County Employees Retirement System
Actuarial Committee – Special Meeting
November 6, 2025 at 2:00 PM ET (1:00 PM CT)
Live Video Conference/Facebook Live

AGENDA

1.	**Call to Order**	**Michael Foster**
2.	**Opening Statement**	**Eric Branco**
3.	**Roll Call**	**Sherry Rankin**
4.	**Public Comment**	**Sherry Rankin**
5.	**Approval of Minutes* -- May 7, 2025**	**Michael Foster**
6.	**Draft Actuarial Valuation***	**Danny White, GRS** **Janie Shaw, GRS** **Krysti Kiesel, GRS**
7.	**ADJOURN***	**Michael Foster**

Committee Action May Be Taken

MINUTES OF MEETING
COUNTY EMPLOYEES RETIREMENT SYSTEM
SPECIAL-CALLED
ACTUARIAL COMMITTEE MEETING
MAY 7, 2025, AT 2:00 P.M.
VIA LIVE VIDEO TELECONFERENCE

At the Special Called Meeting of the Actuarial Committee of the County Employees Retirement System Board of Trustees held on May 7, 2025, the following members were present: Michael Foster (Chair), Dr. Patricia Carver, George Cheatham, and Steven Webb. Staff members present were CERS CEO Ed Owens III, Ryan Barrow, Rebecca Adkins, Erin Surratt, Michael Lamb, Michael Board, Victoria Hale, Nathan Goodrich, Ashley Gabbard, Shaun Case, Sandy Hardin, and Sherry Rankin. Others present included Janie Shaw with GRS and Eric Branco with Johnson, Branco and Brennan, LLP.

1. Mr. Foster called the meeting to order.

2 Mr. Branco read the Opening Statement.

3. Ms. Rankin took Roll Call.

4. Ms. Rankin noted no ***Public Comment*** was submitted.

5. Mr. Foster introduced agenda item ***Approval of Minutes – November 8, 2024*** *(Video 00:06:01 to 00:06:40).* Mr. Cheatham made a motion to approve the November 8, 2024, minutes as presented. Dr. Carver seconded the motion. The motion passed unanimously.

6. Mr. Foster introduced agenda item ***Forward-Looking Return Expectations*** *(Video 00:06:40 to 00:12:09).* David Lindberg and Craig Morton from Wilshire presented on forward-looking return expectations. They discussed capital market assumptions over the next 10 years, set at the end of calendar year 2024, which align with upcoming actuarial work. The expected return for the policy allocation is projected at 6.21% annualized, with a risk level of approximately 11.5%. This is slightly lower than previous forecasts, which

estimated 6.36% in March 2024, though the difference is not significant. They highlighted the impact of interest rate changes on returns, noting that previously low interest rates reduced fixed income returns, but recent rate increases have brought them closer to equilibrium. The presentation compared current assumptions to equilibrium returns, with equity forecasts being lower due to valuation concerns, particularly in U.S. markets. The expected return of 6.21% represents a baseline market return (beta), meaning active portfolio management could potentially generate returns above this level.

7. Mr. Foster introduced agenda item ***Review of Actuarial Assumptions*** *(Video 00:12:09 to 00:27:01).* Janie Shaw from GRS presented actuarial assumptions for the June 30, 2025, valuation, recommending no changes. The price inflation assumption remains at 2.5%, supported by economic forecasts, though it does not directly impact valuation. The investment return assumption stays at 6.5%, aligning with market expectations and consultant reports. The payroll growth assumption remains at 2%, given historical stability despite recent spikes, as long-term trends suggest payroll will not continue growing at higher rates indefinitely. Increasing this assumption could lead to backloaded contributions, potentially delaying plan funding.

   In response to questions, Shaw explained that while individual pay raises often match inflation, overall payroll growth lags due to retirements, where higher salaries are replaced by lower ones. Mr. Cheatham raised concerns about aligning payroll growth more closely with inflation and suggested further review using municipal payroll data from sources like Kentucky Association of Counties (KACo) and Kentucky School Boards Association (KSBA). Mr. Webb noted that recent payroll increases were influenced by expired government funding, which could slow growth moving forward.

   Following the discussion, Mr. Cheatham made a motion to adopt the actuarial assumptions as presented. Mr. Webb seconded the motion. The motion passed unanimously.

8. There being no further business, Mr. Foster ***adjourned*** the meeting.

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CERTIFICATION

I do certify that I was present at this meeting, and I have recorded the above actions of the Trustees on the various items considered by it at this meeting. Further, I certify that all requirements of KRS 61.805-61.850 were met in conjunction with this meeting.

_____
Recording Secretary

I, the Chair of the Actuarial Committee of the County Employees Retirement System Board of Trustees, do certify that the Minutes of Meeting held on May 7, 2025, were approved on November 6, 2025.

_____
Chair of the CERS Actuarial Committee

I have reviewed the Minutes of the May 7, 2025, Board of Trustees Meeting for content, form, and legality.

_____
Executive Director
Office of Legal Services

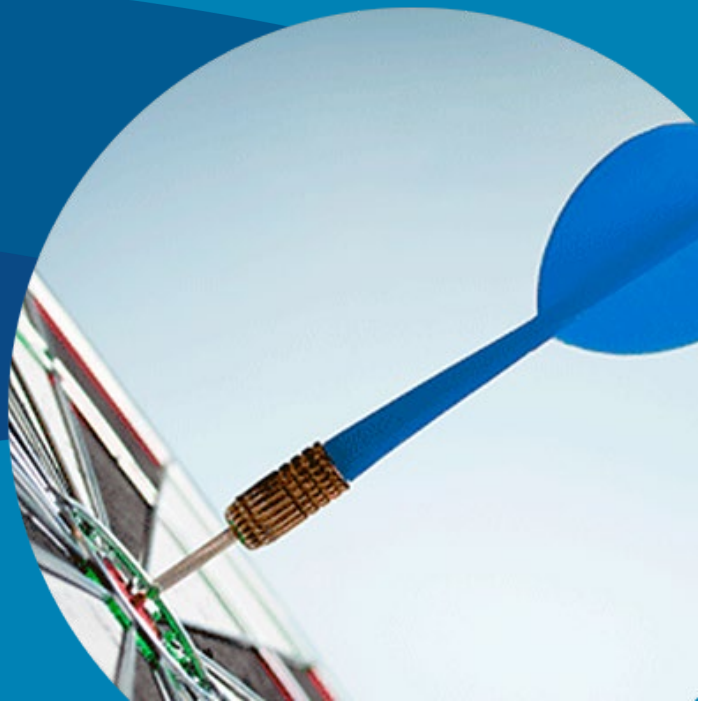
County Employees Retirement System

2025 Actuarial Valuation Results

November 10, 2025

Janie Shaw, ASA, EA, MAAA

Danny White, FSA, EA, MAAA



June 30, 2025 Actuarial Valuation

- Based on membership data and assets as of June 30, 2025
- Change in insurance benefits due to SB 10
- No changes in assumptions since prior valuation
- Sets contribution requirements for one year effective July 1, 2026
  - i.e. FYE 2027

Comments on Valuation Results

- Change in active membership and payroll
  - Active headcount and membership payroll increased across both funds

	Active Headcount		Membership Payroll		Average Payroll	
	2025 Val	Change	2025 Val	Change	2025 Val	Change
(1)	(2)	(3)	(4)	(5)	(6)	(7)
CERS Non-Hazardous	81,863	1.8% ↑	$3,336,807	6.3% ↑	$40,761	4.5% ↑
CERS Hazardous	9,927	2.6% ↑	$806,462	8.5% ↑	$81,239	5.8% ↑

Comments on Valuation Results

- FYE 2025 Investment Experience
  - 11.1% to 11.6% return on market value (varies by fund)
    - Assumed rate of return: 6.50%
  - Fund assets $901M more than expected for CERS ($648M pension and $253M insurance)
  - $630M in asset gains recognized this year ($444M pension and $186M insurance)

Comments on Valuation Results

- Overview of legislation passed in 2025
  - **Senate Bill 10:** increased insurance dollar subsidy to $40 (non-hazardous) and $50 (hazardous) for non-Medicare retirees that meet certain service threshold requirements
    - Increased the insurance member contribution rate for hazardous members from 1% to 2%
    - Extended the required contribution to members hired on or after July 1, 2003 but prior to September 1, 2008 for both non-hazardous and hazardous members
  - $252M liability increase across both insurance funds

Comments on Valuation Results

- Retirement Fund Liability Experience
  - $221M loss for both retirement funds combined
  - Liability within 1.5% of expected
  - Primarily attributed to salary increases greater than expected for individual active members
- Insurance Fund Liability Experience
  - $545M loss for both insurance funds combined
  - 2026 health insurance premiums significantly higher than expected

Required Employer Contributions

	CERS Non-Hazardous		CERS Hazardous	
	2024 Val	2025 Val	2024 Val	2025 Val
(1)	(2)	(3)	(4)	(5)
Pension Fund	18.62%	17.14%	34.00%	31.52%
Insurance Fund	0.00%	0.29%	1.73%	3.20%
Actuarially Determined Contribution Rate, payable as a percentage of payroll	**18.62%**	**17.43%**	**35.73%**	**34.72%**
Difference		**-1.19%**		**-1.01%**

Note: 2024 Valuation set the contribution rates for FYE2026.
2025 Valuation will be used to set the contribution rates for FYE2027.

Required Employer Contributions ($millions)

	CERS Non-Hazardous		CERS Hazardous	
	2024 Val	2025 Val	2024 Val	2025 Val
(1)	(2)	(3)	(4)	(5)
Pension Fund	$596	$583	$258	$259
Insurance Fund	0	10	13	26
Total Actuarially Determined Employer Contribution	**$596**	**$593**	**$271**	**$285**
Change in Actuarially Determined Employer Contribution		**$(3)**		**$14**

Note: 2024 Valuation set the contribution rates for FYE2026.
2025 Valuation will be used to set the contribution rates for FYE2027.

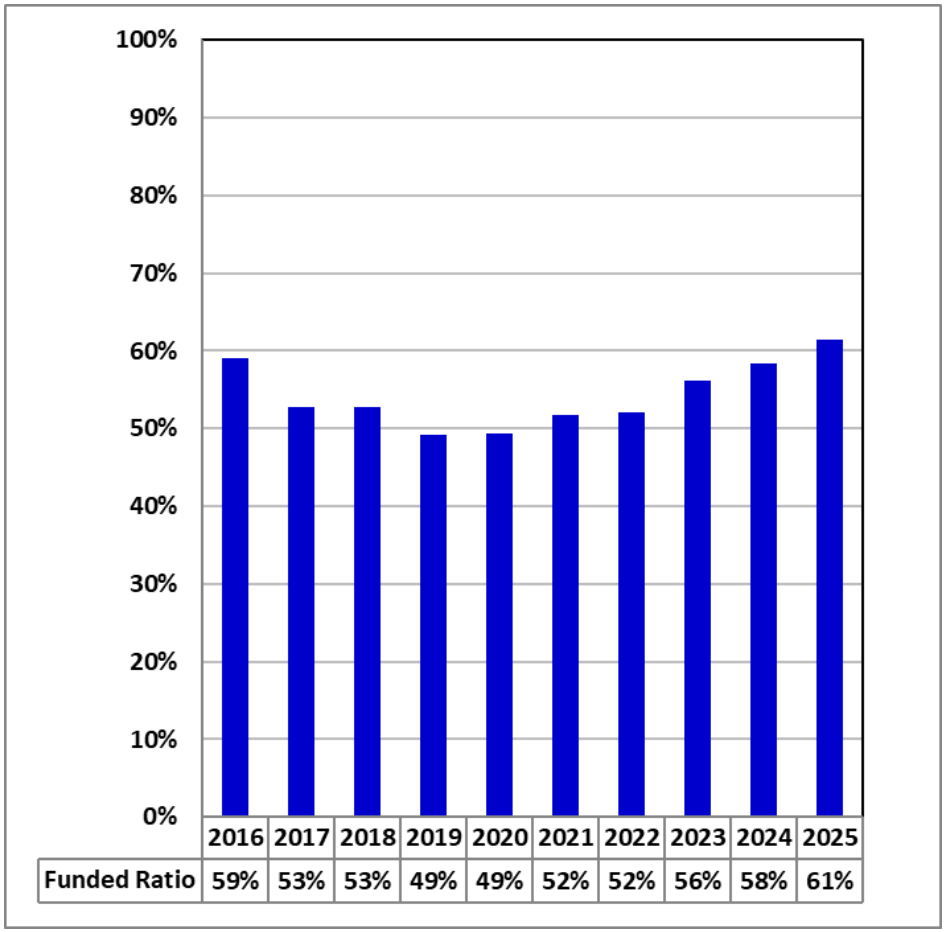
Unfunded Actuarial Accrued Liability – Actuarial Value of Asset Basis ($ in Billions)

	CERS Non-Hazardous		CERS Hazardous	
	2024 Val	2025 Val	2024 Val	2025 Val
(1)	(2)	(3)	(4)	(5)
Pension Fund	$6.56	$6.24	$2.79	$2.71
Insurance Fund	(0.65)	(0.23)	(0.01)	0.18
Total Unfunded Actuarial Accrued Liability	**$5.92**	**$6.01**	**$2.78**	**$2.89**
Change in Unfunded Actuarial Accrued Liability		**$0.09**		**$0.10**

Note: Amounts may not add due to rounding

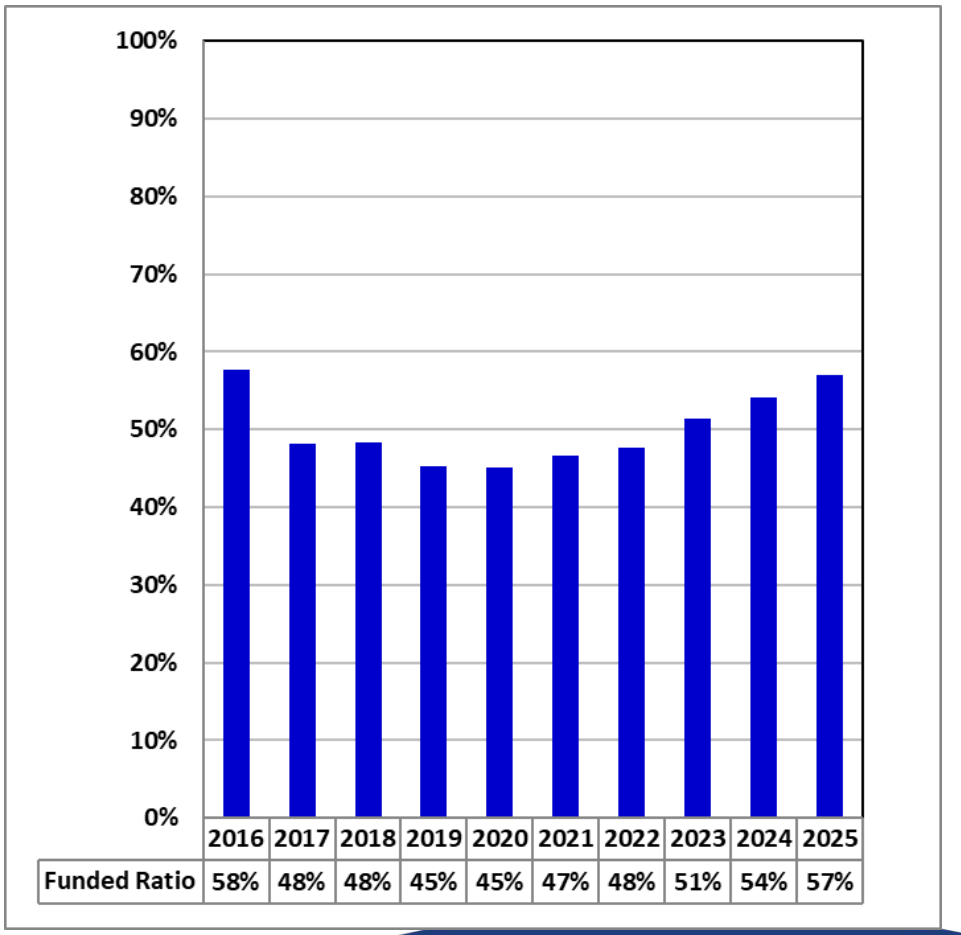
Historic Funded Ratio (Actuarial Value of Assets / Accrued Liability)

Non-Hazardous Pension Fund



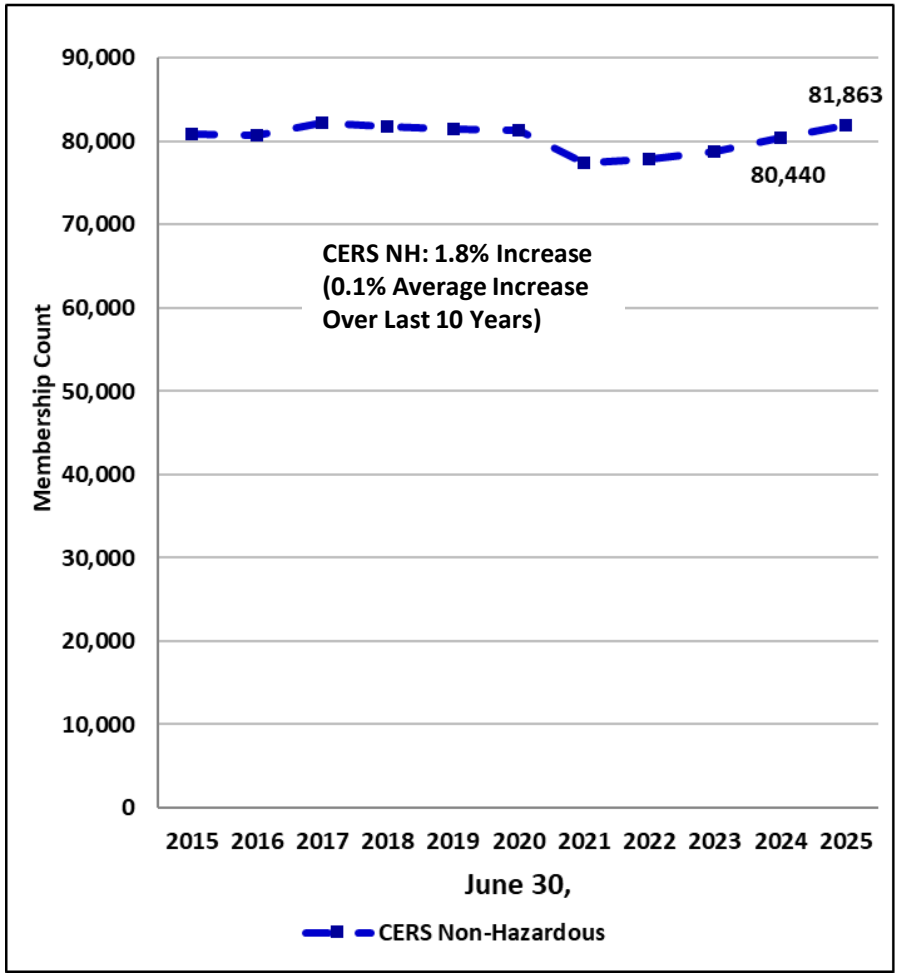
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Funded Ratio	59%	53%	53%	49%	49%	52%	52%	56%	58%	61%

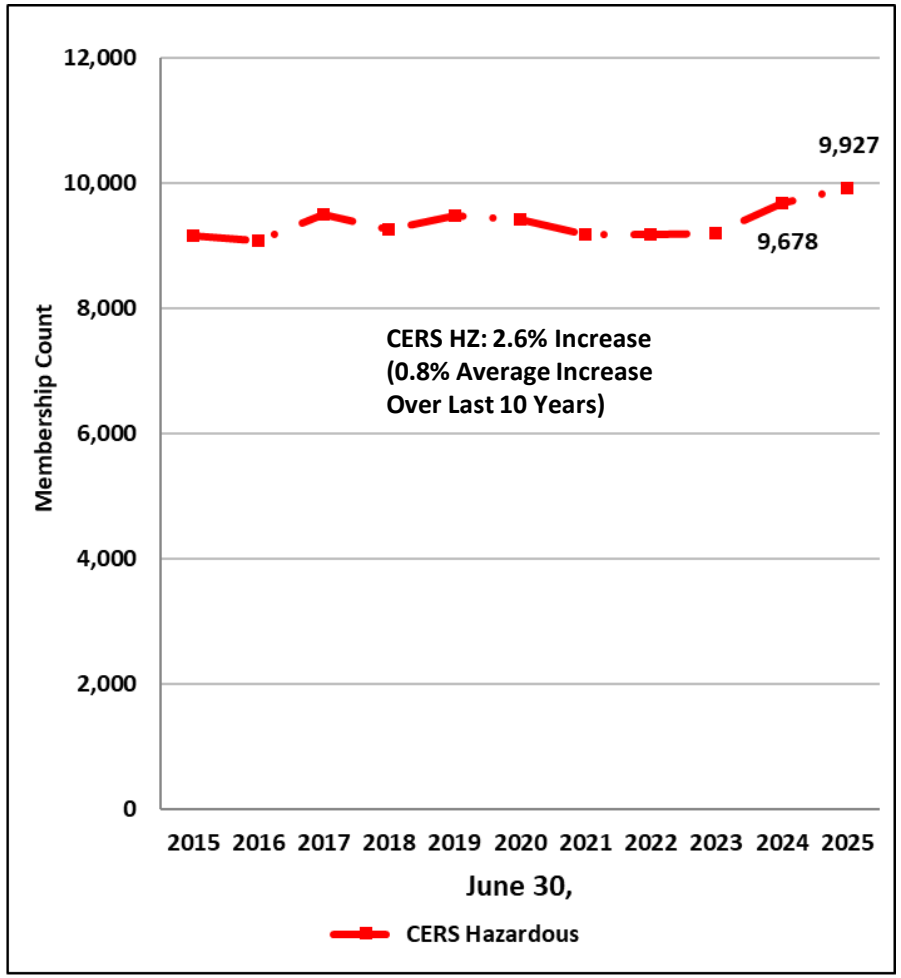
Hazardous Pension Fund



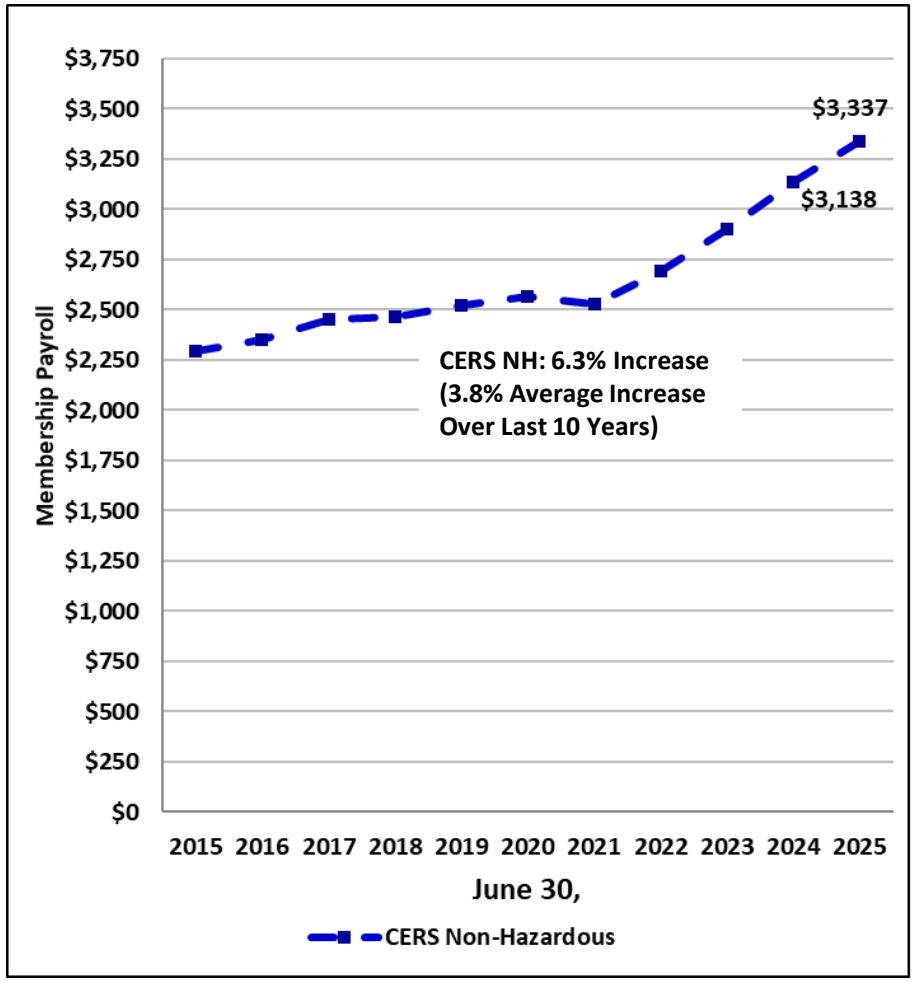
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Funded Ratio	58%	48%	48%	45%	45%	47%	48%	51%	54%	57%

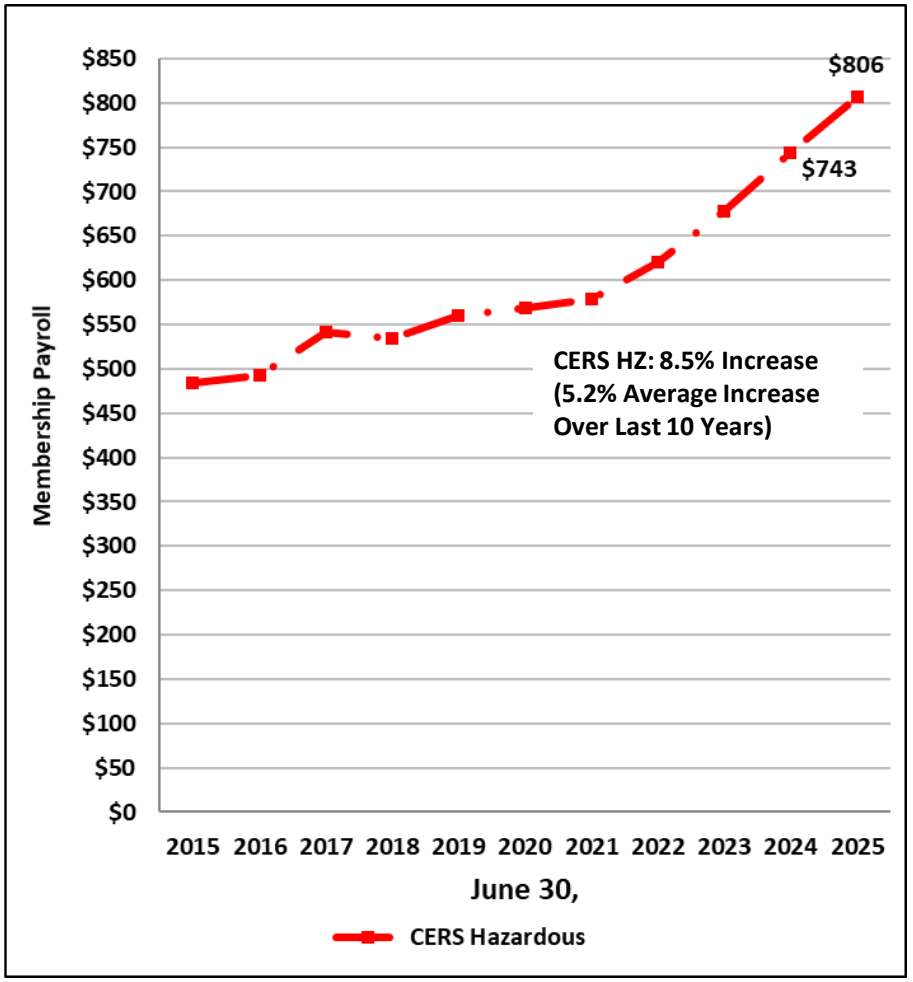
Active Membership Count



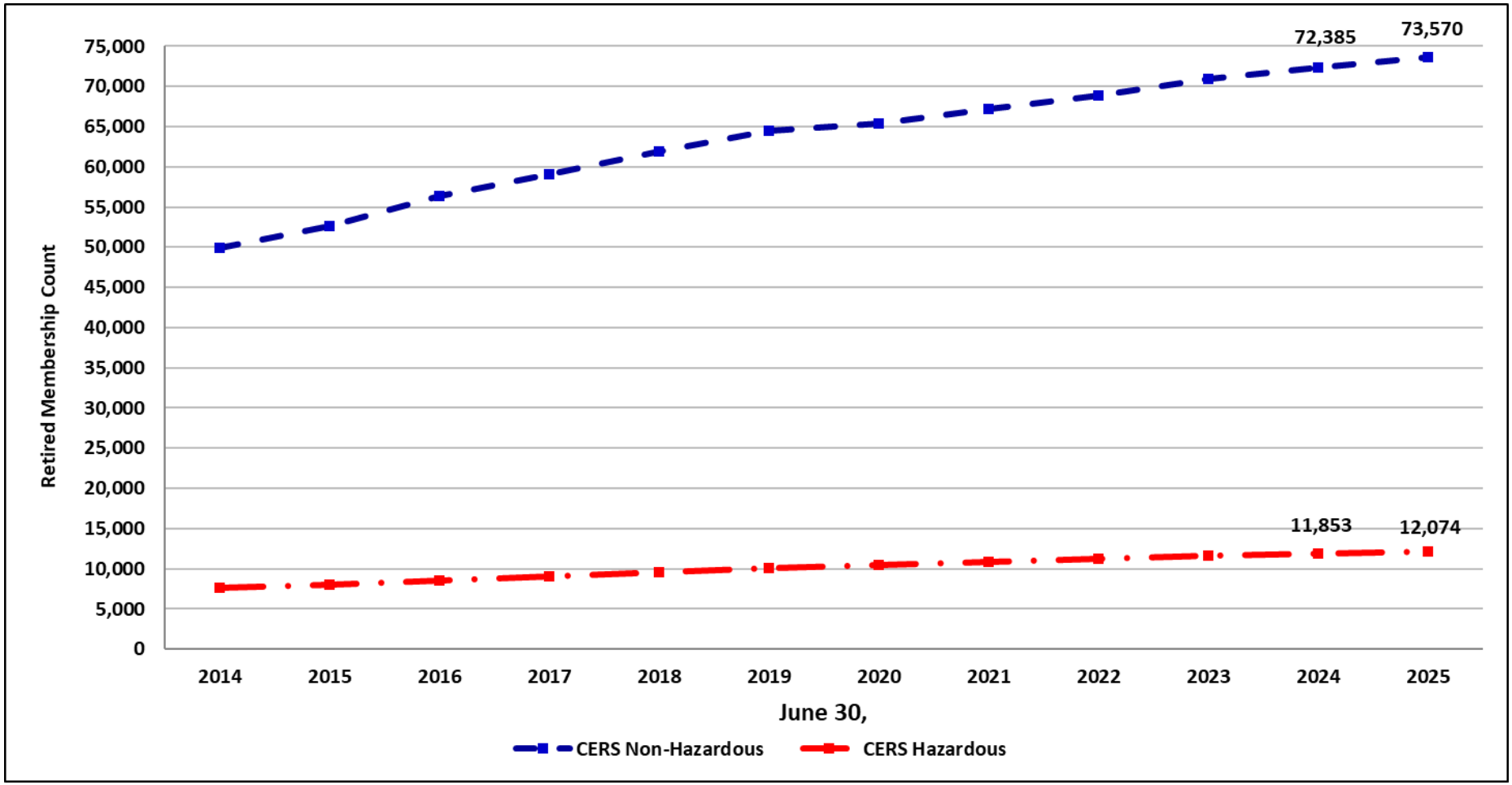


Membership Payroll ($ in Millions)

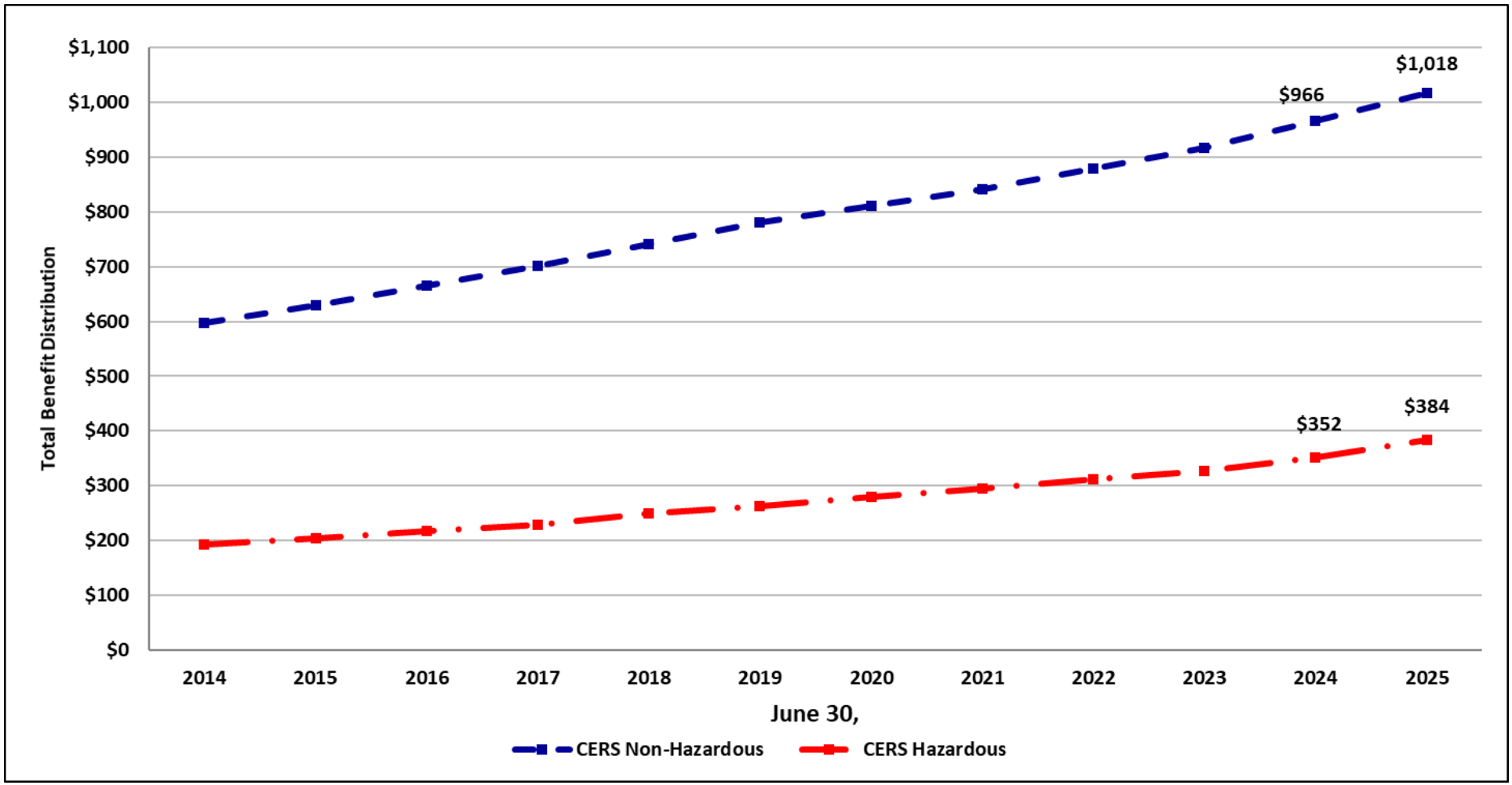




Retired Membership Count



Pension Benefit Distributions ($ in Millions)



Funding Results – CERS ($ in millions)

Item	Non-Hazardous System				Hazardous System			
	Pension		Insurance		Pension		Insurance	
	2024	2025	2024	2025	2024	2025	2024	2025
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Normal Cost Rate	9.37%	9.26%	2.15%	2.41%	17.17%	16.90%	3.40%	4.18%
Member Rate	(5.00)%	(5.00)%	(0.67)%	(0.84)%	(8.00)%	(8.00)%	(0.69)%	(1.86)%
Employer Normal Cost Rate	4.37%	4.26%	1.48%	1.57%	9.17%	8.90%	2.71%	2.32%
Administrative Expenses	0.85%	0.77%	0.03%	0.03%	0.31%	0.28%	0.07%	0.07%
Amortization Cost	13.40%	12.11%	(2.37)%	(1.31)%	24.52%	22.34%	(1.05)%	0.81%
Total Actuarially Determined Rate	**18.62%**	**17.14%**	**0.00%**	**0.29%**	**34.00%**	**31.52%**	**1.73%**	**3.20%**
Actuarial Accrued Liability (AAL)	$15,776	$16,174	$2,901	$3,563	$6,070	$6,302	$1,668	$1,940
Actuarial Value of Assets	$9,212	$9,934	$3,549	$3,794	$3,280	$3,593	$1,676	$1,763
Unfunded AAL	**$6,565**	**$6,240**	**$(648)**	**$(231)**	**$2,791**	**$2,709**	**$(8)**	**$176**
Funded Ratio	**58.4%**	**61.4%**	**122.3%**	**106.5%**	**54.0%**	**57.0%**	**100.5%**	**90.9%**

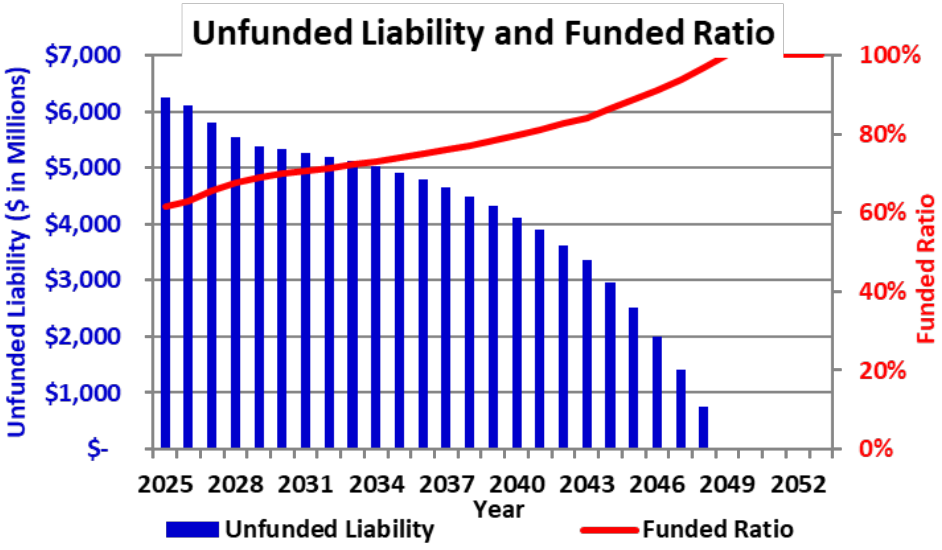
PROJECTION INFORMATION PENSION AND INSURANCE

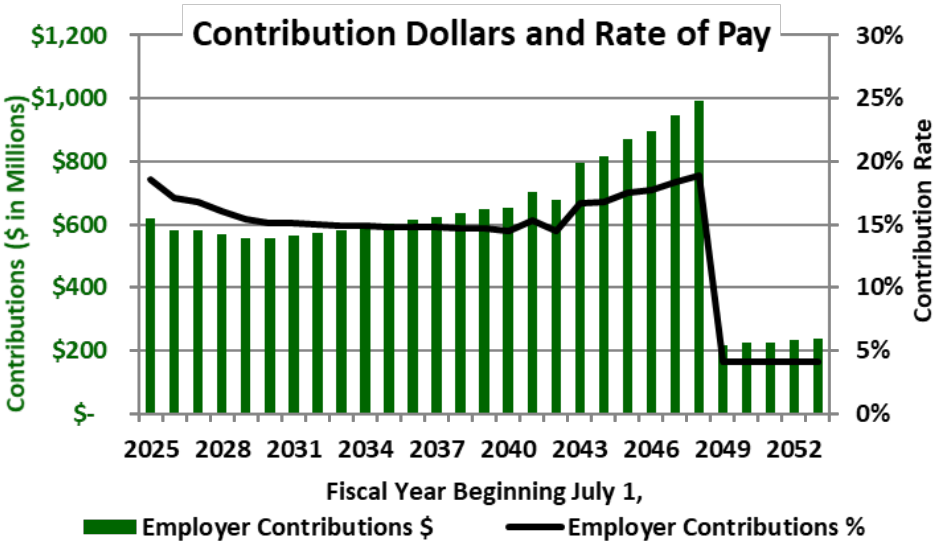
Projection Assumptions

- Assumes that all actuarial assumptions are realized, including the assumed annual asset return of 6.50%
- Full actuarially determined contribution paid each year
- Membership payroll assumed to increase by 2% each year
  - Total active population assumed to remain level

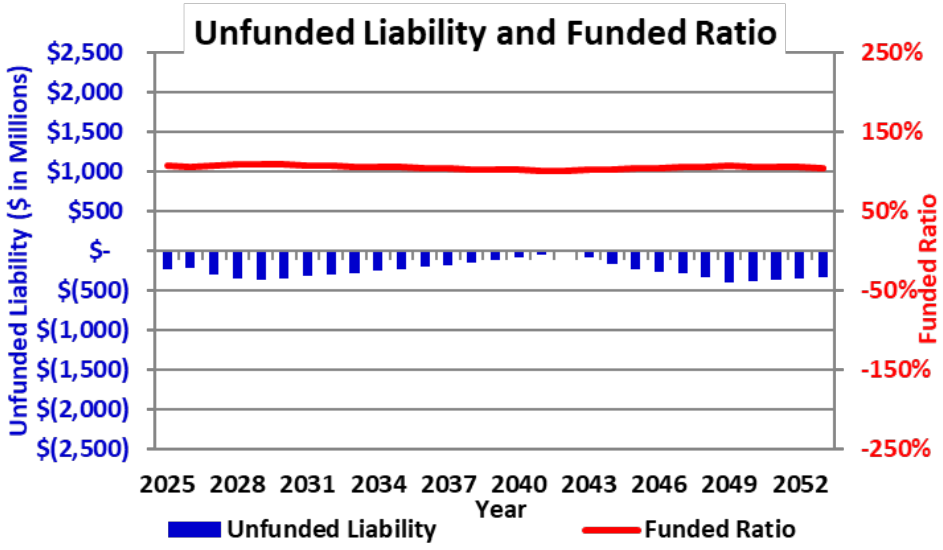
CERS Non-Hazardous Projection

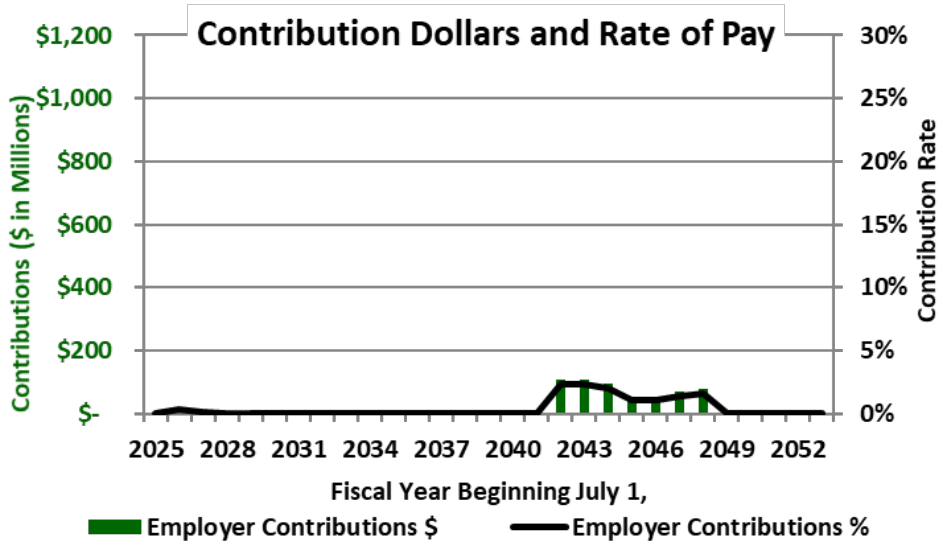
Pension





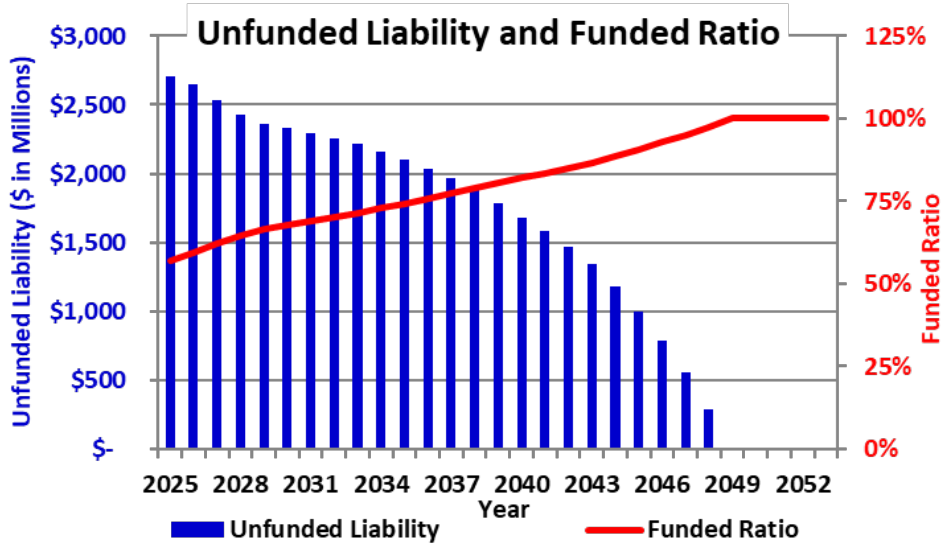
Insurance

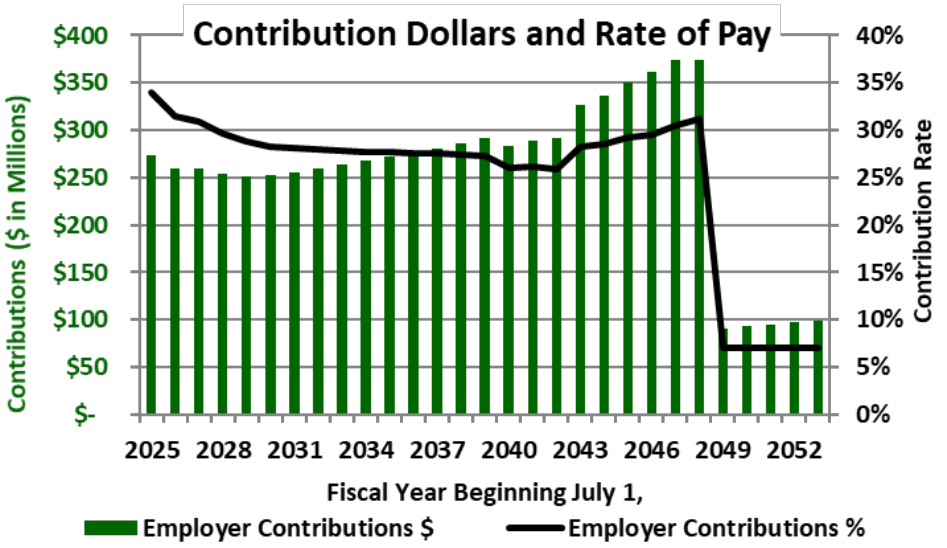




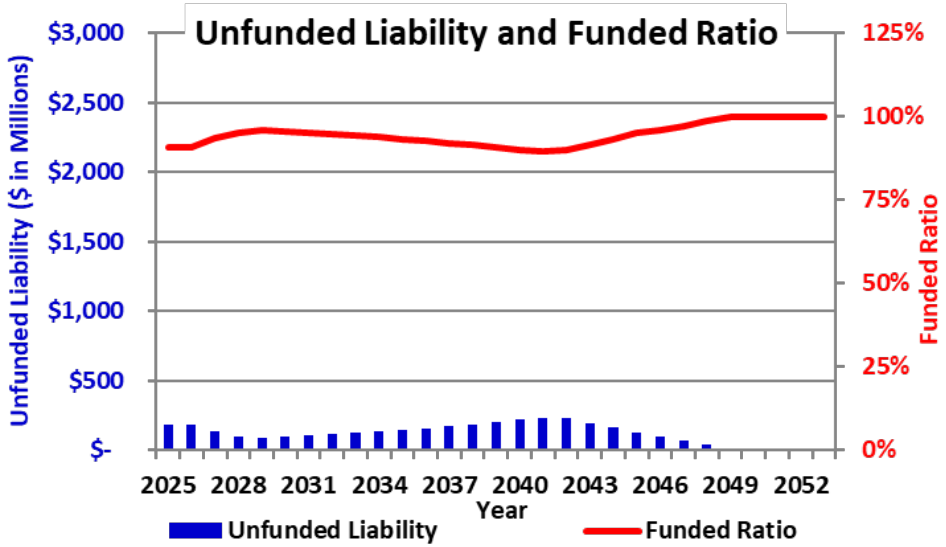
CERS Hazardous Projection

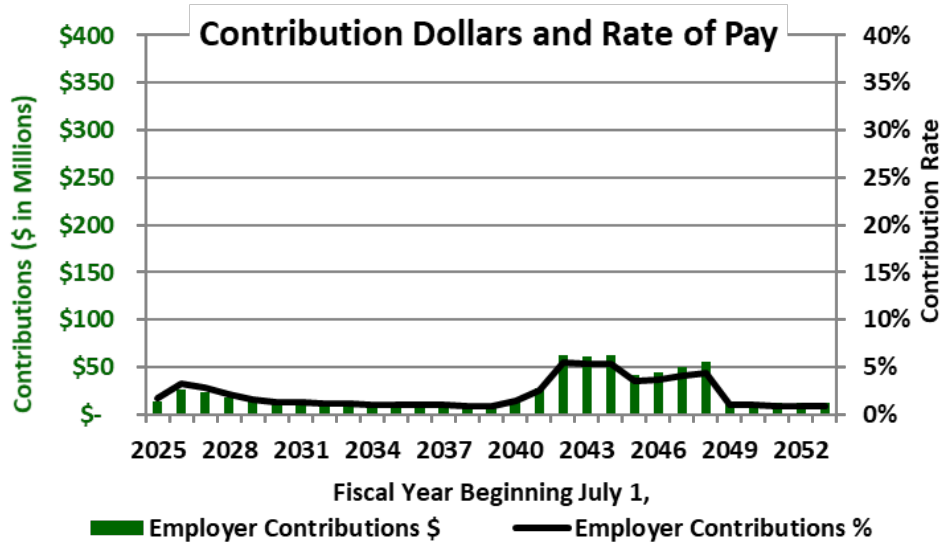
Pension





Insurance





Closing Comments on 2025 Valuation Results

- Favorable investment experience and membership payroll increases decreased contribution rates
  - Partially offset by increases in insurance contribution rates due to 2026 health insurance premiums
- Unfunded liability continues to decrease and funded ratios continue to increase for both pension funds
- Increase in unfunded liability for insurance funds due to 2026 health insurance premiums
- It is imperative the current funding policy be maintained as it will continue to improve the System's financial security

Disclaimers

- This presentation is intended to be used in conjunction with the actuarial valuation as of June 30, 2025. This presentation should not be relied on for any purpose other than the purpose described in the valuation report.
- This presentation shall not be construed to provide tax advice, legal advice or investment advice.
- Readers are cautioned to examine original source materials and to consult with subject matter experts before making decisions related to the subject matter of this presentation.

P: 469.524.0000 | www.grsconsulting.com

October 31, 2025

Board of Trustees
County Employees Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Re: Sensitivity Analysis Based on Results of the June 30, 2025 Actuarial Valuation – CERS

Dear Members of the Board:

Per Kentucky State Statute 61.670, we are providing this supplemental information regarding the sensitivity of the valuation results to changes in some of the economic assumptions. Specifically, the enclosed tables show the impact for the **County Employees Retirement System (CERS)** due to changes in the investment return assumption, the inflation rate assumption, and the payroll growth rate assumption.

Background

Investment Assumption

The investment return assumption is used to discount future expected benefit payments to the valuation date in order to determine the liabilities of the plans. The lower the investment return assumption, the less the benefit payments are discounted and the higher the valuation liability. The current investment return assumption is 6.50% for the non-hazardous and hazardous retirement and insurance funds. The sensitivity analysis shows the financial impact of a 1.00% increase and a 1.00% decrease in the investment return assumption. For purposes of this sensitivity analysis, the inflation assumption and payroll growth assumption remain unchanged from the valuation assumption.

Inflation Assumption

The inflation assumption underlies most of the other economic assumptions, including the investment return, salary increases, and payroll growth rate. This is a macroeconomic assumption and as such the same assumption is used in the valuation of each of the retirement systems. The current assumption is 2.50% for all funds. The sensitivity analysis shows the financial impact of a 0.25% increase and a 0.25% decrease in the inflation assumption. Note, the change in the inflation assumption results in a corresponding change in the investment return assumption, the individual salary increase assumption for projecting members' benefit amounts, the payroll growth rate assumption, and the healthcare trend assumption that is used in the valuation of the health insurance funds.

Payroll Growth Assumption

Participating employers of CERS make contributions to the system as a percentage of covered payroll. Therefore, as payroll changes over time these amortization payments will also change. If actual covered payroll increases at a rate that is less than assumed, then the retirement system receives fewer contribution dollars than expected to finance the unfunded liability, which means the contribution rates in future years will be required to increase in order to finance the unfunded liability over the same time period. The current payroll growth assumption is 2.00% for all the CERS retirement and insurance funds. The analysis shows the impact of a 1.00% increase and a 1.00% decrease in the payroll growth assumption.

Please note that the payroll growth assumption does not impact the valuation liabilities, unfunded liability, or funded status of the system. Rather, this assumption only impacts the amortization rate for financing the existing unfunded actuarial accrued liability and the actuarially determined employer contribution. For purposes of this analysis, the investment return assumption and the inflation assumption are held at their current valuation assumptions.

Certification

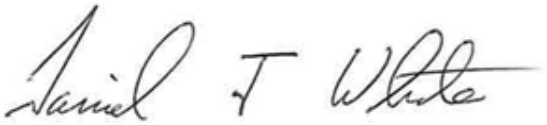
The information provided in this letter compliments the information provided in the June 30, 2025 actuarial valuation report. Please refer to the June 30, 2025 actuarial valuation report for additional discussion of the actuarial valuation, including the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making. The purpose of this information is to provide stakeholders the financial sensitivity of the unfunded liability and contribution rates to changes in the inflation, assumed rate of return, and payroll growth assumption.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. All of the undersigned are Enrolled Actuaries and members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. In addition, all three are independent of KPPA and are experienced in performing valuations for large public retirement systems. This communication shall not be construed to provide tax advice, legal advice or investment advice.

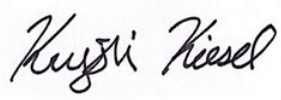
Sincerely,

Gabriel, Roeder, Smith & Company



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

Janie Shaw, ASA, EA, MAAA
Consultant



Krysti Kiesel, ASA, EA, MAAA
Consultant

Sensitivity Analysis - Discount Rate
Non-Hazardous Members
(Dollar amounts expressed in thousands)

(1)	Decrease Discount Rate (2)	Valuation Results (3)	Increase Discount Rate (4)
Payroll Growth Rate	2.00%	2.00%	2.00%
Inflation Rate	2.50%	2.50%	2.50%
Discount Rate - Retirement	5.50%	6.50%	7.50%
Discount Rate - Insurance	5.50%	6.50%	7.50%
Retirement			
Actuarial Accrued Liability	$ 17,990,133	$ 16,174,006	$ 14,673,696
Actuarial Value of Assets	9,933,705	9,933,705	9,933,705
Unfunded Actuarial Accrued Liability	8,056,428	6,240,301	4,739,991
Funded Ratio	55.2%	61.4%	67.7%
Actuarially Determined Contribution Rate	22.14%	17.14%	12.94%
Insurance			
Actuarial Accrued Liability	$ 4,009,861	$ 3,562,876	$ 3,190,544
Actuarial Value of Assets	3,793,782	3,793,782	3,793,782
Unfunded Actuarial Accrued Liability	216,079	(230,906)	(603,238)
Funded Ratio	94.6%	106.5%	118.9%
Actuarially Determined Contribution Rate	2.07%	0.29%	0.00%
Combined			
Actuarial Accrued Liability	$ 21,999,994	$ 19,736,882	$ 17,864,240
Actuarial Value of Assets	13,727,487	13,727,487	13,727,487
Unfunded Actuarial Accrued Liability	8,272,507	6,009,395	4,136,753
Funded Ratio	62.4%	69.6%	76.8%
Actuarially Determined Contribution Rate	24.21%	17.43%	12.94%

Sensitivity Analysis - Inflation Rate
Non-Hazardous Members
(Dollar amounts expressed in thousands)

(1)	Decrease Inflation Rate (2)	Valuation Results (3)	Increase Inflation Rate (4)
Payroll Growth Rate	1.75%	2.00%	2.25%
Inflation Rate	2.25%	2.50%	2.75%
Discount Rate - Retirement	6.25%	6.50%	6.75%
Discount Rate - Insurance	6.25%	6.50%	6.75%
Retirement			
Actuarial Accrued Liability	$ 16,559,086	$ 16,174,006	$ 15,805,260
Actuarial Value of Assets	9,933,705	9,933,705	9,933,705
Unfunded Actuarial Accrued Liability	6,625,381	6,240,301	5,871,555
Funded Ratio	60.0%	61.4%	62.9%
Actuarially Determined Contribution Rate	18.41%	17.14%	15.94%
Insurance			
Actuarial Accrued Liability	$ 3,616,206	$ 3,562,876	$ 3,512,545
Actuarial Value of Assets	3,793,782	3,793,782	3,793,782
Unfunded Actuarial Accrued Liability	(177,576)	(230,906)	(281,237)
Funded Ratio	104.9%	106.5%	108.0%
Actuarially Determined Contribution Rate	0.55%	0.29%	0.05%
Combined			
Actuarial Accrued Liability	$ 20,175,292	$ 19,736,882	$ 19,317,805
Actuarial Value of Assets	13,727,487	13,727,487	13,727,487
Unfunded Actuarial Accrued Liability	6,447,805	6,009,395	5,590,318
Funded Ratio	68.0%	69.6%	71.1%
Actuarially Determined Contribution Rate	18.96%	17.43%	15.99%

Sensitivity Analysis - Payroll Growth
Non-Hazardous Members
(Dollar amounts expressed in thousands)

(1)	Decrease Payroll Growth (2)	Valuation Results (3)	Increase Payroll Growth (4)
Payroll Growth Rate	1.00%	2.00%	3.00%
Inflation Rate	2.50%	2.50%	2.50%
Discount Rate - Retirement	6.50%	6.50%	6.50%
Discount Rate - Insurance	6.50%	6.50%	6.50%
Retirement			
Actuarial Accrued Liability	$ 16,174,006	$ 16,174,006	$ 16,174,006
Actuarial Value of Assets	9,933,705	9,933,705	9,933,705
Unfunded Actuarial Accrued Liability	6,240,301	6,240,301	6,240,301
Funded Ratio	61.4%	61.4%	61.4%
Actuarially Determined Contribution Rate	18.45%	17.14%	15.93%
Insurance			
Actuarial Accrued Liability	$ 3,562,876	$ 3,562,876	$ 3,562,876
Actuarial Value of Assets	3,793,782	3,793,782	3,793,782
Unfunded Actuarial Accrued Liability	(230,906)	(230,906)	(230,906)
Funded Ratio	106.5%	106.5%	106.5%
Actuarially Determined Contribution Rate	0.27%	0.29%	0.31%
Combined			
Actuarial Accrued Liability	$ 19,736,882	$ 19,736,882	$ 19,736,882
Actuarial Value of Assets	13,727,487	13,727,487	13,727,487
Unfunded Actuarial Accrued Liability	6,009,395	6,009,395	6,009,395
Funded Ratio	69.6%	69.6%	69.6%
Actuarially Determined Contribution Rate	18.72%	17.43%	16.24%

Sensitivity Analysis - Discount Rate
Hazardous Members
(Dollar amounts expressed in thousands)

(1)	Decrease Discount Rate (2)	Valuation Results (3)	Increase Discount Rate (4)
Payroll Growth Rate	2.00%	2.00%	2.00%
Inflation Rate	2.50%	2.50%	2.50%
Discount Rate - Retirement	5.50%	6.50%	7.50%
Discount Rate - Insurance	5.50%	6.50%	7.50%
Retirement			
Actuarial Accrued Liability	$ 7,095,901	$ 6,301,846	$ 5,666,439
Actuarial Value of Assets	3,592,717	3,592,717	3,592,717
Unfunded Actuarial Accrued Liability	3,503,184	2,709,129	2,073,722
Funded Ratio	50.6%	57.0%	63.4%
Actuarially Determined Contribution Rate	41.07%	31.52%	23.94%
Insurance			
Actuarial Accrued Liability	$ 2,163,631	$ 1,939,809	$ 1,753,457
Actuarial Value of Assets	1,763,479	1,763,479	1,763,479
Unfunded Actuarial Accrued Liability	400,152	176,330	(10,022)
Funded Ratio	81.5%	90.9%	100.6%
Actuarially Determined Contribution Rate	6.35%	3.20%	0.37%
Combined			
Actuarial Accrued Liability	$ 9,259,532	$ 8,241,655	$ 7,419,896
Actuarial Value of Assets	5,356,196	5,356,196	5,356,196
Unfunded Actuarial Accrued Liability	3,903,336	2,885,459	2,063,700
Funded Ratio	57.8%	65.0%	72.2%
Actuarially Determined Contribution Rate	47.42%	34.72%	24.31%

Sensitivity Analysis - Inflation Rate
Hazardous Members
(Dollar amounts expressed in thousands)

(1)	Decrease Inflation Rate (2)	Valuation Results (3)	Increase Inflation Rate (4)
Payroll Growth Rate	1.75%	2.00%	2.25%
Inflation Rate	2.25%	2.50%	2.75%
Discount Rate - Retirement	6.25%	6.50%	6.75%
Discount Rate - Insurance	6.25%	6.50%	6.75%
Retirement			
Actuarial Accrued Liability	$ 6,469,541	$ 6,301,846	$ 6,145,497
Actuarial Value of Assets	3,592,717	3,592,717	3,592,717
Unfunded Actuarial Accrued Liability	2,876,824	2,709,129	2,552,780
Funded Ratio	55.5%	57.0%	58.5%
Actuarially Determined Contribution Rate	33.90%	31.52%	29.40%
Insurance			
Actuarial Accrued Liability	$ 1,962,491	$ 1,939,809	$ 1,918,382
Actuarial Value of Assets	1,763,479	1,763,479	1,763,479
Unfunded Actuarial Accrued Liability	199,012	176,330	154,903
Funded Ratio	89.9%	90.9%	91.9%
Actuarially Determined Contribution Rate	3.66%	3.20%	2.78%
Combined			
Actuarial Accrued Liability	$ 8,432,032	$ 8,241,655	$ 8,063,879
Actuarial Value of Assets	5,356,196	5,356,196	5,356,196
Unfunded Actuarial Accrued Liability	3,075,836	2,885,459	2,707,683
Funded Ratio	63.5%	65.0%	66.4%
Actuarially Determined Contribution Rate	37.56%	34.72%	32.18%

Sensitivity Analysis - Payroll Growth
Hazardous Members
(Dollar amounts expressed in thousands)

(1)	Decrease Payroll Growth (2)	Valuation Results (3)	Increase Payroll Growth (4)
Payroll Growth Rate	1.00%	2.00%	3.00%
Inflation Rate	2.50%	2.50%	2.50%
Discount Rate - Retirement	6.50%	6.50%	6.50%
Discount Rate - Insurance	6.50%	6.50%	6.50%
Retirement			
Actuarial Accrued Liability	$ 6,301,846	$ 6,301,846	$ 6,301,846
Actuarial Value of Assets	3,592,717	3,592,717	3,592,717
Unfunded Actuarial Accrued Liability	2,709,129	2,709,129	2,709,129
Funded Ratio	57.0%	57.0%	57.0%
Actuarially Determined Contribution Rate	33.85%	31.52%	29.35%
Insurance			
Actuarial Accrued Liability	$ 1,939,809	$ 1,939,809	$ 1,939,809
Actuarial Value of Assets	1,763,479	1,763,479	1,763,479
Unfunded Actuarial Accrued Liability	176,330	176,330	176,330
Funded Ratio	90.9%	90.9%	90.9%
Actuarially Determined Contribution Rate	3.39%	3.20%	3.04%
Combined			
Actuarial Accrued Liability	$ 8,241,655	$ 8,241,655	$ 8,241,655
Actuarial Value of Assets	5,356,196	5,356,196	5,356,196
Unfunded Actuarial Accrued Liability	2,885,459	2,885,459	2,885,459
Funded Ratio	65.0%	65.0%	65.0%
Actuarially Determined Contribution Rate	37.24%	34.72%	32.39%

Kentucky Public Pensions Authority
CERS Non-Hazardous Retirement Fund
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2025	$ 16,174	$ 9,934	$ 6,240	61%	$ 621	$ 167	$ 3,337	18.62%	18.62%
2026	16,517	10,412	6,105	63%	583	170	3,404	17.14%	17.14%
2027	16,833	11,039	5,794	66%	583	174	3,472	16.79%	16.79%
2028	17,128	11,588	5,540	68%	568	177	3,541	16.03%	16.03%
2029	17,406	12,021	5,385	69%	558	181	3,612	15.46%	15.46%
2030	17,667	12,338	5,329	70%	558	184	3,684	15.14%	15.14%
2031	17,915	12,645	5,270	71%	566	188	3,758	15.06%	15.06%
2032	18,154	12,953	5,201	71%	575	192	3,833	14.99%	14.99%
2033	18,386	13,267	5,119	72%	583	195	3,910	14.92%	14.92%
2034	18,614	13,589	5,025	73%	593	199	3,988	14.88%	14.88%
2035	18,840	13,924	4,916	74%	603	203	4,068	14.83%	14.83%
2036	19,085	14,293	4,792	75%	614	207	4,149	14.80%	14.80%
2037	19,337	14,687	4,650	76%	625	212	4,232	14.77%	14.77%
2038	19,605	15,113	4,492	77%	636	216	4,317	14.74%	14.74%
2039	19,891	15,578	4,313	78%	648	220	4,403	14.72%	14.72%
2040	20,200	16,086	4,114	80%	653	225	4,491	14.53%	14.53%
2041	20,534	16,634	3,900	81%	701	229	4,581	15.30%	15.30%
2042	20,898	17,271	3,627	83%	677	234	4,672	14.50%	14.50%
2043	21,293	17,930	3,363	84%	794	238	4,766	16.65%	16.65%
2044	21,721	18,756	2,965	86%	818	243	4,861	16.82%	16.82%
2045	22,184	19,663	2,521	89%	870	248	4,958	17.55%	17.55%
2046	22,683	20,686	1,997	91%	897	253	5,057	17.74%	17.74%
2047	23,220	21,806	1,414	94%	948	258	5,159	18.38%	18.38%
2048	23,798	23,052	746	97%	992	263	5,262	18.85%	18.85%
2049	24,417	24,417	-	100%	218	268	5,367	4.07%	4.07%
2050	25,078	25,078	-	100%	223	274	5,474	4.08%	4.08%
2051	25,784	25,784	-	100%	227	279	5,584	4.07%	4.07%
2052	26,535	26,535	-	100%	232	285	5,696	4.08%	4.08%
2053	27,332	27,332	-	100%	237	290	5,809	4.08%	4.08%
2054	28,173	28,173	-	100%	242	296	5,926	4.08%	4.08%

Notes and assumptions:

The projection is based on the results of the June 30, 2025 actuarial valuation and assumes that all actuarial assumptions are realized, including the assumed annual asset return of 6.50%.

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

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

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

The Board certified contribution rate paid by employers is assumed to be equal to the full actuarially determined contribution rate, except as allowed by House Bill 362 (passed during the 2018 legislative session), which limits the certified contribution rate to a 12% increase over the prior year rate for the period of July 1, 2018 to June 30, 2028.

Kentucky Public Pensions Authority
CERS Hazardous Retirement Fund
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2025	$ 6,302	$ 3,593	$ 2,709	57%	$ 274	$ 65	$ 806	34.00%	34.00%
2026	6,492	3,843	2,649	59%	259	66	823	31.52%	31.52%
2027	6,673	4,143	2,530	62%	259	67	839	30.91%	30.91%
2028	6,849	4,420	2,429	65%	254	68	856	29.69%	29.69%
2029	7,024	4,661	2,363	66%	251	70	873	28.78%	28.78%
2030	7,199	4,868	2,331	68%	252	71	890	28.26%	28.26%
2031	7,379	5,081	2,298	69%	255	73	908	28.10%	28.10%
2032	7,565	5,306	2,259	70%	259	74	926	27.97%	27.97%
2033	7,760	5,545	2,215	72%	263	76	945	27.86%	27.86%
2034	7,964	5,802	2,162	73%	268	77	964	27.76%	27.76%
2035	8,178	6,074	2,104	74%	272	79	983	27.66%	27.66%
2036	8,402	6,364	2,038	76%	277	80	1,003	27.58%	27.58%
2037	8,633	6,669	1,964	77%	281	82	1,023	27.49%	27.49%
2038	8,868	6,989	1,879	79%	286	83	1,043	27.40%	27.40%
2039	9,107	7,321	1,786	80%	291	85	1,064	27.30%	27.30%
2040	9,350	7,667	1,683	82%	283	87	1,085	26.04%	26.04%
2041	9,600	8,018	1,582	84%	289	89	1,107	26.14%	26.14%
2042	9,858	8,390	1,468	85%	292	90	1,129	25.86%	25.86%
2043	10,125	8,779	1,346	87%	326	92	1,152	28.26%	28.26%
2044	10,401	9,219	1,182	89%	336	94	1,175	28.57%	28.57%
2045	10,684	9,685	999	91%	351	96	1,198	29.25%	29.25%
2046	10,972	10,182	790	93%	361	98	1,222	29.55%	29.55%
2047	11,265	10,708	557	95%	381	100	1,247	30.53%	30.53%
2048	11,564	11,272	292	98%	397	102	1,272	31.23%	31.23%
2049	11,869	11,869	-	100%	91	104	1,297	6.99%	6.99%
2050	12,180	12,180	-	100%	93	106	1,323	7.01%	7.01%
2051	12,498	12,498	-	100%	95	108	1,350	7.02%	7.02%
2052	12,823	12,823	-	100%	97	110	1,377	7.03%	7.03%
2053	13,153	13,153	-	100%	99	112	1,404	7.03%	7.03%
2054	13,488	13,488	-	100%	101	115	1,432	7.04%	7.04%

Notes and assumptions:

The projection is based on the results of the June 30, 2025 actuarial valuation and assumes that all actuarial assumptions are realized, including the assumed annual asset return of 6.50%.

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

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

The Board certified contribution rate paid by employers is assumed to be equal to the full actuarially determined contribution rate, except as allowed by House Bill 362 (passed during the 2018 legislative session), which limits the certified contribution rate to a 12% increase over the prior year rate for the period of July 1, 2018 to June 30, 2028.

Kentucky Public Pensions Authority
CERS Non-Hazardous Insurance Fund
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2025	$ 3,563	$ 3,794	$ (231)	107%	$ -	$ 28	$ 3,304	0.00%	0.00%
2026	3,708	3,932	(224)	106%	10	29	3,370	0.29%	0.29%
2027	3,835	4,139	(304)	108%	3	31	3,437	0.10%	0.10%
2028	3,952	4,306	(354)	109%	-	32	3,506	0.00%	0.00%
2029	4,061	4,427	(366)	109%	-	33	3,576	0.00%	0.00%
2030	4,162	4,506	(344)	108%	-	35	3,648	0.00%	0.00%
2031	4,254	4,577	(323)	108%	-	36	3,721	0.00%	0.00%
2032	4,340	4,641	(301)	107%	-	37	3,795	0.00%	0.00%
2033	4,420	4,699	(279)	106%	-	38	3,871	0.00%	0.00%
2034	4,497	4,753	(256)	106%	-	39	3,948	0.00%	0.00%
2035	4,574	4,805	(231)	105%	-	40	4,027	0.00%	0.00%
2036	4,652	4,859	(207)	104%	-	41	4,108	0.00%	0.00%
2037	4,735	4,915	(180)	104%	-	42	4,190	0.00%	0.00%
2038	4,822	4,973	(151)	103%	-	42	4,274	0.00%	0.00%
2039	4,916	5,037	(121)	103%	-	43	4,359	0.00%	0.00%
2040	5,017	5,105	(88)	102%	-	44	4,447	0.00%	0.00%
2041	5,124	5,177	(53)	101%	-	45	4,535	0.00%	0.00%
2042	5,237	5,254	(17)	100%	109	46	4,626	2.35%	2.35%
2043	5,358	5,447	(89)	102%	109	47	4,719	2.31%	2.31%
2044	5,486	5,652	(166)	103%	96	48	4,813	1.99%	1.99%
2045	5,618	5,853	(235)	104%	50	49	4,909	1.02%	1.02%
2046	5,756	6,017	(261)	105%	55	50	5,007	1.09%	1.09%
2047	5,899	6,191	(292)	105%	69	51	5,108	1.35%	1.35%
2048	6,047	6,386	(339)	106%	80	52	5,210	1.54%	1.54%
2049	6,198	6,600	(402)	107%	-	53	5,314	0.00%	0.00%
2050	6,352	6,738	(386)	106%	-	54	5,420	0.00%	0.00%
2051	6,507	6,876	(369)	106%	-	55	5,529	0.00%	0.00%
2052	6,665	7,015	(350)	105%	-	56	5,639	0.00%	0.00%
2053	6,825	7,154	(329)	105%	-	58	5,752	0.00%	0.00%
2054	6,986	7,294	(308)	104%	-	59	5,867	0.00%	0.00%

Notes and assumptions:

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

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Kentucky Public Pensions Authority
CERS Hazardous Insurance Fund
($ in Millions)

Fiscal Year Beginning July 1,	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio (3) / (2)	Employer Contribution	Member Contribution	Covered Payroll	Employer Contribution as % of Covered Payroll	Employer Actuarially Determined Contribution
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
2025	$ 1,940	$ 1,763	$ 177	91%	$ 14	$ 15	$ 803	1.73%	1.73%
2026	1,986	1,806	180	91%	26	15	819	3.20%	3.20%
2027	2,018	1,885	133	93%	23	16	836	2.80%	2.80%
2028	2,043	1,944	99	95%	18	17	852	2.11%	2.11%
2029	2,061	1,975	86	96%	14	17	870	1.61%	1.61%
2030	2,076	1,984	92	96%	12	18	887	1.32%	1.32%
2031	2,089	1,988	101	95%	11	18	905	1.22%	1.22%
2032	2,098	1,988	110	95%	11	18	923	1.14%	1.14%
2033	2,104	1,984	120	94%	10	19	941	1.09%	1.09%
2034	2,110	1,979	131	94%	10	19	960	1.04%	1.04%
2035	2,115	1,972	143	93%	10	20	979	0.99%	0.99%
2036	2,123	1,968	155	93%	10	20	999	0.97%	0.97%
2037	2,135	1,966	169	92%	10	20	1,019	0.94%	0.94%
2038	2,151	1,967	184	91%	10	21	1,039	0.92%	0.92%
2039	2,171	1,971	200	91%	9	21	1,060	0.89%	0.89%
2040	2,196	1,979	217	90%	15	22	1,081	1.36%	1.36%
2041	2,226	1,996	230	90%	27	22	1,103	2.47%	2.47%
2042	2,260	2,030	230	90%	62	22	1,125	5.51%	5.51%
2043	2,299	2,104	195	92%	61	23	1,147	5.29%	5.29%
2044	2,342	2,184	158	93%	62	23	1,170	5.30%	5.30%
2045	2,388	2,269	119	95%	41	24	1,194	3.47%	3.47%
2046	2,434	2,337	97	96%	44	24	1,218	3.59%	3.59%
2047	2,480	2,409	71	97%	50	25	1,242	4.06%	4.06%
2048	2,527	2,489	38	99%	55	25	1,267	4.37%	4.37%
2049	2,572	2,572	-	100%	13	26	1,292	0.97%	0.97%
2050	2,616	2,616	-	100%	12	26	1,318	0.94%	0.94%
2051	2,660	2,660	-	100%	12	27	1,344	0.90%	0.90%
2052	2,703	2,703	-	100%	12	27	1,371	0.87%	0.87%
2053	2,744	2,744	-	100%	12	28	1,399	0.84%	0.84%
2054	2,783	2,783	-	100%	12	29	1,427	0.81%	0.81%

Notes and assumptions:

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P: 469.524.0000 | www.grsconsulting.com

October 31, 2025

Board of Trustees
Kentucky Public Pensions Authority
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Certification of the June 30, 2025 Actuarial Valuation Results

Dear Members of the Board:

The purpose of this letter is to summarize the June 30, 2025 actuarial valuation reports for the County Employees Retirement System (CERS), the Kentucky Employees Retirement System (KERS), and the State Police Retirement System (SPRS). These reports provide the current actuarial and financial condition of the funds and analyze fluctuations in the employer contribution requirements since the prior actuarial valuation.

Under Kentucky Statute, the Board of Trustees of the Kentucky Retirement System (KRS) must recommend the employer contributions for KERS and SPRS for the fiscal years beginning July 1, 2026 and ending June 30, 2028. The Board of Trustees of the County Employees Retirement System (CERS) must certify the employer contribution rates for CERS for the fiscal year beginning July 1, 2026 and ending June 30, 2027. The contributions determined by the June 30, 2025 actuarial valuations are intended to become effective twelve months after the valuation date and, as such, are intended to be used by the Board for recommending these required contributions effective July 1, 2026.

FINANCING OBJECTIVES AND FUNDING POLICY

The Kentucky Public Pensions Authority (KPPA) administers pension and health insurance funds to provide for monthly retirement income and retiree health insurance benefits. The total employer contribution requirement is comprised of a contribution to each respective fund and is determined in accordance with Sections 61.565 and 78.635 of Kentucky Statute. As specified by the Statute, the employer contribution is comprised of a normal cost contribution and an actuarial accrued liability contribution. The actuarial accrued liability contribution is calculated by amortizing the unfunded accrued liability as of June 30, 2019 over a closed 30-year amortization period (24 years remaining

as of June 30, 2025). Gains and losses incurring in years after June 30, 2019 are amortized as separate closed 20-year amortization bases.

If the contributions made are equal to the Actuarially Determined Contribution (ADC), and if all actuarial assumptions are met, there will not be an unfunded accrued liability at the end of the 24-year period remaining from the original closed 30-year amortization base. Accordingly, the ADC under the funding policy can be considered a "Reasonable Actuarially Determined Contribution" as required by the Actuarial Standards of Practice.

House Bill 8 passed during the 2021 legislative session and specified the method for allocating and collecting contributions from the participating employers in the KERS non-hazardous fund. Each employer will pay a normal cost contribution on the payroll of their covered employees and contribute to the fund an allocated share of the cost required to amortize the unfunded liability.

HB 1 and HB 6 were enacted in the 2024 legislative session and provided an additional $300 million in appropriations to finance the unfunded actuarial accrued liability of the KERS non-hazardous retirement fund in FY 2025 and FY 2026 and an additional $25 million to finance the unfunded actuarial accrued liability of the SPRS retirement fund in FY 2025 and FY 2026. The appropriations for FY 2025 were reflected in the contribution requirement calculated in the prior year's valuation. The appropriations for FY 2026 have been reflected in the contribution requirement calculated in this year's valuation.

House Bill 362 passed during the 2018 legislative session and limited the increases to the CERS employer contribution rates to 12% over the prior fiscal year through June 30, 2028. This legislation does not impact the contribution rates calculated in this actuarial valuation. The recommended certified contribution rates are equal to the actuarially determined rates.

PROGRESS TOWARDS REALIZATION OF FUNDING OBJECTIVES

One way to measure the progress towards achieving the intended funding objective is to measure the relationship between the actuarial value of assets and the actuarial accrued liabilities for each fund. This relationship is referred to as the funded ratio and should increase over time (absent of benefit improvements) with the goal of attaining 100%.

Table 1 provides a comparison of the change in funded ratio from June 30, 2024 to June 30, 2025 for the retirement funds. As the table shows, the funded ratios for all funds have increased since the prior year. The improvement in the financial health of these retirement funds is dependent on the CERS and KRS Boards, as well as the Commonwealth, maintaining a sound funding policy and the participating employers paying the full actuarially determined contributions.

**Table 1. Change in the Funded Ratio (AVA / AAL)
from June 30, 2024 to June 30, 2025 for the Retirement Funds**

System	Funded Ratio – Retirement Funds	
	June 30, 2024	June 30, 2025
CERS Non-Hazardous	58.4%	61.4%
CERS Hazardous	54.0%	57.0%
KERS Non-Hazardous	24.8%	28.6%
KERS Hazardous	68.3%	72.3%
SPRS	56.7%	61.9%

Table 2 provides a similar comparison of the change in funded ratio for the insurance funds. As the table shows, the funded ratio decreased for all funds since the prior year due to increases in the 2026 health insurance premiums.

**Table 2. Change in the Funded Ratio (AVA / AAL)
from June 30, 2024 to June 30, 2025 for the Insurance Funds**

System	Funded Ratio – Insurance Funds	
	June 30, 2024	June 30, 2025
CERS Non-Hazardous	122.3%	106.5%
CERS Hazardous	100.5%	90.9%
KERS Non-Hazardous	81.7%	73.4%
KERS Hazardous	171.9%	166.4%
SPRS	104.9%	101.2%

On average, pre-Medicare premiums were approximately 8% higher than expected and Medicare premiums were approximately 28% higher than expected. Additionally, in conjunction with the review of the healthcare per capita claims cost, the assumed increase in future healthcare costs, or trend assumption, is reviewed on an annual basis. As a result of our review, the trend assumption was updated. In general, the updated assumption is assuming higher future increases in pre-Medicare and Medicare health costs. The ultimate annual trend assumption for pre-Medicare and Medicare Plans remained at 4.25%.

SUMMARY OF CHANGE IN CONTRIBUTION RATES SINCE THE PRIOR VALUATION

Table 3 provide a comparison of the actuarially determined employer contributions determined by the June 30, 2025 actuarial valuation and the June 30, 2024 actuarial valuation, both as a percentage of payroll and as a dollar amount.

Table 3. Comparison of the Actuarially Determined Contribution (Retirement and Insurance)

System	Percentage of Payroll		Annual Dollar Amount	
	2024 Valuation	2025 Valuation	FYE2026	FYE2027
CERS Non-Hazardous	18.62%	17.43%	$596M	$593M
CERS Hazardous	35.73%	34.72%	$271M	$285M
KERS Non-Hazardous	7.99%	7.76%	$1,015M	$1,025M
KERS Hazardous	20.68%	18.83%	$54M	$50M
SPRS	59.37%	54.33%	$43M	$41M

[1] Amortization cost for KERS non-hazardous fund increased from $866 million calculated in the June 30, 2024 valuation to $868 million calculated in the June 30, 2025 valuation

The contribution requirement as a percent of pay decreased across all funds. The membership payroll for each fund increased more than assumed. The payroll increases resulted in liability losses for most funds, which increased the unfunded actuarially accrued liability for the pension funds, which ultimately increased the total required contribution as a dollar amount. This increase was offset by favorable investment returns, which resulted in a net decrease in the total required contribution (as a dollar amount) for most funds.

The KERS non-hazardous and CERS hazardous funds experienced the highest average salary increases amongst their active populations, which caused the total required contribution (as a dollar amount) to increase for those funds. Additionally, there was a reduction in the contribution requirement for the KERS non-hazardous and SPRS pension funds due to the additional appropriations expected in FY2026.

Table 4 provides the increase in membership payroll since the prior valuation.

Table 4. Increase in Membership Payroll from June 30, 2024 to June 30, 2025

System	Increase in Membership Payroll	
	Actual	Assumed
CERS Non-Hazardous	6.3%	2.0%
CERS Hazardous	8.5%	2.0%
KERS Hazardous	2.6%	0.0%
SPRS	1.5%	0.0%

Note: KERS non-hazardous fund amortization cost portion of the required contribution is no longer tied to membership payroll

ASSUMPTIONS AND METHODS

The Boards of Trustees, in consultation with the actuary, set the actuarial assumptions and methods used in the actuarial valuation. In general, the assumptions used in the June 30, 2025 actuarial valuations were adopted for first use in the June 30, 2023 actuarial valuations and are based on the experience study conducted through June 30, 2022.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

BENEFIT PROVISIONS

The benefit provisions reflected in the June 30, 2025 valuations are those which were in effect on June 30, 2025. The CERS actuarial valuation reflects the benefits enacted by Senate Bill 10, which provided increased retiree medical benefits for CERS members hired after July 1, 2003 that meet certain eligibility requirements at retirement. This legislation also increased the insurance member contribution rate for CERS hazardous members and extended the required contribution to CERS members hired on or after July 1, 2003 but prior to September 1, 2008 for both non-hazardous and hazardous members.

DATA

Member data for retired, active and inactive members was supplied as of June 30, 2025, by KPPA staff. The staff also supplied asset information as of June 30, 2025. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KPPA.

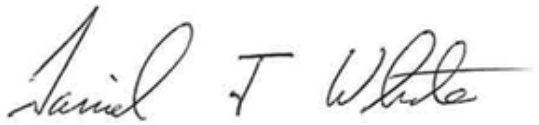
CERTIFICATION

The information provided in this letter compliments the information provided in the June 30, 2025 actuarial valuation reports. Please refer to the June 30, 2025 actuarial valuation reports for additional discussion of the actuarial valuation, including the nature of actuarial calculations and more information related to participant data, economic and demographic assumptions, and benefit provisions.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. All of the undersigned are Enrolled Actuaries and members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. In addition, all three are independent of KPPA and are experienced in performing valuations for large public retirement systems. This communication shall not be construed to provide tax advice, legal advice or investment advice.

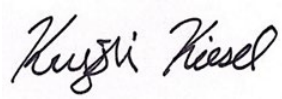
Sincerely,

Gabriel, Roeder, Smith & Company



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

Janie Shaw, ASA, EA, MAAA
Consultant



Krysti Kiesel, ASA, EA, MAAA
Consultant

Summary of June 30, 2025 Actuarial Valuation Results

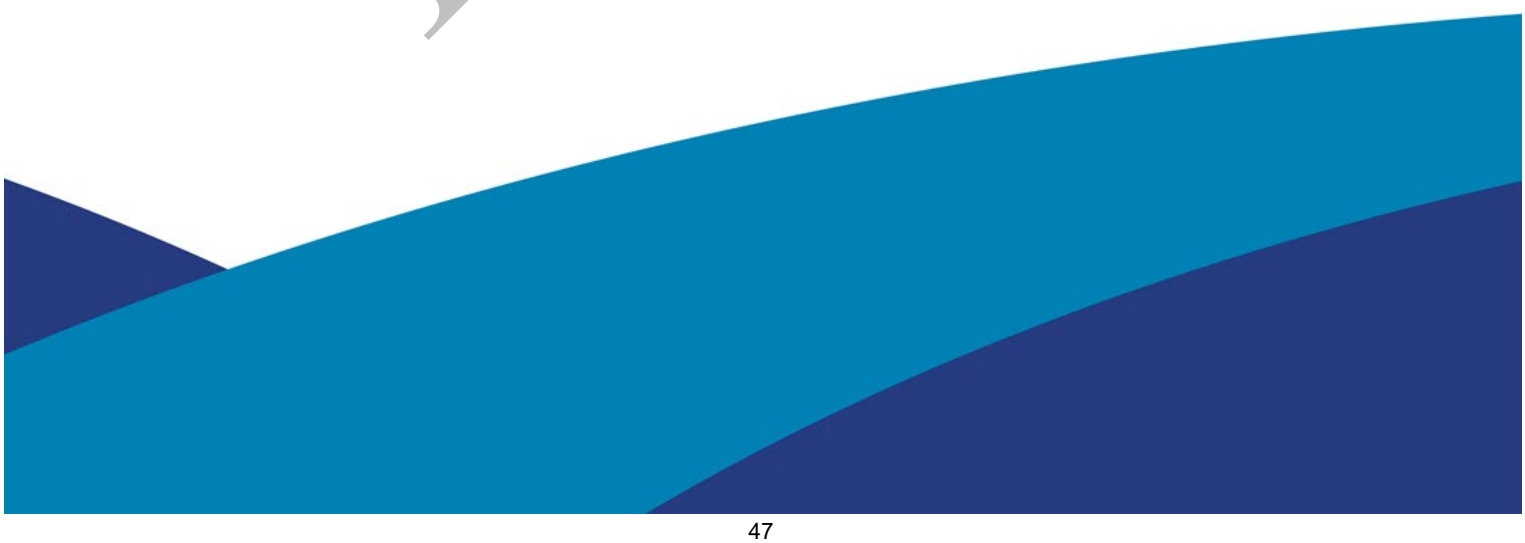
	CERS Non-Hazardous	CERS Hazardous	KERS Non-Hazardous	KERS Hazardous	SPRS
Actuarially Determined Contribution:					
Pension Fund Contribution	17.14%	31.52%	6.65%	18.83%	51.84%
Insurance Fund Contribution	0.29%	3.20%	1.11%	0.00%	2.49%
Employer Contribution, payable as a percentage of payroll	17.43%	34.72%	7.76% [2]	18.83%	54.33%
Amortization Cost to be Allocated, if applicable	N/A	N/A	868,158,252 [2]	N/A	N/A
Certified Contribution Rate for Fiscal Year Ending 2027[1]	17.43%	34.72%	7.76% [2]	18.83%	54.33%
Assets:					
Retirement					
• Actuarial value (AVAR)	$9,933,705,336	$3,592,716,988	$4,810,420,381	$1,076,412,201	$699,538,955
• Market value (MVAR)	$10,490,132,265	$3,796,462,074	$5,061,424,520	$1,137,479,989	$741,281,980
• Ratio of actuarial to market value of assets	94.7%	94.6%	95.0%	94.6%	94.4%
Insurance					
• Actuarial value (AVAI)	$3,793,782,246	$1,763,479,375	$1,817,922,524	$699,650,236	$276,806,058
• Market value (MVAI)	$4,011,291,021	$1,862,028,671	$1,915,731,580	$735,292,505	$291,043,388
• Ratio of actuarial to market value of assets	94.6%	94.7%	94.9%	95.2%	95.1%
Funded Status:					
Retirement					
• Actuarial accrued liability	$16,174,005,715	$6,301,845,834	$16,839,319,157	$1,488,008,170	$1,130,392,428
• Unfunded accrued liability on AVAR	$6,240,300,379	$2,709,128,846	$12,028,898,776	$411,595,969	$430,853,473
• Funded ratio on AVAR	61.4%	57.0%	28.6%	72.3%	61.9%
• Unfunded accrued liability on MVAR	$5,683,873,450	$2,505,383,760	$11,777,894,637	$350,528,181	$389,110,448
• Funded ratio on MVAR	64.9%	60.2%	30.1%	76.4%	65.6%
Insurance					
• Actuarial accrued liability	$3,562,876,208	$1,939,809,337	$2,475,126,492	$420,391,986	$273,393,126
• Unfunded accrued liability on AVAI	($230,906,038)	$176,329,962	$657,203,968	($279,258,250)	($3,412,932)
• Funded ratio on AVAI	106.5%	90.9%	73.4%	166.4%	101.2%
• Unfunded accrued liability on MVAI	($448,414,813)	$77,780,666	$559,394,912	($314,900,519)	($17,650,262)
• Funded ratio on MVAI	112.6%	96.0%	77.4%	174.9%	106.5%
Membership:					
• Number of					
- Active Members	81,863	9,927	33,356	4,228	863
- Retirees and Beneficiaries	73,570	12,074	48,594	5,043	1,693
- Inactive Members	120,312	4,591	57,597	9,312	775
- Total	275,745	26,592	139,547	18,583	3,331
• Projected payroll of active members	$3,336,806,507	$806,462,406	$2,023,843,270	$266,387,327	$74,404,942
• Average salary of active members	$40,761	$81,239	$60,674	$63,006	$86,217

[1] Contributions for KERS and SPRS calculated with the June 30, 2025 valuation are effective for two years (fiscal years ending June 30, 2027 and June 30, 2028).
Contributions for CERS calculated with the June 30, 2025 valuation are effective for one year (fiscal year ending June 30, 2027).

[2] For the KERS non-hazardous fund, contribution rate includes the normal cost portion of the contribution requirement only. Amortization cost will be allocated to employers as a dollar amount.

County Employees Retirement System (CERS)

Actuarial Valuation Report
as of June 30, 2025



P: 469.524.0000 | www.grsconsulting.com

October 31, 2025

Board of Trustees
County Employees Retirement System
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Subject: Actuarial Valuation as of June 30, 2025

Dear Trustees of the Board:

This report describes the current actuarial condition of the County Employees Retirement System (CERS) and provides the actuarially determined employer contribution rates for fiscal year ending June 30, 2027. In addition, the report analyzes changes in CERS's financial condition and provides various summaries of the data.

EXECUTIVE SUMMARY OF VALUATION RESULTS

The first page of the executive summary provides a table with a comparison of the valuation results from 2024 to 2025. Fund investments earned between 11.1% and 11.6% in fiscal year 2025, with returns varying by fund, which resulted in $901 million ($648 million pension and $253 million insurance) more in assets than expected at the beginning of the year.

Retirement fund liabilities were $221 million larger than expected for both funds combined, primarily attributable to salary increases for individual member being greater than expected. There was also a net $797 million liability loss for the insurance funds primarily due to higher than expected health insurance premiums for 2026, as well as the passing of Senate Bill 10 during the 2025 legislative session, which increased insurance benefits for certain members.

The contribution rate for the non-hazardous funds decreased by 1.19% of pay to 17.43% of pay. This reflects a 1.48% decrease in the pension fund contribution rate, primarily due to a larger than assumed increase in membership payroll and favorable investment experience, and a 0.29% increase in the insurance contribution rate, primarily due to higher than expected health insurance premiums, and the passing of Senate Bill 10.

Similarly, the contribution rate for the hazardous funds decreased by 1.01% of pay to 34.72% of pay. This reflects a 2.48% decrease in the pension fund contribution rate, primarily due to a larger than assumed increase in membership payroll and favorable investment experience, and a 1.47% increase in the insurance contribution rate, primarily due to higher than expected health insurance premiums, and the passing of Senate Bill 10.

The following table provides the projected contributions for the non-hazardous and hazardous fund for the next 30 years (retirement + insurance), as well as the unfunded actuarial accrued liability and funded ratio for each retirement fund (excluding insurance). These projections assume that all actuarial assumptions are realized and the full actuarially determined contributions are made each future year.

Projected Contributions, Unfunded Liability, and Funded Ratio
($ in Millions)

	Fiscal Year Beginning July 1,				
	2025	**2029**	**2034**	**2044**	**2054**
	Year 1	Year 5	Year 10	Year 20	Year 30
CERS Non-Hazardous					
Employer Contribution[1]	18.62%	15.46%	14.88%	18.81%	4.08%
Unfunded Liability – Pension Only	$6,240	$5,385	$5,025	$2,965	$0
Funded Ratio – Pension Only	61%	69%	73%	86%	100%
CERS Hazardous					
Employer Contribution Rate[1]	35.73%	30.39%	28.80%	33.87%	7.85%
Unfunded Liability – Pension Only	$2,709	$2,363	$2,162	$1,182	$0
Funded Ratio – Pension Only	57%	66%	73%	89%	100%

[1] Employer Contribution shown includes required contributions for both the retirement and insurance funds.

FINANCING OBJECTIVES AND FUNDING POLICY

The employer contribution is determined in accordance with Section 78.635 of Kentucky Statute. As specified by the Statute, the employer contribution is comprised of a normal cost contribution and an actuarial accrued liability contribution. The actuarial accrued liability contribution is calculated by amortizing the unfunded accrued liability as of June 30, 2019 over a closed 30-year amortization period (24 years remaining as of June 30, 2025). Gains and losses incurring in years after June 30, 2019 are amortized as separate closed 20-year amortization bases.

If the contributions made are equal to the Actuarially Determined Contribution (ADC), and if all actuarial assumptions are met, there will not be an unfunded accrued liability at the end of the 24-year period remaining from the original closed 30-year amortization base (i.e. as of June 30, 2049). Accordingly, the ADC under the funding policy can be considered a "Reasonable Actuarially Determined Contribution" as required by the Actuarial Standards of Practice.

House Bill 362 passed during the 2018 legislative session and limited the increases to the employer contribution rates to 12% over the prior fiscal year through June 30, 2028. This legislation does not impact the contribution rates calculated in this actuarial valuation. The recommended certified contribution rates are equal to the actuarially determined rates.

Assumptions and Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the actuarial valuation. Except where noted in this report, the assumptions used in this actuarial valuation are based on an experience study conducted with experience through June 30, 2022, adopted by the Board of Trustees on May 9, 2023.

The results of the actuarial valuation are dependent on the actuarial assumptions used. Actual results can, and almost certainly will, differ as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rate, and funding periods. The actuarial calculations are intended to provide information for rational decision making.

Benefit Provisions and Data

The benefit provisions reflected in these valuations are those which were in effect on June 30, 2025. Senate Bill 10 passed during the 2025 legislative session and provided increased retiree medical benefits for members hired after July 1, 2003 that meet certain eligibility requirements at retirement. This legislation also increased the insurance member contribution rate for hazardous members and extended the required contribution to members hired on or after July 1, 2003 but prior to September 1, 2008 for both non-hazardous and hazardous members.

Member data for retired, active and inactive members was supplied as of June 30, 2025, by the Kentucky Public Pensions Authority (KPPA) staff. The staff also supplied asset information as of June 30, 2025. We did not audit this data, but we did apply a number of tests to the data, and we concluded that it was reasonable and consistent with the prior year's data. GRS is not responsible for the accuracy or completeness of the information provided to us by KPPA.

Certification

We certify that the information presented herein is accurate and fairly portrays the actuarial position of CERS as of June 30, 2025.

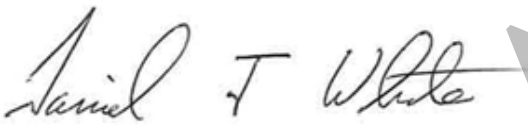
Separate reports are issued with regard to valuation results determined in accordance with Governmental Accounting Standards Board (GASB) Statements 67, 68, 74 and 75. Results of this report should not be used for any other purpose without consultation with the undersigned. Valuations are prepared annually as of June 30, the first day of the plan year for CERS. This report was prepared at the request of the Board of Trustees of the County Employees Retirement System (Board) and is intended for use by KPPA staff and those designated or approved by the Board.

All of our work conforms with generally accepted actuarial principles and practices, and is in conformity with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, our calculations also comply with the requirements of Kentucky Code of Laws and, where applicable, the Internal Revenue Code, ERISA, and the Statements of the Governmental Accounting Standards Board.

To the best of our knowledge, this report is complete and accurate and is in accordance with generally recognized actuarial practices and methods. All of the undersigned are Enrolled Actuaries and members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. In addition, all three are independent of KPPA and are experienced in performing valuations for large public retirement systems. This communication shall not be construed to provide tax advice, legal advice or investment advice.

Sincerely,

Gabriel, Roeder, Smith & Company



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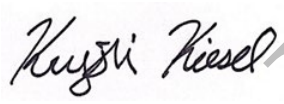

Krysti Kiesel, ASA, EA, MAAA
Consultant

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SECTION 1

EXECUTIVE SUMMARY

Summary of Principal Results

(Dollar amounts expressed in thousands)

	Non-Hazardous		Hazardous		Total	
	June 30, 2025	June 30, 2024	June 30, 2025	June 30, 2024	June 30, 2025	June 30, 2024
Actuarially Determined Contribution:						
Retirement	17.14%	18.62%	31.52%	34.00%		
Insurance	0.29%	0.00%	3.20%	1.73%		
Total	17.43%	18.62%	34.72%	35.73%	N/A	N/A
Contribution Rate for Next Fiscal Year[1]	17.43%	18.62%	34.72%	35.73%		
Assets:						
Retirement						
• Actuarial value (AVAR)	$9,933,705	$9,211,735	$3,592,717	$3,279,623	$13,526,422	$12,491,358
• Market value (MVAR)	$10,490,132	$9,596,244	$3,796,462	$3,416,897	$14,286,594	$13,013,141
• Ratio of actuarial to market value of assets	94.7%	96.0%	94.6%	96.0%	94.7%	96.0%
Insurance						
• Actuarial value (AVAI)	$3,793,782	$3,549,422	$1,763,479	$1,676,141	$5,557,261	$5,225,563
• Market value (MVAI)	$4,011,291	$3,707,277	$1,862,029	$1,752,366	$5,873,320	$5,459,643
• Ratio of actuarial to market value of assets	94.6%	95.7%	94.7%	95.7%	94.6%	95.7%
Funded Status:						
Retirement						
• Actuarial accrued liability	$16,174,006	$15,776,491	$6,301,846	$6,070,201	$22,475,852	$21,846,692
• Unfunded accrued liability on AVAR	$6,240,301	$6,564,756	$2,709,129	$2,790,578	$8,949,430	$9,355,334
• Funded ratio on AVAR	61.4%	58.4%	57.0%	54.0%	60.2%	57.2%
• Unfunded accrued liability on MVAR	$5,683,874	$6,180,247	$2,505,384	$2,653,304	$8,189,258	$8,833,551
• Funded ratio on MVAR	64.9%	60.8%	60.2%	56.3%	63.6%	59.6%
Insurance						
• Actuarial accrued liability	$3,562,876	$2,901,345	$1,939,809	$1,668,057	$5,502,685	$4,569,402
• Unfunded accrued liability on AVAI	($230,906)	($648,077)	$176,330	($8,084)	($54,576)	($656,161)
• Funded ratio on AVAI	106.5%	122.3%	90.9%	100.5%	101.0%	114.4%
• Unfunded accrued liability on MVAI	($448,415)	($805,932)	$77,780	($84,309)	($370,635)	($890,241)
• Funded ratio on MVAI	112.6%	127.8%	96.0%	105.1%	106.7%	119.5%
Membership:						
• Number of						
- Active Members	81,863	80,440	9,927	9,678	91,790	90,118
- Retirees and Beneficiaries	73,570	72,385	12,074	11,853	85,644	84,238
- Inactive Members	120,312	115,789	4,591	4,418	124,903	120,207
- Total	275,745	268,614	26,592	25,949	302,337	294,563
• Projected payroll of active members	$3,336,807	$3,137,814	$806,462	$743,133	$4,143,269	$3,880,947
• Average salary of active members	$40,761	$39,008	$81,239	$76,786	$45,139	$43,065

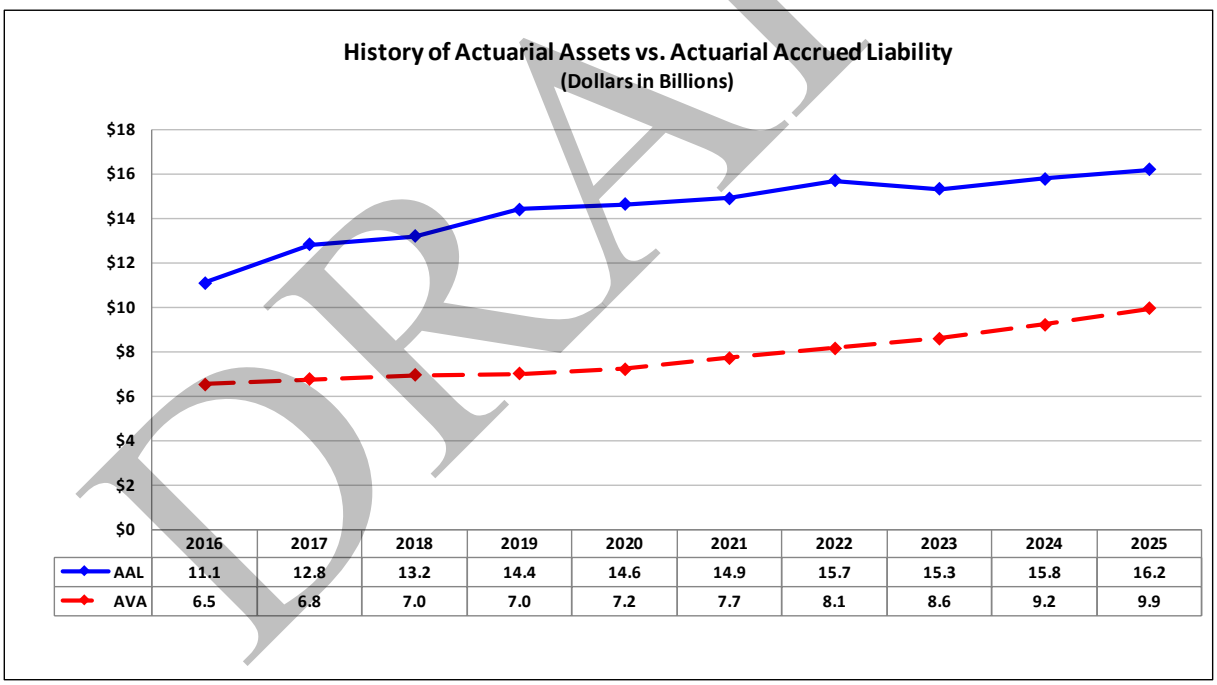
[1] Contribution rates calculated with the June 30, 2025 valuation (June 30, 2024 valuation) are effective for fiscal year ending June 30, 2027 (June 30, 2026).

Executive Summary (Continued)

Non-Hazardous Retirement Fund

The unfunded actuarial accrued liability of the non-hazardous retirement fund decreased by $324 million since the prior year's valuation to $6.240 billion. This decrease was approximately $210 million more than expected, primarily due to favorable investment experience. These asset gains were partially offset by liability losses as a result of salary increases for individual members being greater than assumed.

Below is a chart with the historical actuarial value of assets and actuarial accrued liability. The divergence in the assets and liability at the beginning of the ten-year period was due to: (1) actual contributions being insufficient to finance the unfunded actuarial accrued liability, and (2) assumption changes. Since 2023, the unfunded actuarial accrued liability has been decreasing steadily due to the increased funding effort to the retirement system and the phase in of the full actuarially determined contribution rates.



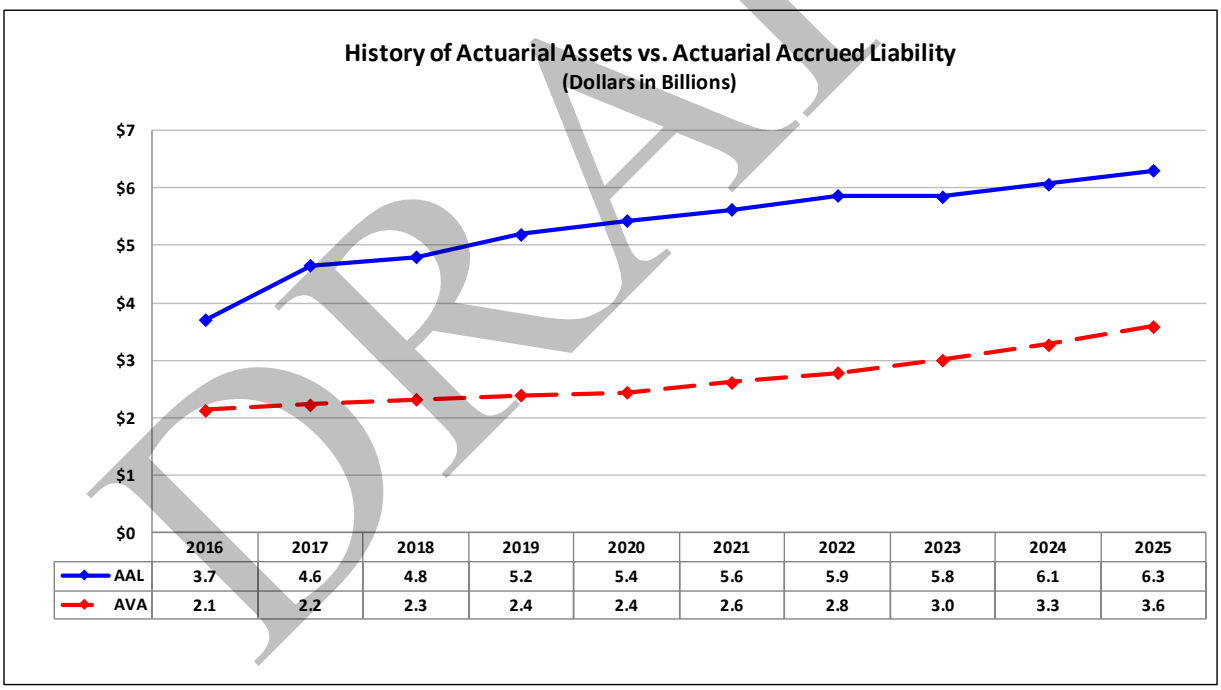
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AAL	11.1	12.8	13.2	14.4	14.6	14.9	15.7	15.3	15.8	16.2
AVA	6.5	6.8	7.0	7.0	7.2	7.7	8.1	8.6	9.2	9.9

Executive Summary (Continued)

Hazardous Retirement Fund

The unfunded actuarial accrued liability of the hazardous retirement fund decreased by $81 million since the prior year's valuation to $2.709 billion. This decrease was approximately $13 million more than expected, primarily due to favorable investment experience. These asset gains were partially offset by liability losses as a result of salary increases for individual members being greater than assumed.

Below is a chart with the historical actuarial value of assets and actuarial accrued liability. The divergence in the assets and liability at the beginning of the ten-year period was due to: (1) actual contributions being insufficient to finance the unfunded actuarial accrued liability, and (2) assumption changes. Since 2023, the unfunded actuarial accrued liability has been decreasing steadily due to the increased funding effort to the retirement system and the phase in of the full actuarially determined contribution rates.



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
AAL	3.7	4.6	4.8	5.2	5.4	5.6	5.9	5.8	6.1	6.3
AVA	2.1	2.2	2.3	2.4	2.4	2.6	2.8	3.0	3.3	3.6

Executive Summary (Continued)

Summary of Change in Financial Condition of the Insurance Funds

The funding surplus (assets in excess of actuarial accrued liability) of the non-hazardous insurance fund decreased by $417 million since the prior year's valuation to $231 million. The funding surplus was expected to increase by $9 million; therefore, the funding surplus was $426 million lower than expected.

Similarly, the funding surplus of the hazardous insurance fund decreased by $184 million since the prior year's valuation, resulting in an unfunded actuarial accrued liability of $176 million. The funding surplus was expected to increase by $1 million; therefore, the difference in the accrued liability and the assets was a $185 million greater than expected.

The actuarial losses on the insurance funds are primarily due to the 2026 health insurance premiums being higher than expected. Additionally, both funds experienced an increase in accrued liability due to the passing of Senate 10 in 2025, which increased health insurance benefits for certain members. These liability increases were offset by favorable investment earnings.

On average, pre-Medicare premiums were approximately 8% higher than expected and Medicare premiums were approximately 28% higher than expected. In conjunction with the review of the healthcare per capita claims cost, the assumed increase in future healthcare costs, or trend assumption, is also reviewed on an annual basis. As a result of our review, the trend assumption was updated. In general, the updated assumption is using higher future increases in pre-Medicare and Medicare health costs. The ultimate annual trend assumption for pre-Medicare and Medicare Plans remained at 4.25%. The updates to the trend assumption increased the liability for the non-hazardous and hazardous insurance funds by approximately $108 million and $51 million, respectively.

SECTION 2

DISCUSSION

Discussion

The County Employees Retirement System (CERS) is a cost-sharing, multiple-employer defined benefit pension plan that provides coverage for regular full-time members employed by positions of each participating county, city, and school board, and any additional eligible local agencies electing to participate in CERS. CERS includes both non-hazardous and hazardous duty benefits. This report presents the results of the June 30, 2025 actuarial funding valuation for both the retirement funds and insurance funds.

The primary purposes of the valuation report are to describe the current actuarial condition of CERS and provide the actuarially determined employer contribution rates for fiscal year ending June 30, 2027. In addition, the report analyzes changes in CERS's financial condition and provides various summaries of the data.

The actuarially determined contribution consist of two components: a normal cost rate and an amortization cost to finance the unfunded actuarial accrued liability. The normal cost rate is the theoretical amount which would be required to pay the members' benefits, based on the current plan provisions, if this amount had been contributed from each member's entry date and if the fund's experience exactly followed the actuarial assumptions. This is the amount that it should cost to provide the benefits for an average member. Since members contribute to the fund, only the excess of the normal cost rate over the member contribution rate is included in the employer contribution. The amortization cost is the amount necessary to amortize the unfunded actuarial accrued liability. The payroll growth rate and discount rate assumptions are selected by the Board. The funding period is specified in Section 78.635 of Kentucky Statute.

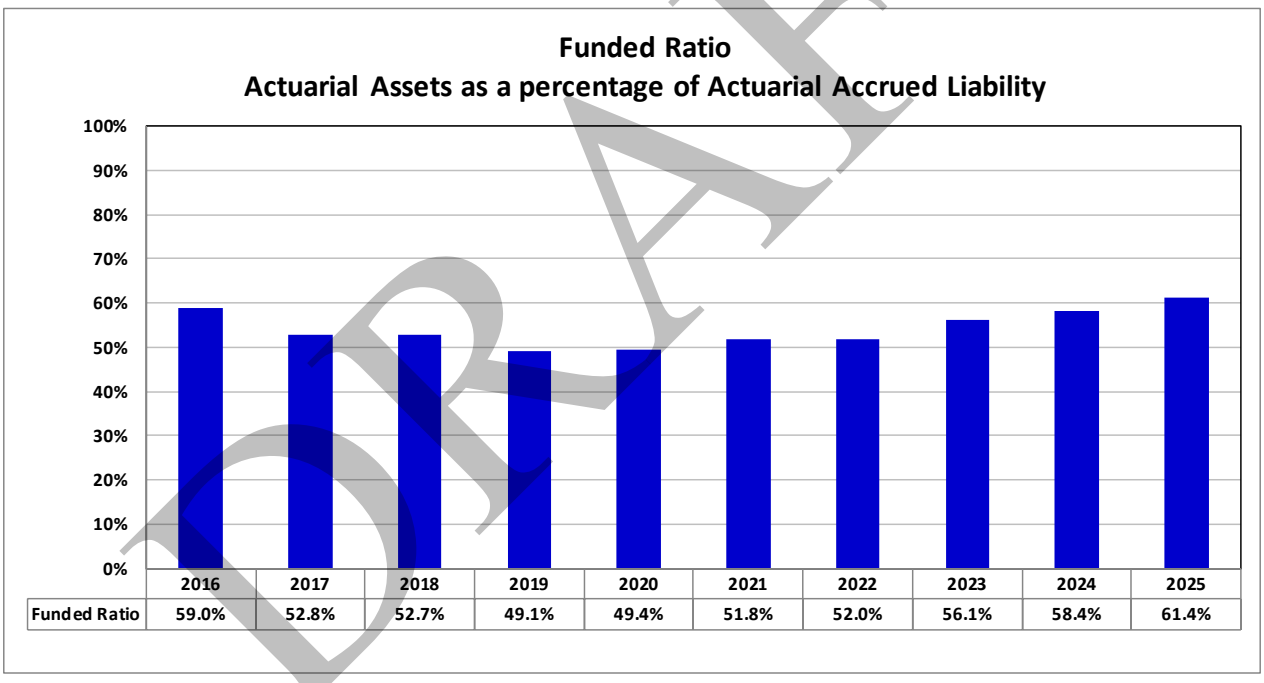
All of the actuarial and financial tables referenced by the other sections of this report appear in Section 3. Section 4 provides additional details related to the calculation of the amortization of the unfunded actuarial accrued liability. Section 5 provides member data and statistical information. Section 6 provides a discussion of various risk measures, which are intended to aid stakeholders in understanding the effects of future experience differing from the assumptions used in performing an actuarial valuation. Appendices A and B provide summaries of the principle actuarial assumptions and methods and plan provisions. Finally, Appendix C provides a glossary of technical terms that are used throughout this report.

Funding Progress

The following charts provide a ten-year history of the retirement funds' funded ratio (i.e. the Actuarial Value of Assets divided by the Actuarial Accrued Liability). The decline in the funded ratio in the first half of this ten-year period was generally due to: (1) actual contributions being insufficient to finance the unfunded actuarial accrued liability, and (2) assumption changes.

The funded ratio has been gradually increasing for the past several years for both the non-hazardous and hazardous funds. Now that the full actuarially determined contributions have been fully phased-in and absent significant future unfavorable experience, the funded ratio is expected to continue trending upward. Also, the dollar amount of the unfunded actuarial accrued liability, or the difference between the actuarial accrued liability and the actuarial value of assets, is expected to continue a decreasing trend. Table 9, Schedule of Funding Progress, in the following section of the report provides additional detail regarding the funding progress of the retirement funds.

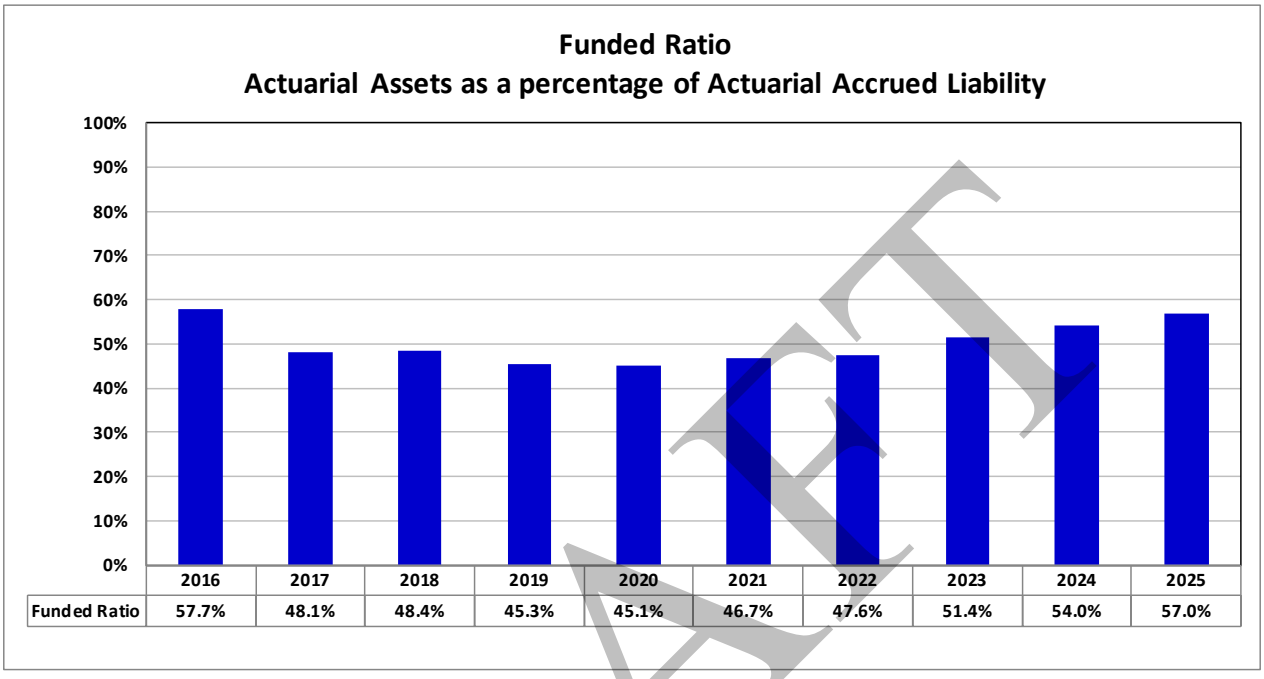
Non-Hazardous Retirement Fund



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Funded Ratio	59.0%	52.8%	52.7%	49.1%	49.4%	51.8%	52.0%	56.1%	58.4%	61.4%

Funding Progress (Continued)

Hazardous Retirement Fund



	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Funded Ratio	57.7%	48.1%	48.4%	45.3%	45.1%	46.7%	47.6%	51.4%	54.0%	57.0%

Asset Gains/ (Losses)

The actuarial value of assets ("AVA") is based on a smoothed market value of assets, using a systematic approach to phase-in the difference between the actual and expected investment return on the market value of assets (adjusted for receipts and disbursements during the year). This is appropriate because it dampens the short-term volatility inherent in investment markets. The return is computed net of investment expenses.

Non-Hazardous Retirement Fund

The actuarial value of assets for the non-hazardous retirement fund increased from $9.212 billion to $9.934 billion since the prior valuation. The rate of return on the market value of assets on a dollar-weighted basis for the prior fiscal year was 11.5% which is greater than the 6.50% expected annual return. The return on an actuarial (smoothed) asset value was 10.1%, which resulted in a $329 million gain for the fiscal year. The market value of assets is $556 million more than the actuarial value of assets, which signifies that the retirement fund is in a position of net deferred investment gains to be realized in future years.

Hazardous Retirement Fund

Likewise, the actuarial value of assets for the hazardous retirement fund increased from $3.280 billion to $3.593 billion since the prior valuation. The rate of return on the market value of assets on a dollar-weighted basis for the prior fiscal year was 11.6% which is greater than the 6.50% expected annual return. The return on an actuarial (smoothed) asset value was 10.0%, which resulted in a $115 million gain for the fiscal year. The market value of assets is $204 million more than the actuarial value of assets, which signifies that the retirement fund is in a position of net deferred investment gains to be realized in future years.

Table 6 in the following section of this report provides asset information that was included in the annual financial statements of the funds, as well as the estimated yield on a market value basis. Tables 7 and 8 provide the development of the actuarial value of assets and the estimated yield on an actuarial value basis.

Actuarial Gains/ (Losses)

The annual actuarial valuation is a snapshot analysis of the benefit liabilities, assets and funded position of the funds as of the first day of the plan year. In any one fiscal year, the experience can be better or worse from that which is assumed or expected. The actuarial assumptions do not necessarily attempt to model what the experience will be for any one given fiscal year, but instead try to model the overall experience over many years. Therefore, as long as the actual experience of a retirement system is reasonably close to the current assumptions, the long-term funding requirements of the system will remain relatively consistent.

Below are tables that separately show a reconciliation of the unfunded liability since the prior actuarial valuation for the retirement and health insurance funds, which includes the effect of asset and liability gains and losses, changes in assumptions, and changes in plan provisions. See the discussion in the Executive Summary for additional information related to the liability experience and additional information in this section of the report related to the asset experience, plan changes, and assumption changes.

Retirement Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ 6,564,756	$ 2,790,578
2. Normal cost and administrative expenses	320,685	129,900
3. Less: contributions for the year	(844,580)	(371,876)
4. Interest accrual	409,683	173,523
5. Expected UAAL (Sum of Items 1 - 4)	$ 6,450,544	$ 2,722,125
6. Actual UAAL as of June 30,2025	$ 6,240,301	$ 2,709,129
7. Total gain (loss) for the year (Item 5 - Item 6)	$ 210,243	$ 12,996
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ 328,670	$ 115,137
9. Liability experience gain (loss) for the year	(118,427)	(102,141)
10. Plan Change	—	—
11. Assumption change	—	—
12. Total	$ 210,243	$ 12,996

Actuarial Gains/ (Losses) (Continued)

Insurance Experience Gain or (Loss)
(Dollar amounts expressed in thousands)

	Non-Hazardous	Hazardous
A. Calculation of total actuarial gain or loss		
1. Unfunded actuarial accrued liability (UAAL), previous year	$ (648,077)	$ (8,084)
2. Normal cost and administrative expenses	67,726	25,655
3. Less: contributions for the year	(35,547)	(25,656)
4. Interest accrual	(41,079)	(525)
5. Expected UAAL (Sum of Items 1 - 4)	$ (656,977)	$ (8,610)
6. Actual UAAL as of June 30,2025	$ (230,906)	$ 176,330
7. Total gain (loss) for the year (Item 5 - Item 6)	$ (426,071)	$ (184,940)
B. Source of gains and losses		
8. Asset gain (loss) for the year	$ 124,517	$ 61,256
9. Liability experience gain (loss) for the year	(413,843)	(130,916)
10. Plan Change	(136,745)	(115,280)
11. Assumption change	—	—
12. Total	$ (426,071)	$ (184,940)

Note, the liability experience gain (loss) shown above includes the impact of any trend assumption changes made in conjunction with the review of the healthcare per capita claims cost, as described in the Executive Summary.

Actuarial Assumptions and Methods

In determining costs and liabilities, actuaries use assumptions about the future, such as rates of salary increase, probabilities of retirement, termination, death and disability, and an annual investment return assumption. The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the actuarial valuation.

In conjunction with the review of the healthcare per capita claims cost, the assumed increase in future healthcare costs, or trend assumption, is reviewed on an annual basis. The trend assumption was increased as a result of our review. All other assumptions were adopted by the Board and are based on an experience study conducted based on experience through June 30, 2022. It is our opinion that the assumptions are internally consistent, reasonable, and reflect anticipated future experience of the System. Appendix A includes a summary of the actuarial assumptions and methods used in this valuation.

Future actuarial measurements may differ significantly from the current measurements 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. This report does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Benefit Provisions

Appendix B of this report includes a summary of the major benefit provisions for System.

Senate Bill 10 passed during the 2025 legislative session and increased the insurance dollar benefit for members who began participating on or after July 1, 2003 to $40 a month for non-hazardous CERS service and $50 a month for hazardous CERS service, effective January 1, 2026. These increases are only payable when a member is not eligible for Medicare benefits and only if they met certain year-of-service thresholds at retirement. In order for the member to be eligible for the increase in the insurance dollar benefit, the member must meet the following career threshold requirements:

(1) 20 years of service for a hazardous member hired on or after July 1, 2003 but prior to September 1, 2008;
(2) 25 years of service for a hazardous member hired on or after September 1, 2008; and
(3) 27 years of service for a non-hazardous member.

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

There have been no other material plan provision changes since the prior valuation.

SECTION 3

ACTUARIAL TABLES

Actuarial Tables

RETIREMENT BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Retirement Benefits
(Dollar amounts expressed in thousands)

		June 30, 2025	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 3,336,807	$ 806,462
2.	Present value of future pay	$ 24,659,169	$ 7,650,345
3.	Normal cost rate		
	a. Total normal cost rate	9.26%	16.90%
	b. Less: member contribution rate	-5.00%	-8.00%
	c. Employer normal cost rate	4.26%	8.90%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 8,108,812	$ 3,380,837
	b. Less: present value of future normal costs	(2,186,662)	(1,226,258)
	c. Actuarial accrued liability	$ 5,922,150	$ 2,154,579
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 9,503,442	$ 4,055,899
	b. Inactive members	748,414	91,368
	c. Active members (Item 4c)	5,922,150	2,154,579
	d. Total	$ 16,174,006	$ 6,301,846
6.	Actuarial value of assets	$ 9,933,705	$ 3,592,717
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ 6,240,301	$ 2,709,129
8.	Funded Ratio	61.4%	57.0%

Actuarial Present Value of Future Benefits
Retirement Benefits
(Dollar amounts expressed in thousands)

		June 30, 2025	
		Non-Hazardous (1)	Hazardous (2)
1.	Active members		
	a. Service retirement	$ 6,943,932	$ 3,006,803
	b. Deferred termination benefits and refunds	721,602	188,464
	c. Survivor benefits	132,417	29,005
	d. Disability benefits	310,861	156,565
	e. Total	$ 8,108,812	$ 3,380,837
2.	Retired members		
	a. Service retirement	$ 8,463,017	$ 3,677,336
	b. Disability retirement	419,118	111,440
	c. Beneficiaries	621,307	267,123
	d. Total	$ 9,503,442	$ 4,055,899
3.	Inactive members		
	a. Vested terminations	$ 630,943	$ 78,003
	b. Nonvested terminations	117,471	13,365
	c. Total	$ 748,414	$ 91,368
4.	Total actuarial present value of future benefits	$ 18,360,668	$ 7,528,104

Development of Actuarially Determined Contribution Rate
Retirement Benefits

		June 30, 2025	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate		
	a. Service retirement	5.71%	12.88%
	b. Deferred termination benefits and refunds	2.66%	2.59%
	c. Survivor benefits	0.32%	0.25%
	d. Disability benefits	0.57%	1.18%
	e. Total	9.26%	16.90%
2.	Less: member contribution rate	-5.00%	-8.00%
3.	Total employer normal cost rate	4.26%	8.90%
4.	Administrative expenses	0.77%	0.28%
5.	Net employer normal cost rate	5.03%	9.18%
6.	UAAL amortization contribution rate	12.11%	22.34%
7.	Total calculated employer contribution	17.14%	31.52%

Actuarial Balance Sheet

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)

	June 30, 2025 (1)	June 30, 2024 (2)
1. Assets - Present and Expected Future Resources		
a. Current assets (actuarial value)	$ 9,933,705	$ 9,211,735
b. Present value of future member contributions	$ 1,232,958	$ 1,152,289
c. Present value of future employer contributions		
i. Normal cost contributions	$ 953,704	$ 913,278
ii. Unfunded accrued liability contributions	6,240,301	6,564,756
iii. Total future employer contributions	$ 7,194,005	$ 7,478,034
d. Total assets	$ 18,360,668	$ 17,842,058
2. Liabilities - Present Value of Expected Future Benefit Payments		
a. Active members		
i. Present value of future normal costs	$ 2,186,662	$ 2,065,567
ii. Accrued liability	5,922,150	5,720,456
iii. Total present value of future benefits	$ 8,108,812	$ 7,786,023
b. Present value of benefits payable on account of current retired members and beneficiaries	$ 9,503,442	$ 9,342,394
c. Present value of benefits payable on account of current inactive members	$ 748,414	$ 713,641
d. Total liabilities	$ 18,360,668	$ 17,842,058

Actuarial Balance Sheet

Hazardous Members Retirement

(Dollar amounts expressed in thousands)

	June 30, 2025 (1)	June 30, 2024 (2)
1. Assets - Present and Expected Future Resources		
a. Current assets (actuarial value)	$ 3,592,717	$ 3,279,623
b. Present value of future member contributions	$ 612,028	$ 553,585
c. Present value of future employer contributions		
i. Normal cost contributions	$ 614,230	$ 570,671
ii. Unfunded accrued liability contributions	2,709,129	2,790,578
iii. Total future employer contributions	$ 3,323,359	$ 3,361,249
d. Total assets	$ 7,528,104	$ 7,194,457
2. Liabilities - Present Value of Expected Future Benefit Payments		
a. Active members		
i. Present value of future normal costs	$ 1,226,258	$ 1,124,256
ii. Accrued liability	2,154,579	2,051,103
iii. Total present value of future benefits	$ 3,380,837	$ 3,175,359
b. Present value of benefits payable on account of current retired members and beneficiaries	$ 4,055,899	$ 3,935,492
c. Present value of benefits payable on account of current inactive members	$ 91,368	$ 83,606
d. Total liabilities	$ 7,528,104	$ 7,194,457

Reconciliation of Retirement Net Assets

(Dollar amounts expressed in thousands)[1]

	Year Ending June 30, 2025 (1) Non-Hazardous	Year Ending June 30, 2025 (2) Hazardous
1. Value of assets at beginning of year	$ 9,596,244	$ 3,416,897
2. Revenue for the year		
a. Contributions		
i. Member contributions	$ 167,151	$ 65,846
ii. Employer contributions	677,431	305,978
iii. Other contributions (less 401h)	(2)	52
iv. Total	$ 844,580	$ 371,876
b. Income		
i. Interest, dividends, and other income	$ 322,685	$ 115,732
ii. Investment expenses	(87,885)	(30,112)
iii. Net	$ 234,800	$ 85,620
c. Net realized and unrealized gains (losses)	858,084	308,684
d. Total revenue	$ 1,937,464	$ 766,180
3. Expenditures for the year		
a. Disbursements		
i. Refunds	$ 24,377	$ 8,005
ii. Regular annuity benefits	993,357	376,348
iii. Other benefit payments	0	0
iv. Transfers to other systems	0	0
v. Total	$ 1,017,734	$ 384,353
b. Administrative expenses and depreciation	25,841	2,262
c. Total expenditures	$ 1,043,575	$ 386,615
4. Increase in net assets (Item 2. - Item 3.)	$ 893,889	$ 379,565
5. Value of assets at end of year (Item 1. + Item 4.)	$ 10,490,132	$ 3,796,462
6. Net external cash flow		
a. Dollar amount	$ (198,995)	$ (14,739)
b. Percentage of market value	-2.0%	-0.4%
7. Estimated annual return on net assets	11.5%	11.6%

[1] Amounts may not add due to rounding

[1] Excludes 401h assets

Development of Actuarial Value of Assets

Non-Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2025
1.	Actuarial value of assets at beginning of year	$ 9,211,735
2.	Market value of assets at beginning of year	$ 9,596,244
3.	Net new investments	
	a. Contributions	$ 844,580
	b. Benefit payments	(1,017,734)
	c. Administrative expenses	(25,841)
	d. Subtotal	$ (198,995)
4.	Market value of assets at end of year	$ 10,490,132
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 1,092,884
6.	Assumed investment return rate for fiscal year	6.50%
7.	Expected return for immediate recognition	$ 617,288
8.	Excess return for phased recognition	$ 475,595
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2025	$ 475,595	$ 95,119
b.	2024	428,459	85,692
c.	2023	310,590	62,118
d.	2022	(1,026,802)	(205,360)
e.	2021	1,330,544	266,109
f.	Total		$ 303,677

10.	Actuarial value of assets as of June 30, 2025 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 9,933,705
11.	Ratio of actuarial value to market value	94.7%
12.	Estimated annual return on actuarial value of assets	10.1%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Retirement

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2025
1.	Actuarial value of assets at beginning of year	$ 3,279,623
2.	Market value of assets at beginning of year	$ 3,416,897
3.	Net new investments	
	a. Contributions	$ 371,876
	b. Benefit payments	(384,353)
	c. Administrative expenses	(2,262)
	d. Subtotal	$ (14,739)
4.	Market value of assets at end of year	$ 3,796,462
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 394,304
6.	Assumed investment return rate for fiscal year	6.50%
7.	Expected return for immediate recognition	$ 221,619
8.	Excess return for phased recognition	$ 172,685
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2025	$ 172,685	$ 34,537
b.	2024	155,229	31,046
c.	2023	108,990	21,798
d.	2022	(355,681)	(71,136)
e.	2021	449,846	89,969
f.	Total		$ 106,214

10.	Actuarial value of assets as of June 30, 2025 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 3,592,717
11.	Ratio of actuarial value to market value	94.6%
12.	Estimated annual return on actuarial value of assets	10.0%

* Amounts may not add due to rounding

Schedule of Funding Progress
Retirement Benefits
(Dollar amounts expressed in thousands)

June 30, (1)	Actuarial Value of Assets (AVA) (2)	Actuarial Accrued Liability (AAL) (3)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2) (4)	Funded Ratio (2)/(3) (5)	Annual Covered Payroll (6)	UAAL as % of Payroll (4)/(6) (7)
			Non-Hazardous Members			
2016	$ 6,535,372	$ 11,076,457	$ 4,541,085	59.0%	$ 2,352,762	193.0%
2017	6,764,873	12,803,510	6,038,637	52.8%	2,452,407	246.2%
2018	6,950,225	13,191,505	6,241,280	52.7%	2,466,801	253.0%
2019	7,049,527	14,356,113	7,306,586	49.1%	2,521,860	289.7%
2020	7,220,607	14,610,868	7,390,261	49.4%	2,565,391	288.1%
2021	7,715,883	14,894,906	7,179,023	51.8%	2,528,735	283.9%
2022	8,148,912	15,674,220	7,525,308	52.0%	2,691,171	279.6%
2023	8,585,073	15,296,429	6,711,356	56.1%	2,898,813	231.5%
2024	9,211,735	15,776,491	6,564,756	58.4%	3,137,814	209.2%
2025	9,933,705	16,174,006	6,240,301	61.4%	3,336,807	187.0%
			Hazardous Members			
2016	$ 2,139,119	$ 3,704,456	$ 1,565,337	57.7%	$ 492,851	317.6%
2017	2,238,320	4,649,047	2,410,727	48.1%	541,633	445.1%
2018	2,321,721	4,792,548	2,470,827	48.4%	533,618	463.0%
2019	2,375,106	5,245,365	2,870,259	45.3%	559,353	513.1%
2020	2,447,885	5,431,299	2,983,414	45.1%	568,558	524.7%
2021	2,628,621	5,629,458	3,000,837	46.7%	578,355	518.9%
2022	2,788,714	5,861,691	3,072,977	47.6%	620,934	494.9%
2023	3,008,147	5,849,995	2,841,848	51.4%	677,988	419.2%
2024	3,279,623	6,070,201	2,790,578	54.0%	743,133	375.5%
2025	3,592,717	6,301,846	2,709,129	57.0%	806,462	335.9%
			Total CERS Members			
2016	$ 8,674,491	$ 14,780,913	$ 6,106,422	58.7%	$ 2,845,613	214.6%
2017	9,003,193	17,452,557	8,449,364	51.6%	2,994,040	282.2%
2018	9,271,946	17,984,053	8,712,107	51.6%	3,000,419	290.4%
2019	9,424,633	19,601,478	10,176,845	48.1%	3,081,213	330.3%
2020	9,668,492	20,042,167	10,373,675	48.2%	3,133,949	331.0%
2021	10,344,504	20,524,364	10,179,860	50.4%	3,107,090	327.6%
2022	10,937,626	21,535,911	10,598,285	50.8%	3,312,105	320.0%
2023	11,593,220	21,146,424	9,553,204	54.8%	3,576,801	267.1%
2024	12,491,358	21,846,692	9,355,334	57.2%	3,880,947	241.1%
2025	13,526,422	22,475,852	8,949,430	60.2%	4,143,269	216.0%

Summary of Principal Assumptions and Methods

Below is a summary of the principal economic assumptions, cost method, and the method for financing the unfunded actuarial accrued liability:

	Non-Hazardous	Hazardous
Valuation date:	June 30, 2025	June 30, 2025
Actuarial cost method:	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll (2% payroll growth assumed)	Level percentage of payroll (2% payroll growth assumed)
Amortization period for contribution rate:	30-year closed period at June 30, 2019 Gains/losses incurring after 2019 will be amortized over separate closed 20-year amortization bases	30-year closed period at June 30, 2019 Gains/losses incurring after 2019 will be amortized over separate closed 20-year amortization bases
Asset valuation method:	5-Year Smoothed Market	5-Year Smoothed Market
Actuarial assumptions:		
Investment rate of return	6.50%	6.50%
Projected salary increases	3.30% to 10.30% (varies by service)	3.55% to 19.05% (varies by service)
Inflation	2.50%	2.50%
Post-retirement benefit adjustments	0.00%	0.00%
Retiree Mortality	System-specific mortality table based on mortality experience from 2013 to 2022, projected with the ultimate rates from MP-2020 mortality improvement scale using a base year of 2023.	System-specific mortality table based on mortality experience from 2013 to 2022, projected with the ultimate rates from MP-2020 mortality improvement scale using a base year of 2023.

Solvency Test
Retirement Benefits
(Dollar amounts expressed in thousands)

	Actuarial Accrued Liability				Portion of Aggregate Accrued Liabilities Covered by Assets		
June 30,	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed)	Valuation Assets	Active	Retired	ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2016	$ 1,231,027	$ 6,785,530	$ 3,059,900	$ 6,535,372	100.0%	78.2%	0.0%
2017	1,277,432	7,731,682	3,794,396	6,764,873	100.0%	71.0%	0.0%
2018	1,269,287	8,196,719	3,725,499	6,950,225	100.0%	69.3%	0.0%
2019	1,280,679	8,905,544	4,169,890	7,049,527	100.0%	64.8%	0.0%
2020	1,312,554	9,088,237	4,210,077	7,220,607	100.0%	65.0%	0.0%
2021	1,324,826	9,397,968	4,172,112	7,715,883	100.0%	68.0%	0.0%
2022	1,335,758	10,021,345	4,317,117	8,148,912	100.0%	68.0%	0.0%
2023	1,341,594	9,791,605	4,163,230	8,585,073	100.0%	74.0%	0.0%
2024	1,384,947	10,056,035	4,335,509	9,211,735	100.0%	77.8%	0.0%
2025	1,454,966	10,251,856	4,467,184	9,933,705	100.0%	82.7%	0.0%
Hazardous Members							
2016	$ 428,713	$ 2,388,712	$ 887,031	$ 2,139,119	100.0%	71.6%	0.0%
2017	458,808	2,910,601	1,279,638	2,238,320	100.0%	61.1%	0.0%
2018	442,637	3,151,058	1,198,853	2,321,721	100.0%	59.6%	0.0%
2019	458,559	3,399,954	1,386,852	2,375,106	100.0%	56.4%	0.0%
2020	454,801	3,606,091	1,370,407	2,447,885	100.0%	55.3%	0.0%
2021	457,391	3,777,313	1,394,754	2,628,621	100.0%	57.5%	0.0%
2022	468,325	3,915,964	1,477,402	2,788,714	100.0%	59.3%	0.0%
2023	476,005	3,905,982	1,468,008	3,008,147	100.0%	64.8%	0.0%
2024	509,070	4,019,098	1,542,033	3,279,623	100.0%	68.9%	0.0%
2025	539,330	4,147,267	1,615,249	3,592,717	100.0%	73.6%	0.0%

INSURANCE BENEFITS

ACTUARIAL TABLES

Development of Unfunded Actuarial Accrued Liability
Insurance Benefits

(Dollar amounts expressed in thousands)

		June 30, 2025	
		Non-Hazardous (1)	Hazardous (2)
1.	Projected payroll of active members	$ 3,336,807	$ 806,462
2.	Present value of future pay	$ 23,930,459	$ 7,711,659
3.	Normal cost rate		
	a. Total normal cost rate	2.41%	4.18%
	b. Less: member contribution rate	-0.84%	-1.86%
	c. Employer normal cost rate	1.57%	2.32%
4.	Actuarial accrued liability for active members		
	a. Present value of future benefits	$ 2,231,660	$ 829,145
	b. Less: present value of future normal costs	(562,554)	(284,399)
	c. Actuarial accrued liability	$ 1,669,106	$ 544,746
5.	Total actuarial accrued liability		
	a. Retirees and beneficiaries	$ 1,709,443	$ 1,376,187
	b. Inactive members	184,327	18,876
	c. Active members (Item 4c)	1,669,106	544,746
	d. Total	$ 3,562,876	$ 1,939,809
6.	Actuarial value of assets	$ 3,793,782	$ 1,763,479
7.	Unfunded actuarial accrued liability (UAAL) (Item 5d - Item 6)	$ (230,906)	$ 176,330
8.	Funded Ratio	106.5%	90.9%

Development of Actuarially Determined Contribution Rate
Insurance Benefits

		June 30, 2025	
		Non-Hazardous (1)	Hazardous (2)
1.	Total normal cost rate	2.41%	4.18%
2.	Less: member contribution rate	-0.84%	-1.86%
3.	Total employer normal cost rate	1.57%	2.32%
4.	Administrative expenses	0.03%	0.07%
5.	Net employer normal cost rate	1.60%	2.39%
6.	UAAL amortization contribution rate	-1.31%	0.81%
7.	Total calculated employer contribution	0.29%	3.20%

Actuarial Balance Sheet

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)

	June 30, 2025 (1)	June 30, 2024 (2)
1. Assets - Present and Expected Future Resources		
a. Current assets (actuarial value)	$ 3,793,782	$ 3,549,422
b. Present value of future member contributions	$ 219,004	$ 171,473
c. Present value of future employer contributions		
i. Normal cost contributions	$ 343,550	$ 286,801
ii. Unfunded accrued liability contributions	(230,906)	(648,077)
iii. Total future employer contributions	$ 112,644	$ (361,276)
d. Total assets	$ 4,125,430	$ 3,359,619
2. Liabilities - Present Value of Expected Future Benefit Payments		
a. Active members		
i. Present value of future normal costs	$ 562,554	$ 458,274
ii. Accrued liability	1,669,106	1,390,383
iii. Total present value of future benefits	$ 2,231,660	$ 1,848,657
b. Present value of benefits payable on account of current retired members and beneficiaries	$ 1,709,443	$ 1,343,043
c. Present value of benefits payable on account of current inactive members	$ 184,327	$ 167,919
d. Total liabilities	$ 4,125,430	$ 3,359,619

Actuarial Balance Sheet

Hazardous Members Insurance

(Dollar amounts expressed in thousands)

	June 30, 2025 (1)	June 30, 2024 (2)
1. Assets - Present and Expected Future Resources		
a. Current assets (actuarial value)	$ 1,763,479	$ 1,676,141
b. Present value of future member contributions	$ 150,954	$ 59,830
c. Present value of future employer contributions		
i. Normal cost contributions	$ 133,445	$ 136,726
ii. Unfunded accrued liability contributions	176,330	(8,084)
iii. Total future employer contributions	$ 309,775	$ 128,642
d. Total assets	$ 2,224,208	$ 1,864,613
2. Liabilities - Present Value of Expected Future Benefit Payments		
a. Active members		
i. Present value of future normal costs	$ 284,399	$ 196,556
ii. Accrued liability	544,746	430,514
iii. Total present value of future benefits	$ 829,145	$ 627,070
b. Present value of benefits payable on account of current retired members and beneficiaries	$ 1,376,187	$ 1,219,648
c. Present value of benefits payable on account of current inactive members	$ 18,876	$ 17,895
d. Total liabilities	$ 2,224,208	$ 1,864,613

Reconciliation of Insurance Net Assets

(Dollar amounts expressed in thousands)[1]

	Year Ending June 30, 2025 (1) Non-Hazardous	Year Ending June 30, 2025 (2) Hazardous
1. Value of assets at beginning of year	$ 3,707,277	$ 1,752,366
2. Revenue for the year		
a. Contributions		
i. Member contributions	$ 22,706	$ 5,706
ii. Employer contributions	824	17,735
iii. Other contributions (less 401h)	12,017	2,216
iv. Total	$ 35,547	$ 25,656
b. Income		
i. Interest, dividends, and other income	$ 118,756	$ 55,907
ii. Investment expenses	(32,461)	(16,732)
iii. Net	$ 86,296	$ 39,175
c. Net realized and unrealized gains (losses)	325,099	150,746
d. Total revenue	$ 446,941	$ 215,578
3. Expenditures for the year		
a. Disbursements		
i. Refunds	$ 0	$ 0
ii. Healthcare premium subsidies	137,430	104,552
iii. Other benefit payments[2]	4,587	839
iv. Transfers to other systems	0	0
v. Total	$ 142,017	$ 105,391
b. Administrative expenses and depreciation	910	524
c. Total expenditures	$ 142,927	$ 105,915
4. Increase in net assets (Item 2. - Item 3.)	$ 304,014	$ 109,662
5. Value of assets at end of year (Item 1. + Item 4.)	$ 4,011,291	$ 1,862,029
6. Net external cash flow		
a. Dollar amount	$ (107,380)	$ (80,259)
b. Percentage of market value	-2.8%	-4.4%
7. Estimated annual return on net assets	11.3%	11.1%

[1] Amounts may not add due to rounding and include 401h assets

[2] Benefit payments have been offset by Medicare Drug Reimbursements, Insurance Premiums, and Humana Gain Share Payments

Development of Actuarial Value of Assets

Non-Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2025
1.	Actuarial value of assets at beginning of year	$ 3,549,422
2.	Market value of assets at beginning of year	$ 3,707,277
3.	Net new investments	
	a. Contributions	$ 35,547
	b. Benefit payments	(142,017)
	c. Administrative expenses	(910)
	d. Subtotal	$ (107,380)
4.	Market value of assets at end of year	$ 4,011,291
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 411,394
6.	Assumed investment return rate for fiscal year	6.50%
7.	Expected return for immediate recognition	$ 237,483
8.	Excess return for phased recognition	$ 173,911
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2025	$ 173,911	$ 34,782
b.	2024	174,981	34,996
c.	2023	123,546	24,709
d.	2022	(380,135)	(76,027)
e.	2021	478,981	95,796
f.	Total		$ 114,257

10.	Actuarial value of assets as of June 30, 2025 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 3,793,782
11.	Ratio of actuarial value to market value	94.6%
12.	Estimated annual return on actuarial value of assets	10.1%

* Amounts may not add due to rounding

Development of Actuarial Value of Assets

Hazardous Members Insurance

(Dollar amounts expressed in thousands)*

	Year Ending	June 30, 2025
1.	Actuarial value of assets at beginning of year	$ 1,676,141
2.	Market value of assets at beginning of year	$ 1,752,366
3.	Net new investments	
	a. Contributions	$ 25,656
	b. Benefit payments	(105,391)
	c. Administrative expenses	(524)
	d. Subtotal	$ (80,259)
4.	Market value of assets at end of year	$ 1,862,029
5.	Net earnings (Item 4. - Item 2. - Item 3.d.)	$ 189,922
6.	Assumed investment return rate for fiscal year	6.50%
7.	Expected return for immediate recognition	$ 111,295
8.	Excess return for phased recognition	$ 78,626
9.	Phased-in recognition, 20% of excess return on assets for prior years:	

	Fiscal Year Ending June 30,	Excess Return	Recognized Amount
a.	2025	$ 78,626	$ 15,725
b.	2024	81,800	16,360
c.	2023	56,727	11,345
d.	2022	(180,610)	(36,122)
e.	2021	244,967	48,993
f.	Total		$ 56,302

10.	Actuarial value of assets as of June 30, 2025 (Item 1. + Item 3.d. + Item 7.+ Item 9.f.)	$ 1,763,479
11.	Ratio of actuarial value to market value	94.7%
12.	Estimated annual return on actuarial value of assets	10.2%

* Amounts may not add due to rounding

Schedule of Funding Progress
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Value of Assets (AVA)	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability (UAAL) (3) - (2)	Funded Ratio (2)/(3)	Annual Covered Payroll	UAAL as % of Payroll (4)/(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Non-Hazardous Members						
2016	$ 2,079,811	$ 2,988,121	$ 908,310	69.6%	$ 2,352,762	38.6%
2017	2,227,401	3,355,151	1,127,750	66.4%	2,452,407	46.0%
2018	2,371,430	3,092,624	721,194	76.7%	2,466,801	29.2%
2019	2,523,249	3,567,947	1,044,698	70.7%	2,521,860	41.4%
2020	2,661,351	3,392,085	730,734	78.5%	2,565,391	28.5%
2021	2,947,312	3,450,484	503,172	85.4%	2,528,735	19.9%
2022	3,160,084	2,391,990	(768,094)	132.1%	2,691,171	-28.5%
2023	3,366,332	2,560,387	(805,945)	131.5%	2,898,813	-27.8%
2024	3,549,422	2,901,345	(648,077)	122.3%	3,137,814	-20.7%
2025	3,793,782	3,562,876	(230,906)	106.5%	3,336,807	-6.9%
Hazardous Members						
2016	$ 1,135,784	$ 1,558,818	$ 423,034	72.9%	$ 492,851	85.8%
2017	1,196,780	1,788,433	591,653	66.9%	541,633	109.2%
2018	1,256,306	1,684,028	427,722	74.6%	533,618	80.2%
2019	1,313,659	1,732,879	419,220	75.8%	559,353	74.9%
2020	1,362,028	1,740,971	378,943	78.2%	568,558	66.6%
2021	1,475,635	1,751,203	275,568	84.3%	578,355	47.6%
2022	1,553,761	1,538,131	(15,630)	101.0%	620,934	-2.5%
2023	1,615,349	1,604,146	(11,203)	100.7%	677,988	-1.7%
2024	1,676,141	1,668,057	(8,084)	100.5%	743,133	-1.1%
2025	1,763,479	1,939,809	176,330	90.9%	806,462	21.9%
Total CERS Members						
2016	$ 3,215,595	$ 4,546,939	$ 1,331,344	70.7%	$ 2,845,613	46.8%
2017	3,424,181	5,143,584	1,719,403	66.6%	2,994,040	57.4%
2018	3,627,736	4,776,652	1,148,916	75.9%	3,000,419	38.3%
2019	3,836,908	5,300,826	1,463,918	72.4%	3,081,213	47.5%
2020	4,023,379	5,133,056	1,109,677	78.4%	3,133,949	35.4%
2021	4,422,947	5,201,687	778,740	85.0%	3,107,090	25.1%
2022	4,713,845	3,930,121	(783,724)	119.9%	3,312,105	-23.7%
2023	4,981,681	4,164,533	(817,148)	119.6%	3,576,801	-22.8%
2024	5,225,563	4,569,402	(656,161)	114.4%	3,880,947	-16.9%
2025	5,557,261	5,502,685	(54,576)	101.0%	4,143,269	-1.3%

Solvency Test
Insurance Benefits
(Dollar amounts expressed in thousands)

June 30,	Actuarial Accrued Liability: Active Member Contributions	Actuarial Accrued Liability: Retired Members & Beneficiaries	Actuarial Accrued Liability: Active Members (Employer Financed)	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets: Active	Retired	ER Financed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Non-Hazardous Members							
2016	$ -	$ 1,484,937	$ 1,503,184	$ 2,079,811	100.0%	100.0%	39.6%
2017	-	1,603,438	1,751,713	2,227,401	100.0%	100.0%	35.6%
2018	-	1,525,323	1,567,301	2,371,430	100.0%	100.0%	54.0%
2019	-	1,830,692	1,737,255	2,523,249	100.0%	100.0%	39.9%
2020	-	1,746,159	1,645,926	2,661,351	100.0%	100.0%	55.6%
2021	-	1,835,734	1,614,750	2,947,312	100.0%	100.0%	68.8%
2022	-	1,055,375	1,336,615	3,160,084	100.0%	100.0%	100.0%
2023	-	1,256,529	1,303,858	3,366,332	100.0%	100.0%	100.0%
2024	-	1,510,962	1,390,383	3,549,422	100.0%	100.0%	100.0%
2025	-	1,893,770	1,669,106	3,793,782	100.0%	100.0%	100.0%
Hazardous Members							
2016	$ -	$ 879,360	$ 679,458	$ 1,135,784	100.0%	100.0%	37.7%
2017	-	994,764	793,669	1,196,780	100.0%	100.0%	25.5%
2018	-	1,001,717	682,311	1,256,306	100.0%	100.0%	37.3%
2019	-	1,072,861	660,018	1,313,659	100.0%	100.0%	36.5%
2020	-	1,154,389	586,582	1,362,028	100.0%	100.0%	35.4%
2021	-	1,217,527	533,676	1,475,635	100.0%	100.0%	48.4%
2022	-	1,045,022	493,109	1,553,761	100.0%	100.0%	100.0%
2023	-	1,163,314	440,832	1,615,349	100.0%	100.0%	100.0%
2024	-	1,237,543	430,514	1,676,141	100.0%	100.0%	100.0%
2025	-	1,395,063	544,746	1,763,479	100.0%	100.0%	67.6%

SECTION 4

AMORTIZATION BASES

Amortization of Unfunded Liability

Non-Hazardous Members Retirement

Valuation Year Base Established	Original Amortization Base	Remaining at June 30, 2025	Payments for FYE 2027	Funding Period at June 30, 2025
June 30, 2019	$ 7,306,586	$ 7,411,556	$ 510,939	24
June 30, 2020	(43,634)	63,982	5,970	15
June 30, 2021	(333,595)	(297,285)	(26,508)	16
June 30, 2022	327,156	310,893	26,593	17
June 30, 2023	(803,273)	(892,004)	(73,434)	18
June 30, 2024	(42,864)	(74,891)	(5,951)	19
June 30, 2025	(281,950)	(281,950)	(25,360)	20
Total		$ 6,240,301	$ 412,249	

Projected Payroll for FYE 2027	$ 3,403,543
Amortization Payments as a Percentage of Payroll	12.11%

Hazardous Members Retirement

Valuation Year Base Established	Original Amortization Base	Remaining at June 30, 2025	Payments for FYE 2027	Funding Period at June 30, 2025
June 30, 2019	$ 2,870,259	$ 2,932,991	$ 202,195	24
June 30, 2020	41,583	103,840	9,689	15
June 30, 2021	(57,337)	(15,753)	(1,405)	16
June 30, 2022	32,971	21,695	1,856	17
June 30, 2023	(215,367)	(243,724)	(20,065)	18
June 30, 2024	(16,713)	(34,225)	(2,720)	19
June 30, 2025	(55,695)	(55,695)	(5,773)	20
Total		$ 2,709,129	$ 183,777	

Projected Payroll for FYE 2027	$ 822,592
Amortization Payments as a Percentage of Payroll	22.34%

Note:
Budgeted contribution rates for FYE 2026 were known at the time of the June 30, 2025 Valuation. Amortization bases established at this valuation date were adjusted accordingly.

Amortization of Unfunded Liability

Non-Hazardous Members Insurance

Valuation Year Base Established	Original Amortization Base	Remaining at June 30, 2025	Payments for FYE 2027	Funding Period at June 30, 2025
June 30, 2019	$ 1,044,698	$ 1,060,185	$ 73,087	24
June 30, 2020	(332,646)	(315,562)	(29,443)	15
June 30, 2021	(219,172)	(222,296)	(19,822)	16
June 30, 2022	(1,261,234)	(1,309,472)	(112,008)	17
June 30, 2023	44,464	14,480	1,192	18
June 30, 2024	158,457	130,877	10,400	19
June 30, 2025	410,882	410,882	32,305	20
Total		$ (230,906)	$ (44,289)	

Projected Payroll for FYE 2027	$ 3,369,902
Amortization Payments as a Percentage of Payroll	-1.31%

Hazardous Members Insurance

Valuation Year Base Established	Original Amortization Base	Remaining at June 30, 2025	Payments for FYE 2027	Funding Period at June 30, 2025
June 30, 2019	$ 419,220	$ 420,753	$ 29,006	24
June 30, 2020	(43,079)	(43,067)	(4,018)	15
June 30, 2021	(100,257)	(103,735)	(9,250)	16
June 30, 2022	(282,650)	(293,865)	(25,136)	17
June 30, 2023	23,141	19,596	1,613	18
June 30, 2024	(534)	(3,257)	(259)	19
June 30, 2025	179,905	179,905	14,720	20
Total		$ 176,330	$ 6,676	

Projected Payroll for FYE 2027	$ 819,379
Amortization Payments as a Percentage of Payroll	0.81%

Note:
Budgeted contribution rates for FYE 2026 were known at the time of the June 30, 2025 Valuation. Amortization bases established at this valuation date were adjusted accordingly.

SECTION 5

MEMBERSHIP INFORMATION

Membership Tables

Summary of Membership Data

(Total dollar amounts expressed in thousands)

		Non-Hazardous June 30, 2025 (1)	Hazardous June 30, 2025 (2)	Total June 30, 2025 (3)	Total June 30, 2024 (4)
1.	Active members				
a.	Males	30,388	8,788	39,176	38,375
b.	Females	51,475	1,139	52,614	51,743
c.	Total members	81,863	9,927	91,790	90,118
d.	Total annualized prior year salaries	$ 3,336,807	$ 806,462	$ 4,143,269	$ 3,880,947
e.	Average salary[3]	$ 40,761	$ 81,239	$ 45,139	$ 43,065
f.	Average age	46.9	37.5	45.9	46.0
g.	Average service	8.5	9.4	8.6	8.7
h.	Member contributions with interest	$ 1,454,966	$ 539,330	$ 1,994,296	$ 1,894,017
i.	Average contributions with interest[3]	$ 17,773	$ 54,330	$ 21,727	$ 21,017
2.	Vested inactive members[2]				
a.	Number	50,069	1,814	51,883	52,327
b.	Total annual deferred benefits	$ 94,350	$ 9,542	$ 103,892	$ 101,653
c.	Average annual deferred benefit[3]	$ 1,884	$ 5,260	$ 2,002	$ 1,943
d.	Average age at the valuation date	55.7	48.0	55.4	54.8
3.	Nonvested inactive members[2]				
a.	Number	70,243	2,777	73,020	67,880
b.	Total member contributions with interest	$ 114,097	$ 12,954	$ 127,051	$ 112,933
c.	Average contributions with interest[3]	$ 1,624	$ 4,665	$ 1,740	$ 1,664
4.	Service retirees[1]				
a.	Number	62,852	9,923	72,775	71,558
b.	Total annual benefits	$ 788,202	$ 302,370	$ 1,090,572	$ 1,061,303
c.	Average annual benefit[3]	$ 12,541	$ 30,472	$ 14,986	$ 14,831
d.	Average age at the valuation date	71.9	63.6	70.7	70.5
5.	Disabled retirees[1]				
a.	Number	3,671	597	4,268	4,306
b.	Total annual benefits	$ 43,549	$ 10,204	$ 53,753	$ 53,952
c.	Average annual benefit[3]	$ 11,863	$ 17,092	$ 12,594	$ 12,529
d.	Average age at the valuation date	68.2	60.0	67.1	66.6
6.	Beneficiaries[1]				
a.	Number	7,047	1,554	8,601	8,374
b.	Total annual benefits	$ 73,586	$ 27,954	$ 101,540	$ 97,026
c.	Average annual benefit[3]	$ 10,442	$ 17,988	$ 11,806	$ 11,587
d.	Average age at the valuation date	69.6	62.4	68.3	67.6

[1] 4,129 members receiving benefits in both the non-hazardous and hazardous fund. Members' headcounts and hazardous benefits included in the hazardous summary above. Members' additional $30,741,000 in non-hazardous annual benefits not included in summary above.

[2] Vested inactive member section includes Tier 1 members eligible for a benefit equal to the actuarially equivalent of two times the member's contribution balance.

[3] Average dollar amounts shown are expressed to the dollar.

Summary of Historical Active Membership

	Active Members		Covered Payroll[1]		Average Annual Pay	
June 30,	Number	Percent Increase /(Decrease)	Amount in Thousands	Percent Increase /(Decrease)	Amount	Percent Increase /(Decrease)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous Members			
2016	80,664		$ 2,352,762		$ 29,167	
2017	82,198	1.9%	2,452,407	4.2%	29,835	2.3%
2018	81,818	-0.5%	2,466,801	0.6%	30,150	1.1%
2019	81,506	-0.4%	2,521,860	2.2%	30,941	2.6%
2020	81,250	-0.3%	2,565,391	1.7%	31,574	2.0%
2021	77,367	-4.8%	2,528,735	-1.4%	32,685	3.5%
2022	77,849	0.6%	2,691,171	6.4%	34,569	5.8%
2023	78,810	1.2%	2,898,813	7.7%	36,782	6.4%
2024	80,440	2.1%	3,137,814	8.2%	39,008	6.1%
2025	81,863	1.8%	3,336,807	6.3%	40,761	4.5%
			Hazardous Members			
2016	9,084		$ 492,851		$ 54,255	
2017	9,495	4.5%	541,633	9.9%	57,044	5.1%
2018	9,263	-2.4%	533,618	-1.5%	57,607	1.0%
2019	9,474	2.3%	559,353	4.8%	59,041	2.5%
2020	9,419	-0.6%	568,558	1.6%	60,363	2.2%
2021	9,173	-2.6%	578,355	1.7%	63,050	4.5%
2022	9,184	0.1%	620,934	7.4%	67,610	7.2%
2023	9,205	0.2%	677,988	9.2%	73,654	8.9%
2024	9,678	5.1%	743,133	9.6%	76,786	4.3%
2025	9,927	2.6%	806,462	8.5%	81,239	5.8%

[1] Covered payroll is the annualized, projected compensation for the following year and does not include payroll attributable to working retirees.

Distribution of Active Members by Age and by Years of Service

Non-Hazardous Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	666	66	2	0	0	0	0	0	0	0	0	0	734
	$12,978	$19,175	$16,044	$0	$0	$0	$0	$0	$0	$0	$0	$0	$13,543
20-24	1,945	1,122	562	264	92	30	0	0	0	0	0	0	4,015
	$22,949	$30,226	$33,570	$35,547	$39,774	$41,813	$0	$0	$0	$0	$0	$0	$27,824
25-29	1,633	1,257	966	718	398	723	8	0	0	0	0	0	5,703
	$28,287	$34,863	$38,239	$39,772	$41,502	$45,746	$62,168	$0	$0	$0	$0	$0	$36,051
30-34	1,438	1,291	1,021	726	486	1,792	361	4	0	0	0	0	7,119
	$27,834	$33,001	$36,078	$37,630	$40,348	$46,867	$57,659	$44,449	$0	$0	$0	$0	$38,119
35-39	1,371	1,247	1,018	815	494	2,070	983	348	9	0	0	0	8,355
	$27,867	$32,876	$34,724	$36,711	$38,260	$45,609	$56,347	$62,185	$59,685	$0	$0	$0	$40,137
40-44	1,080	1,032	949	668	475	2,195	1,207	892	405	24	0	0	8,927
	$28,856	$33,918	$33,881	$35,976	$38,996	$43,571	$51,768	$61,206	$66,823	$78,458	$0	$0	$42,852
45-49	876	890	806	657	433	2,319	1,452	1,101	954	337	6	0	9,831
	$29,282	$36,144	$37,911	$39,737	$39,671	$42,019	$49,030	$57,649	$64,484	$68,784	$96,417	$0	$45,676
50-54	716	732	717	565	408	2,060	1,564	1,438	1,212	649	81	2	10,144
	$28,842	$36,640	$39,309	$39,017	$40,068	$41,798	$46,165	$51,261	$57,821	$67,504	$86,159	$191,397	$46,068
55-59	742	674	635	480	380	1,921	1,462	1,543	1,512	819	155	30	10,353
	$28,103	$34,080	$34,185	$38,217	$39,238	$43,145	$44,526	$48,001	$50,454	$59,012	$77,541	$78,100	$44,413
60-64	614	532	504	457	336	1,655	1,326	1,389	1,315	858	163	64	9,213
	$25,552	$28,945	$31,960	$32,860	$33,655	$39,403	$43,812	$47,046	$46,992	$49,403	$62,900	$72,664	$41,383
65 & Over	618	518	521	429	306	1,567	1,227	935	686	395	145	122	7,469
	$19,133	$24,273	$27,664	$26,367	$29,309	$32,414	$37,955	$41,686	$47,408	$49,300	$52,844	$63,755	$35,194
Total	11,699	9,361	7,701	5,779	3,808	16,332	9,590	7,650	6,093	3,082	550	218	81,863
	$25,945	$32,853	$35,209	$36,691	$38,320	$42,297	$47,168	$51,240	$54,128	$58,100	$68,166	$69,516	$40,761

Distribution of Active Members by Age and by Years of Service

Hazardous Members

Attained Age	Years of Credited Service												
	0 Count & Avg. Comp.	1 Count & Avg. Comp.	2 Count & Avg. Comp.	3 Count & Avg. Comp.	4 Count & Avg. Comp.	5-9 Count & Avg. Comp.	10-14 Count & Avg. Comp.	15-19 Count & Avg. Comp.	20-24 Count & Avg. Comp.	25-29 Count & Avg. Comp.	30-34 Count & Avg. Comp.	35 & Over Count & Avg. Comp.	Total Count & Avg. Comp.
Under 20	26	3	0	0	0	0	0	0	0	0	0	0	29
	$40,053	$57,789	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$41,888
20-24	288	256	141	74	25	13	0	0	0	0	0	0	797
	$47,239	$60,131	$66,130	$69,617	$76,889	$73,180	$0	$0	$0	$0	$0	$0	$58,153
25-29	246	265	271	231	184	388	3	0	0	0	0	0	1,588
	$46,950	$62,601	$67,382	$68,176	$76,725	$77,556	$62,621	$0	$0	$0	$0	$0	$67,094
30-34	113	114	129	149	137	860	202	2	0	0	0	0	1,706
	$50,568	$65,901	$67,006	$74,463	$76,845	$80,916	$88,872	$87,553	$0	$0	$0	$0	$76,910
35-39	68	83	87	94	65	553	694	192	1	0	0	0	1,837
	$48,026	$64,175	$67,616	$67,739	$70,640	$81,414	$92,033	$94,971	$72,346	$0	$0	$0	$83,088
40-44	43	52	42	36	44	247	425	633	135	1	1	0	1,659
	$49,578	$61,654	$72,181	$68,895	$74,370	$81,406	$89,303	$101,329	$108,942	$98,118	$181,168	$0	$91,206
45-49	15	21	25	13	20	116	177	368	275	51	1	0	1,082
	$39,212	$69,150	$65,577	$60,402	$64,905	$79,733	$89,311	$99,896	$109,264	$120,098	$159,357	$0	$96,039
50-54	10	25	13	12	13	71	83	191	143	79	14	0	654
	$52,710	$63,224	$56,242	$73,945	$74,857	$74,286	$84,566	$96,376	$108,205	$121,587	$131,248	$0	$95,285
55-59	9	7	17	8	3	51	60	85	64	42	10	3	359
	$37,644	$70,022	$59,895	$72,147	$87,986	$76,104	$81,279	$93,969	$106,705	$117,434	$128,723	$151,379	$91,745
60-64	4	3	2	5	2	21	19	50	31	9	4	5	155
	$41,286	$62,845	$52,062	$54,995	$62,963	$64,657	$72,069	$91,134	$88,162	$94,093	$118,212	$112,296	$82,301
65 & Over	3	1	0	0	2	13	4	18	6	6	5	3	61
	$58,474	$31,689	$0	$0	$61,462	$66,145	$80,669	$87,659	$100,255	$133,894	$81,705	$125,080	$86,543
Total	825	830	727	622	495	2,333	1,667	1,539	655	188	35	11	9,927
	$47,397	$62,584	$66,899	$69,723	$75,182	$79,889	$89,598	$98,663	$107,579	$119,207	$124,188	$126,442	$81,239

Distribution of Annuitant Monthly Benefit by Status and Age
Non-Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

	Retirement		Disability		Survivors & Beneficiaries		Total	
Current Age	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	294	$ 7,025	91	$ 1,033	764	$ 7,215	1,149	$ 15,273
50 - 54	1,238	26,526	187	2,356	289	2,688	1,714	31,570
55 - 59	3,590	59,439	375	4,922	410	4,347	4,375	68,708
60 - 64	7,902	123,755	638	8,459	646	7,547	9,186	139,761
65 - 69	13,737	183,508	893	10,759	993	11,687	15,623	205,954
70 - 74	14,179	170,180	658	7,594	1,105	12,274	15,942	190,047
75 - 79	11,224	119,217	462	4,987	1,167	12,112	12,853	136,316
80 - 84	6,333	60,878	250	2,486	858	8,756	7,441	72,119
85 - 89	3,070	27,730	96	774	550	5,033	3,716	33,537
90 And Over	1,285	9,945	21	179	265	1,927	1,571	12,051
Total	**62,852**	**$ 788,202**	**3,671**	**$ 43,549**	**7,047**	**$ 73,586**	**73,570**	**$ 905,336**

*Amounts may not add due to rounding

Distribution of Annuitant Monthly Benefit by Status and Age
Hazardous Retirees and Beneficiaries
(Dollar amounts expressed in thousands)

	Retirement		Disability		Survivors & Beneficiaries		Total	
Current Age	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount	Number of Annuitants	Total Annual Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Under 50	818	$ 31,695	99	$ 1,800	292	$ 3,755	1,209	$ 37,250
50 - 54	1,483	54,977	109	1,969	115	1,999	1,707	58,946
55 - 59	1,670	55,572	101	1,832	124	2,336	1,895	59,739
60 - 64	1,655	51,200	101	1,771	153	2,931	1,909	55,902
65 - 69	1,426	38,077	72	1,102	201	3,673	1,699	42,851
70 - 74	1,409	37,763	70	1,072	241	4,898	1,720	43,734
75 - 79	885	20,787	27	417	200	4,111	1,112	25,315
80 - 84	392	8,506	15	197	131	2,564	538	11,267
85 - 89	149	2,979	1	33	72	1,302	222	4,314
90 And Over	36	816	2	10	25	385	63	1,210
Total	**9,923**	**$ 302,370**	**597**	**$ 10,204**	**1,554**	**$ 27,954**	**12,074**	**$ 340,528**

*Amounts may not add due to rounding

Non-Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	6,707	$ 7,595,364	25,863	$ 20,500,006	32,570	$ 28,095,370
Joint & Survivor:						
100% to Beneficiary	4,821	6,184,571	3,584	2,681,641	8,405	8,866,212
66 2/3% to Beneficiary	925	1,858,947	890	1,048,487	1,815	2,907,435
50% to Beneficiary	1,257	2,203,466	2,124	2,609,415	3,381	4,812,881
Pop-up Option	4,250	7,371,854	4,585	5,150,633	8,835	12,522,486
Social Security Option:						
Age 62 Basic	220	397,857	576	719,655	796	1,117,513
Age 62 Survivorship	583	1,159,850	394	453,046	977	1,612,896
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	0	0	0	0	0	0
10 Years Certain & Life	1,602	1,991,393	4,387	3,756,279	5,989	5,747,672
15 Years Certain & Life	770	900,505	1,387	1,085,824	2,157	1,986,330
20 Years Certain & Life	546	798,271	1,052	845,487	1,598	1,643,758
Total:	21,681	$ 30,462,080	44,842	$ 38,850,473	66,523	$ 69,312,552

Hazardous Retired Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	1,493	$ 3,283,076	457	$ 814,643	1,950	$ 4,097,718
Joint & Survivor:						
100% to Beneficiary	1,844	4,388,689	89	133,169	1,933	4,521,858
66 2/3% to Beneficiary	401	1,063,854	30	73,665	431	1,137,519
50% to Beneficiary	570	1,517,599	69	168,742	639	1,686,341
Pop-up Option	3,972	10,966,292	198	463,046	4,170	11,429,338
Social Security Option:						
Age 62 Basic	109	178,612	14	17,535	123	196,147
Age 62 Survivorship	307	612,283	24	40,325	331	652,608
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	0	0	0	0	0	0
10 Years Certain	115	484,440	6	23,017	121	507,457
10 Years Certain & Life	280	625,277	82	153,256	362	778,533
15 Years Certain & Life	146	315,387	28	61,661	174	377,048
20 Years Certain & Life	246	591,398	40	71,887	286	663,285
Total:	9,483	$ 24,026,906	1,037	$ 2,020,946	10,520	$ 26,047,852

Non-Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	34	$ 12,397	76	$ 70,486	110	$ 82,883
Joint & Survivor:						
100% to Beneficiary	648	413,079	2,277	1,850,124	2,925	2,263,203
66 2/3% to Beneficiary	115	69,699	332	291,373	447	361,072
50% to Beneficiary	257	124,225	484	292,853	741	417,078
Pop-up Option	365	333,954	1,170	1,375,987	1,535	1,709,942
Social Security Option:						
Age 62 Basic	1	860	5	4,294	6	5,154
Age 62 Survivorship	32	30,081	198	259,708	230	289,789
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	0	0	0	0
5 Years Certain	111	130,071	141	162,927	252	292,998
10 Years Certain	148	106,645	186	170,779	334	277,424
10 Years Certain & Life	66	50,991	104	106,181	170	157,172
15 Years Certain & Life	59	46,151	102	108,626	161	154,777
20 Years Certain & Life	46	23,454	90	97,202	136	120,656
Total:	1,882	$ 1,341,608	5,165	$ 4,790,540	7,047	$ 6,132,148

Hazardous Beneficiary Lives Summary

Form of Payment	Male Lives Number	Male Lives Monthly Benefit Amount	Female Lives Number	Female Lives Monthly Benefit Amount	Total Number	Total Monthly Benefit Amount
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Basic	12	$ 8,454	99	$ 131,145	111	$ 139,599
Joint & Survivor:						
100% to Beneficiary	33	30,699	417	587,848	450	618,547
66 2/3% to Beneficiary	2	1,688	85	137,679	87	139,367
50% to Beneficiary	18	16,956	145	146,448	163	163,405
Pop-up Option	45	34,621	483	931,697	528	966,318
Social Security Option:						
Age 62 Basic	0	0	2	1,641	2	1,641
Age 62 Survivorship	1	423	108	144,335	109	144,758
Partial Deferred (Old Plan)	0	0	0	0	0	0
Widows Age 60	0	0	2	1,469	2	1,469
5 Years Certain	1	3,826	4	15,779	5	19,605
10 Years Certain	9	14,385	27	47,207	36	61,592
10 Years Certain & Life	2	6,642	10	11,709	12	18,351
15 Years Certain & Life	6	6,755	13	21,200	19	27,955
20 Years Certain & Life	10	7,048	20	19,860	30	26,908
Total:	139	$ 131,498	1,415	$ 2,198,017	1,554	$ 2,329,514

Schedule of Retirees Added to And Removed from Rolls

(Dollar amounts except average allowance expressed in thousands)

Year Ended	Added to Rolls	Removed from Rolls	Rolls End of the Year		% Increase in Annual Benefit	Average Annual Benefit
	Number	Number	Number	Annual Benefits		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Non-Hazardous			
2016	4,409	721	56,339	$ 661,217		$ 11,736
2017	4,141	1,467	59,013	667,468	0.9%	11,311
2018	4,650	1,725	61,938	710,374	6.4%	11,469
2019	4,472	1,871	64,539	747,117	5.2%	11,576
2020	3,550	2,675	65,414	763,459	2.2%	11,671
2021	4,350	2,558	67,206	791,562	3.7%	11,778
2022	4,693	3,010	68,889	820,678	3.7%	11,913
2023	4,753	2,710	70,932	855,173	4.2%	12,056
2024	4,203	2,750	72,385	883,192	3.3%	12,201
2025	4,109	2,924	73,570	905,336	2.5%	12,306
			Hazardous			
2016	604	75	8,563	$ 215,302		$ 25,143
2017	576	141	8,998	226,680	5.3%	25,192
2018	779	190	9,587	245,675	8.4%	25,626
2019	608	172	10,023	258,813	5.3%	25,822
2020	621	192	10,452	274,791	6.2%	26,291
2021	651	245	10,858	288,876	5.1%	26,605
2022	674	301	11,231	301,966	4.5%	26,887
2023	672	300	11,603	317,529	5.2%	27,366
2024	548	298	11,853	329,089	3.6%	27,764
2025	590	369	12,074	340,528	3.5%	28,203

SECTION 6

ASSESSMENT AND DISCLOSURE OF RISK

Risks Associated with Measuring the Accrued Liability And Actuarially Determined Contribution

(As Required by ASOP No. 51)

The determination of CERS's accrued liability and actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. The risk measures illustrated in this section are intended to aid stakeholders in understanding the effects of future experience differing from the assumptions used in performing an actuarial valuation. These risk measures may also help with illustrating the potential volatility in the funded status and actuarially determined contributions that result from differences between actual experience and the expected experience based on the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience (economic and demographic) differing from the assumptions, changes in assumptions due to changing conditions, changes in contribution requirements due to modifications to the funding policy, and changes in the liability and cost due to changes in plan provisions or applicable law. The scope of this actuarial valuation does not include any analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the System's future financial condition include:

- Investment risk – actual investment returns may differ from expected returns;
- Longevity risk – members may live longer or shorter than expected and receive pensions for a time period different than assumed;
- Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future contributions differing from expected;
- Salary and payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liabilities or contributions differing from expected;
- Asset/Liability mismatch – changes in assets may be inconsistent with changes in liabilities, thereby altering the relative difference between the assets and liabilities which may alter the funded status and contribution requirements;
- Contribution risk – actual contributions may differ from expected future contributions (for example, actual contributions not being paid in accordance with the System's funding policy, withdrawal liability assessments or other anticipated payments to the plan are not being paid, or material changes occurring in the anticipated number of covered employees, covered payroll, or another relevant contribution base).

Effects of certain experience can generally be anticipated. For example, if investment returns since the most recent actuarial valuation are less (or more) than the assumed rate of return, then the funded status of the plan can be expected to decrease (or increase) more than anticipated.

The required contributions in this report were established in accordance with applicable Statutes and assumptions adopted by the Board. However, stakeholders should be aware that the scheduled contributions specified in State Code do not necessarily guarantee that the contribution requirements will not increase in a future year.

Employer Risk with Contribution Rates

Currently contributions are collected from participating employers based on the employer's total payroll of employees who are earning benefits in CERS (i.e. covered payroll). The actuarially determined contribution rate is comprised of two components - the normal cost rate (to pay for the benefits accruing in the next year) and the unfunded amortization (to pay for the benefits accrued by members in previous years). The unfunded amortization is calculated by first determining the dollar amount necessary to pay for the unfunded liability based on CERS's funding policy, and then by dividing that dollar amount by expected covered payroll to convert that contribution requirement to a percentage of payroll (i.e. a contribution rate).

As the contribution requirement, as a percentage of payroll, increases then there is increased incentive for participating employers to make deliberate business action to reduce their payroll reported to the System in order to reduce their pension cost.

Plan Specific Risk Measures

Risks faced by a pension plan evolve over time. A relatively new plan with virtually no assets and paying few benefits will experience lower investment risk than a mature plan with a significant amount of assets and large number of members receiving benefits. There are a few measures that can assist stakeholders in understanding and comparing the maturity of a plan to other systems, which include:

- Ratio of market value of assets to payroll: The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. If assets are approximately the same as covered payroll, an investment return that is 5% different than assumed would equal 5% of payroll. In another example, if the assets are approximately twice as large as covered payroll, an investment return that is 5% different than assumed would equal 10% of payroll. A ratio that increases over time generally indicates the potential of an increasing volatility in employer contribution rates as a percentage of payroll.
- Ratio of actuarial accrued liability to payroll: The ratio of actuarial accrued liability to payroll can be used as a measure to indicate the potential volatility of contributions due to volatility in the liability experience. For instance, if the actuarial accrued liability is 5 times the size of the covered payroll, then a change in the liability that is 2% different than expected would be a change in magnitude that is 10% of payroll. A ratio that increases over time generally indicates the potential of an increasing volatility in employer contribution rates as a percentage of payroll.
- Percentage of Expected Contributions Actually Received: This measure identifies the percentage difference between the contributions the fund expects to receive during the fiscal year to and actual contributions received by the fund during the fiscal year. A percentage that is less than 100% means that actual contributions the fund received were less than the expected contributions determined by a prior actuarial valuation. On the other hand, a percentage that is greater than 100% means that actual contributions the fund received were more than the expected contributions.

- Ratio of active to retired members: A relatively mature open plan is likely to have close to the same number of actives to retirees resulting in a ratio that is around 1.0. On the other hand, a super-mature plan, or a plan that is closed to new entrants will have more retirees than active members resulting in a ratio below 1.0. As this ratio declines, a larger portion of the total actuarial accrued liability in the System is attributable to retirees. This metric also typically moves in tandem with the liability to payroll metric, which provides an indication of potential contribution volatility.

The following tables provide a summary of these measures for CERS Non-Hazardous and Hazardous Funds for the current year and the prior four years so stakeholders can identify how these measures are trending. While ASOP No. 51 requires this disclosure with respect to only the retirement funds, we have included this information for the insurance funds for completeness.

CERS Non-Hazardous

	Retirement Fund					Insurance Fund				
	June 30,					June 30,				
	2025	2024	2023	2022	2021	2025	2024	2023	2022	2021
Ratio of the market value of assets to total payroll	3.14	3.06	2.99	2.96	3.39	1.20	1.18	1.17	1.14	1.28
Ratio of actuarial accrued liability to payroll	4.85	5.03	5.28	5.82	5.89	1.07	0.92	0.88	0.89	1.36
Ratio of net cash flow to market value of assets	-2.0%	-0.7%	-1.2%	-1.3%	-2.9%	-2.8%	-2.4%	0.1%	0.3%	0.8%
Percentage of Expected Contribution Actually Received	107% [1]	111%	109%	99%	76%	N/A [1]	N/A [1]	109%	110%	88%
Ratio of actives to retirees and beneficiaries	1.11	1.11	1.11	1.13	1.15					

[1] Expected contribution for FYE 2025 based on the actuarially determined contribution rate of 19.71% from the June 30, 2023 valuation and expected compensation based on census data from the June 30, 2024 valuation. As of the 2022 valuation (FYE2024), the required employer contribution was 0% of pay for the insurance fund.

CERS Hazardous

	Retirement Fund					Insurance Fund				
	June 30,					June 30,				
	2025	2024	2023	2022	2021	2025	2024	2023	2022	2021
Ratio of the market value of assets to total payroll	4.71	4.60	4.48	4.38	5.04	2.31	2.36	2.41	2.45	2.81
Ratio of actuarial accrued liability to payroll	7.81	8.17	8.63	9.44	9.73	2.41	2.24	2.37	2.48	3.03
Ratio of net cash flow to market value of assets	-0.4%	0.9%	1.3%	-0.8%	-2.3%	-4.4%	-4.0%	-2.5%	-1.6%	-1.4%
Percentage of Expected Contribution Actually Received	111% [1]	113%	114%	87%	71%	110% [1]	115%	114%	113%	102%
Ratio of actives to retirees and beneficiaries	0.82	0.82	0.79	0.82	0.84					

[1] Expected contribution for FYE2025 based on the actuarially determined contribution rate of 38.61% from the June 30, 2023 valuation and expected compensation based on census data from the June 30, 2024 valuation.

Low-Default-Risk Obligation Measure

Introduction

In December 2021, the Actuarial Standards Board (ASB) adopted a revision to Actuarial Standard of Practice (ASOP) No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions. The revised ASOP No. 4 requires the calculation and disclosure of a liability referred to by the ASOP as the "Low-Default-Risk Obligation Measure" (LDROM). The rationale that the ASB cited for the calculation and disclosure of the LDROM was included in the Transmittal Memorandum of ASOP No. 4 and is presented below (emphasis added):

> "The ASB believes that the calculation and disclosure of this measure provides **appropriate, useful information for the intended user regarding the funded status of a pension plan.** The calculation and disclosure of this additional measure is **not intended to suggest that this is the "right" liability measure** for a pension plan. However, the ASB does believe that **this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date."**

Comparing the Accrued Liabilities and the LDROM

One of the fundamental financial objectives of the County Employees' Retirement System (CERS) is to finance each member's retirement benefits over the period from the member's date of hire until the member's projected date of retirement (entry age actuarial cost method) as a level percentage of payroll. To fulfill this objective, the discount rate that is used to value the accrued liabilities is set equal to the **expected return** on each fund's diversified portfolio of assets (referred to sometimes as the investment return assumption). For the retirement funds, the investment return assumption is 6.50%.

The LDROM is meant to approximately represent the lump sum cost to a plan to purchase low-default-risk fixed income securities whose resulting cash flows essentially replicate in timing and amount the benefits earned (or the costs accrued) as of the measurement date. The LDROM is very dependent upon market interest rates at the time of the LDROM measurement. The lower the market interest rates, the higher the LDROM, and vice versa. The LDROM results presented in this report are based on the entry age actuarial cost method and discount rates based upon the intermediate rate from the FTSE Pension Discount Curve and Liability Index published by the Society of Actuaries. This rate is 5.46% as of June 30, 2025. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation.

The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on risk in a diversified portfolio.

Non-Hazardous Retirement Fund

Valuation Accrued Liabilities	LDROM
$16,174,005,715	$18,070,165,537

Hazardous Retirement Fund

Valuation Accrued Liabilities	LDROM
$6,301,845,834	$7,131,181,116

APPENDIX A

ACTUARIAL ASSUMPTIONS AND METHODS

Summary of Actuarial Methods and Assumptions

The following presents a summary of the actuarial assumptions and methods used in the valuation of the County Employees Retirement System.

In general, the assumptions and methods used in the valuation are based on the actuarial experience study as of June 30, 2022 and adopted by the Board in May 2023.

Investment return rate:

Assumed annual rate of 6.50% net of investment expenses for the retirement funds and the insurance funds

Price Inflation:

Assumed annual rate of 2.50%

Payroll Growth Assumption (used for amortization of unfunded accrued liabilities):

Assumed annual rate of 2.00%

Rates of Annual Salary Increase:

Assumed rates of annual salary increases are shown below.

Service Years	Annual Rates of Salary Increase					
	Merit & seniority		Price Inflation & Productivity		Total Increase	
	Non-Hazardous	Hazardous	Non-Hazardous	Hazardous	Non-Hazardous	Hazardous
0	7.00%	15.50%	3.30%	3.55%	10.30%	19.05%
1	4.00%	5.50%	3.30%	3.55%	7.30%	9.05%
2	3.00%	3.50%	3.30%	3.55%	6.30%	7.05%
3	2.00%	2.50%	3.30%	3.55%	5.30%	6.05%
4	1.75%	2.25%	3.30%	3.55%	5.05%	5.80%
5	1.50%	2.00%	3.30%	3.55%	4.80%	5.55%
6	1.25%	2.00%	3.30%	3.55%	4.55%	5.55%
7	1.00%	1.50%	3.30%	3.55%	4.30%	5.05%
8	0.75%	1.50%	3.30%	3.55%	4.05%	5.05%
9	0.75%	1.00%	3.30%	3.55%	4.05%	4.55%
10	0.50%	1.00%	3.30%	3.55%	3.80%	4.55%
11	0.50%	0.50%	3.30%	3.55%	3.80%	4.05%
12	0.25%	0.50%	3.30%	3.55%	3.55%	4.05%
13	0.25%	0.50%	3.30%	3.55%	3.55%	4.05%
14	0.25%	0.25%	3.30%	3.55%	3.55%	3.80%
15	0.00%	0.25%	3.30%	3.55%	3.30%	3.80%
16 & Over	0.00%	0.00%	3.30%	3.55%	3.30%	3.55%

Retirement rates:

Assumed annual rates of retirement are shown below. Rates are only applicable for members who are eligible for a service retirement.

	Non-Hazardous					Hazardous		
	Normal Retirement		Early Retirement[1]			Members participating before 9/1/2008[2]	Members participating between 9/1/2008 and 1/1/2014[3]	Members participating after 1/1/2014[3]
Age	Male	Female	Male	Female	Service			
Under 45	35.0%	27.0%			5	17.0%		
45	35.0%	27.0%			6	17.0%		
46	35.0%	27.0%			7	17.0%		
47	35.0%	27.0%			8	17.0%		
48	35.0%	27.0%			9	17.0%		
49	35.0%	27.0%			10	17.0%		
50	30.0%	27.0%			11	17.0%		
51	30.0%	27.0%			12	17.0%		
52	30.0%	27.0%			13	17.0%		
53	30.0%	27.0%			14	17.0%		
54	30.0%	27.0%			15	17.0%		
55	30.0%	27.0%	4.0%	5.0%	16	17.0%		
56	30.0%	27.0%	4.0%	5.0%	17	17.0%		
57	30.0%	27.0%	4.0%	5.0%	18	17.0%		
58	30.0%	27.0%	4.0%	5.0%	19	17.0%		
59	30.0%	27.0%	4.0%	5.0%	20	30.0%		
60	30.0%	27.0%	4.0%	8.0%	21	22.5%		
61	30.0%	27.0%	4.0%	9.0%	22	18.0%		
62	30.0%	40.0%	15.0%	20.0%	23	21.0%		
63	30.0%	35.0%	15.0%	18.0%	24	24.0%		
64	30.0%	30.0%	15.0%	16.0%	25	27.0%	21.6%	16.0%
65	30.0%	30.0%			26	30.0%	24.0%	16.0%
66	30.0%	27.0%			27	33.0%	26.4%	16.0%
67	30.0%	27.0%			28	36.0%	28.8%	16.0%
68	30.0%	27.0%			29	39.0%	31.2%	16.0%
69	30.0%	27.0%			30+	39.0%	31.2%	100.0%
70	30.0%	27.0%						
71	30.0%	27.0%						
72	30.0%	27.0%						
73	30.0%	27.0%						
74	30.0%	27.0%						
75	100.0%	100.0%						

[1] The annual rate of retirement is 11% for male members and 12% for female members with 25-26 years of service.

[2] The annual rate of retirement is 100% at age 62.

[3] The annual rate of retirement is 100% at age 60.

Non-Hazardous: There is a 1% increase in the first two years a member becomes eligible under the age of 65. For members hired after 7/1/2003, the rates shown above are multiplied by 80% if the member is under age 65 to reflect the different retiree health insurance benefit.

Hazardous: For members hired after 7/1/2003 and prior to 9/1/2008, the rates shown above are multiplied by 80% if the member is under age 62 to reflect the different retiree health insurance benefit.

Disability rates:

An abbreviated table with assumed rates of disability is show below.

Age	Non-Hazardous		Hazardous	
	Male	Female	Male	Female
20	0.04%	0.04%	0.06%	0.06%
30	0.06%	0.06%	0.11%	0.11%
40	0.13%	0.13%	0.24%	0.24%
50	0.37%	0.37%	0.67%	0.67%
60	0.97%	0.97%	1.75%	1.75%

Withdrawal rates (for causes other than disability and retirement):

Assumed annual rates of withdrawal are shown below and include pre-retirement mortality rates as described on the next page.

Service Years	Annual Rates of Withdrawal	
	Non-Hazardous	Hazardous
1	20.00%	20.00%
2	17.92%	10.48%
3	14.35%	8.33%
4	12.26%	7.06%
5	10.78%	6.18%
6	9.63%	5.47%
7	8.69%	4.91%
8	7.90%	4.43%
9	7.21%	4.01%
10	6.60%	3.66%
11	6.06%	3.32%
12	5.57%	3.02%
13	5.12%	2.76%
14	4.70%	2.51%
15	4.32%	2.28%
16	3.97%	2.07%
17	3.63%	1.86%
18	3.32%	1.68%
19	3.04%	1.50%
20	2.75%	1.33%
21	2.48%	0.00%
22	2.23%	0.00%
23	2.00%	0.00%
24	1.77%	0.00%
25	1.55%	0.00%
26 & Over	0.00%	0.00%

Mortality Assumption:

Pre-retirement mortality: PUB-2010 General Mortality table, for the non-hazardous funds, and the PUB-2010 Public Safety Mortality table for the hazardous funds, projected with the ultimate rates from the MP-2020 mortality improvement scale using a base year of 2010.

Post-retirement mortality (non-disabled): System-specific mortality table based on mortality experience from 2013-2022, projected with the ultimate rates from MP-2020 mortality improvement scale using a base year of 2023.

The following table provides the life expectancy for a non-disabled retiree in future years based on the assumption with full generational projection:

Life Expectancy for an Age 65 Retiree in Years					
Gender	**Year of Retirement**				
	2025	**2030**	**2035**	**2040**	**2045**
Male	19.8	20.2	20.6	21.0	21.3
Female	22.4	22.7	23.1	23.4	23.7

Post-retirement mortality (disabled): PUB-2010 Disabled Mortality table, with rates multiplied by 150% for both male and female rates, projected with the ultimate rates from the MP-2020 mortality improvement scale using a base year of 2010.

Marital status:

100% of employees are assumed to be married, with the female spouse 3 years younger than the male spouse.

Line of Duty/Duty-Related Disability

Non-Hazardous: 2% of disabilities are assumed to be duty-related (100% of which are assumed to be "total and permanent")

Hazardous: 50% of disabilities are assumed to occur in the line of duty (10% of which are assumed to be "total and permanent")

Line of Duty Death

25% of deaths are assumed to occur in the line of duty

Dependent Children:

For members in the Hazardous Plan who receive a duty-related death or disability benefit, the member is assumed to be survived by two dependent children, each age 6 with payments for 15 years.

Form of Payment:

Members are assumed to elect a life-only annuity at retirement.

Actuarial Cost Method:

Entry Age Normal, Level Percentage of Pay. The Entry Age Normal actuarial cost method allocates the System's actuarial present value of future benefits to various periods based upon service. The portion of the present value of future benefits allocated to years of service prior to the valuation date is the actuarial accrued liability, and the portion allocated to years following the valuation date is the present value of future normal costs. The normal cost is determined for each active member as the level percent of pay necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

Health Care Age Related Morbidity/Claims Utilization:

To model the impact of aging on the underlying health care costs for Medicare retirees, the valuation relied on the Society of Actuaries' 2013 Study "Health Care Costs – From Birth to Death". Table 4 (Development of Plan Specific Medicare Age Curve) was used to model the impact of aging for ages 65 and over.

Health Care Cost Trend Rates:

Year	Non-Medicare Plans[1]	Medicare Plans[1]	Dollar Contribution[2]
2027	7.35%	12.00%	1.50%
2028	7.20%	8.00%	1.50%
2029	7.05%	8.00%	1.50%
2030	6.90%	7.50%	1.50%
2031	6.75%	7.00%	1.50%
2032	6.50%	6.50%	1.50%
2033	6.25%	6.00%	1.50%
2034	6.00%	5.50%	1.50%
2035	5.75%	5.00%	1.50%
2036	5.50%	4.50%	1.50%
2037	5.25%	4.25%	1.50%
2038	5.00%	4.25%	1.50%
2039	4.75%	4.25%	1.50%
2040	4.50%	4.25%	1.50%
2041 & Beyond	4.25%	4.25%	1.50%

[1]All increases are assumed to occur on January 1. The 2026 premiums were known at the time of the valuation and were incorporated into the liability measurement.
[2]Applies to members participating on or after July 1, 2003. All increases are assumed to occur on July 1.

The healthcare trend assumption is based on the framework developed in the Society of Actuaries' Getzen Model. The ultimate trend assumption of 4.25% is based on a 2.50% inflation assumption plus 1.75% long-term real GDP growth.

Health Care Participation Assumptions:

- Active members are assumed to elect health coverage at retirement at the following participation rates.

Service at Retirement	Members participating before 7/1/2003*	Members participating after 7/1/2003
Under 10	50%	100%
10-14	75%	100%
15-19	90%	100%
Over 20	100%	100%

* 100% of members with a duty disability or a duty death (in service) benefit are assumed to elect coverage at retirement.

- Future retirees are assumed to have a similar distribution by plan type as the current retirees.

Medicare Plan	Participation Percentage	Non-Medicare Plan	Participation Percentage
Medical Only[1]	5%	LivingWell Basic	4%
Essential Plan	7%	LivingWell CDHP	35%
Premium Plan	88%	LivingWell PPO	61%

[1] Includes Mirror Plans

- 50% of deferred vested members participating before July 1, 2003 are assumed to elect health coverage at retirement. 100% of deferred vested members participating after July 1, 2003 are assumed to elect health coverage at retirement.

- Deferred vested members receiving insurance benefits from the non-hazardous fund are assumed to begin health coverage at age 55 for members participating before September 1, 2008, at age 60 for members participating on or after September 1, 2008 but before January 1, 2014, and at age 65 for members participating on or after January 1, 2014.

- Deferred vested members receiving insurance benefits from the hazardous fund are assumed to begin health coverage at age 50 for members participating before January 1, 2014 and at age 60 for members participating on or after January 1, 2014.

- 75% of future retirees, with hazardous service, are assumed to elect spouse health care coverage. No dependent coverage is assumed for members who only have non-hazardous service. 100% of spouses with health care coverage are assumed to continue coverage after the member's death.

Other Assumptions

1. Valuation payroll (used for determining the amortization contribution rate): Current fiscal year payroll.

2. Individual salaries used to project benefits: For salary amounts prior to the valuation date, the salary from the last fiscal year is projected backward with the valuation salary scale assumption. For future salaries, the salary from the last fiscal year is projected forward with one year's salary scale.

3. Pay increase timing: Beginning of (fiscal) year. This is equivalent to assuming that reported salaries represent amounts paid to members during the year ending on the valuation date.

4. Current active members that terminated employment (for reasons other than retirement, disability, or death) are assumed to commence their retirement benefits at first unreduced retirement eligibility. Members are assumed to elect a refund of member contributions if the value of their account balance exceeds the present value of the deferred benefit. Members participating in the Cash Balance plan are assumed to elect to receive a lump sum of their cash balance account if their account balance exceeds the present value of the deferred benefit and the member is not eligible for insurance benefits at termination.

5. The beneficiaries of current active members that die while active are assumed to commence their survivor benefits at the member's first unreduced retirement eligibility. Beneficiaries are assumed to elect a refund of member contributions if the value of the member's account balance exceeds the present value of the survivor benefit. Beneficiaries of active members that die while in the line of duty are assumed to commence their survivor benefits immediately at the death of the member.

6. There will be no recoveries once disabled.

7. Cash Balance Provisions: The cash balance interest crediting rate while a member is an active employee is assumed to equal 6.75%. The interest crediting rate after a member terminates employment is 4%.

8. Decrement timing: Decrements of all types are assumed to occur mid-year. Decrement rates are used as described in this report, without adjustment for multiple decrement table effects.

9. Service: All members are assumed to accrue 1 year of benefit and eligibility service each year.

10. Eligibility testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

11. Incidence of Contributions: Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

12. Current Inactive Population (Retirement Funds): All non-vested members are assumed to take an immediate refund of member contributions. Vested members are assumed to elect an immediate refund of member contributions at the valuation date if the value of their account balance exceeds the present value of their deferred benefit. Non-hazardous members are assumed to retire at age 65. Hazardous members hired prior to September 1, 2008 are assumed to retire at age 55 and hazardous members hired on or after September 1, 2008 are assumed to retire at age 60.

13. The additional $5 per year of service insurance dollar subsidy effective January 1, 2023 is assumed to be paid in all applicable years.

14. For members who earned service within multiple Kentucky retirement systems, the cost of their health insurance benefits is allocated between the funds the member earned service. For members currently in receipt of post-retirement health insurance benefits, this split is provided within the participant data and the liability for each member is allocated accordingly. For active members, we have allocated the entirety of the member's insurance liability to the fund in which the member is currently contributing and earning service.

Participant Data

Participant data was supplied in electronic text files. There were separate files for (i) active and inactive members, and (ii) members and beneficiaries receiving benefits.

The data for active and terminated members included date of birth, gender, date of participation, benefit tier indicator, service with the current system, total vesting service, salary, employee contribution account balances, and employer pay credits for members participating in the cash balance plan. For retired members and beneficiaries, the data included date of birth, gender, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and form of payment code.

Assumptions were made to correct for missing, bad, or inconsistent data. These had no material impact on the results presented.

Changes in assumptions since the prior valuation:

In conjunction with the review of healthcare per capita claims cost, the assumed increase in future healthcare costs, or trend assumption, is reviewed on an annual basis. The trend assumption was increased as a result of our review.

Development of Baseline Claims Cost

For non-Medicare retirees, the initial per capita costs were based on the plan premiums effective January 1, 2026, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. The spouse/dependent premium of $1,272.35 for non-Medicare retirees is based on a blending of Family and Couple premiums for the current retirees that have over 4 years of hazardous service. The fully-insured premiums paid to the Kentucky Employees' Health Plan (KEHP) are blended rates based on the combined experience of active and retired members. Because the average cost of providing health care benefits to retirees under age 65 is higher than the average cost of providing health care benefits to active employees, there is an implicit rate subsidy for the non-Medicare eligible retirees. Actuarial Standard of Practice No. 6 (ASOP No. 6) requires aging subsidies (or implicit rate subsidies) to be recognized. However, the health insurance trusts are only used to reimburse KEHP for the employer's portion of the blended premiums. Said another way, the trusts are not used to fund the difference between the underlying retiree claims and the blended KEHP premiums. As a result, the retiree health care liabilities developed in this report for the non-Medicare retirees are based solely on the premiums charged by KEHP, without any age-adjustment. GASB Statements No. 74 and No. 75 prohibit such a deviation from ASOP No. 6. The liabilities developed in this report are solely for the purpose of funding the benefits paid by the health insurance funds and are not appropriate for financial statement disclosures required by GASB. GRS provides separate GASB reports which include the liabilities associated with the implicit rate subsidy.

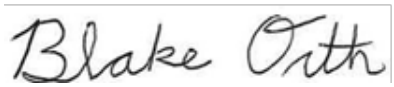
2026 Monthly Costs for Those Not Eligible for Medicare		
Age	Member	Spouse/Dependents
<65	$1,083.05	$1,272.35

For Medicare retirees, the initial per capita costs were estimated based on the plan premiums effective January 1, 2026, and are used for both current and future retirees. An inherent assumption in this methodology is that the projected future retirees will have a similar distribution by plan type as the current retirees. Age graded and sex distinct premiums are utilized for retirees over the age of 65. These costs are appropriate for the unique age and sex distribution currently existing. Over the future years covered by this valuation, the age and sex distribution will most likely change. Therefore, our process "distributes" the average premium over all age/sex combinations and assigns a unique premium for each combination. The age/sex specific costs more accurately reflect the health care utilization and cost at that age.

2026 Monthly Costs for Those Eligible for Medicare		
Age	Male	Female
65	$ 167.73	$ 158.20
75	196.24	191.49
85	207.51	209.96

Appendix B of the report provides a full schedule of premiums.

Blake Orth is a Member of the American Academy of Actuaries (MAAA) and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.



Blake Orth, FSA, EA, MAAA

APPENDIX B

BENEFIT PROVISIONS

Summary of Benefit Provisions for County Employees Retirement System (CERS)

CERS Non-Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 65 with at least 1 month of service credit; or Any age with at least 27 years of service
Benefit Amount	If a member has at least 48 months of service, the monthly benefit is 2.00% times final average compensation times years of service. For members who began participating prior to 8/1/2004, the monthly benefit is 2.20% times final average compensation times years of service. If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 5 years of compensation.
Early Retirement Eligibility	Any age (prior to age 65) with at least 25 years of service; or Age 55 with at least 5 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement eligibility precedes the member's normal retirement date.

CERS Non-Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.10%
10-20	1.30%
20-26	1.50%
26-30	1.75%
Greater than 30*	2.00%

* The 2.00% benefit multiplier only applies to service credit in excess of 30 years. If a member has greater than 30 years of service at retirement, service prior to 30 years will be multiplied by the 1.75% benefit multiplier.

Final compensation is based on the member's last 5 years of compensation.

Early Retirement Eligibility	Age 60 with at least 10 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 65 with at least 5 years of service; or Rule of 87 (Age 57 or older if age plus service equals 87)
Benefit Amount	Each year that the member is active, a 4.00% employer pay credit and the employee's 5.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

CERS Non-Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 65th birthday, with total service not exceeding 25 years. Total service credit added shall not be greater than the member's actual service at disability. For members with at least 25 years of service on the last day of paid employment but less than 27 years of service, total service shall be 27 years. For members with 27 or more years of service credit, actual service will be used.

CERS Non-Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 20% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Duty-Related Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly final rate of pay. If the disability is deemed to be Total and Permanent (and the member is working in a non-hazardous position that could be certified as a hazardous position), then this benefit shall not be less than 75% of the member's monthly average pay.
Child Benefit	Additionally, each eligible dependent child will receive 10% of the member's monthly average pay up to a maximum of 40%. Member and dependent payment shall not exceed 100% of member's monthly average pay.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 65 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

CERS Non-Hazardous Employees (continued)

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 75% of the deceased member's final monthly average pay. Each dependent child will receive 10% of the final monthly average pay (not to exceed a total child benefit of 25% while the spouse is alive). A spouse may also elect the non-line of duty death benefit.
Child Benefit	In the event there is no surviving spouse, the benefit is 50% of final monthly average pay for one child, 65% of final monthly average pay for two children, or 75% of final monthly average pay for three or more eligible children.

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	5% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the Board, not less than 2.0%. Effective July 1, 2026, members hired on or after July 1, 2003 but prior to September 1, 2008 will contribute 1% of creditable compensation to be deposited into the 401(h) account and it is not refundable.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	5% of creditable compensation plus 1% of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes in Non-Hazardous Retirement Benefits since the Prior Valuation

There have been no changes in retirement benefits since the prior valuation.

CERS Hazardous Employees

Retirement: Tier 1, Participation before 9/1/2008

Normal Retirement Eligibility	Age 55 with at least 1 month of service credit; or Any age with at least 20 years of service
Benefit Amount	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation times years of service. If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest. Final average compensation is based on the member's highest 3 years of compensation.
Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

CERS Hazardous Employees (continued)

Retirement: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	The monthly benefit is equal to the applicable benefit multiplier times final average compensation times years of service.

Years of Service	Benefit Multiplier
10 or less	1.30%
10-20	1.50%
20-25	2.25%
Greater than 25	2.50%

Final average compensation is based on the member's highest 3 years of compensation.

Early Retirement Eligibility	Age 50 with at least 15 years of service
Early Retirement Reduction	Normal Retirement benefit reduced 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member's retirement date precedes the member's normal retirement eligibility.

Retirement: Tier 3, Participation on or after 1/1/2014

Normal Retirement Eligibility	Age 60 with at least 5 years of service; or Any age with at least 25 years of service
Benefit Amount	Each year that the member is active, a 7.50% employer pay credit and the employee's 8.00% contribution will be credited to each member's hypothetical cash balance account. The hypothetical account will earn interest at a minimum rate of 4%, annually. If the System's geometric average net investment return for the previous five years exceeds 4%, then the hypothetical account will be credited with an additional amount of interest in that year equal to 75% of the amount of the return which exceeds 4%. All interest credits will be applied to the hypothetical account balance on June 30 based on the account balance as of June 30 of the previous year. At retirement, the member's hypothetical account balance may be converted into an annuity based on an actuarial factor.
Early Retirement Eligibility	N/A

CERS Hazardous Employees (continued)

Deferred Vested Benefit: Tier 1, Participation before 9/1/2008

Eligibility	At least 1 month of service credit
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit: Tier 2, Participation on or after 9/1/2008 but before 1/1/2014

Eligibility	5 years of service
Benefit Amount	Normal retirement benefit deferred to normal retirement age, or a reduced retirement benefit at an early retirement age

Deferred Vested Benefit Tier 3, Participation on or after 1/1/2014

Eligibility	5 years of service
Benefit Amount	At termination of employment, members may choose to leave their account balance with the System and retire once they are eligible. The hypothetical account balance will earn 4% annual interest after termination. Members may also choose to withdrawal their entire accumulated balance. If a member does not have 5 years of service at termination, the member is eligible to receive a partial refund of their account balance. This refund includes the member's contributions with interest.

Disability Retirement: Participation before 8/1/2004

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	Disability benefits are calculated in the same manner as the normal retirement benefit with years of service and final compensation being determined as of the date of disability, except that if the member has less than 20 years of service at disability, service credit shall be added to the person's total service beginning with the last date of paid employment and continuing to the member's 55th birthday, with total service not exceeding 20 years. Total service credit added shall not be greater than the member's actual service at disability.

CERS Hazardous Employees (continued)

Disability Retirement: Participation on or after 8/1/2004 but before 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's normal retirement benefit (without reduction for early retirement) with years and final compensation being determined as of the date of disability.

Disability Retirement: Participation on or after 1/1/2014

Eligibility	60 months of service (requirement is waived if line of duty disability)
Disability Benefit	The higher of 25% of the member's final monthly rate of pay or the member's retirement benefit calculated at the member's normal retirement date.

Line of Duty Disability Benefit

Disability Benefit	If the disability is a direct result of an act in the line of duty, the benefit shall not be less than 25% of the member's final monthly final rate of pay. If the disability is deemed to be Total and Permanent, then this benefit shall not be less than 75% of the member's monthly average pay.
Child Benefit	Additionally, each eligible dependent child will receive 10% of the member's monthly average pay up to a maximum of 40%. Member and dependent payment shall not exceed 100% of member's monthly average pay.

Pre-Retirement Death Benefit

Eligibility	Eligible for early or normal retirement; or Under age 55 with at least 60 months of service and actively working at the time of death; or At least 144 months of service, if no longer actively working
Spouse Benefit	The member's retirement benefit calculated in the same manner as if the member had retired on the day of the member's death and elected a 100% joint and survivor benefit. The benefit is actuarially reduced if the member dies prior to their normal retirement age.

CERS Hazardous Employees (continued)

Pre-Retirement Death Benefit (Death in the Line of Duty)

Eligibility	One month of service credit
Spouse Benefit	A $10,000 lump sum payment plus a monthly payment of 75% of the deceased member's final monthly average pay. Each dependent child will receive 10% of the final monthly average pay (not to exceed a total child benefit of 25% while the spouse is alive). A spouse may also elect the non-line of duty death benefit.
Non-Spouse Benefit	If the beneficiary is only one person who is a dependent receiving at least 50% of his or her support from the member, the beneficiary may elect a lump-sum payment of $10,000.
Child Benefit	In the event there is no surviving spouse, the benefit is 50% of final monthly average pay for one child, 65% of final average pay for two children, or 75% of final average pay for three or more eligible children.

Post-Retirement Death Benefit

Eligibility	48 months of service, and in receipt of retirement benefits
Death Benefit	A $5,000 lump sum payment

Member Contributions

Tier 1, Participation before 9/1/2008	8% of creditable compensation. Members who do not receive a retirement benefit are entitled to a full refund of contributions with interest. The annual interest rate is set by the Board, not less than 2.0%. Effective July 1, 2026, members hired on or after July 1, 2003 but prior to September 1, 2008 will contribute 2% of creditable compensation to be deposited into the 401(h) account and it is not refundable.
Tier 2, Participation on or after 9/1/2008 but before 1/1/2014	8% of creditable compensation plus 1% (2% effective July 1, 2026) of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest. The annual interest rate is 2.5%.
Tier 3, Participation after 1/1/2014	8% of creditable compensation plus 1% (2% effective July 1, 2026) of creditable compensation, which is deposited into the 401(h) account and is not refundable. Members who do not receive a retirement benefit are entitled to a refund of non-401(h) contributions with interest.

Changes in Hazardous Retirement Benefits since the Prior Valuation

There have been no changes in retirement benefits since the prior valuation.

Summary of Main Retiree Insurance Benefit Provisions

Insurance: Participation began before 7/1/2003

Benefit Eligibility Recipient of a retirement allowance

Benefit Amount

Non-Hazardous Service	Percentage of Member Premium Paid by Retirement System	Hazardous Service	Percentage of Member & Dependent Premium Paid by Retirement System
Less than 4 years	0%	Less than 4 years	0%
4 – 9 years	25%	4 – 9 years	25%
10 – 14 years	50%	10 – 14 years	50%
15 – 19 years	75%	15 – 19 years	75%
20 or more years	100%	20 or more years	100%

The percentage paid by the retirement system is applied to the 'contribution' plan selected by the Board.

Duty Disability Retirement If disability was a result of injuries sustained while in the line of duty, the member receives 100% of the maximum contribution for the member and dependents. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Duty Death in Service If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a fully subsidized health insurance benefit. This benefit is provided to members in the Non-hazardous and Hazardous plans alike.

Non-Duty Death in Service If the surviving spouses is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Surviving Spouse of a Retiree A surviving spouse of a retiree, who is in receipt of a pension allowance, will receive a premium subsidy based on the member's years of hazardous service.

Hazardous employees who retired prior to August 1, 1998 System's contribution for spouse and dependents is based on total service.

Insurance: Participation began on or after 7/1/2003

Benefit Eligibility

Recipient of a retirement allowance with at least 120 months of service at retirement (180 months if participation began on or after 9/1/2008)

Non-Hazardous Subsidy

Monthly contribution of $10 for each year of earned non-hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2025, the Non-Hazardous monthly contribution was $14.85/year of service. Upon the retiree's death, the surviving spouse may continue coverage (if in receipt of a retirement allowance) but will be 100% responsible for the premiums.

Effective January 1, 2026, the monthly contribution is $40 a month for each year of non-hazardous service if the members is not eligible for Medicare benefits and has attained 27 years of service at retirement. The monthly contribution is increased by 1.5% each July 1, with the first increase occurring July 1, 2026.

Effective January 1, 2023, members will receive an additional dollar contribution of $5 for every year of non-hazardous service a member attains over 27 years. This additional dollar contribution does not increase by 1.5% annually and is only payable for non-Medicare retirees. Also, it is only payable when the applicable insurance fund is at least 90% funded on an actuarial value of asset basis as of the last actuarial valuation.

Hazardous Subsidy

Monthly contribution of $15 for each year of earned hazardous service. The monthly contribution is increased by 1.5% each July 1. As of July 1, 2025, the Hazardous monthly contribution was $22.27/year of service. Upon the retiree's death, the surviving spouse of a hazardous duty member will receive a monthly contribution of $10 ($14.85 as of July 1, 2025) for each year of hazardous service.

Effective January 1, 2026, the monthly contribution is $50 a month for each year of hazardous service if the members is not eligible for Medicare benefits and has attained 20 years of service if they were hired prior to September 1, 2008 and 25 years of service for a member who was hired on or after September 1, 2008. The monthly contribution is increased by 1.5% each July 1, with the first increase occurring July 1, 2026.

Effective January 1, 2023, members will receive an additional dollar contribution of $5 for every year of hazardous service a Tier 1 member attains over 20 years and a Tier 2 member attains 25 years. This additional dollar contribution does not increase by 1.5% annually and is only payable for non-Medicare retirees. Also, it is only payable when the applicable insurance fund is at least 90% funded on an actuarial value of asset basis as of the last actuarial valuation.

Duty Disability Retirement

If disability was a result of injuries sustained while in the line of duty or was duty-related, the member receives a benefit based on at least 20 years of service. This benefit is provided to members in the Non-Hazardous and Hazardous plans alike.

If the disability is deemed to be Total and Permanent, the insurance premium for the member, the member's spouse, and the member's dependent children shall also be paid in full by the System. For non-hazardous members to be eligible for this benefit, they must be working in a position that could be certified as a hazardous position.

Duty Death in Service

If an active employee's death was a result of injuries sustained while in the line of duty, the member's spouse and children receive a fully subsidized health insurance benefit. This benefit is provided to members in the Non-Hazardous and Hazardous plans alike.

Non-Duty Death in Service

If the surviving spouse is in receipt of a pension allowance, he or she is eligible for continued health coverage. The percentage of the premium paid for by the retirement system is based on the member's years of hazardous service at the time of death.

Monthly Health Plan Premiums – Effective January 1, 2026

Non-Medicare Plan Options					
Plan Option	Single	Parent Plus	Couple	Family	Family X-Ref
LivingWell PPO	$1,105.54	$1,514.46	$2,238.22	$2,453.16	$1,300.24
LivingWell CDHP	1,090.42	1,475.34	2,144.14	2,383.68	1,247.34
LivingWell Basic	1,059.88	1,447.24	2,150.90	2,385.14	1,244.12
LivingWell HDHP	983.66	1,343.02	1,996.16	2,213.58	1,153.50

Medicare Plan Options	
Medical Only Plan	$194.23
Essential Mirror Plan	264.56
Premium Mirror Plan	404.67
Essential Medical Advantage Plan	55.10
Premium Medical Advantage Plan	199.94

Contribution plan selected by the Board was the LivingWell PPO plan option for non-Medicare retirees. Contribution plan selected by the Board was the Premium Medical Advantage Plan for the Medicare retirees.

Dollar Contribution Amount for Participation on or after 7/1/2003

Monthly contribution amounts per year of service as of July 1, 2025.

Non-Hazardous Service		Hazardous Service	
Non-Medicare Eligible	Medicare Eligible	Non-Medicare Eligible	Medicare Eligible
$40.00[1]	$14.85	$50.00[1]	$22.27

[1] Effective January 1, 2026, members who meet certain service eligibility requirements at retirement will be eligible for the increased contribution amount

Changes in Health Insurance Benefits Since the Prior Valuation

Senate Bill 10 passed during the 2025 legislative session and increased the insurance dollar benefit for members who began participating on or after July 1, 2003 to $40 a month for non-hazardous service and $50 a month for hazardous service, effective January 1, 2026. The increased insurance benefit is only payable to members that meet certain eligibility requirements at retirement. Additionally, this legislation increased the insurance member contribution rate for hazardous members from 1% of pay to 2% of pay, effective July 1, 2026 and extends the required member contribution to members hired on or after July 1, 2003 but prior to September 1, 2008 for both non-hazardous and hazardous members.

APPENDIX C

GLOSSARY

Glossary

Actuarial Accrued Liability (AAL): That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.

Actuarial Assumptions: Assumptions as to future experience under the Fund. These include assumptions about the occurrence of future events affecting costs or liabilities, such as:

- mortality, withdrawal, disablement, and retirement;
- future increases in salary;
- future rates of investment earnings and future investment and administrative expenses;
- characteristics of members not specified in the data, such as marital status;
- characteristics of future members;
- future elections made by members; and
- other relevant items.

Actuarial Cost Method or ***Funding Method:*** A procedure for allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability. These items are used to determine the ADC.

Actuarial Gain or ***Actuarial Loss:*** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two Actuarial Valuation dates. Through the actuarial assumptions, rates of decrements, rates of salary increases, and rates of fund earnings have been forecasted. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted, or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., the fund's assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results that produce actuarial liabilities which are larger than projected. Actuarial gains will shorten the time required for funding of the actuarial balance sheet deficiency while actuarial losses will lengthen the funding period.

Actuarially Equivalent: Of equal actuarial present value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV): The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. For purposes of this standard, each such amount or series of amounts is:

a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.)

b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

c. discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Actuarial Present Value of Future Plan Benefits: The Actuarial Present Value of those benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits. The Actuarial Present Value of Future Plan Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive, non-retired members either entitled to a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation: The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial valuation for a governmental retirement system typically also includes calculations that provide the financial information of the plan, such as the funded ratio, unfunded actuarial accrued liability and the ADC.

Actuarial Value of Assets or ***Valuation Assets:*** The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the ADC.

Actuarially Determined: Values which have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the law.

Actuarially Determined Contribution (ADC): The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and the Amortization Payment.

Amortization Method: A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.

Amortization Payment: The portion of the pension plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Closed Amortization Period: A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc. See Funding Period and Open Amortization Period.

Decrements: Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or termination.

Defined Benefit Plan: A retirement plan that is not a Defined Contribution Plan. Typically a defined benefit plan is one in which benefits are defined by a formula applied to the member's compensation and/or years of service.

Defined Contribution Plan: A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, and the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.

Employer Normal Cost: The portion of the Normal Cost to be paid by the employers. This is equal to the Normal Cost less expected member contributions.

Experience Study: A periodic review and analysis of the actual experience of the Fund which may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified as deemed appropriate by the Actuary.

Funded Ratio: The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL). Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA.

Funding Period or ***Amortization Period:*** The term "Funding Period" is used two ways. In the first sense, it is the period used in calculating the Amortization Payment as a component of the ADC. This funding period is specified in State statute. In the second sense, it is a calculated item: the number of years in the future that will theoretically be required to amortize (i.e., pay off or eliminate) the Unfunded Actuarial Accrued Liability, based on a statutory employer contribution rate, and assuming no future actuarial gains or losses.

GASB: Governmental Accounting Standards Board.

GASB 67 and ***GASB 68***: Governmental Accounting Standards Board Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting and reporting rules for public retirement systems and the employers that sponsor, participate in, or contribute to them. Statement No. 67 sets the accounting rules for the financial reporting of the retirement systems, while Statement No. 68 sets the rules for the employers that sponsor, participate in, or contribute to public retirement systems.

Normal Cost: That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded

Actuarial Accrued Liability is not part of Normal Cost (see Amortization Payment). For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total of employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the Normal Cost is intended to be the level cost (when expressed as a percentage of pay) needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.

Open Amortization Period: An open amortization period is one which is used to determine the Amortization Payment but may not decrease by exactly one year in the subsequent year's actuarial valuation. For instance, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year.

Unfunded Actuarial Accrued Liability: The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

Valuation Date or Actuarial Valuation Date: The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Plan Benefits is determined. The expected benefits to be paid in the future are discounted to this date.