

Connecticut State Employees Retirement System



Report of the Actuary on the Valuation

Prepared as of June 30, 2025



November 18, 2025

State of Connecticut
State Employees Retirement Commission
55 Elm Street
Hartford, CT 06106

Members of the Commission:

Connecticut General Statutes Section 5-155a governs the operation of the Connecticut State Employees Retirement System (SERS). The actuary makes periodic valuations of the contingent assets and liabilities of the Retirement System at the direction of the Commission. We are pleased to submit the report giving the results of the actuarial valuation of the Retirement System prepared as of June 30, 2025.

The purpose of the report is to provide a summary of the funded status of SERS as of June 30, 2025 and to recommend an actuarially determined contribution rate for the fiscal year ending June 30, 2027. The report indicates that an annual actuarially determined employer contribution of approximately \$1.889 billion (at the rate of 40.43% of compensation) for the fiscal year ending June 30, 2027 is sufficient to support the benefits of the System.

In preparing the valuation, the actuary relied on data provided by the Comptroller's Office. While not verifying data at the source, the actuary performed tests for consistency and reasonableness. The valuation results depend on the integrity of the data. If any of the information is inaccurate or incomplete, our results may be different and our calculations may need to be revised. The complete cooperation of the SERS staff in furnishing materials requested is hereby acknowledged with appreciation.

The System is funded on an actuarial reserve basis. The actuarial assumptions recommended by the actuary and adopted by the Commission are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System. The funding objective of the System is that contribution amounts will be sufficient to fully fund the liabilities of System over a reasonable funding period. The funding method determines the unfunded actuarial accrued liability (UAAL) as the excess of actuarial accrued liability over the actuarial value of assets. See page 8 of this report for the allocation of the UAAL.

This is to certify that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.



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

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

The actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the System. Use of these computations for purposes other than meeting these requirements may not be appropriate.

The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely yours,

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

Larry Langer, EA, ASA, FCA, MAAA
Principal and Consulting Actuary

Ryan Gundersen, ASA, FCA, MAAA
Consulting Actuary



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SECTION I – SUMMARY OF PRINCIPAL RESULTS

- For convenience of reference, the principal results of the current and preceding valuations are summarized below:

Valuation Date	June 30, 2025	June 30, 2024
Number of active members	49,362	49,023
Annual compensation	\$ 4,673,330,109	\$ 4,460,206,853
Retired members and beneficiaries:		
Number	57,652	57,628
Annual allowances	\$ 2,734,173,159	\$ 2,675,602,660
Deferred Vested Members:		
Number	3,783	3,638
Annual allowances	\$ 57,953,559	\$ 52,373,125
Assets:		
Market Value*	\$ 26,810,070,217	\$ 23,890,859,768
Actuarial Value*	\$ 25,988,657,610	\$ 23,683,582,977
Unfunded actuarial accrued liability	\$ 17,621,358,541	\$ 19,186,215,936
Funded Ratio based on Actuarial Assets	59.6%	55.2%
Funded Ratio based on Market Assets	61.5%	55.7%
For Fiscal Year Ending	June 30, 2027	June 30, 2026
Actuarially Determined Employer Contribution (ADEC):		
Normal	\$ 253,717,677	\$ 246,515,453
Accrued liability	<u>1,635,683,966</u>	<u>1,733,888,428</u>
Total	\$ 1,889,401,643	\$ 1,980,403,881
Actuarially Determined Employer Contribution (ADEC) Rate:		
Normal	5.43%	5.53%
Accrued liability	<u>35.00%</u>	<u>38.87%</u>
Total	40.43%	44.40%
Basis		
Discount Rate	6.90%	6.90%
Amortization period (years)	20.4	21.6

* The June 30, 2025 amounts include the transfer of \$894,706,383 made subsequent to June 30, 2025.
The June 30, 2024 amounts include the transfer of \$513,939,722 made subsequent to June 30, 2024.





SECTION I – SUMMARY OF PRINCIPAL RESULTS

2. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains and losses during the valuation year are given in Section VII and the rates of contribution payable by employers are given in Section V.
3. The results of the valuation are given in Schedule A.
4. Schedule B of this report presents the development of the actuarial value of assets. We have included an adjustment to both the market and actuarial value of assets of \$872,139,767 to reflect the discounted value of the amounts transferred subsequent to June 30, 2025. Without these transfers, the unfunded actuarial accrued liability would be correspondingly larger, the funded ratio would be 57.6% and the ADEC for FYE27 would be approximately \$74.2 million larger. Through the 2025 valuation, the accumulated transfers to SERS total \$6.51 billion which, in isolation, reflect a \$553 million dollar decrease to the annual contributions required. Schedule K details the impact of past contribution transfers.
5. Schedule D details the actuarial assumptions and methods employed. There were no changes to the actuarial assumptions or methods since the last valuation.
6. Schedule F gives a summary of the benefit and contribution provisions of the plan. There were no changes to the plan provisions since the last valuation.
7. The Governmental Accounting Standards Board issued Statement No. 67 (GASB 67) in June 2012 and is effective for plan years beginning after June 15, 2013. A separate GASB 67 report will be prepared for the Commission. We have provided some supplemental disclosure information and tables in Section VI.
8. As shown in the Summary of Principal Results, the funded ratio of 59.6% is the ratio of the actuarial value of assets to the accrued liability and has increased 4.4% since the prior valuation. The funded ratio is an indication of progress in funding the promised benefits using a long-term, stable funding approach. Since the ratio is less than 100%, there is a need for contributions in addition to the plan's normal cost. The funded ratio based on the market value of assets is also provided for informational purposes.
9. The table on the following page provides a history of pertinent census and valuation result figures.





SECTION I – SUMMARY OF PRINCIPAL RESULTS

COMPARATIVE SCHEDULE											
Valuation Date June 30	Active Members				Retired Lives				Valuation Results (\$ thousands)		
	Number	Payroll (\$ 000)	Average Salary	% increase from previous valuation	Number	Active/ Retired Ratio	Annual Benefits (\$ 000)	Benefits as % of Payroll	Accrued Liability	Valuation Assets	UAAL
2014	49,976	\$3,487,577	\$69,785	(0.4)%	45,803	1.09	\$1,576,606	45.2%	\$25,505,610	\$10,584,795	\$14,920,815
2016	50,019	3,720,751	74,387	6.6	48,191	1.04	1,745,785	46.9	32,310,335	11,922,966	20,387,369
2018	49,153	3,428,068	69,743	(6.2)	50,441	0.97	1,931,098	56.3	34,214,163	12,990,400	21,223,763
2019	49,429	3,686,365	74,579	6.9	51,745	0.96	2,051,605	55.7	36,087,938	13,795,389	22,292,549
2020	47,662	3,672,443	77,052	3.3	52,498	0.91	2,158,277	58.8	36,971,136	14,242,897	22,728,239
2021	48,014	3,847,146	80,126	4.0	53,699	0.89	2,280,127	59.3	38,344,444	15,946,862	22,397,582
2022	46,661	3,787,016	81,160	1.3	56,778	0.82	2,525,749	66.7	40,656,964	19,726,002	20,930,962
2023	47,269	4,168,950	88,196	8.7	57,327	0.82	2,619,341	62.8	41,981,067	21,846,667	20,134,400
2024	49,023	4,460,207	90,982	3.2	57,628	0.85	2,675,603	60.0	42,869,799	23,683,583	19,186,216
2025	49,362	4,673,330	94,675	4.1	57,652	0.86	2,734,173	58.5	43,610,016	25,988,657	17,621,359





SECTION II – MEMBERSHIP

Data regarding the membership of the System for use as a basis for the valuation were furnished by the Comptroller's office. The following tables summarize the membership of the Retirement System as of June 30, 2025 upon which the valuation was based. Detailed tabulations of the data are given in Schedule G.

ACTIVE MEMBERS					
Group	Number	Payroll	Salary	Group Averages	
				Age*	Service*
Tier I – Plan B	51	\$ 6,988,043	\$ 137,020	71.7	44.4
Tier I – Plan C	1	124,442	124,442	67.0	43.0
Tier II – Hazardous	91	11,609,182	127,573	56.5	28.1
Tier II – Hybrid Plan	191	30,320,173	158,744	62.6	30.4
Tier II – Others	3,960	467,252,915	117,993	59.2	32.2
Tier IIA – Hazardous	2,797	341,555,311	122,115	48.9	18.3
Tier IIA – Hybrid Plan	645	89,764,649	139,170	56.6	20.8
Tier IIA – Others	10,282	1,109,340,799	107,892	53.3	20.0
Tier III – Hazardous	2,163	228,402,793	105,595	43.0	11.6
Tier III – Hybrid Plan	484	53,095,629	109,702	48.7	10.9
Tier III – Others	6,035	576,756,970	95,569	48.0	11.1
Tier IV – Hazardous	3,915	338,128,317	86,367	36.4	4.0
Tier IV – Hybrid Plan	1,402	118,878,307	84,792	41.2	3.4
Tier IV – Others	17,345	1,301,112,579	75,014	40.6	3.3
Total	49,362	\$4,673,330,109	\$ 94,675	46.4	11.8

*Years

Of the 49,362 active members, 24,316 are vested and 25,046 are non-vested.





SECTION II – MEMBERSHIP

RETIRED LIVES				
Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age*
Retired – Pre 1980	265	\$ 12,247,638	\$ 46,218	91.9
Retired – 1980 - 1997	7,969	368,878,955	46,289	84.5
Retired – 1997 - 2011	20,390	1,069,049,677	52,430	75.0
Retired – 2011 - 2022	24,412	1,104,012,696	45,224	67.0
Retired – 2022+	4,616	179,984,193	38,991	62.3
Total Retired Members	57,652	\$ 2,734,173,159	\$ 47,425	72.0
Deferred Vested Members	3,783	\$ 57,953,559	\$ 15,319	53.4

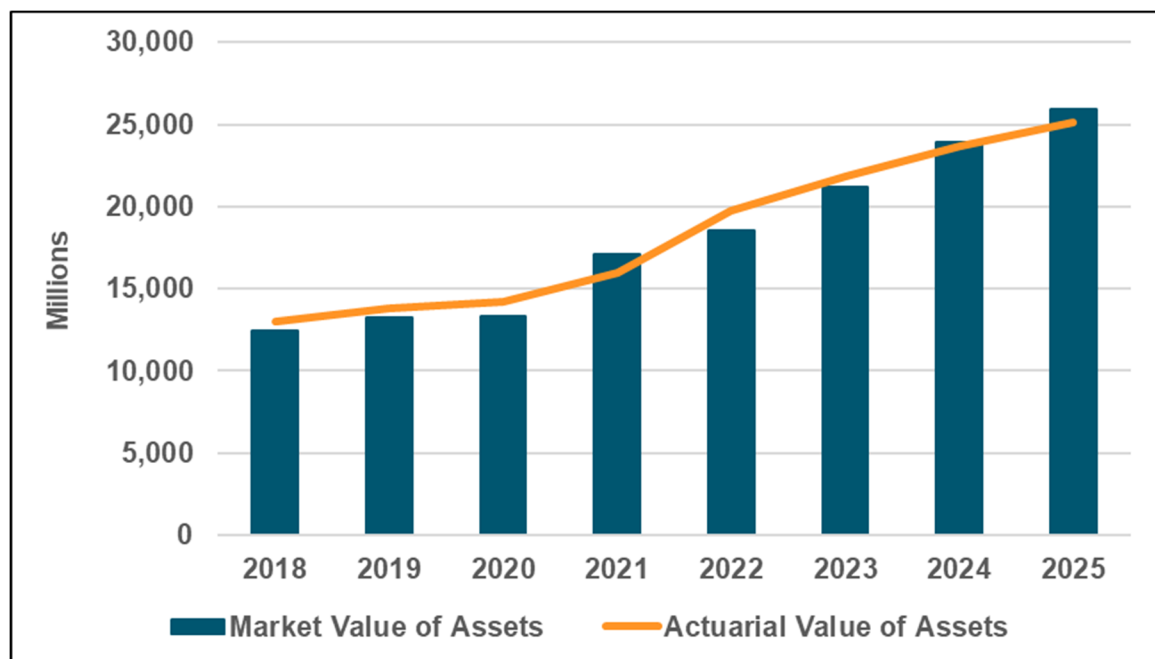
*Years





SECTION III – ASSETS

1. As of June 30, 2025, the total market value of assets amounted to \$25,937,930,450 as reported by the Comptroller's Office. The estimated investment return for the plan year since the last valuation was 10.30%. Subsequent to June 30, 2025, the State deposited two General fund surplus transfer totaling \$894,706,383 mid-November, and this is treated as a receivable amount for the plan year. For valuation purposes, we discounted this amount using the 6.90% expected return on assets to the valuation date which results in an increase in the plan's assets of \$872,139,767 as of June 30, 2025. The June 30, 2025 market value of assets is \$26,810,070,217 including these transfers. Schedule C shows receipts and disbursements of the System for the year preceding the valuation date and a reconciliation of the fund balances at market value.
2. The actuarial value of assets used for the current valuation using a smoothed method was \$25,988,657,610. The estimated investment return for the plan year on an actuarial value of assets basis was 7.77%, which can be compared to the investment return assumed over the period of 6.90%. Schedule B shows the development of the actuarial value of assets as of June 30, 2025.





SECTION III – ASSETS

3. The net investment returns for the past eight valuations are summarized in the table below:

Period Ending June 30	Market Value	Actuarial Value
2018	7.13%	5.64%
2019	5.67%	5.90%
2020	2.26%	5.20%
2021	24.39%	8.66%
2022	-8.16%	4.57%
2023	8.95%	5.88%
2024	11.45%	7.06%
2025	10.30%	7.77%





SECTION IV – COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the valuation of the Retirement System as of June 30, 2025. The valuation was prepared in accordance with the actuarial assumptions and methods set forth in Schedule D and the actuarial cost method which is described in Schedule E.
2. The valuation shows that the System has a total actuarial accrued liability of \$43,610,016,151, of which \$33,270,146,539 is for the benefits payable on account of present retired members, beneficiaries of deceased members, and inactive members entitled to deferred vested benefits, and \$10,339,869,614 is for the benefits expected to be payable on account of present active members, based on service to the valuation date. Against these liabilities, the System has total present assets for valuation purposes of \$25,988,657,610 as of June 30, 2025. When this amount is deducted from the actuarial accrued liability of \$43,610,016,151, there remains \$17,621,358,541 as the unfunded actuarial accrued liability (UAAL) which is a \$1.565 billion decrease from the prior valuation.
3. The employer's contributions to the System consist of normal cost contributions and accrued liability contributions. The normal cost represents the ultimate cost of the benefits, and the accrued liability contribution is an addition (reduction in case of a surplus) due to the amortization of the unfunded accrued liability. The valuation indicates that annual employer normal cost contributions at the rate of 5.43% of active members' compensation are required to provide the currently accruing benefits of the System.





SECTION IV – COMMENTS ON VALUATION

4. The following table provides the components of the total UAAL, and the derivation of the amortization amounts required in accordance with the Memorandum of Understanding (MOU) between the State and SEBAC effective December 8, 2016.

TOTAL UAAL AMORTIZATION SCHEDULE (\$ thousands)				
	Initial UAAL	Remaining UAAL	Remaining Amortization Period (years)	Amortization Payment*
Statutory Base (1984 UAAL)	\$ 4,138,969	\$ 3,648,373	21	\$ 334,003
2016 Base	16,248,400	15,337,159	21	1,404,096
2018 Base	570,349	507,087	18	50,048
2019 Base	1,014,250	911,947	19	87,573
2020 Base	516,320	471,215	20	44,134
2021 Base	(105,787)	(98,265)	21	(8,996)
2022 Base	(1,101,195)	(1,044,469)	22	(93,644)
2023 Base	(423,584)	(409,527)	23	(36,021)
2024 Base	(556,265)	(547,343)	24	(47,304)
2025 Base	(1,154,818)	<u>(1,154,818)</u>	25	<u>(98,205)</u>
Total UAAL		\$ 17,621,359		\$ 1,635,684
Annual Valuation Payroll				\$ 4,673,330
UAAL Amortization Rate				35.00%

* Amortization payment method is level dollar methodology.

5. We have determined that a contribution of 35.00% of payroll is required to amortize the unfunded actuarial accrued liability of \$17,621,358,541 over the scheduled amortization periods in accordance with the MOU.
6. Schedule J of this report shows the amortization schedule for the total UAAL.





SECTION V – CONTRIBUTIONS PAYABLE BY EMPLOYER

The following table shows the amount and rate of contribution payable by the employer as determined from the present valuation for the 2026/2027 fiscal year.

EMPLOYER CONTRIBUTIONS		
	Amount	Rate
A. Normal Cost:		
Service retirement benefits	\$ 452,686,891	9.69%
Disability benefits	27,980,272	0.60%
Survivor benefits	<u>3,880,823</u>	<u>0.08%</u>
Total Normal Cost	\$ 484,547,986	10.37%
B. Less Member Contributions	(230,830,309)	(4.94)%
C. Employer Normal Cost	\$ 253,717,677	5.43%
D. Unfunded Actuarial Accrued Liabilities (20.4 year weighted average amortization period)	\$1,635,683,966	35.00%
E. Total (C. + D.)	\$1,889,401,643	40.43%





SECTION V – CONTRIBUTIONS PAYABLE BY EMPLOYER

The following table shows a breakdown by group of the normal cost amount and rate payable by the employer as determined from the present valuation for the 2026/2027 fiscal year.

EMPLOYER NORMAL COST		
Group	Amount	Rate
Tier I – Plan B	\$ 312,364	4.47%
Tier I – Plan C	2,488	2.00
Tier II – Hazardous	1,742,520	15.01
Tier II – Hybrid Plan	856,147	2.82
Tier II – Others	21,453,935	4.59
Tier IIA – Hazardous	52,487,952	15.37
Tier IIA – Hybrid Plan	1,353,447	1.51
Tier IIA – Others	48,969,978	4.41
Tier III – Hazardous	30,926,722	13.54
Tier III – Hybrid Plan	911,316	1.72
Tier III – Others	23,417,673	4.06
Tier IV – Hazardous	33,817,250	10.00
Tier IV – Hybrid Plan	1,220,617	1.03
Tier IV – Others	36,245,268	2.79
Total	\$ 253,717,677	5.43%





SECTION V – CONTRIBUTIONS PAYABLE BY EMPLOYER

The official contribution requirement for the fiscal year ending June 30, 2028 will be determined in the June 30, 2026 valuation. However, we have estimated the contribution requirement for the fiscal year ending June 30, 2028 using standard roll forward techniques from this valuation. These results assume the market value of assets will earn 6.90% and the active member population will remain static.

Projected Contributions Required for Fiscal Year Ending June 30, 2028	Roll Forward of June 30, 2025 Valuation	
	As % of Pay	\$ Amount
Employer Normal Cost	5.35%	\$ 257,603,000
Unfunded Actuarial Accrued Liabilities	33.67%	1,620,750,000
Total	39.02%	\$ 1,878,353,000





SECTION VI – ACCOUNTING INFORMATION

- The information required under Governmental Accounting Standards Board (GASB) will be issued in separate reports. The following is a distribution of the number of employees by type of membership:

NUMBER OF ACTIVE AND RETIRED MEMBERS AS OF JUNE 30, 2025	
Group	Number
Retirees and beneficiaries currently receiving benefits	57,652
Terminated employees entitled to benefits but not yet receiving benefits	3,783
Active plan members	<u>49,362</u>
Total	110,797

- Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS (Dollar amounts in thousands)						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) EAN (b)	Unfunded AAL (UAAL) (b – a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b – a) / c)
6/30/2016 [#]	\$11,922,966	\$32,310,335	\$20,387,369	36.9%	\$3,720,751	547.9%
6/30/2018	12,990,400	34,214,163	21,223,763	38.0	3,428,068	619.1
6/30/2019	13,795,389	36,087,938	22,292,549	38.2	3,686,365	604.7
6/30/2020	14,242,897	36,971,136	22,728,239	38.5	3,672,443	618.9
6/30/2021	15,946,862	38,344,444	22,397,582	41.6	3,847,146	582.2
6/30/2022	19,726,002	40,656,964	20,930,962	48.5	3,787,016	552.7
6/30/2023	21,846,667	41,981,067	20,134,400	52.0	4,168,950	483.0
6/30/2024	23,683,583	42,869,799	19,186,216	55.2	4,460,207	430.2
6/30/2025	25,988,657	43,610,016	17,621,359	59.6	4,673,330	377.1

Reflects change in discount rate.





SECTION VI – ACCOUNTING INFORMATION

3. The following shows the schedule of employer contributions (all dollar amounts are in thousands).

SCHEDULE OF EMPLOYER CONTRIBUTIONS (\$ thousands)				
Fiscal Year Ending June 30	Valuation Date Ending June 30	Actuarially Determined Contribution	Actual Contribution*	Percentage Contributed
2018	2016	\$1,443,110	\$1,444,053	100.1%
2019	2016	1,574,537	1,578,323	100.2%
2020	2018	1,616,312	1,616,312	100.0%
2021	2019	1,806,708	1,848,524	102.3%
2022	2020	1,993,151	2,014,154	101.1%
2023	2021	2,143,325	2,215,325	103.4%
2024	2022	2,040,374	2,097,178	102.8%
2025	2023	2,013,790	2,046,839	101.6%
2026	2024	1,980,404	N/A	N/A
2027	2025	1,889,402	N/A	N/A

* Does not reflect the General Fund surplus transfers.

4. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2025. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2025
Actuarial cost method	Entry Age Normal
Amortization method	Level dollar, closed
Weighted amortization period	20.4 years
Asset valuation method	Smoothed market with 20% recognition of investment gains and losses
Actuarial assumptions:	
Investment rate of return*	6.90%
Projected salary increases*	3.00% - 11.50%
Cost-of-living adjustments	1.95% - 3.25%
Social Security Wage Base	3.50%
*Includes assumed price inflation at	2.50%





SECTION VII – EXPERIENCE

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain/(loss) for the period ended June 30, 2025 is shown below. Schedule H provides detailed gain/(loss) by source.

	<u>\$ Millions</u>
(1) UAAL* as of June 30, 2024	\$ 19,186.2
(2) Total Normal cost for 2025 fiscal year	464.5
(3) Actual Employer and Employee contributions	2,293.3
(4) Interest accrual: $[(1) + (2)] \times .069 - [(3) \times .0345]$	<u>1,276.7</u>
(5) Expected UAAL as of June 30, 2025: $(1) + (2) - (3) + (4)$	\$ 18,634.1
(6) Assumption/Method Changes	<u>0.0</u>
(7) Expected UAAL as of June 30, 2025: $(5) + (6)$	\$ 18,634.1
(8) Actual UAAL as of June 30, 2025	\$ 17,621.4
(9) Gain/(loss): $(7) - (8)$ (See Schedule H)	\$ 1,012.7
(10) Gain/(loss) as percent of actuarial accrued liabilities at June 30, 2024 (\$42,869.8)	2.4%

*Unfunded actuarial accrued liability.

Valuation Date June 30	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2023	0.4%
2024	0.9%
2025	2.4%





SECTION VIII – RISK ASSESSMENT

Overview

Actuarial Standards of Practice (ASOP) No. 51, issued by the Actuarial Standards Board, provides guidance on assessing and disclosing risks related to pension plan funding. This guidance is binding on all credentialed actuaries practicing in the United States. This standard was issued as final in September 2017 with application to measurement dates on or after November 1, 2018.

The term “risk” frequently has a negative connotation, but from an actuarial perspective, it may be thought of as simply the fact that what actually happens in the real world will not always match what was expected, based on actuarial assumptions. Of course, when actual experience is better than expected, the favorable risk is easily absorbed. The risk of unfavorable experience will likely be unpleasant, and so there is an understandable focus on aspects of risk that are negative.

Risk usually can be reduced or eliminated at some cost. Consumers, for example, buy auto and home insurance to reduce the risk of accidents or catastrophes. Another way to express this concept, however, is that there is generally some reward for assuming risk. Thus, retirement plans invest not just in US Treasury bonds which have almost no risk, but also in equities which are considerably riskier – because they have an expected reward of a higher return that justifies the risk.

Under ASOP 51, the actuary is called on to identify the significant risks to the pension plan and provide information to help those sponsoring and administering the plan understand the implications of these risks. In this section, we identify some of the key risks for the System and provide information to help interested parties better understand these risks.





SECTION VIII – RISK ASSESSMENT

Investment Risk

The investment return on assets is the most obvious risk – and usually the largest risk – to funding a pension plan. To illustrate the magnitude of this risk, please review the following chart showing the Asset Volatility Ratio (AVR), defined as the market value of assets divided by covered payroll.

(\$ in thousands)

Valuation Date June 30	Market Value of Assets	Covered Payroll	Asset Volatility Ratio
2023	\$20,136,795	\$4,168,950	4.83
2024	23,387,153	4,460,207	5.24
2025	25,937,930	4,673,330	5.55

The asset volatility ratio is especially useful to compare across plans or through time. It is also frequently useful to consider how the AVR translates into changes in the Required Contribution Rate (actuarially determined employer contribution rate). For example, the following table demonstrates that with an AVR of 5.00, if the market value return is 10% below assumed, or -3.10% for the System, there will be an increase in the Required Contribution Rate of 0.82% payroll in the first year. Without asset smoothing or without returns above the expected return in the next four years, the impact on the Required Contribution Rate would be 4.11%. A higher AVR would produce more volatility in the Required Contribution Rate.

AVR	Unsmoothed Amortization Increase due to 10% Market Loss	Smoothed Amortization Increase
4.00	3.29%	0.66%
5.00	4.11%	0.82%
6.00	4.93%	0.99%





SECTION VIII – RISK ASSESSMENT

Sensitivity Measures

Valuations are generally performed with a single set of assumptions that reflects the best estimate of future conditions, in the opinion of the actuary and typically the governing board. Note that under actuarial standards of practice, the set of economic assumptions used for funding must be consistent. To enhance the understanding of the importance of an assumption, a sensitivity test can be performed where the valuation results are recalculated using a different assumption or set of assumptions.

The following tables contains the key measures for the System using the valuation assumption for investment return of 6.90%, along with the results if the assumption were 5.90% or 7.90%. In this analysis, only the investment return assumption is changed. Consequently, there may be inconsistencies between the investment return and other economic assumptions such as inflation or payroll increases. In addition, simply because the valuation results under alternative assumptions are shown here, it should not be implied that CavMac believes that either assumption (5.90% or 7.90%) would comply with actuarial standards of practice.

(\$ in thousands)

As of June 30, 2025	-1% Discount Rate (5.90%)	Current Discount Rate (6.90%)	+1 Discount Rate (7.90%)
Accrued Liability	\$48,738,308	\$43,610,016	\$39,327,109
Unfunded Liability	\$22,749,651	\$17,621,359	\$13,338,452
Funded Ratio (AVA)	53.3%	59.6%	66.1%
ADEC Amount	\$2,340,320	\$1,889,402	\$1,487,569





SECTION VIII – RISK ASSESSMENT

Mortality Risk

The mortality assumption is a significant assumption for valuation results, second only to the investment assumption in most situations. The System's mortality assumption utilizes a mortality table (with separate rates for males and females, as well as different rates by status) with generational projection of future mortality improvement to reflect the future trend in expected experience.

Although the valuation uses a generational improvement approach, the future is unknown, and actual mortality improvements may occur at a faster rate than expected under a generational improvement approach. Periodic studies of the mortality experience will allow for adjustments to the mortality improvement scale to reflect emerging experience and reduce the plan's exposure to mortality risk.

Contribution Risk

The System is primarily funded by member and employer contributions to the trust fund, together with the earnings on those accumulated contributions. Each year in the valuation, the Actuarial Determined Employer Contribution is determined, based on the System's funding policy. This amount is the sum of the employer's share of the normal cost for the plan and the amortization of the UAAL. Since the System is obligated to make 100% of the ADEC by agreement, there is little contribution risk.





SECTION VIII – RISK ASSESSMENT

Low-Default-Risk Obligation Measure

Under the revised Actuarial Standards of Practice (ASOP) No. 4 effective for valuations after February 15, 2023, we are required to include a low-default-risk obligation measure of the system's liability in our funding valuation report. This is an informational disclosure as described below and would not be appropriate for assessing the funding progress or health of the plan. This measure uses the unit credit cost method and reflects all the assumptions and provisions of the funding valuation (including the assumed COLA paid), except that the discount rate is derived from considering low-default-risk fixed income securities. We considered the FTSE Pension Discount Curve based on market bond rates published by the Society of Actuaries as of June 30, 2025 and with the 30-year spot rate used for all durations beyond 30 because this provides an appropriate set of discount rates for this intended purpose.

Using these assumptions, we calculate a liability of approximately \$48.1 billion. This amount approximates the termination liability if the plan (or all covered employment) ended on the valuation date and all of the accrued benefits had to be paid with cash-flow matched bonds. If the plan were funded with the intent of being able to be terminated at any valuation date, contribution requirements may need to increase and would also be more volatile. This assurance of funded status and benefit security is typically more relevant for corporate plans than for governmental plans since governments rarely have the need or option to completely terminate a plan. However, this informational disclosure is required for all plans whether corporate or governmental and care should be taken to ensure the one size fits all metric is not misconstrued.





SCHEDULE A – RESULTS OF VALUATION

	JUNE 30, 2025	JUNE 30, 2024
1. ACTUARIAL ACCRUED LIABILITY		
Present value of prospective benefits payable in respect of:		
(a) Present active members		
- Tier I – Plan B	\$ 49,454,951	\$ 52,852,348
- Tier I – Plan C	1,030,839	1,521,773
- Tier II – Hazardous Duty	93,548,725	104,240,380
- Tier II – Hybrid Plan	132,400,116	132,556,385
- Tier II – All Others	2,392,344,369	2,460,204,255
- Tier IIA – Hazardous Duty	1,983,425,287	2,053,787,494
- Tier IIA – Hybrid Plan	260,830,377	248,850,234
- Tier IIA – All Others	3,165,830,878	2,999,540,121
- Tier III – Hazardous Duty	687,161,518	599,697,771
- Tier III – Hybrid Plan	68,906,846	61,220,383
- Tier III – All Others	740,421,358	674,949,798
- Tier IV – Hazardous Duty	281,579,823	202,241,293
- Tier IV – Hybrid Plan	45,882,032	33,497,211
- Tier IV – All Others	<u>437,052,494</u>	<u>319,076,013</u>
- Total actives	\$ 10,339,869,613	\$ 9,944,235,459
(b) Present inactive members and members entitled to deferred vested benefits	641,926,095	562,473,849
(c) Present annuitants and beneficiaries	<u>32,628,220,443</u>	<u>32,363,089,606</u>
(d) Total actuarial accrued liability: [1(a) + 1(b) + 1(c)]	\$ 43,610,016,151	\$ 42,869,798,913
2. ACTUARIAL VALUE OF ASSETS	<u>\$ 25,988,657,610</u>	<u>\$ 23,683,582,977</u>
3. UNFUNDED ACTUARIAL ACCRUED LIABILITY [1(d) – 2]	\$ 17,621,358,541	\$ 19,186,215,936





SCHEDULE B – DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

	June 30, 2025
(1) Actuarial Value Beginning of Year*	\$23,683,582,977
(2) Market Value End of Year* (Before Adjustment)	25,937,930,450
(3) Market Value Beginning of Year	23,890,859,768
(4) Cash Flow	
(a) Contributions	\$ 2,293,266,330
(b) Other	11,033,605
(c) Disbursements	<u>(2,697,326,046)</u>
(d) Net: (4)(a) + (4)(b) + (4)(c)	\$ (393,026,111)
(5) Investment Income	
(a) Market Total: (2) – (3) – (4)(d)	\$ 2,440,096,793
(b) Assumed Rate	6.90%
(c) Amount for Immediate Recognition: [(1) x (5)(b)] + [(4)(d)] x (5)(b) x 0.5	1,620,607,825
(6) Expected Actuarial Value End of Year (With Adjustment): (1) + (4)(c) + (5)(c) + Adjustment**	\$25,783,304,458
(7) Phased-In Recognition of Investment Income	
(a) Difference between Adjusted Market & Expected Actuarial Value: (2) + \$872,139,767 – (6)	1,026,765,759
(b) 20% of Difference: 0.2 x (7)(a)	205,353,152
(8) Preliminary Actuarial Value End of Year: (6) + (7)(b)	25,988,657,610
(9) Final Actuarial Value End of Year Using 20% Corridor: Greater of [(8) and .8 x (2)] with adjustment, but no more than 1.2 x (2) with adjustment	25,988,657,610
(10) Difference Between Adjusted Market & Actuarial Values: (2) + Adjustment – (9)	\$ 821,412,607

* Before corridor constraints, if applicable.

** Adjustment = \$872,139,767 discounted value of subsequent transfer amounts





SCHEDULE C – SUMMARY OF RECEIPTS AND DISBURSEMENTS

MARKET VALUE OF ASSETS	
	Year Ending June 30, 2025
<u>Receipts for the Year</u>	
Contributions:	
Members	\$ 246,399,541
State	1,804,716,188
Federal (Net of Transfers)	<u>242,150,601</u>
Subtotal	\$ 2,293,266,330
Investment Earnings (net of expenses)	2,440,096,793
Other	<u>11,033,605</u>
TOTAL	\$ 4,744,396,728
<u>Disbursements for the Year</u>	
Benefit Payments	\$ 2,682,094,342
Refunds to Members	12,883,436
Interest Awarded	2,348,268
Administrative Expense	0
Other	<u>0</u>
Total	\$ 2,697,326,046
<u>Excess of Receipts over Disbursements</u>	\$ 2,047,070,682
<u>Reconciliation of Asset Balances</u>	
Asset Balance as of the Beginning of Year	\$ 23,890,859,768
Excess of Receipts over Disbursements	<u>2,047,070,682</u>
Asset Balance as of the End of Year	\$ 25,937,930,450
Rate of Return	10.30%
Adjusted Market Value of Assets*	\$ 26,810,070,217

* Includes \$872,139,767 discounted value of subsequent transfer amounts.





SCHEDULE D – OUTLINE OF ACTUARIAL ASSUMPTIONS & METHODS

Adopted or reaffirmed by the Commission on September 16, 2021 for the June 30, 2021 and later valuations based on the experience investigation report for the five-year period ending June 30, 2020 which can be found at on the Office of the State Comptroller - Retirement Services Division website. The combined effect of the assumptions is expected to have no significant bias.

VALUATION INTEREST RATE: 6.90% per annum, compounded annually, net of expenses, comprised of a 2.50% price inflation assumption and a 4.40% real return assumption.

SALARY INCREASES: The assumptions for salary increases are as follows:

Years of Service	Hazardous Rate*	Non-Hazardous Rate*
0	11.50%	10.50%
1	11.50%	10.50%
2	7.50%	7.50%
3	5.50%	5.50%
4	5.25%	5.25%
5	5.00%	5.00%
6	4.75%	4.75%
7	4.75%	4.75%
8	4.75%	4.75%
9	4.75%	4.75%
10	4.50%	4.50%
11	4.50%	4.25%
12	4.25%	4.25%
13	4.25%	4.25%
14	4.00%	4.00%
15	3.50%	3.50%
16	3.50%	3.25%
17	3.50%	3.25%
18	3.25%	3.25%
19	3.25%	3.25%
20+	3.00%	3.00%

*includes Wage Inflation of 3.00%





SCHEDULE D – OUTLINE OF ACTUARIAL ASSUMPTIONS & METHODS

COST OF LIVING ADJUSTMENTS (COLA):

Group	Rate
Pre July 1, 1980 Retirees	3.25%
July 1, 1980 – June 30, 1997 Retirees	3.00%
July 1, 1997 – October 1, 2011 Retirees	2.60%
October 2, 2011 – June 30, 2022 Retirees	2.25%
Post July 1, 2022 Retirees	1.95%

We have also assumed a COLA moratorium for those retiring on or after July 1, 2022 for the first 30 months of retirement. We assume the first COLA received is increased by 0.15% to reflect the possible additional COLA in the event the annualized rate of increase in the CPI-W is greater than 5.5% during the first 18 months of retirement.

SOCIAL SECURITY WAGE BASE INCREASES: 3.50% per annum.

PAYROLL GROWTH ASSUMPTION: Level dollar amortization method.

SPOUSES: For members who have elected spouse coverage, husbands are assumed to be three years older than their wives.

PERCENT MARRIED: 80% of active members are assumed to be married with an average of two children who are on average age 12.





SCHEDULE D – OUTLINE OF ACTUARIAL ASSUMPTIONS & METHODS

SEPARATIONS BEFORE SERVICE RETIREMENT: Representative values of the assumed annual rates of separation before service retirement are as follows:

ANNUAL RATES OF WITHDRAWAL								
Age	Years of Service							
	0	1	2	3	4	5	6-9	10+
Hazardous Males								
20	8.00%	4.25%	4.25%	4.00%	3.00%	2.50%	1.25%	1.00%
25	8.00	4.25	4.25	4.00	3.00	2.50	1.25	1.00
30	8.00	4.25	4.25	3.50	2.75	2.50	1.25	1.00
35	8.00	4.00	4.00	3.25	2.75	2.50	1.25	1.00
40	8.00	4.00	4.00	3.00	2.50	2.50	1.25	0.80
45	8.00	4.00	4.00	3.00	2.50	2.50	1.25	0.80
50	8.00	4.00	4.00	3.00	2.50	2.50	1.25	0.80
55+	8.00	4.00	4.00	3.00	2.50	2.50	1.25	0.80
Hazardous Females								
20	11.00%	7.00%	7.00%	7.00%	4.00%	3.30%	2.50%	1.75%
25	11.00	7.00	7.00	7.00	4.00	3.30	2.50	1.75
30	11.00	6.00	6.00	6.00	4.00	3.30	2.50	1.75
35	11.00	5.50	5.50	5.50	4.00	3.30	2.50	1.75
40	11.00	5.50	5.50	5.50	4.00	3.30	2.00	1.00
45	11.00	5.50	5.50	5.50	4.00	3.30	2.00	1.00
50	11.00	5.50	5.50	5.50	4.00	3.30	2.00	1.00
55+	11.00	5.50	5.50	5.50	4.00	3.30	2.00	1.00
Nonhazardous Males								
20	45.00%	35.00%	17.00%	13.00%	11.00%	11.00%	4.50%	4.50%
25	25.00	22.00	17.00	13.00	11.00	11.00	4.50	4.50
30	20.00	15.00	14.00	10.00	7.50	7.50	4.50	4.50
35	17.00	10.00	12.00	9.00	6.50	5.00	4.50	3.00
40	17.00	10.00	10.00	8.00	6.50	5.00	4.00	2.75
45	17.00	10.00	9.00	8.00	6.50	5.00	4.00	2.50
50	17.00	10.00	9.00	8.00	6.50	5.00	3.00	2.50
55+	17.00	10.00	9.00	8.00	6.50	5.00	3.00	2.00
Nonhazardous Females								
20	40.00%	40.00%	40.00%	35.00%	20.00%	20.00%	10.00%	5.00%
25	25.00	22.00	17.00	12.00	10.00	10.00	7.00	5.00
30	18.00	15.00	12.00	10.00	8.00	7.00	5.00	4.50
35	16.00	10.00	11.00	9.00	6.00	5.00	4.00	3.25
40	16.00	10.00	10.00	8.00	6.00	5.00	3.50	2.00
45	16.00	10.00	10.00	7.00	6.00	5.00	3.25	2.00
50	16.00	10.00	10.00	7.00	6.00	4.00	3.25	2.00
55+	16.00	10.00	10.00	7.00	6.00	4.00	3.25	2.00





SCHEDULE D – OUTLINE OF ACTUARIAL ASSUMPTIONS & METHODS

ANNUAL RATES OF DISABILITY		
Age	Hazardous	Non-Hazardous
30	0.05%	0.04%
35	0.09	0.05
40	0.15	0.07
45	0.25	0.12
50	0.33	0.22
55	0.42	0.40
60	0.50	0.50
65	0.60	0.50
70	0.80	0.50
75	1.00	0.50

RETIREMENT: The assumed annual rates of retirement are shown below.

ANNUAL RATES OF RETIREMENT						
Hazardous						
Age	Tier I, II & IIA		Tier III & IV			
	First Year Eligible	All Years After	Years of Service			
			20	21 - 24	25	26+
40 - 49	45%	25%			45%	25%
50	45	25	45%	45%	45	25
51 - 56	45	25	45	25	25	25
57	60	25	60	25	25	25
58 - 61	60	30	60	30	30	30
62	65	30	65	30	30	30
63	65	30	65	30	30	30
64	65	40	65	40	40	40
65 - 66	75	50	75	50	50	50
67	75	45	75	45	45	45
68	75	40	75	40	40	40
69	75	35	75	35	35	35
70 - 73	75	30	75	30	30	30
74 - 79	100	30	100	30	30	30
80	100	100	100	100	100	100





SCHEDULE D – OUTLINE OF ACTUARIAL ASSUMPTIONS & METHODS

ANNUAL RATES OF RETIREMENT						
Nonhazardous						
Age	Tier I		Tier II & IIA		Tier III & IV	
	Early	Other Years	Early	Other Years	Early	Other Years
55	12.0%	30.0%	4.0%			
56	12.0	30.0	4.0			
57	12.0	30.0	4.0			
58	12.0	30.0	4.0		4.0%	
59	12.0	30.0	4.0		4.0	
60		30.0	4.0	20.0%	4.0	
61		30.0	4.0	20.0	4.0	
62		30.0		20.0	4.0	
63		30.0		20.0	4.0	25.0%
64		30.0		20.0	4.0	25.0
65		30.0		20.0		25.0
66 - 70		30.0		25.0		25.0
71 - 79		30.0		22.5		25.0
80		100.0		100.0		100.0





SCHEDULE D – OUTLINE OF ACTUARIAL ASSUMPTIONS & METHODS

MORTALITY: The Pub-2010 Mortality Tables projected generationally with scale MP-2020:

Non-Hazardous

- Service Retirees: General, Above-Median, Healthy Retiree Mortality Table.
- Disabled Retirees: General, Disabled Retiree Mortality Table.
- Beneficiaries: General, Above-Median Contingent Annuitant Mortality Table.
- Active Employees: General, Above-Median, Employee Mortality Table.

Hazardous

- Service Retirees: Public Safety, Above-Median, Healthy Retiree Mortality Table.
- Disabled Retirees: Public Safety, Disabled Retiree Mortality Table.
- Beneficiaries: Public Safety, Above-Median Contingent Annuitant Mortality Table.
- Active Employees: Public Safety, Above-Median, Employee Mortality Table.

In our opinion, the generational projection of the mortality rates with scale MP-2020 provide a sufficient margin in the assumed rates of mortality to allow for additional improvement in mortality experience.

ASSET METHOD: Actuarial Value, as developed in Schedule B. The actuarial value of assets recognizes 20% of the difference between actual market value and expected actuarial value as of the valuation date. In addition, the actuarial value of assets cannot be less than 80% or more than 120% of the market value of assets.

VALUATION METHOD: Entry Age Normal cost method. See Schedule E for a brief description of this method.

IMPACT OF LONGLEY DECISION: Benefits for members retiring from service on or after the *Longley* decision date are assumed to increase by 0.084% as a result of the revised treatment of longevity pay. Retroactive application of *Longley* has been reflected in this valuation to the extent impacted retiree benefits have been recalculated.

OTHER ASSUMPTIONS:

- Pre-Retirement deaths and disabilities assumed to be service related:
 - 30% for non-hazardous duty members
 - 60% for hazardous duty members
- To take into account State Police Supplemental Benefits and the offset of Workers Compensation, Social Security, and Non-Rehabilitation Earnings, the following minimum and maximum benefits as a percent of salary are assumed for disability benefits:

	<u>Minimum</u>	<u>Maximum</u>
Tier I State Police	60%	80%
All Other Members	40%	60%





SCHEDULE E – ACTUARIAL COST METHOD

The valuation is prepared on the projected benefit basis, which is used to determine the present value of each member's expected benefit payable at retirement, disability, or death. The calculations are based on the member's age, years of service, sex, compensation, expected future salary increases, and an assumed future interest earnings rate (currently 6.90%). The calculations consider the probability of a member's death or termination of employment prior to becoming eligible for a benefit and the probability of the member terminating with a service, disability, or survivor's benefit. The present value of the expected benefits payable to active members is added to the present value of the expected future payments to current benefit recipients to obtain the present value of all expected benefits payable to the present group of members and survivors.

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

Under the entry age normal cost method, the actuarial present value of each member's projected benefits is allocated on a level basis over the member's compensation between the entry age of the member and the assumed exit ages. The portion of the actuarial present value allocated to the valuation year is called the normal cost. The actuarial present value of benefits allocated to prior years of service is called the actuarial accrued liability. The unfunded actuarial accrued liability represents the difference between the actuarial accrued liability and the actuarial value of assets as of the valuation date. The unfunded actuarial accrued liability is determined by subtracting the actuarial value of assets from the actuarial accrued liability. The UAAL is amortized according to the MOU between the State and SEBAC which established separate UAAL bases. The amortization amounts are adjusted with interest to the applicable fiscal year. The employer required contribution amount is the sum of the normal cost contribution and the UAAL amortization payment.





SCHEDULE F – SUMMARY OF MAIN SYSTEM PROVISIONS

AS INTERPRETED FOR VALUATION PURPOSES

The Connecticut State Employees Retirement System (CT SERS) is a defined benefit pension plan established by the Connecticut General Assembly for the purpose of providing retirement allowances and other benefits for State employees in Connecticut, and their survivors and other beneficiaries.

Eligibility Requirements

Tier I	All State Employees, Elected Officials and their Appointees hired prior to July 1, 1984. Those employees hired between July 1, 1982 and January 1, 1984 could elect to move to Tier II.
Tier II	All State Employees, Elected Officials and their Appointees hired on or after July 1, 1984.
Tier IIA	All State Employees, Elected Officials and their Appointees hired on or after July 1, 1997.
Tier III	All State Employees, Elected Officials and their Appointees hired on or after July 1, 2011.
Tier IV	All State Employees, Elected Officials and their Appointees hired on or after July 1, 2017.

Final Average Earnings (FAE)

Tier I, II, and IIA	Average Salary of the three highest paid years of service. Effective January 1, 1986, no one year's earnings can be greater than 130% of the average of the two preceding years in calculating the Final Average Earnings.
Tier III and IV	Average Salary of the five highest paid years of service. No one year's earnings can be greater than 130% of the average of the two preceding years in calculating the Final Average Earnings.





SCHEDULE F – SUMMARY OF MAIN SYSTEM PROVISIONS

Normal Retirement Benefit

Eligibility

Tier I Hazardous – 20 years of credited service.

Tier I Plans B and C – Earliest of age 55 with 25 years of service, age 60 with 10 years of service, or age 70 with 5 years of service.

Tier II Hazardous – 20 years of credited service.

Tier II and IIA – For those who will be eligible for retirement on or before July 1, 2022, the earliest of age 62 with 10 years of vesting service (effective July 1, 1992), age 60 with 25 years of vesting service, age 70 with 5 years of vesting service, or age 62 with 5 years of actual state service for terminations on or after July 1, 1997.

For those who will not be eligible for retirement on or before July 1, 2022, the earliest of age 65 with 10 years of vesting service, age 63 with 25 years of vesting service, age 70 with 5 years of vesting service.

Tier III Hazardous – Earlier of Age 50 and 20 years of benefit service or 25 years of benefit service.

Tier III and IV – Age 63 and 25 years of benefit service or Age 65 and 10 years of benefit service.

Tier IV Hazardous – 25 years of benefit service.

Benefit

Tier I Hazardous – 50% of FAE plus 2% for each year of service in excess of 20.

Tier I Plan B – 2% of FAE times years of service up to age 65. Thereafter, 1% of FAE up to \$4,800, plus 2% of FAE in excess of \$4,800 times years of service. At age 70, greater of 1.25% of FAE up to \$4,800 plus 2.5% of FAE in excess of \$4,800 times years of service (maximum 20 years) or 1.0% of FAE up to \$4,800 plus 2% of FAE in excess of \$4,800 times year of service. Minimum benefit with 25 years is \$833.34 per month.





SCHEDULE F – SUMMARY OF MAIN SYSTEM PROVISIONS

Tier I Plan C – 2% of FAE times years of service. At age 70, greater of 2.5% of FAE times years of service (maximum 20 years) or 2.0% of FAE times years of service. Minimum benefit with 25 years is \$833.34 per month.

Tier II, IIA, III and IV Hazardous – 2.5% of FAE times years of service up to 20 years plus 2.0% of FAE times years of service in excess of 20 years, if any. Minimum benefit with 25 years is \$360 per month.

Tier II, IIA and III All Others – 1.40% of FAE plus 0.433% of FAE in excess of year's breakpoint*, times years of service from October 1, 1982 up to 35 years plus 1.625% of FAE times years of service in excess of 35 years, if any. Minimum benefit with 25 years is \$360 per month.

* \$10,700 increased by 6% each year after 1982, rounded to nearest \$100 but not greater than Social Security Covered Compensation.

Tier IV All Others – 1.30% of FAE times years of service. Minimum benefit with 25 years is \$360 per month.

Early Retirement Benefit

Eligibility

Hazardous – None.

Tier I – Age 55 with 10 years of service.

Tier II and IIA – Age 55 with 10 years of service.

Tier III and IV – Age 58 with 10 years of service.

Benefit

Tier I – Benefit is Normal Retirement Benefit reduced for retirement prior to age 60 with less than 25 years of service.





SCHEDULE F – SUMMARY OF MAIN SYSTEM PROVISIONS

Tier II, IIA, III and IV – Benefit is Normal Retirement Benefit reduced 0.25% (effective July 1, 1991) for each month prior to age 60 if at least 25 years of service or age 62 if at least 10 but less than 25 years of service.

For those who retire on or after October 2, 2011 but prior to meeting the age and service requirements for a normal retirement, will be subject to a benefit reduced by 0.50% for each month prior to Normal Retirement.

Disability Retirement Benefit

Tier I

For non-service disabilities occurring prior to age 60 with at least 5 years of service, benefit is 3% of FAE times years of service; maximum benefit is 1.667% of FAE times year of service projected to age 65.

For service disabilities occurring prior to age 60, benefit is 1.667% of Salary times years of service projected to age 65 (maximum 30 years).

Exception: State Police benefit is equal to the normal retirement benefit if more than 20 years of service. State Police also receives an additional benefit of \$360 per month plus \$300 to spouse plus \$300 to a surviving dependent child.

Tier II, IIA, III and IV

Prior to age 65 for service related disability or at any age with at least 10 years of service, benefit is 1.333% of FAE plus 0.50% of FAE in excess of the year's breakpoint, times service projected to age 65 (maximum 30 years).

Deferred Vested Retirement Benefit

Eligibility

Tier I - 10 years of service.

Tier II and IIA – Effective July 1, 1997, 5 years of actual state service, 10 years of vesting service, or age 70 with 5 years of service.

Tier III and IV – 10 years of benefit service.





SCHEDULE F – SUMMARY OF MAIN SYSTEM PROVISIONS

Benefit

Tier I – Benefit is payable at Normal Retirement Age or an Early Retirement Benefit is payable at age 55.

Tier II and IIA – Benefit is payable at Normal Retirement Age or an Early Retirement Benefit is payable at age 55.

Tier III and IV – Benefit is payable at Normal Retirement Age or an Early Retirement Benefit is payable at age 58.

Pre-Retirement Spouse's Benefit

Tier I

State Police – Survivor benefits to spouse of \$670 per month plus \$300 to a surviving dependent child.

If eligible for early or normal retirement, 50% of the average of the Life Benefit and the 50% Joint & Survivor Benefit the member would have received.

If not eligible for retirement but with 25 years of service, the same benefit calculated as though age 55 using service and earnings at death.

If not eligible for retirement, return of contributions (5% interest).

Tier II, IIA, III and IV

If eligible for early or normal retirement, 50% of the 50% Joint & Survivor Benefit the member would have received.

If not eligible for retirement but with 25 years of service, the same benefit calculated as though age 55 using service and earnings at death.

If not eligible for retirement, return of contributions (5% interest).

Tiers I, II, IIA, III and IV

If death is due to employment and there are dependent children under age 18, spouse will be paid \$100,000 in 10 annual installments while living and not remarried. In addition, \$50 per month will be paid to each child while under age 18.





SCHEDULE F – SUMMARY OF MAIN SYSTEM PROVISIONS

If death is due to employment and there are no dependent children under age 18, spouse will be paid \$50,000 in not less than 10 annual installments.

Payment Options

50% or 100% Joint and Survivor (Normal Form if married).

Straight life annuity (Normal Form if not married).

10 or 20 year certain and life annuity.

Cost of Living Adjustments (COLA)

Annual adjustments each July 1 of up to 5% for retirements prior to July 1, 1980; 3% for retirements after July 1, 1980. For members (and beneficiaries) not covered by Social Security and age 62 and over, the maximum increase is 6%.

For employees retiring after June 30, 1999, the annual adjustment will be 60% of the increase in CPI up to 6% and 75% of the increase in the CPI over 6%. This adjustment will be no less than 2.5% and no greater than 6%.

Employees retiring between July 1, 1997 and June 30, 1999 made an irrevocable choice between the above formula and a fixed 3% annual adjustment.

An employee from Tier IIA must have at least 10 years of actual state service or directly make the transition into retirement in order to be eligible for annual adjustments.

For employees retiring on or after October 2, 2011, the minimum COLA shall be 2.0% and the maximum COLA shall be 7.5%.





SCHEDULE F – SUMMARY OF MAIN SYSTEM PROVISIONS

For employees retiring on or after July 1, 2022, the annual rate of increase will be the CPI-W from 0.00% to 2.00%, plus 60% of the annual rate of increase in CPI-W from 3.33% to 6.00%, plus 75% of the annual rate of increase in CPI-W above 6.00%, with a cap on the COLA rate of 7.50%. In addition, a COLA moratorium for those retiring on or after July 1, 2022 will be on the first 30 months of retirement. If rate of increase in CPI-W exceeds an annualized rate of 5.5% during the initial 18 month period of receiving retirement benefits, the COLA provided beginning with the 31st monthly benefit includes an additional adjustment based on the annual COLA rate as determined above using the annualized rate over the 18 month period. The COLA rate applied would but reduced by 2.5% and then multiplied by 1.5 to reflect the 18 month period.

Member Contributions*

Tier I – Hazardous	6% of earnings up to Social Security Taxable Wage Base plus 7% of earnings above that level.
Tier I – Plan B	4% of earnings up to Social Security Taxable Wage Base plus 7% of earnings above that level.
Tier I – Plan C	7% of earnings.
Tier II – Hazardous	6% of earnings.
Tier II – All Others	2% of earnings.
Tier IIA & III – Hazardous	7% of earnings.
Tier IIA & III – All Others	4% of earnings.
Tier IV – Hazardous	8% of earnings.
Tier IV – All Others	5% of earnings.

* In years where asset losses require further increases in contributions, Tier IV employees' contributions may increase by half the necessary increase in rates (up to 2.0%). Finally, all Tier IV employees must contribute 1% to the Defined Contributions (DC) portion of the Hybrid Plan and may elect additional contribution of up to 3% of salary to the DC portion.





SCHEDULE F – SUMMARY OF MAIN SYSTEM PROVISIONS

Hybrid Defined Benefit/Defined Contribution Plan for Employees of Higher Learning

Individuals hired on or after July 1, 2011 otherwise eligible for the Alternate Retirement Plan (“ARP”) shall be eligible to be members of the new Hybrid Plan in addition to their existing choices. Individuals who are currently members of the ARP shall be eligible to join the Hybrid Plan on a one time option at the full actuarial cost. The Hybrid Plan shall have defined benefits identical to Tier II/IIA and Tier III for individuals hired on or after July 1, 2011 but shall require employee contributions 3% higher than the contribution required from the Applicable Tier II/IIA/III Plan. An employee shall have the option, upon leaving state service, of accepting the defined benefit amount, or electing to receive a return of his/her contributions to the Hybrid Plan, plus a 5% employer match, plus 4% interest (“cash out option”). In the event the employee elects the cash out option, he/she shall permanently waive any entitlement they may have to health insurance as a retired state employee unless they convert the cash out option to a periodic payment as would be required under the current ARP Plan.





SCHEDULE G – TABLES OF MEMBERSHIP DATA

RECONCILIATION OF ACTIVE MEMBERS	
STATUS	TOTAL
As of June 30, 2024	49,023
Retirements	(940)
Disability	(119)
Terminated	(1,997)
Deaths	(53)
Rehires	444
New Participants	3,449
Refunds	(445)
As of June 30, 2025	49,362

RECONCILIATION OF RETIRED MEMBERS				
STATUS	RETIREE	DISABILITY	SURVIVOR	TOTAL
As of June 30, 2024	47,614	4,218	5,796	57,628
Retirements	15	(15)		0
Disability	(7)	8	(1)	0
Survivors	(324)	(45)	369	0
Deaths with no Survivors	(923)	(126)	(418)	(1,467)
Rehires	(3)			(3)
Refunds				0
Certain Period Ended	(1)	(1)	(25)	(27)
Data Corrections	171	11	65	247
From Term Deferred	186	10	1	197
From Active	940	119	18	1,077
As of June 30, 2025	47,668	4,179	5,805	57,652





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER I – PLAN B									
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025									
Age	Years of Service							Total	
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No.	Payroll
Under 25									\$ 0
25 to 29									0
30 to 34									0
35 to 39									0
40 to 44									0
45 to 49									0
50 to 54									0
55 to 59									
60 to 64						1	4	5	527,486
65 to 69							16	16	1,810,478
70 & Up							30	30	4,650,079
Total						1	50	51	\$ 6,988,043

Average Age: 71.7

Average Service: 44.4

Average Salary: \$137,020





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER I – PLAN C									
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025									
Age	Years of Service							Total	
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No.	Payroll
Under 25									\$ 0
25 to 29									0
30 to 34									0
35 to 39									0
40 to 44									0
45 to 49									0
50 to 54									0
55 to 59									0
60 to 64									0
65 to 69							1	1	124,442
70 & Up									0
Total							1	1	\$ 124,442

Average Age: 67.0

Average Service: 43.0

Average Salary: \$124,442





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER II – HAZARDOUS DUTY									
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025									
Age	Years of Service							Total	
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No.	Payroll
Under 25									\$ 0
25 to 29									0
30 to 34									0
35 to 39				1				1	118,639
40 to 44		1	1	2				4	232,753
45 to 49						2		2	517,466
50 to 54	1				3	9	5	18	2,095,427
55 to 59	1			3	5	12	26	47	6,232,213
60 to 64			1	1		2	9	13	1,585,561
65 to 69						2	2	4	588,093
70 & Up						1	1	2	239,030
Total	2	1	2	7	8	28	43	91	\$ 11,609,182

Average Age: 56.5

Average Service: 28.1

Average Salary: \$127,573





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER II – HYBRID PLAN								
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025								
Age	Years of Service							Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No. Payroll
Under 25								\$ 0
25 to 29								0
30 to 34								0
35 to 39								0
40 to 44								0
45 to 49								0
50 to 54				1		4	7	12 1,858,858
55 to 59			1	5	2	20	29	57 7,622,150
60 to 64				2	4	15	38	59 9,001,782
65 to 69				3	1	5	25	34 6,632,353
70 & Up				6	1	4	18	29 5,205,030
Total			1	17	8	48	117	191 \$ 30,320,173

Average Age: 62.6

Average Service: 30.4

Average Salary: \$158,744





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER II – ALL OTHERS									
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025									
Age	Years of Service							Total	
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No.	Payroll
Under 25									\$ 0
25 to 29									0
30 to 34									0
35 to 39					1			1	71,336
40 to 44			1		3			4	403,487
45 to 49	1		1	1	15	28		46	4,618,727
50 to 54	3	1	6	4	28	202	179	423	48,900,949
55 to 59	8	11	15	23	46	357	1,337	1,797	206,145,264
60 to 64	4	6	8	14	31	178	1,025	1,266	157,039,906
65 to 69	1	3	4	11	12	43	229	303	36,653,984
70 & Up	1		3	10	8	16	82	120	13,419,262
Total	18	21	38	63	144	824	2,852	3,960	\$ 467,252,915

Average Age: 59.2

Average Service: 32.2

Average Salary: \$117,993





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER IIA – HAZARDOUS DUTY								
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025								
Age	Years of Service							Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No. Payroll
Under 25								\$ 0
25 to 29								0
30 to 34			1				1	97,420
35 to 39		1	48	84	5		138	15,876,107
40 to 44	3	3	90	643	62		801	98,946,613
45 to 49	3	4	46	511	134	18	716	89,159,546
50 to 54	1	2	38	331	110	39	521	62,863,276
55 to 59	1	2	31	217	57	20	328	39,877,494
60 to 64		1	15	145	29	10	200	24,379,990
65 to 69			4	54	10	5	73	8,373,932
70 & Up			2	12	4	1	19	1,980,933
Total	8	13	275	1,997	411	93	2,797	\$ 341,555,311

Average Age: 48.9

Average Service: 18.3

Average Salary: \$122,115





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER IIA – HYBRID PLAN								
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025								
Age	Years of Service							Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No. Payroll
Under 25								\$ 0
25 to 29								0
30 to 34								0
35 to 39			3					3 325,436
40 to 44		1	5	15	3			24 2,634,602
45 to 49		3	7	27	24	8		69 8,501,963
50 to 54		3	11	60	58	24		156 21,493,744
55 to 59		3	14	46	74	42		179 26,752,527
60 to 64		2	9	34	57	38		140 19,121,514
65 to 69		1	3	18	19	11	1	53 8,065,803
70 & Up			4	7	7	3		21 2,869,060
Total		13	56	207	242	126	1	645 \$ 89,764,649

Average Age: 56.6

Average Service: 20.8

Average Salary: \$139,170





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER IIA – ALL OTHERS								
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025								
Age	Years of Service							Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No. Payroll
Under 25								\$ 0
25 to 29								0
30 to 34	1	1	3	4				9 599,569
35 to 39	5	14	79	173	7			278 26,642,626
40 to 44	19	37	147	788	177	7		1,175 121,368,243
45 to 49	22	24	157	889	658	204	1	1,955 210,578,480
50 to 54	16	17	140	851	694	592	4	2,314 255,963,777
55 to 59	10	19	152	788	689	563	19	2,240 244,786,986
60 to 64	7	9	149	606	484	307	33	1,595 172,028,038
65 to 69	5	12	60	224	139	93	4	537 58,129,683
70 & Up	4	11	26	75	36	24	3	179 19,243,397
Total	89	144	913	4,398	2,884	1,790	64	10,282 \$ 1,109,340,799

Average Age: 53.3

Average Service: 20.0

Average Salary: \$107,892





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER III – HAZARDOUS DUTY									
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025									
Age	Years of Service							Total	
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No.	Payroll
Under 25									\$ 0
25 to 29		4						4	357,723
30 to 34	2	56	116	3				177	18,308,895
35 to 39		79	565	62	3		1	710	75,115,578
40 to 44	1	75	448	24	10	1		559	59,043,984
45 to 49	2	37	237	15	3			294	30,944,779
50 to 54	2	31	136	3	1			173	18,620,830
55 to 59		37	102	1				140	14,800,660
60 to 64	1	14	63	1				79	8,510,693
65 to 69		7	13	1				21	2,242,058
70 & Up		1	5					6	457,593
Total	8	341	1,685	110	17	1	1	2,163	\$ 228,402,793

Average Age: 43.0

Average Service: 11.6

Average Salary: \$105,595





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER III – HYBRID PLAN								
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025								
Age	Years of Service							Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No. Payroll
Under 25								\$ 0
25 to 29								0
30 to 34	3	16	5	2				26 2,131,698
35 to 39	4	20	36	7	2			69 6,431,947
40 to 44	7	27	57	5				96 10,309,304
45 to 49	5	18	54	2	1			80 9,149,084
50 to 54	2	19	48	4	1			74 8,555,810
55 to 59	2	19	38	1				60 7,610,267
60 to 64	1	9	32		1			43 4,535,596
65 to 69	1	7	17			1		26 3,261,213
70 & Up	1		9					10 1,110,710
Total	26	135	296	21	5	1		484 \$ 53,095,629

Average Age: 48.7

Average Service: 10.9

Average Salary: \$109,702





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER III – ALL OTHERS									
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025									
Age	Years of Service							Total	
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No.	Payroll
Under 25									\$ 0
25 to 29	4	25	6					35	2,419,697
30 to 34	26	180	185	5				396	34,961,208
35 to 39	35	286	648	129	4			1,102	103,020,483
40 to 44	23	280	718	48	34			1,103	106,909,613
45 to 49	15	247	597	27	16	1		903	90,998,178
50 to 54	11	227	476	10	4			728	72,234,693
55 to 59	14	216	512	9	5			756	72,759,272
60 to 64	5	149	437	4	7			602	57,207,798
65 to 69	6	85	191	8	2		1	293	26,230,816
70 & Up	4	35	77	1				117	10,015,212
Total	143	1,730	3,847	241	72	1	1	6,035	\$ 576,756,970

Average Age: 48.0

Average Service: 11.1

Average Salary: \$95,569





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER IV – HAZARDOUS DUTY								
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025								
Age	Years of Service							Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No. Payroll
Under 25	143							143 \$ 9,458,800
25 to 29	654	129	2					785 62,055,568
30 to 34	588	445	6	1				1,040 87,404,318
35 to 39	439	367	5	1				812 71,963,407
40 to 44	236	220	3					459 41,041,147
45 to 49	141	109						250 23,240,600
50 to 54	94	96						190 18,352,972
55 to 59	88	57	2					147 14,915,230
60 to 64	42	20	1					63 6,332,793
65 to 69	12	9	1	1				23 2,884,021
70 & Up	1	2						3 479,461
Total	2,438	1,454	20	3				3,915 \$ 338,128,317

Average Age: 36.4

Average Service: 4.0

Average Salary: \$86,367





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER IV – HYBRID PLAN									
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025									
Age	Years of Service							Total	
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No.	Payroll
Under 25	26							26	\$ 1,358,137
25 to 29	165	13						178	12,223,666
30 to 34	193	58	1					252	18,407,040
35 to 39	164	60	1					225	20,929,862
40 to 44	162	58						220	20,171,948
45 to 49	125	52	1					178	15,106,074
50 to 54	97	45	1					143	13,296,592
55 to 59	62	28						90	7,674,032
60 to 64	31	24	1					56	5,875,602
65 to 69	11	15						26	3,564,171
70 & Up	7	1						8	271,183
Total	1,043	354	5					1,402	\$ 118,878,307

Average Age: 41.2

Average Service: 3.4

Average Salary: \$84,792





SCHEDULE G – TABLES OF MEMBERSHIP DATA

TIER IV – ALL OTHERS									
The Number and Average Compensation of Active Employees By Age and Service as of June 30, 2025									
Age	Years of Service							Total	
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 30	30 & Up	No.	Payroll
Under 25	1,040	15						1,055	\$ 35,893,087
25 to 29	2,047	228						2,275	147,235,021
30 to 34	2,030	746	30					2,806	211,055,715
35 to 39	1,931	790	8	8				2,737	216,248,659
40 to 44	1,650	664	4	5	4			2,327	192,727,210
45 to 49	1,378	527	4		1			1,910	158,438,162
50 to 54	1,177	397	3	3	1	1		1,582	127,613,161
55 to 59	985	355	3	4			2	1,349	108,994,818
60 to 64	598	267	2	1				868	70,501,019
65 to 69	230	112	2	1	1			346	26,649,157
70 & Up	65	25						90	5,756,570
Total	13,131	4,126	56	22	7	1	2	17,345	\$ 1,301,112,579

Average Age: 40.6

Average Service: 3.3

Average Salary: \$75,014





SCHEDULE G – TABLES OF MEMBERSHIP DATA

NUMBER OF RETIRED MEMBERS AND THEIR BENEFITS BY AGE			
Age	Number	Total Annual Benefits	Average Annual Benefits
Under 50	675	\$ 38,263,076	\$ 56,686
50 – 54	1,358	86,119,288	63,416
55 – 59	3,175	174,184,243	54,861
60 – 64	6,959	338,116,427	48,587
65 – 69	10,126	464,970,060	45,918
70 – 74	10,396	515,065,948	49,545
75 – 79	8,794	437,698,296	49,772
80 – 84	5,559	274,482,328	49,376
85 – 89	2,922	141,051,006	48,272
90 – 94	1,359	60,703,921	44,668
95 & Over	524	20,277,648	38,698
Total	51,847	\$ 2,550,932,241	\$ 49,201

NUMBER OF BENEFICIARIES AND THEIR BENEFITS BY AGE			
Age	Number	Total Annual Benefits	Average Annual Benefits
Under 50	256	\$ 6,662,889	\$ 26,027
50 – 54	89	2,637,720	29,637
55 – 59	171	5,696,105	33,311
60 – 64	295	9,494,540	32,185
65 – 69	550	18,277,927	33,233
70 – 74	769	25,602,813	33,294
75 – 79	1,007	32,320,019	32,095
80 – 84	1,036	32,208,204	31,089
85 – 89	865	27,326,379	31,591
90 – 94	532	16,284,548	30,610
95 & Over	235	6,729,774	28,637
Total	5,805	\$ 183,240,918	\$ 31,566





SCHEDULE G – TABLES OF MEMBERSHIP DATA

NUMBER OF DEFERRED VESTED MEMBERS AND THEIR BENEFITS BY AGE			
Age	Number	Total Annual Benefits	Average Annual Benefits
Under 50	1,476	\$ 17,920,283	\$ 12,141
50 – 54	638	10,626,720	16,656
55 – 59	648	13,148,407	20,291
60 – 64	474	9,926,686	20,942
65 & Over	547	6,331,463	11,575
Total	3,783	\$ 57,953,559	\$ 15,319





SCHEDULE H – ANALYSIS OF FINANCIAL EXPERIENCE

GAINS & LOSSES IN ACCRUED LIABILITIES Resulting from Differences Between Assumed Experience & Actual Experience (\$ Millions)	
Type of Activity	\$ Gain or (Loss) for One-Year Period Ending 6/30/2025
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (11.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(19.4)
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(10.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(10.3)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	(121.3)
New Members. Additional unfunded accrued liability will produce a loss.	(16.6)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	205.3
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	26.7
Cost of Living Adjustments: If COLA increase more than expected there is a loss.	70.4
Other. Miscellaneous gains and losses resulting from changes in valuation software, data or asset adjustments, timing of financial transactions, etc.	<u>28.1</u>
Gain (or Loss) During Year From Financial Experience	<u>\$ 140.6</u>
Receivable Transfer Amounts: Discounted value of amounts transferred subsequent to the end of the fiscal year.	<u>872.1</u>
Composite Gain (or Loss) During Year	<u>\$ 1,012.7</u>





SCHEDULE I – ACTUARIAL SURPLUS TEST

Section 5-162(h) of the General Statutes of Connecticut provides that the Retirement Commission may grant additional Cost-of-Living Adjustments (COLAs) for retired members if an actuarial surplus exists. An actuarial surplus is deemed to exist if three criteria are met.

I. **Investment Income:** The actual rate of return for the Fiscal Year ending on the valuation date must exceed the actuarial interest rate assumption.

Market Value of Assets on June 30, 2024: (A)	\$23,890,859,768
Market Value of Assets on June 30, 2025: (B)	\$26,810,070,217
Investment Income for FY 2024-2025: (I)	\$2,440,096,793
Actual Rate of Return for FY 2024-2025: $2I / (A + B - I)$	10.30%
Actuarial Interest Rate Assumption:	6.90%

Actual return of 10.30% is more than the assumed 6.90%, so the first criterion is met.

II. **Assets vs. Liabilities:** Market value of assets must exceed 50% of specified liabilities.

Adjusted Market Value of Assets on June 30, 2025:	\$26,810,070,217
Specified Liabilities on June 30, 2025:	
Liability for Retired Members	\$32,628,220,443
Liability for Terminated Vested Members	\$641,926,095
Liability for Member Contributions with Interest	<u>\$2,284,503,452</u>
Total	\$35,554,649,990
50% of Specified Liabilities	\$17,777,324,995

Market Value exceeds 50% of specified liabilities so the second criterion is met.

III. **Unfunded Liability:** Actual unfunded liability must be less than the projected unfunded liability five years from the determination date.

Actual Unfunded Liability on June 30, 2025:	\$17,621,358,541
Projected Unfunded Liability on June 30, 2030 (see next page):	\$ 2,103,631,000

Actual Unfunded Liability is not less than Projected Unfunded Liability, so the third criterion is not met and therefore, no actuarial surplus exists.





SCHEDULE I – ACTUARIAL SURPLUS TEST

ACTUARIAL SURPLUS TEST PROJECTION OF UNFUNDED LIABILITY

Section 5-162-h(b)(2) of the General Statutes of Connecticut specifies the means of calculating the Projected Unfunded Liability used in the third criterion of the Actuarial Surplus Test. The projection reflects the actual unfunded liability as of December 31, 1983 adjusted for changes in actuarial assumptions and cost methods through the determination date. No provision is made in the Statute for reflecting the impact of plan changes. The projection below reflects the following changes: data correction (June 30, 1987); change in actuarial assumptions (June 30, 1987); change in actuarial cost method (June 30, 1988); change in actuarial assumptions - interest rate only (June 30, 1989); change in actuarial cost method – amortization period only (June 30, 1992); change in actuarial assumptions (June 30, 1993); change in actuarial cost method – level percent amortization (June 30, 1997); change in actuarial methods and assumptions (June 30, 2000); change in actuarial assumptions (June 30, 2004); change in actuarial assumptions (June 30, 2008); change in actuarial assumptions (June 30, 2012); change in actuarial assumptions (June 30, 2016); change in actuarial assumptions (June 30, 2021).

Year	(\$000) June 30 Unfunded Liability	Year	(\$000) June 30 Unfunded Liability	Year	(\$000) June 30 Unfunded Liability
1987	\$2,524,556	2002	\$2,360,589	2017	\$9,951,987
1988	1,954,257	2003	2,429,273	2018	9,659,917
1989	1,432,333	2004	2,502,591	2019	9,424,079
1990	1,939,758	2005	2,569,504	2020	9,140,386
1991	1,930,524	2006	2,634,814	2021	8,756,187
1992	1,920,505	2007	2,698,021	2022	8,198,476
1993	1,794,192	2008	2,823,251	2023	7,602,282
1994	1,787,586	2009	2,861,884	2024	6,964,951
1995	1,780,419	2010	2,895,933	2025	6,283,644
1996	1,772,643	2011	2,924,709	2026	5,555,326
1997	1,764,205	2012	4,160,465	2027	4,776,755
1998	1,835,087	2013	4,172,971	2028	3,944,463
1999	1,907,249	2014	4,174,465	2029	3,054,742
2000	2,222,296	2015	4,163,616	2030	2,103,631
2001	2,291,494	2016	10,057,733	2031	1,086,893
				2032	0





SCHEDULE J – PROJECTION OF UNFUNDED

An amortization payment schedule of the June 30, 2025 Unfunded Accrued Liability is provided in the table below. No future gains and losses are included in this table.

PROJECTION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (\$ thousands)		
Valuation Year	Unfunded Actuarial Accrued Liability	Amortization Payment
2025	\$17,621,359	\$1,635,684
2026	17,201,548	1,635,684
2027	16,752,771	1,635,684
2028	16,273,028	1,635,684
2029	15,760,183	1,635,684
2030	15,211,952	1,635,684
2031	14,625,893	1,635,684
2032	13,999,395	1,635,684
2033	13,329,670	1,635,684
2034	12,613,733	1,635,684
2035	11,848,397	1,635,684
2036	11,030,252	1,635,684
2037	10,155,655	1,635,684
2038	9,220,712	1,635,684
2039	8,221,257	1,635,684
2040	7,152,840	1,635,684
2041	6,010,702	1,635,684
2042	4,789,756	1,635,684
2043	3,484,565	1,585,636
2044	2,139,364	1,498,063
2045	788,917	1,453,929
2046	(610,577)	(275,174)
2047	(377,533)	(181,530)
2048	(222,053)	(145,509)
2049	(91,866)	(98,204)
2050	0	0





SCHEDULE K – IMPACT OF PAST CONTRIBUTION TRANSFERS

The following tables show the forecast of the reductions the State's ADEC resulting from the additional contributions to the System's assets from the Budget Reserves Fund (BRF) and General Fund Surplus. The table below summarizes the amount of these transfers.

Past Contribution Transfer Amounts	
Valuation Year	Amount
2020	\$ 61,621,659
2021	714,663,947
2022	3,203,691,833
2023	1,118,546,305
2024	513,939,722
2025	894,706,383
Total	\$ 6,507,169,849

The transfer amounts increase the value of assets in the actuarial valuation and effectively have a corresponding decrease in the UAAL as of the valuation date. The UAAL is amortized with future payments which reflect an interest and principal component. By reducing the UAAL with each transfer, the future interest payments are reduced. The following table provides the forecast of savings to the ADEC due to the transfers shown above.





SCHEDULE K – IMPACT OF PAST CONTRIBUTION TRANSFERS

Projected ADEC Reductions Due to Additional Transfers		
Valuation Year	Fiscal Year	Amount
2020	2022	\$ 5,240,239
2021	2023	66,014,489
2022	2024	338,452,980
2023	2025	433,572,949
2024	2026	477,277,828
2025	2027	553,362,692
2026	2028	553,362,692
2027	2029	553,362,692
2028	2030	553,362,692
2029	2031	553,362,692
2030	2032	553,362,692
2031	2033	553,362,692
2032	2034	553,362,692
2033	2035	553,362,692
2034	2036	553,362,692
2035	2037	553,362,692
2036	2038	553,362,692
2037	2039	553,362,692
2038	2040	553,362,692
2039	2041	553,362,692
2040	2042	553,362,692
2041	2043	553,362,692
2042	2044	553,362,692
2043	2045	553,362,692
2044	2046	553,362,692
2045	2047	548,122,452
2046	2048	487,348,203
2047	2049	214,909,711
2048	2050	119,789,742
2049	2051	76,084,864
Total		\$ 13,834,067,297

