,139	19,215,139					
84	Mercer County Schools	-	54,999,484	54,999,484					
85	Metcalf County Schools	-	23,500,728	23,500,728					
86	Monroe County Schools	-	34,572,425	34,572,425					
87	Montgomery County Schools	-	79,068,544	79,068,544					
88	Morgan County Schools	-	33,608,103	33,608,103					
89	Muhlenberg County Schools	-	87,036,809	87,036,809					
90	Nelson County Schools	-	89,167,132	89,167,132					
91	Nicholas County Schools	-	16,737,156	16,737,156					
92	Ohio County Schools	-	69,655,781	69,655,781					
93	Oldham County Schools	-	258,779,560	258,779,560					
94	Owen County Schools	-	30,455,350	30,455,350					
95	Owsley County Schools	-	11,985,279	11,985,279					
96	Pendleton County Schools	-	38,123,151	38,123,151					
97	Perry County Schools	-	65,863,407	65,863,407					
98	Pike County Schools	-	145,422,332	145,422,332					
99	Powell County Schools	-	38,480,449	38,480,449					
100	Pulaski County Schools	-	139,687,284	139,687,284					
101	Robertson County Schools	-	7,200,238	7,200,238					
102	Rockcastle County Schools	-	52,971,915	52,971,915					
103	Rowan County Schools	-	54,589,889	54,589,889					
104	Russell County Schools	-	50,961,920	50,961,920					
105	Scott County Schools	-	180,690,077	180,690,077					
106	Shelby County Schools	-	147,191,530	147,191,530					
107	Simpson County Schools	-	57,491,640	57,491,640					
108	Spencer County Schools	-	56,389,984	56,389,984					
109	Taylor County Schools	-	48,140,954	48,140,954					
110	Todd County Schools	-	31,575,715	31,575,715					
111	Trigg County Schools	-	42,145,551	42,145,551					
112	Trimble County Schools	-	20,766,075	20,766,075					
113	Union County Schools	-	40,430,918	40,430,918					
114	Warren County Schools	-	286,728,865	286,728,865					
115	Washington County Schools	-	34,015,715	34,015,715					
116	Wayne County Schools	-	55,838,234	55,838,234					
117	Webster County Schools	-	38,095,231	38,095,231					
118	Whitley County Schools	-	78,470,591	78,470,591					
119	Wolfe County Schools	-	25,556,360	25,556,360					
120	Woodford County Schools	-	77,448,586	77,448,586					



Schedule B (continued)

Code	Employer	June 30, 2020			Deferred Outflows of Resources				
		Employer's	State's	Total	Difference Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources
		Proportionate Share of Net Pension Liability	Proportionate Share of Net Pension Liability	Net Pension Liability					
122	Anchorage City Schools	-	15,997,899	15,997,899					
124	Ashland City Schools	-	64,096,760	64,096,760					
125	Augusta City Schools	-	6,277,301	6,277,301					
126	Barbourville City Schools	-	12,866,973	12,866,973					
127	Bardstown City Schools	-	62,015,617	62,015,617					
128	Beechwood Independent Schools	-	29,578,617	29,578,617					
129	Bellevue City Schools	-	14,299,424	14,299,424					
131	Berea City Schools	-	23,576,553	23,576,553					
134	Bowling Green City Schools	-	85,674,089	85,674,089					
136	Burgin City Schools	-	10,530,860	10,530,860					
140	Campbellsville City Schools	-	24,344,864	24,344,864					
144	Caverna City Schools	-	14,689,744	14,689,744					
147	Cloverport City Schools	-	6,680,945	6,680,945					
150	Corbin City Schools	-	54,725,948	54,725,948					
151	Covington City Schools	-	92,257,808	92,257,808					
154	Danville City Schools	-	50,104,178	50,104,178					
155	Dawson Springs City Schools	-	11,843,125	11,843,125					
156	Dayton City Schools	-	19,635,506	19,635,506					
158	East Bernstadt City Schools	-	9,259,413	9,259,413					
160	Elizabethtown City Schools	-	50,207,357	50,207,357					
161	Eminence Independent Schools	-	17,909,251	17,909,251					
162	Erlanger-Bismere City Schools	-	50,641,472	50,641,472					
163	Fairview Independent Schools	-	11,294,069	11,294,069					
166	Fort Thomas Independent Schools	-	67,970,628	67,970,628					
167	Frankfort City Schools	-	19,941,639	19,941,639					
170	Fulton City Schools	-	7,386,186	7,386,186					
173	Glasgow City Schools	-	45,673,742	45,673,742					
180	Harlan City Schools	-	12,701,434	12,701,434					
182	Hazard Independent Schools	-	18,904,611	18,904,611					
190	Jackson City Schools	-	4,883,117	4,883,117					
191	Jenkins City Schools	-	9,307,742	9,307,742					
206	Ludlow City Schools	-	18,130,064	18,130,064					
210	Mayfield City Schools	-	31,157,616	31,157,616					
214	Middlesboro City Schools	-	21,800,268	21,800,268					
221	Murray City Schools	-	33,989,778	33,989,778					
222	Newport City Schools	-	40,840,230	40,840,230					
224	Owensboro City Schools	-	112,065,088	112,065,088					
226	Paducah City Schools	-	60,297,866	60,297,866					
227	Paintsville City Schools	-	16,918,993	16,918,993					
228	Paris City Schools	-	13,137,816	13,137,816					



Schedule B (continued)

Code	Employer	June 30, 2020			Deferred Outflows of Resources				
		Employer's Proportionate Share of Net Pension Liability	State's Proportionate Share of Net Pension Liability	Total Net Pension Liability	Difference Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources
230	Pikeville City Schools	-	29,495,139	29,495,139					
231	Pineville City Schools	-	10,458,579	10,458,579					
235	Raceland City Schools	-	19,105,582	19,105,582					
238	Russell City Schools	-	45,394,395	45,394,395					
239	Russellville City Schools	-	20,198,877	20,198,877					
240	Science Hill City Schools	-	7,470,798	7,470,798					
245	Silver Grove City Schools	-	-	-					
246	Somerset City Schools	-	32,150,424	32,150,424					
247	Southgate City Schools	-	5,374,349	5,374,349					
258	Walton-Verona Independent Schools	-	36,383,433	36,383,433					
259	West Point City Schools	-	3,158,138	3,158,138					
260	Williamsburg City Schools	-	14,097,744	14,097,744					
261	Williamstown City Schools	-	14,209,851	14,209,851					
870	Ohio Valley Educational Cooperative	-	9,852,831	9,852,831					
871	West Kentucky Educational Cooperative	-	4,994,232	4,994,232					
872	Southeast South-Central Educational Cooperative	-	1,701,027	1,701,027					
890	Green River Regional Educational Cooperative	-	3,460,587	3,460,587					
891	Central KY Special Education Cooperative	-	1,388,373	1,388,373					
892	KY Valley Educational Cooperative	-	3,979,456	3,979,456					
894	KY Educational Development Corporation	-	7,604,590	7,604,590					
895	Northern KY Cooperative for Educational Services	-	7,144,964	7,144,964					
	Total - Local School Districts	\$ -	\$ 13,880,555,348	\$ 13,880,555,348					
	Total Non University	\$ 120,814,419	\$ 14,052,045,679	\$ 14,172,860,098	\$ 682,158	\$ 2,976,529	\$ 625,502	\$ 5,013,572	\$ 9,297,761
	State's Proportionate Share of Outflow s/Inflow s				\$ 75,296,444	\$ 355,050,381	\$ 75,887,441	\$ 126,215,625	\$ 632,449,891



Schedule B (continued)

CodeEmployer		Deferred Inflows of Resources					Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions				
		Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Net Employer Pension Expense	Revenue State Support	Proportionate Share of Pension Plan Expense	Employer Contributions and Proportionate Share of Contributions	Total Pension Expense
Local School Districts and Educational Cooperatives											
1	Adair County Schools						\$ -	\$ (5,065,806)	\$ (5,065,806)	\$ -	\$ (5,065,806)
2	Allen County Schools						-	(5,818,579)	(5,818,579)	-	(5,818,579)
3	Anderson County Schools						-	(7,170,356)	(7,170,356)	-	(7,170,356)
4	Ballard County Schools						-	(2,365,948)	(2,365,948)	-	(2,365,948)
5	Barren County Schools						-	(10,027,694)	(10,027,694)	-	(10,027,694)
6	Bath County Schools						-	(3,698,272)	(3,698,272)	-	(3,698,272)
7	Bell County Schools						-	(5,121,649)	(5,121,649)	-	(5,121,649)
8	Boone County Schools						-	(50,498,237)	(50,498,237)	-	(50,498,237)
9	Bourbon County Schools						-	(5,374,162)	(5,374,162)	-	(5,374,162)
10	Boyd County Schools						-	(7,152,271)	(7,152,271)	-	(7,152,271)
11	Boyle County Schools						-	(6,684,721)	(6,684,721)	-	(6,684,721)
12	Bracken County Schools						-	(2,526,227)	(2,526,227)	-	(2,526,227)
13	Breathitt County Schools						-	(3,536,419)	(3,536,419)	-	(3,536,419)
14	Breckinridge County Schools						-	(5,376,615)	(5,376,615)	-	(5,376,615)
15	Bullitt County Schools						-	(28,299,910)	(28,299,910)	-	(28,299,910)
16	Butler County Schools						-	(4,217,419)	(4,217,419)	-	(4,217,419)
17	Caldwell County Schools						-	(3,524,185)	(3,524,185)	-	(3,524,185)
18	Calloway County Schools						-	(6,031,997)	(6,031,997)	-	(6,031,997)
19	Campbell County Schools						-	(11,259,356)	(11,259,356)	-	(11,259,356)
20	Carlisle County Schools						-	(1,600,924)	(1,600,924)	-	(1,600,924)
21	Carroll County Schools						-	(4,621,955)	(4,621,955)	-	(4,621,955)
22	Carter County Schools						-	(8,058,200)	(8,058,200)	-	(8,058,200)
23	Casey County Schools						-	(4,158,588)	(4,158,588)	-	(4,158,588)
24	Christian County Schools						-	(15,908,438)	(15,908,438)	-	(15,908,438)
25	Clark County Schools						-	(11,499,823)	(11,499,823)	-	(11,499,823)
26	Clay County Schools						-	(6,474,873)	(6,474,873)	-	(6,474,873)
27	Clinton County Schools						-	(3,357,725)	(3,357,725)	-	(3,357,725)
28	Crittenden County Schools						-	(2,576,692)	(2,576,692)	-	(2,576,692)
29	Cumberland County Schools						-	(2,007,756)	(2,007,756)	-	(2,007,756)
30	Daviess County Schools						-	(25,096,206)	(25,096,206)	-	(25,096,206)
31	Edmonson County Schools						-	(3,654,742)	(3,654,742)	-	(3,654,742)
32	Elliott County Schools						-	(2,148,300)	(2,148,300)	-	(2,148,300)
33	Estill County Schools						-	(4,467,164)	(4,467,164)	-	(4,467,164)
34	Fayette County Schools						-	(121,288,428)	(121,288,428)	-	(121,288,428)
35	Fleming County Schools						-	(4,263,119)	(4,263,119)	-	(4,263,119)
36	Floyd County Schools						-	(10,572,915)	(10,572,915)	-	(10,572,915)
37	Franklin County Schools						-	(14,206,317)	(14,206,317)	-	(14,206,317)
38	Fulton County Schools						-	(1,391,076)	(1,391,076)	-	(1,391,076)
39	Gallatin County Schools						-	(3,415,958)	(3,415,958)	-	(3,415,958)
40	Garrard County Schools						-	(5,198,738)	(5,198,738)	-	(5,198,738)



Schedule B (continued)

Code	Employer	Deferred Inflows of Resources					Net Employer Pension Expense	Revenue State Support	Proportionate Share of Pension Expense	Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	
		Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources				Share of Contributions	Total Pension Expense
41	Grant County Schools						-	(7,101,665)	(7,101,665)	-	(7,101,665)
42	Graves County Schools						-	(8,165,907)	(8,165,907)	-	(8,165,907)
43	Grayson County Schools						-	(7,883,499)	(7,883,499)	-	(7,883,499)
44	Green County Schools						-	(3,378,625)	(3,378,625)	-	(3,378,625)
45	Greenup County Schools						-	(5,642,259)	(5,642,259)	-	(5,642,259)
46	Hancock County Schools						-	(3,693,208)	(3,693,208)	-	(3,693,208)
47	Hardin County Schools						-	(31,516,085)	(31,516,085)	-	(31,516,085)
48	Harlan County Schools						-	(6,646,664)	(6,646,664)	-	(6,646,664)
49	Harrison County Schools						-	(5,555,750)	(5,555,750)	-	(5,555,750)
50	Hart County Schools						-	(4,785,238)	(4,785,238)	-	(4,785,238)
51	Henderson County Schools						-	(15,361,535)	(15,361,535)	-	(15,361,535)
52	Henry County Schools						-	(4,338,808)	(4,338,808)	-	(4,338,808)
53	Hickman County Schools						-	(1,779,587)	(1,779,587)	-	(1,779,587)
54	Hopkins County Schools						-	(13,125,641)	(13,125,641)	-	(13,125,641)
55	Jackson County Schools						-	(4,539,519)	(4,539,519)	-	(4,539,519)
56	Jefferson County Schools						-	(308,499,752)	(308,499,752)	-	(308,499,752)
57	Jessamine County Schools						-	(18,203,100)	(18,203,100)	-	(18,203,100)
58	Johnson County Schools						-	(7,505,619)	(7,505,619)	-	(7,505,619)
59	Kenton County Schools						-	(30,529,922)	(30,529,922)	-	(30,529,922)
60	Knott County Schools						-	(4,536,342)	(4,536,342)	-	(4,536,342)
61	Knox County Schools						-	(8,863,670)	(8,863,670)	-	(8,863,670)
62	Larue County Schools						-	(5,175,306)	(5,175,306)	-	(5,175,306)
63	Laurel County Schools						-	(17,174,603)	(17,174,603)	-	(17,174,603)
64	Lawrence County Schools						-	(5,139,876)	(5,139,876)	-	(5,139,876)
65	Lee County Schools						-	(1,530,660)	(1,530,660)	-	(1,530,660)
66	Leslie County Schools						-	(3,359,470)	(3,359,470)	-	(3,359,470)
67	Letcher County Schools						-	(6,308,775)	(6,308,775)	-	(6,308,775)
68	Lewis County Schools						-	(4,059,939)	(4,059,939)	-	(4,059,939)
69	Lincoln County Schools						-	(6,751,352)	(6,751,352)	-	(6,751,352)
70	Livingston County Schools						-	(2,614,277)	(2,614,277)	-	(2,614,277)
71	Logan County Schools						-	(7,017,751)	(7,017,751)	-	(7,017,751)
72	Lyon County Schools						-	(1,769,743)	(1,769,743)	-	(1,769,743)
73	Madison County Schools						-	(21,813,715)	(21,813,715)	-	(21,813,715)
74	Magoffin County Schools						-	(3,737,319)	(3,737,319)	-	(3,737,319)
75	Marion County Schools						-	(7,281,916)	(7,281,916)	-	(7,281,916)
76	Marshall County Schools						-	(9,897,703)	(9,897,703)	-	(9,897,703)
77	Martin County Schools						-	(3,270,367)	(3,270,367)	-	(3,270,367)
78	Mason County Schools						-	(5,814,915)	(5,814,915)	-	(5,814,915)
79	McCracken County Schools						-	(14,906,298)	(14,906,298)	-	(14,906,298)
80	McCreary County Schools						-	(5,425,098)	(5,425,098)	-	(5,425,098)



Schedule B (continued)

Code	Employer	Deferred Inflows of Resources					Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions				
		Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Net Employer Pension Expense	Revenue State Support	Proportionate Share of Pension Expense	Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Pension Expense
81	McLean County Schools						-	(3,255,584)	(3,255,584)	-	(3,255,584)
82	Meade County Schools						-	(9,318,766)	(9,318,766)	-	(9,318,766)
83	Menifee County Schools						-	(2,132,086)	(2,132,086)	-	(2,132,086)
84	Mercer County Schools						-	(6,102,669)	(6,102,669)	-	(6,102,669)
85	Metcalfe County Schools						-	(2,607,609)	(2,607,609)	-	(2,607,609)
86	Monroe County Schools						-	(3,836,110)	(3,836,110)	-	(3,836,110)
87	Montgomery County Schools						-	(8,773,340)	(8,773,340)	-	(8,773,340)
88	Morgan County Schools						-	(3,729,110)	(3,729,110)	-	(3,729,110)
89	Muhlenberg County Schools						-	(9,657,488)	(9,657,488)	-	(9,657,488)
90	Nelson County Schools						-	(9,893,866)	(9,893,866)	-	(9,893,866)
91	Nicholas County Schools						-	(1,857,132)	(1,857,132)	-	(1,857,132)
92	Ohio County Schools						-	(7,728,913)	(7,728,913)	-	(7,728,913)
93	Oldham County Schools						-	(28,713,835)	(28,713,835)	-	(28,713,835)
94	Owen County Schools						-	(3,379,285)	(3,379,285)	-	(3,379,285)
95	Owsley County Schools						-	(1,329,871)	(1,329,871)	-	(1,329,871)
96	Pendleton County Schools						-	(4,230,094)	(4,230,094)	-	(4,230,094)
97	Perry County Schools						-	(7,308,116)	(7,308,116)	-	(7,308,116)
98	Pike County Schools						-	(16,135,868)	(16,135,868)	-	(16,135,868)
99	Powell County Schools						-	(4,269,739)	(4,269,739)	-	(4,269,739)
100	Pulaski County Schools						-	(15,499,515)	(15,499,515)	-	(15,499,515)
101	Robertson County Schools						-	(798,929)	(798,929)	-	(798,929)
102	Rockcastle County Schools						-	(5,877,693)	(5,877,693)	-	(5,877,693)
103	Rowan County Schools						-	(6,057,221)	(6,057,221)	-	(6,057,221)
104	Russell County Schools						-	(5,654,667)	(5,654,667)	-	(5,654,667)
105	Scott County Schools						-	(20,049,130)	(20,049,130)	-	(20,049,130)
106	Shelby County Schools						-	(16,332,176)	(16,332,176)	-	(16,332,176)
107	Simpson County Schools						-	(6,379,196)	(6,379,196)	-	(6,379,196)
108	Spencer County Schools						-	(6,256,957)	(6,256,957)	-	(6,256,957)
109	Taylor County Schools						-	(5,341,656)	(5,341,656)	-	(5,341,656)
110	Todd County Schools						-	(3,503,599)	(3,503,599)	-	(3,503,599)
111	Trigg County Schools						-	(4,676,414)	(4,676,414)	-	(4,676,414)
112	Trimble County Schools						-	(2,304,176)	(2,304,176)	-	(2,304,176)
113	Union County Schools						-	(4,486,161)	(4,486,161)	-	(4,486,161)
114	Warren County Schools						-	(31,815,053)	(31,815,053)	-	(31,815,053)
115	Washington County Schools						-	(3,774,338)	(3,774,338)	-	(3,774,338)
116	Wayne County Schools						-	(6,195,736)	(6,195,736)	-	(6,195,736)
117	Webster County Schools						-	(4,226,996)	(4,226,996)	-	(4,226,996)
118	Whitley County Schools						-	(8,706,992)	(8,706,992)	-	(8,706,992)
119	Wolfe County Schools						-	(2,835,700)	(2,835,700)	-	(2,835,700)
120	Woodford County Schools						-	(8,593,592)	(8,593,592)	-	(8,593,592)



Schedule B (continued)

Code	Employer	Deferred Inflows of Resources					Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions				
		Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Net Employer Pension Expense	Revenue State Support	Proportionate Share of Pension Expense	Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Pension Expense
122	Anchorage City Schools						-	(1,775,106)	(1,775,106)	-	(1,775,106)
124	Ashland City Schools						-	(7,112,091)	(7,112,091)	-	(7,112,091)
125	Augusta City Schools						-	(696,521)	(696,521)	-	(696,521)
126	Barbourville City Schools						-	(1,427,702)	(1,427,702)	-	(1,427,702)
127	Bardstown City Schools						-	(6,881,170)	(6,881,170)	-	(6,881,170)
128	Beechwood Independent Schools						-	(3,282,004)	(3,282,004)	-	(3,282,004)
129	Bellevue City Schools						-	(1,586,645)	(1,586,645)	-	(1,586,645)
131	Berea City Schools						-	(2,616,023)	(2,616,023)	-	(2,616,023)
134	Bowling Green City Schools						-	(9,506,283)	(9,506,283)	-	(9,506,283)
136	Burgin City Schools						-	(1,168,490)	(1,168,490)	-	(1,168,490)
140	Campbellsville City Schools						-	(2,701,274)	(2,701,274)	-	(2,701,274)
144	Caverna City Schools						-	(1,629,954)	(1,629,954)	-	(1,629,954)
147	Cloverport City Schools						-	(741,309)	(741,309)	-	(741,309)
150	Corbin City Schools						-	(6,072,318)	(6,072,318)	-	(6,072,318)
151	Covington City Schools						-	(10,236,803)	(10,236,803)	-	(10,236,803)
154	Danville City Schools						-	(5,559,493)	(5,559,493)	-	(5,559,493)
155	Dawson Springs City Schools						-	(1,314,097)	(1,314,097)	-	(1,314,097)
156	Dayton City Schools						-	(2,178,730)	(2,178,730)	-	(2,178,730)
158	East Bernstadt City Schools						-	(1,027,412)	(1,027,412)	-	(1,027,412)
160	Elizabethtown City Schools						-	(5,570,941)	(5,570,941)	-	(5,570,941)
161	Eminence Independent Schools						-	(1,987,187)	(1,987,187)	-	(1,987,187)
162	Erlanger-Elsmere City Schools						-	(5,619,110)	(5,619,110)	-	(5,619,110)
163	Fairview Independent Schools						-	(1,253,175)	(1,253,175)	-	(1,253,175)
166	Fort Thomas Independent Schools						-	(7,541,930)	(7,541,930)	-	(7,541,930)
167	Frankfort City Schools						-	(2,212,698)	(2,212,698)	-	(2,212,698)
170	Fulton City Schools						-	(819,561)	(819,561)	-	(819,561)
173	Glasgow City Schools						-	(5,067,898)	(5,067,898)	-	(5,067,898)
180	Harlan City Schools						-	(1,409,334)	(1,409,334)	-	(1,409,334)
182	Hazard Independent Schools						-	(2,097,630)	(2,097,630)	-	(2,097,630)
190	Jackson City Schools						-	(541,824)	(541,824)	-	(541,824)
191	Jenkins City Schools						-	(1,032,775)	(1,032,775)	-	(1,032,775)
206	Ludlow City Schools						-	(2,011,688)	(2,011,688)	-	(2,011,688)
210	Mayfield City Schools						-	(3,457,207)	(3,457,207)	-	(3,457,207)
214	Middlesboro City Schools						-	(2,418,929)	(2,418,929)	-	(2,418,929)
221	Murray City Schools						-	(3,771,460)	(3,771,460)	-	(3,771,460)
222	Newport City Schools						-	(4,531,577)	(4,531,577)	-	(4,531,577)
224	Owensboro City Schools						-	(12,434,593)	(12,434,593)	-	(12,434,593)
226	Paducah City Schools						-	(6,690,571)	(6,690,571)	-	(6,690,571)
227	Paintsville City Schools						-	(1,877,309)	(1,877,309)	-	(1,877,309)
228	Paris City Schools						-	(1,457,755)	(1,457,755)	-	(1,457,755)



Schedule B (continued)

Code	Employer	Deferred Inflows of Resources					Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions				
		Differences Between Expected and Actual Experience	Change of Assumptions	Net Difference Between Projected and Actual Investment Earnings on Pension Plan	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources	Net Employer Pension Expense	Revenue State Support	Proportionate Share of Plan Pension Expense	Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Pension Expense
230	Pikeville City Schools						-	(3,272,741)	(3,272,741)	-	(3,272,741)
231	Pineville City Schools						-	(1,160,470)	(1,160,470)	-	(1,160,470)
235	Raceland City Schools						-	(2,119,930)	(2,119,930)	-	(2,119,930)
238	Russell City Schools						-	(5,036,902)	(5,036,902)	-	(5,036,902)
239	Russellville City Schools						-	(2,241,240)	(2,241,240)	-	(2,241,240)
240	Science Hill City Schools						-	(828,950)	(828,950)	-	(828,950)
245	Silver Grove City Schools						-	-	-	-	-
246	Somerset City Schools						-	(3,567,368)	(3,567,368)	-	(3,567,368)
247	Southgate City Schools						-	(596,331)	(596,331)	-	(596,331)
258	Walton-Verona Independent Schools						-	(4,037,057)	(4,037,057)	-	(4,037,057)
259	West Point City Schools						-	(350,423)	(350,423)	-	(350,423)
260	Williamsburg City Schools						-	(1,564,267)	(1,564,267)	-	(1,564,267)
261	Williamstown City Schools						-	(1,576,706)	(1,576,706)	-	(1,576,706)
870	Ohio Valley Educational Cooperative						-	(1,093,257)	(1,093,257)	-	(1,093,257)
871	West Kentucky Educational Cooperative						-	(554,153)	(554,153)	-	(554,153)
872	Southeast South-Central Educational Cooperative						-	(188,744)	(188,744)	-	(188,744)
890	Green River Regional Educational Cooperative						-	(383,982)	(383,982)	-	(383,982)
891	Central KY Special Education Cooperative						-	(154,052)	(154,052)	-	(154,052)
892	KY Valley Educational Cooperative						-	(441,555)	(441,555)	-	(441,555)
894	KY Educational Development Corporation						-	(843,795)	(843,795)	-	(843,795)
895	Northern KY Cooperative for Educational Services						-	(792,796)	(792,796)	-	(792,796)
Total - Local School Districts							\$ 0	\$ (1,540,167,912)	\$ (1,540,167,912)	\$ -	\$ (1,540,167,912)
Total Non University		\$ 463,506	\$ 38,181,698	\$ -	\$ 45,427,772	\$ 84,072,976	\$ (13,405,406)	\$ (1,559,196,253)	\$ (1,572,601,659)	\$ (74,888,682)	\$ (1,647,490,341)
State's Proportionate Share of Outflow s/Inflow s		\$ 65,028,088	\$ 4,538,653,250	\$ -	\$ 13,168,987	\$ 4,616,850,325				\$ 184,719,128	



Schedule C – Schedules of Remaining Deferred Outflows and (Inflows)

CodeEmployer		NPL Sensitivity		Recognition of Existing Deferred Outflows (Inflows) of Resources for					
		Less 1%- 6.50%	Plus 1%- 8.50%	Future Plan Years Ending June 30,					
		Employer's Proportionate Share of Net Pension Liability	Employer's Proportionate Share of Net Pension Liability	2022	2023	2024	2025	2026	Thereafter
University Employers									
263	Eastern Kentucky University	\$ 115,422,529	\$ 69,975,571	\$ (43,172,193)	\$ (13,344,753)	\$ 1,824,447	\$ 12,214,303	\$ -	\$ -
266	Kentucky State University	31,570,074	19,139,538	(10,053,139)	(2,325,320)	1,419,871	4,581,073	-	-
269	Morehead State University	63,390,660	38,430,952	(24,373,890)	(7,439,858)	892,404	8,370,433	-	-
270	Murray State University	64,452,146	39,074,484	(27,484,848)	(8,352,071)	1,091,088	6,138,104	-	-
273	Western Kentucky University	101,797,672	61,715,423	(44,752,454)	(14,284,822)	546,082	925,673	-	-
500	KCTCS Central Office - University	34,453,633	20,887,713	(15,082,558)	(4,992,991)	175,502	8,922,383	-	-
	Total University	\$ 411,086,714	\$ 249,223,681	\$ (164,919,082)	\$ (50,739,815)	\$ 5,949,394	\$ 41,151,969	\$ -	\$ -
	State's Proportionate Share of NPL - University	\$ 432,333,135	\$ 262,104,446	\$ 16,841,190	\$ (5,891,676)	\$ (1,243,220)	\$ (37,956,718)	\$ -	\$ -
Non-University Employers									
400	KCTCS CENTRAL OFFICE	\$ 28,371,763	\$ 17,200,544	\$ (25,779,692)	\$ (9,449,211)	\$ (627,175)	\$ 14,553,594	\$ -	\$ -
801	KY High School Athletic Association	1,757,801	1,065,677	(721,716)	(221,837)	39,426	489,135	-	-
805	KY School Boards Association	2,871,027	1,740,577	(1,764,460)	(599,443)	(50,933)	777,965	-	-
806	KY Education Association	434,043	263,141	(212,756)	(61,203)	8,986	118,573	-	-
807	KY Academic Association	280,109	169,818	(134,117)	(42,490)	4,667	75,609	-	-
809	Jefferson County Teachers' Association	128,338	77,806	(58,042)	(17,588)	2,551	30,834	-	-
		\$ 33,843,081	\$ 20,517,563	\$ (28,670,783)	\$ (10,391,772)	\$ (622,478)	\$ 16,045,710	\$ -	\$ -
State Agencies									
301	Technical Education District - Madisonville	\$ 13,366,463	\$ 8,103,495	\$ (4,603,066)	\$ (1,570,953)	\$ (50,524)	\$ 1,155,874	\$ -	\$ -
302	Technical Education District - Bowling Green	14,274,384	8,653,927	(4,911,404)	(1,520,785)	214,598	1,700,364	-	-
303	Technical Education District - Elizabethtown	-	-	(6,159,412)	(1,984,808)	(8,673)	6,159,412	-	-
304	Technical Education District - Frankfort	10,706,329	6,490,773	(6,015,169)	(1,888,545)	105,838	3,300,251	-	-
305	Technical Education District - Hazard	13,186,393	7,994,327	(5,591,012)	(1,793,766)	52,968	2,663,031	-	-
308	Adult Education - Workforce Investment	727,490	441,045	(666,920)	(228,730)	2,360	378,814	-	-
316	Office of Career and Technical Education	4,834,134	2,930,721	(1,551,658)	(523,106)	205,039	1,189,170	-	-
317	Office of Secretary of Workforce Investment	-	-	-	-	-	-	-	-
318	Department for Vocational Rehabilitation	22,140,328	13,422,701	(13,091,673)	(4,651,252)	108,899	9,106,803	-	-
320	School for the Blind	5,821,184	3,529,127	(3,284,393)	(980,305)	35,407	1,720,771	-	-
330	School for the Deaf	3,347,789	2,029,617	(4,013,066)	(1,583,491)	(301,345)	459,337	-	-
345	Department of Education	31,272,351	18,959,042	(15,550,410)	(4,832,103)	632,087	7,101,452	-	-
728	Department of Corrections	131,763	79,882	(63,844)	(19,705)	(3,881)	15,632	-	-
896	Education Professional Standards Board	-	-	-	-	-	-	-	-
		\$ 119,808,608	\$ 72,634,657	\$ (65,502,027)	\$ (21,577,549)	\$ 992,773	\$ 34,950,911	\$ -	\$ -
	State's Proportionate Share of NPL - Non-University	\$ 17,871,381,460	\$ 10,834,627,652	\$ (2,994,515,918)	\$ (1,151,734,365)	\$ 162,627,493	\$ 27,472,780	\$ -	\$ -



Schedule D – Summary of Main Plan Provisions

AS INTERPRETED FOR ACCOUNTING AND REPORTING VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2019. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, "final average salary" means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance	Completion of 27 years of service or attainment of age 55 and 5 years of service.
Amount of Allowance	<p>The annual retirement allowance for non-university members is equal to:</p> <ul style="list-style-type: none">(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus(b) 2.5% of final average salary multiplied by service after July 1, 1983.(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.



Schedule D – Summary of Main Plan Provisions

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is \$440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

- 1.7% of final average salary if service is 10 years or less.
- 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- 1.5% of final average salary if service is 10 years or less.
- 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- 2.0% of final average salary if service is greater than or equal to 27 years.

For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.



Schedule D – Summary of Main Plan Provisions

Disability Retirement Allowance

Condition for Allowance Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.

Amount of Allowance The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than \$6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.

Benefits Payable on Separation from Service

Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.

Life Insurance

A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased TRS active and retired members.



Schedule D – Summary of Main Plan Provisions

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of \$2,880 except that if income from other sources exceeds \$6,600 per year the annual allowance will be \$2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

<u>Number of Children</u>	<u>Annual Allowance</u>
1	\$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.



Schedule D – Summary of Main Plan Provisions

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.



Schedule E – Statement of Actuarial Assumptions and Methods

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2015, submitted to and adopted by the Board on September 19, 2016.

INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually, including price inflation at 3.00% per annum.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 3.50% per annum:

<u>Age</u>	<u>Annual Rate</u>
20	7.20%
25	6.40
30	5.40
35	4.70
40	4.20
45	3.80
50	3.70
55	3.50
60	3.50
65	3.50

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

Age	Annual Rate of						
	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			Service			Before 27 Years of Service	After 27 Years of Service*
			0 – 4	5 – 9	10+		
20	0.019%	0.01%	11.00%				
25	0.021	0.01	11.00	3.00%			
30	0.025	0.01	11.00	3.00	3.00%		
35	0.043	0.04	12.00	3.50	1.40		
40	0.060	0.09	12.00	4.50	1.40		
45	0.084	0.20	12.00	4.50	1.30		17.0%
50	0.119	0.30	14.00	4.50	1.90		17.0
55	0.202	0.58	15.00	4.50	2.40	5.0%	45.0
60	0.340	0.75	15.00	4.00	2.40	13.0	35.0
62	0.419	0.75	15.00	3.80	2.40	15.0	25.0
65	0.565	0.75	15.00	3.50	2.40	20.0	25.0
70	0.913	0.75	20.00	0.00	0.00	20.0	20.0
75	1.556	0.75	20.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.



Schedule E – Statement of Actuarial Assumptions and Methods

Females

Age	Annual Rate of						
	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
						Before	After
			Service			27 Years	27 Years
0 – 4	5 – 9	10+	of Service	of Service*			
20	0.007%	0.01%	9.00%				
25	0.008	0.01	9.00	4.00%			
30	0.010	0.03	12.00	4.00	1.65%		
35	0.018	0.06	12.00	4.00	1.50		
40	0.026	0.12	12.00	4.00	1.30		
45	0.042	0.25	13.00	4.00	1.20		15.0%
50	0.062	0.44	13.00	5.00	1.50		18.0
55	0.096	0.65	15.00	5.00	2.00	5.5%	50.0
60	0.157	0.85	15.00	5.00	2.00	14.0	40.0
62	0.197	0.85	15.00	4.60	2.00	14.0	40.0
65	0.287	0.85	15.00	4.00	2.00	22.0	35.0
70	0.495	0.85	15.00	0.00	0.00	20.0	35.0
75	0.831	0.85	15.00	0.00	0.00	100.0	100.0

*Plus 7.5% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2025 using scale BB (set forward two years for males and one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set forward two years for males and seven years for females) is used for death after disability retirement. There is a margin for future mortality improvement in the tables used by the System. Based on the results of the most recent experience study adopted by the Board on September 19, 2016, the numbers of expected future deaths are 15-19% less than the actual number of deaths that occurred during the study period for healthy retirees and 13-17% less than expected under the selected table for disabled retirees. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

Age	Annual Rate of Death After			
	Service Retirement		Disability Retirement	
	Male	Female	Male	Female
45	0.1609%	0.1135%	2.3306%	1.2482%
50	0.2474	0.1718	2.9279	1.5650
55	0.4246	0.2658	3.4400	1.7807
60	0.6985	0.4409	3.5881	2.3164
65	1.1300	0.8100	3.8275	3.1687
70	1.8697	1.3739	4.7566	4.4032
75	3.2147	2.2899	6.3153	6.0857
80	5.5160	3.7551	8.3527	8.4679
85	9.5631	6.3873	10.9122	12.7572
90	17.2787	11.2476	17.2787	19.4718
95	27.1263	18.1190	27.1263	24.2074



Schedule E – Statement of Actuarial Assumptions and Methods

ASSETS: Market Value

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability



Schedule F – Funding Policy

Introduction

Pursuant to the provisions of KRS 161.250, the Board of Trustees (board) of the Teachers' Retirement System of the State of Kentucky (TRS) is vested with the responsibility for the general administration and management of the retirement system. The board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes shall control if any inconsistency exists between state law and this policy.

The board's policy is to achieve full funding within specific, closed 30-year periods. The underpinning of this is to request, as a minimum appropriation, amounts consistent with the annual actuarial valuations. The actuary focuses on a long investment horizon to promote cost stability, predictability and equity among current and future taxpayers. This policy, as detailed below for each trust, confirms the board's process for recommending annual appropriations payable and the primary actuarial assumptions and methodologies associated with calculating the annual appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study or resolutions adopted by the board.

Also, the board will provide options for funding the Retirement Annuity Trust that could accelerate the paying of its unfunded liability ahead of the amortization schedule and reduce costs for the state thereafter to the normal cost.

This policy is in keeping with the board's direction for the Investment Committee to continue investing for maximum returns within the parameters of prudent risk.

This policy will be reviewed regularly and amended or revised as necessary.

Background

The level of benefits and funding for teachers' pension and health care are mandated in law by the General Assembly. Also, state law requires that the board, as fiduciary, adopt reasonable actuarial assumptions based upon the advice of a qualified independent actuary and other professionals. Additionally, state law mandates that actuarial assumptions be set using rigorous and transparent processes that adhere to recognized actuarial and financial standards. These processes reflect national best practices, including the Government Finance Officers Association's best practice guidelines for valuations, experience studies and actuarial audits.

TRS evaluates actuarial assumptions (demographic and economic) each year during the actuarial valuation. Several other regular reviews are conducted as well. The return assumptions are reviewed annually by the board's Investment Committee as it evaluates asset allocation. Every five years, the actuary conducts an experience investigation and recommends to the board adjustments to assumptions based upon past trends, current behavior



Schedule F – Funding Policy

and forecasted experience. TRS also conducts an actuarial audit (an audit of the actuary) at least every 10 years to ensure that assumptions are reasonable and appropriately reflect the cost of the plans. In the investment context, TRS conducts an asset liability modeling study at least every five years — and more often if material changes warrant an updated study. The annual valuation determines the additional required employer contribution that is included in TRS's biennial budget requests.

The amount that the state owes for benefits consists of two components, normal cost and amortization of unfunded liability. The normal cost is included in the statutory payroll contributions made by members, the state and employers. The amortization of the unfunded liability includes the balance of the statutory payroll contributions paid by the state and employers above amounts needed for the normal cost. In addition, TRS requests additional contributions necessary to amortize the unfunded liability. The funding for medical insurance is outlined by statute as a shared responsibility of employees, employers, retirees and the state.

State law requires, and the TRS board uses, a qualified independent actuary that follows the generally accepted actuarial standards of practice. Some factors considered by the actuary include the length of amortization periods; the projected pattern of cash flows; current and projected interest rates and rates of inflation; and historical and projected returns of the funds. The actuary focuses on a long investment horizon to promote cost stability, predictability and equity among current and future taxpayers.

Retirement Annuity Trust Appropriations

KRS 161.714 provides that the retirement benefits promised to members of TRS are “an inviolable contract of the Commonwealth.” To satisfy this solemn commitment, the Commonwealth of Kentucky (state) is required to pay annual retirement appropriations necessary to fund the benefit requirements of retirement system members. All employers participating in TRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state — as plan guarantor — solely is responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits under KRS 161.550.

Beginning in 2019, the state made its full actuarially determined contribution. Prior to that, from fiscal year 2009 through 2018, the state did not pay the full annual retirement appropriations necessary to prefund the benefit requirements of members of the retirement system. Over this period, primarily because of the failure to fund, the state's annual retirement appropriations grew.



Schedule F – Funding Policy

Fiscal Year	Requested Minimum Additional Payment for Unfunded Liability	Appropriated
2009	\$ 60,499,800	\$ 0
2010	82,331,200	0
2011	121,457,000	0
2012	208,649,000	0
2013	260,980,000	0
2014	299,420,000	0
2015	386,400,000	0
2016	487,400,000	0
2017	520,372,000	498,537,600
2018	512,883,000	474,724,700
2019	553,597,000	553,597,000
2020	538,253,000	538,253,000

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2018)

The board always has acted as required by state law and requested annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members.

Annual Retirement Appropriations Payable by the State

In each biennial budget request, the board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system (KRS 161.550). The recommended additional annual retirement appropriations payable by the state are calculated by the board's actuary based upon the results of an annual valuation preceding the beginning of each biennium (KRS 161.400).



Schedule F – Funding Policy

Calculation of Annual Retirement Appropriations Payable by the State

The board will present the actuarially determined annual retirement appropriations payable by the state, which if paid, are the minimum to meet the benefit requirements of the members of the retirement system, consistent with generally accepted actuarial principles. Based upon technical advice from the board's actuary, the board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- A. Use the Entry Age Normal actuarial cost method;
- B. Use a five-year asset smoothing method;
- C. Use a 30-year closed period that began fiscal year 2014 to amortize the unfunded liability. This is calculated by the actuary as the minimum dollar amount for the state to pay each year;
- D. Use a 20-year closed period to amortize new sources of unfunded liability (new sources of unfunded liability are the unfunded liability consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation); and
- E. Reach a minimum funded ratio of 100% within the 30-year closed amortization period.

Accelerated Funding Options

In recognition that the state may want to pay off the unfunded liability earlier than the closed amortization period and thereby reduce its costs long-term, the board will provide options for funding over and above the actuarially required minimum. The board will provide the analytical support showing the impact of each of these on the current costs and the potential savings.

Adopted December 16, 2013; amended December 9, 2015, September 19, 2016,
September 18, 2017, November 14, 2017, September 16, 2019