Firefighters' Unified Retirement System of the State of Montana

Actuarial Valuation Report

Prepared as of June 30, 2025

CavMac
Actuarial Consulting Services

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September 30, 2025

Public Employees' Retirement Board
100 North Park, Suite 200
Helena, MT 59620-0139

Members of the Board:

In this report are submitted the results of the annual valuation of the assets and liabilities of the Firefighters' Unified Retirement System of the State of Montana (FURS), prepared as of June 30, 2025.

The purpose of this report is to provide a summary of the funded status of the System as of June 30, 2025 to determine the adequacy of the System's funding policy, to compare the actual and expected experience during the year ending June 30, 2025, to assess and disclose the key risks associated with funding the System, and to analyze and report on trends in contributions, assets and liabilities over the past several years. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The valuation indicates that the statutory contribution rate reflecting all anticipated contribution increases are sufficient to amortize the unfunded accrued liability within an 8-year period.

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the Entry Age Normal Cost Method. Four-year market related value of assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll, on the assumption that payroll will increase by 3.25% annually. The assumptions recommended by the actuary and adopted by the Board are, in the aggregate, reasonably related to the experience under the Fund and reasonable expectations of anticipated experience under the Fund.

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.

This is to certify that the undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. This also certifies that the undersigned have experience in performing valuations for public retirement systems, 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.

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 Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

Todd B. Green, ASA, EA, FCA, MAAA
President

Bryan Hoge, FSA, EA, FCA, MAAA
Principal and Consulting Actuary

Beverly V. Bailey, ASA, EA, FCA, MAAA
Senior Actuary

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SECTION 1 – SUMMARY OF RESULTS

For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below:

VALUATION DATE	**June 30, 2025**	**June 30, 2024**
Participant Counts		
Active Members	944	833
Retirees and Beneficiaries	724	712
Disabled Members*	12	12
Terminated Vested Members	63	56
Terminated Non-Vested Members	136	118
Total**	1,879	1,731
Annual Covered Payroll of Active Members	$ 83,371,559	$ 71,767,525
Average Salaries from Covered Payroll	$ 88,317	$ 86,155
Annual Retirement Allowances for Retired Members and Beneficiaries	$ 36,509,343	$ 34,574,110
Assets		
Actuarial Value	$ 770,478,346	$ 716,671,562
Market Value	787,155,364	709,382,172
Actuarial Accrued Liability (AAL)	$ 915,318,218	$ 844,848,032
Unfunded Actuarial Accrued Liability (UAAL)	$ 144,839,872	$ 128,176,470
Funded Ratio	84.18%	84.83%
Market Value Rate of Return	9.14%	8.96%
Annual Cost		
Statutory Funding Rate***	57.67%	57.67%
Total Normal Rate	31.43%	31.70%
Employee Contribution Rate	10.70%	10.70%
Employer Normal Rate	20.73%	21.00%
Employer Contribution Rate		
Normal Rate	20.73%	21.00%
UAAL Rate	26.24%	25.97%
Total Rate	46.97%	46.97%
Amortization Period	8 years	8 years
Employer Contribution Rate Necessary to Amortize UAAL over 30 Years		
Normal Rate	20.73%	21.00%
UAAL Rate (30-Year Rate)	9.25%	9.82%
Total Rate	29.98%	30.82%
Shortfall/(Surplus)	(16.99%)	(16.15%)

* Based on PERB categorization for the annual report. For actuarial purposes, 39 members in 2024 and 39 members in 2025 were valued as disabled members with offsetting reductions to the number of retired members.

** A reconciliation between participant counts used for the annual report and counts for the valuation appears at the beginning of Appendix D.

*** The statutory funding rate consists of the member contribution rate of 10.70% of compenstation plus the employer contribution rate of 46.97% of compensation.

As a result of this actuarial valuation of the benefits in effect under the Firefighters' Unified Retirement System as of June 30, 2025, the statutory employer contributions are sufficient to amortize the Unfunded Actuarial Accrued Liability (UAAL) of the Retirement System within 8 years. The Funded Ratio is 84.18%.

Calculations based on the Market Value of Assets

MCA 19-2-407 requires this report to show how market performance is affecting the actuarial funding of the Retirement System. The June 30, 2025 market value of assets is $16,677,018 more than the actuarial value of assets. This is due to the smoothing of investment gains and losses over a four-year period. If the market value of assets was used, the amortization period would be 7 years, and the Funded Ratio would be 86.00%.

Additional Details

MCA 19-13-605 sets the employer contribution at 14.36% of salary. MCA 19-16-604 sets the state contribution at 32.61% of salary. MCA 19-16-601 sets the employee contribution at 9.50% for non-GABA actives and 10.70% for GABA actives of salary respectively as defined by MCA 19-13-1010.

The actuarial costs are calculated using the entry age actuarial cost method. This is the method used by most public plans. It is designed to provide a stable contribution rate as a percent of member pay. This actuarial valuation measures the adequacy of the contribution rates set in Montana State Law.

Based on the current statutory funding rate, the amortization period as of the valuation date is 8 years. Contributions are developed with the intent of being level as a percentage of covered payroll, assuming the number of active members remains stable. Furthermore, the funding policy is expected to accumulate sufficient assets to make all future benefit payments as they become due, if all assumptions are met. Actuarial Standard of Practice Number 4 (ASOP 4) requires the disclosure of a reasonable actuarial determined contribution rate. The current statutory funding rate is expected to fully fund the plan and reduce the unfunded actuarial accrued liability each year. While there are potentially other reasonable actuarial determined contribution rates, in our professional judgement, the current statutory funding rate meets the guidelines of ASOP 4.

Investment Experience

The market assets earned 9.14% net of investment and administrative expenses. As a result of prior years' unrecognized losses, the actuarial assets earned 5.73%, which is 1.57% less than the expected return of 7.30%. The return on the actuarial assets differs from the return on market assets because the actuarial value of assets spreads gains and losses over four years. The chart below shows the annual returns for the past ten years.

Year	Market Return	Actuarial Return	Assumed Investment Return	Market Return over Assumption	Actuarial Return over Assumption
7/1/2015 to 6/30/2016	2.15	8.33	7.75	(5.60)	0.58
7/1/2016 to 6/30/2017	11.56	8.00	7.75	3.81	0.25
7/1/2017 to 6/30/2018	8.63	6.84	7.65	0.98	(0.81)
7/1/2018 to 6/30/2019	5.44	7.07	7.65	(2.21)	(0.58)
7/1/2019 to 6/30/2020	2.64	6.79	7.65	(5.01)	(0.86)
7/1/2020 to 6/30/2021	27.04	10.52	7.65	19.39	2.87
7/1/2021 to 6/30/2022	(4.24)	7.85	7.65	(11.89)	0.20
7/1/2022 to 6/30/2023	8.27	7.24	7.30	0.97	(0.06)
7/1/2023 to 6/30/2024	8.96	8.60	7.30	1.66	1.30
7/1/2024 to 6/30/2025	9.14	5.73	7.30	1.84	(1.57)

Asset gains or losses result when the return on the actuarial value of assets differs from the assumed investment return assumption.

Amortization of the UAAL

The June 30, 2024, actuarial valuation calculated an 8-year amortization period for the UAAL. The resulting amortization period at June 30, 2025 is 8 years.

Funding and Benefits Policy

The Montana Public Employees' Retirement Board has adopted a Funding and Benefits Policy to provide general guidelines to help ensure decisions are made based on sound, consistent, and thoroughly examined criteria. The Funding and Benefits Policy includes guidance on the following topics:

1) Funding Requirement
   a) The Funding and Benefits Policy states:
      1. The Entry Age Normal Cost Method shall be applied to the projected benefits in determining the Normal Cost and Actuarial Accrued Liability.
      2. Asset smoothing can be used in the valuation process to spread the recognition of investment gains and losses over a four-year period.

3. The unfunded actuarial accrued liability should be amortized over a reasonable period of time and should not exceed 30 years on a rolling basis. Generally, the funding period should be constant or decreasing.

b) Analysis: The liabilities of the System are determined using the Entry Age Normal Cost Method and are compared to the actuarial value of assets, which are developed using asset smoothing that recognizes gains and losses over a four-year period. Finally, the amortization period as of June 30, 2025 is 8 years based on actuarial value of assets. The current employer and employee statutory rates keep the System's funding within Board policy guidelines.

2) Funding Objectives

a) The Funding and Benefits Policy states: "The primary objectives are to: 1) ensure that the systems are financially sound and pay all benefits promised using assets accumulated from required employer and member contributions and investment income; and 2) achieve a well-funded status with a range of safety to absorb market volatility without creating a UAAL."

b) Analysis: The employer and employee contributions provided for in statute are sufficient to amortize the unfunded actuarial accrued liability within an 8-year period. This ensures that the System is financially sound and will be able to pay all promised benefits and achieve a well-funded status with a range of safety to absorb market volatility without creating a UAAL.

3) Benefit Enhancements

a) The Funding and Benefits Policy states: "Proposals must provide funding from sources sufficient to cover future costs. Unfunded liabilities created by the proposal must be amortized over a period of time appropriate to the retirement system, but not more than 30 years."

b) Analysis: Without supplemental funding, a benefit enhancement would increase the amortization period of the unfunded actuarial accrued liability and further delay the goal of achieving a well-funded status with a range of safety to absorb market volatility without creating a UAAL.

Sensitivity to Future Experience

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing the ultimate cost. The following illustrations provide simple analyses on how the costs are sensitive to changes in the assumed rate of return.

Investment Return – The investment return generally has the largest impact on the funding of the System.

Impact of Assuming 1.0% Higher Investment Return			
	Funded Ratio	Amortization Period	Actuarially Determined Employer Contribution (Millions $)*
Current Assumption 7.30%	84.18%	8 Years	$42.0
Higher Assumption 8.30%	96.29%	2 Years	16.8
Increase / (Decrease)	12.11%	(6) Years	($25.2)

Impact of Assuming 0.5% Higher Investment Return			
	Funded Ratio	Amortization Period	Actuarially Determined Employer Contribution (Millions $)*
Current Assumption 7.30%	84.18%	8 Years	$42.0
Higher Assumption 7.80%	90.16%	4 Years	27.8
Increase / (Decrease)	5.98%	(4) Years	($14.2)

Impact of Assuming 0.5% Lower Investment Return			
	Funded Ratio	Amortization Period	Actuarially Determined Employer Contribution (Millions $)*
Current Assumption 7.30%	84.18%	8 Years	$42.0
Lower Assumption 6.80%	78.36%	14 Years	53.3
Increase / (Decrease)	(5.82%)	6 Years	$11.3

Impact of Assuming 1.0% Lower Investment Return			
	Funded Ratio	Amortization Period	Actuarially Determined Employer Contribution (Millions $)*
Current Assumption 7.30%	84.18%	8 Years	$42.0
Lower Assumption 6.30%	72.71%	30 Years	68.3
Increase / (Decrease)	(11.47%)	22 Years	$26.3

* Amounts reflect estimated increase/(decrease) in FY2026 employer contributions in order to maintain the 8 year amortization period.

The future funding status of the System will be determined by the System's experience. The System's actual asset returns and retirement rates, as well as member longevity, salary increases, withdrawal rates, disability rates and future legislation will all impact the funding status of the System. The entry age normal cost method and four year smoothing of asset gains and losses will help to provide a more orderly funding of the System's liabilities, but will not change the actual experience. The amortization period of the UAAL is not likely to decrease by the expected 1.0 year with each passing actuarial valuation. Instead, the amortization period is expected to decrease more or less than 1.0 year each year, reflecting gains and losses due to experience different than the actuarial assumptions.

Assumption Changes

There have been no assumption changes since the previous valuation.

Benefit Changes

There have been no benefit changes since the previous valuation.

Contribution Changes

There have been no contribution changes since the previous valuation.

Method Changes

There have been no method changes since the previous valuation.

Impact of Changes

The following table summarizes how experience has changed the UAAL since the June 30, 2024, Actuarial Valuation. Further detail can be found in Tables 10 and 11.

Changes in the Unfunded Actuarial Accrued Liability (UAAL)

June 30, 2024 Valuation UAAL	$128,176,470
Normal Cost	22,115,345
Contributions	(48,349,615)
Interest	9,206,542
Expected June 30, 2025 UAAL	111,148,742
Experience (Gain)/Loss on Actuarial Liabilities	$22,345,304
Experience (Gain)/Loss on Actuarial Assets	11,345,826
Assumption & Method Changes	0
Plan Changes	0
Total (Gain) / Loss	33,691,130
June 30, 2025 Valuation UAAL	144,839,872

Summary

* The System's return on actuarial value of assets of 5.73% for the year ended June 30, 2025 is 1.57% less than the expected return of 7.30%. This represents an asset loss of $11,345,826 due to investment return being less than anticipated. As of June 30, 2025, the market value of assets was $787,155,364. As of June 30, 2025, the actuarial value of assets was $770,478,346. The June 30, 2025 deferred asset experience will be recognized in future actuarial valuations unless it is offset by returns less than 7.30% on an actuarial basis.

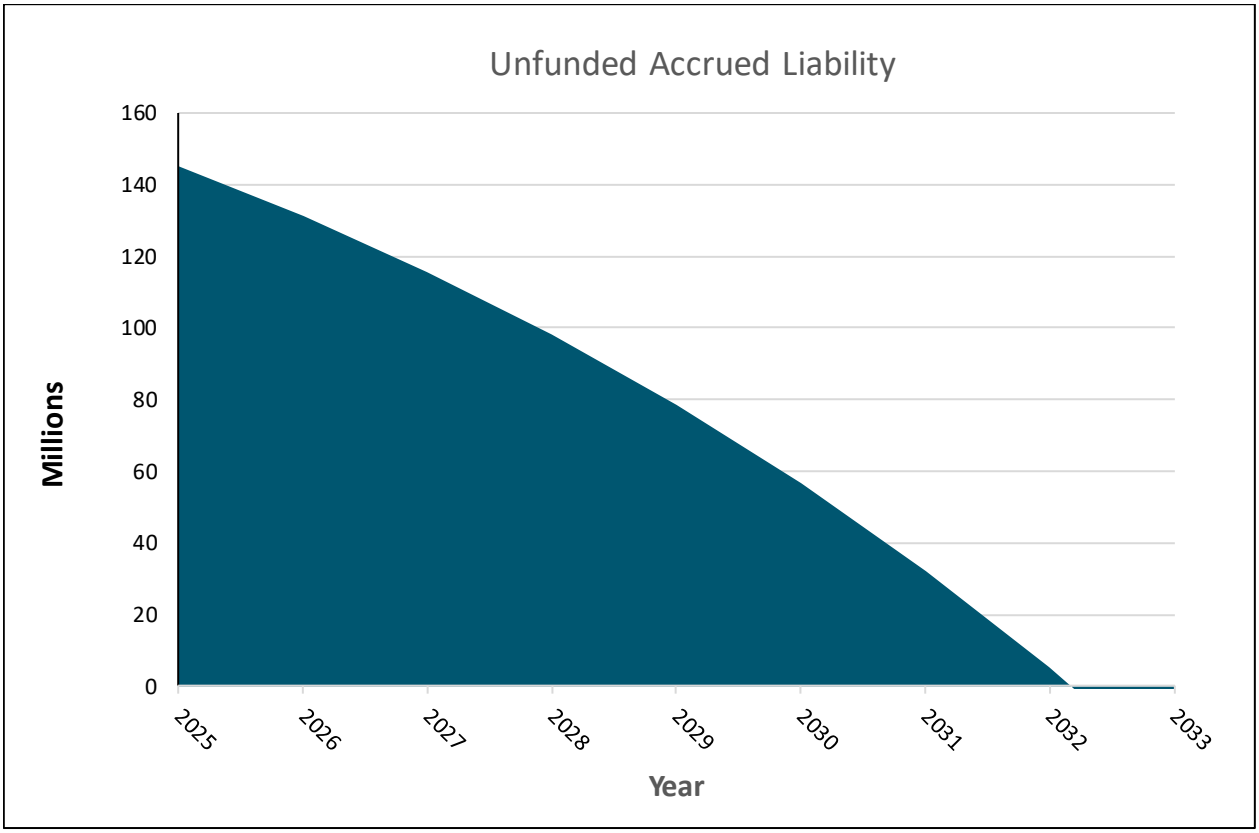
* As of June 30, 2025, the amortization period of the UAAL is 8 years. Prior to this valuation, the funding period was 8 years. The ultimate goal of the Board's Funding and Benefit Policy is to increase the funded status to a level such that the amortization period is below 30 years. The System is currently being funded in the parameters as defined by the Board.

* The funding of the retirement system will be impacted by future experience, which will sometimes be more favorable than the actuarial assumptions and sometimes less favorable. In particular, investment returns larger and smaller than the 7.30% assumption are expected to have significant impacts on the System's funding progress. In the long term, the favorable experience is needed to offset the less favorable experience. This is the reason for using an actuarial value of assets that allows gains and losses to be smoothed over four years.

* The unfunded actuarial accrued liability is amortized using a level percentage of payroll method over the amortization period. Under the level percentage of payroll method, amortization payments will not be large enough to cover interest on the UAAL in the beginning of the amortization schedule, which means that as a dollar amount the UAAL is expected to grow. After a period of time, amortization payments will be large enough that the amortization payments will cover both interest and principal, and the UAAL as a dollar amount will be projected to decrease in each subsequent year. The payroll growth assumption is used to determine the percentage of payroll required over the remaining amortization period to fully amortize the unfunded liability. The payroll growth assumption is 3.25%.

Projected Progress toward 100% Funding

The table below shows the projected progress toward reaching 100%. When the System is 100% funded, the Unfunded Actuarial Accrued Liability will be fully amortized. This is scheduled to occur within 8 years. The ultimate goal of the FURS System is to become at least 100% funded and to establish a reserve equal to 10% of the System's Actuarial Accrued Liability.



SECTION 2 – ASSETS

In many respects, an actuarial valuation can be regarded as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is June 30, 2025. On that date, the assets available for the payment of benefits are appraised. These assets are compared with the actuarial liabilities. The actuarial process thus leads to a method of determining what contributions by members and their employers are needed to strike a balance.

The asset valuation method being used is a four-year smoothing method. The expected return is determined each year based on the beginning of year market value and actual cash flows during the year. Any difference between the expected market value return and the actual market value return is recognized evenly over a period of four years.

Table 1 lists the assets held and their market value for the past two years. Table 2 summarizes the fund's activity during the past two years. Table 3 summarizes the determination of the actuarial value of assets. Table 4 summarizes historical asset returns for the last 10 years including the amount recognized by the actuarial asset valuation method which was greater or lesser than the actuarial investment return assumption. Table 5 summarizes the historical asset values on a market value and actuarial value basis, to the extent it was available. Additional data can be included in this table for future reports, if provided by the System.

Table 1:
Statement of Fiduciary Net Position
Fiscal Year Ended June 30,

	2025	2024
ASSETS		
Cash and Short Term Investments	$ 8,034,527	$ 7,312,258
Securities Lending Collateral	$ 36,928,477	$ 23,747,170
Receivables:		
Interest Receivable	$ 29,121	$ 33,784
Accounts Receivable	243,768	368,796
Due from Other Funds	-	-
Due from Primary Government	27,249,043	23,576,364
Notes Receivable	-	-
Def Outflow of Resources	4,261	3,970
Total Receivables	$ 27,526,193	$ 23,982,914
Investments, at fair value:		
Investment Pools	751,697,705	678,117,788
Other Investments	-	-
Total Investments	$ 751,697,705	$ 678,117,788
Capital Assets		
Property and Equipment, at cost, net of Accumulated Depreciation	$ -	$ 324
Intangible Assets, at cost, net of Amortization Expense	98,763	142,254
Total Capital Assets	$ 98,763	$ 142,578
TOTAL ASSETS	$ 824,285,665	$ 733,302,708
LIABILITIES		
Securities Lending Liability	$ 36,928,477	$ 23,747,170
Accounts Payable	423	5,342
Unearned Revenue	-	-
Payable to Other Systems	110,916	107,676
Contributions Received in Advance	32,000	-
Other Liabilities	10,017	8,511
Def Inflow of Resources	5,308	5,435
Leasing Liabilites	43,160	46,402
TOTAL LIABILITIES	$ 37,130,301	$ 23,920,536
NET POSITION - RESTRICTED FOR PENSION BENEFITS	$ 787,155,364	$ 709,382,172

Table 2:
Statement of Changes in Fiduciary Net Position
Fiscal Year Ended June 30,

	2025	2024
ADDITIONS		
Contributions:		
Employer	$ 12,025,383	$ 10,391,947
Plan Member	9,075,189	7,745,969
Other	27,249,043	23,576,364
Total Contributions	$ 48,349,615	$ 41,714,280
Misc Income	$ -	$ -
Investment Income:		
Net Appreciation/(Depreciation) in Fair Value of Investments	$ 69,031,018	$ 61,673,862
Investment Earnings	408,005	416,718
Security Lending Income	1,686,912	837,489
Investment Income/(Loss)	$ 71,125,935	$ 62,928,069
Investment Expense	(4,113,497)	(4,070,432)
Security Lending Expense	(1,466,159)	(672,531)
Net Investment Income/(Loss)	$ 65,546,279	$ 58,185,106
Total Additions	$ 113,895,894	$ 99,899,386
DEDUCTIONS		
Benefit Payments, Refunds, and Distributions	$ 35,966,030	$ 34,058,878
Refunds to Other Plans	-	-
Transfers to DCRP	-	-
Transfers to MUS-RP	-	-
OPEB Expense	-	-
Administrative Expense	156,566	160,607
Total Deductions	$ 36,122,596	$ 34,219,485
NET INCREASE (DECREASE) IN PLAN NET ASSETS	$ 77,773,298	$ 65,679,901
NET POSITION - RESTRICTED FOR PENSION BENEFITS BEGINNING OF YEAR	$ 709,382,172	$ 643,702,271
ADJUSTMENT	(106)	$ -
END OF YEAR	$ 787,155,364	$ 709,382,172

Table 3:
Determination of Actuarial Value of Assets

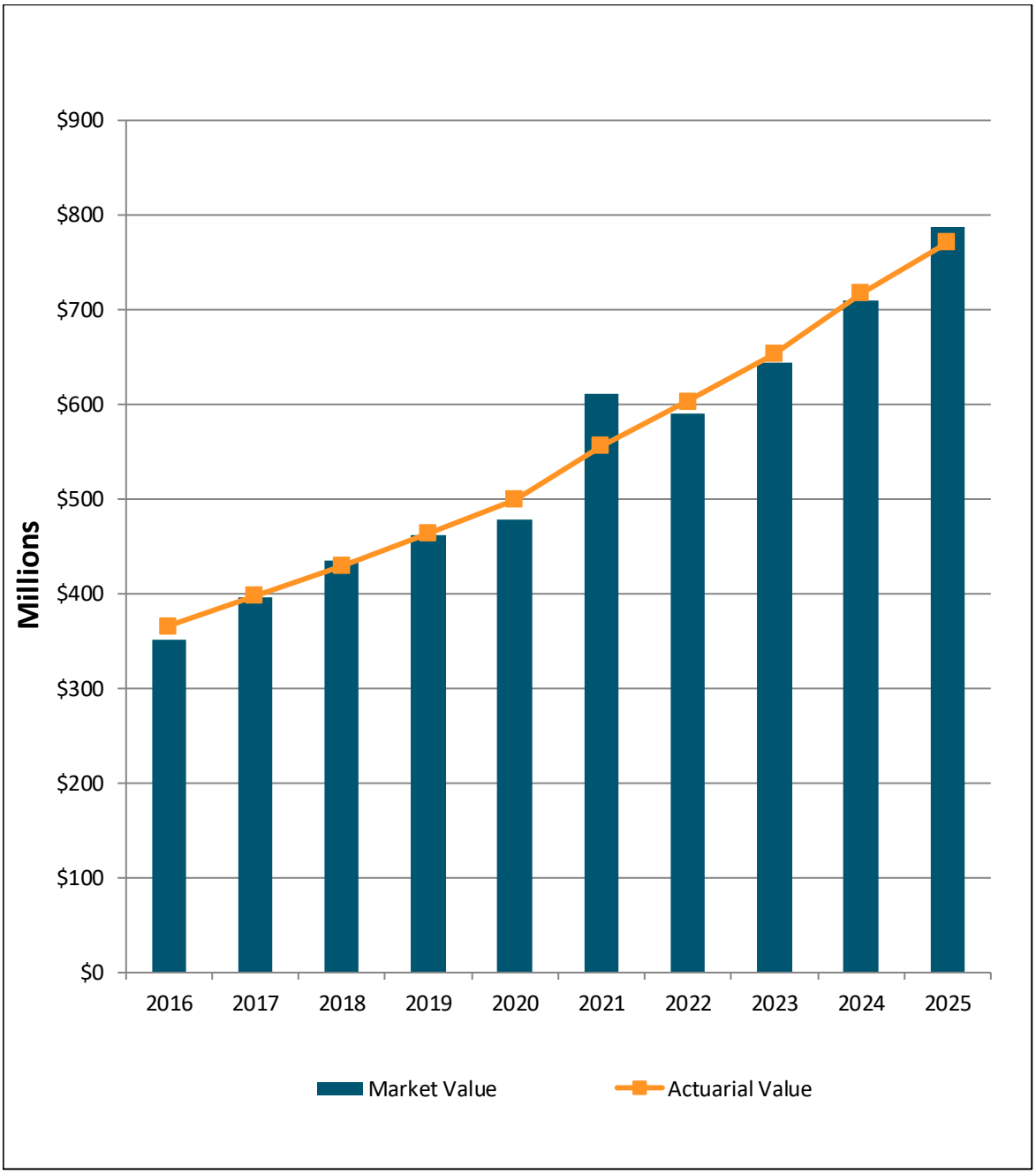
Valuation Date June 30:	2024	2025	2026	2027	2028
A. Actuarial Value Beginning of Year	$ 652,590,498	$ 716,671,562			
B. Market Value End of Year	709,382,172	787,155,364			
C. Market Value of Beginning of Year	643,702,271	709,382,172			
D. Cash Flow					
D1. Contributions	41,714,280	48,349,615			
D2. Benefit Payments	(34,058,878)	(35,966,030)			
D3. Administrative Expenses	(160,607)	(156,566)			
D4. Investment Expenses	(4,742,963)	(5,579,656)			
D5. Net	$ 2,751,832	$ 6,647,363			
E. Investment Income					
E1. Market Total: B. - C. - D5.	$ 62,928,069	$ 71,125,829			
E2. Assumed Rate	7.30%	7.30%			
E3. Amount for Immediate Recognition C.*E2. + ((D1.+D2.)*E2.*0.5) - D3 - D4	52,173,258	57,973,121			
E4. Amount for Phased-in Recognition E1. - E3.	10,754,811	13,152,708			
F. Phased-In Recognition of Investment Income					
F1. Current Year: 0.25 * E4.	$ 2,688,703	$ 3,288,177	$ -	$ -	$ -
F2. First Prior Year	1,435,079	2,688,703	3,288,177	-	-
F3. Second Prior Year	(18,225,659)	1,435,079	2,688,703	3,288,177	-
F4. Third Prior Year	23,257,851	(18,225,659)	1,435,078	2,688,702	3,288,177
F5. Total Recognized Investment Gain	$ 9,155,974	$ (10,813,700)	$ 7,411,958	$ 5,976,879	$ 3,288,177
G. Actuarial Value End of Year A. + D5. + E3. + F5.	$ 716,671,562	$ 770,478,346			

Table 4:
Historical Investment Returns*

Fiscal Year Ending	Market Returns	Actuarial Returns	Actuarial Assumption	Actuarial Return Over Assumption
June 30, 2016	2.15%	8.33%	7.75%	0.58%
June 30, 2017	11.56%	8.00%	7.75%	0.25%
June 30, 2018	8.63%	6.84%	7.65%	(0.81)%
June 30, 2019	5.44%	7.07%	7.65%	(0.58)%
June 30, 2020	2.64%	6.79%	7.65%	(0.86)%
June 30, 2021	27.04%	10.52%	7.65%	2.87%
June 30, 2022	(4.24)%	7.85%	7.65%	0.20%
June 30, 2023	8.27%	7.24%	7.30%	(0.06)%
June 30, 2024	8.96%	8.60%	7.30%	1.30%
June 30, 2025	9.14%	5.73%	7.30%	(1.57)%
10 Year Average	7.69%	7.69%		0.12%

* Returns reflect all investment returns, including investment income and realized and unrealized investment gains and losses, and are net of investment expenses and administrative expenses paid by the System.

Table 5:
Market Value of Assets vs. Actuarial Value of Assets



SECTION 3 – ACTUARIAL PRESENT VALUE OF FUTURE BENEFITS

In the previous section, an actuarial valuation was related to an inventory process, and an analysis was given of the inventory of assets of the System as of the valuation date. In this section, the discussion will focus on the commitments of the System, which will be referred to as its actuarial liabilities.

Table 6 contains an analysis of the actuarial present value of all future benefits for active members, retirees, and beneficiaries. The analysis is given by type of benefit.

The actuarial liabilities summarized in Table 6 include the actuarial present value of all future benefits expected to be paid with respect to each member covered as of the valuation date. For an active member, this value includes a measure of both benefits already earned and future benefits to be earned. Thus, for all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and, if an optional benefit is chosen, for the lives of their surviving beneficiaries.

The actuarial valuation does not recognize liabilities for employees who become members and participate in the System after the valuation date.

Table 6:
Actuarial Present Value of Future Benefits for Actives, Retirees, and Beneficiaries

	June 30, 2025 Total	June 30, 2024 Total
A. Active Members Liability Due to Probability of		
Retirement	$ 578,875,088	$ 496,000,528
Disabilty	24,746,236	20,821,626
In-Service Death	8,655,316	7,045,426
Termination	27,417,577	22,485,229
Total	$ 639,694,217	$ 546,352,809
B. Inactive Members and Annuitants		
Service Retirement	$ 447,508,191	$ 424,747,163
Disability Retirement	30,542,942	30,231,462
Beneficiaries*	55,910,012	53,706,376
Vested Terminated Members	9,932,234	10,143,100
Refund of Member Contributions	765,491	673,795
Total	$ 544,658,870	$ 519,501,896
C. Grand Total	$ 1,184,353,087	$ 1,065,854,705

* Includes survivors of active and retired members.

SECTION 4 – EMPLOYER CONTRIBUTIONS

In the previous two sections, attention has been focused on the assets and the present value of all future benefits of the System. A comparison of Tables 3 and 6 indicates that there is a shortfall in current actuarial assets to meet the present value of all future benefits for current members and beneficiaries.

In an active system, there will always be a difference between the assets and the present value of all future benefits. An actuarial valuation sets a schedule of future contributions that will deal with this funding in an orderly fashion.

The method used to determine the incidence of the contributions in various years is called the actuarial cost method. For this valuation, the entry age actuarial cost method has been used. A description of the entry age actuarial cost method is provided in Appendix A. Under this method, or essentially any actuarial cost method, the contributions required to meet the difference between current assets and the present value of all future benefits are allocated each year between two elements:

- A normal cost amount, which ideally is relatively stable as a percentage of salary over the years;
- An amount which is used to amortize the UAAL.

The two items described above, normal cost and UAAL, are the keys to understanding the actuarial cost method. Let us first discuss the normal cost.

The normal cost is the theoretical contribution rate, which will meet the ongoing costs of a group of average new employees. Suppose that a group of new employees were covered under a separate fund from which all benefits and to which all contributions and associated investment return were to be paid. Under the entry age actuarial cost method, the normal cost contribution rate is that level percentage of pay which would be exactly right to maintain this fund on a stable basis. If experience were to follow the actuarial assumptions exactly, the fund would be completely liquidated with the last payment to the last survivor of the group.

The assumed investment rate of return is 7.30%, net of administrative and investment expenses.

We have determined the normal cost rates separately by type of benefit under the System. These are summarized in Table 7. In Table 7 we also provide a summary of the member and employer statutory contributions.

The term "fully funded" is often applied to a system where contributions for everyone at the normal cost rate will fully pay for the benefits of existing as well as new employees. Often, systems are not fully funded, either because of benefit improvements in the past that have not been completely paid for or actuarial deficiencies that have occurred because experience has not been as anticipated. Under these circumstances, a UAAL exists.

SECTION 4 – EMPLOYER CONTRIBUTIONS

Table 8 shows how the UAAL was derived for the System. Lines A and B show, respectively, the total present value of future benefits and the portion of the future liability that is expected to be paid from future normal cost contributions, both employer and employee. The future normal coast contributions are the portion of the present value of future benefits that are attributed to future years of service that have not been earned yet by the active membership. Line C shows the actuarial accrued liability. Line D shows the amount of assets available for benefits. Line E shows the UAAL.

The UAAL at any date after establishment of a system is affected by any actuarial gains or losses arising when the actual experience of the system varies from the experience anticipated by the actuarial assumptions used in the valuations. To the extent actual experience as it develops differs from the assumptions used, so also will the actual emerging costs differ from the estimated costs. The impact of these differences in actual experience from the assumptions is included in Section 1, the Summary of Findings.

Table 7:
Normal Cost Contribution Rates
As Percentages of Salary

	June 30, 2025 Total	June 30, 2024 Total
Service retirement	25.98%	26.18%
Disability retirement	2.07%	2.12%
In Service Death	0.73%	0.72%
Termination	2.65%	2.68%
Total Normal Rate	31.43%	31.70%
Employee Normal Rate*	10.70%	10.70%
Employer Normal Rate	20.73%	21.00%
Rate Available to Amortize Unfunded Actuarial Liability	26.24%	25.97%
Statutory Funding Rate**	57.67%	57.67%

* Members who have elected GABA contribute 10.70% of compensation. Members who have not elected GABA contribute 9.50% of compensation. The employee contribution rate reflects the average contribution rate of all employees.

** The statutory funding rate consists of the member contribution rate plus the employer statutory rate of 46.97% of compensation.

Table 8:
Unfunded Actuarial Accrued Liability

	June 30, 2025	June 30, 2024
A. Actuarial present value of all future benefits for present members and retirees and their survivors (Table 6)	$ 1,184,353,087	$ 1,065,854,705
B. Less actuarial present value of total future normal costs for present members	$ 269,034,869	$ 221,006,673
C. Actuarial accrued liability	$ 915,318,218	$ 844,848,032
D. Less assets available for benefits	$ 770,478,346	$ 716,671,562
E. Unfunded actuarial accrued liability	$ 144,839,872	$ 128,176,470

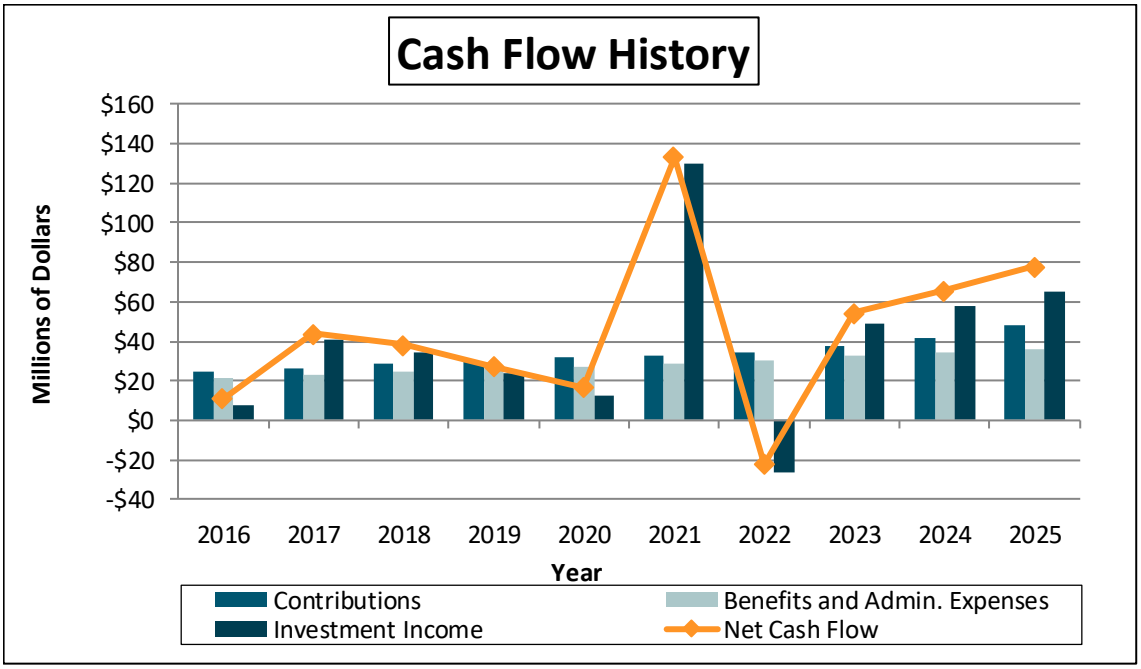
SECTION 5 – CASH FLOW HISTORY

The fundamental equation for funding a retirement system is that benefits and administrative expenses must be provided for by contributions (past and future) and investment income. When a retirement system matures, benefits and administrative expenses often exceed contributions. In this case we say the system has a "negative cash flow." Mature systems are characterized by negative cash flows and large pools of assets. This is natural. Actuarial funding is designed to accumulate large pools of assets which will in turn provide investment income and finance negative cash flows when systems mature. If the fund is looked at as a whole, investment income is usually larger than the difference between contributions and benefit payments. The retirement system's investment strategy should maximize potential returns at a prudent level of risk while providing for needed cash flows.

Table 9 shows the System had a positive cash flow for the year ended June 30, 2025. The System's total cash flow including contributions, benefit payments, administrative expenses and investment earnings was $77.7 million. Of the $77.7 million, $65.5 million was due to investment returns.

As long as the System had a positive cash flow, there was no need to plan where the funds would come from to pay benefits since benefits could be paid by incoming contributions. A negative cash flow, as defined above, requires planning what funds will be used to pay the difference between benefits and contributions.

Table 9:
Cash Flow History
(Dollar amounts in millions)



Year Ended June 30	Historical Cash Flows: Contributions	Benefits & Administrative Expenses	Investment Income	Net Cash Flow
2016	$ 24.9	$ 21.2	$ 7.3	$ 11.0
2017	25.9	22.8	40.8	43.9
2018	28.5	24.4	34.3	38.4
2019	29.4	25.9	23.7	27.2
2020	31.6	27.1	12.2	16.7
2021	32.4	28.8	129.6	133.2
2022	34.5	30.6	(26.0)	(22.1)
2023	37.9	32.5	48.8	54.2
2024	41.7	34.2	58.2	65.7
2025	48.3	36.1	65.5	77.7

SECTION 6 – ACTUARIAL GAINS OR LOSSES

An analysis of actuarial gains or losses is performed in conjunction with all regularly scheduled valuations.

The developments of the gains or losses related to the actuarial liability and the assets are shown in Table 10. The results of our analysis of the financial experience of the System in the three most recent regular actuarial valuations are presented in Table 11. Each gain or loss shown represents our estimate of how much the given type of experience caused the Unfunded Actuarial Accrued Liability or Funding Reserve to change in the period since the previous actuarial valuation.

Each gain or loss shown represents our estimate of how much the given type of experience caused the UAAL or Funding Reserve to change in the period since the previous actuarial valuation.

Gains and losses shown due to demographic sources are approximate. Demographic experience is analyzed in greater detail in our periodic assumption studies.

Non-recurring gains and losses result from changes in the actuarial assumptions and benefit improvements.

Table 10:
Analysis of Actuarial (Gains) or Losses*

A.	ACTUARIAL ACCRUED LIABILITY (GAIN) / LOSS ANALYSIS	
1.	Actual Actuarial Accrued Liability as of June 30, 2024:	$ 844,848,032
2.	Normal Cost for this Plan Year	22,115,345
3.	Interest on items 1 and 2 [(1+2) x 7.30%]	63,288,327
4.	Benefit Payments for this Plan Year	(35,966,030)
5.	Interest on item [4 x 7.30% x .5]	(1,312,760)
6.	Expected Actuarial Accrued Liability as of June 30, 2025:	892,972,914
7.	Changes due to:	
a.	Assumption Changes	0
b.	Plan Amendments	0
c.	Funding Method	0
d.	Actuarial (Gain) / Loss	$ 22,345,304
8.	Actual Actuarial Accrued Liability as of June 30, 2025:	$ 915,318,218
9.	Items Affecting Calculation of Unfunded Accrued Actuarial Liability:	
a.	Benefit provisions reflected in the unfunded accrued liability (see Appendix C)	
b.	Actuarial assumptions and methods used to determine actuarial accrued liability (see Appendix B)	
B.	ASSET (GAIN) / LOSS ANALYSIS	
1.	Actuarial Value of Assets as of June 30, 2024:	$ 716,671,562
2.	Interest on item [1 x 7.30%]:	52,317,024
3.	Contributions for this Plan Year:	48,349,615
4.	Interest on item [3. x 7.30% x .5]:	1,764,761
5.	Benefit Payments for this Plan Year:	(35,966,030)
6.	Interest on item [5. x 7.30% x .5]:	(1,312,760)
7.	Expected Actuarial Value of Assets as of June 30, 2025:	$ 781,824,172
8.	Actuarial Value of Assets as of June 30, 2025:	$ 770,478,346
9.	(Gain) / Loss	$ 11,345,826
C.	UNFUNDED ACTUARIAL ACCRUED LIABILITY (GAIN) / LOSS ANALYSIS	
1.	Actual Unfunded Actuarial Accrued Liability as of June 30, 2024:	$ 128,176,470
2.	Normal Cost for this Plan Year:	22,115,345
3.	Contributions for this Plan Year:	(48,349,615)
4.	Interest on items 1 - 3: [(1+2) x 7.30% + (3 x 7.30% x .5)]:	9,206,542
5.	Expected Unfunded Actuarial Accrued Liability as of June 30, 2025:	$ 111,148,742
6.	Changes due to:	
a.	Assumption Changes:	-
b.	Plan Amendments:	-
c.	Funding Method:	-
d.	Actuarial (Gain) / Loss:	$ 33,691,130
7.	Actual Unfunded Actuarial Accrued Liability as of June 30, 2025:	$ 144,839,872

* Effects related to gains are shown in parentheses. Numerical results are expressed as a (decrease) increase in the Unfunded Actuarial Accrued Liability (UAAL). Gains decrease the UAAL and losses increase the UAAL.

Table 11:
Historical Actuarial (Gains) or Losses*
(in thousands)

	UAAL (Gain)/Loss		
	June 30, 2025	**June 30, 2024**	**June 30, 2023**
Investment Income Investment income was (greater) less than expected based on actuarial value of assets.	$ 11,345.8	$ (8,507.1)	$ 355.7
Pay Increases Pay increases were (less) greater than expected.	$ 23,144.4	$ 8,006.0	$ 12,420.0
Age & Service Retirements Members retired at (older) younger ages or with (less) greater final average pay than expected	$ (17.5)	$ 460.8	$ (701.6)
Disability Retirements Disability claims were (less) greater than expected	$ 79.9	$ (650.3)	$ 335.8
Death-in-Service Benefits Survivor claims were (less) greater than expected	$ (259.9)	$ 24.0	$ (209.8)
Withdrawal From Employment (More) less reserves were released by withdrawals than expected	$ (86.4)	$ (1,183.1)	$ (5.2)
Death After Retirement Retirees (died younger) lived longer than expected	$ (2,673.5)	$ (2,345.0)	$ (5,837.9)
Data Adjustments and Benefit Payment Timing Service purchases, data corrections, etc.	$ 2,158.2	$ 880.0	$ (51.9)
Other Miscellaneous (gains) and losses	$ 0.1	$ -	$ 0.1
Total (Gain) or Loss During Period From Financial Experience	$ 33,691.1	$ (3,314.7)	$ 6,305.2
Non-Recurring Items. Changes in actuarial assumptions and methods	$ -	$ -	$ -
Changes in benefits caused a (gain) loss	$ -	$ -	$ -
Composite (Gain) Loss During Period	$ 33,691.1	$ (3,314.7)	$ 6,305.2

* Effects related to gains are shown in parentheses. Numerical results are expressed as a (decrease) increase in the Unfunded Actuarial Accrued Liability (UAAL). Gains decrease the UAAL and losses increase the UAAL.

SECTION 7 – RISK CONSIDERATIONS

A typical retirement plan faces many different risks, but the greatest risk is the inability to make benefit payments when due. If plan assets are depleted, benefits may not be paid which could create legal and litigation risk or the plan could become "pay as you go". The term "risk" is most commonly associated with an outcome with undesirable results. However, in the actuarial world, risk can be translated as uncertainty. The actuarial valuation process uses many actuarial assumptions to project how future contributions and investment returns will meet the cash flow needs for future benefit payments. Of course, we know that actual experience will not unfold exactly as anticipated by the assumptions and that uncertainty, whether favorable or unfavorable, creates risk. ASOP 51 defines risk as the potential of actual future measurements to deviate from expected results due to actual experience that is different than the actuarial assumptions.

The various risk factors for a given plan can have a significant impact – positive or negative – on the actuarial projection of liability and contribution rates.

There are a number of risks inherent in the funding of a defined benefit plan. These include:

- economic risks, such as investment return and price inflation;
- demographic risks such as mortality, payroll growth, aging population including impact of baby boomers, and retirement ages;
- contribution risk, i.e., the potential for contribution rates to be too high for the plan sponsor/employer to pay and
- external risks such as the regulatory and political environment.

There is a direct correlation between healthy, well-funded retirement plans and consistent contributions that are sufficient to fund the System. The System is primarily funded by member, employer and State contributions to the trust fund, together with the earnings on these accumulated contributions. These contributions fund benefit accruals for current active members and administrative expenses. The remainder of the contributions amortize the unfunded actuarial accrued liability. The contribution rates are set in statute and are intended to provide the needed amounts to fund the system over time. The purpose of the valuation is to determine if these contributions remain sufficient to fund the Plan. Due to the fixed nature of the contributions actuarial gains and losses are reflected in the amortization period. Generally, the largest source of actuarial gains and losses are caused by investment volatility. In addition, the unfunded liability is amortized as a level percentage of pay assuming payroll will grow by 3.25% per year. A key risk factor to the System's funding is that over time, the Statutory Contribution Rates will be insufficient to accumulate enough funds, with investment income, to fund the promised benefits. The funding insufficiency can be caused by amortization periods that are too long or by payroll not growing at the assumed rate.

The other significant risk factor for the System is investment return because of the volatility of returns and the size of plan assets compared to payroll. This is to be expected, given the underlying capital market assumptions and the System's asset allocation. To the extent that the investment return on the market value of assets cannot achieve the assumed investment rate of return, there is a risk of change to the discount rate which determines the present value of liabilities and actuarial valuation results. Please see the summary of results of this report which demonstrates the sensitivity of valuation results to differing assumed rates of return on the market value of assets.

Under the revised Actuarial Standards of Practice (ASOP) No. 4 effective for valuations after February 15, 2023, we 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 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. Using these assumptions, we calculate a liability of $1,033 million. 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. 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.

A key demographic risk for the Retirement System is improvements in mortality (longevity) greater than anticipated. While the actuarial assumptions reflect a margin for improvement in mortality experience these assumptions are refined every experience study, the risk arises because there is a possibility of some sudden shift, perhaps from a significant medical breakthrough that could quickly increase liabilities. Likewise, there is some possibility of a significant public health crisis that could result in a significant number of additional deaths in a short time period, which would also be significant, although more easily absorbed. While either of these events could happen, it represents a small probability and thus represents much less risk than the volatility associated with investment returns.

The exhibits on the following pages summarize some historical information that helps indicate how certain key risk metrics have changed over time. Many are due to the maturing of the retirement system.

Historical Asset Volatility Ratios
(in 1,000's)

As a retirement system matures, the size of the market value of assets increases relative to the covered payroll of active members, on which the System is funded. The size of the plan assets relative to covered payroll, sometimes referred to as the asset volatility ratio, is an important indicator of the contribution risk for the System. The higher this ratio, the more sensitive a plan's contribution rate is to investment return volatility. In other words, it will be harder to recover from investment losses with increased contributions.

Actuarial Valuation Date	Market Value of Assets	Plan Year Payroll	Asset Volatility Ratio
6/30/2016	$ 351,629	$ 43,119	8.15
6/30/2017	395,506	45,208	8.75
6/30/2018	433,935	47,935	9.05
6/30/2019	461,189	50,756	9.09
6/30/2020	477,937	53,859	8.87
6/30/2021	611,282	56,282	10.86
6/30/2022	589,209	59,394	9.92
6/30/2023	643,702	65,575	9.82
6/30/2024	709,382	71,768	9.88
6/30/2025	787,155	83,372	9.44

The assets at June 30, 2025 are 944.0% of payroll, so underperforming the investment return assumption by 1.00% (i.e., earn 6.30% for one year) is equivalent to 9.44% of payroll. While the actual impact in the first year is mitigated by the asset smoothing method and amortization of the UAAL, this illustrates the risk associated with volatile investment returns.

Historical Cash Flows
(in 1,000's)

Plans with negative cash flows will experience increased sensitivity to investment return volatility. Cash flows, for this purpose, are measured as contributions less benefit payments. If the System has negative cash flows and then experiences returns below the assumed rate, there are fewer assets to be reinvested to earn the higher returns that typically follow. While any negative cash flow will produce such a result, it is typically a negative cash flow of more than 5% of MVA that may cause significant concerns. Since June 30, 2016, the System has experienced positive cash flows which ranged from 0.59% to 1.57% for the prior ten years. Currently, there is no concern for the foreseeable future.

Year End	Market Value of Assets (MVA)	Contributions	Benefit Payments	Net Cash Flow	Net Cash Flow as a Percent of MVA
6/30/2016	$ 351,629	$ 24,885	$ 21,202	$ 3,683	1.05%
6/30/2017	395,506	25,864	22,824	3,040	0.77%
6/30/2018	433,935	28,495	24,366	4,129	0.95%
6/30/2019	461,189	29,418	25,887	3,531	0.77%
6/30/2020	477,937	31,633	27,124	4,509	0.94%
6/30/2021	611,282	32,417	28,804	3,613	0.59%
6/30/2022	589,209	34,468	30,551	3,917	0.66%
6/30/2023	643,702	37,894	32,355	5,539	0.86%
6/30/2024	709,382	41,714	34,059	7,655	1.08%
6/30/2025	787,155	48,350	35,966	12,384	1.57%

Liability Maturity Measurement

Most public sector retirement systems have been in operation for many years. As a result, they have aging plan populations, and in some cases declining active populations, resulting in an increasing ratio of retirees to active members and a growing percentage of retiree liability. The retirement of the remaining baby boomers over the next decade is expected to further exacerbate the aging of the retirement system population. With more of the total liability residing with retirees, investment volatility has a greater impact on the funding of the system since it is more difficult to restore the system financially after losses occur when there is comparatively less payroll over which to spread costs. Below are two tables which demonstrate the ratio of the System's retiree liability compared to the total accrued liability and the ratio of the number of retirees and beneficiaries to the number of active members.

Year End	Retiree Liability (a)	Total Actuarial Accrued Liability (b)	Retiree Percentage (a) / (b)
6/30/2016	$295,838,021	$466,671,399	63.4%
6/30/2017	338,350,700	522,287,639	64.8%
6/30/2018	359,654,851	548,240,945	65.6%
6/30/2019	378,008,258	579,103,280	65.3%
6/30/2020	402,508,346	612,294,224	65.7%
6/30/2021	422,394,922	646,173,296	65.4%
6/30/2022	469,688,657	748,060,423	62.8%
6/30/2023	488,157,188	794,682,254	61.4%
6/30/2024	519,501,896	844,848,032	61.5%
6/30/2025	544,658,870	915,318,218	59.5%

Historical Member Statistics

Valuation Date June 30,	Number of Active	Number of Retired	Active/ Retired
2016	644	621	1.04
2017	678	630	1.08
2018	691	652	1.06
2019	722	661	1.09
2020	735	678	1.08
2021	734	692	1.06
2022	749	704	1.06
2023	826	710	1.16
2024	833	724	1.15
2025	944	736	1.28

The assumptions and methods utilized in the valuation were developed in the five-year experience study for the period ending June 30, 2021.

Tables B-3 through B-5 give rates of decrement for service retirement, disablement, mortality, and other terminations of employment.

Actuarial Cost Method

The actuarial valuation was prepared using the entry age actuarial cost method. Under this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit. The portion of this actuarial present value allocated to a valuation year is called the normal cost. The normal cost was first calculated for each individual member. The normal cost rate is defined to equal the total of the individual normal costs, divided by the total pay rate.

The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets and (b) the actuarial present value of future normal costs is called the UAAL. The UAAL is amortized as a level percentage of the projected salaries of present and future members of the System.

Records and Data

The data used in the valuation consist of financial information; records of age, sex, service, salary, contribution rates, and account balances of contributing members; and records of age, sex, and amount of benefit for retired members and beneficiaries. All of the data has been supplied by the System and was accepted for valuation purposes without audit.

Replacement of Terminated Members

The ages at entry and distribution by sex of future members are assumed to average the same as those of the present members they replace. If the number of active members should increase, it is further assumed that the average entry age of the larger group will be the same, from an actuarial standpoint, as that of the present group. Under these assumptions, the normal cost rates for active members will not vary with the termination of present members.

Administrative and Investment Expenses

The administrative and investment expenses of the System are assumed to be funded by investment earnings in excess of 7.30% per year.

Valuation of Assets

The actuarial asset valuation method spreads asset gains and losses over four years. The expected return is determined each year based on the beginning of year market value and actual cash flows during the year. Any difference between the expected market value return and the actual market value return is recognized evenly over a period of four years.

Investment Earnings

The annual rate of investment earnings of the assets of the System is assumed to be 7.30% per year net of administrative and investment expenses, compounded annually.

Interest on Member Contributions

Interest on member contributions is assumed to accrue at the most recent actual rate granted, or a rate of 2.50% per annum, compounded annually.

Future Salaries

The rates of annual salary increase assumed for the purpose of the valuation are illustrated in Table B-2. In addition to increases in salary due to merit and longevity, this scale includes an assumed 3.50% annual rate of increase in the general wage level of the membership.

Service Retirement

Table B-3 shows the annual assumed rates of retirement among members eligible for service retirement. Separate rates are used when a member is eligible for reduced benefits, for the first year a member is eligible for full benefits, and for the years following the first year a member is eligible for full benefits.

Disablement

The rates of disablement used in this valuation are illustrated in Table B-4.

Mortality

The mortality rates used in this valuation are described in Table B-1.

Other Terminations of Employment

The rates of assumed future withdrawal from active service for reasons other than death, disability or retirement are shown for representative ages in Table B-5.

Probability of Marriage & Dependent Children

If death occurs in active status, all members are assumed to have an eligible surviving spouse with no dependent children. Female spouses are assumed to be three years younger than their male spouse.

Records with no Birth Date

New records with no birth date are assumed to be 37 years old. Records that are not new and have no birth date used the same birth date as the prior year's valuation.

Active Records with a Salary Less than $1,000

These members are included in the active headcounts, however the pay of these members is not included in the Valuation Projected Salaries summarized in Appendix D. The liability for these members is their accumulated member contributions payable on the valuation date.

Table B-1

Summary of Valuation Assumptions

I.	Economic assumptions	
A.	General wage increases	3.50%
B.	Investment return	7.30%
C.	Price Inflation assumption	2.75%
D.	Payroll growth	3.25%
E.	Growth in membership	0.00%
F.	Interest on member accounts	2.50%
II.	Demographic assumptions	
A.	Individual salary increase due to promotion and longevity	Table B-2
B.	Retirement	Table B-3
C.	Disablement	Table B-4
D.	Mortality among Active Participants PUB-2010 Safety Amount Weighted Employee Mortality projected to 2021 for males and females. Projected generationally using MP-2021.	
E.	Mortality among Disabled pensioners PUB-2010 Safety Amount Weighted Disabled Retiree mortality projected to 2021 set forward 1 year for males.	
F.	Mortality among Contingent Survivor pensioners PUB-2010 Amount Weighted Contingent Survivor Mortality projected to 2021 with ages set forward 1 year for males. Projected generationally using MP-2021.	
G.	Mortality among Healthy pensioners PUB 2010 Safety Amount Weighted Healthy Retiree Mortality Table projected to 2021, set forward one year for males and adjusted 105% for males and 100% for females. Projected generationally using MP-2021.	
H.	Other terminations of employment	Table B-5

Table B-2

Future Salaries

Years of Service	(a) Individual Merit & Longevity	(b) General Wage Increase	(1+(a))*(1+(b)) Total Salary Increase
0-1	6.40%	3.50%	10.12%
1-2	4.70	3.50	8.36
2-3	3.60	3.50	7.23
3-4	2.70	3.50	6.29
4-5	2.00	3.50	5.57
5-6	1.40	3.50	4.95
6 & Up	1.00	3.50	4.54

Table B-3

Retirement
Annual Rates

Age	20 or More Years of Service
Less than 50	16.0%
50	16.0%
51	16.0
52	16.0
53	16.0
54	16.0
55	25.0
56	25.0
57	25.0
58	25.0
59	25.0
60	25.0
61	40.0
62	40.0
63 & Over	100.0

Table B-4

Disablement
Annual Rates

Age	All Members
22	0.00%
27	0.11
32	0.11
37	0.11
42	0.37
47	0.37
52	0.37
57	0.36
62	0.00

All disabilities are assumed to be permanent and without recovery.

Table B-5

Other Terminations of Employment
Among Members Not Eligible to Retire
Annual Rates

Years of Service	All Members
0	9.0%
1	7.0
2	5.0
3	4.0
4	3.0
5	2.0
6	2.0
7	2.0
8	2.0
9	2.0
10	2.0
11	2.0
12 & Over	1.0

Family Composition
Female spouses are assumed to be three years younger than males. 100% of non-retired employees are assumed married for both male and female employees. Actual marital characteristics are used for pensioners.

Vested Benefits for Termination Members
Vested benefits for members who terminated during years ending June 30, 2009 and later were estimated based upon compensation and service information in the census data. For members who terminated prior to June 30, 2008, vested benefits valued were the same as had been calculated by the prior actuary for the June 30, 2008 actuarial valuation.

Service credit	• Service credit is used to determine the amount of a member's retirement benefit. • One month of service credit is earned for each month where the member is paid for 160 hours (240 hours in 3-paycheck months). This includes certain transferred and purchased service.
Membership service	• Membership service is used to determine eligibility for vesting, retirement or other benefits. • One month of membership service is earned for any month member contributions are made, regardless of the number of hours worked. • Eligible members in all systems may purchase service that counts toward membership service. • Additionally, eligible active and inactive Sheriffs' Retirement System (SRS) members may purchase 1 for 5 (additional) service that will count as membership service.
Contributions	• Member contributions are made through an "employer pick-up" arrangement which results in deferral of taxes on the contributions.
Compensation	• Compensation generally means all remuneration paid, excluding certain allowances, benefits, and lump sum payments. Compensation is specifically defined in law and differs amongst the systems. • Bonuses paid **on or after** July 1, 2013 to any member will not be treated as compensation for retirement purposes. No member or employer contributions will be paid on bonuses.
Withdrawal of employee contributions	• A member is eligible for a withdrawal of their contributions when they terminate service and are either not eligible for or have not taken a retirement benefit. • The member receives the accumulated member contributions, which consists of member contributions and regular interest. • Upon receipt of a refund of accumulated contributions a member's vested right to a monthly benefit is forfeited.
Member contributions interest credited (regular interest)	• Interest is credited to member accounts at the rates determined by the Board. • The current interest rate credited to member accounts was 2.50%.

Working Retiree Limitations

Applies to retirement system members who return **on or after** July 1, 2017 to covered employment in the system from which they retired. These limits already applied to SRS members before July 1, 2017.

- Members who return for **less than 480 hours** in a **calendar** year:
  - may not become an active member in the system; and
  - are subject to a $1 reduction in their retirement benefit for each $3 earned in excess of $5,000 in the calendar year.
- Members who return for **480 or more hours** in a **calendar** year;
  - must become an active member of the system;
  - will stop receiving a retirement benefit from the system; **and**
  - will be eligible for a second retirement benefit if they earn 5 or more years of service credit through their second employment.
- Employee, employer and state contributions apply as follows:
  - Employer contributions and state contributions (if any) must be paid on all working retirees;
  - Employee contributions must be paid on working retirees who return to covered employment for 480 or more hours in a calendar year.

NOTE: PERS has its own limits.

Second Retirement Benefit

Applies to retirement system members who return on or after July 1, 2017 to active service covered by the system from which they retired.

- If the member works more than 480 hours in a calendar year and accumulates less than 5 years of service credit before terminating again, the member:
  - is not awarded service credit for the period of reemployment;
  - is refunded the accumulated contributions associated with the period of reemployment;
  - starting the first month following termination of service, receives the same retirement benefit previously paid to the member; and
  - does not accrue post-retirement benefit adjustments during the term of reemployment but receives a GABA in January immediately following second retirement.

Second Retirement Benefit (continued)

- If the member works more than 480 hours in a calendar year and accumulates at least 5 years of service credit before terminating again, the member:
  - is awarded service credit for the period of reemployment;
  - starting the first month following termination of service, receives:
    - the same retirement benefit previously paid to the member; **and**
    - a second retirement benefit for the period of reemployment calculated based on the laws in effect as of the member's rehire date; **and**
  - does not accrue post-retirement benefit adjustments during the term of reemployment but receives a GABA:
    - on the initial retirement benefit in January immediately following second retirement; **and**
    - on the second retirement benefit starting in January after receiving that benefit for at least 12 months.
- A member who returns to covered service is **not** eligible for a disability benefit.

Refunds

- Terminating members eligible to retire may, in lieu of receiving a monthly retirement benefit, refund their accumulated contributions in a lump sum.
- Terminating members with accumulated contributions between $200 and $1,000 who wish to rollover their refund must do so within 90 days of termination of service.
- Trusts, estates, and charitable organizations listed as beneficiaries are entitled to receive only a lump sum payment.

Lump-sum payouts

- Effective July 1, 2017, lump sum payouts in all systems are limited to the member's accumulated contributions rather than the present value of the member's benefit.

Type of plan

- Multiple-employer cost sharing

Membership eligibility

- Firefighters of first- and second-class cities
- Firefighters of other cities that adopt the plan
- Firefighters of rural fire district departments that adopt the plan
- Firefighters hired by the Montana Air National Guard (MANG) on or after October 1, 2001

Member contributions

- Members hired **before** 7/1/1997 and **not electing** GABA**:** 9.5% of member's compensation
- Members hired **on or after** 7/1/1997 or **electing** GABA: 10.7% of member's compensation

Employer contributions	• 14.36% of each member's compensation • 14.36% of each working retiree's compensation
State contributions	• 32.61% of each member's compensation • 32.61% of each working retiree's compensation
Compensation period used in benefit calculation	• HAC = Highest Average Compensation • HAC is average of the highest 36 consecutive months (or shorter period of total service) of compensation paid to member. • **Part-time firefighter:** 15% of regular compensation of a newly confirmed full-time firefighter. • Hired **on or after** July 1, 2013: 110% annual cap on compensation considered as part of a member's HAC
Service retirement eligibility and benefit formula	Member hired **on or after** July 1, 1981, **or** a member who has **elected** to be covered by GABA: ○ 20 years of membership service ○ 2.5% of HAC x years of service credit Member hired **prior to** July 1, 1981, **and** who had **not elected** to be covered by GABA, **the greater of above, or:** If membership service is **less than 20 years**: ○ 2% of highest monthly compensation (HMC) x years of membership service and If membership service is **greater or equal to 20 years**: • 50% of HMC + 2% of HMC x years of membership service in excess of 20
Early retirement eligibility and benefit	• Age 50 with 5 years of membership service ○ Normal retirement benefit calculated using HAC and service credit at early retirement.
Disability retirement eligibility and benefit formula	• Any active member • The greater of: ○ 50% of HAC, or ○ 2.5% of HAC x years of service credit
Survivor's eligibility and benefit formula	• Any active or inactive member • For deaths of active members with **less than 20 years** of membership service, a monthly survivor benefit to the surviving spouse (or equally to dependent children if there is no surviving spouse or after a surviving spouse dies, for as long as they remain dependent children) equal to 50% of HAC. • For active or inactive members with **more than 20 years** of membership service, a benefit equal to the accrued retirement benefit at the date of death.

Vesting eligibility and benefit	• 5 years of membership service • Accrued normal retirement benefit, payable when eligible for retirement. • In lieu of a pension, a member may receive a refund of accumulated contributions. • Upon receipt of a refund of accumulated contributions, a member's vested right to a monthly benefit is forfeited.
Retirement benefits - Form of payment	• The retirement benefit is paid for the retired member's life. • Upon the death of the retired member, the benefit is paid to the surviving spouse. • If there is no surviving spouse, or after the death of a surviving spouse, benefits are paid to the dependent children, if any, for as long as they remain dependent children.
Post retirement benefit increases	• For retired members who became active members **on or after** July 1, 1997 and those who elected to be **covered under** GABA and who have been retired at least 12 months, a GABA will be paid each year in January equal to 3%. • For retired members who were hired **prior to** July 1, 1997 and who did **not elect GABA**, the minimum benefit adjustment should not be less than 50% of the current base compensation of a newly confirmed active firefighter of the employer that last employed the member as a firefighter.
Changes since last valuation	• None

Valuation Data

This chart is presented for informational purposes only. The counts shown in the valuation line were used for preparation of the liabilities disclosed within this report. The counts disclosed for the Annual Financial Report and the Summary of Results (page 1) match the Financial Statements at the request of the Board. The differences between counts, if any, have no material effect upon the liability calculation.

	Active	Disabled	Retirees and Beneficiaries	Terminated Vested Members	Terminated Non-Vested Members	Total
Participant Counts Used for Valuation	944	51	685	62	136	1,878
Disabled Members having attained normal retirement age		(39)	39			
Beneficiaries of Disabled Members						
Beneficiaries with less than one year of certain payments remaining						
Other Adjustments				1		1
Participant Counts shown in the Annual Financial Report	944	12	724	63	136	1,879

APPENDIX D – VALUATION DATA

This valuation is based upon the membership of the System as of June 30, 2025. Membership data were supplied by the System and accepted for valuation purposes without audit. However, tests were performed to ensure that the data are sufficiently accurate for valuation purposes.

The salaries used in the tables and charts which follow are different than the salaries used for the Summary on Page 1. The valuation projected salaries to be paid for the following fiscal year, whereas the Summary, salaries are applicable in the year ending on the valuation.

Active Members	Number	Valuation Projected Salaries
Full-Time Members	860	$ 87,650,658
Part-Time Members	84	$ 1,753,818
Total Active Members	944	$ 89,404,476

Table D-1 contains summaries of the data for contributing members. For full-time members, values shown in the tables are the numbers of members and their total and average annual salaries. For part-time members, only the numbers of members are shown.

Table D-2 presents distributions of the following:

- Members receiving service retirement benefits.
- Members receiving disability retirement benefits.
- Survivors of deceased retired members receiving benefits.
- Survivors of deceased active members.
- Terminated vested members.

Table D-3 is a reconciliation of membership data from June 30, 2024 to June 30, 2025.

APPENDIX D – VALUATION DATA

The following is a summary of retired members and beneficiaries currently receiving benefits. The chart reflects the counts and benefits used for valuation purposes as a result of data processing. Please refer to the chart on page 44 for an explanation of the number of annuitants used for valuation purposes.

Type of Annuitant	Number	Annual Benefits	Average Annual Benefits
Service Retirement	543	$ 28,816,384	$ 53,069
Survivors of Deceased Retired Members	128	5,350,117	41,798
Survivors of Deceased Active Members	14	481,310	34,379
Total Retirees and Beneficiaries	685	$ 34,647,811	$ 50,581
Disability Retirement	51	1,861,532	36,501
Total Annuitants	736	$ 36,509,343	$ 49,605

Terminated Members with Contributions Not Withdrawn	Number
Vested Terminated Members	62
Non-Vested Terminated Members	136
Total Terminated Members	198

Table D-1:
Active Members Distribution of
Full-Time Employees and Salaries
as of June 30, 2025

Number of Employees

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
<25	27	6	8	3									44
25 to 29	33	15	25	27	19	1							120
30 to 34	29	15	26	26	57	11	1						165
35 to 39	9	10	15	12	52	45	9						152
40 to 44	3	4	6	9	31	38	55	10					156
45 to 49	2	3	3	4	14	17	47	27	3				120
50 to 54	3	1	2	2	2	9	17	18	18				72
55 to 59			1			1	4	8	5	4			23
60 to 64	2				1				2	1			6
65 to 69		1	1										2
70 and up													
Totals	108	55	87	83	176	122	133	63	28	5	-	-	860

Table D-1:
Active Members Distribution of
Full-Time Employees and Salaries
as of June 30, 2025

Annual Salaries in Thousands

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
<25	1,825	435	615	303									3,179
25 to 29	2,467	995	2,154	2,279	1,660	68							9,623
30 to 34	2,106	1,205	2,378	2,247	5,352	1,131	92						14,512
35 to 39	732	743	1,498	1,035	4,955	5,009	970						14,941
40 to 44	282	255	455	793	3,507	4,152	6,777	1,259					17,481
45 to 49	132	309	256	353	1,406	1,971	5,815	3,672	462				14,376
50 to 54	354	126	231	200	177	1,019	2,052	2,224	2,987				9,371
55 to 59			70			115	587	1,029	665	697			3,164
60 to 64	247				88				310	71			716
65 to 69		182	106										288
70 and up													
Totals	8,146	4,250	7,764	7,210	17,145	13,466	16,293	8,185	4,424	768	-	-	87,651

The salary shown in the above chart was used for valuation purposes and assumes pay increases for the year.

Table D-1:
Active Members Distribution of
Full-Time Employees and Salaries
as of June 30, 2025

Average Annual Salary

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
<25	67,610	72,537	76,846	101,154									72,248
25 to 29	74,743	66,347	86,166	84,405	87,383	68,156							80,194
30 to 34	72,614	80,361	91,462	86,426	93,898	102,821	92,224						87,950
35 to 39	81,352	74,286	99,854	86,258	95,279	111,311	107,730						98,296
40 to 44	94,027	63,755	75,889	88,104	113,141	109,272	123,220	125,864					112,057
45 to 49	66,236	102,838	85,324	88,150	100,403	115,940	123,726	136,015	153,985				119,797
50 to 54	118,064	126,255	115,626	100,096	88,697	113,199	120,680	123,573	165,934				130,150
55 to 59			70,416			115,438	146,776	128,683	133,053	174,135			137,575
60 to 64	123,458				88,020				155,001	71,498			119,406
65 to 69		181,575	106,221										143,898
70 and up													
Totals	75,422	77,274	89,241	86,871	97,417	110,375	122,501	129,918	158,001	153,608			101,919

The salary shown in the above chart was used for valuation purposes and assumes pay increases for the year.

Table D-1:
Active Members Distribution of
Part-Time Employees
as of June 30, 2025

Number of Employees

	Completed Years of Service												
Age	0	1	2	3 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40+	Totals
<25	14	1	1										16
25 to 29	17	3	2	1									23
30 to 34	11		1	2	1								15
35 to 39	5	1	2		3	1	1						13
40 to 44	2			1	3								6
45 to 49	2												2
50 to 54	1				1		3						5
55 to 59	1				1								2
60 to 64					1								1
65 to 69													
70 and up					1								1
Totals	53	5	6	4	11	1	4	-	-	-	-	-	84

Table D-2:
Distribution of Inactive Lives

The charts reflects the counts and benefits used for valuation purposes as a result of data processing. Please refer to the chart on page 44 for an explanation of the number of annuitants used for valuation purposes.

Members Receiving Service Retirement Benefits as of June 30, 2025

Age	Number of Persons	Annual Benefits	Average Annual Benefits
<50	18	$ 1,025,068	$ 56,948
50 to 54	57	2,766,211	48,530
55 to 59	73	3,708,965	50,808
60 to 64	88	4,803,996	54,591
65 to 69	102	5,398,749	52,929
70 to 74	75	4,253,520	56,714
75 to 79	71	4,169,190	58,721
80 to 84	34	1,793,042	52,737
85 to 89	23	816,247	35,489
90 and up	2	81,396	40,698
Totals	543	$ 28,816,384	$ 53,069

Members Receiving Disability Retirement Benefits as of June 30, 2025

Age	Number of Persons	Annual Benefits	Average Annual Benefits
<50	12	$ 410,162	$ 34,180
50 to 54	2	84,927	42,464
55 to 59	6	266,666	44,444
60 to 64	5	184,066	36,813
65 to 69	4	126,231	31,558
70 to 74	7	249,560	35,651
75 to 79	10	381,284	38,128
80 to 84	3	95,335	31,778
85 to 89	1	31,504	31,504
90 and up	1	31,797	31,797
Totals	51	$ 1,861,532	$ 36,501

Table D-2:
Distribution of Inactive Lives

Please refer to the chart on page 44 for an explanation of the number of annuitants used for valuation purposes.

Survivors of Deceased Retired Members as of June 30, 2025

Age	Number of Persons	Annual Benefits	Average Annual Benefits
<50	1	$ 42,369	$ 42,369
50 to 54	2	86,122	43,061
55 to 59	1	27,520	27,520
60 to 64	11	520,791	47,345
65 to 69	9	403,638	44,849
70 to 74	17	845,257	49,721
75 to 79	24	1,130,287	47,095
80 to 84	16	700,348	43,772
85 to 89	23	844,724	36,727
90 and up	24	749,061	31,211
Totals	128	$ 5,350,117	$ 41,798

Survivors of Deceased Active Members as of June 30, 2025

Age	Number of Persons	Annual Benefits	Average Annual Benefits
<50	2	$ 67,399	$ 33,700
50 to 54	2	67,246	33,623
55 to 59	1	39,342	39,342
60 to 64	1	26,579	26,579
65 to 69	1	33,226	33,226
70 to 74	1	40,447	40,447
75 to 79	3	121,662	40,554
80 to 84	-	-	-
85 to 89	3	85,409	28,470
90 and up	-	-	-
Totals	14	$ 481,310	$ 34,379

Table D-2:
Distribution of Inactive Lives

Please refer to the chart on page 44 for an explanation of the number of annuitants used for valuation purposes.

Terminated Vested Members as of June 30, 2025
Number of Persons

Age	Number
<25	
25 to 29	
30 to 34	9
35 to 39	8
40 to 44	19
45 to 49	18
50 to 54	3
55 to 59	3
60 to 64	2
65 to 69	
70 and above	
Total	62

Table D-3:
Data Reconciliation

The following table shows a reconciliation of the participants used in the previous valuation to this valuation. This chart reflects the counts used for valuation purposes as a result of data processing.

	Active Contributing Members	Terminated Vested Members	Service Retired Members	Disabled Members	Survivors and Beneficiaries
June 30, 2024 Valuation	833	54	531	51	142
Refunds and Non-Vested Terminations	(25)				(5)
Vested Terminations	(11)	11			
Service Retirements	(19)	(3)	22		
Disability Retirements					
Deaths			(11)	(1)	5
New Entrants	163				
Rehires	3				
Other			1	1	
June 30, 2025 Valuation	944	62	543	51	142

Comparative Schedules

This section contains tables that summarize the experience of the System shown in present and past valuation reports.

Table E-1 shows a summary of the active members covered as of the various valuation dates.

Table E-2 shows a summary of the retired and inactive members as of the various valuation dates.

Table E-3 summarizes the contribution rates determined by each annual actuarial valuation.

Table E-1:
Active Membership Data

Valuation Date June 30,	Actives	Annual Salaries in Thousands	Average Annual Salary	Average Age	Average Years of Service	Average Hire Age
2025	944	83,372	88,317	38.3	8.9	29.4
2024	833	71,768	86,155	38.9	9.7	29.2
2023	826	65,575	79,389	38.9	9.7	29.2
2022	749	59,394	79,298	39.5	10.5	29.0
2021	734	56,282	76,678	39.6	10.6	29.0
2020	735	53,859	73,277	39.6	10.4	29.2
2019	722	50,756	70,300	39.6	10.5	29.2
2018	691	47,935	69,370	39.6	10.5	29.1
2017	678	45,208	66,679	39.9	10.6	29.3
2016	644	43,119	66,955	40.1	10.8	29.3
2015	627	41,041	65,457	39.1	11.0	28.1
2014	616	39,495	64,155			
2013	610	37,727	61,848			
2012	590	35,849	60,762			

Table E-2:
Retired and Inactive Membership Data

		All Annuitants					Terminated Members	
Valuation Date June 30,	Number	Annual Benefits in Thousands	Average Annual Benefit	Average Current Age	Average Age at Retirement	Average Service at Retirement	Number Vested Terminated	Number Non-Vested Terminated
2025	736	36,509	49,605	65.4	52.6	23.6	62	136
2024	724	34,574	47,754	65.0	52.6	23.7	54	118
2023	710	32,557	45,854	64.8	52.5	23.8	49	106
2022	704	31,001	44,035	64.6	52.6	24.0	51	92
2021	692	29,009	41,920	64.4	52.5	24.1	43	81
2020	678	27,589	40,691	68.7	52.5	24.0	39	72
2019	661	25,880	39,153	68.8	52.4	24.3	36	67
2018	652	24,497	37,571	66.6	51.7	23.9	41	66
2017	630	22,876	36,310	68.5	51.8	20.1	39	54
2016	621	21,568	34,731	69.3	52.6	23.7	77	27
2015	609	20,322	33,369	68.4	50.5	24.1	71	21
2014	595	19,208	32,282				66	19
2013	587	18,234	31,063				63	15
2012	571	17,066	29,889				62	13

Table E-3:
Contribution Rates

Valuation Date June 30,	Contribution Rates			Normal Cost Rate*	UAAL Rate**
	Employee***	Employer/State	Total		
2025	10.70 %	46.97 %	57.67 %	31.43 %	26.24 %
2024	10.70	46.97	57.67	31.70	25.97
2023	10.70	46.97	57.67	32.01	25.66
2022	10.69	46.97	57.66	32.20	25.46
2021	10.69	46.97	57.66	24.86	32.80
2020	10.69	46.97	57.66	25.05	32.61
2019	10.69	46.97	57.66	24.97	32.70
2018	10.69	46.97	57.66	25.19	32.47
2017	10.69	46.97	57.66	24.99	32.67
2016	10.69	46.97	57.66	26.67	30.99
2015	10.69	46.97	57.66	26.70	30.96
2014	10.69	46.97	57.66	26.70	30.96
2013	10.69	46.97	57.66	26.59	31.07
2012	10.69	46.97	57.66	26.50	31.16

* Includes administrative expenses for the 2014 through 2021 Valuation Dates.
** The UAAL rate is the amount available to amortize the UAAL. It is equal to the total contribution rate, minus the normal cost rate.
*** Members who have elected GABA contribute 10.70% of compensation. Members who have not elected GABA contribute 9.50% of compensation. The employee contribution rate reflects the average contribution rate of all employees.

APPENDIX F – FINANCIAL STATEMENT INFORMATION

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

Valuation date	June 30, 2025
Actuarial cost method	Entry Age Normal
Amortization method	Open
Remaining amortization period	8 Years
Asset valuation method	Four-year smoothed market
Actuarial assumptions:	
Investment rate of return*	7.30%
General wage growth*	3.50%
Merit salary increases	1.0% - 6.4%
*Includes inflation	2.75%

Gain and Loss in Accrued Liability During Years Ended June 30 Resulting from Differences Between Assumed Experience and Actual Experience						
	Gain or (Loss) for Year Ending June 30, (expressed in thousands)					
Type of Activity	2020	2021	2022	2023	2024	2025
Investment Income on Actuarial Value of Assets	$ (4,012)	$ 14,399	$ 1,093	$ (356)	$ 8,507	$ (11,346)
Combined Liability Experience	(3,723)	(2,870)	(3,772)	(5,949)	(5,192)	(22,345)
(Loss)/Gain During Year from Financial Experience	$ (7,735)	$ 11,529	$ (2,679)	$ (6,305)	$ 3,315	$ (33,691)
Non-Recurring Items	0	0	(65,995)	0	0	0
Composite Gain of (Loss) During Year	$ (7,735)	$ 11,529	$ (68,674)	$ (6,305)	$ 3,315	$ (33,691)

Schedule of Funding Progress (expressed in thousands)						
Valuation Date June 30,	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Funded Ratio	Unfunded AAL (UAAL)	Covered Payroll	UAAL as a Percentage of Covered Payroll
2025	$ 770,478	$ 915,318	84%	$ 144,840	$ 83,372	174%
2024	716,672	844,848	85%	128,176	71,768	179%
2023	652,590	794,682	82%	142,092	65,575	217%
2022	603,174	748,060	81%	144,887	59,394	244%
2021	555,517	646,173	86%	90,656	56,282	161%
2020	499,180	612,294	82%	113,114	53,859	210%

Valuation Date June 30,	Solvency Test Aggregate Accrued Liabilities for (expressed in thousands) Active Member Contributions (1)	Retirees & Beneficiaries (2)	Active Member Employer Financed Contributions (3)	Actuarial Value of Reported Assets	Portion of Accrued Liability Covered by Reported Assets (1)	(2)	(3)
2025	$ 71,514	$ 533,961	$ 309,844	$ 770,478	100%	100%	53%
2024	63,180	508,685	272,983	716,672	100%	100%	53%
2023	59,030	480,451	255,202	652,590	100%	100%	44%
2022	56,109	460,314	231,637	603,174	100%	100%	37%
2021	54,685	412,744	178,744	555,517	100%	100%	49%
2020	52,250	395,697	164,347	499,180	100%	100%	31%

APPENDIX G –GLOSSARY

The following definitions are largely excerpts from a list adopted in 1981 by the major actuarial organizations in the United States. In some cases the definitions have been modified for specific applicability to the Firefighters' Unified Retirement System. Defined terms are capitalized throughout this Appendix.

Accrued Benefit

The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.

Actuarial Accrued Liability

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation, rates of investment earnings, and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.

Actuarial Cost Method

A procedure for determining the Actuarial Present Value of pension plan benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.

Actuarial Gains and Losses

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, as determined in accordance with a particular Actuarial Cost Method.

Actuarial Present Value

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.

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 pension plan.

Actuarial Value of Assets

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

Amortization Payment

That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Entry Age Actuarial Cost Method

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

Market Value of Assets

The fair value of cash, investments and other property belonging to a pension plan that could be acquired by exchanging them on the open market.

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.

Projected Benefits

Those pension plan 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.

Unaccrued Benefit

The excess of an individual's Projected Benefits over the Accrued Benefits as of a specified date.

Unfunded Actuarial Accrued Liability

The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.