TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY

Annual Valuation of the Retiree Health and Life Insurance Trusts

Prepared as of June 30, 2024

CavMac
Actuarial Consulting Services

CavMac
Actuarial Consulting Services

November 14, 2024

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

Members of the Board:

This report covers the Retiree Medical Plan funded by the Health Insurance Trust (health trust) and OPEB liabilities related to the Life Insurance Plan funded by the Life Insurance Trust (life trust). CavMac has submitted the results of the annual actuarial valuation prepared as of June 30, 2024. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

The valuation covers benefits for members hired before July 1, 2002 (TRS 1), members hired between July 1, 2002 and June 30, 2008 (TRS 2), members hired between July 1, 2008 and December 31, 2021 (TRS 3), and members hired on/after January 1, 2022 (TRS 4).

The valuation indicates a total actuarially determined contribution of 3.54% as a percentage of active member payroll for the health trust payable for the fiscal year ending June 30, 2025 is required to support the benefits of the Kentucky Employees' Health Plan (KEHP) and the Medicare Eligible Health Plan (MEHP). This actuarially determined contribution reflects the actuarial value of assets of the health trust and a 7.10% discount rate for valuing liabilities.

The initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been revised since the previous valuation. The health care trend assumption has been increased for the next few years starting at 7.00% while continuing to step down to an ultimate health care trend assumption of 4.50%, which is 2.00% higher than our price inflation assumption. The increase in trend is due to continuing high expectations for prescription drug costs and utilization, particularly for specialty drugs. In addition, we note that expected 2025 per member per month (PMPM) costs for the stand alone Medicare Part D prescription drug plan are less than expected in spite of the plan changes due to the Inflation Reduction Act, including the $2,000 out of pocket maximum, because of increased Federal reimbursements and the additional $15 per member per month (PMPM) premium stabilization contribution. We have made no additional specific changes to the valuation results due to the Inflation Reduction Act, but we have included scenarios in our sensitivity analysis section in Schedule G to illustrate the potential impact of changes to the Medicare Part D plan design, such as the elimination of the $15 PMPM premium stabilization contribution or decreased Federal reimbursements.

The impact of the COVID-19 pandemic was considered in this valuation; however, no changes were incorporated at this time due to the level of uncertainty regarding the impact on both plan costs and contribution levels going forward. Given the uncertainty regarding COVID- 19 (e.g., the impact of routine care being deferred, direct COVID-19 treatment and prevention costs, changes in contribution and budget projections), continued monitoring of the impact on the Plan's liability will be required.

We recommend that the Life Insurance Plan valuation maintain a total actuarially determined contribution of 0.08% of active member payroll payable for the fiscal year ending June 30, 2027 to support the benefits of the life trust. This actuarially determined contribution reflects the actuarial value of assets of the life trust and a 7.10% discount rate for valuing liabilities.

The promised benefits of the Retiree Medical and Life Insurance Plans are included in the actuarially calculated contribution rates that are developed using the entry age normal actuarial cost method. Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded actuarial accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 16-year period for the Retiree Medical Plan and a 20-year period for the Life Insurance Plan, on the assumption that payroll will increase by 2.75% annually. The assumptions recommended by the actuary and adopted by the Board are in aggregate reasonably related to the experience under the Retiree Medical and Life Insurance Plans and to reasonable expectations of anticipated experience under the Retiree Medical and Life Insurance Plans.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retiree Medical and Life Insurance Plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the Plans.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This actuarial valuation was performed to determine the recommended funding amount for the system. The asset values used to determine unfunded liabilities and funded ratios are not market values, but less volatile market-related values. A smoothing technique is applied to market values to determine the market-related values. The unfunded liability amounts and funded ratios using the market value of assets would be different. The interest rate used for determining liabilities is based on the expected return of assets. Therefore, liability amounts in this report cannot be used to assess a settlement of the obligation.

In our opinion, if the contributions to the Health Insurance Trust continue at the current statutorily required levels, the funded ratio of the Retiree Medical Plan will continue to increase, and the ability of the health trust to fund the benefits called for under the Retiree Medical Plan will improve.

Respectfully submitted,

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President

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

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Table of Contents

TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF THE ACTUARY ON THE ANNUAL VALUATION
OF THE RETIREE HEALTH AND LIFE INSURANCE TRUSTS
PREPARED AS OF JUNE 30, 2024

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below:

HEALTH INSURANCE TRUST (Dollar amounts in $1,000's)		
Valuation Date	**June 30, 2024**	**June 30, 2023**
Number of Active Members	76,014	75,644
Number of Active Members after Adjustment for Duplicates and Retirees Returned to Work	71,213	71,005
Annual Salaries	$ 4,308,468	$ 4,138,909
Number of Deferred Vested Members	8,409	7,917
Number of Annuitants in Medical Plans	41,000	41,055
Number of Spouses and Beneficiaries in Medical Plans*	6,322	6,555
Total	47,322	47,610
Assets:		
Market Value	$ 3,317,711	$ 2,743,413
Actuarial Value	$ 3,246,186	$ 2,788,970
Actuarial Accrued Liability	$ 4,035,741	$ 3,909,612
Unfunded Actuarial Accrued Liability	$ 789,555	$ 1,120,642
Funded Ratio Based on Actuarial Value of Assets	80.4%	71.3%
Amortization Period (Years)	16	17
Discount Rate	7.10%	7.10%

** Spouses of post-65 retirees and surviving spouses of deceased retirees with a date of death on or after July 1, 2002 pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. There are 1,067 Surviving Spouses reflected in these headcounts.*

HEALTH INSURANCE TRUST CONTRIBUTION RATES FOR UNIVERSITY MEMBERS						
Valuation Date	**June 30, 2024**			**June 30, 2023**		
Contribution for fiscal year ending:	**June 30, 2025**			**June 30, 2024**		
	TRS 1 & TRS 2	TRS 3	TRS 4	TRS 1 & TRS 2	TRS 3	TRS 4
Normal	2.01 %	2.01 %	2.01 %	2.04 %	2.04 %	2.04 %
Accrued liability	1.53	1.53	1.53	2.17	2.17	2.17
Total	3.54 %	3.54 %	3.54 %	4.21 %	4.21 %	4.21 %
Member	2.775 %	2.775 %	2.775 %	2.775 %	2.775 %	2.775 %
Employer	2.775	2.775	2.000	2.775	2.775	2.000
State*	1.740	1.740	1.740	1.870	1.870	1.870
Statutorily Required Prefunding**	(3.750)	(3.750)	(2.975)	(3.210)	(3.210)	(2.435)
Total	3.540 %	3.540 %	3.540 %	4.210 %	4.210 %	4.210 %

** This represents funding by the State to pay the cost of health insurance for retirees who are not eligible for Medicare and who retire on or after July 1, 2010, less the amounts that are otherwise required to be paid by the retirees under KRS 161.675. See KRS 161.550(2).*

*** This represents funding by active members, local school districts, universities, and other employers toward the unfunded liability of the health trust. See KRS 161.540(1)(c)(3) & 161.550(5).*

HEALTH INSURANCE TRUST CONTRIBUTION RATES FOR SCHOOL DISTRICT EMPLOYEES (NON-FEDERAL)						
Valuation Date	**June 30, 2024**			**June 30, 2023**		
Contribution for fiscal year ending:	**June 30, 2025**			**June 30, 2024**		
	TRS 1 & TRS 2	TRS 3	TRS 4	TRS 1 & TRS 2	TRS 3	TRS 4
Normal	2.01 %	2.01 %	2.01 %	2.04 %	2.04 %	2.04 %
Accrued liability	1.53	1.53	1.53	2.17	2.17	2.17
Total	3.54 %	3.54 %	3.54 %	4.21 %	4.21 %	4.21 %
Member	3.750 %	3.750 %	3.750 %	3.750 %	3.750 %	3.750 %
Employer	3.000	3.000	3.000	3.000	3.000	3.000
State*	2.490	2.490	2.490	2.620	2.620	2.620
Statutorily Required Prefunding**	(5.700)	(5.700)	(5.700)	(5.160)	(5.160)	(5.160)
Total	3.540 %	3.540 %	3.540 %	4.210 %	4.210 %	4.210 %

** This represents funding by the State to pay the cost of health insurance for retirees who are not eligible for Medicare and who retire on or after July 1, 2010, less the amounts that are otherwise required to be paid by the retirees under KRS 161.675. See KRS 161.550(2). Includes the State contribution of 0.75% on behalf of Non-Federal School District employees.*

*** This represents funding by active members, local school districts, universities, and other employers toward the unfunded liability of the health trust. See KRS 161.540(1)(c)(3) & 161.550(5).*

HEALTH INSURANCE TRUST CONTRIBUTION RATES FOR OTHER EMPLOYEES						
Valuation Date	June 30, 2024			June 30, 2023		
Contribution for fiscal year ending:	June 30, 2025			June 30, 2024		
	TRS 1 & TRS 2	TRS 3	TRS 4	TRS 1 & TRS 2	TRS 3	TRS 4
Normal	2.01 %	2.01 %	2.01 %	2.04 %	2.04 %	2.04 %
Accrued liability	1.53	1.53	1.53	2.17	2.17	2.17
Total	3.54 %	3.54 %	3.54 %	4.21 %	4.21 %	4.21 %
Member	3.750 %	3.750 %	3.750 %	3.750 %	3.750 %	3.750 %
Employer	3.750	3.750	3.750	3.750	3.750	3.750
State*	1.740	1.740	1.740	1.870	1.870	1.870
Statutorily Required Prefunding**	(5.700)	(5.700)	(5.700)	(5.160)	(5.160)	(5.160)
Total	3.540 %	3.540 %	3.540 %	4.210 %	4.210 %	4.210 %

** This represents funding by the State to pay the cost of health insurance for retirees who are not eligible for Medicare and who retire on or after July 1, 2010, less the amounts that are otherwise required to be paid by the retirees under KRS 161.675. See KRS 161.550(2).*

*** This represents funding by active members, local school districts, universities, and other employers toward the unfunded liability of the health trust. See KRS 161.540(1)(c)(3) & 161.550(5).*

We recommend maintaining the Total Employer Contribution rate to the Life Insurance Trust at 0.08% by rounding the Normal Contribution up to 0.03% for FY 2027 (from actual amount of 0.024%) and holding the Accrued Liability Contribution at 0.05%. The resulting contribution is equivalent to using an effective amortization period of 14 years.

LIFE INSURANCE TRUST (Dollar amounts in $1,000's)		
Valuation Date	**June 30, 2024**	**June 30, 2023**
Number of Active Members	76,014	75,644
Number of Active Members after Adjustment for Duplicates and Retirees Returned to Work	70,712	70,528
Annual Salaries	$ 4,308,468	$ 4,138,909
Number of Vested Former Members	11,845	11,216
Number of Retirees in Life Insurance Plan	54,048	53,379
Assets:		
Market Value	$ 101,559	$ 94,030
Actuarial Value	$ 102,760	$ 99,027
Actuarial Accrued Liability	$ 125,526	$ 122,611
Unfunded Actuarial Accrued Liability*	$ 22,766	$ 23,584
Funded Ratio Based on Actuarial Value of Assets	81.9%	80.8%
Amortization Period (Years)	20	21
Effective Amortization Period (Years)	14	15
Discount Rate	7.10%	7.10%
Contribution for fiscal year ending:	**June 30, 2027**	**June 30, 2026**
Normal	0.03 %	0.03 %
Accrued Liability	0.05	0.05
Total	0.08 %	0.08 %

** Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post-employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, we will consider the entire liability an OPEB liability under GASB 74 and 75.*

2. The valuation indicates combined member, employer, and State contributions of 3.54% of active member payroll would be sufficient to support the current benefits of the Retiree Medical Plan and State contributions of 0.08% of active member payroll would be sufficient to support the current benefits of the Life Insurance Plan. Comments on the valuation results as of June 30, 2024 are given in Section IV and further discussion of the contribution levels is set out in Sections VI and VII.
3. Schedule B shows the development of the actuarial value of assets. The assumed investment rate of return is 7.10% for the health trust and 7.10% for the life trust.
4. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. Since the previous valuation, the initial per capita costs of health care and the rates of health care inflation used to project the per capita health care costs have been increased for the next few years starting at 7.00%, while continuing to step down to an ultimate health care trend assumption of 4.50%, which is 2.00% higher than our price inflation assumption. The increase in trend is due to continuing high expectations for prescription drug costs and utilization, particularly for specialty drugs.
5. The impacts of the COVID-19 pandemic, the ACA and the Inflation Reduction Act were considered in this valuation. We note that expected 2025 per member per month (PMPM) costs for the stand alone Medicare Part D prescription drug plan is less than expected in spite of the plan changes due to the Inflation Reduction Act, including the $2,000 out of pocket maximum, because of increased Federal reimbursements and the additional $15 per member per month (PMPM) premium stabilization contribution. We have made no additional specific changes to the valuation results due to the Inflation Reduction Act, COVID-19 or the ACA, but we have included scenarios in our sensitivity analysis section in Schedule G to illustrate the potential impact of changes to the Medicare Part D plan design, such as the elimination of the $15 PMPM premium stabilization contribution or decreased Federal reimbursements. We also considered scenarios regarding economic factors and healthcare trend in our sensitivity analysis in Schedule G. Continued monitoring of the impact of these and any future such events on the Plan's liability will be required.
6. Provisions of the system, as summarized in Schedule E, were taken into account in the current valuation.
7. The funded ratio shown in the Summary of Principal Results is the ratio of actuarial value of assets to the actuarial accrued liability. The funded status would be different based on the market value of assets. The funded ratio is an indication of progress in funding the promised benefits. Since the ratio is less than 100%, there is a need for additional contributions toward the payment of the unfunded actuarial accrued liability. In addition, this funded ratio does not have any relationship to measuring the sufficiency if the plan had to settle its liabilities.

1. Data regarding the membership of the Retiree Medical and Life Insurance Plans for use as a basis of the valuation were furnished by the system's office. The following tables summarize the membership of the system as of June 30, 2024, upon which the valuation was based. Detailed tabulations of the data are given in Schedule F.

ACTIVE MEMBERS AS OF JUNE 30, 2024		
Group	**Number**	**Annual Salaries ($1,000's)**
University Active Members		
TRS 1 and TRS 2 Members	1,239	$ 94,584
TRS 3 Members	1,303	82,773
TRS 4 Members	395	17,893
Total University Active Members	2,937	$ 195,250
Non-University Active Members		
Full Time TRS 1 and TRS 2 Members	25,775	2,014,122
Full Time TRS 3 Members	28,966	1,735,679
Full Time TRS 4 Members	5,799	260,122
Part Time TRS 1 and TRS 2 Members	990	9,681
Part Time TRS 3 Members	5,444	56,963
Part Time TRS 4 Members	6,103	36,651
Total Non-University Members	73,077	$ 4,113,218
Grand Total	76,014	$ 4,308,468

2. The following tables show the number of retired members and their beneficiaries receiving health care as of the valuation date, as well as average ages.

RETIREES RECEIVING HEALTH BENEFITS AS OF JUNE 30, 2024			
	Non-Medicare	**Medicare**	**Total**
Number	8,418	32,582	41,000
Average Age	59.66	75.82	72.51

SPOUSES RECEIVING HEALTH BENEFITS AS OF JUNE 30, 2024			
	Non-Medicare	**Medicare**	**Total**
Number	1,154	5,168	6,322
Average Age	60.09	75.4	72.6

3. The Retiree Medical Plan valuation includes 71,213 active members eligible for health care and the Life Insurance Plan valuation includes 70,712 active members eligible for life insurance. There were initially 76,014 active members eligible for health care and life insurance. However, 4,801 were ultimately excluded from the Retiree Medical Plan active headcounts and 5,302 from the Life Insurance Plan active headcounts, as they are either retirees returning to work or members working an additional active position. The adjusted amounts are shown in the active or retiree headcounts on pages 1 and 4.
4. The Retiree Medical Plan valuation includes 8,409 deferred vested members eligible for health care at age 60, and the Life Insurance Plan valuation includes 11,845 deferred vested members eligible for retiree life insurance at age 60. There were initially 8,467 deferred vested members eligible for health care at age 60 and 11,957 deferred vested members eligible for retiree life insurance at age 60. However, 58 were ultimately excluded from the Retiree Medical Plan deferred vested headcounts and 112 from the Life Insurance Plan deferred vested headcounts, as they are either retirees returning to work or members working an additional active position.
5. The Life Insurance Plan valuation includes 54,048 retired members eligible for life insurance. There were initially 55,483 retired members eligible for life insurance. However, 1,435 were ultimately excluded from the Life Insurance Plan retiree headcounts as they were listed multiple times, reflecting different pension benefits earned under multiple roles as an employee.

1. As of June 30, 2024, the market value of the health trust assets held by the Retiree Medical Plan amounted to $3,317,710,858 and the market value of the life trust assets held by the Life Insurance Plan amounted to $101,559,122. The market investment return for the plan year was 12.37% for the health trust and 11.18% for the life trust.
2. The five-year market related actuarial value of the health trust assets used for valuation purposes as of June 30, 2024 was $3,246,185,590 and the five-year market related actuarial value of the life trust assets used for valuation purposes as of June 30, 2024 was $102,759,762. Schedule B shows the development of the actuarial value of assets as of June 30, 2024.
3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the health trust and the life trust.

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.
2. The valuation shows the Retiree Medical Plan has an actuarial accrued liability of $2,169,814,455 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $85,149,245. The liability on account of benefits payable to retirees and covered spouses amounts to $1,780,777,041. The total actuarial accrued liability of the Retiree Medical Plan amounts to $4,035,740,741. Against these liabilities, the Retiree Medical Plan has present assets for valuation purposes of $3,246,185,590. When this amount is deducted from the actuarial accrued liability of $4,035,740,741, there remains $789,555,151 as the unfunded actuarial accrued liability for the Retiree Medical Plan.
3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the Retiree Medical Plan is determined to be $86,568,580, or 2.01% of payroll.
4. The valuation shows that the Life Insurance Plan has an actuarial accrued liability of $16,825,312 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of deferred vested members amounts to $4,866,955. The liability on account of benefits payable to retirees amounts to $103,834,159. The total actuarial accrued liability of the Life Insurance Plan amounts to $125,526,426. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability, and assets could be split for active and post-employment purposes. As this could be administratively burdensome, and as death in active service liabilities can be considered de minimis, we will consider the entire liability an OPEB liability under GASB 74 and 75. Against these liabilities, the Life Insurance Plan has present assets for valuation purposes of $102,759,762. When this amount is deducted from the actuarial accrued liability of $125,526,426, there remains $22,766,664 as the unfunded actuarial accrued liability for the life insurance plan.
5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be $1,048,137, which is rounded up to 0.03% of payroll.

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year-to-year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2024 is shown below ($1,000's).

	Experience (Gain)/Loss of the:	Health Insurance Trust	Life Insurance Trust
(1)	UAAL as of 6/30/2023	$ 1,120,642	$ 23,584
(2)	Normal cost from last valuation	84,496	1,007
(3)	Expected employer contributions	174,478	2,279
(4)	Interest accrual: [(1) + (2)] x .071 - (3) x (.071)/2 for Health [(1) + (2)] x .071 - (3) x (.071)/2 for Life	79,371	1,665
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	$ 1,110,031	$ 23,977
(6)	Change due to updated health care trend rates	243,591	0
(7)	Change due to claims experience	(286,194)	0
(8)	Expected UAAL after changes: (5) + (6) + (7)	$ 1,067,428	$ 23,977
(9)	Actual UAAL as of 6/30/2024	789,555	22,766
(10)	Total (gain)/loss: (9) - (8)	(277,873)	(1,211)
	(a) Contribution and investment (gain)/loss	(227,144)	(665)
	(b) Experience (gain)/loss (10) - (10a)	(50,729)	(546)
(11)	Accrued liabilities as of 6/30/2023	$ 3,909,612	$ 122,611
(12)	Experience (gain)/loss as percent of actuarial accrued liabilities at start of year (10b) / (11)	(1.30%)	(0.45%)

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the State are required to contribute to the Health Insurance Trust. These contribution amounts vary by date of membership and employee type.

Employer Percentage of Payroll Contribution Made to Health Insurance Trust								
University Employees			School District Employees (Non-Federal)*			Other Employees		
TRS 1 & TRS 2	TRS 3	TRS 4	TRS 1 & TRS 2	TRS 3	TRS 4	TRS 1 & TRS 2	TRS 3	TRS 4
2.775	2.775	2.000	3.000	3.000	3.000	3.750	3.750	3.750

** In addition to the amounts contributed by School Districts on behalf of Non-Federal employees, the State contributes 0.75%.*

2. For the fiscal year ending June 30, 2024, member contributions will be 2.775% for University employees and 3.750% for all other members. Based upon the amortization of the unfunded actuarial accrued liability over a 16-year period as a level percentage of payroll, the valuation indicates employer and State contributions of 0.765% of payroll for University employees and (0.210)% of payroll for all other members.

3. The State is scheduled to contribute 0.08% of salary to the Life Insurance Trust for the fiscal year ending June 30, 2026. We recommend maintaining this rate for the fiscal year ending June 30, 2027 to sufficiently support the benefits of the Life Insurance Plan.

REQUIRED CONTRIBUTION RATES Health Insurance Trust For Fiscal Year Ending June 30, 2025	
Normal	2.01 %
Accrued Liability	1.53
Total	3.54 %

	University Employees			School District Employees (Non-Federal)			Other Employees		
	TRS 1 & TRS 2	TRS 3	TRS 4	TRS 1 & TRS 2	TRS 3	TRS 4	TRS 1 & TRS 2	TRS 3	TRS 4
Member	2.775%	2.775%	2.775%	3.750%	3.750%	3.750%	3.750%	3.750%	3.750%
Employer	2.775	2.775	2.000	3.000	3.000	3.000	3.750	3.750	3.750
State*	1.740	1.740	1.740	2.490	2.490	2.490	1.740	1.740	1.740
Statutorily Required Prefunding**	(3.750)	(3.750)	(2.975)	(5.700)	(5.700)	(5.700)	(5.700)	(5.700)	(5.700)
Total	3.540%	3.540%	3.540%	3.540%	3.540%	3.540%	3.540%	3.540%	3.540%

REQUIRED CONTRIBUTION RATE Life Insurance Trust For Fiscal Year Ending June 30, 2027	
Normal	0.03 %
Accrued Liability	0.05
Total	0.08 %
Member	0.00 %
State	0.08
Total	0.08 %

** This represents funding by the State to pay the cost of health insurance for retirees who are not eligible for Medicare and who retire on or after July 1, 2010, less the amounts that are otherwise required to be paid by the retirees under KRS 161.675. See KRS 161.550(2). Includes the State contribution of 0.75% on behalf of Non-Federal School District employees.*

*** This represents funding by active members, local school districts, universities, and other employers toward the unfunded liability of the health trust. See KRS 161.540(1)(c)(3) & 161.550(5).*

4. The valuation indicates that a total normal contribution of 2.01% of payroll is required to meet the cost of benefits currently accruing under the Retiree Medical Plan, and 0.03% of payroll is required to meet the cost of benefits currently accruing under the Life Insurance Plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 1.53% of payroll for the Retiree Medical Plan and 0.05% of payroll for the Life Insurance Plan.
5. The unfunded actuarial accrued liability amounts to $789,555,151 for the Retiree Medical Plan and $22,766,664 for the Life Insurance Plan as of the valuation date. An accrued liability contribution rate of 1.53% of payroll for the Retiree Medical Plan and 0.05% of payroll for the Life Insurance Plan is sufficient to amortize the unfunded actuarial accrued liabilities over a 16-year period for the Retiree Medical Plan and a 20-year period for the Life Insurance Plan, based on the assumption that the payroll will increase by 2.75% annually.

1. Beneficiary contributions and the system's monthly contribution for retirees who opt into the Retiree Medical Plan are based upon date of hire, date of attaining age 65, years of service at retirement, plan election, Medicare eligibility, and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims and/or insured premiums for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State on a current disbursement basis. Current employer and State contributions have been determined to be sufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of active member Retiree Medical Plan contributions by fiscal year, date of membership, and employer type is provided in Schedule E.
2. This valuation provides the contributions required to sufficiently fund the Retiree Medical Plan and to ensure the future solvency of the Health Insurance Trust. For all membership, a combined member contribution together with employer and State contributions totaling 3.54% of payroll is required to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 16 years.

1. The information required under Governmental Accounting Standards Board (GASB) Statements No. 74 and 75 will be issued in separate reports. The following information is provided for informational purposes only.

NUMBER OF ACTIVE AND RETIRED MEMBERS IN RETIREE MEDICAL PLAN AS OF JUNE 30, 2024	
GROUP	NUMBER
Retirees currently receiving health benefits	41,000
Spouses of retirees currently receiving health benefits	6,322
Terminated employees entitled to benefits but not yet receiving benefits	8,409
Active plan members	71,213
Total	126,944

NUMBER OF ACTIVE AND RETIRED MEMBERS IN LIFE INSURANCE PLAN AS OF JUNE 30, 2024	
GROUP	NUMBER
Retirees	54,048
Terminated employees	11,845
Active plan members	70,712
Total	136,605

SCHEDULE OF FUNDING PROGRESS Health Insurance Trust (Dollar amounts in $1,000's)						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Annual Salary (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2016	$ 795,055	$ 3,634,073	$ 2,839,018	21.9 %	$ 3,537,226	80.3 %
6/30/2017	985,694	3,691,719	2,706,025	26.7	3,563,584	75.9
6/30/2018	1,213,918	3,340,709	2,126,791	36.3	3,605,116	58.9
6/30/2019	1,442,522	3,133,202	1,690,680	46.0	3,648,428	46.3
6/30/2020	1,700,968	2,757,653	1,056,685	61.7	3,723,482	28.4
6/30/2021	2,072,648	3,456,677	1,384,029	60.0	3,784,400	36.6
6/30/2022	2,401,147	3,768,713	1,367,566	63.7	4,033,509	33.9
6/30/2023	2,788,970	3,909,612	1,120,642	71.3	4,138,909	27.1
6/30/2024	3,246,186	4,035,741	789,555	80.4	4,308,468	18.3

SCHEDULE OF FUNDING PROGRESS Life Insurance Trust (Dollar amounts in $1,000's)						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Annual Salary (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2016	$ 97,269	$ 106,059	$ 8,790	91.7 %	$ 3,537,226	0.25 %
6/30/2017	95,730	109,069	13,339	87.8	3,563,584	0.37
6/30/2018	93,808	112,471	18,663	83.4	3,605,116	0.52
6/30/2019	92,506	117,485	24,979	78.7	3,648,428	0.68
6/30/2020	92,229	122,194	29,965	75.5	3,723,482	0.80
6/30/2021	95,483	116,656	21,173	81.9	3,784,400	0.56
6/30/2022	96,926	119,197	22,271	81.3	4,033,509	0.55
6/30/2023	99,027	122,611	23,584	80.8	4,138,909	0.57
6/30/2024	102,760	125,526	22,766	81.9	4,308,468	0.53

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2024. Additional information as of the latest actuarial valuation follows.

Valuation Date	6/30/2024
Actuarial Cost Method	Entry Age
Amortization Method	Level Percent of Pay, Closed
Remaining Amortization Period	16 Years Retiree Medical Plan
	20 Years Life Insurance Plan
Asset Valuation Method	5-Year Smoothed Market
Actuarial Assumptions:	
Investment Rate of Return*	7.10% Retiree Medical Plan
	7.10% Life Insurance Plan
Medical Trend Assumption**	7.00%
Ultimate Trend Rate	4.50%
Year of Ultimate Trend Rate	2035

**Includes price inflation at 2.50%.*
***Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule D.*

SCHEDULE OF EMPLOYER CONTRIBUTIONS Health Insurance Trust			
Fiscal Year Ending Date	Statutorily Required Contribution (a)	Actual Employer Contribution (b)	Percentage of Statutory Contributed ((b) / (a))
6/30/2017	$ 180,375,986	$ 180,375,986	100.0 %
6/30/2018	187,102,413	187,102,413	100.0
6/30/2019	183,146,155	183,146,155	100.0
6/30/2020	184,625,474	184,625,474	100.0
6/30/2021	184,887,065	184,887,065	100.0
6/30/2022	200,235,203	151,765,145	75.8
6/30/2023	208,815,818	208,815,818	100.0
6/30/2024	224,320,176	224,320,176	100.0

SCHEDULE OF EMPLOYER CONTRIBUTIONS Life Insurance Trust			
Fiscal Year Ending Date	Actuarially Determined Contribution (a)	Actual Employer Contribution (b)	Percentage of ADC Contributed ((b) / (a))
6/30/2017	$ 1,065,122	$ 1,049,683	98.6 %
6/30/2018	1,075,305	1,058,329	98.4
6/30/2019	1,081,535	1,421,227	131.4
6/30/2020	1,842,977	1,796,389	97.5
6/30/2021	2,252,365	2,138,375	94.9
6/30/2022	2,736,268	2,754,863	100.7
6/30/2023	3,268,967	3,223,560	98.6
6/30/2024	3,311,127	3,356,772	101.4

RESULTS OF THE VALUATION AS OF JUNE 30, 2024 (Dollar amounts in $1,000's)		
	Health Insurance Trust	**Life Insurance Trust**
PAYROLL	$ 4,308,468	$ 4,308,468
ACTUARIAL ACCRUED LIABILITY Present value of prospective benefits payable in respect of:		
(a) Present active members	$ 2,169,814	$ 16,825
(b) Present terminated vested members	85,149	4,867
(c) Present retired members and covered spouses	1,780,778	103,834
(d) Total actuarial accrued liability	$ 4,035,741	$ 125,526
PRESENT ASSETS FOR VALUATION PURPOSES	$ 3,246,186	$ 102,760
UNFUNDED ACTUARIAL ACCRUED LIABILITY	$ 789,555	$ 22,766
CONTRIBUTIONS:	**Fiscal Year Ending June 30, 2025**	**Fiscal Year Ending June 30, 2027**
Normal	2.01 %	0.03 %
Accrued Liability	1.53	0.05
Total	3.54 %	0.08 %

LIFE INSURANCE TRUST
SOLVENCY TEST
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Accrued Liabilities: Deferred Vested, Retirants, And Beneficiaries	(3) Accrued Liabilities: Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Coved by Assets (1)	(2)	(3)
6/30/2016	n/a	$ 89.0	$ 17.1	$ 97.3	n/a	100 %	49 %
6/30/2017	n/a	92.1	17.0	95.7	n/a	100	21
6/30/2018	n/a	94.2	18.3	93.8	n/a	99	0
6/30/2019	n/a	99.1	18.4	92.5	n/a	93	0
6/30/2020	n/a	103.5	18.7	92.2	n/a	89	0
6/30/2021	n/a	100.7	16.0	95.5	n/a	95	0
6/30/2022	n/a	102.8	16.4	96.9	n/a	94	0
6/30/2023	n/a	106.1	16.5	99.0	n/a	93	0
6/30/2024	n/a	108.7	16.8	102.8	n/a	95	0

HEALTH INSURANCE TRUST
SOLVENCY TEST
(Dollar amounts in millions)

Valuation Date	(1) Active Member Contributions	(2) Accrued Liabilities: Deferred Vested, Retirants, And Beneficiaries	(3) Accrued Liabilities: Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Coved by Assets (1)	(2)	(3)
6/30/2017	n/a	$ 1,985.1	$ 1,706.6	$ 985.7	n/a	50 %	0 %
6/30/2018	n/a	1,692.3	1,648.4	1,213.9	n/a	72	0
6/30/2019	n/a	1,604.3	1,528.9	1,442.5	n/a	90	0
6/30/2020	n/a	1,354.0	1,403.7	1,701.0	n/a	100	25
6/30/2021	n/a	1,690.3	1,766.3	2,072.6	n/a	100	22
6/30/2022	n/a	1,832.1	1,936.6	2,401.1	n/a	100	29
6/30/2023	n/a	1,836.8	2,072.8	2,789.0	n/a	100	46
6/30/2024	n/a	1,865.9	2,169.8	3,246.2	n/a	100	64

HEALTH INSURANCE TRUST AS OF JUNE 30, 2024			
(1)	Actuarial Value of Assets Beginning of Year	$	2,788,969,835
(2)	Market Value of Assets End of Year	$	3,317,710,858
(3)	Market Value of Assets Beginning of Year	$	2,743,413,081
(4)	Cash Flow		
	a. Contributions	$	536,423,857
	b. Benefit Payments		300,298,462
	c. Administrative Expense		2,120,996
	d. Net: (4)a - (4)b - (4)c	$	234,004,399
(5)	Investment Income		
	a. Market Total: (2) - (3) - (4)d	$	340,293,378
	b. Assumed Rate		7.10%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]		203,089,485
	d. Amount for Phased-In Recognition: 5(a) - 5(c)	$	137,203,893
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	27,440,779
	b. First Prior Year		14,746,739
	c. Second Prior Year		(77,903,191)
	d. Third Prior Year		73,328,318
	e. Fourth Prior Year		(17,490,774)
	f. Total Recognized Investment Gain/(Loss)	$	20,121,871
(7)	Actuarial Value of Assets End of Year (1) + (4)d + (5)c + (6)f	$	3,246,185,590
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	71,525,268
(9)	Rate of Return on Actuarial Value:		7.68%

LIFE INSURANCE TRUST AS OF JUNE 30, 2024			
(1)	Actuarial Value of Assets Beginning of Year	$	99,026,964
(2)	Market Value of Assets End of Year	$	101,559,122
(3)	Market Value of Assets Beginning of Year	$	94,029,915
(4)	Cash Flow		
	a. Contributions	$	3,356,772
	b. Benefit Payments		6,106,000
	c. Administrative Expense		36,650
	d. Net: (4)a - (4)b - (4)c	$	(2,785,878)
(5)	Investment Income		
	a. Market Total: (2) - (3) - (4)d	$	10,315,085
	b. Assumed Rate		7.10%
	c. Amount for Immediate Recognition:		
	[(3) x (5)b] + [(4)d x (5)b x 0.5]		6,577,225
	d. Amount for Phased-In Recognition: 5(a) - 5(c)	$	3,737,860
(6)	Phased-In Recognition of Investment Income		
	a. Current Year: 0.20 x (5)d	$	747,572
	b. First Prior Year		503,029
	c. Second Prior Year		(4,617,322)
	d. Third Prior Year		3,534,632
	e. Fourth Prior Year		(226,460)
	f. Total Recognized Investment Gain/(Loss)	$	(58,549)
(7)	Actuarial Value of Assets End of Year		
	(1) + (4)d + (5)c + (6)f	$	102,759,762
(8)	Difference Between Market & Actuarial Values: (2) - (7)	$	(1,200,640)
(9)	Rate of Return on Actuarial Value:		6.68%

HEALTH INSURANCE TRUST SUMMARY OF RECEIPTS AND DISBURSEMENTS (Market Value)	For the Year Ending	
	June 30, 2024	June 30, 2023
Receipts for the Year		
Contributions		
Members Statutory	$ 155,327,151	$ 149,209,656
Payment by Retired Members	62,939,581	63,329,256
Total Members	$ 218,266,732	$ 212,538,912
State Statutory Contributions	$ 26,039,273	$ 24,370,180
Employer Contributions	127,901,507	123,487,533
State's Shared Responsibility	70,379,396	60,958,105
Total Employer	$ 224,320,176	$ 208,815,818
Grand Total	$ 442,586,908	$ 421,354,730
Recovery Income	156,776,530	145,358,918
Net Investment Income	340,293,378	243,052,241
TOTAL RECEIPTS	$ 939,656,816	$ 809,765,889
Disbursements for the Year		
Administrative Expense	$ 2,120,996	$ 1,974,318
Medical Insurance Expense	363,238,043	333,554,179
TOTAL DISBURSEMENTS	$ 365,359,039	$ 335,528,497
Excess of Receipts over Disbursements	$ 574,297,777	$ 474,237,392
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 2,743,413,081	$ 2,269,175,689
Excess of Receipts over Disbursements	574,297,777	474,237,392
Asset Balance as of the End of the Year	$ 3,317,710,858	$ 2,743,413,081
Investment Rate of Return on Market Value	12.37%	11.52%

LIFE INSURANCE TRUST SUMMARY OF RECEIPTS AND DISBURSEMENTS (Market Value)		
	For the Year Ending	
	June 30, 2024	June 30, 2023
Receipts for the Year		
Contributions		
Members	$ 0	$ 0
State	2,777,522	2,599,486
Employer	579,250	624,074
Total	$ 3,356,772	$ 3,223,560
Net Investment Income	10,315,085	8,682,485
TOTAL RECEIPTS	$ 13,671,857	$ 11,906,045
Disbursements for the Year		
Benefit Payments	$ 6,106,000	$ 6,219,000
Miscellaneous, including expenses	36,650	37,633
TOTAL DISBURSEMENTS	$ 6,142,650	$ 6,256,633
Excess of Receipts over Disbursements	$ 7,529,207	$ 5,649,412
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 94,029,915	$ 88,380,503
Excess of Receipts over Disbursements	7,529,207	5,649,412
Asset Balance as of the End of the Year	$ 101,559,122	$ 94,029,915
Investment Rate of Return on Market Value	11.18%	9.63%

The rates of retirement, disability, mortality, termination, salary increases, and rates of future benefit participation used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2020, submitted to, and adopted by the Board on September 20, 2021. The health care cost trend rates and expected plan costs were determined by the actuary based on recent experience.

VALUATION DATE: June 30, 2024

DISCOUNT RATE: 7.10% per annum, compounded annually for the Health Insurance Trust
7.10% per annum, compounded annually for the Life Insurance Trust

HEALTH CARE COST TREND RATES: Following is a chart detailing health care trend assumptions.

Fiscal Year Ended	Medicare Part B	Medical
2025	3.39%	7.00%
2026	6.02	6.75
2027	7.71	6.50
2028	5.98	6.25
2029	6.47	6.00
2030	6.05	5.75
2031	6.63	5.50
2032	7.01	5.25
2033	5.98	5.00
2034	4.87	4.75
2035	4.62	4.50
2036 and Beyond	4.50	4.50

EXPECTED ANNUAL CLAIMS: For retirees ages 65 and older, per capita costs are adjusted to reflect expected cost changes related to age. The relative value factors used were developed from the Society of Actuaries' June 2013 research report Health Care Costs—From Birth to Death by Dale Yamamoto and from the ASOP 6 practice note developed by the American Academy of Actuaries. Representative values of the expected annual claims based on a blended 2025 MEHP rate of $210 per month, or $2,520 per year, are as follows:

Age	Male	Female
65	$1,713	$1,632
70	2,082	2,007
75	2,472	2,343
80	2,870	2,699
85	3,233	3,046
90	3,550	3,308

For the retiree health care liabilities of those under age 65, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the health care trend assumption. No implicit rate subsidy is calculated or recognized, as the implicit rate subsidy is deemed the responsibility of the KEHP. Under Actuarial Standard of Practice No. 6 (ASOP No. 6), aging subsidies (or implicit rate subsidies) should be recognized, as the differences in health care utilization and cost due to age have been demonstrated and well quantified.

The impact of aging on a valuation's results can be as significant as the use of mortality, trend, and discounting. It has been the long-standing position that the responsibility for costs that relate to KEHP implicit subsidies rests with KEHP, not the system, as the system has no operational authority over KEHP. As such, KEHP implicit subsidies are excluded from the OPEB funding valuation process of the Retiree Medical Plan. However, GASB 74 and 75 prohibit such a deviation from ASOP No. 6 and therefore the KEHP implicit subsidies will be valued and will increase the actuarial accrued liability for GASB 74 and 75 purposes. The information required under Governmental Accounting Standards Board (GASB) Statements No. 74 and 75 will be issued in separate reports.

RETIREE MEDICAL PLAN COSTS: Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following are charts detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that the system pays as the full contribution amount. An additional $8.00 per month is paid to the Department of Employee Insurance (DEI) and is not included in the under age 65 costs listed below.

	Monthly Under Age 65 KEHP Full Costs as of January 1, 2025			
Tier Elected	LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell HD
Single	$930.76	$949.04	$901.04	$835.42
Parent Plus	$1,269.28	$1,320.40	$1,234.80	$1,144.86
Couple	$1,866.24	$1,981.62	$1,863.04	$1,727.36
Family	$2,078.08	$2,185.78	$2,069.88	$1,919.14
Family C-R*	$1,068.66	$1,126.28	$1,057.40	$980.38

** Family Cross-Reference is not an available payment option if hired on January 1, 2025 or after.*

RETIREE MEDICAL PLAN CONTRIBUTION: The portion of the medical plan premiums paid by participants is composed of a Plan Option Cost, a Time-Specific Adjustment Cost and a Shared Responsibility Cost. Retirees under the age of 65 who do not complete their LivingWell Promise will be charged an additional $40 per month above the Plan Option Cost detailed below. An additional contribution is required to be paid by retirees under the age of 65 who use tobacco ($40 for Single or Family Cross-Reference, and $80 for Parent Plus, Couple or Family).

	Monthly Under Age 65 KEHP Plan Option Costs as of January 1, 2025			
Tier Elected	LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell HD
Single	$53.46	$89.14	$28.34	$20.88
Parent Plus	$137.06	$254.10	$67.52	$56.10
Couple	$339.34	$571.76	$281.42	$250.46
Family	$398.92	$716.64	$337.68	$301.30
Family C-R*	$86.90	$170.48	$31.50	$29.20
Spouse – Single	$938.76	$957.04	$909.04	$843.42
Spouse – Parent Plus	$1,277.28	$1,328.40	$1,242.80	$1,152.86

** Per employee/retiree. Family Cross-Reference is not an available payment option if hired on January 1, 2025 or after.*

TIME-SPECIFIC ADJUSTMENT PLUS SHARED RESPONSIBILITY COST: The chart below and on the page following are the Time-Specific Adjustment costs paid by Retirees in addition to the Plan Option Costs shown prior.

Abbreviations for Time-Specific Adjustment Charts:
LW CDHP = LivingWell CDHP
LW PPO = LivingWell PPO
LW Basic = LivingWell Basic CDHP
LW HD = LivingWell HD

Time-Specific Adjustment for Retirees Employed Before July 1, 2002 as of January 1, 2025						
Plan	Years of Service	Single	Parent Plus	Couple	Family	Family C-R*
LW CDHP	5 – 9.99	$704.22	$959.14	$1,353.82	$1,506.08	$808.68
	10 – 14.99	531.15	786.07	1,180.75	1,333.01	635.61
	15 – 19.99	358.07	612.99	1,007.67	1,159.93	462.53
	20 or More	185.00	439.92	834.60	986.86	289.46
LW PPO	5 – 9.99	$691.17	$893.22	$1,236.78	$1,296.06	$782.72
	10 – 14.99	522.45	720.15	1,063.71	1,122.99	609.65
	15 – 19.99	353.72	547.07	890.63	949.91	436.57
	20 or More	185.00	374.00	717.56	776.84	263.50
LW Basic	5 – 9.99	$700.77	$994.20	$1,408.54	$1,559.12	$852.82
	10 – 14.99	528.85	821.13	1,235.47	1,386.05	679.75
	15 – 19.99	356.92	648.05	1,062.39	1,212.97	506.67
	20 or More	185.00	474.98	889.32	1,039.90	333.60
LW HD	5 – 9.99	$657.15	$915.68	$1,303.82	$1,444.76	$778.10
	10 – 14.99	499.77	742.61	1,130.75	1,271.69	605.03
	15 – 19.99	342.38	569.53	957.67	1,098.61	431.95
	20 or More	185.00	396.46	784.60	925.54	258.88

** Family Cross-Reference is not an available payment option if hired on January 1, 2025 or after.*

Time-Specific Adjustment for Retirees Employed On/After July 1, 2002 as of January 1, 2025						
Plan	Years of Service	Single	Parent Plus	Couple	Family	Family C-R*
LW CDHP	5 – 9.99	$808.07	$1,062.99	$1,457.67	$1,609.93	$912.53
	10 – 14.99	704.22	959.14	1,353.82	1,506.08	808.68
	15 – 19.99	565.76	820.68	1,215.36	1,367.62	670.22
	20 – 24.99	427.30	682.22	1,076.90	1,229.16	531.76
	25 – 25.99	254.23	509.15	903.83	1,056.09	358.69
	26 – 26.99	219.61	474.53	869.21	1,021.47	324.07
	27 or More	185.00	439.92	834.60	986.86	289.46
LW PPO	5 – 9.99	$792.41	$997.07	$1,340.63	$1,399.91	$886.57
	10 – 14.99	691.17	893.22	1,236.78	1,296.06	782.72
	15 – 19.99	556.19	754.76	1,098.32	1,157.60	644.26
	20 – 24.99	421.21	616.30	959.86	1,019.14	505.80
	25 – 25.99	252.49	443.23	786.79	846.07	332.73
	26 – 26.99	218.74	408.61	752.17	811.45	298.11
	27 or More	185.00	374.00	717.56	776.84	263.50
LW Basic	5 – 9.99	$803.93	$1,098.05	$1,512.39	$1,662.97	$956.67
	10 – 14.99	700.77	994.20	1,408.54	1,559.12	852.82
	15 – 19.99	563.23	855.74	1,270.08	1,420.66	714.36
	20 – 24.99	425.69	717.28	1,131.62	1,282.20	575.90
	25 – 25.99	253.77	544.21	958.55	1,109.13	402.83
	26 – 26.99	219.38	509.59	923.93	1,074.51	368.21
	27 or More	185.00	474.98	889.32	1,039.90	333.60
LW HD	5 – 9.99	$751.59	$1,019.53	$1,407.67	$1,548.61	$881.95
	10 – 14.99	657.15	915.68	1,303.82	1,444.76	778.10
	15 – 19.99	531.25	777.22	1,165.36	1,306.30	639.64
	20 – 24.99	405.34	638.76	1,026.90	1,167.84	501.18
	25 – 25.99	247.95	465.69	853.83	994.77	328.11
	26 – 26.99	216.48	431.07	819.21	960.15	293.49
	27 or More	185.00	396.46	784.60	925.54	258.88

** Family Cross-Reference is not an available payment option if hired on January 1, 2025 or after.*

CURRENT RETIREE MEDICAL PLAN PARTICIPATION: Actual census data and current plan elections (including waivers) provided by the system were used for those retirees currently participating in the Retiree Medical Plan. Current participants are assumed to maintain their current Retiree Medical Plan coverage until they are no longer eligible.

ANTICIPATED RETIREE MEDICAL PLAN PARTICIPATION: The assumed annual rates of health care plan participation for future retirees are as follows:

Years of Service	Member Participation		
	TRS 1	TRS 2	TRS 3 & TRS 4
5 – 9.99	20%	20%	Not Eligible
10 – 14.99	40	20	Not Eligible
15 – 19.99	70	40	40%
20 – 24.99	90	50	50
25 – 25.99	90	80	80
26 – 26.99	90	85	85
27 or More	90	90	90

ANTICIPATED RETIREE MEDICAL PLAN ELECTIONS: The assumed rates of plan election for future retirees participating in the KEHP plans are provided in the following table. As the assumed plan election rates are estimates and actual results may be materially different, this assumption will need to be revised as experience evolves.

LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell HD
58%	39%	3%	0%

SPOUSE COVERAGE IN RETIREE MEDICAL PLAN: Actual census data and current plan elections were used for MEHP and KEHP covered spouses (including beneficiaries) of current retirees. For spouses of future retirees, 30% of future male retirees are assumed to cover their spouse and 25% of future female retirees are assumed to cover their spouse. Male retirees are assumed to be three years older than their spouse and female retirees are assumed to be one year younger than their spouse.

DISABLED DEPENDENT CHILDREN IN RETIREE MEDICAL PLAN: The liability associated with disabled dependent children was determined to be de minimis and was therefore excluded from this valuation.

WITHDRAWAL ASSUMPTION: Future vested members who terminate employment prior to retirement are assumed to elect to withdraw their contributions based upon their age and service at termination of employment as follows:

Rates of Withdrawal Upon Termination of Employment			
Age at Termination of Employment	Years of Service		
	5 - 9	10 - 14	15+
Under Age 55	20%	15%	10%
Ages 55+	10%	10%	10%

All vested members who terminate employment prior to retirement are assumed to elect to withdraw their contributions prior to receiving a pension benefit based upon their service as follows:

Rates of Withdrawal Prior to Receiving a Pension Benefit			
Years of Service			
5 - 9	10 - 14	15 - 26	27+
25%	15%	10%	25%

All vested members who terminate employment prior to retirement and who are assumed to elect to receive a pension benefit are assumed to begin receiving their benefit at age 60.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include wage inflation at 2.75% per annum:

Service	Annual Rate
1	7.50%
2	5.50%
3	5.00%
4	5.00%
5	5.00%
6	4.75%
7	4.50%
8	4.25%
9	4.00%
10	4.00%
11	4.00%
12	3.75%
13	3.50%
14	3.50%
15	3.25%
16	3.25%
>=17	3.00%

PAYROLL GROWTH: 2.75% per annum, compounded annually.

PRICE INFLATION: 2.50% per annum, compounded annually.

FEDERAL LEGISLATION: The impacts of the Affordable Care Act (ACA) and the Inflation Reduction Act (IRA) were addressed in this valuation. Review of the information currently available did not identify any specific provisions of the legislation that are anticipated to directly impact results at this time other than plan design features and fees currently mandated by the ACA and incorporated in the plan designs, which are included in the current baseline claims costs, and the anticipation of potential changes to Medicare due to the IRA, which are included in our trend assumption and considered in our sensitivity analysis section in Schedule G. Continued monitoring of the impact on the Plan's liability due to this and other legislation, if applicable, will be required.

COVID-19: The impact of the COVID-19 pandemic was considered in this valuation; however, no changes were incorporated at this time due to the level of uncertainty regarding the impact on both plan costs and contribution levels going forward. Given the uncertainty regarding COVID- 19 (e.g., the impact of routine care being deferred, direct COVID-19 treatment and prevention costs, changes in contribution and budget projections), continued monitoring of the impact on the Plan's liability will be required.

ASSET VALUATION METHOD: Five-year market related actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the ultimate assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The ultimate assumed valuation rate of return is assumed to be 7.10% for the Health Insurance Trust and 7.10% for the Life Insurance Trust.

ACTUARIAL COST METHOD: The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future, of each active member's expected benefit at retirement or death is determined, based on his/her age, service, and gender. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his/her terminating with a service, disability or survivor's benefit. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and deferred vested members to obtain the present value of all expected benefits payable from the system on account of the present group of members and beneficiaries.

The employer contributions required to support the benefits of the system are determined following a level funding approach and consist of a normal contribution and an accrued liability contribution.

The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his/her anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his/her behalf.

The unfunded actuarial accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the system.

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

Age	Annual Rates for Males				
			Withdrawal		
			Years of Service		
	Death*	Disability	0 – 4	5 – 9	10+
20	0.030%	0.01%	20.00%		
25	0.017	0.01	11.00	3.25%	
30	0.024	0.01	10.00	3.60	2.80%
35	0.032	0.02	11.00	3.60	1.55
40	0.046	0.07	12.50	4.00	1.25
45	0.074	0.18	11.50	4.00	1.10
50	0.122	0.28	14.25	4.50	1.10
55	0.187	0.40	15.00	6.00	1.25
60	0.291	0.50	15.00	0.00	0.00
62	0.354	0.50	15.00	0.00	0.00
65	0.481	0.50	20.00	0.00	0.00
70	0.774	0.50	20.00	0.00	0.00
75	1.234	0.50	20.00	0.00	0.00

* *Base Rates*

Age	Annual Rates for Females				
			Withdrawal		
			Years of Service		
	Death*	Disability	0 – 4	5 – 9	10+
20	0.013%	0.01%	13.00%		
25	0.009	0.01	9.00	4.50%	
30	0.011	0.02	11.00	4.25	1.00%
35	0.017	0.06	11.00	3.50	1.60
40	0.026	0.10	12.50	4.00	1.20
45	0.040	0.24	13.50	4.00	1.00
50	0.062	0.38	15.00	4.50	1.25
55	0.090	0.50	15.00	5.00	1.60
60	0.132	0.60	17.50	0.00	0.00
62	0.158	0.62	17.50	0.00	0.00
65	0.213	0.65	25.00	0.00	0.00
70	0.372	0.65	25.00	0.00	0.00
75	0.696	0.65	25.00	0.00	0.00

* *Base Rates*

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of retirement are as follows:

TRS 1, TRS 2 & TRS 3 Members				
	Annual Rates for Males		Annual Rates for Females	
Age	Before 27 Years of Service	After 27 Years of Service*	Before 27 Years of Service	After 27 Years of Service**
45		17.0%		17.0%
50		25.0		20.0
55	5.25%	40.0	5.0%	50.0
60	13.50	33.0	15.0	40.0
62	15.00	30.0	15.0	40.0
65	20.00	30.0	25.0	40.0
70	25.00	30.0	30.0	35.0
75	100.00	100.0	100.0	100.0

** Plus 8.5% in year when first eligible for unreduced retirement with 27 years of service*
*** Plus 10.0% in year when first eligible for unreduced retirement with 27 years of service*

TRS 4 Members						
	Annual Rates for Males			Annual Rates for Females		
Age	Before 20 Years of Service	20-29 Years of Service	30 or More Years of Service*	Before 20 Years of Service	20-29 Years of Service	30 or More Years of Service*
57	3.0%	5.0%	25.0%	3.0%	5.0%	30.0%
60	8.5	13.5	25.0	10.0	15.0	30.0
62	12.0	15.0	25.0	12.0	15.0	30.0
65	20.0	20.0	25.0	25.0	25.0	30.0
70	25.0	25.0	25.0	30.0	30.0	30.0
75	100.0	100.0	100.0	100.0	100.0	100.0

** Plus 20.0% in the first year attaining 30 years of service; plus 25% at age 65 in the first year attaining 30 years of service*

DEATHS AFTER RETIREMENT:

Mortality Assumption: Mortality rates were based on the Pub2010 (Teachers Benefit-Weighted) Mortality table, projected generationally based on Projection Scale MP-2020, with various set-forwards, set-backs, and adjustments for each of the groups. Below is a summary of the specific mortality tables and adjustments for each of the groups:

Group	Membership Table	Set Forward (+)/ Setback (-)	Adjustment to Rates	Projection Scale
Service Retirees	Teachers Benefit-Weighted	Male: +2 Female: +2	Male: 102%, Female: 98%	75% of MP-2020
Contingent Annuitants	Teachers Benefit-Weighted	Male: +2 Female: None	Male: 101%, Female: 100%	75% of MP-2020
Disabled Retirees	Teachers Benefit-Weighted	Male: +1 Female: -2	Male: 96%, Female: 94%	75% of MP-2020
Actives	Teachers Benefit-Weighted	Male: +1 Female: -2	Male: 100%, Female: 98%	75% of MP-2020

Representative values of the assumed annual rates of death after service retirement, disability retirement, and survivors of deceased members are shown below:

	Annual Base Rates of Death For					
	Service Retirees		Contingent Annuitants		Disability Retirees	
Age	Male	Female	Male	Female	Male	Female
45	0.0836%	0.0568%	0.6020%	0.2620%	1.0646%	0.7755%
50	0.1357	0.0843	0.7545	0.3200	1.6435	1.1910
55	0.2744	0.2215	0.8959	0.4460	2.1130	1.5416
60	0.4427	0.3322	1.1413	0.6220	2.4806	1.7616
65	0.7579	0.5351	1.6443	0.8990	3.0653	1.9834
70	1.4066	0.9682	2.5876	1.3530	3.9485	2.4149
75	2.6816	1.8649	4.1006	2.1510	5.3155	3.2562
80	5.0500	3.5819	6.5630	3.5730	7.6118	4.7705
85	9.4585	6.8071	10.7717	6.3160	11.2109	7.3423
90	16.9116	12.6077	17.7306	11.3290	16.9738	11.1653
95	26.9423	21.5110	26.8670	18.5900	24.2170	15.7356

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, 2024. The following summary describes the main benefit and contribution provisions of the system as interpreted for the valuation.

ELIGIBILITY FOR ACCESS TO RETIREE MEDICAL PLAN COVERAGE:

Service Retirement:

TRS 1 and TRS 2 Members	Completion of 27 years of service, or Attainment of age 55 and 5 years of service
TRS 3 Members	Completion of 27 years of service, or Attainment of age 55 and 10 years of service, or Attainment of age 60 and 5 years of service
TRS 4 Members	Attainment of age 57 and 10 years of service, or Attainment of age 65 and 5 years of service

For employees hired prior to July 1, 2008, Retiree Medical Plan coverage eligibility is attained when an employee retires, as described above. All other employees must be eligible to retire and additionally have completed a minimum of 15 years of service to be eligible for Retiree Medical Plan coverage.

Disability Retirement: Disabled employees hired prior to July 1, 2008 with at least 5 years of service, who are totally and permanently incapable of being employed as a teacher, are eligible for Retiree Medical Plan coverage upon approval for TRS disability retirement benefits. Disabled employees hired after July 1, 2008 must have 15 years of service to be eligible for Retiree Medical Plan coverage upon approval for TRS disability retirement benefits.

Members and dependents under age 65 and eligible for Medicare due to a disability after January 1, 2013 are only eligible to enroll in the MEHP. Under age 65 members who retired prior to January 1, 2013, are grandfathered from this requirement and allowed a choice of KEHP or MEHP coverage. Actual census data and current plan elections were used for current disabled retirees. All future disabled members under the age of 65 with Medicare are placed on the MEHP and not the KEHP. This has been consistently applied since 2013.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage if elected within 30 days of the employee's/retiree's death with no future remarriage. Otherwise, survivor is not eligible for Retiree Medical Plan coverage.

Spousal Shared Risk Waiver for MEHP: Beginning in 2013, eligible spouses who waive the MEHP coverage will no longer have the opportunity to enroll during any annual MEHP open enrollment, so most spousal waivers on the MEHP are now permanent waivers unless a TRS specific qualifying event is met. This does not apply to the KEHP. This MEHP eligibility rule became necessary to mitigate spousal adverse selection with zero premium Medicare Advantage plans on the individual and open market.

Termination: For employees hired prior to July 1, 2008 and who terminated with at least 5 years of service, Retiree Medical Plan coverage is assumed to begin at age 60. For employees hired on or after July 1, 2008 and who terminated with at least 15 years of service, Retiree Medical Plan coverage is assumed to begin at age 60.

Reemployed Retirees: Effective January 1, 2019 and because of the Affordable Care Act (ACA) and Medicare secondary payer (MSP) federal rules, if a TRS retiree returns to work and is offered the same health insurance coverage as any full time employee (whether the KEHP, MEHP, or another plan), then the member must waive coverage through TRS. For valuation purposes, active employees identified as currently receiving retiree health care through the system are valued as retirees. Retirees making active contributions into a second account do not qualify for insurance on that second account.

COVERED MEMBER RETIREE MEDICAL PLAN CONTRIBUTIONS:

Under Age 65 Retiree Shared Responsibility Contribution: Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the system to retirees, by adjusting the Shared Responsibility Contribution amount by 100% less the appropriate percentage from the Retiree Percentage Contribution table below. Effective July 1, 2012, the full Shared Responsibility Contribution equals the Standard Medicare Part B premium paid by retirees ages 65 and older.

Monthly Under Age 65 Shared Responsibility Contribution Timeline			
Effective Date	Medicare Part B Monthly Cost	Formula	Shared Responsibility Contribution
July 1, 2010	$110.50	(1/3 x $110.50)	$ 37.00
January 1, 2011	115.40	(1/3 x 115.40)	39.00
July 1, 2011	115.40	(2/3 x 115.40)	77.00
January 1, 2012	99.90	(2/3 x 99.90)	66.00
July 1, 2012	99.90	99.90	99.90
January 1, 2013	104.90	104.90	104.90
January 1, 2014	104.90	104.90	104.90
January 1, 2015	104.90	104.90	104.90
January 1, 2016	121.80	121.80	121.80
January 1, 2017	134.00	134.00	134.00
January 1, 2018	134.00	134.00	134.00
January 1, 2019	135.50	135.50	135.50
January 1, 2020	144.60	144.60	144.60
January 1, 2021	148.50	148.50	148.50
January 1, 2022	170.10	170.10	170.10
January 1, 2023	164.90	164.90	164.90
January 1, 2024	174.70	174.70	174.70
January 1, 2025	185.00	185.00	185.00

Retiree Years of Service Percentage Contribution: Retirees contribute the following percentages based on years of service at retirement, which are then applied to the Retiree Contribution Rate Basis:

Retiree Percentage Contribution*				
	TRS 1			
Years of Service	Age 65 or Older and Covered Before 1/1/2005	Age 65 After or Covered After 12/31/2004	TRS 2	TRS 3 & TRS 4
5 – 9.99	30%	75%	90%	Not Eligible
10 – 14.99	20	50	75	Not Eligible
15 – 19.99	10	25	55	55%
20 – 24.99	0	0	35	35
25 – 25.99	0	0	10	10
26 – 26.99	0	0	5	5
27 or more	0	0	0	0

** 0% for disabled retirees that retired prior to 1/1/2002*

COVERED MEMBER RETIREE MEDICAL PLAN CONTRIBUTIONS (CONTINUED):

For January 1, 2025, the TRS Board of Trustees approved a single contribution amount of up to $877.30 as well as an additional $8.00 per month paid to the Department of Employee Insurance (DEI) for participants on the Kentucky Employees' Health Plan (KEHP). TRS will contribute this amount towards insurance costs, less the Shared Responsibility cost of $185.00. Under-65 retirees who are not Medicare eligible and continue on the KEHP are responsible for the remaining costs left from the total premium costs. The total premium costs are shown below.

Monthly Full Costs Effective January 1, 2025					
	Under Age 65 (KEHP)*				
Tier Elected	LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell HD	Ages 65 and Older (MEHP)
Single	$930.76	$949.04	$901.04	$835.42	$210.00
Parent Plus	1,269.28	1,320.40	1,234.80	1,144.86	n/a
Couple	1,866.24	1,981.62	1,863.04	1,727.36	n/a
Family	2,078.08	2,185.78	2,069.88	1,919.14	n/a
Family C-R**	1,068.66	1,126.28	1,057.40	980.38	n/a

** Does not include the additional contribution required to be paid by retirees under the age of 65 who use tobacco ($40 for Single or Family Cross-Reference, and $80 for Parent Plus, Couple or Family). Also, this does not include the additional contribution required to be paid by retirees under the age of 65 who do not complete their LivingWell Promise, which is an additional $40 per month for all levels of coverage—single, parent +, couple, and family. For valuation purposes, it is conservatively assumed that, over time, 100% of KEHP retirees will complete their LivingWell Promise. This assumption will be monitored in future experience studies.*
*** Family Cross-Reference is not an available payment option if hired on January 1, 2025 or after.*

Spouse Contributions: 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Neither the State nor TRS will pay any subsidy for family style coverage.

Survivors: Spouses of employees who die in service while eligible to retire, as well as survivors of service and disabled retirees, are eligible for Retiree Medical Plan coverage if elected within 30 days of the employee's/retiree's death with no future remarriage. Otherwise, the survivor is not eligible for Retiree Medical Plan coverage.

Spousal Shared Risk Waiver for MEHP: Beginning in 2013, eligible spouses who waive the MEHP coverage will no longer have the opportunity to enroll during any annual MEHP open enrollment, so most spousal waivers on the MEHP are now permanent waivers unless a TRS specific qualifying event is met. This does not apply to the KEHP. This MEHP eligibility rule became necessary to mitigate spousal adverse selection with zero premium Medicare Advantage plans on the individual and open market.

Monthly Surviving Spouse Contribution Effective January 1, 2025					
Tier Elected by Surviving Spouse	Under Age 65 (KEHP)				Ages 65 and Older (MEHP)
	LivingWell CDHP	LivingWell PPO	LivingWell Basic CDHP	LivingWell HD	
Single	$938.76	$957.04	$909.04	$843.42	$210.00
Parent Plus	1,277.28	1,328.40	1,242.80	1,152.86	n/a

SYSTEM RETIREE MEDICAL PLAN CONTRIBUTIONS:

The System Contribution Rate Basis is determined annually by the system, and the full cost is projected based on historical claims data. For retirees, the following percentages are based on years of service at retirement and are then applied to the System Contribution Rate Basis:

Percentage of System Contribution Rate Provided to Retirees*				
	TRS 1			
Years of Service	Age 65 or Older and Covered Before 1/1/2005	Age 65 After or Covered After 12/31/2004	TRS 2	TRS 3 & TRS 4
5 – 9.99	70%	25%	10%	Not Eligible
10 – 14.99	80	50	25	Not Eligible
15 – 19.99	90	75	45	45%
20 – 24.99	100	100	65	65
25 – 25.99	100	100	90	90
26 – 26.99	100	100	95	95
27 or more	100	100	100	100

** 100% for disabled retirees that retired prior to 1/1/2002*

ACTIVE MEMBER RETIREE MEDICAL PLAN CONTRIBUTIONS:

Actively employed members make payroll contributions to the Health Insurance Trust based upon the following schedule:

Active Member Percentage of Payroll Contribution Made to Health Insurance Trust								
University Employees			School District Employees (Non-Federal)			Other Employees		
TRS 1 & TRS 2	TRS 3	TRS 4	TRS 1 & TRS 2	TRS 3	TRS 4	TRS 1 & TRS 2	TRS 3	TRS 4
2.775	2.775	2.775	3.750	3.750	3.750	3.750	3.750	3.750

LIFE INSURANCE PLAN BENEFITS:

(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its members who are retired for service or disability if hired prior to January 1, 2022. Provide a life insurance benefit in a minimum amount of ten thousand dollars ($10,000) for its members who are retired for service or disability if hired on or after January 1, 2022. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars ($2,000) for its active contributing members if hired prior to January 1, 2022. Provide a life insurance benefit in a minimum amount of five thousand dollars ($5,000) for its active contributing members if hired on or after January 1, 2022. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Members employed on a substitute or part-time basis and working at least 69% of a full contract year in a single fiscal year will be eligible for a life insurance benefit for the balance of the fiscal year or the immediately succeeding fiscal year under certain conditions. For non-vested members employed on a substitute or part-time basis, the life insurance benefit is provided if death occurs as the result of a physical injury on the job. For vested members employed on a substitute or part-time basis, death does not have to be the result of a physical injury on the job for life insurance benefits to be provided.

TABLE 1 DISTRIBUTION OF ACTIVE MEMBERS BY ATTAINED AGE AND SERVICE GROUPS AS OF JUNE 30, 2024												
	Completed Years of Service										Total	
Age	Less Than 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 26	27 to 29	30 to 34	35 & Over	No.	Payroll
Under 25	2,437	2,147	7								4,591	$ 109,240,905
25 to 29	927	4,801	2,108	1							7,837	348,749,181
30 to 34	622	2,024	4,049	1,407	1						8,103	423,693,514
35 to 39	616	1,546	1,984	3,903	1,446						9,495	562,239,697
40 to 44	623	1,449	1,583	1,981	4,233	1,491	6	1			11,367	738,849,100
45 to 49	445	982	1,104	1,248	1,951	3,976	1,018	134	3	0	10,861	772,334,410
50 to 54	625	970	782	960	1,403	1,929	1,336	1,576	393	1	9,975	701,722,041
55 to 59	855	1,064	470	493	831	1,029	515	431	352	45	6,085	365,083,982
60 to 64	715	1,034	368	322	390	469	185	173	119	56	3,831	182,154,030
65 to 69	524	783	240	115	99	132	56	63	68	35	2,115	66,413,089
70 & Over	464	709	267	79	59	55	16	34	28	43	1,754	37,988,096
Total	**8,853**	**17,509**	**12,962**	**10,509**	**10,413**	**9,081**	**3,132**	**2,412**	**963**	**180**	**76,014**	**$ 4,308,468,045**

Average Age: 43.8
Average Service: 11.1

Retirement Eligible: 9,864

The active counts above reflect the totals before adjusting for duplicates and return to work status.

TABLE 2 SCHEDULE OF TOTAL ACTIVE MEMBER VALUATION DATA				
Valuation Date	Number	Annual Payroll	Annual Average Payroll	Percentage Increase in Average Pay
6/30/2024	76,014	$ 4,308,468,045	$ 56,680	3.59 %
6/30/2023	75,644	4,138,908,992	54,716	1.45
6/30/2022	74,785	4,033,509,178	53,935	(1.30)
6/30/2021	69,256	3,784,400,223	54,644	7.35
6/30/2020	73,151	3,723,481,576	50,901	1.35
6/30/2019	72,647	3,648,427,710	50,221	0.58
6/30/2018	72,205	3,605,115,787	49,929	1.06
6/30/2017	72,130	3,563,584,342	49,405	0.35
6/30/2016	71,848	3,537,226,348	49,232	1.19

The active counts above reflect the totals before adjusting for duplicates and return to work status.

TABLE 3 ELIGIBLE DEFERRED VESTED MEMBERS AS OF JUNE 30, 2024 MALE AND FEMALE DEMOGRAPHIC BREAKDOWN						
Attained Age	Health Insurance Trust			Life Insurance Trust		
	Number of		Total	Number of		Total
	Male	Female	Number	Male	Female	Number
Under 30	0	0	0	26	89	115
30 - 34	14	40	54	196	726	922
35 - 39	188	544	732	378	1,181	1,559
40 - 44	399	1,253	1,652	505	1,605	2,110
45 - 49	387	1,198	1,585	480	1,514	1,994
50 - 54	387	1,419	1,806	484	1,675	2,159
55 - 59	253	1,042	1,295	304	1,217	1,521
60 & Over	276	1,009	1,285	335	1,130	1,465
Total	**1,904**	**6,505**	**8,409**	**2,708**	**9,137**	**11,845**

TABLE 4 ALL RETIREES AND SPOUSES RECEIVING HEALTH CARE BENEFITS AS OF JUNE 30, 2024 MALE AND FEMALE DEMOGRAPHIC BREAKDOWN			
Attained Age	Number of		Total Number
	Male	Female	
Under 40	0	2	2
40 - 44	3	20	23
45 - 49	22	68	90
50 - 54	320	831	1,151
55 - 59	945	2,303	3,248
60 - 64	1,581	3,660	5,241
65 - 69	2,155	5,555	7,710
70 - 74	3,334	7,660	10,994
75 - 79	3,197	6,518	9,715
80 - 84	1,856	3,479	5,335
85 - 89	830	1,679	2,509
90 - 94	279	730	1,009
95 - 99	44	206	250
100 & Over	7	38	45
Total	**14,573**	**32,749**	**47,322**

TABLE 5
SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS
ADDED TO AND REMOVED FROM ROLLS*
Health Insurance Trust

Fiscal Year Ending June 30	Number of Members Added to Rolls	Number of Spouses** Added to Rolls	Total Number Added to Rolls	Number of Members Removed from Rolls	Number of Spouses** Removed from Rolls	Total Number Removed from Rolls	Number of Members on Rolls at the End of the Year	Number of Spouses** on Rolls at the End of the Year	Total Number on Rolls at the End of the Year
2016	2,045	726	2,771	1,305	674	1,979	38,815	7,181	45,996
2017	1,835	699	2,534	1,153	691	1,844	39,497	7,189	46,686
2018	1,903	828	2,731	1,170	422	1,592	40,230	7,595	47,825
2019	1,701	666	2,367	1,220	692	1,912	40,711	7,569	48,280
2020	1,500	487	1,987	1,057	1,173	2,230	41,154	6,883	48,037
2021	1,548	448	1,996	1,527	603	2,130	41,175	6,728	47,903
2022	1,600	466	2,066	1,598	533	2,131	41,177	6,661	47,838
2023	1,619	369	1,988	1,741	475	2,216	41,055	6,555	47,610
2024	1,500	267	1,767	1,555	500	2,055	41,000	6,322	47,322

** Reflects members, spouses, and beneficiaries participating in a health care plan.*
*** Includes spouses, beneficiaries, and surviving spouses.*

TABLE 6
SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS
ADDED TO AND REMOVED FROM ROLLS*
Life Insurance Trust

Fiscal Year Ending June 30	Number Added to Rolls	Life Insurance Benefit ($1,000's)	Number Removed from Rolls	Life Insurance Benefit ($1,000's)	Number on Rolls at the End of the Year	Life Insurance Benefit ($1,000's)	Increase in Life Insurance Benefit	Average Life Insurance Benefit
2016	2,394	11,970	807	4,035	47,071	235,355	3.49 %	5,000
2017	2,175	10,875	1,021	5,105	48,225	241,125	2.45	5,000
2018	2,605	13,025	1,408	7,040	49,422	247,110	2.48	5,000
2019	2,226	11,130	210	1,050	51,438	257,190	4.08	5,000
2020	2,003	10,015	1,179	5,895	52,262	261,310	1.60	5,000
2021	1,886	9,430	2,417	12,085	51,731	258,655	(1.02)	5,000
2022	2,213	11,065	1,731	8,655	52,213	261,065	0.93	5,000
2023	2,600	13,000	1,434	7,170	53,379	266,895	2.23	5,000
2024	2,036	10,180	1,367	6,835	54,048	270,240	1.25	5,000

** Beginning with the June 30, 2021 valuation date, the counts in the exhibit above reflect all adjustments, which resulted in a larger number removed from rolls. Prior to June 30, 2021, the exhibit reflected the initial member counts.*

The June 30, 2024 valuation results of the Health Insurance Trust (health trust) are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate, the assumed rate of payroll growth, and the assumed rates of health care costs due to inflation (trend) and/or Federal legislation. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio, and the employer contribution rate under the following scenarios:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption, 7.10%, together with a decrease in the discount rate to 6.10% and an increase in the discount rate to 8.10%. Under this scenario, the underlying inflation rate assumption is held constant at 2.50% and the payroll growth assumption is held constant at 2.75%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 2.50%, together with decreases in the inflation rate to 2.25% and 2.00%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption, the assumed rates of salary increase for active members, and the ultimate health care trend.
- The wage inflation assumption sensitivity analysis shows the valuation results with the baseline underlying payroll growth assumption, 2.75%, together with decreases in the wage inflation assumption to 1.25% and 0.00% Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.
- The health care inflation (trend) assumption sensitivity analysis shows the valuation results with the baseline trend assumption along with a 1.00% increase in all assumed trend rates and a 1.00% decrease in all assumed trend rates.
- The MEHP cost sensitivity analysis shows the valuation results with the baseline costs along with cost scenarios reflecting the risk of trust income disruption if income sources beyond the control of the state and TRS – such as prescription medication rebates and subsidies – are eliminated. We illustrate the impact of potential changes due to the Inflation Reduction Act on Medicare Part D costs and/or changes to Medicare Advantage plans under Medicare Part C.

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY HEALTH INSURANCE TRUST ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS ($1,000's)	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 4,626,112	$ 4,035,741	$ 3,555,188
Actuarial Value of Assets	3,246,186	3,246,186	3,246,186
Unfunded Liability	$ 1,379,926	$ 789,555	$ 309,002
Funded Ratio	70.17%	80.44%	91.31%
Contributions			
Normal Cost	2.67%	2.01%	1.52%
Accrued Liability	2.52%	1.53%	0.64%
Total	5.19%	3.54%	2.16%
Member	(3.71%)	(3.71%)	(3.71%)
Employer	(2.99%)	(2.99%)	(2.99%)
State	(2.46%)	(2.46%)	(2.46%)
Statutorily Required Prefunding*	(3.97%)	(5.62%)	(7.00%)
Discount Rate	6.10%	7.10%	8.10%
Payroll Growth	2.75%	2.75%	2.75%
Inflation Rate	2.50%	2.50%	2.50%
Ultimate Health Care Trend	4.50%	4.50%	4.50%

** This represents funding by active members, local school districts, universities and other employers toward the unfunded liability of the health trust. See KRS 161.540(1)(c)(3) & 161.550(5).*

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY HEALTH INSURANCE TRUST INFLATION ASSUMPTION SENSITIVITY ANALYSIS ($1,000's)	Valuation Results	Decrease Inflation Rate 0.25%	Decrease Inflation Rate 0.50%
Actuarial Accrued Liability	$ 4,035,741	$ 4,119,343	$ 4,210,744
Actuarial Value of Assets	3,246,186	3,246,186	3,246,186
Unfunded Liability	$ 789,555	$ 873,157	$ 964,558
Funded Ratio	80.44%	78.80%	77.09%
Contributions			
Normal Cost	2.01%	2.06%	2.11%
Accrued Liability	1.53%	1.70%	1.88%
Total	3.54%	3.76%	3.99%
Member	(3.71%)	(3.71%)	(3.71%)
Employer	(2.99%)	(2.99%)	(2.99%)
State	(2.46%)	(2.46%)	(2.46%)
Statutorily Required Prefunding*	(5.62%)	(5.40%)	(5.17%)
Discount Rate	7.10%	6.85%	6.60%
Payroll Growth	2.75%	2.50%	2.25%
Inflation Rate	2.50%	2.25%	2.00%
Ultimate Health Care Trend	4.50%	4.25%	4.00%

** This represents funding by active members, local school districts, universities and other employers toward the unfunded liability of the health trust. See KRS 161.540(1)(c)(3) & 161.550(5).*

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY HEALTH INSURANCE TRUST WAGE INFLATION ASSUMPTION SENSITIVITY ANALYSIS ($1,000's)	Valuation Results	Decrease Wage Inflation to 1.25%	No Wage Inflation
Actuarial Accrued Liability	$ 4,035,741	$ 4,035,741	$ 4,035,741
Actuarial Value of Assets	3,246,186	3,246,186	3,246,186
Unfunded Liability	$ 789,555	$ 789,555	$ 789,555
Funded Ratio	80.44%	80.44%	80.44%
Contributions			
Normal Cost	2.01%	2.01%	2.01%
Accrued Liability	1.53%	1.69%	1.82%
Total	3.54%	3.70%	3.83%
Member	(3.71%)	(3.71%)	(3.71%)
Employer	(2.99%)	(2.99%)	(2.99%)
State	(2.46%)	(2.46%)	(2.46%)
Statutorily Required Prefunding*	(5.62%)	(5.46%)	(5.33%)
Discount Rate	7.10%	7.10%	7.10%
Payroll Growth	2.75%	1.25%	0.00%
Inflation Rate	2.50%	2.50%	2.50%
Ultimate Health Care Trend	4.50%	4.50%	4.50%

** This represents funding by active members, local school districts, universities and other employers toward the unfunded liability of the health trust. See KRS 161.540(1)(c)(3) & 161.550(5).*

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY HEALTH INSURANCE TRUST HEALTH CARE TREND ASSUMPTION SENSITIVITY ANALYSIS ($1,000's)			
	Decrease Trend Rates 1.00%	**Valuation Results**	**Increase Trend Rates 1.00%**
Actuarial Accrued Liability	$ 3,509,330	$ 4,035,741	$ 4,696,716
Actuarial Value of Assets	3,246,186	3,246,186	3,246,186
Unfunded Liability	$ 263,144	$ 789,555	$ 1,450,530
Funded Ratio	92.50%	80.44%	69.12%
Contributions			
Normal Cost	1.58%	2.01%	2.59%
Accrued Liability	0.51%	1.53%	2.82%
Total	2.09%	3.54%	5.41%
Member	(3.71%)	(3.71%)	(3.71%)
Employer	(2.99%)	(2.99%)	(2.99%)
State	(2.46%)	(2.46%)	(2.46%)
Statutorily Required Prefunding*	(7.07%)	(5.62%)	(3.75%)
Discount Rate	7.10%	7.10%	7.10%
Payroll Growth	2.75%	2.75%	2.75%
Inflation Rate	2.50%	2.50%	2.50%
Ultimate Health Care Trend	3.50%	4.50%	5.50%

** This represents funding by active members, local school districts, universities and other employers toward the unfunded liability of the health trust. See KRS 161.540(1)(c)(3) & 161.550(5).*

The 2025 monthly TRS MEHP rate of $210 includes $200 in EGWP prescription drug costs. The EGWP prescription drug costs are based on projected total drug costs minus projected reimbursements from CMS and drug manufacturers for Medicare Part D rebates, subsidies, and reinsurance. If these reimbursements were not to continue at the current rate, and if Medicare eligible medical costs were to increase significantly, it is estimated that TRS MEHP costs could increase to as much as $809. In this case, the statutory contribution rates will be less than the actuarially determined contribution rates, the unfunded actuarial accrued liability will not be paid off in the scheduled 16 year timeframe, and the health insurance fund may not reach 100% funded. To illustrate the potential impact of this risk, the chart below shows the valuation results under the baseline scenario of the monthly TRS MEHP rate of $210, the projected worst case scenario of $809 per month, and incremental steps of 25%, 50% and 75% of the way from $210 to $809.

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY
HEALTH INSURANCE TRUST
MEHP COST SENSITIVITY ANALYSIS
($1,000's)

Incremental Step Scenario	Baseline 0%	25%	50%	75%	100%
MA Rate	$210.00	$359.75	$509.50	$659.25	$809.00
Actuarial Accrued Liability	$ 4,035,741	$ 5,658,010	$ 7,280,279	$ 8,902,548	$ 10,524,817
Actuarial Value of Assets	3,246,186	3,246,186	3,246,186	3,246,186	3,246,186
Unfunded Liability	$ 789,555	$ 2,411,824	$ 4,034,093	$ 5,656,362	$ 7,278,631
Funded Ratio	80.44%	57.37%	44.59%	36.46%	30.84%
Contributions					
Normal Cost	2.01%	2.54%	3.07%	3.59%	4.12%
Accrued Liability	1.53%	4.69%	7.84%	11.00%	14.15%
Total	3.54%	7.23%	10.91%	14.59%	18.27%
Member	(3.71%)	(3.71%)	(3.71%)	(3.71%)	(3.71%)
Employer	(2.99%)	(2.99%)	(2.99%)	(2.99%)	(2.99%)
State	(2.46%)	(2.46%)	(2.46%)	(2.46%)	(2.46%)
Statutorily Required Prefunding*	(5.62%)	(1.93%)	1.75%	5.43%	9.11%
Discount Rate	7.10%	7.10%	7.10%	7.10%	7.10%
Payroll Growth	2.75%	2.75%	2.75%	2.75%	2.75%
Inflation Rate	2.50%	2.50%	2.50%	2.50%	2.50%
Ultimate Health Care Trend	4.50%	4.50%	4.50%	4.50%	4.50%

** This represents funding by active members, local school districts, universities and other employers toward the unfunded liability of the health trust. See KRS 161.540(1)(c)(3) & 161.550(5).*

The June 30, 2024 valuation results of the Life Insurance Trust (life trust) are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing cost. The charts on the following pages provide a simple analysis on how the costs are sensitive to changes to the assumed discount rate, the assumed inflation rate, and the assumed rate of payroll growth. The charts show the actuarial accrued liability, the unfunded liability, the funded ratio and the employer contribution rate under the following scenarios. Please note that we maintain a minimum total employer contribution rate of 0.08% for all scenarios except the 1% increase in the discount rate scenario:

- The discount rate assumption sensitivity analysis shows the valuation results with the baseline discount rate assumption 7.10%, together with a decrease in the discount rate to 6.10% and an increase in the discount rate to 8.10%. Under this scenario, the underlying inflation rate assumption is held constant at 2.50% and the payroll growth assumption is held constant at 2.75%.
- The inflation assumption sensitivity analysis shows the valuation results with the baseline underlying inflation rate assumption, 2.50%, together with decreases in the inflation rate to 2.25% and 2.00%. Under this scenario, the decrease in the underlying inflation rate assumption leads to corresponding decreases in the discount rate, the payroll growth assumption, and the assumed rates of salary increase for active members.
- The wage inflation assumption sensitivity analysis shows the valuation results with the baseline underlying wage inflation assumption, 2.75%, together with decreases in the wage inflation assumption to 1.25% and 0.00%. Under this scenario, all other assumptions, including the individual member salary scale, are held constant so that the only impact is in the amortization of the unfunded liability, leading to higher employer contribution rates.

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY
LIFE INSURANCE TRUST
ASSUMED DISCOUNT RATE SENSITIVITY ANALYSIS
($1,000's)

	Decrease Discount Rate	Valuation Results	Increase Discount Rate
Actuarial Accrued Liability	$ 143,083	$ 125,526	$ 111,321
Actuarial Value of Assets	102,760	102,760	102,760
Unfunded Liability	$ 40,323	$ 22,766	$ 8,561
Funded Ratio	71.82%	81.86%	92.31%
Contributions			
Normal Cost	0.03%	0.03%	0.02%
Accrued Liability	0.06%	0.05%	0.02%
Total	0.09%	0.08%	0.04%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.09%	0.08%	0.04%
Discount Rate	6.10%	7.10%	8.10%
Payroll Growth	2.75%	2.75%	2.75%
Inflation Rate	2.50%	2.50%	2.50%

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY LIFE INSURANCE TRUST INFLATION ASSUMPTION SENSITIVITY ANALYSIS ($1,000's)	Valuation Results	Decrease Inflation Rate 0.25%	Decrease Inflation Rate 0.50%
Actuarial Accrued Liability	$ 125,526	$ 129,721	$ 134,165
Actuarial Value of Assets	102,760	102,760	102,760
Unfunded Liability	$ 22,766	$ 26,961	$ 31,405
Funded Ratio	81.86%	79.22%	76.59%
Contributions*			
Normal Cost	0.03%	0.03%	0.03%
Accrued Liability	0.05%	0.05%	0.05%
Total	0.08%	0.08%	0.08%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.08%	0.08%	0.08%
Discount Rate	7.10%	6.85%	6.60%
Payroll Growth	2.75%	2.50%	2.25%
Inflation Rate	2.50%	2.25%	2.00%

** Recommended contributions actuarially determined, but not less than 0.08%*

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY
LIFE INSURANCE TRUST
WAGE INFLATION ASSUMPTION SENSITIVITY ANALYSIS
($1,000's)

	Valuation Results	Decrease Wage Inflation to 1.25%	No Wage Inflation
Actuarial Accrued Liability	$ 125,526	$ 125,526	$ 125,526
Actuarial Value of Assets	102,760	102,760	102,760
Unfunded Liability	$ 22,766	$ 22,766	$ 22,766
Funded Ratio	81.86%	81.86%	81.86%
Contributions*			
Normal Cost	0.03%	0.03%	0.03%
Accrued Liability	0.05%	0.05%	0.05%
Total	0.08%	0.08%	0.08%
Member	(0.00%)	(0.00%)	(0.00%)
Employer/State	0.08%	0.08%	0.08%
Discount Rate	7.10%	7.10%	7.10%
Payroll Growth	2.75%	1.25%	0.00%
Inflation Rate	2.50%	2.50%	2.50%

** Recommended contributions actuarially determined, but not less than 0.08%*

Schedule I – Health Trust 30-Year Baseline Projection

The results of actuarial valuations are a "snapshot" of the financial position on the valuation date, based on the assumed number of active employees and current beneficiaries. Projections simulate future actuarial valuation results over a forecast period (thirty years in this case) by "creating" future new hires and performing valuations using the projected membership. The following items are assumed for the projected results provided on the following page.

- Active Employee Growth Rate: 0.00%
- Valuation Discount Rate: 7.10%
- Investment Rate of Return: 7.10% each year
- Actuarial Value of Assets: 5-year smoothing, No Corridor
- Amortization Method: Level Percent of Payroll, Closed
- Amortization Period: 16-year period as of Valuation Date
- Future Contributions: Based on the contribution rates defined in statute

All other demographic and economic changes are assumed to occur in accordance with the actuarial assumptions used for the actuarial valuation.

Projections assume all actuarial assumptions are met and do not include any adjustment for adverse experience due to COVID-19 (either impacting claims or demographics), changes in the ACA, larger than expected increases to Medicare costs, or lower than expected investment return or payroll growth.

Baseline - MEHP rate = $210 PMPM (Dollar Amounts in $1,000's)							
Valuation Year	Contribution Fiscal Year	Non-University Payroll (1)	University Payroll (2)	Total Payroll (3)	Unfunded Accrued Liability (4)	Funded Ratio (5)	Total Contribution (Including Member Contributions) (6)
2024	2025	$4,113,218	$195,250	$4,308,468	$789,555	80.4%	$394,272
2025	2026	4,169,805	192,928	4,362,733	489,747	88.5%	406,601
2026	2027	4,228,577	193,456	4,422,033	233,779	94.8%	420,860
2027	2028	4,290,665	195,267	4,485,932	0	100.0%	91,970
2028	2029	4,357,028	198,193	4,555,221	0	100.0%	94,084
2029	2030	4,425,169	201,593	4,626,762	0	100.0%	96,351
2030	2031	4,493,153	205,384	4,698,537	0	100.0%	98,769
2031	2032	4,564,905	209,424	4,774,329	0	100.0%	101,360
2032	2033	4,640,218	213,737	4,853,955	0	100.0%	104,135
2033	2034	4,716,337	218,587	4,934,924	0	100.0%	107,046
2034	2035	4,797,477	223,365	5,020,842	0	100.0%	110,133
2035	2036	4,882,036	228,306	5,110,342	0	100.0%	113,381
2036	2037	4,972,405	234,130	5,206,535	0	100.0%	116,815
2037	2038	5,068,750	240,257	5,309,007	0	100.0%	120,462
2038	2039	5,171,141	247,030	5,418,171	0	100.0%	124,335
2039	2040	5,279,233	254,478	5,533,711	0	100.0%	128,420
2040	2041	5,393,852	262,659	5,656,511	0	100.0%	132,748
2041	2042	5,514,532	271,416	5,785,948	0	100.0%	137,302
2042	2043	5,640,821	280,527	5,921,348	0	100.0%	142,053
2043	2044	5,775,151	290,456	6,065,607	0	100.0%	147,073
2044	2045	5,915,394	301,159	6,216,553	0	100.0%	152,349
2045	2046	6,062,497	312,480	6,374,977	0	100.0%	157,892
2046	2047	6,214,259	324,232	6,538,491	0	100.0%	163,661
2047	2048	6,373,710	336,294	6,710,004	0	100.0%	169,697
2048	2049	6,541,205	348,973	6,890,178	0	100.0%	176,048
2049	2050	6,715,433	361,582	7,077,015	0	100.0%	182,679
2050	2051	6,903,335	374,642	7,277,977	0	100.0%	189,907
2051	2052	7,102,508	387,553	7,490,061	0	100.0%	197,785
2052	2053	7,311,143	400,312	7,711,455	0	100.0%	206,315
2053	2054	7,524,056	412,557	7,936,613	0	100.0%	215,387

SCHEDULE J – HEALTH TRUST 30-YEAR SENSITIVITY PROJECTION

The results of actuarial valuations are a “snapshot” of the financial position on the valuation date, based on the assumed number of active employees and current beneficiaries. Projections simulate future actuarial valuation results over a forecast period (thirty years in this case) by “creating” future new hires and performing valuations using the projected membership. The following items are assumed for the projected results provided on the following page.

- Active Employee Growth Rate: 0.00%
- Valuation Discount Rate: 7.10%
- Investment Rate of Return: 7.10% each year
- Actuarial Value of Assets: 5-year smoothing, No Corridor
- Amortization Method: Level Percent of Payroll, Closed
- Amortization Period: 16-year period as of Valuation Date
- Future Contributions: Based on the contribution rates defined in statute
- MEHP Rate: $359.75

All other demographic and economic changes are assumed to occur in accordance with the actuarial assumptions used for the actuarial valuation.

Projections assume all actuarial assumptions are met and do not include any adjustment for adverse experience due to COVID-19 (either impacting claims or demographics), changes in the ACA, larger than expected increases to MEHP premiums, or lower than expected investment return or payroll growth. The 2025 monthly TRS MEHP rate of $210 includes $200 in EGWP prescription drug costs. The EGWP prescription drug costs are based on projected total drug costs minus projected reimbursements from CMS and drug manufacturers for Medicare Part D rebates, subsidies and reinsurance. If 25% of these reimbursements were to discontinue, TRS MEHP costs could increase to as much as $359.75. In this case, the statutory contribution rates would still be more than the actuarially determined contribution rates, the unfunded actuarial accrued liability would be paid off in the scheduled 16 year timeframe, and the health insurance fund would reach 100% funded, but it would take an additional 7 years to achieve.

25% risk scenario - MEHP rate = $359.75 PMPM (Dollar Amounts in $1,000's)							
Valuation Year	Contribution Fiscal Year	Non-University Payroll (1)	University Payroll (2)	Total Payroll (3)	Unfunded Accrued Liability (4)	Funded Ratio (5)	Total Contribution (Including Member Contributions) (6)
2024	2025	$4,113,218	$195,250	$4,308,468	$2,411,824	57.4%	$394,272
2025	2026	4,169,805	192,928	4,362,733	2,251,609	62.2%	406,601
2026	2027	4,228,577	193,456	4,422,033	2,145,969	65.8%	420,860
2027	2028	4,290,665	195,267	4,485,932	1,940,502	70.5%	435,345
2028	2029	4,357,028	198,193	4,555,221	1,726,331	74.9%	451,637
2029	2030	4,425,169	201,593	4,626,762	1,512,870	79.0%	468,370
2030	2031	4,493,153	205,384	4,698,537	1,270,564	83.1%	486,540
2031	2032	4,564,905	209,424	4,774,329	996,118	87.3%	504,947
2032	2033	4,640,218	213,737	4,853,955	687,282	91.6%	522,854
2033	2034	4,716,337	218,587	4,934,924	342,421	96.0%	541,319
2034	2035	4,797,477	223,365	5,020,842	0	100.0%	143,567
2035	2036	4,882,036	228,306	5,110,342	0	100.0%	148,310
2036	2037	4,972,405	234,130	5,206,535	0	100.0%	153,328
2037	2038	5,068,750	240,257	5,309,007	0	100.0%	158,650
2038	2039	5,171,141	247,030	5,418,171	0	100.0%	164,294
2039	2040	5,279,233	254,478	5,533,711	0	100.0%	170,243
2040	2041	5,393,852	262,659	5,656,511	0	100.0%	176,541
2041	2042	5,514,532	271,416	5,785,948	0	100.0%	183,165
2042	2043	5,640,821	280,527	5,921,348	0	100.0%	190,092
2043	2044	5,775,151	290,456	6,065,607	0	100.0%	197,399
2044	2045	5,915,394	301,159	6,216,553	0	100.0%	205,077
2045	2046	6,062,497	312,480	6,374,977	0	100.0%	213,142
2046	2047	6,214,259	324,232	6,538,491	0	100.0%	221,553
2047	2048	6,373,710	336,294	6,710,004	0	100.0%	230,360
2048	2049	6,541,205	348,973	6,890,178	0	100.0%	239,615
2049	2050	6,715,433	361,582	7,077,015	0	100.0%	249,287
2050	2051	6,903,335	374,642	7,277,977	0	100.0%	259,713
2051	2052	7,102,508	387,553	7,490,061	0	100.0%	270,937
2052	2053	7,311,143	400,312	7,711,455	0	100.0%	282,954
2053	2054	7,524,056	412,557	7,936,613	0	100.0%	295,645

The results of actuarial valuations are a "snapshot" of the financial position on the valuation date, based on the assumed number of active employees and current beneficiaries. Projections simulate future actuarial valuation results over a forecast period (thirty years in this case) by "creating" future new hires and performing valuations using the projected membership. The following items are assumed for the projected results provided on the following page.

- Active Employee Growth Rate: 0.00%
- Valuation Discount Rate: 7.10%
- Investment Rate of Return: 7.10% each year
- Actuarial Value of Assets: 5-year smoothing, No Corridor
- Amortization Method: Level Percent of Payroll, Closed
- Amortization Period: 16-year period as of Valuation Date
- Future Contributions: Based on the contribution rates defined in statute
- MEHP Rate: $509.50

All other demographic and economic changes are assumed to occur in accordance with the actuarial assumptions used for the actuarial valuation.

Projections assume all actuarial assumptions are met and do not include any adjustment for adverse experience due to COVID-19 (either impacting claims or demographics), changes in the ACA, larger than expected increases to MEHP premiums, or lower than expected investment return or payroll growth. The 2025 monthly TRS MEHP rate of $210 includes $200 in EGWP prescription drug costs. The EGWP prescription drug costs are based on projected total drug costs minus projected reimbursements from CMS and drug manufacturers for Medicare Part D rebates, subsidies and reinsurance. If 50% of these reimbursements were to discontinue, TRS MEHP costs could increase to as much as $509.50. In this case, the statutory contribution rates will be less than the actuarially determined contribution rates, the unfunded actuarial accrued liability will not be paid off in the scheduled 16 year timeframe, and the health insurance fund will not reach 100% funded until almost 2050.

50% risk scenario - MEHP rate = $509.50 PMPM (Dollar Amounts in $1,000's)							
Valuation Year	Contribution Fiscal Year	Non-University Payroll (1)	University Payroll (2)	Total Payroll (3)	Unfunded Accrued Liability (4)	Funded Ratio (5)	Total Contribution (Including Member Contributions) (6)
2024	2025	$4,113,218	$195,250	$4,308,468	$4,034,093	44.6%	$394,272
2025	2026	4,169,805	192,928	4,362,733	4,013,471	47.6%	406,601
2026	2027	4,228,577	193,456	4,422,033	4,058,158	49.6%	420,860
2027	2028	4,290,665	195,267	4,485,932	4,014,562	52.5%	435,345
2028	2029	4,357,028	198,193	4,555,221	3,974,699	55.1%	451,637
2029	2030	4,425,169	201,593	4,626,762	3,948,942	57.3%	468,370
2030	2031	4,493,153	205,384	4,698,537	3,908,758	59.5%	486,540
2031	2032	4,564,905	209,424	4,774,329	3,851,951	61.7%	504,947
2032	2033	4,640,218	213,737	4,853,955	3,777,459	63.9%	522,854
2033	2034	4,716,337	218,587	4,934,924	3,684,923	66.2%	541,319
2034	2035	4,797,477	223,365	5,020,842	3,572,809	68.4%	556,331
2035	2036	4,882,036	228,306	5,110,342	3,443,675	70.7%	566,057
2036	2037	4,972,405	234,130	5,206,535	3,302,132	72.9%	576,505
2037	2038	5,068,750	240,257	5,309,007	3,146,946	75.1%	587,645
2038	2039	5,171,141	247,030	5,418,171	2,976,863	77.3%	599,515
2039	2040	5,279,233	254,478	5,533,711	2,790,520	79.5%	612,077
2040	2041	5,393,852	262,659	5,656,511	2,586,481	81.7%	625,429
2041	2042	5,514,532	271,416	5,785,948	2,363,162	83.9%	639,507
2042	2043	5,640,821	280,527	5,921,348	2,118,908	86.1%	654,239
2043	2044	5,775,151	290,456	6,065,607	1,852,001	88.3%	669,940
2044	2045	5,915,394	301,159	6,216,553	1,560,359	90.5%	686,367
2045	2046	6,062,497	312,480	6,374,977	1,242,006	92.7%	703,614
2046	2047	6,214,259	324,232	6,538,491	894,744	94.9%	721,415
2047	2048	6,373,710	336,294	6,710,004	516,459	97.2%	740,103
2048	2049	6,541,205	348,973	6,890,178	104,598	99.5%	759,747
2049	2050	6,715,433	361,582	7,077,015	0	100.0%	315,896
2050	2051	6,903,335	374,642	7,277,977	0	100.0%	329,519
2051	2052	7,102,508	387,553	7,490,061	0	100.0%	344,089
2052	2053	7,311,143	400,312	7,711,455	0	100.0%	359,594
2053	2054	7,524,056	412,557	7,936,613	0	100.0%	375,903

SCHEDULE J – HEALTH TRUST 30-YEAR SENSITIVITY PROJECTION

The results of actuarial valuations are a “snapshot” of the financial position on the valuation date, based on the assumed number of active employees and current beneficiaries. Projections simulate future actuarial valuation results over a forecast period (thirty years in this case) by “creating” future new hires and performing valuations using the projected membership. The following items are assumed for the projected results provided on the following page.

- Active Employee Growth Rate: 0.00%
- Valuation Discount Rate: 7.10%
- Investment Rate of Return: 7.10% each year
- Actuarial Value of Assets: 5-year smoothing, No Corridor
- Amortization Method: Level Percent of Payroll, Closed
- Amortization Period: 16-year period as of Valuation Date
- Future Contributions: Based on the contribution rates defined in statute
- MEHP Rate: $659.25

All other demographic and economic changes are assumed to occur in accordance with the actuarial assumptions used for the actuarial valuation.

Projections assume all actuarial assumptions are met and do not include any adjustment for adverse experience due to COVID-19 (either impacting claims or demographics), changes in the ACA, larger than expected increases to MEHP premiums, or lower than expected investment return or payroll growth. The 2025 monthly TRS MEHP rate of $210 includes $200 in EGWP prescription drug costs. The EGWP prescription drug costs are based on projected total drug costs minus projected reimbursements from CMS and drug manufacturers for Medicare Part D rebates, subsidies and reinsurance. If 75% of these reimbursements were to discontinue, TRS MEHP costs could increase to as much as $659.25. In this case, the statutory contribution rates will be less than the actuarially determined contribution rates, the unfunded actuarial accrued liability will not be paid off in the scheduled 16 year timeframe, and the health insurance fund will not reach 100% funded in the 30 year period.

75% risk scenario - MEHP rate = $659.25 PMPM (Dollar Amounts in $1,000's)							
Valuation Year	Contribution Fiscal Year	Non-University Payroll (1)	University Payroll (2)	Total Payroll (3)	Unfunded Accrued Liability (4)	Funded Ratio (5)	Total Contribution (Including Member Contributions) (6)
2024	2025	$4,113,218	$195,250	$4,308,468	$5,656,362	36.5%	$394,272
2025	2026	4,169,805	192,928	4,362,733	5,775,332	38.4%	406,601
2026	2027	4,228,577	193,456	4,422,033	5,970,348	39.3%	420,860
2027	2028	4,290,665	195,267	4,485,932	6,088,621	41.0%	435,345
2028	2029	4,357,028	198,193	4,555,221	6,223,067	42.4%	451,637
2029	2030	4,425,169	201,593	4,626,762	6,385,014	43.5%	468,370
2030	2031	4,493,153	205,384	4,698,537	6,546,952	44.5%	486,540
2031	2032	4,564,905	209,424	4,774,329	6,707,784	45.5%	504,947
2032	2033	4,640,218	213,737	4,853,955	6,867,637	46.4%	522,854
2033	2034	4,716,337	218,587	4,934,924	7,027,426	47.3%	541,319
2034	2035	4,797,477	223,365	5,020,842	7,186,981	48.1%	556,331
2035	2036	4,882,036	228,306	5,110,342	7,350,323	49.0%	566,057
2036	2037	4,972,405	234,130	5,206,535	7,523,627	49.7%	576,505
2037	2038	5,068,750	240,257	5,309,007	7,707,341	50.4%	587,645
2038	2039	5,171,141	247,030	5,418,171	7,902,017	51.0%	599,515
2039	2040	5,279,233	254,478	5,533,711	8,108,230	51.6%	612,077
2040	2041	5,393,852	262,659	5,656,511	8,326,618	52.2%	625,429
2041	2042	5,514,532	271,416	5,785,948	8,557,831	52.7%	639,507
2042	2043	5,640,821	280,527	5,921,348	8,802,603	53.1%	654,239
2043	2044	5,775,151	290,456	6,065,607	9,061,774	53.5%	669,940
2044	2045	5,915,394	301,159	6,216,553	9,336,015	53.9%	686,367
2045	2046	6,062,497	312,480	6,374,977	9,626,299	54.3%	703,614
2046	2047	6,214,259	324,232	6,538,491	9,933,593	54.6%	721,415
2047	2048	6,373,710	336,294	6,710,004	10,259,170	54.9%	740,103
2048	2049	6,541,205	348,973	6,890,178	10,604,118	55.2%	759,747
2049	2050	6,715,433	361,582	7,077,015	10,969,600	55.4%	780,138
2050	2051	6,903,335	374,642	7,277,977	11,357,049	55.6%	802,118
2051	2052	7,102,508	387,553	7,490,061	11,767,529	55.8%	825,367
2052	2053	7,311,143	400,312	7,711,455	12,202,543	56.0%	848,172
2053	2054	7,524,056	412,557	7,936,613	12,665,456	56.1%	858,771

SCHEDULE J – HEALTH TRUST 30-YEAR SENSITIVITY PROJECTION

The results of actuarial valuations are a "snapshot" of the financial position on the valuation date, based on the assumed number of active employees and current beneficiaries. Projections simulate future actuarial valuation results over a forecast period (thirty years in this case) by "creating" future new hires and performing valuations using the projected membership. The following items are assumed for the projected results provided on the following page.

- Active Employee Growth Rate: 0.00%
- Valuation Discount Rate: 7.10%
- Investment Rate of Return: 7.10% each year
- Actuarial Value of Assets: 5-year smoothing, No Corridor
- Amortization Method: Level Percent of Payroll, Closed
- Amortization Period: 16-year period as of Valuation Date
- Future Contributions: Based on the contribution rates defined in statute
- MEHP Rate: $809.00

All other demographic and economic changes are assumed to occur in accordance with the actuarial assumptions used for the actuarial valuation.

Projections assume all actuarial assumptions are met and do not include any adjustment for adverse experience due to COVID-19 (either impacting claims or demographics), changes in the ACA, larger than expected increases to MEHP premiums, or lower than expected investment return or payroll growth. The 2025 monthly TRS MEHP rate of $210 includes $200 in EGWP prescription drug costs. The EGWP prescription drug costs are based on projected total drug costs minus projected reimbursements from CMS and drug manufacturers for Medicare Part D rebates, subsidies and reinsurance. If 100% of these reimbursements were to discontinue, TRS MEHP costs could increase to as much as $809.00. In this case, the statutory contribution rates will be less than the actuarially determined contribution rates, the unfunded actuarial accrued liability will not be paid off in the scheduled 16 year timeframe, and the health insurance fund will not reach 100% funded in the 30 year period.

100% risk scenario - MEHP rate = $809 PMPM (Dollar Amounts in $1,000's)							
Valuation Year	Contribution Fiscal Year	Non-University Payroll (1)	University Payroll (2)	Total Payroll (3)	Unfunded Accrued Liability (4)	Funded Ratio (5)	Total Contribution (Including Member Contributions) (6)
2024	2025	$4,113,218	$195,250	$4,308,468	$7,278,631	30.8%	$394,272
2025	2026	4,169,805	192,928	4,362,733	7,537,194	31.9%	406,601
2026	2027	4,228,577	193,456	4,422,033	7,882,537	32.2%	420,860
2027	2028	4,290,665	195,267	4,485,932	8,162,681	33.1%	435,345
2028	2029	4,357,028	198,193	4,555,221	8,471,435	33.6%	451,637
2029	2030	4,425,169	201,593	4,626,762	8,821,086	33.9%	468,370
2030	2031	4,493,153	205,384	4,698,537	9,185,146	34.1%	486,540
2031	2032	4,564,905	209,424	4,774,329	9,563,617	34.2%	504,947
2032	2033	4,640,218	213,737	4,853,955	9,957,814	34.2%	522,854
2033	2034	4,716,337	218,587	4,934,924	10,369,928	34.2%	541,319
2034	2035	4,797,477	223,365	5,020,842	10,801,152	34.1%	556,331
2035	2036	4,882,036	228,306	5,110,342	11,256,972	34.0%	566,057
2036	2037	4,972,405	234,130	5,206,535	11,745,122	33.7%	576,505
2037	2038	5,068,750	240,257	5,309,007	12,267,735	33.4%	587,645
2038	2039	5,171,141	247,030	5,418,171	12,827,171	33.0%	599,515
2039	2040	5,279,233	254,478	5,533,711	13,425,940	32.5%	612,077
2040	2041	5,393,852	262,659	5,656,511	14,066,755	31.9%	625,429
2041	2042	5,514,532	271,416	5,785,948	14,752,500	31.3%	639,507
2042	2043	5,640,821	280,527	5,921,348	15,486,297	30.7%	654,239
2043	2044	5,775,151	290,456	6,065,607	16,271,548	29.9%	669,940
2044	2045	5,915,394	301,159	6,216,553	17,111,672	29.1%	686,367
2045	2046	6,062,497	312,480	6,374,977	18,010,593	28.3%	703,614
2046	2047	6,214,259	324,232	6,538,491	18,972,442	27.4%	721,415
2047	2048	6,373,710	336,294	6,710,004	20,001,881	26.4%	740,103
2048	2049	6,541,205	348,973	6,890,178	21,103,638	25.4%	759,747
2049	2050	6,715,433	361,582	7,077,015	22,282,778	24.3%	780,138
2050	2051	6,903,335	374,642	7,277,977	23,544,917	23.2%	802,118
2051	2052	7,102,508	387,553	7,490,061	24,895,619	22.0%	825,367
2052	2053	7,311,143	400,312	7,711,455	26,341,201	20.7%	848,172
2053	2054	7,524,056	412,557	7,936,613	27,890,174	19.4%	858,771

SCHEDULE K – LIFE TRUST 30-YEAR BASELINE PROJECTION

The results of actuarial valuations are a "snapshot" of the financial position on the valuation date, based on the assumed number of active employees and current beneficiaries. Projections simulate future actuarial valuation results over a forecast period (thirty years in this case) by "creating" future new hires and performing valuations using the projected membership. The following items are assumed for the projected results provided on the following page.

- Active Employee Growth Rate: 0.00%
- Valuation Discount Rate: 7.10%
- Investment Rate of Return: 7.10% each year
- Actuarial Value of Assets: 5-year smoothing, No Corridor
- Amortization Method: Level Percent of Payroll, Closed
- Amortization Period: 20-year period as of Valuation Date
- Future Contributions: Based on Expected Actuarially Determined Contributions (not less than 0.08%)

All other demographic and economic changes are assumed to occur in accordance with the actuarial assumptions used for the actuarial valuation

(Dollar amounts in $1,000's)							
Valuation Year	Contribution Fiscal Year	Non-University Payroll (1)	University Payroll (2)	Total Payroll (3)	Unfunded Accrued Liability (4)	Funded Ratio (5)	Actuarially Determined Contribution in Dollars (6)
2024	2027	$4,113,218	$195,250	$4,308,468	$22,766	81.9%	$3,538
2025	2028	4,169,805	192,928	4,362,733	21,898	83.0%	3,589
2026	2029	4,228,577	193,456	4,422,033	24,550	81.3%	3,644
2027	2030	4,290,665	195,267	4,485,932	22,562	83.2%	3,701
2028	2031	4,357,028	198,193	4,555,221	21,045	84.6%	3,759
2029	2032	4,425,169	201,593	4,626,762	20,229	85.5%	3,819
2030	2033	4,493,153	205,384	4,698,537	19,357	86.4%	3,883
2031	2034	4,564,905	209,424	4,774,329	18,424	87.3%	3,948
2032	2035	4,640,218	213,737	4,853,955	17,417	88.2%	4,017
2033	2036	4,716,337	218,587	4,934,924	16,325	89.1%	4,088
2034	2037	4,797,477	223,365	5,020,842	15,138	90.0%	4,165
2035	2038	4,882,036	228,306	5,110,342	13,844	91.0%	4,247
2036	2039	4,972,405	234,130	5,206,535	12,429	92.0%	4,335
2037	2040	5,068,750	240,257	5,309,007	10,877	93.1%	4,427
2038	2041	5,171,141	247,030	5,418,171	9,171	94.3%	4,525
2039	2042	5,279,233	254,478	5,533,711	7,293	95.5%	4,629
2040	2043	5,393,852	262,659	5,656,511	5,218	96.8%	4,737
2041	2044	5,514,532	271,416	5,785,948	2,928	98.2%	4,852
2042	2045	5,640,821	280,527	5,921,348	398	99.8%	4,973
2043	2046	5,775,151	290,456	6,065,607	0	100.0%	1,984
2044	2047	5,915,394	301,159	6,216,553	0	100.0%	2,007
2045	2048	6,062,497	312,480	6,374,977	0	100.0%	2,027
2046	2049	6,214,259	324,232	6,538,491	0	100.0%	2,047
2047	2050	6,373,710	336,294	6,710,004	0	100.0%	2,063
2048	2051	6,541,205	348,973	6,890,178	0	100.0%	2,080
2049	2052	6,715,433	361,582	7,077,015	0	100.0%	2,096
2050	2053	6,903,335	374,642	7,277,977	0	100.0%	2,107
2051	2054	7,102,508	387,553	7,490,061	0	100.0%	2,112
2052	2055	7,311,143	400,312	7,711,455	0	100.0%	2,112
2053	2056	7,524,056	412,557	7,936,613	0	100.0%	2,110

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 without extending or resetting those 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 may 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 consistent with the advice of the board's independent actuary.

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 two years, the actuary conducts a review of economic assumptions and incorporates any changes into valuations. Every five years, the actuary conducts an experience investigation and recommends to the board adjustments to assumptions based upon past trends, current behavior 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.

1. <u>Retirement Annuity Trust Appropriations</u>

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, the state's annual retirement appropriations grew primarily because of the failure to fund.

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).

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, and the amount to be provided by the state shall not be less than the prior year's dollar amount until the plan reaches a funded ratio of 100%;
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 closed period adopted by the board.

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 may provide options for funding over and above the actuarially required minimum. The board will provide the analytical data showing the impact of each of these on the current costs and the potential savings.

2. Retiree Health Insurance Trust

State law provides for a retiree medical plan (KRS 161.675). Since July 1, 2010, retired teachers, active teachers, local school boards, universities and the state have paid contributions for funding the retiree medical plan in accordance with the Shared Responsibility Solution contained in HB 540 (2010 RS). The contributions mandated by Shared Responsibility will meet the benefit requirements of the members of the retirement system, consistent with generally accepted actuarial principles.

Projections of longer term funded status assume both the continuation of current revenue sources beyond state or TRS control and that costs remain in line with assumptions. Regulatory, legislative and other changes, which cannot be predicted and could be severe, would alter the actual future experience. Examples include changes in the solvency of Medicare; in the Inflation Reduction Act, Affordable Care Act or other federal legislation; in Medicare Advantage premiums; and in prescription medication subsidies, rebates or discounts.

Based upon technical advice from the board's actuary, the board hereby adopts the following principles concerning the retiree health insurance plan:

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 2011 to amortize the unfunded liability;
D. Reach a minimum funded ratio of 100% within the closed period adopted by the board; and
E. For projecting future funded ratios, the same assumptions shall be used including income received from all current sources. Also, a separate schedule in the valuation will address the risk of trust income disruption if income sources beyond the control of the state and TRS – such as prescription medication rebates and subsidies – are eliminated. For that projection, income from sources other than those mandated by Shared Responsibility (from active members, retirees, employers and the state) shall not be used when calculating the funded ratios.

3. Life Insurance Trust

State law provides for a life insurance plan for active and retired teachers (KRS 161.655). The life insurance plan is funded by employer contributions. Based upon technical advice from the board's actuary, the board hereby adopts the following principles concerning the life insurance plan:

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;
D. Use a 20-year closed period to amortize, as a level percentage of pay, 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 closed period adopted by the board.

Adopted December 16, 2013; amended December 9, 2015, September 19, 2016, September 18, 2017, December 18, 2017, September 16, 2019, September 21, 2020; December 18, 2023.