STATE OF IOWA PEACE OFFICERS' RETIREMENT, ACCIDENT AND DISABILITY SYSTEM

Actuarial Valuation Report as of July 1, 2025

SUBMITTED: OCTOBER 10, 2025

CavMac
Actuarial Consulting Services

TABLE OF CONTENTS

CavMac
Actuarial Consulting Services

October 10, 2025

Board of Trustees
Iowa Peace Officers' Retirement, Accident
and Disability System
215 East 7th Street
Des Moines, IA 50319

Dear Members of the Board:

At your request, we have performed an actuarial valuation of the Iowa Peace Officers' Retirement, Accident and Disability System (POR) as of July 1, 2025. The purpose of this report is to provide a summary of the funded status of the System as of July 1, 2025 and determine the normal contribution rate as defined in Iowa Code Chapter 97A.8. There have been no changes to the actuarial assumptions and methods since the prior valuation. However, there were changes to the plan provisions due to the passage of House File 969 which broadened the coverage of cancer and infectious diseases and increased the member contribution rate beginning July 1, 2025.

The System is funded with fixed contribution rates for the members (11.525%) and the State (37.000%). In addition, the State makes a supplemental contribution of $5.0 million which is payable until the funded ratio reaches 85%. This current funding policy is projected to result in the System's funded status remaining between 75% and 85% over the next 10 years if all actuarial assumptions, including a 6.50% investment return, are met each year in the future. While the System is not projected to move to a funded ratio of 100%, there is not a projected depletion date and the System is expected to be able to pay all future benefits as they become due. However, there is risk to the System's funding if unfavorable experience occurs since the contributions coming into the System do not adjust when actual experience is less favorable than assumed. In order to improve the System's funded ratio and move it to 100% over a reasonable period, additional contributions above the current level will be necessary. We are happy to assist in further analysis if there is interest in considering alternate funding policies.

In preparing our report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, member data and financial information. We found this information to be reasonably consistent and comparable with information provided in prior years. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different, and our calculations may need to be revised.

We further certify that all costs, liabilities, rates of interest and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the System.

Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C.

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.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for the System. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. Actuarial computations for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standards No. 67 and No. 68 are provided in a separate report.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We respectfully submit the following report and look forward to discussing it with you.

Patrice A. Beckham, FSA, EA, FCA, MAAA
Consulting Actuary

Aaron J. Chochon, ASA, EA, FCA, MAAA
Senior Actuary

SECTION 1 – EXECUTIVE SUMMARY

Purpose of the Report

This report presents the results of the July 1, 2025 actuarial valuation of the Iowa Peace Officers' Retirement, Accident and Disability System (POR). The primary purposes of performing the valuation are as follows:

- to determine the normal contribution rate payable by the State under Chapter 97A.8(1)(b) of the Code of Iowa (referred to in this report as the "actuarial contribution rate");
- to evaluate the sufficiency of the statutory contribution rates to fund the System over the long term;
- to satisfy the reporting requirements under Chapter 97 D.5 of the Code of Iowa;
- to assess and disclose the key risks associated with funding the System;
- to disclose asset and liability measures indicating the current funded status of the System as of the valuation date; and
- to analyze and report on trends in System contributions, assets, and liabilities over the past several years.

There have been no changes to the actuarial assumptions or methods since the last valuation. However, there was a change to the plan provisions because of the passage of House File 969 which broadened the cancer and infectious disease definition to include all cancers and increased the POR member contribution rate from 11.400% to 11.525%, effective July 1, 2025. Due to the small impact this change is expected to have on accidental disabilities in the active POR membership, the underlying disability assumption was not changed. Therefore, House File 969 did not impact the actuarial accrued liability in the July 1, 2025 actuarial valuation.

The valuation results provide a "snapshot" view of the System's financial condition on July 1, 2025. The unfunded actuarial accrued liability (UAAL) decreased slightly from $221 million on July 1, 2024 to $220 million on July 1, 2025, primarily due to favorable experience on the System's assets.

The key factors impacting the actuarial contribution rate from the last valuation include:

- The rate of return on the market value of assets for fiscal year 2025, as provided by the State Treasurer's office, was 10.4%. However, due to the use of an asset smoothing method, only part of the actuarial gain (return above the assumed 6.5%) for this year is recognized in the current valuation. Coupled with the scheduled recognition of the current year's portion of deferred investment experience from prior years, the rate of return on the actuarial value of assets was 6.9%, higher than the expected return of 6.5%. This produced an actuarial gain that decreased the UAAL by $3.2 million and decreased the actuarial contribution rate by 0.373% of pay. The market value of assets is now 0.7% higher than the actuarial (smoothed) value of assets, reflecting a net deferred investment gain.

- The total statutory contribution rate for fiscal year 2025 was lower than the actuarial contribution rate. This contribution shortfall resulted in an increase in the UAAL of $6.7 million, which increased the actuarial contribution rate by 0.792% of pay.

- There was a net liability loss of $1.6 million, primarily due to mortality and salary experience that were less favorable than expected, based on the actuarial assumptions. The liability experience increased the actuarial contribution rate by 0.184% of pay.

A more detailed discussion of actual experience is included later in this section of the report.

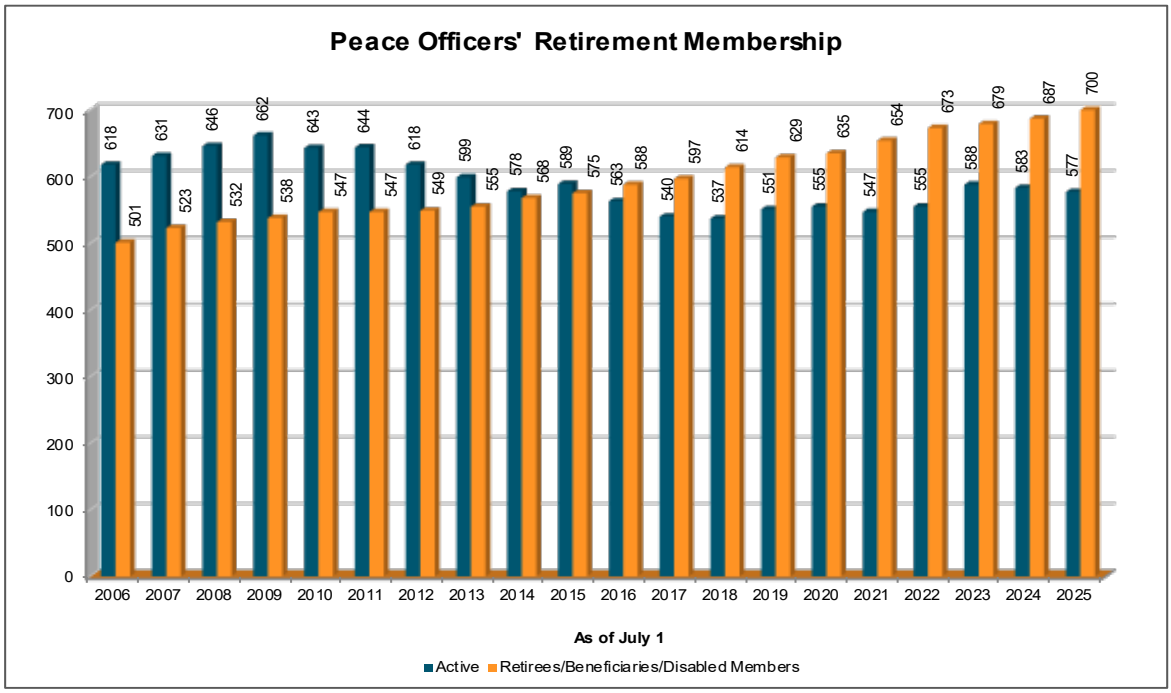
The experience of both the System's assets and liabilities impacts the System's funded status as well as the actuarial contribution rate. Experience that is more favorable than anticipated, based on actuarial assumptions, will generally lower the UAAL and the actuarial contribution rate, while experience that is less favorable than expected will generally increase the UAAL and the actuarial contribution rate.

The State's actuarial contribution rate increased from 56.670% in last year's valuation to 57.021% this year, given the member contribution rate of 11.525%. The State's actuarial contribution rate exceeds the State's fixed payroll-related contribution rate for FY 2026 of 37.000% by 20.021% of pay. However, by statute the State is required to make supplemental contributions of $5.0 million per year until the System is at least 85% funded. With the State's supplemental contribution for FY 2026, the contribution shortfall is reduced to 11.747% of pay, or about $7.1 million. The supplemental contribution of $5.0 million is an important component of strengthening PORS' long-term funding as it represents an additional funding source of about 8.3% of payroll.

Membership

The number of active members decreased from 583 in the prior valuation to 577 in the current valuation, a decrease of 1.0%. Due to the decrease in active membership, the total covered payroll of POR increased by 2.5%, below the expected increase of 2.75%. The lower active payroll than expected has a negative impact on the long-term funding of the System because the member and State fixed contribution rates result in a lower dollar amount of contributions, paying down the UAAL less rapidly.

As the following graph indicates, the number of active members in the System has decreased about 13% since 2009. Over this period, the number of retirees has continually grown to the point where the number of retirees is larger than the number of actives. This is not necessarily problematic and, in fact, is a key reason for funding retirement systems in advance. Such growth in the number of retirees is expected and factored into the valuation process. However, this demographic characteristic can create a funding challenge because the volatility in investment returns has a greater impact on the actuarial contribution rate due to the size of plan assets compared to active member payroll. See Table 14 for more information.



Assets

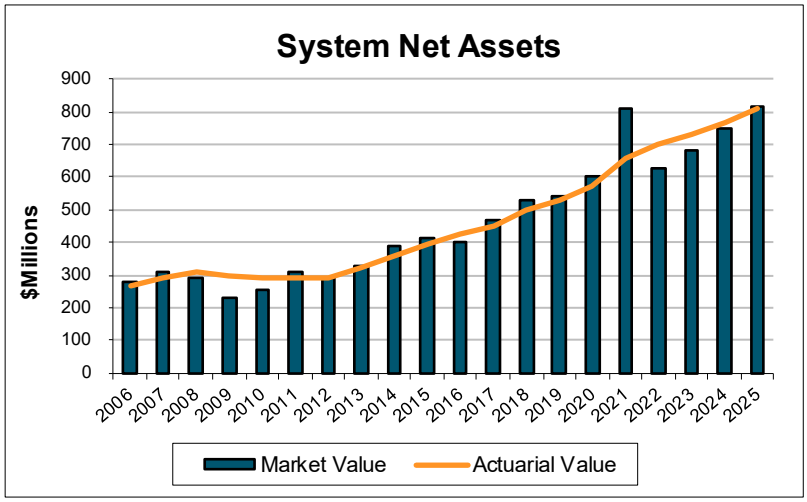
As of July 1, 2025, the System had total funds, on a market value basis, of $817.7 million. This is an increase of $68.6 million from last year's market value of $749.1 million. The market value of assets is not used directly in the calculation of the funded status or the actuarial contribution rate. The System uses an asset valuation method to smooth the effects of market fluctuations. The actuarial value of assets spreads the difference between the actual return and the expected return (based on the actuarial assumption) on the market value of assets evenly over five years. See Tables 3 and 4 for a detailed development of the actuarial value of assets. The components of the change in the asset values are shown in the following table:

	Market Value	Actuarial Value
Net Assets, July 1, 2024	$749,102,528	$768,394,237
· Member Contributions	7,248,816	7,248,816
· Employer Contributions	21,696,838	21,696,838
· Supplemental State Appropriations	5,000,000	5,000,000
· Benefit Payments	(43,181,538)	(43,181,538)
· Administrative Expenses	(307,048)	(307,048)
· Investment Income	78,156,743	52,811,973
Net Assets, July 1, 2025	$817,716,339	$811,663,278

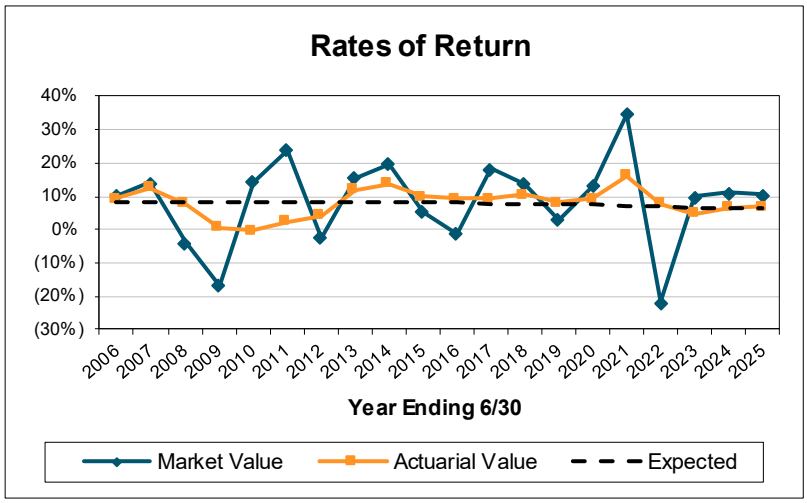
SECTION 1 – EXECUTIVE SUMMARY

The net rate of return on the market value of assets for FY 2025, as provided by the State Treasurer's office, was 10.4%. Measured on the actuarial value of assets, the rate of return was 6.9% which resulted in an actuarial gain of $3.2 million.

The market value of assets is currently $6.1 million, or about 0.7%, higher than the actuarial value of assets. This net deferred asset gain will be recognized over the next four years, resulting in an decrease in the actuarial contribution rate, unless offset by unfavorable experience in future years.



During this period, the actuarial value of assets has been both above and below the market value of assets, which is expected when using an asset smoothing method.



Rates of return on the market value of assets have been extremely volatile, while the return on the actuarial value of assets has been more stable. This illustrates the advantage of using an asset smoothing method.

System Liabilities

The actuarial accrued liability is that portion of the present value of future benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial accrued liability (UAAL). The UAAL will be reduced if the employer's contributions exceed the employer's normal cost for the year, after allowing for interest on the previous balance of the unfunded actuarial accrued liability.

Benefit improvements, experience gains and losses, and changes in actuarial assumptions and methods will also impact the total actuarial accrued liability (AAL) and the unfunded portion thereof.

The unfunded actuarial accrued liability as of July 1, 2025 is as follows:

Actuarial Accrued Liability	$1,031,387,817
Actuarial Value of Assets	811,663,278
Unfunded Actuarial Accrued Liability	$219,724,539

See Table 7 for the detailed development of the actuarial accrued liability and the unfunded actuarial accrued liability.

Factors influencing the UAAL from year to year include actual experience versus that expected based on the actuarial assumptions (for both assets and the actuarial accrued liability), changes in actuarial assumptions, procedures or methods and any changes in benefit provisions. The actual experience measured in this valuation is that which occurred during the prior plan year (FY 2025). There was an $3.2 million experience gain on the actuarial value of assets, as discussed earlier, and a $1.6 million net experience liability loss, primarily due to mortality and salary experience that were less favorable than expected, based on actuarial assumptions. The net result of both asset and liability experience was a decrease in the UAAL of $1.6 million.

Between July 1, 2024 and July 1, 2025, the change in the unfunded actuarial accrued liability for the System was as follows (in millions):

	$ millions
Unfunded Actuarial Accrued Liability, July 1, 2024	$220.6
· expected decrease due to amortization method	(5.2)
· effect of contributions below the actuarial rate	6.7
· investment experience	(3.2)
· liability experience*	1.6
· other experience	(0.8)
Unfunded Actuarial Accrued Liability, July 1, 2025	$219.7

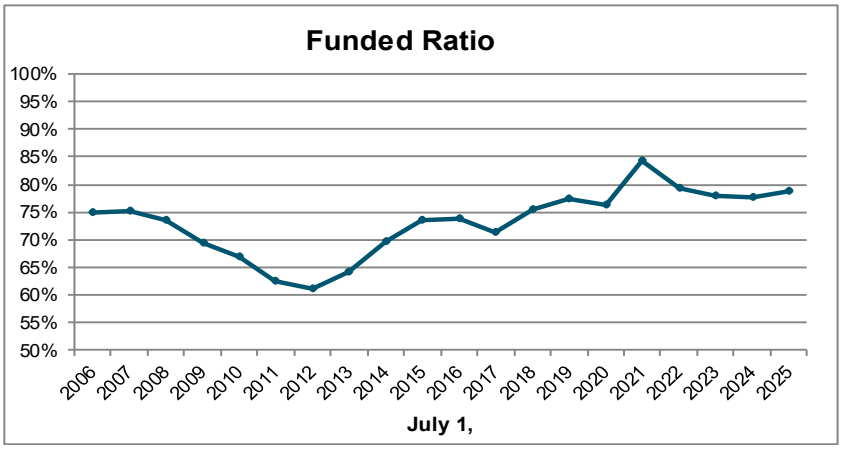
* Liability loss is about 0.2% of total actuarial accrued liability.

An evaluation of the unfunded actuarial accrued liability on a pure dollar basis may not provide a complete analysis since only the difference between the assets and liabilities (which are both very large numbers) is reflected. Another way to evaluate the unfunded actuarial accrued liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial accrued liability. The funded status information, on both an actuarial and a market value basis, is shown on the following table (in millions). Note that the funded ratio does not indicate whether the System has sufficient funds to settle all current obligations, nor is it necessarily indicative of the need for future funding.

	7/1/2021	7/1/2022	7/1/2023	7/1/2024	7/1/2025
Using Actuarial Value of Assets:					
Funded Ratio	84.4%	79.2%	77.9%	77.7%	78.7%
Unfunded Actuarial Accrued Liability (UAAL)	$122	$184	$207	$221	$220
Using Market Value of Assets:					
Funded Ratio	103.5%	70.7%	72.9%	75.7%	79.3%
Unfunded Actuarial Accrued Liability (UAAL)	($27)	$259	$254	$240	$214

Note: assumptions were changed in the 2022 valuation.

The funded status of the System over the last 20 years is shown in the following graph. Due to the asset smoothing method, the impact of the Great Recession was not fully recognized until the 2012 valuation, at which point the funded ratio was 61%. Since that time, strong investment returns and increasing contributions have strengthened the funded status of the System. The decrease in the funded ratio during the 2022 valuation was primarily due to the adoption of a new set of actuarial assumptions, which included lowering the assumed investment rate of return from 7.0% to 6.5%.



Contribution Rates

Under the Entry Age Normal cost method, the actuarial contribution rate consists of:

- a “normal cost” for the portion of projected liabilities allocated by the actuarial cost method to service of members during the current year;
- an “administrative expense” for the expenses expected to be paid from the trust for the year; and
- an “unfunded actuarial accrued liability contribution” for the excess of the actuarial accrued liability over the actuarial value of assets.

The UAAL is funded using a "layered" approach with new pieces of UAAL amortized as a level-percent of payroll over a closed 20-year period, beginning with the July 1, 2018 valuation. The legacy UAAL (amount as of July 1, 2017) continues to be amortized on its existing schedule (13 years remaining).

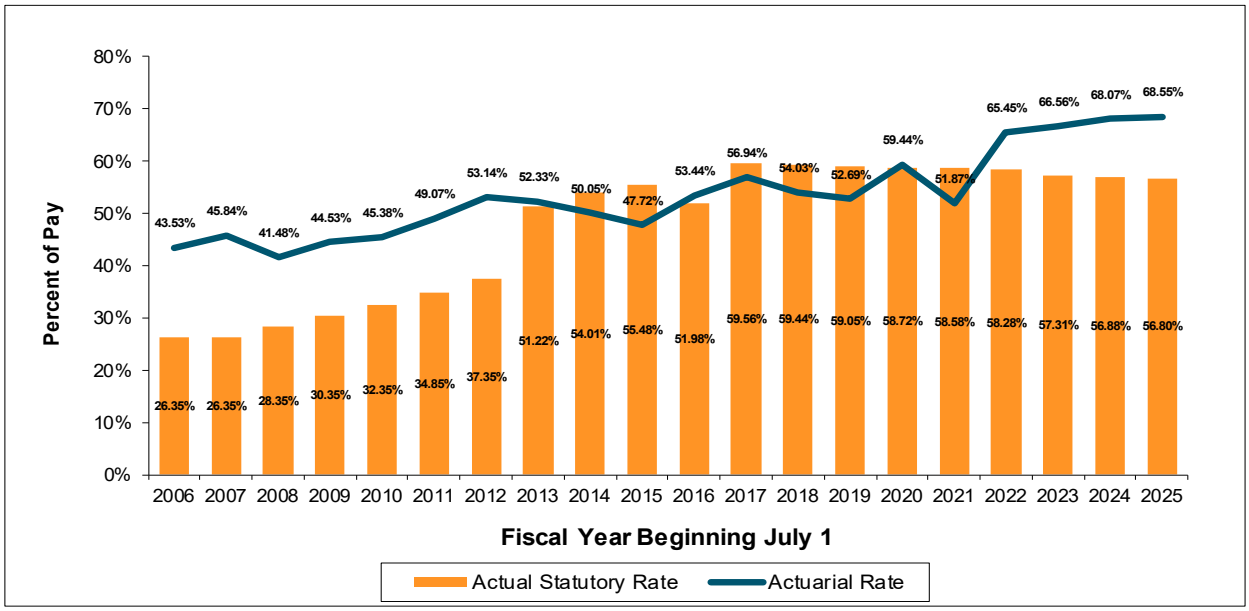
The total actuarial contribution rate for the Plan Year beginning July 1, 2025 is 68.546% of covered payroll. Based on the member contribution rate of 11.525%, the State's portion of the actuarial contribution rate is 57.021%, an increase of 0.351% from the prior valuation. The sources of change are shown in the following table. The largest factor in the change in the actuarial contribution rate from the prior valuation was the actual contribution less than the actuarial contribution amount, which increased the contribution rate by 0.792%. This unfavorable experience was partially offset by the favorable experience on assets.

	Plan Year Beginning	
	July 1, 2025	July 1, 2024
Prior year total contribution rate	68.070%	66.560%
· change due to asset (gains)/losses	(0.373%)	(0.190%)
· change due to liability and other experience	(0.002%)	1.770%
· change due to actual contribution rate (above)/below the actuarial rate	0.792%	0.650%
· payroll increase (greater)/less than assumed	0.068%	(0.730%)
· change in normal cost rate	(0.009%)	0.010%
Current year total actuarial contribution rate	68.546%	68.070%
Members' contribution rate	(11.525%)	(11.400%)
State's actuarial contribution rate	57.021%	56.670%

Contributions to the System are made by both the members and the State. Historically, members contributed 9.35% of pay, but the member contribution rate increased to 9.85% for FY 2012, 10.35% for FY 2013, 10.85% for FY 2014 and to a rate of 11.35% in FY 2015 (changed to 11.40% in conjunction with a benefit change by the 2014 legislature). Effective July 1, 2025, the member contribution rate increased to 11.525% due to the passage of House File 969. The State's contribution rate was 17.00% of pay for many years but began increasing 2.00% per year commencing July 1, 2008. In 2010, the Legislature passed a bill that continued the 2.00% annual increase with an ultimate contribution rate of 37.00% for FY 2018 and thereafter until the normal contribution rate is less than 37.00%. It also provided for a supplemental State appropriation of $5.0 million per year beginning July 1, 2013 (originally July 1, 2012 but extended by the 2012 legislature) and ending June 30 of the fiscal year during which the System's funded ratio is at least 85%. However, HF 2459 in the 2016 session reduced the supplemental contribution for FY 2017 to $2.5 million. The supplemental contribution returned to $5.0 million for FY 2018 and is expected to remain at that level.

Projected results over the next 10 years, assuming all assumptions are met each year, indicate that the supplemental contributions of $5.0 million from the State will continue to be needed. However, actual experience will unfold differently than assumed, especially from year to year, and is therefore expected to impact these projections, perhaps significantly. The State's fixed contribution rate of 37.000% and the supplemental contributions of $5.0 million payable until the funded ratio is 85%, along with the member contribution rate of 11.525%, are expected to maintain the System's funded status between 75% to 85% over the next 10 years if all actuarial assumptions, including a 6.50% return, are met each year in the future. While the System is not projected to move to a funded ratio of 100%, there is not a projected depletion date, and the System is expected to be able to pay all future benefits as they become due, if all assumptions are met. However, there is risk to the System's funding if unfavorable experience occurs since contribution rates to fund the System do not adjust when actual experience is less favorable than assumed. In order to improve the System's funded ratio and move it to 100% over a reasonable period, a one-time infusion of additional money or higher ongoing contributions will be necessary. We are happy to assist in further analysis if there is interest in considering alternate funding policies.

The following graph shows the total actuarial contribution rate compared to the actual contribution rate in each year.



Following an eleven-year period in which actual statutory contributions to the System were significantly less than the actuarial contribution rate, the statutory contribution rate regularly exceeded the actuarial rate between fiscal year 2014 and fiscal year 2022. However, because the State contributes a fixed rate of pay, contributions do not automatically adjust when the System experiences actuarial gains and losses, or when there are changes to benefit provisions or actuarial assumptions. This method of funding, combined with the fact that the assumed rate of return on investments has decreased from 7.50% to 6.50% since July 1, 2019, has resulted in contribution

shortfalls in each of the past four valuations. Retirement systems that are funded with fixed contribution rates typically oscillate between rates that are above and then below the actuarial contribution rate. The pattern observed for POR in recent years is not unexpected or unusual, but it should continue to be closely monitored given the substantive contribution shortfall. If the trend continues, some adjustment to the funding policy may be needed.

Summary

The System's funded ratio, based on the actuarial value of assets, increased slightly from 78% in last year's valuation to 79% in the current valuation. On a market value of assets basis, the System's funded ratio increased from 76% to 79% due to the investment return in FY 2025 of 10.4%.

The combined contribution rate for members and the State, including the $5 million, is 56.799% of pay, which is well above the 35.842% of pay required to fund the System's normal cost and administrative expenses. However, a contribution rate of 59.476% is needed to fund the normal cost and the interest on the UAAL. As a result, the current contribution levels do not move the System's funded ratio significantly over the next ten to twenty years. In addition, future investment experience will have a significant impact on the System's funding progress. We will continue to monitor the actuarial metrics in the valuation and evaluate the System's long-term funding in future valuations.

The State's actuarial contribution rate for FY 2025 was 56.670%, while the State's statutory fixed contribution rate was only 37.000% of covered payroll. However, the $5.0 million supplemental contribution by the State for FY 2025 represented about 8.480% of payroll so the total expected State contribution for FY 2025 was 45.480%, still below the actuarial contribution rate by 11.190% of pay. This resulted in an increase to the UAAL of $6.7 million. The supplemental contribution of $5.0 million remains in place for FY 2026 and reduces the contribution shortfall for FY 2026. If all actuarial assumptions are met, the System's funded ratio is expected to remain under 85% for ten years indicating the supplemental contribution of $5 million will be needed.

The long-term financial health of this, and all retirement systems, is heavily dependent on two key items: (1) future investment returns and (2) contributions to the System. Over the past five years, the actual dollar amount of investment return, in total, was greater than the expected return on a market basis and, as a result, the System has $6.1 million in net deferred asset gains that will be recognized in the actuarial value of assets over the next four years. In addition, total contributions have been below the actuarial contribution rate in the past four years, which has decreased the System's funding. However, if the System's funded ratio is to move to 100% over a reasonable period of time, a one-time infusion of additional money or higher ongoing contributions will be needed, assuming all assumptions are met.

A typical retirement plan faces many different risks. 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, year to year, as anticipated by the assumptions and that uncertainty, whether favorable or unfavorable, creates risk. Actuarial Standard of Practice Number 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. Risk evaluation is an important part of managing a defined benefit plan. Please see Section 5 of this report for an in-depth discussion of the specific risks facing the Iowa Peace Officers' Retirement, Accident and Disability System.

A summary of key data elements and valuation results as of July 1, 2025 and July 1, 2024 is presented on the following page. More detail on each of these elements can be found in the following Sections of this report.

SUMMARY OF PRINCIPAL RESULTS

	July 1, 2025 Valuation	July 1, 2024 Valuation	% Change
PARTICIPANT DATA			
Number of			
Active Members	577	583	(1.0)
Retirees/Beneficiaries/Disabled Members	700	687	1.9
Inactive Vested Members	43	44	(2.3)
Inactive Nonvested Members	12	12	0.0
Total Members	1,332	1,326	0.5
Projected Annual Salaries of Active Members	$ 60,431,321	$ 58,935,416	2.5
Average Annual Projected Salary	$ 104,734	$ 101,090	3.6
Average Annual Benefit for Retired Members, Disabled Members and Beneficiaries	$ 65,113	$ 62,559	4.1
ASSETS AND LIABILITIES			
Total Actuarial Accrued Liability	$1,031,387,817	$988,955,331	4.3
Actuarial Value of Assets	811,663,278	768,394,237	5.6
Unfunded Actuarial Accrued Liability	$219,724,539	$220,561,094	(0.4)
Funded Ratio (Actuarial Value of Assets)	78.7%	77.7%	1.3
Market Value of Assets	$817,716,339	$749,102,528	9.2
Funded Ratio (Market Value of Assets)	79.3%	75.7%	4.8
CONTRIBUTION RATES			
Normal Cost Rate	35.321%	35.330%	(0.0)
Administrative Expenses	0.521%	0.620%	(16.0)
Amortization of Unfunded Actuarial Accrued Liability (Level Percent of Payroll)	32.704%	32.120%	1.8
Actuarial Required Contribution Rate	68.546%	68.070%	0.7
Member Contribution Rate	(11.525%)	(11.400%)	1.1
Employer Actuarial Required Contribution Rate	57.021%	56.670%	0.6
Statutory State Fixed Contribution Rate	(37.000%)	(37.000%)	0.0
State Supplemental Contribution*	(8.274%)	(8.480%)	(2.4)
Contribution Shortfall/(Margin)	11.747%	11.190%	5.0

* The supplemental contribution is $5 million annually until the System is at least 85% funded.

SECTION 2 – SYSTEM ASSETS

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is July 1, 2025. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System, which are generally in excess of assets. The actuarial process leads to a method of determining the contributions needed by members and the employer in the future to balance the System assets and liabilities.

Market Value of Assets

The current market value represents the "snapshot" or "cash-out" value of System assets as of the valuation date. In addition, market values of assets provide a basis for measuring investment performance from time to time. At July 1, 2025, the market value of assets for the Retirement System was $817.7 million. Table 1 is a comparison, at market values, of System assets as of July 1, 2024 and July 1, 2025, in total and by investment category. Table 2 summarizes the change in the market value of assets from July 1, 2024 to July 1, 2025.

Actuarial Value of Assets

The market value of assets, representing a "cash-out" value of System assets, is not the best measure of the System's ongoing ability to meet its obligations. To arrive at a suitable value for the actuarial valuation, a technique for determining the actuarial value of assets is used which dampens swings in the market value while still indirectly recognizing market values. The actuarial value of assets is equal to the market value of assets less a five-year phase-in of the excess (shortfall) between expected investment return (based on the actuarial assumption) and actual investment return.

Tables 3 and 4 show the development of the actuarial value of assets (AVA) as of the valuation date.

TABLE 1

ANALYSIS OF NET ASSETS AT MARKET VALUE

	July 1, 2025			July 1, 2024		
	Amount	% of Total		Amount	% of Total	
Pooled Cash	$ 7,933,404	0.9	%	$ 37,524,924	4.6	%
Receivables	3,331,078	0.4		4,356,587	0.5	
Common Stocks	561,112,961	66.4		496,408,340	61.2	
Securities on Loan	51,222,563	6.1		67,881,237	8.4	
Bonds	145,533,504	17.2		131,294,181	16.2	
Real Estate	76,363,491	9.0		74,024,487	9.1	
Subtotal	$845,497,001	100.0	%	$811,489,756	100.0	%
Payables	(27,780,662)			(62,387,228)		
NET ASSETS	$817,716,339			$749,102,528		

TABLE 2

SUMMARY OF FUND ACTIVITY
(Market Value)

1.	**NET ASSETS ON JULY 1, 2024**	**$ 749,102,528**
2.	**CONTRIBUTIONS**	
	a. Member Contributions	7,248,816
	b. Employer Contributions	21,696,838
	c. Supplemental State Appropriations	5,000,000
	d. Total Contributions	**$ 33,945,654**
3.	**BENEFIT PAYMENTS**	43,181,538
4.	**ADMINISTRATIVE EXPENSE**	307,048
5.	**NET INVESTMENT INCOME**	78,156,743
6.	**NET ASSETS ON JULY 1, 2025** **(1) + (2d) - (3) - (4) + (5)**	**$ 817,716,339**

TABLE 3

CALCULATION OF EXCESS (SHORTFALL) INVESTMENT INCOME FOR ACTUARIAL VALUE OF ASSETS

		Plan Year Ending				
		2025	2024	2023	2022	2021
1.	Market value of assets, beginning of year	$749,102,528	$681,343,286	$625,063,131	$807,593,863	$604,572,836
2.	Contributions during year					
	a. Member	7,248,816	6,766,569	5,990,767	6,055,840	5,457,794
	b. Employer	26,696,838	25,321,260	23,721,480	23,057,085	22,711,497
	c. Total	33,945,654	32,087,829	29,712,247	29,112,925	28,169,291
3.	Benefits and expenses paid during year	43,488,586	41,012,238	39,125,306	37,790,292	35,370,239
4.	Expected rate of return on assets	6.50%	6.50%	6.50%	7.00%	7.00%
5.	Expected net investment income*					
	a. Market value of assets, beginning of year	48,691,664	44,287,314	40,629,104	56,531,570	42,320,099
	b. Contributions	1,085,866	1,026,437	950,446	1,001,719	969,250
	c. Benefits and expenses	(1,391,129)	(1,311,915)	(1,251,555)	(1,300,290)	(1,217,021)
	d. Total	48,386,401	44,001,836	40,327,995	56,232,999	42,072,328
6.	Contributions receivable	0	0	3,752,792	0	0
7.	Expected Value of Assets (1) + (2c) - (3) + (5d) + (6)	$787,945,997	$716,420,713	$659,730,859	$855,149,495	$639,444,216
8.	Market value of assets, end of year	$817,716,339	$749,102,528	$681,343,286	$625,063,131	$807,593,863
9.	Excess (shortfall) of investment income for Year (8) - (7)	$29,770,342	$32,681,815	$21,612,427	($230,086,364)	$168,149,647

TABLE 4

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

Item	Plan Year Ending June 30 2025	2024
1. Excess (Shortfall) of investment income for current and previous 3 years		
a. Current year	$29,770,342	$32,681,815
b. One year ago	32,681,815	21,612,427
c. Two years ago	21,612,427	(230,086,364)
d. Three years ago	(230,086,364)	168,149,647
2. Deferral of excess (shortfall) of investment income		
a. Current year (80%)	23,816,274	26,145,452
b. One year ago (60%)	19,609,089	12,967,456
c. Two years ago (40%)	8,644,971	(92,034,546)
d. Three years ago (20%)	(46,017,273)	33,629,929
e. Total	$6,053,061	($19,291,709)
3. Market value of plan net assets, end of year	$817,716,339	$749,102,528
4. Actuarial value of plan assets, end of year (3) - (2e)	$811,663,278	$768,394,237
5. Actuarial value divided by market value	99.3%	102.6%

The table below shows the scheduled recognition of current deferred investment gains/(losses):

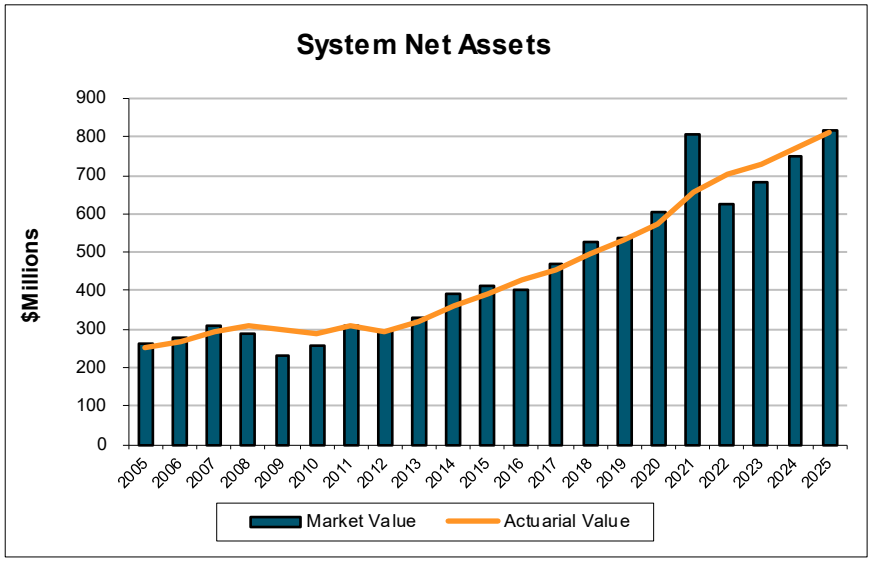
Plan Year Ended	Gain/(Loss) Deferred to Future Years	Gain/(Loss) to be Recognized in Plan Year Ending 2026	2027	2028	2029
6/30/2022	(46,017,273)	(46,017,273)			
6/30/2023	8,644,971	4,322,486	4,322,485		
6/30/2024	19,609,089	6,536,363	6,536,363	6,536,363	
6/30/2025	23,816,274	5,954,069	5,954,069	5,954,069	5,954,067
Total	$6,053,061	($29,204,355)	$16,812,917	$12,490,432	$5,954,067

TABLE 5

HISTORICAL COMPARISON

Value As of	Market Value of Net Assets	Rate of Return (MVA)*	Actuarial Value of Assets	Estimated Rate of Return (AVA)
July 1, 2011	$308,607,733	24.1%	$309,330,330	2.5%
July 1, 2012	292,823,296	(2.5%)	292,909,884	4.3%
July 1, 2013	329,920,144	15.5%	319,441,635	11.9%
July 1, 2014	392,194,960	19.9%	360,063,755	13.7%
July 1, 2015	410,598,719	5.5%	392,989,970	10.0%
July 1, 2016	403,084,512	(1.2%)	426,398,446	9.2%
July 1, 2017	468,300,420	18.4%	453,128,907	9.2%
July 1, 2018	528,781,898	13.8%	496,503,424	10.6%
July 1, 2019	539,362,237	3.0%	530,900,116	8.1%
July 1, 2020	604,572,836	13.2%	573,716,266	9.2%
July 1, 2021	807,593,863	34.8%	658,081,471	16.1%
July 1, 2022	625,063,131	(21.7%)	700,657,990	7.8%
July 1, 2023	681,343,286	9.9%	728,696,523	4.8%
July 1, 2024	749,102,528	11.2%	768,394,237	6.7%
July 1, 2025	817,716,339	10.4%	811,663,278	6.9%

* Time-weighted rate of return, as reported by the System.



SECTION 3 – SYSTEM LIABILITIES

In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of assets of the System as of the valuation date, July 1, 2025. In this section, the discussion will focus on the commitments of the System, which are referred to as its liabilities.

Table 6 contains an analysis of the actuarial present value of all future benefits (PVFB) for contributing members, inactive members, retirees and their beneficiaries. The analysis is provided for each group.

The liabilities summarized in Table 6 include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits expected to be earned. For all members, active and retired, the value extends over benefits earnable and payable for the rest of their lives and for the lives of the surviving beneficiaries.

The actuarial assumptions used to determine liabilities are based on the results of an Experience Study completed in July 2022. This current set of assumptions, as adopted by the Board, is shown in Appendix C and was first used in the July 1, 2022 valuation. The Board's election to change the actuarial cost method from Aggregate to Entry Age Normal was first reflected in the July 1, 2008 valuation.

Actuarial Liabilities

A fundamental principle in financing the liabilities of a retirement program is that the cost of its benefits should be related to the period in which benefits are earned, rather than to the period of benefit distribution. An actuarial cost method is a mathematical technique that allocates the present value of future benefits into annual costs. In order to do this allocation, it is necessary for the funding method to "breakdown" the present value of future benefits into two components:

(1) that which is attributable to the past and

(2) that which is attributable to the future.

Actuarial terminology calls the part attributable to the past the "past service liability" or the "actuarial accrued liability". The portion allocated to the future is known as the present value of future normal costs, with the specific piece of it allocated to the current year being called the "normal cost". Table 7 contains the calculation of actuarial accrued liability.

TABLE 6

PRESENT VALUE OF FUTURE BENEFITS
AS OF JULY 1, 2025

1.	Active employees	
	a. Retirement Benefit	$580,345,237
	b. Withdrawal Benefit	3,210,713
	c. Pre-Retirement Death Benefit	6,123,274
	d. Disability Benefit	48,647,948
	e. Total	$638,327,172
2.	Inactive Vested Members	9,736,279
3.	Inactive Nonvested Members	276,817
4.	Disability Retirees	81,962,237
5.	Retirees and Beneficiaries	544,668,281
6.	Total Present Value of Future Benefits (1e) + (2) + (3) + (4) + (5)	$1,274,970,786

TABLE 7

ACTUARIAL ACCRUED LIABILITY
AS OF JULY 1, 2025

1.	Present Value of Future Benefits for Active Members		
	a. Retirement Benefit	$580,345,237	
	b. Withdrawal Benefit	3,210,713	
	c. Pre-Retirement Death Benefit	6,123,274	
	d. Disability Benefit	48,647,948	
	e. Total		$638,327,172
2.	Present Value of Future Normal Costs		
	a. Retirement Benefit	$197,709,832	
	b. Withdrawal Benefit	4,887,894	
	c. Pre-Retirement Death Benefit	5,193,116	
	d. Disability Benefit	35,792,127	
	e. Total		243,582,969
3.	Present Value of Future Benefits for Inactive Members		636,643,614
4.	Total Actuarial Accrued Liability (1e) - (2e) + (3)		$1,031,387,817
5.	Actuarial Value of Assets		811,663,278
6.	Unfunded Actuarial Accrued Liability (4) - (5)		$219,724,539

TABLE 8

CALCULATION OF ACTUARIAL GAIN/(LOSS)

The actuarial gain/(loss) is comprised of both the liability gain/(loss) and the actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of July 1, 2025.

1.	Expected actuarial accrued liability		
	a. Actuarial accrued liability at July 1, 2024	$	988,955,331
	b. Normal cost for year ending June 30, 2025		19,856,220
	c. Benefit payments for fiscal year ending June 30, 2025		(43,181,538)
	d. Interest on (a), (b), and (c)		64,191,444
	e. Expected actuarial accrued liability at July 1, 2025	$	1,029,821,457
2.	Actuarial accrued liability at July 1, 2025	$	1,031,387,817
3.	Actuarial accrued liability gain/(loss) (1e) - (2)	$	(1,566,360)
4.	Expected actuarial value of assets		
	a. Actuarial value of assets at July 1, 2024	$	768,394,237
	b. Contributions for fiscal year ending June 30, 2025		33,945,654
	c. Benefit payments and administrative expenses for fiscal year ending June 30, 2025		(43,488,586)
	d. Interest on (a), (b), and (c)		49,640,363
	e. Expected actuarial value of assets at July 1, 2025	$	808,491,668
5.	Actuarial value of assets at July 1, 2025	$	811,663,278
6.	Actuarial value of assets gain/(loss) (5) - (4e)	$	3,171,610
7.	Net actuarial gain/(loss) (3) + (6)	$	1,605,250

TABLE 9

ACTUARIAL GAIN/(LOSS) BY SOURCE

The purpose of conducting an actuarial valuation of a retirement plan is to estimate the costs and liabilities for the benefits expected to be paid from the plan, to determine the annual level of contribution for the current plan year that should be made to support these benefits and, finally, to analyze the plan's experience. The costs and liabilities of this retirement plan depend not only upon the benefit formula and plan provisions but also upon factors such as the investment return on the Fund, mortality rates among active and retired members, withdrawal and retirement rates among active members, rates at which salaries increase and the rate at which the cost-of-living increases.

The actuarial assumptions employed as to these and other contingencies in the current valuation are set forth in Appendix C of this report.

Since the overall results of the valuation will reflect the choice of assumptions made, periodic studies of the various components of the plan's experience are conducted in which the experience for each component is analyzed in relation to the assumption used for that component (called an experience study). This summary is not intended to be an actual "experience study" but rather an analysis of sources of gain and loss in the past plan year.

Gain/(Loss) By Source

The System experienced a net actuarial loss on liabilities of $1,566,000 during the plan year ended June 30, 2025 and an actuarial gain on assets of $3,172,000. The net actuarial gain was $1,605,000. The major components of this net actuarial experience gain are shown below:

Liability Sources		**Gain/(Loss)**
Salary Increases	$	(917,000)
Retirements		(637,000)
Terminations		(417,000)
Disabilities		1,001,000
Deaths		(1,008,000)
New Entrants/Rehires		(374,000)
Postretirement Escalator		947,000
Miscellaneous		(161,000)
Total Liability Gain/(Loss)	$	(1,566,000)
Asset Gain/(Loss)	$	3,172,000
Net Actuarial Gain/(Loss)	$	1,605,000

Note: Numbers may not add due to rounding.

TABLE 10

ACTUARIAL BALANCE SHEET
AS OF JULY 1, 2025

ASSETS

Actuarial value of assets		$811,663,278
Present value of future normal costs		243,582,969
Unfunded actuarial accrued liability		219,724,539
Total Net Assets		$1,274,970,786

LIABILITIES

Present Value of Future Benefits		
Retired Members, Disabled Members and Beneficiaries		$626,630,518
Active Members		
Retirement	$580,345,237	
Withdrawal	3,210,713	
Death	6,123,274	
Disability	48,647,948	
Total		638,327,172
Inactive Members		10,013,096
Total Liabilities		$1,274,970,786

SECTION 4 – EMPLOYER CONTRIBUTIONS

The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 4 and 6 indicates that current assets fall short of meeting the present value of future benefits (total liability). This is expected in all but a fully closed fund, where no further contributions are anticipated.

In an active system, there will almost always be a difference between the actuarial value of assets and total liabilities. This deficiency has to be made up by future contributions and investment returns. An actuarial valuation sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion.

The method used to determine the incidence of the contributions in various years is called the actuarial cost method. Under an actuarial cost method, the contributions required to meet the difference between current assets and current liabilities are allocated each year between three elements: (1) the normal cost, (2) administrative expenses and (3) the payment on the unfunded actuarial accrued liability.

The term “fully funded” is often applied to a system in which contributions at the normal cost rate are sufficient to pay for the benefits of existing employees as well as for those of new employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely funded and/or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated. Under these circumstances, an unfunded actuarial accrued liability (UAAL) exists.

Description of Rate Components

Effective with the July 1, 2008 valuation, the actuarial cost method used by the System changed from Aggregate to the traditional Entry Age Normal (EAN) – level percent of pay cost method. Under the EAN cost method, the actuarial present value of each member’s projected benefit 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 calculated each year and reflects experience gains/losses.

The Board has elected to amortize the legacy unfunded actuarial accrued liability as of July 1, 2017 as a level-percent of payroll, over a closed 30-year period beginning July 1, 2008. New layers of unfunded actuarial accrued liability are created on each actuarial valuation date and amortized, as a level-percent of payroll, over a closed 20-year period. Changes in the unfunded actuarial accrued liability that are created by a change in assumptions or changes in benefit structure will be amortized over a reasonable time period as selected by the Board after consultation with their actuary. In our

opinion, the amortization policy meets the requirements of Actuarial Standard of Practice Number 4.

The expected total contributions in the next year from members, the employer and the State are slightly less than the normal cost plus interest on the UAAL (about 96%). Based on the current funded status of the System and ignoring future experience that will impact the funded ratio, estimated future contributions are not expected to exceed the normal cost and interest on the UAAL in the future. However, the difference is so small that the UAAL is expected to grow very slowly and, consequently, the funded ratio is expected to improve. Please note that the System's assets are expected to continue to grow in the future and be able to pay future benefits when due. However, if there is a desire to move the System to a funded ratio of 100% in a reasonable period like 20 to 25 years, additional contributions above the current level will likely be necessary. We are happy to assist in further analysis if there is interest in considering alternate funding policies.

In our professional judgement, the funding policy adopted by the Board of Trustees produces a reasonable actuarial determined contribution, as defined in Actuarial Standard of Practice Number 4. 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.

Contribution Rate Summary

The normal cost rate is developed in Table 11. Table 12 develops the contribution rate for amortization of the unfunded actuarial accrued liability. Table 13 develops the total actuarial contribution rate.

TABLE 11

NORMAL COST RATE
AS OF JULY 1, 2025

1.	Normal Cost		% of Pay
	a. Retirement Benefit	$16,477,900	28.702%
	b. Withdrawal Benefit	390,641	0.680%
	c. Pre-Retirement Death Benefit	424,022	0.739%
	d. Disability Benefit	2,985,293	5.200%
	e. Total	$20,277,856	35.321%
2.	Expected Payroll in FY26 for Current Actives	$57,409,435	
3.	Normal Cost Rate [(1e)/(2)]	35.321%	

TABLE 12

UNFUNDED ACTUARIAL ACCRUED LIABILITY CONTRIBUTION RATE AS OF JULY 1, 2025

Amortization Bases	Original Amount	July 1, 2025 Remaining Payments	Date of Last Payment	Outstanding Balance as of July 1, 2025	Annual Contribution*
2017 UAAL Base	$ 182,759,035	13	7/1/2037	$ 163,077,477	$ 15,908,633
2018 Experience Base	(20,775,216)	13	7/1/2037	(18,537,906)	(1,808,421)
2019 Experience Base	(7,599,217)	14	7/1/2038	(6,955,110)	(640,496)
2020 Assumption Change Base	42,755,186	15	7/1/2039	39,938,088	3,489,389
2020 Experience Base	(18,319,662)	15	7/1/2039	(17,112,599)	(1,495,127)
2021 Experience Base	(53,264,638)	16	7/1/2040	(50,726,636)	(4,223,147)
2022 Assumption Change Base	72,348,995	17	7/1/2041	69,982,019	5,572,867
2022 Experience Base	(8,541,603)	17	7/1/2041	(8,262,155)	(657,939)
2023 Experience Base	26,302,521	18	7/1/2042	25,799,882	1,971,795
2024 Experience Base	18,307,800	19	7/1/2043	18,156,242	1,335,730
2025 Experience Base	4,365,237	20	7/1/2044	4,365,237	309,962
Total				**$ 219,724,539**	**$ 19,763,246**

* Contribution amount reflects mid-year timing.

1. Total UAAL Amortization Payments	$ 19,763,246
2. Projected Payroll for Plan Year Ending June 30, 2026	$ 60,431,321
3. UAAL Amortization Payment Rate	32.704%

TABLE 13

ACTUARIAL CONTRIBUTION RATE
FOR FISCAL YEAR ENDING JUNE 30, 2026

1.	Total Normal Cost Rate	35.321%
2.	Administrative Expenses	0.521%
3.	Amortization of UAAL*	32.704%
4.	Total Actuarial Contribution Rate (1) + (2) + (3)	68.546%
5.	Member Contribution Rate	(11.525%)
6.	State Actuarial Contribution Rate (4) + (5)	57.021%
7.	Statutory State Fixed Contribution Rate	(37.000%)
8.	State Supplemental Contribution**	(8.274%)
9.	Contribution Shortfall/(Margin) (6) + (7) + (8)	11.747%

* Amortization of UAAL is as a level percent of payroll assuming a 2.75% annual increase in payroll.
** The supplemental contribution is $5 million annually until the System is at least 85% funded.

SECTION 5 – RISK CONSIDERATIONS

Actuarial Standards of Practice are issued by the Actuarial Standards Board and are binding on credentialed actuaries practicing in the United States. These standards generally identify what the actuary should consider, document and disclose when performing an actuarial assignment. In September 2017, Actuarial Standard of Practice Number 51, *Assessment and Disclosure of Risk in Measuring Pension Obligations*, (ASOP 51) was issued as final with application to measurement dates on or after November 1, 2018. This ASOP, which applies to funding valuations, actuarial projections, and actuarial cost studies of proposed plan changes, was first applicable for the July 1, 2019 actuarial valuation for the State of Iowa Peace Officers' Retirement, Accident and Disability System (System).

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:

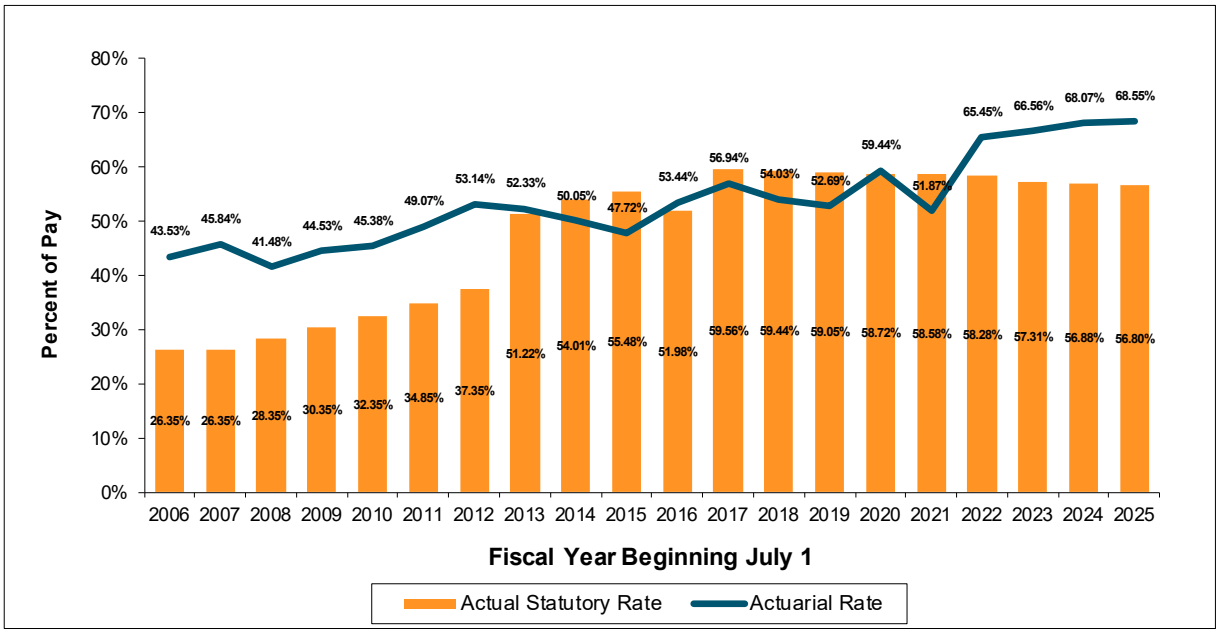
- economic risks, such as investment return and price inflation;
- demographic risks such as mortality, payroll growth, aging population including impact of baby boomers, and retirement ages;
- contribution risk, i.e., the potential for contribution rates to be too high for the plan sponsor/employer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

Although the last two are real risks to the funding of the System, ASOP 51 does not require the actuary to opine on these particular risks so no discussion is included here.

There is a direct correlation between healthy, well-funded retirement plans and consistent contributions equal to the full actuarial contribution rate each year. Fixed contribution rates to the POR System are made by both the members and the State which tends to create more risk than a system whose funding policy requires that the actuarial contribution rate be made each year. In addition, a supplemental annual State contribution of $5.0 million is required to be made until the System's funded ratio is at least 85%. However, in FY 2017, the additional contribution amount was reduced to $2.5 million, so there is some risk that the supplemental contributions could be reduced, suspended, or removed prematurely. The supplemental contribution is an important component of

the funding policy to improve the funded status of the POR System. Therefore, it is critical that the System continue to receive the supplemental contributions. For example, if the State did not contribute the additional $5.0 million in fiscal year 2026, which currently equates to 8.274% of pay, the contribution shortfall would increase to 20.021% or about $12 million.

Due to legislative changes made in 2010 and implemented over the next few years, the statutory contribution rate regularly exceeded the actuarial rate between fiscal year 2014 and fiscal year 2022. However, because the State contributes a fixed rate of pay, contributions do not automatically adjust when the System experiences actuarial gains and losses, or when there are changes to benefit provisions or actuarial assumptions. This method of funding, combined with the fact that the assumed rate of return on investments has decreased from 7.50% to 6.50% since July 1, 2019, has resulted in contribution shortfalls in each of the past four valuations.



The most significant risk factor for the Iowa Peace Officers' Retirement, Accident and Disability System is investment return because of the volatility of returns and the size of plan assets compared to payroll (see Table 14). The impact of investment risk is exacerbated by the System's funding policy which includes fixed contribution rates for both members and the State. When actual investment experience is lower than the assumed return, the contributions to the System do not automatically adjust to compensate for the loss of investment income. The delay in responding to adverse economic experience because of the need for legislation can result in a significant reduction in the System's funded status before corrective action occurs.

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 except the discount rate is derived from considering low-default-risk fixed income securities. For our analysis we used 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 the low-default-risk obligation liability to be $1.1 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. 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.

A key demographic risk for all retirement systems, including the State of Iowa Peace Officers' Retirement, Accident and Disability System, is improvements in mortality (longevity) greater than anticipated. While the actuarial assumptions reflect small, continuous improvements in mortality experience over time and these assumptions are refined every experience study, the larger 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, as we experienced with the COVID-19 pandemic. This kind of event 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.

Finally, the unfunded actuarial accrued liability is amortized as a level percentage of payroll. The underlying assumption used in developing the payment schedule assumes an increasing payroll over time which is dependent on a stable employment level, i.e., active member count remains the same. However, the number of active members in the System has decreased by 13% overall since 2009. To the extent this trend continues, covered payroll will be lower than expected which will result in fewer contribution dollars and slower funding progress.

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

TABLE 14

HISTORICAL ASSET VOLATILITY RATIOS

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	Estimated Plan Year Payroll	Asset Volatility Ratio	Increase in ACR with a Return 10% Lower than Assumed*
7/1/2006	$278,940,737	$36,231,639	7.70	5.468%
7/1/2007	310,459,530	37,268,060	8.33	5.915%
7/1/2008	290,306,257	40,829,801	7.11	5.049%
7/1/2009	233,187,738	41,862,395	5.57	3.955%
7/1/2010	256,873,773	41,954,599	6.12	4.346%
7/1/2011	308,607,733	43,493,715	7.10	5.041%
7/1/2012	292,823,296	43,902,429	6.67	4.736%
7/1/2013	329,920,144	43,984,577	7.50	5.326%
7/1/2014	392,194,960	43,070,315	9.11	6.469%
7/1/2015	410,598,719	45,128,506	9.10	6.462%
7/1/2016	403,084,512	44,775,765	9.00	6.391%
7/1/2017	468,300,420	44,820,732	10.45	7.420%
7/1/2018	528,781,898	45,276,379	11.68	8.294%
7/1/2019	539,362,237	46,955,334	11.49	8.159%
7/1/2020	604,572,836	48,452,696	12.48	8.862%
7/1/2021	807,593,863	49,109,332	16.44	11.674%
7/1/2022	625,063,131	50,602,707	12.35	8.769%
7/1/2023	681,343,286	56,089,142	12.15	8.627%
7/1/2024	749,102,528	58,935,416	12.71	9.025%
7/1/2025	817,716,339	60,431,321	13.53	9.607%

Note: Years prior to the 6/30/2010 were provided by the prior actuary.

*The impact of asset smoothing is not reflected in the impact on the Actuarial Contribution Rate (ACR). Current year assumptions are used for all years shown.

The assets at July 1, 2025 are 13.53 times larger than payroll, so underperforming the investment return assumption by 10.00% (i.e., earn -3.50% for one year) is equivalent to an actuarial loss of $82 million or 135% 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 significant risk associated with volatile investment returns.

TABLE 15

HISTORICAL CASH FLOWS

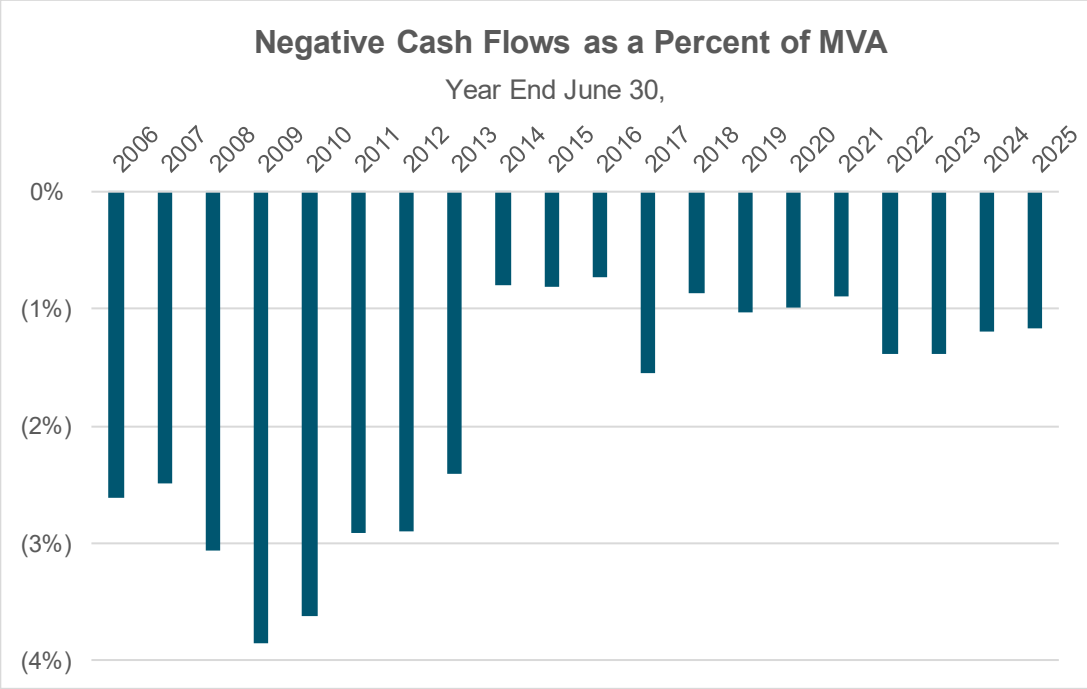
Plans with negative cash flows tend to experience increased sensitivity to investment return volatility. Cash flows, for this purpose, are measured as contributions less benefit payments. The difference must be funded by investment income so typically negative cash flows of more than 5% can impact asset allocation. Furthermore, if the System has negative cash flows and experiences returns below the assumed rate, there are fewer assets to be reinvested to earn the higher returns that typically follow.

Year End	Market Value of Assets (MVA)	Contributions	Benefit Payments and Expenses	Net Cash Flow	Net Cash Flow as a Percent of MVA
6/30/2006	$278,940,737	$8,964,288	$16,255,846	($7,291,558)	(2.61%)
6/30/2007	310,459,530	9,880,794	17,624,000	(7,743,206)	(2.49%)
6/30/2008	290,306,257	10,397,547	19,298,912	(8,901,365)	(3.07%)
6/30/2009	233,187,738	11,780,463	20,745,505	(8,965,042)	(3.84%)
6/30/2010	256,873,773	12,276,818	21,574,361	(9,297,543)	(3.62%)
6/30/2011	308,607,733	13,398,058	22,370,844	(8,972,786)	(2.91%)
6/30/2012	292,823,296	15,071,125	23,541,992	(8,470,867)	(2.89%)
6/30/2013	329,920,144	16,289,757	24,251,618	(7,961,861)	(2.41%)
6/30/2014	392,194,960	22,470,013	25,631,006	(3,160,993)	(0.81%)
6/30/2015	410,598,719	23,592,219	26,910,083	(3,317,864)	(0.81%)
6/30/2016	403,084,512	25,598,997	28,531,524	(2,932,527)	(0.73%)
6/30/2017	468,300,420	22,327,060	29,599,101	(7,272,041)	(1.55%)
6/30/2018	528,781,898	26,622,091	31,199,043	(4,576,952)	(0.87%)
6/30/2019	539,362,237	27,325,686	32,892,072	(5,566,386)	(1.03%)
6/30/2020	604,572,836	27,899,004	33,907,310	(6,008,306)	(0.99%)
6/30/2021	807,593,863	28,169,291	35,370,239	(7,200,948)	(0.89%)
6/30/2022	625,063,131	29,112,925	37,790,292	(8,677,367)	(1.39%)
6/30/2023	681,343,286	29,712,247	39,125,306	(9,413,059)	(1.38%)
6/30/2024	749,102,528	32,087,829	41,012,238	(8,924,409)	(1.19%)
6/30/2025	817,716,339	33,945,654	43,488,586	(9,542,932)	(1.17%)

Note: Years prior to the 6/30/2010 were provided by the prior actuary.

TABLE 15

HISTORICAL CASH FLOWS
(continued)



The reduction in negative cash flows coincides with increases in the contribution rate, as well as the introduction of the supplemental State contributions. Historically, members contributed 9.35% of pay, but the member contribution rate increased to 9.85% for FY 2012, 10.35% for FY 2013, 10.85% for FY 2014 and to a rate of 11.35% in FY 2015 (changed to 11.40% in conjunction with a benefit change by the 2014 legislature). Effective July 1, 2025, the member contribution rate increased to 11.525% due to the passage of House File 969. The State's contribution rate was 17.00% of pay for many years but began increasing 2.00% per year commencing July 1, 2008. In 2010, the Legislature passed a bill that continued the 2.00% annual increase with an ultimate contribution rate of 37.00% for FY 2018 and thereafter until the normal contribution rate is less than 37.00%. It also provided for a supplemental State appropriation of $5.0 million per year beginning July 1, 2013 (originally July 1, 2012, but extended by the 2012 legislature) and ending June 30 of the fiscal year during which the System's funded ratio is at least 85%. However, HF 2459 in the 2016 session reduced the supplemental contribution for FY 2017 to $2.5 million. The supplemental contribution returned to $5.0 million for FY 2018 and is expected to remain at that level until the System is at least 85% funded. When the State supplemental contribution stops, the magnitude of the negative cash flows will increase.

TABLE 16

LIABILITY MATURITY MEASUREMENTS

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. With more of the total liability residing with retirees, investment volatility has a greater impact on the funding of the system because it is more difficult to restore the system financially after losses occur when there is comparatively less payroll over which to spread costs.

Year End	Retiree Liability (a)	Total Actuarial Accrued Liability (b)	Retiree Percentage (a) / (b)
6/30/2011	$265,218,811	$461,594,916	57.5%
6/30/2012	272,401,805	480,157,072	56.7%
6/30/2013	280,492,644	498,468,989	56.3%
6/30/2014	297,967,737	515,859,721	57.8%
6/30/2015	305,590,517	534,626,780	57.2%
6/30/2016	328,089,443	578,388,848	56.7%
6/30/2017	368,319,757	636,058,890	57.9%
6/30/2018	387,738,398	658,487,243	58.9%
6/30/2019	410,196,806	684,752,489	59.9%
6/30/2020	439,895,461	751,076,556	58.6%
6/30/2021	467,834,786	780,150,277	60.0%
6/30/2022	532,071,119	884,315,607	60.2%
6/30/2023	551,520,106	935,234,527	59.0%
6/30/2024	588,753,862	988,955,331	59.5%
6/30/2025	626,630,518	1,031,387,817	60.8%

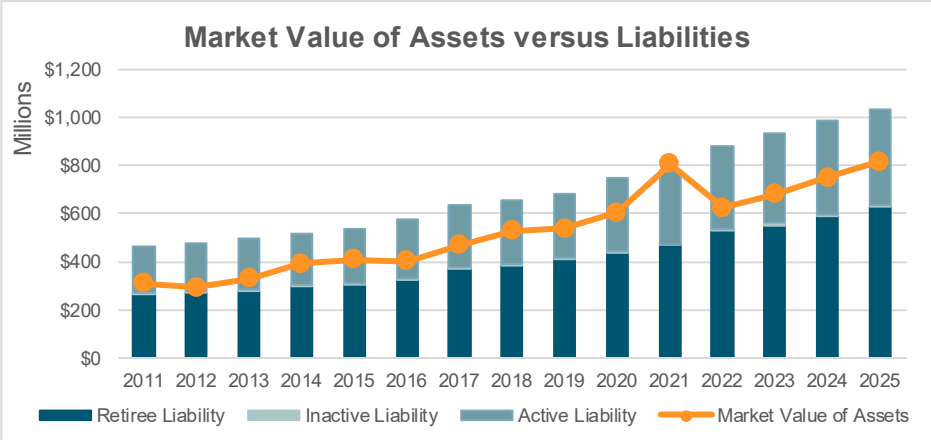


TABLE 17

HISTORICAL MEMBER STATISTICS

The underlying assumption used in developing the payment schedule for the unfunded actuarial accrued liability assumes an increasing payroll over time which is dependent on a stable employment level, i.e., active member count remains the same. However, while we have seen a recent uptick in the number of active members, the active population has decreased by 13% since 2009. Since 2006, the average increase in covered payroll has been 2.7% compared to expected growth of 2.75% to 4.00%. Lower payroll growth results in lower contributions, including payments on the unfunded actuarial accrued liability, so there is slower funding progress.

Valuation Date June 30,	Number	Projected Payroll	Actual Payroll Increase	Expected Payroll Increase
2006	618	$36,231,639		
2007	631	37,268,060	2.86%	4.00%
2008	646	40,829,801	9.56%	4.00%
2009	662	41,862,395	2.53%	4.00%
2010	643	41,954,599	0.22%	4.00%
2011	644	43,493,715	3.67%	4.00%
2012	618	43,902,429	0.94%	3.75%
2013	599	43,984,577	0.19%	3.75%
2014	578	43,070,315	(2.08%)	3.75%
2015	589	45,128,506	4.78%	3.75%
2016	563	44,775,765	(0.78%)	3.00%
2017	540	44,820,732	0.10%	3.00%
2018	537	45,276,379	1.02%	3.00%
2019	551	46,955,334	3.71%	3.00%
2020	555	48,452,696	3.19%	3.00%
2021	547	49,109,332	1.36%	2.75%
2022	555	50,602,707	3.04%	2.75%
2023	588	56,089,142	10.84%	2.75%
2024	583	58,935,416	5.07%	2.75%
2025	577	60,431,321	2.54%	2.75%

Note: Years prior to 6/30/2010 were provided by prior actuary.

TABLE 17

HISTORICAL MEMBER STATISTICS
(continued)

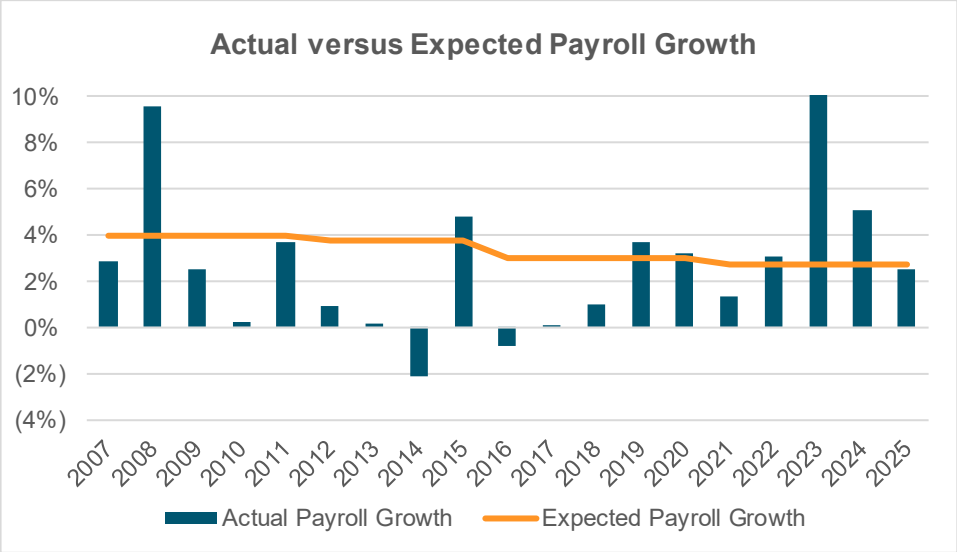


TABLE 18

COMPARISON OF VALUATION RESULTS UNDER ALTERNATE INVESTMENT RETURN ASSUMPTIONS ($ in thousands)

This exhibit compares the key results of the July 1, 2025 valuation under five (5) different investment return assumptions to illustrate the impact of different assumptions on the funding of the System. Note that only the investment return assumption is changed, as identified in the heading below. All other assumptions are unchanged for the purpose of this analysis.

Investment Return Assumption	**6.00%**	**6.25%**	**6.50%**	**6.75%**	**7.00%**
Contribution Rates					
Normal Cost	40.649%	37.880%	35.321%	32.956%	30.767%
Administrative Expenses	0.521%	0.521%	0.521%	0.521%	0.521%
Unfunded Actuarial Accrued Liability	39.800%	36.225%	32.704%	29.232%	25.806%
Member Contributions	(11.525%)	(11.525%)	(11.525%)	(11.525%)	(11.525%)
Employer Actuarial Required Contribution	69.445%	63.101%	57.021%	51.184%	45.569%
Statutory State Fixed Contribution Rate	(37.000%)	(37.000%)	(37.000%)	(37.000%)	(37.000%)
State Supplemental Contribution	(8.274%)	(8.274%)	(8.274%)	(8.274%)	(8.274%)
Contribution Shortfall/(Margin)	24.171%	17.827%	11.747%	5.910%	0.295%
Actuarial Accrued Liability	$1,103,322	$1,066,392	$1,031,388	$998,185	$966,668
Actuarial Value of Assets	811,663	811,663	811,663	811,663	811,663
Unfunded Actuarial Accrued Liability	$291,659	$254,728	$219,725	$186,522	$155,005
Funded Ratio	73.6%	76.1%	78.7%	81.3%	84.0%

Note: All other assumptions are unchanged for the purpose of this sensitivity analysis.
Numbers may not add due to rounding.

SECTION 6 – OTHER INFORMATION

In this section, we have included some exhibits that reflect the historical funding of the System (reflecting some information formerly disclosed under GASB 25) and the expected benefit payments for the next 30 years.

TABLE 19

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (P/R) (c)	UAAL as a Percentage of Covered P/R [(b-a)/(c)]
7/1/2011	$288,851,354	$461,594,916	$172,743,562	62.58%	$43,493,715	397.17%
7/1/2012	292,909,884	480,157,072	187,247,188	61.00%	43,902,429	426.51%
7/1/2013	319,441,635	498,468,989	179,027,354	64.08%	43,984,577	407.02%
7/1/2014	360,063,755	515,859,721	155,795,966	69.80%	43,070,315	361.72%
7/1/2015	392,989,970	534,626,780	141,636,810	73.51%	45,128,506	313.85%
7/1/2016	426,398,446	578,388,848	151,990,402	73.72%	44,775,765	339.45%
7/1/2017	453,128,907	636,058,890	182,929,983	71.24%	44,820,732	408.14%
7/1/2018	496,503,424	658,487,243	161,983,819	75.40%	45,276,379	357.77%
7/1/2019	530,900,116	684,752,489	153,852,373	77.53%	46,955,334	327.66%
7/1/2020	573,716,266	751,076,556	177,360,290	76.39%	48,452,696	366.05%
7/1/2021	658,081,471	780,150,277	122,068,806	84.35%	49,109,332	248.57%
7/1/2022	700,657,990	884,315,607	183,657,617	79.23%	50,602,707	362.94%
7/1/2023	728,696,523	935,234,527	206,538,004	77.92%	56,089,142	368.23%
7/1/2024	768,394,237	988,955,331	220,561,094	77.70%	58,935,416	374.24%
7/1/2025	811,663,278	1,031,387,817	219,724,539	78.70%	60,431,321	363.59%

Note: the investment return assumption was lowered from 8.00% to 7.50% in the 2016 valuation, from 7.50% to 7.00% in the 2020 valuation, and from 7.00% to 6.50% in the 2022 valuation.

TABLE 20

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending	Actuarial Required Contribution	Actual Employer Contribution	Percentage of ARC Contribution
6/30/2006	$12,231,109	$5,817,819	47.57%
6/30/2007	12,592,216	6,262,951	49.74%
6/30/2008	14,373,922	6,696,538	46.59%
6/30/2009	13,356,536	7,898,356	59.13%
6/30/2010	14,237,049	8,498,523	59.69%
6/30/2011	14,966,571	9,554,014	63.84%
6/30/2012	16,623,087	10,741,204	64.62%
6/30/2013	18,665,412	11,777,661	63.10%
6/30/2014	18,186,973	17,715,097	97.41%
6/30/2015	16,957,075	18,600,759	109.69%
6/30/2016	17,080,573	20,519,243	120.13%
6/30/2017	17,745,858	17,274,144	97.34%
6/30/2018	20,306,108	21,498,155	105.87%
6/30/2019	19,402,680	21,840,234	112.56%
6/30/2020	19,377,760	22,364,425	115.41%
6/30/2021	22,996,225	22,711,497	98.76%
6/30/2022	19,750,547	23,057,085	116.74%
6/30/2023	27,348,540	23,721,480	86.74%
6/30/2024	30,295,154	25,321,260	83.58%
6/30/2025	33,231,346	26,696,838	80.34%

Note: To determine the Annual Required Contribution, actual covered payroll for the fiscal year was imputed using employer contributions, net of any state supplemental appropriations, and multiplied by the employer actuarial contribution rate.

TABLE 21

PROJECTED BENEFIT PAYMENTS

Fiscal Year End	Actives at 7/1/2025	Inactives at 7/1/2025	Total
2026	$ 778,000	$45,559,000	$46,337,000
2027	3,499,000	46,030,000	49,529,000
2028	5,699,000	46,448,000	52,147,000
2029	8,351,000	46,750,000	55,101,000
2030	11,105,000	46,934,000	58,039,000
2031	14,802,000	47,162,000	61,964,000
2032	17,292,000	47,290,000	64,582,000
2033	19,211,000	47,409,000	66,620,000
2034	21,385,000	47,346,000	68,731,000
2035	22,937,000	47,224,000	70,161,000
2036	24,567,000	47,026,000	71,593,000
2037	26,818,000	46,749,000	73,567,000
2038	30,871,000	46,487,000	77,358,000
2039	36,949,000	46,086,000	83,035,000
2040	40,723,000	45,625,000	86,348,000
2041	43,766,000	45,090,000	88,856,000
2042	46,541,000	44,491,000	91,032,000
2043	49,129,000	43,830,000	92,959,000
2044	51,879,000	43,147,000	95,026,000
2045	54,105,000	42,362,000	96,467,000
2046	56,984,000	41,515,000	98,499,000
2047	60,538,000	40,605,000	101,143,000
2048	64,590,000	39,629,000	104,219,000
2049	68,653,000	38,586,000	107,239,000
2050	73,247,000	37,471,000	110,718,000
2051	78,067,000	36,283,000	114,350,000
2052	83,762,000	35,017,000	118,779,000
2053	89,531,000	33,673,000	123,204,000
2054	96,023,000	32,249,000	128,272,000
2055	101,330,000	30,748,000	132,078,000

Note: Cash flows are the expected future non-discounted payments to current members. These numbers exclude refund payouts to current nonvested inactives and assume future retirees elect the normal form of payment and future withdrawals elect refunds according to valuation assumptions.

APPENDIX A

SYSTEM MEMBERSHIP

INFORMATION

RECONCILIATION OF MEMBER STATUS FROM JULY 1, 2024 TO JULY 1, 2025

	Active Members	Inactive Vested	Inactive Nonvested	Retired Members	Disabled Members	Spouses Receiving Benefits	Children Receiving Benefits	Total
Members as of July 1, 2024	583	44	12	452	93	134	8	1,326
Service Retirement	(26)	(1)	0	27	0	0	0	0
Disabled Retirement	(1)	0	0	0	1	0	0	0
Refunded	0	(1)	(1)	0	0	0	0	(2)
Terminated with a Refund Due	(1)	0	1	0	0	0	0	0
Terminated Vested	(1)	1	0	0	0	0	0	0
Returned to Active Status	0	0	0	0	0	0	0	0
Deceased without a Beneficiary	0	0	0	(3)	(2)	(8)	0	(13)
Deceased with a Beneficiary	0	0	0	(7)	(1)	8	0	0
Benefits Ended	0	0	0	0	0	0	(2)	(2)
New Hires	23	0	0	0	0	0	0	23
Adjustments	0	0	0	0	0	0	0	0
Members as of July 1, 2025	577	43	12	469	91	134	6	1,332

AGE AND SERVICE DISTRIBUTION FOR ACTIVE PARTICIPANTS AS OF JULY 1, 2025

	Years of Service															
	0 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 & over		Total	
Age	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary	No.	Avg. Salary
Under 25	21	64,611	0	0	0	0	0	0	0	0	0	0	0	0	21	64,611
25-29	52	78,071	25	87,048	0	0	0	0	0	0	0	0	0	0	77	80,986
30-34	24	82,039	38	93,790	23	99,983	0	0	0	0	0	0	0	0	85	92,148
35-39	16	85,350	16	97,744	30	105,765	16	107,626	0	0	0	0	0	0	78	100,314
40-44	3	88,695	6	94,013	8	112,027	58	114,561	12	115,534	1	119,438	0	0	88	112,236
45-49	1	86,850	1	88,461	2	112,639	26	116,853	18	121,040	18	117,306	1	128,090	67	117,270
50-54	1	83,959	2	87,198	0	0	13	117,321	8	115,569	71	122,787	33	121,529	128	120,597
55 & over	0	0	0	0	0	0	5	112,948	1	109,121	9	117,570	18	126,629	33	121,555
Totals	118	77,864	88	92,398	63	104,668	118	114,361	39	117,918	99	121,282	52	123,421	577	104,734

Average Age:	40.8
Average Years of Service:	15.4

ANALYSIS OF INACTIVE PARTICIPANTS
AS OF JULY 1, 2025

Number of Participants

Age	Service Retirement	Accidental Disability	Ordinary Disability	Vested Retirement	Child Beneficiary	Contingent Beneficiary	Inactive Vested	Total
Under 40	0	2	0	0	6	1	3	12
40 to 44	0	1	0	0	0	0	8	9
45 to 49	0	1	2	0	0	0	11	14
50 to 54	5	11	0	0	0	3	18	37
55 to 59	72	14	1	4	0	4	3	98
60 to 64	91	9	1	4	0	3	0	108
65 to 69	69	6	0	4	0	7	0	86
70 to 74	57	6	3	2	0	12	0	80
75 to 79	58	10	4	3	0	26	0	101
80 to 84	47	13	1	3	0	25	0	89
85 to 89	29	4	0	5	0	35	0	73
90 to 94	12	1	0	0	0	12	0	25
95 to 99	4	1	0	0	0	5	0	10
100 & over	0	0	0	0	0	1	0	1
Totals	444	79	12	25	6	134	43	743

ANALYSIS OF INACTIVE PARTICIPANTS
AS OF JULY 1, 2025

Average Annual Benefits of Participants

Age	Service Retirement	Accidental Disability	Ordinary Disability	Vested Retirement	Child Beneficiary	Contingent Beneficiary	Inactive Vested
Under 40	0	44,018	0	0	6,497	50,580	17,475
40 to 44	0	57,734	0	0	0	0	17,093
45 to 49	0	59,061	72,374	0	0	0	25,181
50 to 54	51,575	61,243	0	0	0	42,626	25,539
55 to 59	88,102	62,572	48,265	22,106	0	46,151	16,903
60 to 64	84,606	66,462	49,715	17,303	0	34,986	0
65 to 69	86,131	64,712	0	27,336	0	33,564	0
70 to 74	80,601	57,909	60,281	24,913	0	40,184	0
75 to 79	76,566	60,028	54,092	11,576	0	38,020	0
80 to 84	68,547	56,098	60,741	10,880	0	30,135	0
85 to 89	60,859	57,021	0	14,815	0	28,624	0
90 to 94	58,449	52,149	0	0	0	29,464	0
95 to 99	51,785	53,235	0	0	0	29,565	0
100 & over	0	0	0	0	0	26,112	0
Totals	79,220	60,145	58,390	18,330	6,497	33,257	22,711

APPENDIX B

SUMMARY OF PLAN PROVISIONS

APPENDIX B – SUMMARY OF PLAN PROVISIONS

Chapter 97A of the Iowa code sets out the benefit provisions of the Iowa Peace Officers' Retirement, Accident and Disability System, which are briefly summarized as follows:

Retirement Benefit

Eligibility

Age 55 with 22 years of service.

Average Final Compensation

Average of the member's regular compensation, including longevity and per diem, during the high three (3) years of service.

Monthly Annuity

The sum of (1) and (2):

(1)
- a. For retirement prior to July 1, 1990, 50% of average final compensation at retirement. Average final compensation equals average of highest three years of compensation.
- b. For retirement after June 30, 1990 and before July 1, 1992, 54% of average final compensation at retirement.
- c. For retirement after June 30, 1992 and before July 1, 1993, 56% of average final compensation at retirement.
- d. For retirement after June 30, 1993 and before July 1, 1994, 58% of average final compensation at retirement.
- e. For retirement after June 30, 1994, and before July 1, 2000, 60% of average final compensation at retirement.
- f. For retirement after July 1, 2000, 60.5% of average final compensation at retirement.

(2) For members who do not withdraw member contributions:

- a. For retirement after June 30, 1990 and before July 1, 1991, 0.3% of average final compensation for each year of service over 22 years (up to 8 years). Service after age 55 is excluded.

b. For retirement after June 30, 1991 and before October 16, 1992, 0.6% of average final compensation for each year of service over 22 years (up to 8 years). Service after age 55 is excluded.

c. For retirement after October 15, 1992 and before July 1, 1996, 0.6% of average final compensation for each year of service over 22 years (up to 8 years).

d. For retirement after June 30, 1996, 1.5% of average final compensation for each year of service over 22 years (up to 8 years).

e. For retirement after June 30, 1998, 1.5% of average final compensation for each year of service over 22 years (up to 10 years).

f. For retirement after June 30, 2000, 2.75% of average final compensation for each year of service over 22 years (up to 10 years).

Early Retirement Benefit

Eligibility Effective July 1, 1996, age 50 (but not age 55) with 22 years of service.

Monthly Annuity The benefit provided as a retirement benefit actuarially reduced for commencement prior to age 55.

Deferred Vested Benefit

Eligibility Four years of service.

Monthly Annuity At age 55. The benefit provided as a retirement benefit at termination times a service ratio. The service ratio equals service at termination divided by 22 (not greater than 1.0).

Ordinary Disability Benefit

Eligibility None.

Benefit

(1) If service at disability is greater than or equal to 5 years, the greater of 50% of average final compensation at disability or the benefit amount calculated under a service retirement.

(2) If service at disability is less than 5 years, 25% of average final compensation at disability.

Accidental Disability Benefit

Eligibility None.

Benefit

(1) For retirement prior to July 1, 1990, 66-2/3% of average final compensation at disability.

(2) For retirement after June 30, 1990 and before July 1, 1998, 60% of average final compensation at disability. If the service amount at disability is greater than or equal to 22 years, the greater of 60% of average final compensation at disability or the benefit amount calculated under a service retirement.

(3) For retirement after July 1, 1998, the greater of 60% of average final compensation at disability or the benefit amount calculated under a service retirement.

Ordinary Death Benefit

Eligibility For member in service: None.
For member not in service: Four years of service.

Benefit

(1) A lump sum equal to 50% of compensation during the last year of employment, or

(2) A pension based on 40% of average final compensation but not less than 25% of compensation paid to an active member having

the rank of senior patrol officer of the state patrol. For members not in service, benefit is multiplied by the ratio of service at termination to 22 years (not greater than 1.0).

(3) Additional benefit for members in service of 6% of compensation payable to an active member having the rank of senior patrol officer of the state patrol for each child.

Payment Date

(1) For members in service: Immediately upon death of member.

(2) For member not in service: Payable when member would have been age 55. If there are children of the member, payable commencing at the member's death until children reach age 18 or 22. Pension resumes when member would have been age 55.

Accidental Death Benefit

Eligibility

In actual performance of duty.

Benefit

(1) 50% of average final compensation payable to surviving spouse, children or dependent parents.

(2) If there is not surviving spouse, children or dependent parents, or if accidental death occurs while not in the actual performance of duty, an Ordinary Death Benefit is payable.

(3) Additional benefit for members in service of 6% of compensation payable to an active member having the rank of senior patrol officer of the state patrol, for each child.

(4) If the death meets specified criteria, a lump sum of $100,000 payable to surviving spouse, children, dependent parents, or estate.

Death After Retirement

Benefit

(1) 50% of retirement allowance of retired member but not less than 25% of compensation paid to an active member having the rank of senior patrol officer of the state patrol.

(2) Additional benefit of 6% of compensation payable to an active member having the rank of senior patrol officer of the state patrol, for each child.

Adjustments to Pensions

Each July 1 and January 1, if applicable, the following adjustments are made: Monthly earnable compensation payable to an active member, of the same rank and position in the salary scale as was held by the retired or deceased member at the time of the member's retirement or death, for July of the current year less that of the preceding July, times the following percentages:

(1) 40% for members receiving a service retirement allowance and for beneficiaries receiving an accidental death benefit.

(2) 40% for members with five or more years of membership who are receiving an ordinary disability benefit.

(3) 40% for member receiving an accidental disability benefit.

(4) 24% for members with less than five years of membership who are receiving an ordinary disability benefit and for beneficiaries receiving an ordinary death benefit.

(5) 50% of the amount which would have been added to the benefit of the retired member for surviving spouses.

Additionally, the following amounts will be added to a member or beneficiary monthly pension as follows:

Years Since Retired*	Amount
0-4	$15
5-9	20
10-14	25
15-19	30
20 or more	35

*Measured in whole years.

There was a change in the way the flat escalator was applied effective July 1, 2010. Prior to 2010, the amount increased for each year after retirement.

Surviving children's pensions are adjusted each July to equal 6% of monthly earnable compensation payable to an active member having the rank of senior patrol officer of the state patrol.

No pension adjustments are granted to members who retired with less than 22 years of membership.

State Contributions

For FY 2018 and thereafter, the State will contribute the lesser of 37% of payroll or the normal contribution rate, as defined in Chapter 97 A.8. Prior to FY 2018, the State had been making scheduled increases to its contribution rate of 2% of pay per year for ten years. The State also provides for a supplemental appropriation of $5 million per year beginning July 1, 2013 (originally July 1, 2012 but extended by the 2012 legislature) and ending June 30 of the fiscal year during which the System's funded ratio is at least 85%. For FY 2017, the supplemental contribution was reduced to $2.5 million, but it returned to $5.0 million for FY 2018 and thereafter.

Member Contributions

The following percentage of earnable compensation will be paid as member contributions:

Period	Member Contribution Rate
January 1, 1995 - June 30, 1995	8.350%
July 1, 1995 – June 20, 2011	9.350%
July 1, 2011 – June 30, 2012	9.850%
July 1, 2012 – June 30, 2013	10.350%
July 1, 2013 – June 30, 2014	10.850%
July 1, 2014 – June 30, 2025	11.400%
July 1, 2025 forward*	11.525%

*Beginning July 1, 2025, members contribute 11.475% of compensation plus an additional 0.050% to finance disability benefits for duty-related cancer and infectious diseases. The additional 0.050% contribution is subject to review every five years.

Withdrawal of Member Contributions

Effective July 1, 1990, members who terminate service, other than by death or disability, can elect to withdraw their accumulated contributions with interest in lieu of any benefits to which the member may be entitled from the System.

Transfers With Statewide Fire and Police Retirement System

Beginning July 1, 1996, vested members of an eligible retirement system who terminate employment and, within one year, commences covered employment under another eligible retirement system, may elect to transfer the average accrued benefit or the refund liability earned from the former system to the current system. Once such transfer is completed, service under the former system shall be treated as membership service under the current system.

APPENDIX C

ACTUARIAL ASSUMPTIONS AND METHODS

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the Individual Entry Age method of funding.

Sometimes called "funding method," this is a particular technique used by actuaries for establishing the amount of the annual actuarial cost of pension System benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the System is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost Method, the **Normal Cost** is computed as the level percentage of pay which, if paid from the earliest time each member would have been eligible to join the System if it then existed (thus, entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the System.

The **Actuarial Accrued Liability** under this method at any point in time is the theoretical amount of the fund that would have accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The **Unfunded Actuarial Accrued Liability (UAAL)** is the excess of the actuarial accrued liability over the actuarial value of System assets on the valuation date.

Under this method experience gains or losses, i.e. decreases or increases in accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

UAAL Amortization Method

The Board has elected to amortize the legacy unfunded actuarial accrued liability as of July 1, 2017 as a level-percent of payroll, over a closed 30-year period beginning July 1, 2008. New layers of unfunded actuarial accrued liability will be created on each actuarial valuation date and will be amortized, as a level-percent of payroll, over a closed 20-year period. Changes in the unfunded actuarial accrued liability that are created by a change in assumptions or changes in benefit structure will be amortized over a reasonable time period, as selected by the Board after consultation with their actuary. If the System's funded ratio reaches or exceeds 100%, all amortization bases will be eliminated, and the surplus (actuarial assets minus actuarial liability) will be amortized over an open 30-year period.

In our opinion, the use of the layered amortization policy, with new bases amortized over closed 20-year periods complies with Actuarial Standard of Practice Number 4. This policy will fully amortize the individual, as well as the total, unfunded actuarial accrued liability within a reasonable timeframe and/or reduce the amount of the UAAL by a reasonable amount within a sufficiently short period. Note, however, that the System is funded with fixed contribution rates, not the actuarial contribution rate developed in the actuarial valuation process each year.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

Asset Valuation Method

The System uses an asset valuation method to smooth the effects of market fluctuations. The actuarial value of assets spreads the difference between the actual return and the expected return (based on the actuarial assumption of 6.50%, effective July 1, 2022) evenly over five years.

Technical Procedures

There are a small number of benefit offsets in effect as of July 1, 2025 due to either a QDRO in effect, worker's comp benefits or, if they are disabled, wage earnings over a certain limit. Due to the small number of records impacted and the uncertain duration of these offsets, the full benefit amount is being valued on the member's record.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Assumptions

Investment Return: 6.50% per year, net of investment expenses.

Price Inflation: 2.50% per year.

Payroll Growth: 2.75% per year, including price inflation.

Active Members:

1. Ordinary death rates

Pub-2010 Safety Employees Median Mortality Table, set back 2 years for males and females, projected generationally using Scale MP-2021.

2. Accidental death rate

8.5 deaths per 10,000 exposed for one year.
80% of deaths are assumed to be accidental.

3. Disability rates

Age	Accidental Disability	Ordinary Disability
20	0.029%	0.007%
25	0.101%	0.025%
30	0.173%	0.043%
35	0.245%	0.061%
40	0.328%	0.082%
45	0.464%	0.116%
50	0.664%	0.166%

80% of disabilities are assumed to be accidental.

4. Withdrawal rates

The following table is used:

Service	Rate
0-3	4.00%
4	3.25%
5	2.75%
6	2.00%
7-10	1.50%
11	1.00%
12	0.75%
13	0.50%
14-19	0.25%
20	0.00%

5. Retirement age

Service	Probability of Retirement
22-27	6%
28	15%
29	15%
30	20%
31	60%
32	100%

No early retirements are assumed.

Inactive vested members are assumed to begin receiving benefits at age 55.

6. Salary scale

Year	Increase
1	8.50%
5	7.50%
10	7.50%
15	4.50%
20+	4.00%

7. Post-retirement adjustments — Same as for retired members.

Retired Members and Other Beneficiaries:

1. Mortality rates - Service retirees — Pub-2010 Safety Retirees Median Mortality Table, set back 2 years for males and females, projected generationally using Scale MP-2021.

2. Mortality rates - Beneficiaries — Pub-2010 Contingent Survivors Mortality Table, set back 2 years for males and females, projected generationally using Scale MP-2021.

3. Mortality rates - Disabled retirees — Pub-2010 Safety Disabled Retirees Mortality Table, set back 2 years for males and females, projected generationally using Scale MP-2021.

4. Annual readjustment of pensions — Wages for the same rank are assumed to increase 3.50%.

Dependency Ratios:

1.	Ordinary death benefit	Alternate benefits payable to widow and minor children in 90% of cases.
2.	Pension to spouse and children of deceased pensioned member	In 90% of cases with 1 child per member.

Interest Credited to Member Contributions:	4.00% per year.
Marriage Assumption:	90% married with males 4 years older than females.
Administrative Expenses:	Based on actual amount for the prior year increased with inflation.

ADDENDUM

CERTIFICATION

We have prepared an actuarial valuation of the Iowa Peace Officers' Retirement, Accident and Disability System as of July 1, 2025, for the fiscal year ending June 30, 2026. The results of the valuation are set forth in this addendum, which reflects the benefit provisions in effect on July 1, 2025.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

The results in this Addendum have been prepared for the sole purpose of providing the information required under Chapter 97 D.5 of the Iowa code. Calculations are based on the following prescribed methods:

Actuarial cost method: Entry Age Normal
Amortization method: Level-percent of payroll
Amortization period: 30 years, open period

All other assumptions, methodologies, and System provisions used are consistent with those used in the regular July 1, 2025 valuation for the Iowa Peace Officers' Retirement, Accident and Disability System.

The results shown in this Addendum may not be consistent with those in the regular July 1, 2025 valuation. The July 1, 2025 valuation results were determined in accordance with generally accepted actuarial principles and practices that are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Guides to Professional Conduct, amplifying opinion and supporting recommendations of the American Academy of Actuaries. The results shown in this Addendum are not necessarily based on the methodologies adopted by the System.

We are available to answer any questions on the material contained in this report or to provide explanations or further details as may be appropriate.

The undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

Patrice Beckham

Patrice A. Beckham, FSA, EA, FCA, MAAA — October 3, 2025 Date

Aaron Chochon

Aaron J. Chochon, ASA, EA, FCA, MAAA — October 3, 2025 Date

ADDENDUM

SUMMARY OF VALUATION RESULTS UNDER PRESCRIBED METHODOLOGY

This addendum report has been prepared to present the results of a valuation of the Iowa Peace Officers' Retirement, Accident and Disability System as of July 1, 2025, based on the prescribed methodology under current statutes and regulations issued thereunder.

The unfunded actuarial accrued liability has been amortized as a level-percent of payroll over 30 years. The payroll growth assumption used was 2.75%.

A summary of principal valuation results from the current and the prior valuation follows.

	Actuarial Valuation as of	
	July 1, 2025	**July 1, 2024**
Summary of Costs		
Normal cost	35.321%	35.330%
Administrative Expenses	0.521%	0.620%
UAAL amortization	20.054%	20.640%
Total	55.896%	56.590%
Less Employee Contribution Rate	(11.525%)	(11.400%)
State Required Contribution	44.371%	45.190%
Funded Status		
Actuarial accrued liability	$1,031,387,817	$988,955,331
Actuarial value of assets	811,663,278	768,394,237
Unfunded actuarial accrued liability	$219,724,539	$220,561,094
Funded Ratio	78.7%	77.7%
Asset Values		
Market value of assets (MVA)	$817,716,339	$749,102,528
Actuarial value of assets (AVA)	811,663,278	768,394,237
MVA/AVA	100.7%	97.5%