THE POLICE RETIREMENT SYSTEM OF KANSAS CITY, MISSOURI

ACTUARIAL VALUATION REPORT AS OF APRIL 30, 2025

SUBMITTED: AUGUST 19, 2025

CavMac
Actuarial Consulting Services

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August 19, 2025

Board of Trustees
Police Retirement System of Kansas City, Missouri
9701 Marion Park Drive B
Kansas City, MO 64137

Dear Members of the Board:

At your request, we have performed the annual actuarial valuation of the Police Retirement System of Kansas City, Missouri as of April 30, 2025 for the purpose of determining the actuarial required contribution for the fiscal year beginning May 1, 2026 and ending April 30, 2027. The major findings of the valuation are contained in this report, which reflects the benefit provisions in effect as of April 30, 2025. There were no changes in the benefit provisions or actuarial methods since the prior valuation, but there was one change to the actuarial assumptions used in this valuation. The investment return assumption was lowered from 6.85% to 6.75%. The net impact of this change was an increase in the unfunded actuarial accrued liability and the actuarial required contribution.

In preparing this report, we relied, without audit, on information (some oral and some written) supplied by the System's staff. This information includes, but is not limited to, plan provisions, member data and financial information. Although we found this information to be reasonably consistent and comparable with information reported in prior years, the data has not been audited by CavMac. 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.

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.

In order to prepare the results in this report, we have utilized actuarial models that were created 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 measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provision or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. While we find the actuarial assumptions to be reasonable, the Board of Trustees has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix C.

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. For example, actuarial computations for purposes of fulfilling financial accounting requirements for the System under Governmental Accounting Standards No. 67 and No. 68 are provided in separate reports.

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 would like to express our appreciation to the System's staff, who gave substantial assistance in supplying the data on which this report is based.

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

Respectfully submitted,

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

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

SECTION 1 – BOARD SUMMARY

OVERVIEW

This report presents the results of the actuarial valuation of the Police Retirement System of Kansas City, Missouri as of April 30, 2025. The primary purposes of performing a valuation are to:

- Determine the City contribution required to fund the System on an actuarial basis,
- Assess and disclose the key risks associated with funding the System,
- Determine the experience of the System since the last valuation date,
- Analyze and report on trends in System contributions, assets, and liabilities over the past several years, and
- Disclose asset and liability measures as of the valuation date.

The valuation results provide a "snapshot" view of the System's financial condition on April 30, 2025. A summary of the key measurements ($M) from the current and prior valuation is shown in the table below:

	April 30	
	2025	2024
Actuarial Accrued Liability	$1,620.6	$1,498.4
Actuarial Value of Assets	1,072.6	1,038.1
Unfunded Actuarial Accrued Liability	$548.0	$460.3
Funded Ratio (Actuarial Value)	66%	69%
Funded Ratio (Market Value)	63%	66%
City Contribution	$60.1	$49.2

Note: Numbers may not add due to rounding.

Although the benefit provisions and actuarial methods are unchanged from the last actuarial valuation, the investment return assumption was lowered from 6.85% to 6.75% in this valuation. Based on the results of the last experience study, the Board's intention has been to decrease the assumption incrementally each year until reaching an ultimate assumption of 6.50% in the April 30, 2027 valuation. The decrease in the investment return assumption in this valuation resulted in an increase of $19.9 million in the actuarial accrued liability and $2.0 million in the City contribution amount for the fiscal year ending April 30, 2027.

The unfunded actuarial accrued liability (UAAL) increased from the prior valuation by $87.7 million (from $460.3 million to $548.0 million). The investment return on the market value of assets for fiscal year 2025 was 6.9%, but due to the asset smoothing method and the scheduled recognition of deferred investment experience, the return on the actuarial value of assets was 5.9%. Since this return is lower than the assumed rate of return (6.85% for the twelve-months beginning May 1, 2024), there was an experience loss on assets of $9.8 million. Net demographic experience resulted in an experience loss of $57.2 million on liabilities, primarily due to actual

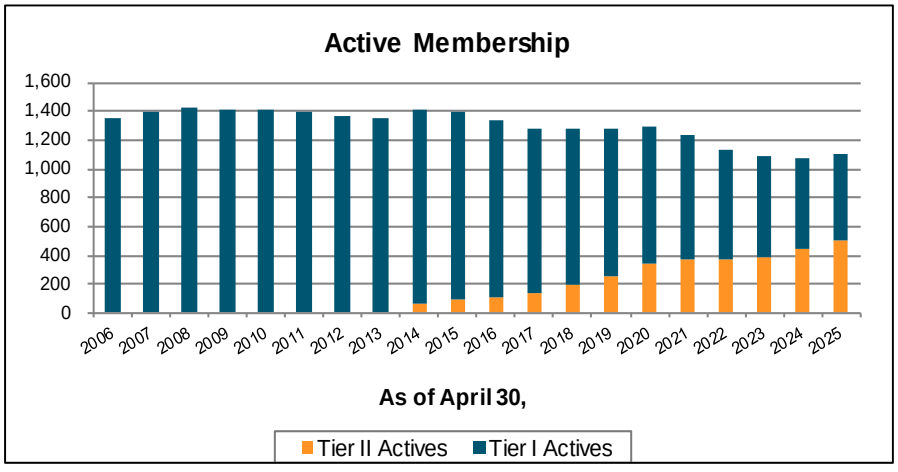
salary increases that were higher than expected. A detailed analysis of the change in the UAAL from April 30, 2024 to April 30, 2025 is shown on page 5.

MEMBERSHIP

As the following graph shows, the number of active members in the valuation has generally decreased over the last 15 years. When the number of active members declines, the actuarial required contribution rate is negatively impacted. While the normal cost rate is unaffected, the contribution rate for the amortization of the unfunded actuarial accrued liability assumes that covered payroll will increase 3.00% each year. A decline in the number of active members usually results in lower covered payroll than the assumed increase. As a result, the UAAL amortization payment is divided by a smaller payroll amount and the UAAL contribution rate increases. However, the dollar amount of the UAAL payment is unchanged.

The number of active members increased from 1,074 in the 2024 valuation to 1,104 in the 2025 valuation, an increase of 2.8%. The covered payroll for the upcoming year increased 21.9% compared to the prior valuation. This had a favorable impact on the UAAL contribution rate, as the actual increase in covered payroll was above the assumed increase of 3.0%.

In 2013, the Missouri General Assembly passed legislation that modified the benefit provisions for members hired on or after August 28, 2013 (called Tier II). As a result, the normal cost rate for this group of members is lower than the normal cost rate for members hired before that date. As of April 30, 2025, there were 500 members in Tier II out of a total of 1,104 active members (about 45% of total actives). The Tier II portion of total estimated payroll is lower, about 39%. Over time, as the Tier I members retire or leave covered employment and are replaced by members covered by the Tier II benefit structure, the normal cost rate for the System is expected to decline. How quickly the decrease unfolds depends on the turnover in the Tier I active group and the total number of active members. To the extent the size of the active group declines as it has in the past, it will take longer for the cost savings to materialize. The decrease in the number of new hires since 2014 has reduced the number of members in Tier II and the related cost savings compared to the expected results when the legislation was passed.



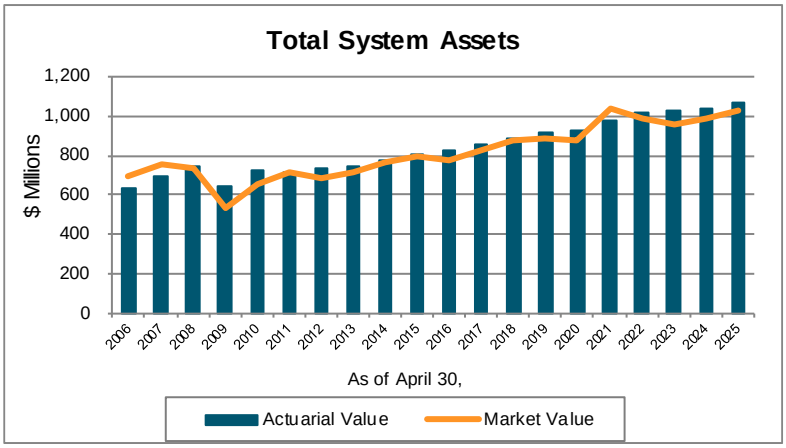
ASSETS

As of April 30, 2025, the System had total assets, when measured on a market value basis, of $1,028.6 million. This was an increase of $40.8 million from the value as of April 30, 2024 of $987.8 million. The market value of assets is not used directly in the calculation of the actuarial required contribution or the funded status. An asset valuation method which smooths the effect of market fluctuations is used to determine the value of assets used in the valuation, called the "actuarial value of assets." The current smoothing method recognizes the difference between the dollar amount of actual and expected return on the market value of assets evenly over a five-year period.

A summary of the asset experience follows:

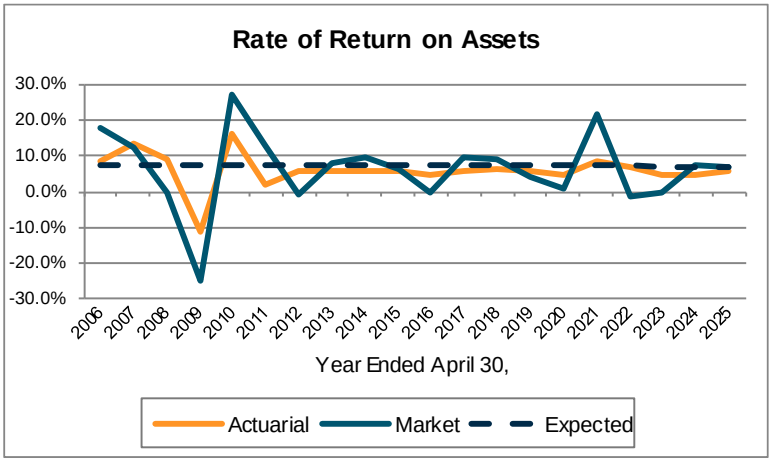
	Market Value ($M)	Actuarial Value ($M)
Assets, April 30, 2024	$987.8	$1,038.1
· City and Member Contributions	60.7	60.7
· Benefit Payments and Refunds	(85.6)	(85.6)
· Administrative Expenses	(1.1)	(1.1)
· Investment Income (net of expenses)	66.8	60.5
Assets, April 30, 2025	$1,028.6	$1,072.6
Estimated Net Rate of Return	6.9%	5.9%

The annualized dollar-weighted rate of return, measured on the market value of assets, was 6.9%. However, due to the use of an asset smoothing method, the rate of return on the actuarial value of assets was 5.9%. Since the return was lower than 6.85% (the assumed rate of return for the twelve-month period beginning May 1, 2024), there was an actuarial loss of $9.8 million which increased the unfunded actuarial accrued liability. Historical asset information is shown in the following two graphs:



The actuarial value of assets has been both above and below the market value during this period. This is to be expected when using an asset smoothing method.

Note: Results for years before 2011 were prepared by the prior actuary.



Rates of return on the market value of assets have been very volatile. The return on actuarial value of assets, although smoother, has lagged the assumption in the last decade.

Note: Results for years before 2011 were prepared by the prior actuary.

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 the asset value at the same date is referred to as the unfunded actuarial accrued liability (UAAL), if the actuarial accrued liability exceeds the asset value. The unfunded actuarial accrued liability will be reduced if the City's contributions exceed the employer 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 and the unfunded portion thereof.

The Actuarial Accrued Liability and Unfunded Actuarial Accrued Liability for the System as of April 30, 2025 are:

Actuarial Accrued Liability	$1,620,587,683
Actuarial Value of Assets	(1,072,579,907)
Unfunded Actuarial Accrued Liability	$ 548,007,776

Between April 30, 2024 and April 30, 2025, the change in the unfunded actuarial accrued liability for the System was as follows (in millions):

	$ millions
UAAL, April 30, 2024	460.3
· Expected change due to amortization method	3.3
· Actual versus expected return	9.8
· Demographic experience[1]	57.2
· Assumption changes	19.9
· All other experience	(2.5)
UAAL, April 30, 2025	548.0

[1] Liability loss is 3.53% of total actuarial accrued liability.

The unfunded actuarial accrued liability increased from the prior valuation by $87.7 million, which includes an increase of $19.9 million due to the decrease in the investment return assumption. The aggregate experience for the plan year, which was an actuarial loss of $67.0 million, also increased the UAAL. The aggregate experience was the combined result of an actuarial loss of $9.8 million on System assets (actuarial value) and an actuarial loss of $57.2 million on System liabilities. The liability loss on demographic experience was primarily the result of actual salary increases that were higher than expected based on the actuarial assumptions.

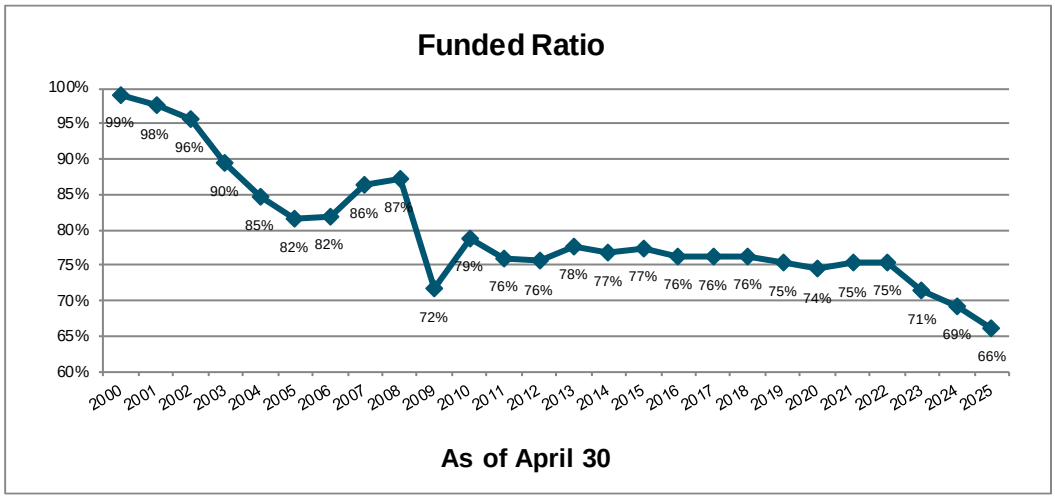
Analysis of the unfunded actuarial accrued liability strictly as a dollar amount can be misleading. Another way to evaluate the unfunded actuarial accrued liability and the progress made in its funding is to track the funded status, the ratio of the actuarial value of assets to the actuarial accrued liability. This information for recent years is shown in the following table (in millions).

	4/30/2021	4/30/2022	4/30/2023	4/30/2024	4/30/2025
Actuarial Value of Assets ($M)	$978.3	$1,013.3	$1,025.4	$1,038.1	$1,072.6
Actuarial Accrued Liability ($M)	$1,298.8	$1,342.1	$1,434.2	$1,498.4	$1,620.6
Funded Ratio (Assets/Liability)	75%	75%	71%	69%	66%

The funded ratio does not indicate whether or not the System could settle current liabilities, nor does it, by itself, indicate what the future funding requirements will be. In addition, if the market value of assets was used, the funded ratios would be different.

The following graph shows the System's historical funded ratio. The funded ratio was near 100% in the early years of this period, but has declined due to many factors including benefit changes, assumption changes, actual experience that was less favorable than expected based on the actuarial assumptions, and contributions below the actuarial rate for many years prior to 2014. Over the more recent past, the funded ratio has decreased to 66%. In 2025, the funded ratio

decreased due to a combination of unfavorable asset and liability experience, as well as the decrease in the investment return assumption.



The decline in the funded ratio since 2000 is a reflection of actual contributions significantly below the actuarial required contribution prior to 2014, coupled with investment returns that were lower than the actuarial assumed rate and changes to the actuarial assumptions. The System's funded status will continue to be heavily dependent on actual investment returns in the future as well as the City's contribution policy. Plan changes passed by the 2013 Missouri General Assembly, which included changes to both the benefit structure and the City contributions, are expected to improve the System's funded status over the long-term, if all actuarial assumptions are met. While these changes have improved the outlook for the long-term financial health of the System, the actual investment returns will continue to be a critical factor in the health of the System over time. Given the volatility inherent in the investments of the portfolio, there is a wide range of potential expected returns in any given year, so the funded ratio and the actuarial required contribution should be expected to change, perhaps significantly, from year to year.

CITY CONTRIBUTION

Generally, contributions to the System consist of:

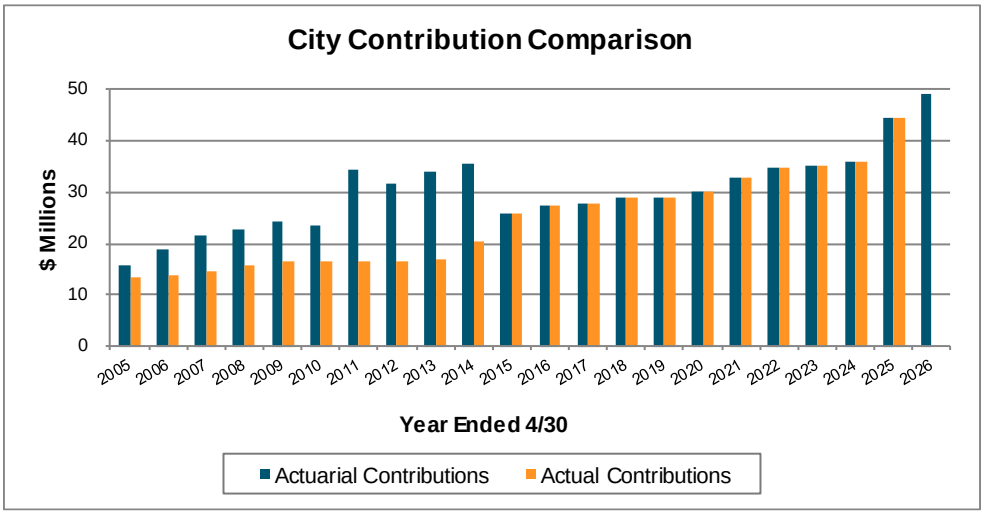
- A "normal cost" for the portion of projected liabilities allocated to service of members during the year following the valuation date, by the actuarial cost method, and administrative expenses,
- An "unfunded actuarial accrued liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

Although the City contributes a dollar amount, it is developed by multiplying the actuarial required contribution rate less the member contribution rate of 11.55% times the expected payroll for the applicable fiscal year. The contribution rate is computed with the objective of developing costs

that are level as a percentage of covered payroll over time. The actuarial required contribution rate for the fiscal year beginning May 1, 2026 and ending April 30, 2027 is computed based on the results of the April 30, 2025 actuarial valuation. The City's actuarial required contribution rate equals the employer normal cost, including administrative expenses, and an amortization payment on the unfunded actuarial accrued liability. The City's actuarial required contribution rate for May 1, 2026 through April 30, 2027 is 51.15% of payroll (employer normal cost of 18.09% and a UAAL payment of 33.06%) or $60,092,852.

The City contribution increased from the prior valuation by $10.9 million, which includes an increase of $2.0 million due to the decrease in the investment return assumption and an increase of $4.5 million for the combined experience on the System's assets and liabilities for the plan year. The City contribution also increased $3.3 million due to higher payroll growth than assumed, which is a result of both higher salary increases than expected and a larger active population.

The following graph shows the actuarial required contributions for the City compared to the amount actually contributed by the City in each year. With the legislative changes in 2013, the City is required to contribute the full amount of the actuarial required contribution.



Effective with the April 30, 2017 valuation, the UAAL at April 30, 2017 is amortized over a closed 30-year period (22 years remaining as of April 30, 2025). Any new piece of unfunded actuarial accrued liability, generated as a result of actuarial experience in subsequent years or changes due to new assumptions, creates a new layer which is then amortized over a closed 20-year period. Under this funding policy, the System's funded ratio is expected to slowly improve from its current level and ultimately reach full funding at the end of the longest amortization period.

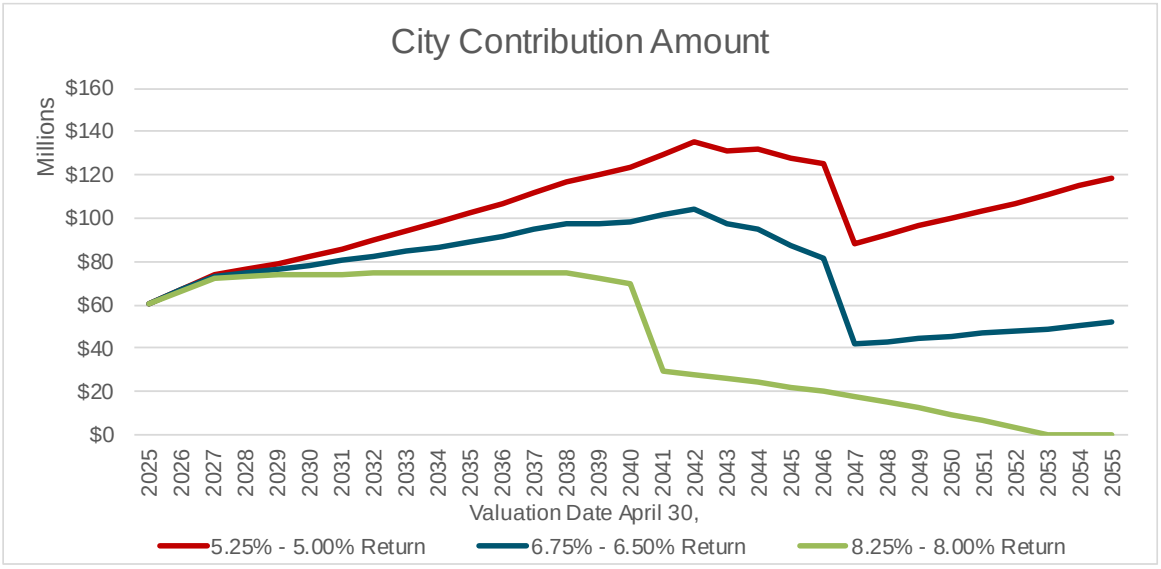
FINANCIAL PROJECTIONS

The April 30, 2025 valuation results indicate the System's financial status at a single point in time, but do not provide insight into future trends in contributions or funded status. In order to assist the

Board in understanding the dynamics of pension funding and the potential impact of deferred investment experience and the anticipated decrease in the investment return assumption, a projection model was prepared in conjunction with the 2025 valuation.

Projections that model a change in one key variable can provide insight and understanding into the longer-term trend of that experience on projected City contributions; the funded status (ratio of actuarial assets over liabilities); and the unfunded actuarial accrued liability (actuarial accrued liability minus actuarial assets). Certain projections, using alternate investment return scenarios selected for purposes of sensitivity analysis, are included in Section 6 of this report. To illustrate the importance of actual investment returns on City contributions, the following graph is included here. Please note that the baseline projections reflect the anticipated "step down" in the investment return assumption to 6.50% over the next 2 years and actual returns equal to the assumed return in each year (6.75% for the twelve-month period beginning May 1, 2025, 6.65% for the twelve-month period beginning May 1, 2026, and 6.50% thereafter). Note that the Board may elect each year whether or not to proceed with the reduction in the investment return assumption.

The alternate scenarios (actual returns that are 1.5% higher and 1.5% lower than assumed) also reflect the step down in the assumed rates of return, so the actual rates modeled are 5.25% grading down to 5.00% over 2 years and 8.25% grading down to 8.00% over 2 years. Note that a 1.5% variance in actual versus expected returns over a 30-year period is a material difference and the significant impact on the City's contribution is not unexpected. These alternate projections do not reflect any change to the plan provisions or assumptions that might occur if either of these scenarios were to actually occur.



COMMENTS

In recent years, the System has systematically been lowering the investment return assumption based on input from their investment consultant and actuary to better align the investment return assumption with reasonable expectations for market returns. As a result, the investment return assumption was lowered from 6.85% to 6.75% in this valuation. The net impact of this change was an increase in the actuarial accrued liability of $19.9 million and an increase in the employer contribution amount of $2.0 million for the fiscal year ending April 30, 2027.

As of April 30, 2025, the actuarial accrued liability was $1.621 billion and the actuarial value of assets was $1.073 billion, resulting in an unfunded actuarial accrued liability (UAAL) of $548 million. The funded ratio decreased from 69% in the 2024 valuation to 66% in 2025 valuation. The UAAL increased by $88 million, as a result of the reduction in the investment return assumption and actual experience over the last year that was less favorable than expected based on the assumptions.

Retirement plans use several mechanisms to create stability in the actuarial contribution rate. These mechanisms include an asset smoothing method, which averages the peaks and valleys of investment returns, and the amortization of actuarial gains or losses, including investment experience, over a number of years. The System utilizes an asset smoothing method that recognizes the difference between actual and expected return on the market value of assets evenly over a five-year period. The return on the market value of assets for the year ended April 30, 2025 was 6.9%, but due to the asset smoothing method only part of that investment experience is recognized in the current valuation along with a portion of the investment experience in the prior four years. As a result, the return on the actuarial value of assets was 5.9%, which resulted in an increase in the UAAL since the actual return was less than the assumed return of 6.85% for the twelve-month period beginning May 1, 2024 and ending April 30, 2025. There was also an actuarial loss of $57.2 million from actual demographic experience that was less favorable than expected, based on the actuarial assumptions, largely due to higher than assumed salary increases.

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 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 7 of this report for an in-depth discussion of the specific risks facing the Police Retirement System of Kansas City, Missouri.

The long-term financial health of this retirement system is heavily dependent on two key items: (1) actual investment returns and (2) contributions to the System. Beginning September 1, 2013, the City began to contribute the full dollar amount of the actuarial required contribution as shown in Table 12. Based on the funding policy adopted by the Board in November, 2016 the UAAL at April 30, 2017 is amortized over a closed 30-year period (22 years remaining as of April 30, 2025). Any new unfunded actuarial accrued liability generated as a result of actuarial experience in subsequent years are layered and amortized over a new, closed 20-year period. Changes in the UAAL due to assumption changes are amortized over a period not to exceed 25 years. As a result, City contributions to the System will be sufficient to fully fund the UAAL over time, and the System's funding status over the long-term is expected to improve if the actuarial assumptions are met.

Board COLA Policy

At their April 10, 2025 meeting, the Board adopted a revised Cost of Living Adjustment Policy. Based on the Board's policy, an ad hoc cost of living adjustment may be granted if the definition of "actuarially sound," which requires the following conditions, is met based on the results of the annual actuarial funding valuation:

1) For six of the last seven completed plan years, the plan has received employer contributions that equal or exceed the plan's actuarially determined contribution amount.

2) The actual compound investment return over the last ten years is equal to or exceeds the current investment return assumption.

3) The projected funded ratio is expected to increase and reach 100% within 25 years if all actuarial assumptions are met and the full actuarially determined contribution, as required under the funding policy, can reasonably be expected to be paid.

The Board of Trustees retains the discretion to grant COLAs on an ad hoc basis. When considering a COLA, the Board will evaluate factors including, but not limited to:

1) The effect of the proposed COLA on the system's liabilities and funded status.

2) Current inflation rates, cost of living indices, and other relevant economic data.

3) The overall financial condition of the Retirement System, including investment performance and contribution levels.

4) The necessity to provide retirees and beneficiaries with adjustments to maintain their purchasing power.

The adoption of this new policy did not affect actuarial assumptions, which assume future ad hoc COLAs of 2.50% (simple COLA) are granted in all future years.

In accordance with the Board adopted definition of "actuarially sound", the System has contributed the full actuarially determined amount in each of the past seven years (see Table 12) and is projected to reach 100% funded within 25 years if all assumptions are met (see Table 13). However, the actual compound investment return over the past ten years was 5.60%, which falls short of the current investment return assumption of 6.75%. Therefore, the System does not currently satisfy the definition of "actuarially sound".

We have not reviewed any legal aspects related to granting the ad hoc COLA. We are not attorneys and cannot give legal advice on such issues. Therefore, we suggest that you review this policy with your legal counsel.

We conclude this Board Summary with the following exhibit which compares the principal results of the current and prior actuarial valuation.

SUMMARY OF PRINCIPAL RESULTS

	4/30/2025 Valuation	4/30/2024 Valuation	% Change
1. MEMBER DATA			
Number of:			
Active members			
- Tier I	604	635	(4.9%)
- Tier II	500	439	13.9%
- Total	1,104	1,074	2.8%
Retired Members and Beneficiaries	1,548	1,553	(0.3%)
Inactive Vested Members	50	46	8.7%
Total Members	2,702	2,673	1.1%
Annual Projected Salaries of Active Members	$ 114,061,730	$ 93,563,950	21.9%
Annual Retirement Payments for Retired Members and Beneficiaries*	$ 77,038,884	$ 74,984,628	2.7%
*Does not include supplemental benefits			
2. ASSETS AND LIABILITIES			
Total Actuarial Accrued Liability	$1,620,587,683	$1,498,414,396	8.2%
Market Value of Assets	1,028,622,529	987,787,161	4.1%
Actuarial Value of Assets	1,072,579,907	1,038,113,517	3.3%
Unfunded Actuarial Accrued Liability	$ 548,007,776	$ 460,300,879	19.1%
Funded Ratio (Actuarial Value)	66%	69%	(4.3%)
Funded Ratio (Market Value)	63%	66%	(4.5%)
3. CITY CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Total Normal Cost	29.64%	29.21%	1.5%
Member Contribution Rate	(11.55%)	(11.55%)	0.0%
Employer Normal Cost	18.09%	17.66%	2.4%
Amortization of Unfunded Actuarial Accrued Liability	33.06%	33.39%	(1.0%)
City Contribution Rate	51.15%	51.05%	0.2%
4. CITY CONTRIBUTION FOR FOLLOWING FISCAL YEAR	$ 60,092,852	$ 49,197,329	22.1%

Note: The investment return assumption was decreased from the prior valuation.

SECTION 2 – SCOPE OF THE REPORT

This report, prepared at the request of the System's Board of Trustees, presents the results of the actuarial valuation of the Police Retirement System of Kansas City, Missouri as of April 30, 2025. There were no changes to the benefit provisions or the actuarial methods from those used in the prior valuation. However, there was one change to the actuarial assumptions used in this valuation. The investment return assumption was decreased from 6.85% to 6.75%.

Please pay particular attention to our cover letter, where the guidelines employed in the preparation of this report are outlined. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings are based. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings, which result from this valuation, is presented in the previous section. Section 3 describes the assets and investment experience of the System. Sections 4 and 5 describe how the obligations of the System are to be met under the actuarial cost method in use. Section 6 includes 30-year financial projections of the System under various investment return scenarios. Section 7 discloses key maturity measurements and the key risks associated with funding the System. Section 8 includes other historical information.

This report includes several appendices:

- Appendix A Schedules of valuation data classified by various categories of members.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on April 30, 2025.
- Appendix C A summary of the actuarial methods and assumptions used to estimate liabilities and determine contribution rates.
- Appendix D A glossary of actuarial terms.

This report also includes the System's Funding Policy, which is shown after Appendix D.

SECTION 3 - 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 April 30, 2025. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System (the present value of future expected benefit payments), which are generally in excess of assets. The actuarial process then leads to a method of determining the contributions needed by members and the City 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, the market value of assets provides a basis for measuring investment performance from time to time. Table 1 is a comparison, at market values, of System assets as of April 30, 2025 and April 30, 2024, in total and by investment category. Table 2 summarizes the change in the market value of assets from April 30, 2024 to April 30, 2025.

Actuarial Value of Assets

Neither the market value of assets, representing a "cash-out" value of System assets, nor the book values of assets, representing the cost of investments, may be the best measure of the System's ongoing ability to meet its obligations.

To arrive at a suitable value of assets 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. Under the current asset smoothing methodology, the difference between the dollar amount of the actual and assumed investment return on the market value of assets is recognized evenly over a five-year period. The method was implemented by resetting the actuarial value of assets on April 30, 2011 equal to the market value of assets and applying the smoothing method prospectively.

TABLE 1

STATEMENT OF NET PLAN ASSETS AT MARKET VALUE

	Market Value	
	April 30, 2025	**April 30, 2024**
Cash & Equivalents	$18,330,912	$36,856,491
Receivables	5,629,775	5,274,497
Stocks:		
Common & Preferred Corporate	93,847,635	113,262,956
World Equities	169,463,549	171,131,809
Foreign	103,082,775	108,003,424
Bonds:		
U.S. Government	73,520,627	57,614,935
Corporate	148,584,824	120,078,253
Asset Backed Securities	1,261,027	1,417,555
Real Estate	115,853,750	121,519,843
Partnerships and Hedge Funds	302,445,614	258,153,018
Building and Other Property Used in Plan Operations	19,921	7,609
Total Assets	$1,032,040,409	$993,320,390
Accounts Payable	(3,417,880)	(5,533,229)
Net Assets Available for Benefits	$1,028,622,529	$987,787,161

TABLE 2

STATEMENT OF CHANGES IN NET ASSETS
DURING YEAR ENDED APRIL 30, 2025

(Market Value)

1. Market Value of Assets as of April 30, 2024	$	987,787,161
2. Contributions:		
a. Members	$	12,574,466
b. City		44,403,767
c. City Supplemental Benefit		3,681,600
d. Total	$	60,659,833
3. Investment Income		
a. Interest and Dividends	$	37,381,865
b. Net Securities Lending Income		137,088
c. Investment Expenses		(5,940,069)
d. Net Appreciation (Depreciation) in Fair Value		35,253,995
e. Net Investment Income (Loss)	$	66,832,879
4. Deductions		
a. Refunds of Member Contributions	$	351,611
b. Benefits Paid:		
(1) Retirement Benefits		80,221,524
(2) City-paid Supplemental Benefit		3,681,600
(3) Death Benefits		34,000
(4) Partial Lump Sums		1,277,656
c. Administrative Expenses		1,091,118
d. Total	$	86,657,509
5. Other Income	$	165
6. Net Change [2d] + [3e] - [4d] + [5]	$	40,835,368
7. Market Value of Assets as of April 30, 2025 [1] + [6]	$	1,028,622,529

TABLE 3

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

Under the current asset smoothing method, the difference between the actual and assumed investment return on the market value of assets is recognized evenly over a five-year period.

	Plan Year End			
	4/30/2022	4/30/2023	4/30/2024	4/30/2025
1. Market Value of Assets, Beginning of Year	$ 1,033,642,868	$ 990,521,742	$ 953,538,876	$ 987,787,161
2. Contributions During Year	49,865,364	50,207,645	50,804,098	60,659,833
3. Benefits, Expenses and Other Income During Year	81,659,428	83,794,783	85,706,525	86,657,344
4. Assumed Rate of Return	7.25%	7.20%	6.95%	6.85%
5. Expected Net Investment Income	73,806,738	70,129,443	65,078,464	66,787,753
6. Expected Value of Assets, End of Year	1,075,655,542	1,027,064,047	983,714,913	1,028,577,403
7. Market Value of Assets, End of Year	990,521,742	953,538,876	987,787,161	1,028,622,529
8. Excess/(Shortfall) of Net Investment Income	$ (85,133,800)	$ (73,525,171)	$ 4,072,248	$ 45,126

TABLE 3
(continued)

1. Excess/(Shortfall) of Investment Income		
a. Year ending 4/30/2025	$	45,126
b. Year ending 4/30/2024		4,072,248
c. Year ending 4/30/2023		(73,525,171)
d. Year ending 4/30/2022		(85,133,800)
2. Deferral of Excess/(Shortfall) of Investment Income		
a. Year ending 4/30/2025 (80%)	$	36,101
b. Year ending 4/30/2024 (60%)		2,443,349
c. Year ending 4/30/2023 (40%)		(29,410,068)
d. Year ending 4/30/2022 (20%)		(17,026,760)
e. Total	$	(43,957,378)
3. Market Value End of Year		1,028,622,529
4. Actuarial Value End of year (3) - (2e)		1,072,579,907
5. Ratio of Actuarial Value to Market Value		104.3%
6. Difference Between Actuarial & Market Value	$	43,957,378
7. Rate of Return on Actuarial Value of Assets		5.9%
8. Rate of Return on Market Value of Assets		6.9%

Plan Year Ended	Gain/(Loss) Deferred to Future Years	Gain/(Loss) to be Recognized in Plan Year Ending			
		2026	2027	2028	2029
4/30/2022	($17,026,760)	(17,026,760)			
4/30/2023	(29,410,068)	(14,705,034)	(14,705,034)		
4/30/2024	2,443,349	814,450	814,450	814,449	
4/30/2025	36,101	9,025	9,025	9,025	9,026
	($43,957,378)	($30,908,319)	($13,881,559)	$823,474	$9,026

SECTION 4 – 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, April 30, 2025. In this section, the discussion will focus on the commitments (future benefit payments) of the System, which are referred to as its liabilities.

Table 4 contains an analysis of the actuarial present value of all future benefits (PVFB) for contributing members, inactive members, retirees and their beneficiaries. The liabilities summarized in Table 4 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 the measurement of both benefits already earned and future benefits 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.

All liabilities are based on the benefit provisions in effect as of April 30, 2025. State law allows the Board to grant a cost-of-living adjustment (COLA) when certain conditions are met, up to a maximum of 3% per year. While the amount and timing of future COLAs are not guaranteed, we assume a 2.5% annual simple COLA for all future years. This assumption is intended to reflect what we expect over the long term based on the plan's provisions and past practice.

Actuarial Accrued Liability

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 5 contains the calculation of actuarial accrued liability for the System. The Entry Age Normal actuarial cost method is used to develop the actuarial accrued liability.

TABLE 4

PRESENT VALUE OF FUTURE BENEFITS (PVFB)
AS OF APRIL 30, 2025

1. Active employees		
a. Retirement Benefit	$	714,929,228
b. Pre-Retirement Death Benefit		7,402,401
c. Withdrawal Benefit		15,852,941
d. Disability Benefit		120,960,654
e. Supplemental Benefit		14,048,168
f. Total	$	873,193,392
2. Inactive Vested Members		
a. Retirement Benefit	$	26,652,175
b. Supplemental Benefit		1,212,002
c. Total	$	27,864,177
3. In Pay Members		
a. Retirees	$	762,088,361
b. Disabled Members		142,251,384
c. Beneficiaries		74,279,202
d. Supplemental Benefit		41,710,833
e. Total	$	1,020,329,780
4. Total Present Value of Future Benefits		
[1f] + [2c] + [3e]	$	1,921,387,349

TABLE 5

ACTUARIAL ACCRUED LIABILITY
AS OF APRIL 30, 2025

1. Active employees		
a. Present Value of Future Benefits	$	873,193,392
b. Present Value of Future Normal Costs		300,799,666
c. Actuarial Accrued Liability [1a] - [1b]	$	572,393,726
2. Inactive Vested Members	$	27,864,177
3. In Pay Members		
a. Retirees	$	762,088,361
b. Disabled Members		142,251,384
c. Beneficiaries		74,279,202
d. Supplemental Benefit		41,710,833
e. Total	$	1,020,329,780
4. Total Actuarial Accrued Liability [1c] + [2] + [3e]	$	1,620,587,683

TABLE 6

DERIVATION OF SYSTEM EXPERIENCE GAIN/(LOSS)

Liabilities		
1. Actuarial Accrued Liability as of May 1, 2024	$	1,498,414,396
2. Normal Cost for Year, Including New Hires		25,233,492
3. Interest on (1) & (2)		104,369,880
4. Benefit Payments during FYE 2025*		(81,884,791)
5. Service Purchases during FYE 2025		92,135
6. Interest on Benefit Payments and Service Purchases		(2,755,000)
7. Assumption Changes		19,872,584
8. Expected Actuarial Accrued Liability as of April 30, 2025	$	1,563,342,696
9. Actuarial Accrued Liability as of April 30, 2025	$	1,620,587,683
Assets		
10. Actuarial Value of Assets as of May 1, 2024	$	1,038,113,517
11. Contributions during FYE 2025*		56,886,098
12. Service Purchases during FYE 2025		92,135
13. Benefit Payments, Expenses and Other Income*		(82,975,744)
14. Interest on Items (10), (11) and (12)		70,235,109
15. Expected Actuarial Value of Assets as of April 30, 2025	$	1,082,351,115
16. Actual Actuarial Value of Assets as of April 30, 2025	$	1,072,579,907
Gain / (Loss)		
17. Expected Unfunded Actuarial Accrued Liability (8) – (15)	$	480,991,581
18. Actual Unfunded Actuarial Accrued Liability (9) – (16)	$	548,007,776
19. Actuarial Gain / (Loss) (17) – (18)	$	(67,016,195)
20. Actuarial Gain / (Loss) on Actuarial Assets (16) – (15)	$	(9,771,208)
21. Actuarial Gain / (Loss) on Actuarial Accrued Liability (8) – (9)	$	(57,244,987)

*Excludes supplemental benefits paid by the City.

TABLE 7

ACTUARIAL GAIN/(LOSS) ANALYSIS BY SOURCE

Source of Gain/(Loss)	Gain/(Loss) ($M)
Retiree Mortality	1.9
Termination of Employment	0.6
Retirement	(0.4)
Disability	1.0
Active Mortality	(0.3)
Salary	(58.4)
Actual vs. Expected COLA	0.0
Other	(1.6)
Total Liability Gain/(Loss)	(57.2)
Asset Gain/(Loss)	(9.8)
Total Gain/(Loss)	(67.0)

* Numbers may not add due to rounding

TABLE 8

PROJECTED BENEFIT PAYMENTS

The chart below shows estimated benefits expected to be paid over the next twenty years, based on the assumptions used in this valuation. The "Actives" column shows benefits expected to be paid to members currently active on April 30, 2025. The "Retirees" column shows benefits expected to be paid to all other members. This includes those who, as of April 30, 2025, are receiving benefit payments or who are inactive vested and are entitled to a benefit in the future (including officers past 32 years of service). No future members are reflected.

Retirement, Survivor, Withdrawal and Supplemental Benefits

Year Ending April 30	Actives	Retirees	Total
2026	$ 3,374,000	$ 80,551,000	$ 83,925,000
2027	7,347,000	80,946,000	88,293,000
2028	11,732,000	81,506,000	93,238,000
2029	15,921,000	81,856,000	97,777,000
2030	20,392,000	81,984,000	102,376,000
2031	25,071,000	81,848,000	106,919,000
2032	30,113,000	81,604,000	111,717,000
2033	34,707,000	81,269,000	115,976,000
2034	39,272,000	80,808,000	120,080,000
2035	43,954,000	80,306,000	124,260,000
2036	48,741,000	79,701,000	128,442,000
2037	52,837,000	79,002,000	131,839,000
2038	56,944,000	78,039,000	134,983,000
2039	61,209,000	77,034,000	138,243,000
2040	65,622,000	75,860,000	141,482,000
2041	69,136,000	74,633,000	143,769,000
2042	72,790,000	73,291,000	146,081,000
2043	76,589,000	71,871,000	148,460,000
2044	80,041,000	70,375,000	150,416,000
2045	83,767,000	68,806,000	152,573,000

SECTION 5 – CITY CONTRIBUTIONS

The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 3 and 4 indicates that current assets fall short of meeting the present value of future benefits (total liability). This is expected in all but a completely 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 two elements: (1) the normal cost rate and (2) the unfunded actuarial accrued liability contribution rate.

The term fully funded generally refers to a system where contributions at the normal cost rate are sufficient to cover the projected benefits for current and future employees. In practice, most systems are not fully funded. This can occur for several reasons, such as past benefit enhancements that were not fully financed, changes in actuarial assumptions, or unfavorable experience compared to expectations. When this happens, the plan has an unfunded actuarial accrued liability (UAAL). Conversely, if the actuarial value of assets exceeds the actuarial accrued liability, the plan is considered to have a surplus.

Description of Contribution Rate Components

The Entry Age Normal (EAN) actuarial cost method is used for the valuation. Under that method, the normal cost for each year from entry age to assumed exit age is a constant percentage of the member's year by year projected compensation. The portion of the present value of future benefits not provided by the present value of future normal costs is 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.

In general, contributions are computed in accordance with a level percent-of-payroll funding objective, although the City contributes the dollar amount from the valuation. The contribution rate based on the April 30, 2025 actuarial valuation will be used to determine the dollar amount of the actuarial required City contribution (contribution rate times expected payroll) to the Police Retirement System of Kansas City, Missouri for fiscal year ending April 30, 2027. In this context, the term “contribution rate” means the percentage which is applied to a particular active member payroll to determine the actual City contribution amount (i.e., in dollars) for the group.

As of April 30, 2025, the actuarial accrued liability was greater than the valuation assets so an unfunded actuarial accrued liability (UAAL) exists. The UAAL as of April 30, 2017 (referred to as the Legacy UAAL) is amortized as a level percent of payroll, over a closed 30-year period (22

years remaining as of April 30, 2025). Any new unfunded actuarial accrued liability generated as a result of actuarial experience in subsequent years will be layered and amortized over a closed 20-year period. Active member payroll is assumed to increase 3.00% per year, which is used in developing the UAAL payment pattern. However, the City contributes the dollar amount of the actuarial required contribution rather than the actuarial required contribution rate applied to actual covered payroll. This insulates the funding of the System from lower UAAL contributions resulting from lower payroll than expected and thus reduces the likelihood that future contributions to the UAAL will be less than the scheduled amount. Please note that the use of closed amortization periods, coupled with the City contributing the full actuarial required contribution each year, will result in the System being fully funded at the end of the amortization period, if all actuarial assumptions are met. Based on the current valuation, the full funding date is the 2047 valuation. In our opinion, the amortization policy meets the requirements of Actuarial Standard of Practice Number 4.

This approach is intended to promote stable contribution rates, balance cost among generations of taxpayers and members, and ensure adequate advance funding of benefits. The amortization schedule will fully fund the UAAL within 23 years and contributions currently exceed the normal cost plus interest on the UAAL.

In our professional judgement, the funding policy adopted by the Board of Trustees produces a reasonable actuarial required 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

In Table 9, the UAAL is projected to May 1, 2026 to align the calculation of the UAAL payment with the fiscal year in which the contribution will be made. Table 10 shows the amortization of the UAAL bases as well as develops the UAAL Amortization Payment Rate. Table 11 develops the actuarial required contribution rate for the System. A historical summary of the actual and actuarial required contribution rates for the City is shown in Table 12.

The contribution rates shown in this report are based on the actuarial assumptions and cost methods described in Appendix C.

TABLE 9

PROJECTED UAAL AT MAY 1, 2026

1. Actuarial Accrued Liability as of April 30, 2025	$	1,620,587,683
2. Actuarial Value of Assets	$	1,072,579,907
3. Unfunded Actuarial Accrued Liability as of April 30, 2025	$	548,007,776
4. Total Contribution Rate for FYE 2026*		62.60%
5. Normal Cost Rate		29.64%
6. Contribution Rate Applied to Fund the UAAL for FYE 2026 (4) - (5)		32.96%
7. Expected Payroll for FYE 2026	$	114,061,730
8. Projected UAAL on May 1, 2026 $[(3) * 1.0675] - [(6) * (7) * 1.0675^{.5}]$	$	546,155,450

* Reflects member contributions of 11.55% and City contributions of 51.05%

TABLE 10

AMORTIZATION OF THE UAAL

We believe the use of the layered amortization policy, with new bases over 20 years and the remainder of the legacy base over 22 years, complies with Actuarial Standard of Practice Number 4.

Amortization Base	Original Amount	Remaining Payments	Projected May 1, 2026 Balance	Annual Payment*
2017 Legacy UAAL	$ 271,513,914	22	$ 291,234,902	$ 19,406,922
2018 Experience	3,938,832	13	3,584,665	349,939
2019 Assumption Changes	7,029,844	14	6,532,190	601,951
2019 Experience	10,682,521	14	9,926,285	914,721
2020 Assumption Changes	7,234,995	15	6,862,261	599,934
2020 Experience	10,137,107	15	9,614,860	840,580
2021 Assumption Changes	24,396,257	16	23,521,751	1,959,425
2021 Experience	(25,238,647)	16	(24,333,945)	(2,027,083)
2022 Assumption Changes	8,562,202	17	8,364,336	666,450
2022 Experience	(1,867,003)	17	(1,823,858)	(145,321)
2023 Assumption Changes	45,549,966	18	44,942,794	3,436,634
2023 Experience	37,132,749	18	36,637,776	2,801,575
2024 Assumption Changes	19,402,370	19	19,294,872	1,420,199
2024 Experience	27,903,468	19	27,748,870	2,042,456
2025 Assumption Changes	21,213,983	20	21,213,983	1,507,035
2025 Experience	62,833,708	20	62,833,708	4,463,687
Total			**$ 546,155,450**	**$ 38,839,104**

* Payment amount reflects mid-year timing.

1. Total UAAL Amortization Payments	$ 38,839,104
2. Expected Payroll for FYE 2027	$ 117,483,582
3. UAAL Amortization Payment Rate (1) / (2)	33.06%

TABLE 11

CITY CONTRIBUTION RATE

	Valuation Date*	
	4/30/2025	**4/30/2024**
Normal Cost		
Service pensions	19.15%	18.87%
Pre-retirement death pensions	0.54%	0.54%
Disability pensions	7.00%	6.77%
Termination benefits	1.70%	1.71%
Supplemental retirement benefit	0.25%	0.32%
Administrative expenses	1.00%	1.00%
Total Normal Cost	29.64%	29.21%
Total UAAL Amortization payment	33.06%	33.39%
Total Actuarial Required Contribution Rate	62.70%	62.60%
Member Portion	11.55%	11.55%
City Portion	51.15%	51.05%

* The valuation results are used to determine the City contribution rate for the fiscal year ending two years later.

TABLE 12

COMPUTED AND ACTUAL CITY CONTRIBUTIONS COMPARATIVE STATEMENT

Fiscal Year Beginning May 1		Valuation Date April 30	Projected Annual Payroll	Fiscal Year Contributions: As a % of Projected Pay: Annual Required Contribution		Fiscal Year Contributions: As a % of Projected Pay: Reported FY City Contribution		Fiscal Year Contributions: $ Contributions: Annual Required Contribution	Fiscal Year Contributions: $ Contributions: Projected FY City Contribution	Fiscal Year Contributions: $ Contributions: Actual Dollar Contribution	Fiscal Year Contributions: $ Contributions: Contribution Shortfall/ (Surplus)
2002		2002	$59,228,848	19.55		19.70		$11,579,240	$11,668,083	$12,017,801	($438,561)
2003	*	2003	65,234,614	23.14		19.70		15,095,290	12,851,219	12,817,176	2,278,114
2004		2003	68,170,172	23.14		19.70		15,774,578	13,429,524	13,297,605	2,476,973
2005		2004	72,325,478	26.26		19.70		18,992,671	14,248,119	13,729,225	5,263,446
2006		2005	73,794,574	29.06		19.70		21,444,703	14,537,531	14,526,734	6,917,969
2007		2006	78,446,156	29.00		19.70		22,749,385	15,453,893	15,747,111	7,002,274
2008		2007	83,716,533	29.04		19.70		24,311,281	16,492,157	16,700,688	7,610,593
2009		2008	90,168,869	26.22		19.70		23,642,278	17,763,267	16,645,229	6,997,049
2010		2009	93,479,787	36.76		19.70		34,363,170	18,415,518	16,532,015	17,831,155
2011		2010	94,094,251	33.75		19.70		31,756,810	18,536,567	16,476,608	15,280,202
2012	*	2011	91,982,770	36.79		19.70		33,840,461	18,120,606	16,933,694	16,906,767
2013		2012	91,396,005	38.85	**	19.70	**	35,507,348	18,005,013	20,528,569	14,978,779
2014	*#	2013	94,109,913	27.35		27.35		25,739,061	25,739,061	25,739,061	0
2015		2014	99,755,810	27.33		27.33		27,263,263	27,263,263	27,263,263	0
2016		2015	100,744,778	27.71		27.71		27,916,378	27,916,378	27,916,378	0
2017		2016	99,605,252	29.08		29.08		28,965,207	28,965,207	28,965,207	0
2018		2017	96,913,504	30.01		30.01		29,083,743	29,083,743	29,083,743	0
2019		2018	99,331,917	30.36		30.36		30,157,170	30,157,170	30,157,170	0
2020	*	2019	100,605,177	32.60		32.60		32,797,288	32,797,288	32,797,288	0
2021	*	2020	100,875,957	34.44		34.44		34,741,680	34,741,680	34,741,680	0
2022	*	2021	97,162,729	36.26		36.26		35,231,206	35,231,206	35,231,206	0
2023	*	2022	92,222,322	38.81		38.81		35,791,483	35,791,483	35,791,483	0
2024	*	2023	94,798,820	46.84		46.84		44,403,767	44,403,767	44,403,767	0
2025	*	2024	96,370,869	51.05		51.05		49,197,329	49,197,329		
2026	*	2025	117,483,582	51.15				60,092,852			

* After changes in actuarial assumptions or methods.
** Effective September 1, 2013, the actuarial required contribution rate was revised to 36.58% and the City began contributing the full actuarial required contribution rate of 25.03%.
\# After changes in benefits
Note: For years prior to 2011, information is shown from the prior actuary's report.

SECTION 6 – FINANCIAL PROJECTIONS

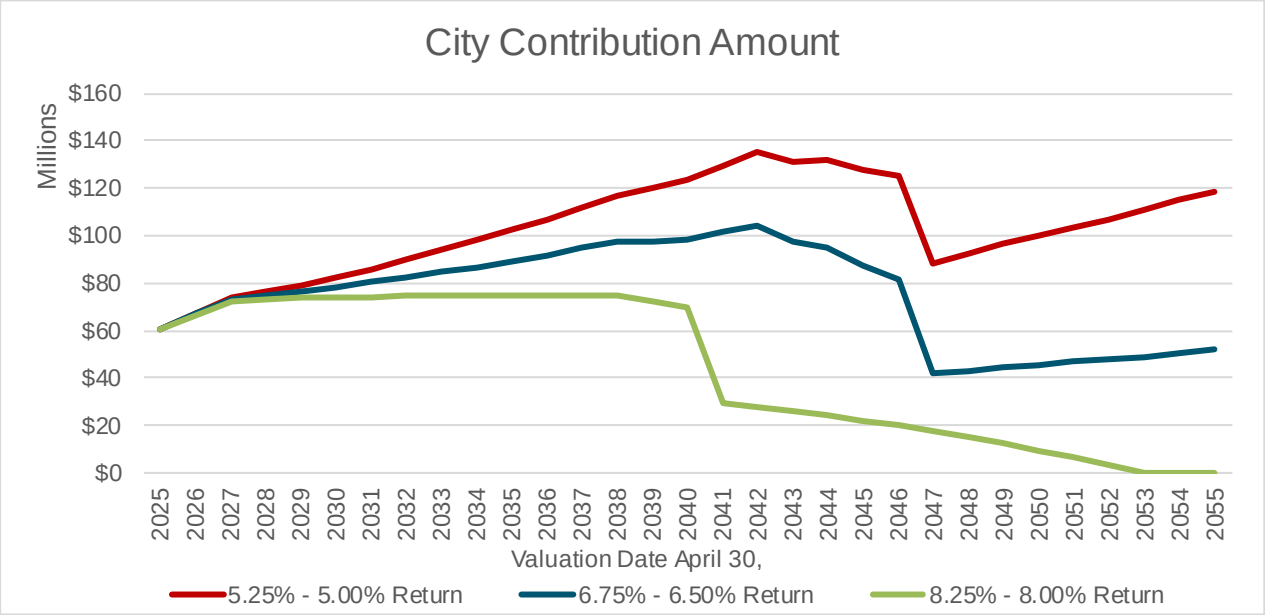
While the April 30, 2025 valuation results indicate the System's financial status at a single point in time, projections are used to identify trends and to compare various scenarios rather than predicting some future state of events. The projections model a change in one key variable to provide insight into the longer term trend of (1) the projected City contributions; (2) the System's projected funded status (ratio of actuarial assets over liabilities); and (3) the unfunded actuarial accrued liability (actuarial accrued liability minus actuarial assets). The projections also show how sensitive the results are to the key variable being modeled. The projections do not predict the System's financial condition or its ability to pay benefits in the future and do not provide any guarantee of future financial soundness of the System. Over time, a defined benefit plan's total cost will depend on a number of factors, including the amount of benefits paid, the number of people paid benefits, plan expenses, and the amount of earnings on assets invested to pay benefits. These amounts and other variables are uncertain and unknowable at the time the projections were prepared. Because not all of the assumptions will unfold exactly as expected, actual results will differ from the projections shown.

The following three actual investment return scenarios are modeled (note the underlying assumption does not change):

(1) Returns of 6.75% for the twelve-month period beginning May 1, 2025, 6.65% for the twelve-month period beginning May 1, 2026, and 6.50% thereafter,
(2) Returns 1.50% higher than the current assumption (8.25% grading down to 8.00%), and
(3) Returns 1.50% lower than the current assumption (5.25% grading down to 5.00%).

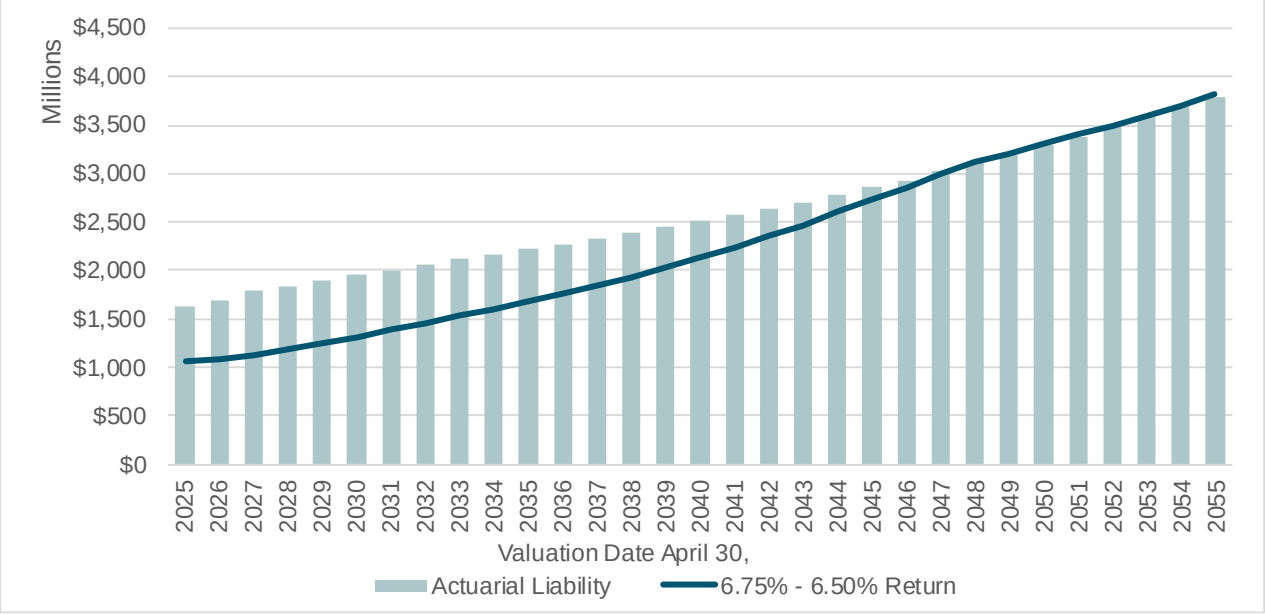
The projections assume that all actuarial assumptions, other than investment return, are met in all future years and that the City makes contributions equal to the full amount of the actuarial required contribution as calculated by the System's actuary, based on the Board's Funding Policy (including closed amortization periods). Note that the 2.5% COLA is assumed to be granted in all years even when the Board's criteria is not met. These projections include estimates of future valuation results, including the unfunded actuarial accrued liability and funded ratio. It should be noted that these actuarial measurements do not indicate the sufficiency of plan assets to settle the plan's obligations nor do they, on their own, indicate future funding requirements.

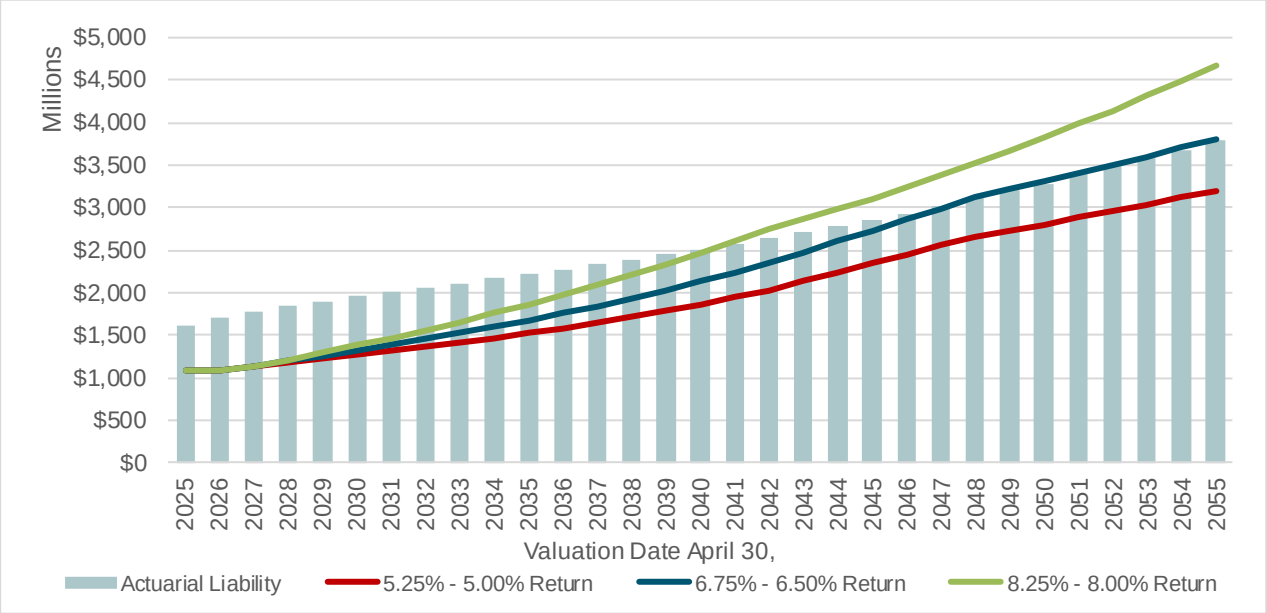
Effect of Various Returns on City Contribution Amount



Comparison of Projected Actuarial Assets to Actuarial Liability

The following graphs compare the actuarial value of assets (blue line) to the System's actuarial accrued liabilities (teal bars) on the valuation date in future years. The first graph shows the baseline case, while the second graph shows the sensitivity of the results to variation in the actual rate of return.





Funded Ratio

The following graph shows the System's projected funded ratio (ratio of actuarial value of assets to actuarial accrued liabilities) under each of the scenarios described earlier. The years shown in the chart are valuation dates (April 30 of each year).

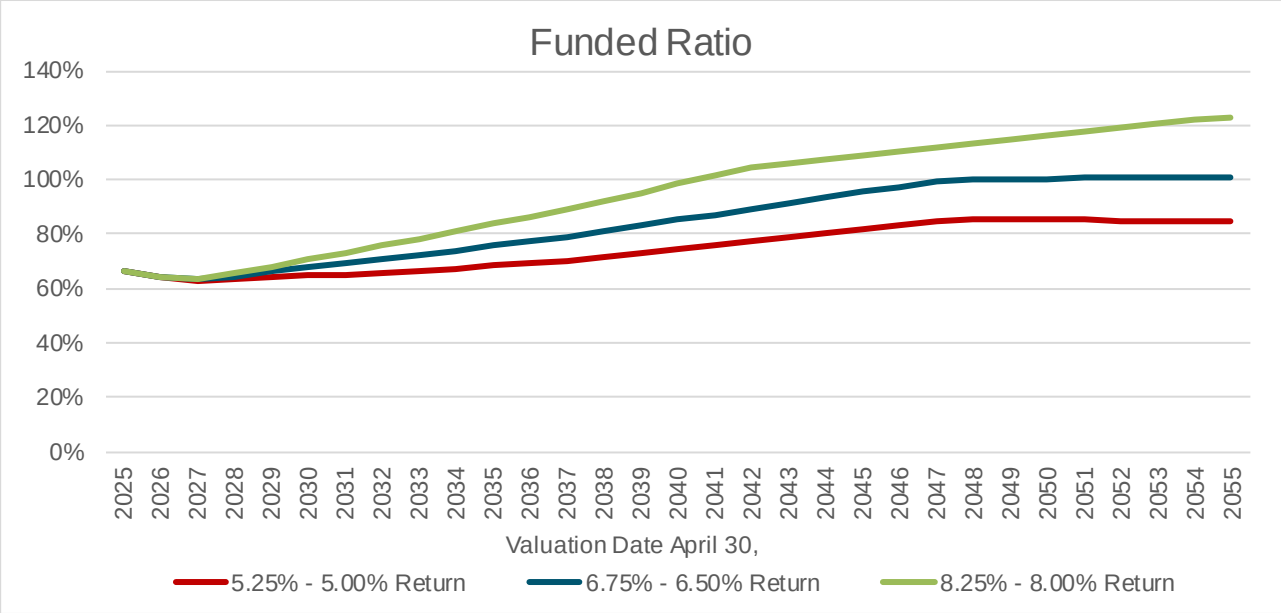


TABLE 13

PROJECTION OF VALUATION RESULTS

Projection Based on April 30, 2025 Actuarial Valuation
6.75% - 6.50% Investment Return Assumption
Amounts in Thousands

Valuation as of April 30, (1)	Covered Payroll at Valuation (2)	Actuarial Accrued Liability (AAL) (3)	Actuarial Value of Assets (AVA) (4)	Unfunded AAL (5)	Funded Ratio Using AVA (6)	UAAL Amortization Payment Rate (7)	Normal Cost Rate (8)	Actuarial Contribution Rate (9)	Member Contribution Rate (10)	Employer Actuarial Contribution Rate (11)	Dollar Amount of Employer Contribution* (12)
2025	$114,062	$1,620,588	$1,072,580	$548,008	66.18%	33.06%	29.64%	62.70%	11.55%	51.15%	$60,093
2026	116,437	1,697,089	1,087,656	609,432	64.09%	37.09%	30.18%	67.27%	11.55%	55.72%	66,825
2027	119,357	1,786,007	1,128,745	657,262	63.20%	39.66%	31.09%	70.75%	11.55%	59.20%	72,779
2028	122,396	1,841,954	1,188,595	653,359	64.53%	39.72%	30.96%	70.68%	11.55%	59.13%	74,544
2029	125,432	1,897,669	1,253,153	644,516	66.04%	39.87%	30.83%	70.70%	11.55%	59.15%	76,419
2030	128,521	1,952,824	1,319,167	633,658	67.55%	40.01%	30.70%	70.71%	11.55%	59.16%	78,314
2031	131,814	2,007,370	1,386,888	620,482	69.09%	40.12%	30.57%	70.69%	11.55%	59.14%	80,293
2032	135,322	2,060,996	1,456,177	604,819	70.65%	40.18%	30.45%	70.63%	11.55%	59.08%	82,347
2033	139,313	2,114,623	1,527,763	586,860	72.25%	40.13%	30.36%	70.49%	11.55%	58.94%	84,574
2034	143,627	2,168,342	1,602,044	566,297	73.88%	40.05%	30.27%	70.32%	11.55%	58.77%	86,942
2035	148,188	2,221,983	1,679,289	542,695	75.58%	39.93%	30.17%	70.10%	11.55%	58.55%	89,367
2036	152,964	2,275,544	1,759,812	515,732	77.34%	39.79%	30.11%	69.90%	11.55%	58.35%	91,932
2037	158,587	2,330,382	1,844,720	485,662	79.16%	39.49%	30.05%	69.54%	11.55%	57.99%	94,723
2038	164,478	2,386,713	1,934,846	451,867	81.07%	38.89%	30.01%	68.90%	11.55%	57.35%	97,158
2039	170,216	2,444,599	2,030,627	413,972	83.07%	37.39%	29.96%	67.35%	11.55%	55.80%	97,830
2040	176,415	2,504,046	2,132,015	372,030	85.14%	35.91%	29.94%	65.85%	11.55%	54.30%	98,667
2041	183,335	2,566,655	2,238,587	328,068	87.22%	35.62%	29.93%	65.55%	11.55%	54.00%	101,971
2042	190,125	2,632,485	2,350,949	281,535	89.31%	34.93%	29.93%	64.86%	11.55%	53.31%	104,396
2043	197,089	2,701,758	2,471,902	229,857	91.49%	29.55%	29.94%	59.49%	11.55%	47.94%	97,319
2044	204,335	2,775,278	2,601,509	173,768	93.74%	26.51%	29.96%	56.47%	11.55%	44.92%	94,541
2045	211,320	2,852,905	2,730,292	122,613	95.70%	21.54%	29.98%	51.52%	11.55%	39.97%	86,999
2046	217,867	2,933,988	2,861,875	72,112	97.54%	17.68%	30.02%	47.70%	11.55%	36.15%	81,122
2047	223,770	3,017,415	2,990,377	27,037	99.10%	(0.36%)	30.07%	29.71%	11.55%	18.16%	41,856
2048	230,080	3,104,323	3,117,708	(13,385)	100.43%	(0.39%)	30.11%	29.72%	11.55%	18.17%	43,060
2049	236,485	3,194,185	3,208,878	(14,693)	100.46%	(0.42%)	30.16%	29.74%	11.55%	18.19%	44,307
2050	242,777	3,286,875	3,303,034	(16,160)	100.49%	(0.45%)	30.21%	29.76%	11.55%	18.21%	45,536
2051	248,990	3,381,963	3,399,857	(17,894)	100.53%	(0.48%)	30.27%	29.79%	11.55%	18.24%	46,778
2052	254,665	3,478,374	3,498,474	(20,099)	100.58%	(0.53%)	30.33%	29.80%	11.55%	18.25%	47,871
2053	261,167	3,576,976	3,599,282	(22,306)	100.62%	(0.57%)	30.37%	29.80%	11.55%	18.25%	49,093
2054	268,920	3,680,658	3,704,398	(23,741)	100.65%	(0.59%)	30.41%	29.82%	11.55%	18.27%	50,606

* Amounts shown are contributions in the fiscal year ending two years after the valuation date.

TABLE 14

CITY CONTRIBUTIONS UNDER ALTERNATE SCENARIOS

Projection Based on April 30, 2025 Actuarial Valuation
Board's Funding Policy (Layered Amortization of UAAL)
Amounts in Thousands

Fiscal Year End April 30,*	City Contribution Amounts at Various Investment Returns		
	6.75% - 6.50% Return	8.25% - 8.00% Return	5.25% - 5.00% Return
2027	$60,093	$60,093	$60,093
2028	66,825	66,585	67,053
2029	72,779	72,017	73,529
2030	74,544	72,930	76,132
2031	76,419	73,615	79,132
2032	78,314	73,972	82,497
2033	80,293	74,252	86,023
2034	82,347	74,472	89,720
2035	84,574	74,702	93,715
2036	86,942	74,885	97,948
2037	89,367	74,958	102,356
2038	91,932	74,979	107,026
2039	94,723	75,008	112,038
2040	97,158	74,473	116,843
2041	97,830	71,952	120,043
2042	98,667	69,339	123,525
2043	101,971	29,515	129,654
2044	104,396	27,847	135,102
2045	97,319	26,045	131,220
2046	94,541	24,204	131,836
2047	86,999	22,158	127,875
2048	81,122	19,905	125,464
2049	41,856	17,401	88,252
2050	43,060	14,835	92,471
2051	44,307	12,155	96,336
2052	45,536	9,302	99,849
2053	46,778	6,309	103,456
2054	47,871	3,017	107,020
2055	49,093	0	110,721
2056	50,606	0	114,756

*The Actuarial Required Contribution (ARC) determined in the annual actuarial valuation is contributed in the following fiscal year. For example, the dollar amount of the ARC for fiscal year-end April 30, 2027 is based on the ARC calculated in the April 30, 2025 valuation.

Note: Projections assume a constant population and no actuarial gains and losses other than recognition of the deferred investment experience as of April 30, 2025.

SECTION 7 – 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. Actuarial Standard of Practice Number 51, *Assessment and Disclosure of Risk in Measuring Pension Obligations*, (ASOP 51) applies to funding valuations, actuarial projections, and actuarial cost studies of proposed plan changes and was first applicable for the April 30, 2019 actuarial valuation for the Police Retirement System of Kansas City, Missouri (System).

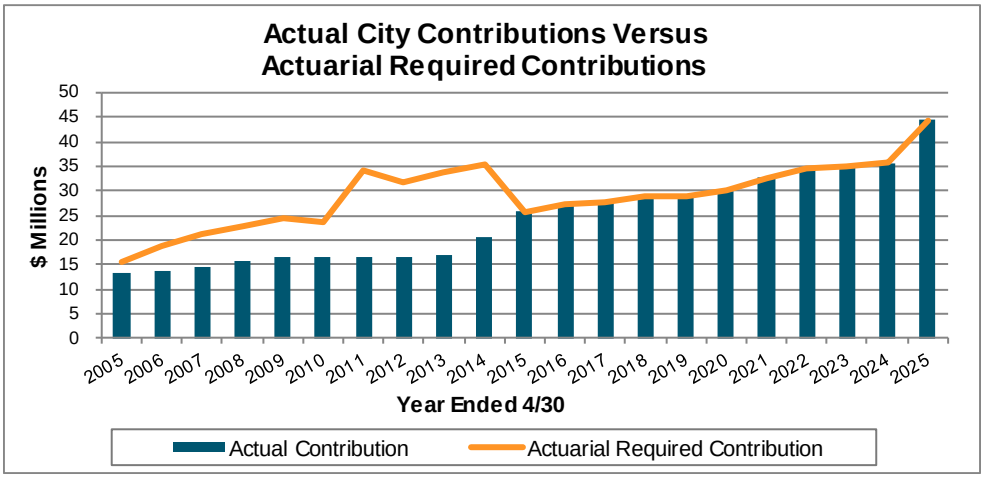
A typical retirement plan faces many different risks, but the greatest risk is the inability to make benefit payments when due. If plan assets are depleted, benefits may not be paid which could create legal and litigation risk or the plan could become "pay as you go". The term "risk" is most commonly 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 volatility in contribution rates and
- external risks, such as the regulatory and political environment, are not included in ASOP 51.

There is a direct correlation between healthy, well-funded retirement plans and consistent contributions equal to the full actuarial required contribution each year. As the following graph shows, the City failed to make contributions equal to the actuarial rate from 2005 to 2014, with large shortfalls in some years. As required by legislation passed in 2013, the City has contributed the full actuarial required contribution for the past 11 fiscal years.



One of the strongest factors regarding the future funding of the System is the City's statutory requirement to make the full actuarial required contribution, as determined by the System's actuary in the annual actuarial valuation. This is an important change from the prior decade when actual City contributions were far below the full actuarial required contribution.

The most significant risk factor for most retirement systems, including the Police Retirement System of Kansas City, Missouri, is investment return risk because of the volatility of returns and the size of plan assets compared to payroll (see Table 15). As that table illustrates, a difference of 10% between the actual return in a year and the assumed return results in an ultimate contribution rate increase of 6.4% of pay over a 20-year period. Given the System's target asset allocation and the associated standard deviation of the portfolio, a variance of 10% or more from the assumption in any given year is not unexpected (likely to occur in about one of every three years).

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 that the discount rate is derived from considering low-default-risk fixed income securities. We considered the FTSE Pension Discount Curve based on market bond rates published by the Society of Actuaries as of April 30, 2025 and with the 30-year spot rate used for all durations beyond 30. Using these assumptions, we calculate a liability of $1,796,200,000. 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.

SECTION 7 – RISK CONSIDERATIONS

A key demographic risk for all retirement systems, including the Police Retirement System of Kansas City, Missouri, 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 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 experienced with the COVID-19 pandemic. This type of event is also significant, although more easily managed by the System. 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 for UAAL payments assumes an increasing covered payroll over time which is dependent on a stable employment level, i.e., active member count remains the same. When payroll does not grow as expected, the UAAL contribution rate will be higher than expected, even if the dollar amount of the payment is the same as scheduled. As Table 18 illustrates, the growth in covered payroll since FYE 2008 has been minimal compared to expected increases over that period of 3.00% to 4.00%. This trend is due to the combined impact of a smaller number of active members and relatively low salary increases. While this is less critical for the Police Retirement System of Kansas City, Missouri because the City contributes a dollar amount, rather than a percent of payroll, the lack of payroll growth does result in a payment schedule for the UAAL that allocates higher dollar amounts of contributions later in the period because it assumes payroll is increasing at a higher rate than is actually occurring. This effect has been partially offset due to higher payroll growth than expected over the past fiscal year.

Many of the public retirement systems in the United States were created shortly after World War II. The Police Retirement System of Kansas City, Missouri was created in 1946 so it has been in existence for more than 75 years. In general, the aging of the population, including the retirement of the baby boomers, along with earlier retirement eligibility, has created a shift in the demographics of most retirement systems. This change is not unexpected and has, in fact, been anticipated in the funding of the retirement system. Even though it was anticipated, the demographic shift and maturing of the plans have increased the risk associated with funding the System. 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 maturing of the retirement system, including the percentage of liability attributable to retirees and the active to retiree ratio.

TABLE 15

HISTORICAL ASSET VOLATILITY RATIOS

As a retirement system matures, the size of the market value of assets typically 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 ARC with a Return 10% Lower than Assumed*
4/30/2006	$692,539,940	$71,835,495	9.64	6.85%
4/30/2007	755,107,136	80,111,515	9.43	6.70%
4/30/2008	734,379,847	86,700,836	8.47	6.02%
4/30/2009	534,314,117	89,884,411	5.94	4.22%
4/30/2010	655,571,619	90,475,241	7.25	5.15%
4/30/2011	715,764,084	88,444,971	8.09	5.75%
4/30/2012	687,870,657	87,880,774	7.83	5.56%
4/30/2013	717,317,928	90,708,350	7.91	5.62%
4/30/2014	763,076,453	96,150,178	7.94	5.64%
4/30/2015	793,880,318	97,103,400	8.18	5.81%
4/30/2016	772,791,036	96,005,062	8.05	5.72%
4/30/2017	827,347,041	93,410,606	8.86	6.29%
4/30/2018	879,496,868	95,741,607	9.19	6.53%
4/30/2019	891,225,734	97,674,929	9.12	6.48%
4/30/2020	874,338,308	97,937,822	8.93	6.34%
4/30/2021	1,033,642,868	94,332,747	10.96	7.79%
4/30/2022	990,521,742	89,536,235	11.06	7.86%
4/30/2023	953,538,876	92,037,689	10.36	7.36%
4/30/2024	987,787,161	93,563,950	10.56	7.50%
4/30/2025	1,028,622,529	114,061,730	9.02	6.41%

Note: Years prior to 2011 were provided by the prior actuary.

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

The amount of assets at April 30, 2025 is 9.02 times the covered payroll, so underperforming the investment return assumption by 10.00% (i.e., earn -3.25% for one year) is equivalent to 90.2% of payroll. While the actual impact in the first year is mitigated by the asset smoothing method and amortization of the UAAL, the magnitude of the ultimate contribution increase illustrates the risk associated with volatile investment returns.

TABLE 16

HISTORICAL CASH FLOWS

Plans with negative cash flows generally tend to experience increased sensitivity to investment return volatility. Cash flows, for this purpose, are measured as contributions less benefit payments. If the System has negative cash flows and then experiences returns below the assumed rate, there are fewer assets to be reinvested to earn the higher returns that typically follow. While any negative cash flow will produce such a result, it is typically a negative cash flow of more than 5% of market value that may cause significant concerns. The System has had negative cash flows of 2 to 4% for the last 20 years.

Year End	Market Value of Assets (MVA)	Contributions	Benefit Payments and Expenses	Net Cash Flow	Net Cash Flow as a Percent of MVA
4/30/2006	$692,539,940	$21,201,728	$40,396,756	($19,195,028)	(2.77%)
4/30/2007	755,107,136	22,340,876	43,503,803	(21,162,927)	(2.80%)
4/30/2008	734,379,847	24,206,873	44,022,306	(19,815,433)	(2.70%)
4/30/2009	534,314,117	25,683,054	45,394,340	(19,711,286)	(3.69%)
4/30/2010	655,571,619	25,579,929	47,088,273	(21,508,344)	(3.28%)
4/30/2011	715,764,084	25,756,009	47,565,630	(21,809,621)	(3.05%)
4/30/2012	687,870,657	25,370,816	49,679,973	(24,309,157)	(3.53%)
4/30/2013	717,317,928	26,277,110	52,371,938	(26,094,828)	(3.64%)
4/30/2014	763,076,453	32,440,600	53,525,039	(21,084,439)	(2.76%)
4/30/2015	793,880,318	39,808,182	55,955,411	(16,147,229)	(2.03%)
4/30/2016	772,791,036	41,020,299	59,150,352	(18,130,053)	(2.35%)
4/30/2017	827,347,041	42,731,044	60,806,452	(18,075,408)	(2.18%)
4/30/2018	879,496,868	43,493,778	65,446,603	(21,952,825)	(2.50%)
4/30/2019	891,225,734	43,693,560	66,880,714	(23,187,154)	(2.60%)
4/30/2020	874,338,308	44,819,176	71,241,916	(26,422,740)	(3.02%)
4/30/2021	1,033,642,868	48,656,431	75,982,346	(27,325,915)	(2.64%)
4/30/2022	990,521,742	49,865,364	81,660,276	(31,794,912)	(3.21%)
4/30/2023	953,538,876	50,207,645	83,794,918	(33,587,273)	(3.52%)
4/30/2024	987,787,161	50,804,098	85,706,684	(34,902,586)	(3.53%)
4/30/2025	1,028,622,529	60,659,833	86,657,509	(25,997,676)	(2.53%)

Note: Years prior to 2011 were provided by the prior actuary.

TABLE 16

(Continued)

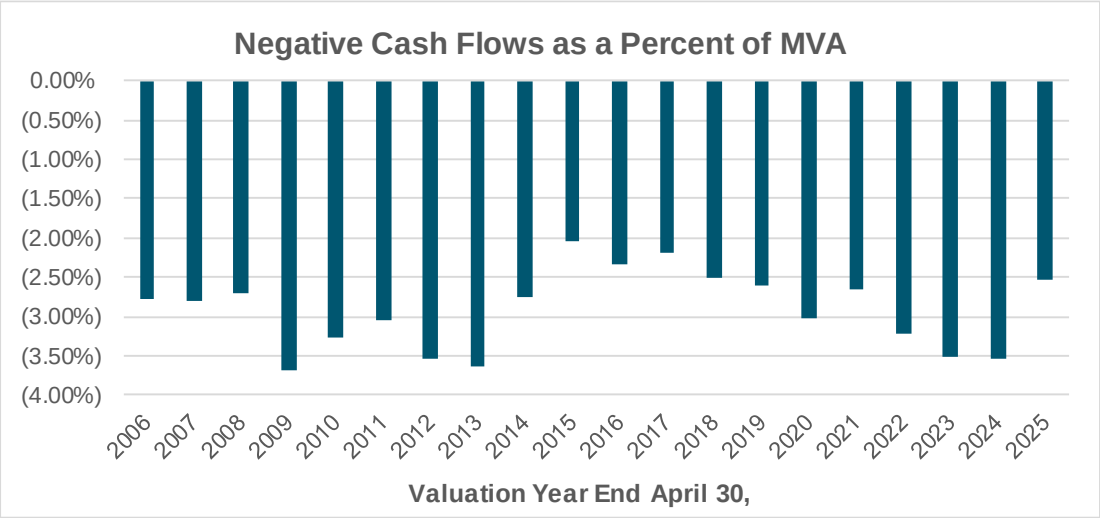


TABLE 17

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 since 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)
4/30/2006	$476,677,326	$775,271,985	61.5%
4/30/2007	487,633,976	807,902,176	60.4%
4/30/2008	511,571,757	850,763,745	60.1%
4/30/2009	521,607,916	893,559,090	58.4%
4/30/2010	526,521,860	915,463,037	57.5%
4/30/2011	537,670,377	940,609,092	57.2%
4/30/2012	551,677,775	972,127,874	56.7%
4/30/2013	554,078,691	964,302,215	57.5%
4/30/2014	568,199,815	1,006,243,143	56.5%
4/30/2015	585,754,594	1,037,256,917	56.5%
4/30/2016	613,092,387	1,076,824,221	56.9%
4/30/2017	652,700,808	1,118,948,065	58.3%
4/30/2018	681,913,348	1,161,788,502	58.7%
4/30/2019	726,393,431	1,211,216,028	60.0%
4/30/2020	763,780,744	1,247,261,603	61.2%
4/30/2021	819,043,424	1,298,802,617	63.1%
4/30/2022	887,719,769	1,342,133,933	66.1%
4/30/2023	940,875,015	1,434,214,565	65.6%
4/30/2024	991,585,316	1,498,414,396	66.2%
4/30/2025	1,020,329,780	1,620,587,683	63.0%

Note: Years prior to 2011 were provided by the prior actuary.

TABLE 17
(continued)

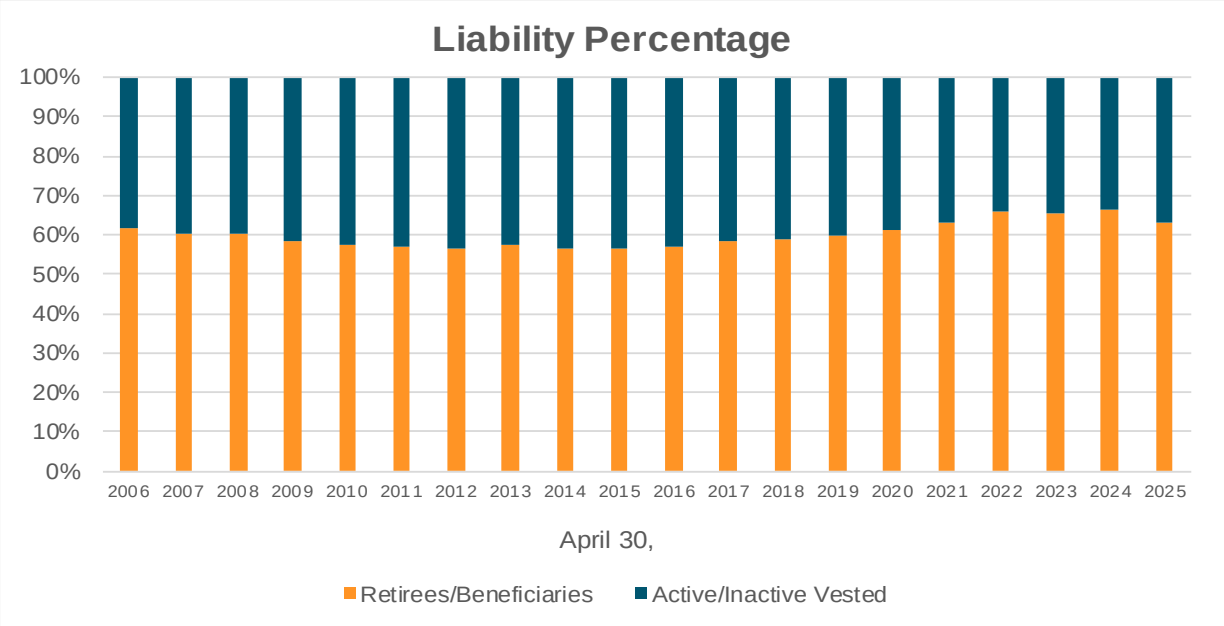


TABLE 18

HISTORICAL MEMBER STATISTICS

Valuation Date April 30,	Number of Active	Number of Retired	Active/ Retired
2006	1,355	1,186	1.14
2007	1,391	1,189	1.17
2008	1,433	1,188	1.21
2009	1,410	1,186	1.19
2010	1,418	1,201	1.18
2011	1,391	1,202	1.16
2012	1,366	1,209	1.13
2013	1,359	1,240	1.10
2014	1,408	1,243	1.13
2015	1,397	1,252	1.12
2016	1,334	1,274	1.05
2017	1,286	1,308	0.98
2018	1,284	1,332	0.96
2019	1,279	1,369	0.93
2020	1,297	1,404	0.92
2021	1,239	1,449	0.86
2022	1,138	1,497	0.76
2023	1,091	1,523	0.72
2024	1,074	1,553	0.69
2025	1,104	1,548	0.71

Note: Years prior to 2011 were provided by prior actuary.

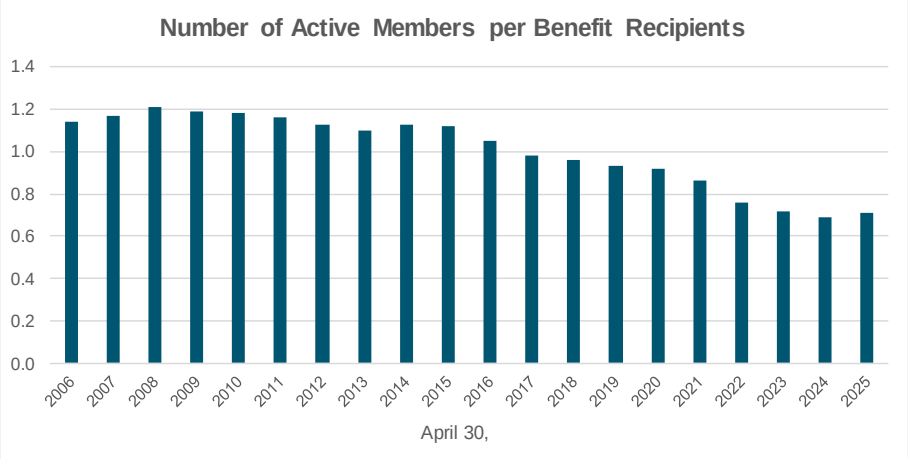


TABLE 18
(continued)

Valuation Date April 30,	Number of Active Members	Projected Payroll	Payroll % Incr.
2006	1,355	$71,835,495	6.30%
2007	1,391	80,111,515	11.52%
2008	1,433	86,700,836	8.23%
2009	1,410	89,884,411	3.67%
2010	1,418	90,475,241	0.66%
2011	1,391	88,444,971	(2.24%)
2012	1,366	87,880,774	(0.64%)
2013	1,359	90,708,350	3.22%
2014	1,408	96,150,178	6.00%
2015	1,397	97,103,400	0.99%
2016	1,334	96,005,062	(1.13%)
2017	1,286	93,410,606	(2.70%)
2018	1,284	95,741,607	2.50%
2019	1,279	97,674,929	2.02%
2020	1,297	97,937,822	0.27%
2021	1,239	94,332,747	(3.68%)
2022	1,138	89,536,235	(5.08%)
2023	1,091	92,037,689	2.79%
2024	1,074	93,563,950	1.66%
2025	1,104	114,061,730	21.91%

Note: Years prior to 2011 were provided by prior actuary.

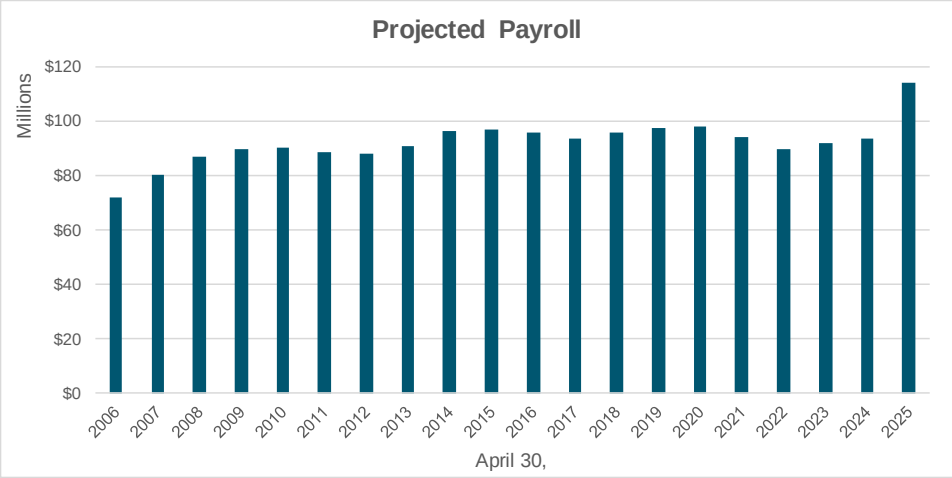


TABLE 19

COMPARISON OF VALUATION RESULTS UNDER ALTERNATE INVESTMENT RETURN ASSUMPTIONS

(Dollars in Thousands)

This exhibit compares the key April 30, 2025 valuation results 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 purposes of this analysis.

Investment Return Assumption	**6.25%**	**6.50%**	**6.75%**	**7.00%**	**7.25%**
Contributions					
Normal Cost Rate	33.38%	31.44%	29.64%	27.97%	26.41%
UAAL Contribution Rate	38.32%	35.67%	33.06%	30.47%	27.91%
Total Actuarial Required Contribution Rate	71.70%	67.11%	62.70%	58.44%	54.32%
Employee Contribution Rate	(11.55%)	(11.55%)	(11.55%)	(11.55%)	(11.55%)
City Contribution Rate	60.15%	55.56%	51.15%	46.89%	42.77%
City Contribution for Following Fiscal Year	$70,666	$65,274	$60,093	$55,088	$50,248
Actuarial Accrued Liability	$1,726,254	$1,672,067	$1,620,588	$1,571,644	$1,525,080
Actuarial Value of Assets	1,072,580	1,072,580	1,072,580	1,072,580	1,072,580
Unfunded Actuarial Accrued Liability	$653,674	$599,488	$548,008	$499,064	$452,500
Funded Ratio	62%	64%	66%	68%	70%

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

SECTION 8 – OTHER INFORMATION

The actuarial accrued liability is a measure intended to help the reader assess (i) a retirement plan's funded status on a going concern basis and (ii) progress being made toward accumulating the assets needed to pay benefits as due. Allocation of the actuarial present value of projected benefits between past and future service was based on service using the Entry Age Normal actuarial cost method. Assumptions, including projected pay increases, were the same as used to determine the System's level percent of payroll annual required contribution between entry age and assumed exit age. Entry age was established by subtracting credited service from current age on the valuation date. The Entry Age Normal actuarial accrued liability was determined as part of an actuarial valuation of the System as of April 30, 2025. The actuarial assumptions used in determining the actuarial accrued liability can be found in Appendix C.

TABLE 20

SUMMARY OF ACTUARIAL METHODS AND ASSUMPTIONS

Valuation Date	April 30, 2025
Actuarial cost method	Entry Age Normal
Amortization method for unfunded actuarial accrued liability	Level percent of payroll
Amortization period	30-year closed, beginning with the 2017 valuation for the Legacy UAAL base 20-year closed for experience bases
Asset valuation method	5-year smoothing of actual versus expected return on market value
Actuarial assumptions:	
Investment rate of return	6.75%, net of investment expenses
Projected salary increases including wage inflation at 3.00%	3.00% to 13.00%
Cost-of-living adjustments	2.50% simple

Membership of the plan consisted of the following at April 30, 2025, the date of the latest actuarial valuation:

Retirees and beneficiaries receiving benefits	1,548
Inactive vested members entitled to but not yet receiving benefits*	50
Active plan members	1,104
Total	2,702

*Note: Officers who are actively working and have 32 or more years of service are included with the inactive vested members entitled to future benefits since they are currently not accruing benefits nor contributing to the System, but are entitled to a benefit in the future.

TABLE 21

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)	Active Member Covered Payroll** (c)	UAAL as a Percentage of Active Member Covered Payroll [(b) - (a)] / (c)
4/30/2001		$600,051,893	$615,291,156	$15,239,263	98%	$57,505,238	27%
4/30/2002		620,948,986	648,632,789	27,683,803	96%	56,678,323	49%
4/30/2003	*	611,246,928	682,690,968	71,444,040	90%	62,425,468	114%
4/30/2004		603,418,620	712,273,616	108,854,996	85%	66,230,606	164%
4/30/2005		604,560,607	741,001,020	136,440,413	82%	67,575,902	202%
4/30/2006		635,621,582	775,271,985	139,650,403	82%	71,835,495	194%
4/30/2007		698,078,688	807,902,176	109,823,488	86%	80,111,515	137%
4/30/2008		742,060,223	850,763,745	108,703,522	87%	86,700,836	125%
4/30/2009		641,176,940	893,559,090	252,382,150	72%	89,884,411	281%
4/30/2010		722,464,003	915,463,037	192,999,034	79%	90,475,241	213%
4/30/2011	*	715,764,084	940,609,092	224,845,008	76%	88,444,971	254%
4/30/2012		734,375,923	972,127,874	237,751,951	76%	87,880,774	271%
4/30/2013	*#	749,617,334	964,302,215	214,684,881	78%	90,708,350	237%
4/30/2014		773,338,034	1,006,243,143	232,905,109	77%	96,150,178	242%
4/30/2015		803,672,621	1,037,256,917	233,584,296	77%	97,103,400	241%
4/30/2016		821,895,127	1,076,824,221	254,929,094	76%	96,005,062	266%
4/30/2017		853,286,442	1,118,948,065	265,661,623	76%	93,410,606	284%
4/30/2018		886,676,375	1,161,788,502	275,112,127	76%	95,741,607	287%
4/30/2019	*	913,895,177	1,211,216,028	297,320,851	75%	97,674,929	304%
4/30/2020	*	928,957,803	1,247,261,603	318,303,800	74%	97,937,822	325%
4/30/2021	*	978,346,638	1,298,802,617	320,455,979	75%	94,332,747	340%
4/30/2022	*	1,013,271,639	1,342,133,933	328,862,294	75%	89,536,235	367%
4/30/2023	*	1,025,449,242	1,434,214,565	408,765,323	71%	92,037,689	444%
4/30/2024	*	1,038,113,517	1,498,414,396	460,300,879	69%	93,563,950	492%
4/30/2025	*	1,072,579,907	1,620,587,683	548,007,776	66%	114,061,730	480%

* After changes in actuarial assumptions or methods.
** For valuation years 2001, and 2007 and later, valuation payroll includes projected increases for year following valuation.
For valuation years 2002 through 2006, valuation payroll is payroll reported in data after annualization of pays for new hires.
After change in benefit provisions
Note: Results for years prior to 2011 were taken from the prior actuary's report.

Analysis of the dollar amounts of actuarial value of assets, actuarial accrued liability, or unfunded actuarial accrued liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides one indication of the System's funded status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the plan's funding. The unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of covered payroll approximately adjusts for the effects of inflation and aids analysis of the progress being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan's funding.

TABLE 22

SCHEDULE OF CITY CONTRIBUTIONS

Fiscal Year Ending April 30	Annual Required Contribution	Percent Contributed	Contribution Shortfall/(Excess)
2001	$ 10,785,784	106%	$ (607,087)
2002	10,837,294	104%	(475,460)
2003	11,579,240	104%	(438,561)
2004	15,095,290	85%	2,278,114
2005	15,774,578	84%	2,476,973
2006	18,992,671	72%	5,263,446
2007	21,444,703	68%	6,917,969
2008	22,749,385	69%	7,002,274
2009	24,311,281	69%	7,610,593
2010	23,642,278	70%	6,997,049
2011	34,363,170	48%	17,831,155
2012	31,756,810	52%	15,280,202
2013	33,840,461	50%	16,906,767
2014	35,507,348	58%	14,978,779
2015	25,739,061	100%	0
2016	27,263,263	100%	0
2017	27,916,378	100%	0
2018	28,965,207	100%	0
2019	29,083,743	100%	0
2020	30,157,170	100%	0
2021	32,797,288	100%	0
2022	34,741,680	100%	0
2023	35,231,206	100%	0
2024	35,791,483	100%	0
2025	44,403,767	100%	0

Note: For years prior to 2011, information shown is from the prior actuary's report.

TABLE 23

SOLVENCY TEST

Valuation Date April 30		Entry Age Actuarial Accrued Liabilities (1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Members (City Financed Portion)	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)
2006		$59,717,930	$476,677,326	$238,876,729	$635,621,582	100 %	100 %	42 %
2007		64,314,276	487,633,976	255,953,924	698,078,688	100	100	57
2008		70,012,081	511,571,757	269,179,907	742,060,223	100	100	60
2009		76,321,890	521,607,916	295,629,284	641,176,940	100	100	15
2010		81,310,956	526,521,860	307,630,221	722,464,003	100	100	37
2011	*	86,306,128	537,670,377	316,632,587	715,764,084	100	100	29
2012		91,427,576	551,677,775	329,022,523	734,375,923	100	100	28
2013	*#	93,709,417	554,078,691	316,514,107	749,617,334	100	100	32
2014		100,221,012	568,199,815	337,822,316	773,338,034	100	100	31
2015		106,540,143	585,754,594	344,962,180	803,672,621	100	100	32
2016		109,073,053	613,092,387	354,658,781	821,895,127	100	100	28
2017		111,119,569	652,700,808	355,127,688	853,286,442	100	100	25
2018		114,197,453	681,913,348	365,677,701	886,676,375	100	100	25
2019	*	114,812,821	726,393,431	370,009,776	913,895,177	100	100	20
2020	*	115,177,685	763,780,744	368,303,174	928,957,803	100	100	14
2021	*	113,411,265	819,043,424	366,347,928	978,346,638	100	100	13
2022	*	109,224,356	887,719,769	345,189,808	1,013,271,639	100	100	5
2023	*	108,601,352	940,875,015	384,738,198	1,025,449,242	100	97	0
2024	*	106,216,614	991,585,316	400,612,466	1,038,113,517	100	94	0
2025	*	112,238,408	1,020,329,780	488,019,495	1,072,579,907	100	94	0

* After changes in actuarial assumptions or methods
# After benefit changes
Note: Results for years before 2011 were prepared by the prior actuary

MEMBER DATA RECONCILIATION

April 30, 2024 to April 30, 2025

The number of members included in the valuation, as summarized in the table below, is in accordance with the data submitted by the System for members as of the valuation date.

	Active Participants	Retirees	Disableds	Beneficiaries	Inactive Vested	Total
Members as of 04/30/2024	1,074	1,055	206	292	46	2,673
New Members*	76	0	0	0	0	76
Terminations						
Refunded	(12)	0	0	0	0	(12)
Refund Due	0	0	0	0	0	0
Inactive Vested	(8)	0	(1)	0	9	0
Retirements						
Service	(22)	27	0	0	(5)	0
Disability	(3)	0	3	0	0	0
Deaths						
Cashed Out/Payments Ended	0	0	0	0	0	0
With Beneficiary	0	(11)	(1)	13	0	1
Without Beneficiary	(1)	(18)	(3)	(14)	0	(36)
Data Adjustments	0	0	0	0	0	0
Members as of 04/30/2025	**1,104**	**1,053**	**204**	**291**	**50**	**2,702**

*Includes reappointments.

Note: There are 8 officers who are counted with the Inactive Vested members as of April 30, 2025 because they have continued employment past 32 years of service.

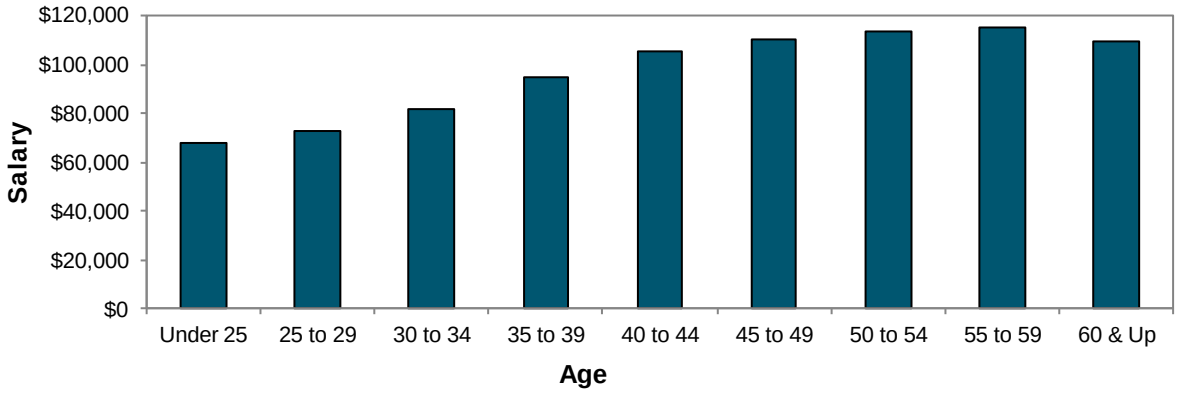
SUMMARY OF ACTIVE MEMBERS
as of April 30, 2025

Total

	Number			Annual Reported Compensation*		
Age	Male	Female	Total	Male	Female	Total**
Under 25	31	4	35	$ 2,106,234	$ 269,222	$ 2,375,456
25 to 29	88	20	108	6,383,540	1,473,810	7,857,350
30 to 34	148	38	186	12,073,018	3,121,244	15,194,262
35 to 39	128	23	151	12,116,433	2,177,294	14,293,727
40 to 44	154	26	180	16,218,924	2,693,746	18,912,671
45 to 49	167	26	193	18,408,115	2,908,597	21,316,712
50 to 54	153	19	172	17,298,689	2,289,220	19,587,908
55 to 59	54	12	66	6,212,949	1,388,895	7,601,845
60 & Up	12	1	13	1,310,832	115,620	1,426,452
Total**	935	169	1,104	$ 92,128,734	$ 16,437,648	$ 108,566,382

* Annualized compensation reported in the valuation data for the prior plan year.
** Numbers may not add due to rounding

Average Salary by Age



Average age:	41.1
Average service:	13.6
Average salary:	$98,339

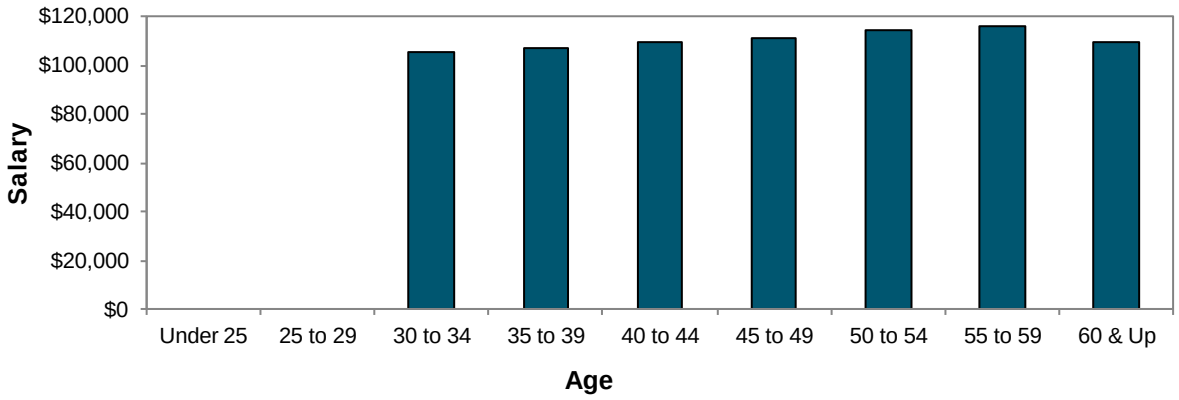
SUMMARY OF ACTIVE MEMBERS
as of April 30, 2025

Tier I

Age	Number			Annual Reported Compensation*		
	Male	Female	Total	Male	Female	Total**
Under 25	0	0	0	$ 0	$ 0	$ 0
25 to 29	0	0	0	0	0	0
30 to 34	0	1	1	0	105,698	105,698
35 to 39	44	4	48	4,716,699	418,704	5,135,403
40 to 44	116	16	132	12,699,491	1,752,536	14,452,027
45 to 49	155	23	178	17,216,891	2,594,569	19,811,460
50 to 54	149	19	168	16,937,543	2,289,220	19,226,763
55 to 59	53	11	64	6,132,957	1,277,171	7,410,128
60 & Up	12	1	13	1,310,832	115,620	1,426,452
Total**	529	75	604	$ 59,014,412	$ 8,553,518	$ 67,567,930

* Annualized compensation reported in the valuation data for the prior plan year.
** Numbers may not add due to rounding

Average Salary by Age



Average age:	47.8
Average service:	20.8
Average salary:	$111,867

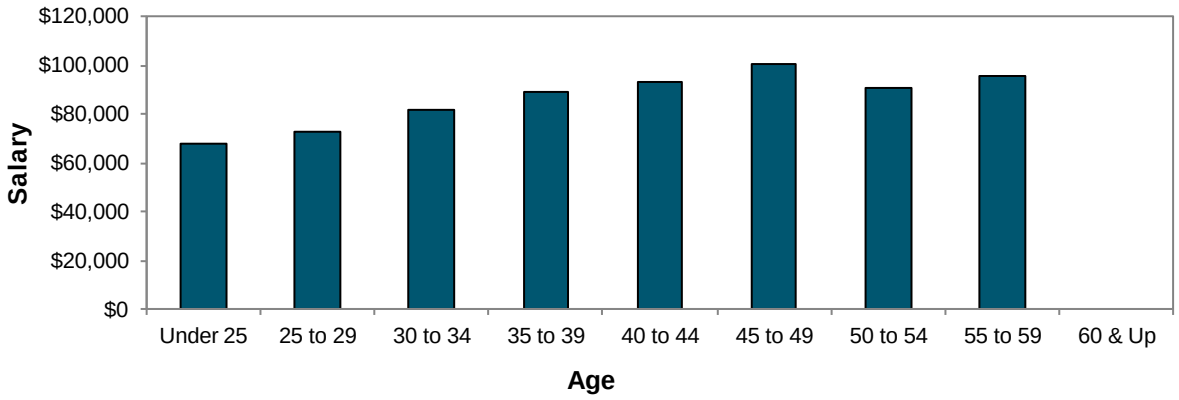
SUMMARY OF ACTIVE MEMBERS
as of April 30, 2025

Tier II

Age	Number			Annual Reported Compensation*		
	Male	Female	Total	Male	Female	Total**
Under 25	31	4	35	$ 2,106,234	$ 269,222	$ 2,375,456
25 to 29	88	20	108	6,383,540	1,473,810	7,857,350
30 to 34	148	37	185	12,073,018	3,015,545	15,088,564
35 to 39	84	19	103	7,399,734	1,758,590	9,158,324
40 to 44	38	10	48	3,519,433	941,211	4,460,644
45 to 49	12	3	15	1,191,225	314,028	1,505,253
50 to 54	4	0	4	361,145	0	361,145
55 to 59	1	1	2	79,993	111,724	191,717
60 & Up	0	0	0	0	0	0
Total**	406	94	500	$ 33,114,322	$ 7,884,130	$ 40,998,452

* Annualized compensation reported in the valuation data for the prior plan year.
** Numbers may not add due to rounding

Average Salary by Age

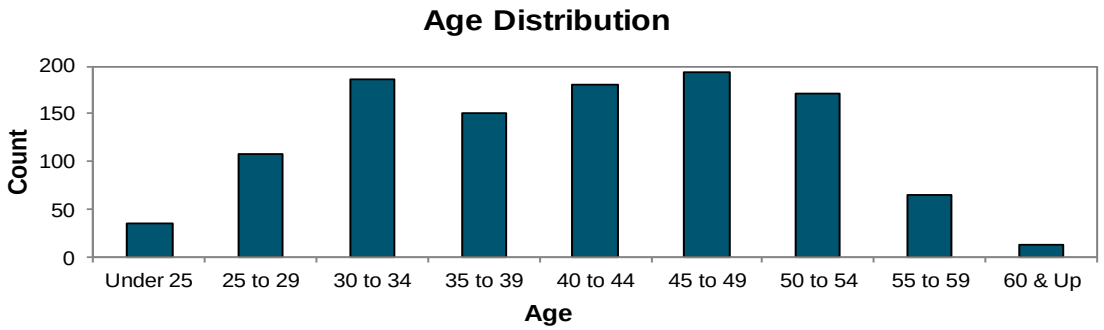


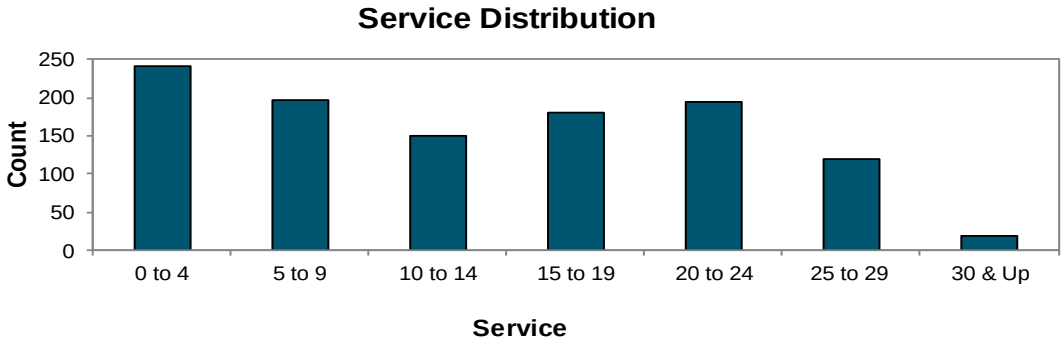
Average age:	32.9
Average service:	4.9
Average salary:	$81,997

DISTRIBUTION OF ACTIVE MEMBERS
as of April 30, 2025

Total

	Years of Service							
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	35	0	0	0	0	0	0	35
25 to 29	84	24	0	0	0	0	0	108
30 to 34	77	94	15	0	0	0	0	186
35 to 39	33	47	59	12	0	0	0	151
40 to 44	11	24	46	86	13	0	0	180
45 to 49	0	6	19	50	106	12	0	193
50 to 54	2	1	8	22	56	72	11	172
55 to 59	0	1	4	7	15	30	9	66
60 & Up	0	0	0	3	5	5	0	13
Total	242	197	151	180	195	119	20	1,104



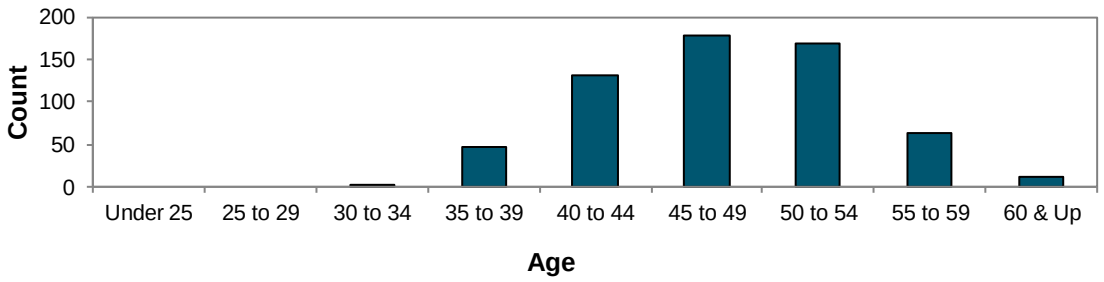


DISTRIBUTION OF ACTIVE MEMBERS
as of April 30, 2025

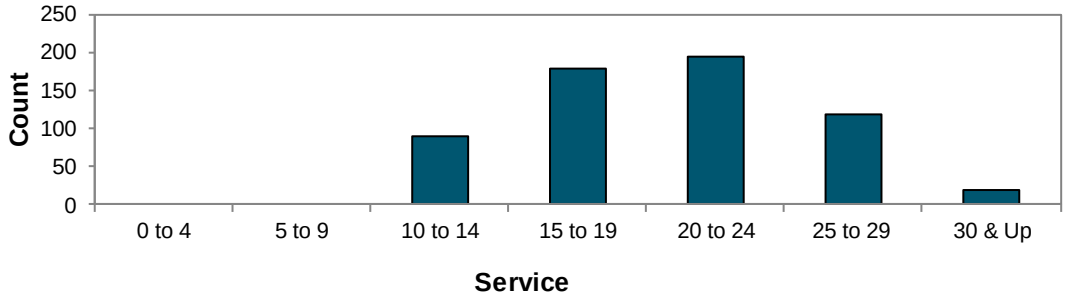
Tier I

	Years of Service							
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0
30 to 34	0	0	1	0	0	0	0	1
35 to 39	0	0	36	12	0	0	0	48
40 to 44	0	0	33	86	13	0	0	132
45 to 49	0	0	11	49	106	12	0	178
50 to 54	0	0	7	22	56	72	11	168
55 to 59	0	0	3	7	15	30	9	64
60 & Up	0	0	0	3	5	5	0	13
Total	0	0	91	179	195	119	20	604

Age Distribution



Service Distribution

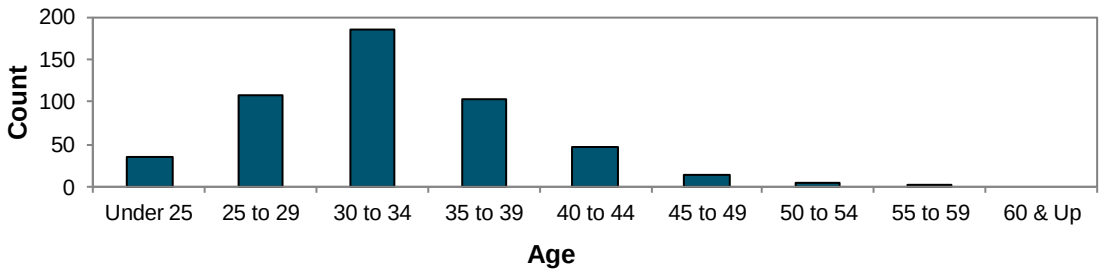


DISTRIBUTION OF ACTIVE MEMBERS
as of April 30, 2025

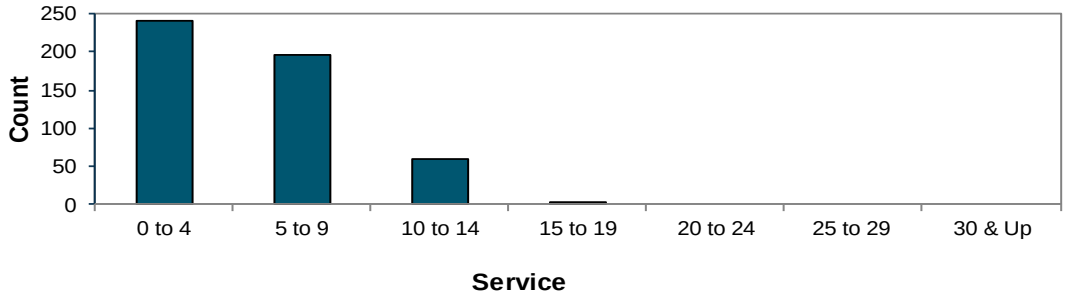
Tier II

	Years of Service							
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 & Up	Total
Under 25	35	0	0	0	0	0	0	35
25 to 29	84	24	0	0	0	0	0	108
30 to 34	77	94	14	0	0	0	0	185
35 to 39	33	47	23	0	0	0	0	103
40 to 44	11	24	13	0	0	0	0	48
45 to 49	0	6	8	1	0	0	0	15
50 to 54	2	1	1	0	0	0	0	4
55 to 59	0	1	1	0	0	0	0	2
60 & Up	0	0	0	0	0	0	0	0
Total	242	197	60	1	0	0	0	500

Age Distribution



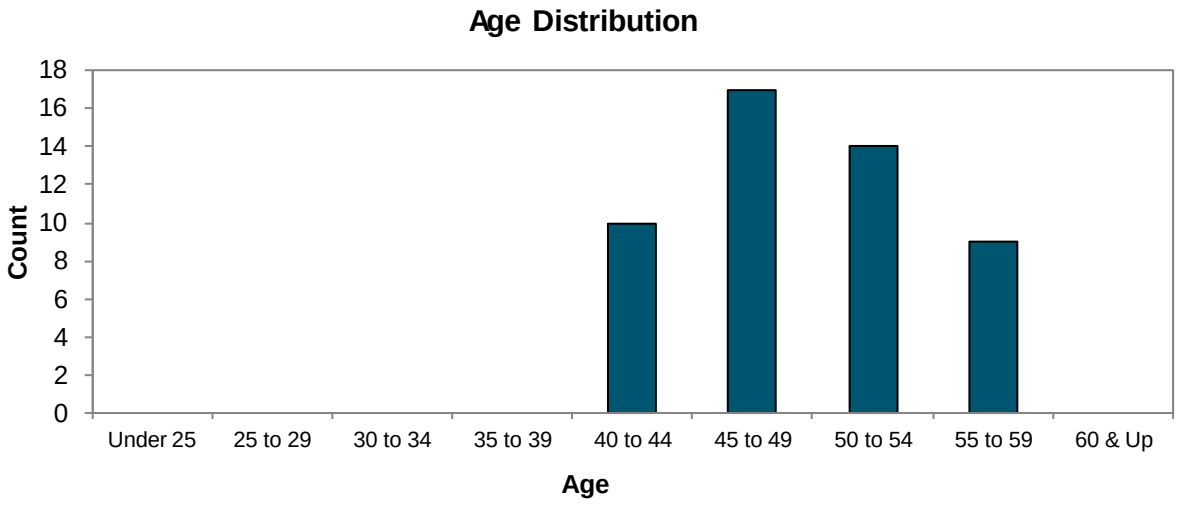
Service Distribution



SUMMARY OF INACTIVE VESTED MEMBERS
as of April 30, 2025

	Number			Current Monthly Benefit at Retirement*		
Age	Male	Female	Total	Male	Female	Total**
Under 25	0	0	0	$ 0	$ 0	$ 0
25 to 29	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0
40 to 44	10	0	10	27,970	0	27,970
45 to 49	17	0	17	54,769	0	54,769
50 to 54	11	3	14	32,456	10,510	42,965
55 to 59	8	1	9	54,928	2,928	57,856
60 & Up	0	0	0	0	0	0
Total**	46	4	50	$ 170,122	$ 13,437	$ 183,559

* Does not include supplemental benefits
** Numbers may not add due to rounding

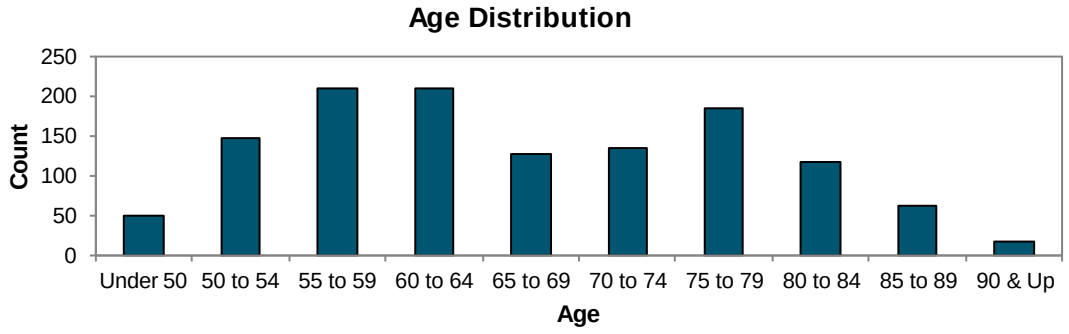


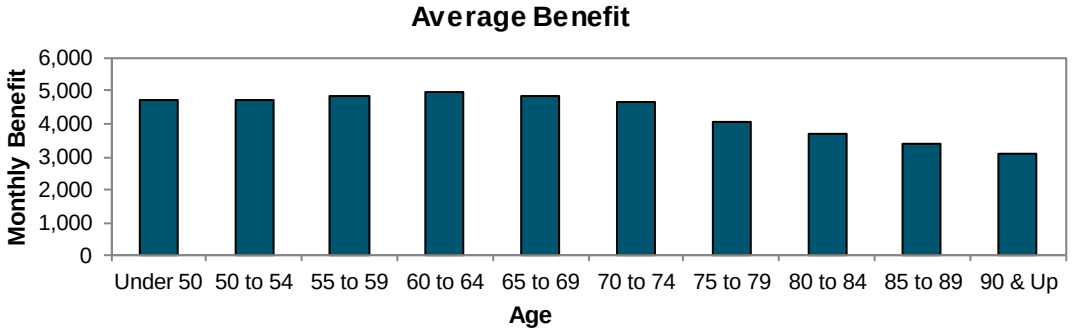
SUMMARY OF RETIRED MEMBERS
as of April 30, 2025

Healthy & Disabled Retirees

	Number			Monthly Benefit*		
Age	Male	Female	Total	Male	Female	Total**
Under 50	37	11	48	$ 176,466	$ 50,765	$ 227,231
50 to 54	119	29	148	568,641	133,756	702,398
55 to 59	188	21	209	914,914	98,805	1,013,719
60 to 64	178	31	209	893,393	145,552	1,038,945
65 to 69	97	30	127	478,557	140,339	618,896
70 to 74	107	28	135	510,476	116,820	627,296
75 to 79	175	11	186	707,223	49,513	756,736
80 to 84	115	2	117	423,057	9,441	432,499
85 to 89	60	1	61	202,264	3,135	205,399
90 & Up	17	0	17	52,280	0	52,280
Total**	1,093	164	1,257	$ 4,927,271	$ 748,127	$ 5,675,398

*Does not include supplemental benefits
** Numbers may not add due to rounding



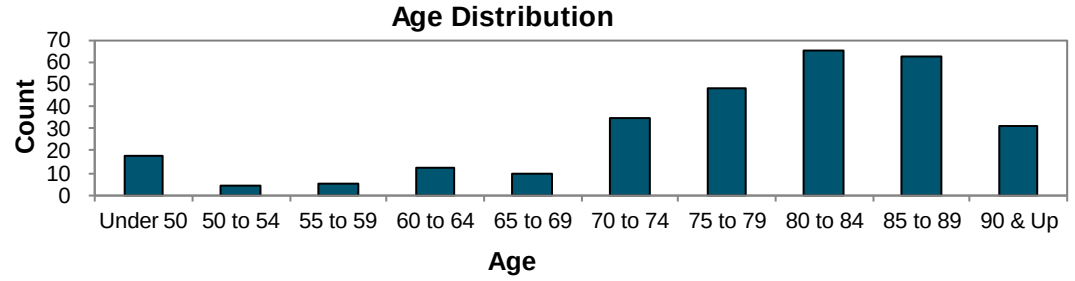


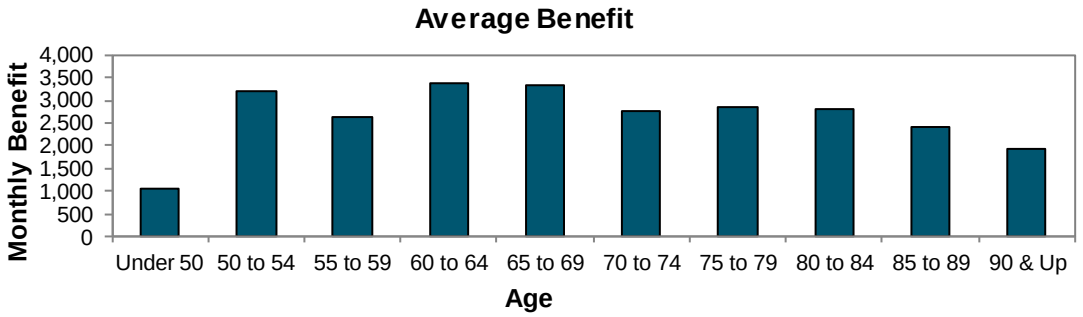
SUMMARY OF RETIRED MEMBERS
as of April 30, 2025

Beneficiaries

	Number			Monthly Benefit*		
Age	Male	Female	Total	Male	Female	Total**
Under 50	6	12	18	$ 2,600	$ 15,981	$ 18,581
50 to 54	1	3	4	2,144	10,564	12,709
55 to 59	0	5	5	0	13,231	13,231
60 to 64	0	12	12	0	40,702	40,702
65 to 69	0	10	10	0	33,493	33,493
70 to 74	0	35	35	0	96,469	96,469
75 to 79	1	47	48	1,752	134,210	135,962
80 to 84	0	65	65	0	181,454	181,454
85 to 89	0	63	63	0	151,769	151,769
90 & Up	0	31	31	0	60,140	60,140
Total**	8	283	291	$ 6,497	$ 738,013	$ 744,510

*Does not include supplemental benefits
** Numbers may not add due to rounding



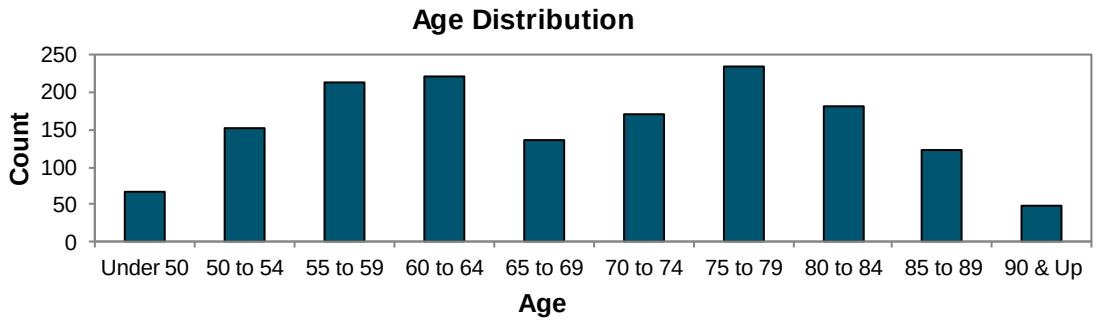


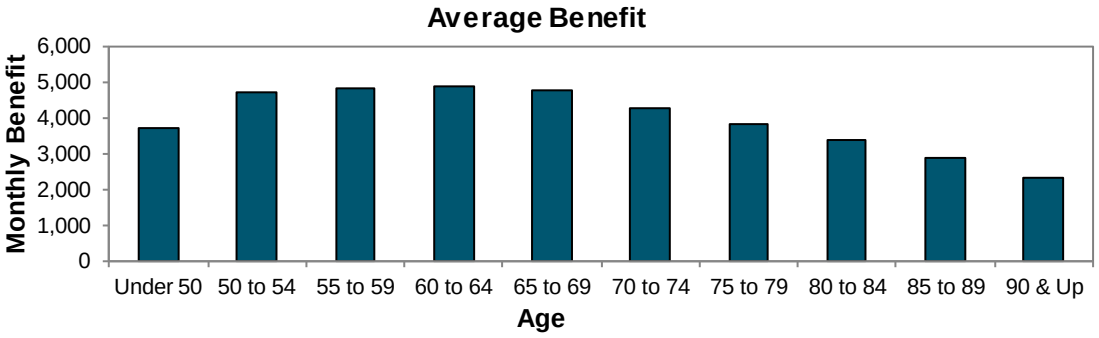
SUMMARY OF RETIRED MEMBERS
as of April 30, 2025

Combined Retirees & Beneficiaries

	Number			Monthly Benefit*		
Age	Male	Female	Total	Male	Female	Total**
Under 50	43	23	66	$ 179,066	$ 66,746	$ 245,812
50 to 54	120	32	152	570,786	144,321	715,106
55 to 59	188	26	214	914,914	112,036	1,026,950
60 to 64	178	43	221	893,393	186,254	1,079,647
65 to 69	97	40	137	478,557	173,832	652,389
70 to 74	107	63	170	510,476	213,289	723,765
75 to 79	176	58	234	708,975	183,723	892,699
80 to 84	115	67	182	423,057	190,895	613,952
85 to 89	60	64	124	202,264	154,904	357,169
90 & Up	17	31	48	52,280	60,140	112,419
Total**	1,101	447	1,548	$ 4,933,767	$ 1,486,140	$ 6,419,907

*Does not include supplemental benefits
** Numbers may not add due to rounding





APPENDIX B – SUMMARY OF BENEFIT PROVISIONS

Membership

All police officers who serve as law enforcement officers for compensation become members as a condition of employment.

Tier I member – A person who became a member prior to August 28, 2013 and remains a member on August 28, 2013.

Tier II member – A person who became a member on or after August 28, 2013.

Service Retirement

Eligibility –

Tier I member – 25 years of service, without regard to age, or at age 60 with at least 10 years of service.

Tier II member – 27 years of service, without regard to age, or at age 60 with at least 15 years of service.

All members must retire at the completion of 35 years of service, or at age 65, whichever occurs first.

Amount of Pension – For a member retiring prior to August 28, 2000, benefit equal to 2% of Final Compensation multiplied by years of creditable service, subject to a maximum benefit of 60% of Final Compensation.

For a member retiring on or after August 28, 2000 and before August 28, 2013, benefit equal to 2.5% of Final Compensation multiplied by years of creditable service, subject to a maximum benefit of 75% of Final Compensation.

For a member retiring on or after August 28, 2013, benefit equal to 2.5% of Final Compensation multiplied by years of creditable service subject to a maximum benefit of 80% of Final Compensation. After members attain 32 years of creditable service, they will no longer contribute to the Plan and their benefit amount will be frozen.

Final Compensation –

Tier I member – Average annual compensation during the two years of service with the highest salary, whether consecutive or otherwise, or during the entire period of service if less than two years.

Tier II member – Average annual compensation during the three years of service with the highest salary, whether consecutive or otherwise, or during the entire period of service if less than three years.

Deferred Retirement (Vested Termination)

***Eligibility* –** 15 years of creditable service.

Tier I member – Benefit begins at age 55.

Tier II member – Benefit begins at age 60.

Amount of Pension – Computed as service retirement but based on service, Final Compensation and benefit formula in effect at termination of employment. Benefits are unreduced.

Duty Disability

Eligibility – A member in active service who has become permanently unable to perform the full and unrestricted duties of a police officer, as determined by the Board of Police Commissioners, as the exclusive result of an accident or disease occurring in the line of duty.

Amount of Pension – For a member retiring on or after August 28, 2001 and before August 28, 2013, benefit equal to 75% of Final Compensation payable for life or as long as the permanent disability continues.

For a member retiring on or after August 28, 2013, benefit equal to 80% of Final Compensation payable for life or as long as the permanent disability continues.

Duty disability benefits may be subject to offset or reduction by amounts paid or payable under any Workers' Compensation law. A disability retiree who is not age 60 may be required by the Retirement Board to undergo continuing eligibility reviews once every three years which may include a medical re-examination.

Non-duty Disability

Eligibility – A member in active service, with a minimum of 10 years of service, who has become permanently unable to perform the full and unrestricted duties of a police officer as determined by the Board of Police Commissioners. Disability is not exclusively caused by the actual performance of official duties.

Amount of pension – 2.5% of Final Compensation multiplied by years of creditable service payable for life or as long as the permanent disability continues.

A disability retiree who is not age 60 may be required by the Retirement Board to undergo continuing eligibility reviews once every three years which may include a medical re-examination.

Death in Service – Duty or Non-duty

Eligibility – Benefit payable to a surviving spouse, if any, upon the death of an active member. Benefit payable for the life of the surviving spouse. If there is no surviving spouse, benefit payable to an eligible child or children in equal shares until age 18. No service requirement.

Amount of Pension – 40% of Final Compensation payable to surviving spouse for life.

Child Benefit - $600 annually for each child under the age of 18, if any, until the child reaches age 18 or age 21 if a full time student. A child who is mentally or physically incapacitated from wage earning at the time of a member's death shall qualify, without regard to age, for life or so long as the incapacity existing at time of member's death continues.

Funeral Benefit - $1,000 payable upon the death of an active member.

Line of Duty Death

Eligibility – Benefit payable to a surviving spouse. If no surviving spouse, benefit payable to children under age 21 or children over age 21 if mentally or physically incapacitated from wage earning, in equal shares. Death resulting from performance of official duties; no service requirement.

Amount of Benefit – In addition to benefits payable under Death in Service shown above, a lump sum of $50,000.

Death After Retirement

Eligibility – Benefit payable to an eligible surviving spouse, if any, upon the death of a retired member. Benefit payable for the life of the surviving spouse. If there is no surviving spouse, benefit payable to an eligible child or children in equal shares until age 18. The surviving spouse of a member who retired on or after August 28, 1997 is eligible for benefits if they were married to the member at the time of the member's retirement. The surviving spouse of a member who retired prior to August 28, 1997 is eligible for benefits if they were married to the member for at least two years prior to the member's retirement.

Amount of Pension –

Tier I member – Benefit equal to 80% of the straight life pension the deceased member was receiving at time of death.

Tier II member – Benefit equal to 50% of the straight life pension the deceased member was receiving at time of death. In lieu of the 50% surviving spouse benefit, a Tier II member may elect, at the time of retirement, a reduced actuarially equivalent annuity of either a 75% or 100% surviving spouse benefit.

Funeral Benefit - $1,000 payable upon the death of a retired member.

Non-Vested Termination

Eligibility – Termination of employment and no pension is or will become payable.

Amount of Benefit – Refund of member's contributions without interest.

Minimum Pension Benefit

Eligibility – Any member who retired entitled to a pension benefit and who either has at least 25 years of creditable service or is retired as a result of an injury or illness. A surviving spouse qualifies for the minimum monthly benefit if the member had at least 25 years of creditable service, died in service, or was retired as a result of an injury or illness.

Amount of Benefit – Minimum monthly benefit of not less than $600 in combined pension benefit and cost-of-living adjustments. The minimum monthly pension benefit is in addition to the Supplemental Retirement Benefit.

Post-Retirement Benefit Increases

Eligibility –

Tier I members and surviving spouses – Member's pension must have commenced by December 31 of prior calendar year.

Tier II members and surviving spouses – Service retirements generally eligible in the year following the year in which member would have attained thirty-two years of service. Duty Disability retirements eligible in year following retirement. Non-duty Disability retirements eligible earlier of year following fifth year after retirement or year following the year in which they would have attained thirty-two years of service. Surviving spouses of retired members eligible at same time member would have been if living.

Amount of Benefit – May receive an annual cost-of-living adjustment in an amount not to exceed 3% of their respective base pension. Base pension is the pension computed under the provisions of the law at the date of retirement, without regard to cost-of-living adjustments.

Statutes require that the Retirement Board must act upon the advice of a qualified actuary when granting cost of living adjustments. The liabilities in this report assume a 2.5% ad hoc COLA will be granted in each future year.

Member Contributions

10.55% of base pay through August 31, 2013. Effective September 1, 2013, 11.55% of base pay. No contributions are required for members that remain in active service after completion of 32 years of creditable service.

Supplemental Retirement Benefit

Tier I member – Current and future retired and disabled members and their surviving spouses are eligible to receive $420 per month in addition to pension benefits. The City will reimburse the System $200, so the System is liable for $220 per month.

Tier II member – Current and future retired and disabled members and their surviving spouses are eligible to receive $200 per month in addition to pension benefits. The City will reimburse the System $200, so the System is not liable for this benefit.

Optional Form of Benefit Payment

Tier I member – Member retiring with at least 26 or more years of service may elect to take a portion of their lifetime benefit as a lump-sum distribution (PLOP).

Tier II member – Member retiring with at least 28 or more years of service may elect to take a portion of their lifetime benefit as a lump-sum distribution (PLOP).

Members electing PLOP will receive an actuarially reduced monthly benefit for their lifetime.

APPENDIX C – ACTUARIAL COST METHOD AND ASSUMPTIONS

Actuarial Cost Method

The actuarial cost method is a procedure for allocating the actuarial present value of pension benefits and expenses to time periods. The method used for the valuation is known as the Entry Age Normal actuarial cost method and has the following characteristics.

(i) The annual normal costs for each individual active member are sufficient to accumulate the value of the member's pension at time of retirement.

(ii) Each annual normal cost is a constant percentage of the member's year-by-year projected covered compensation.

The Entry Age Normal actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's assumed pensionable compensation rates 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 portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called actuarial accrued liability. Deducting actuarial assets from the actuarial accrued liability determines the unfunded actuarial accrued liability or (surplus).

Asset Valuation Method

The Board adopted a new asset smoothing method effective with the April 30, 2011 valuation. Under the current methodology, the difference between the actual and assumed investment return on the market value of assets is recognized evenly over a five-year period. No corridor is used with the new method. The change to a new asset smoothing method was implemented by resetting the actuarial value of assets at April 30, 2011 equal to the market value of assets.

Actuarial Assumptions

Valuations beginning with the April 30, 2023 actuarial valuation include assumptions and methods resulting from the experience study covering the 5-year period from May 1, 2017 to April 30, 2022.

The Board adopted a new Funding Policy at their November 8, 2016 meeting. The amortization policy for the unfunded actuarial accrued liability (UAAL) was changed from an open 30-year period (reset to 30 each valuation) to a closed 30-year period (declining by one year each valuation), beginning with the April 30, 2017 valuation. Any new UAAL generated as a result of actuarial experience in subsequent years will be layered and amortized over a closed 20-year period.

APPENDIX C – ACTUARIAL COST METHOD AND ASSUMPTIONS

Economic Assumptions

Investment Return: 6.75% per year, net of investment expenses, compounded annually.

Pay Increase Assumption: Rates for sample years of service are shown below.

	Annual Rate of Pay Increase		
Years of Service	General Wage Growth	Merit and Longevity	Total
0-6	3.00%	5.00%	8.00%
7-8	3.00%	10.00%	13.00%
9	3.00%	6.00%	9.00%
10	3.00%	3.00%	6.00%
11	3.00%	1.50%	4.50%
12+	3.00%	0.00%	3.00%

Price Inflation: 2.50% per year, compounded annually.

Active Member Payroll Growth: 3.00% per year, compounded annually.

Mortality Tables:

Healthy Retirees: Pub-2010 Safety (Below Median) Healthy Retiree Mortality Table projected generationally using Scale MP-2021.

Disabled Retirees: Pub-2010 Safety Disabled Retiree Mortality Table projected generationally using Scale MP-2021.

Beneficiaries: Pub-2010 (Below Median) Contingent Survivor Mortality Table projected generationally using Scale MP-2021.

Actives: Pub-2010 Safety (Below Median) Employee Mortality Table projected generationally using Scale MP-2021.

75% of active deaths are assumed to be duty related.

Rates of Termination from Active Membership:

Years of Service	% of Active Members Terminating Within Next Year
0	5.00%
1	4.00%
2-9	3.75%
10	3.00%
11-13	1.50%
14-19	1.00%
20-21	0.50%
22+	0.00%

The rates do not apply to members eligible to retire and do not include separation on account of death or disability. All vested members are assumed to leave their contributions with the System and receive a deferred benefit.

Rates of Disability:

	% of Active Members Becoming Disabled Within Next Year	
Sample Ages	Male	Female
30	0.075%	0.140%
35	0.390%	0.700%
40	0.550%	1.000%
45	0.600%	1.250%
50	0.800%	1.900%
55	1.456%	3.200%
60	2.579%	5.500%

It is assumed that 75% of disabilities are duty related.

Rates of Retirement:

Active Members Retiring Within Next Year	
Years of Service	**Percent Retiring**
25	22%
26	17%
27	17%
28	17%
29	20%
30	20%
31	20%
32	100%

100% of Tier I active members are assumed to retire at age 60, if they have 10 years of service. 100% of Tier II active members are assumed to retire at age 65, if they have 15 years of service. Inactive vested members are assumed to retire at age 55 for Tier I and age 60 for Tier II.

Miscellaneous and Technical Assumptions

Marriage Assumption: 85% of males and 55% of females are assumed to be married for purposes of death-in-service benefits and death-after-retirement benefits. Males are assumed to be 3 years older than their spouses. Actual reported data is utilized for retirees and beneficiaries.

Pay Increase Timing: Assumed to occur at the start of the fiscal year.

Pay Annualization: Reported pays for members with less than 1 year of service were annualized for valuation purposes.

Decrement Timing: Decrements of all types are assumed to occur mid-year.

Eligibility Testing: Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year at the start of the year in which the decrement is assumed to occur.

Benefit Service: Service calculated to the nearest month, as of the decrement date, is used to determine the amount of benefit payable.

Child Beneficiaries:	None assumed.
Other:	Turnover decrement does not operate during retirement eligibility.
Form of Payment:	The assumed normal form of payment for Tier I is an 80% joint and survivor annuity (50% joint and survivor for Tier II), if married. Otherwise, a single life annuity.
Administrative Expense:	1.00% of payroll each year. Administrative expenses beyond this allocation and all investment expenses are assumed to be funded by investment return in excess of the actuarial assumed rate of return.
Valuation of Supplemental Benefits:	The net Supplemental Benefit of $220 per month for Tier I members only ($420 less City paid portion of $200) was valued in the valuation.
Cost of Living Adjustment:	It was assumed that the Retirement Board will grant, on average, a 2.5% cost of living adjustment.

APPENDIX D – GLOSSARY OF TERMS

Actuarial Accrued Liability	The difference between the actuarial present value of system benefits and the actuarial value of future normal costs. Also referred to as "accrued liability" or "actuarial liability."
Actuarial Assumptions	Estimates of future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long term average rate of inflation.
Accrued Service	Service credited under the system which was rendered before the date of the actuarial valuation.
Actuarial Equivalent	A single amount or series of amounts of equal actuarial value to another single amount or series of amounts, computed on the basis of appropriate assumptions.
Actuarial Cost Method	A mathematical budgeting procedure for allocating the dollar amount of the actuarial present value of retirement system benefit between future normal cost and actuarial accrued liability. Sometimes referred to as the "actuarial funding method."
Experience Gain (Loss)	The difference between actual experience and actuarial assumptions anticipated experience during the period between two actuarial valuation dates.
Actuarial Present Value	The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest and by probabilities of payment.
Amortization	Paying off an interest-discounted amount with periodic payments of interest and principal, as opposed to paying off with lump sum payment.
Normal Cost	The actuarial present value of retirement system benefits allocated to the current year by the actuarial cost method.
Unfunded Actuarial Accrued Liability	The difference between actuarial accrued liability and the valuation assets.

Most retirement systems have an unfunded actuarial accrued liability. They arise each time new benefits are added and each time an actuarial loss is realized.

The existence of unfunded actuarial accrued liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to amortize the unfunded actuarial accrued liability and the trend in its amount.

FUNDING POLICY

KCPERS Policy

Policy #027 - Funding Policy
Adopted: November 8, 2016
Revised: September 12, 2019

The purpose of the funding policy is to state the overall funding goals for the Police Retirement System of Kansas City, Missouri and Civilian Employees' Retirement System of the Police Department of Kansas City, Missouri (KCPERS or System), the benchmarks that will be used to measure progress in achieving those goals, and the methods and assumptions that will be employed to develop the benchmarks.

I. Funding Goals

The objective is to accumulate sufficient assets during a member's employment with the Kansas City, Missouri Police Department from member and employer contributions to KCPERS (and investment earnings on those contributions) to fully finance the benefits the member receives throughout retirement. In meeting this objective, KCPERS will strive to meet the following funding goals:

- To maintain an increasing ratio of assets to actuarial liabilities and reach a funded ratio of at least 100 percent;
- To maintain adequate asset levels to finance the benefits promised to members;
- To develop a pattern of stable contribution amounts and rates as a percentage of member payroll. This goal is achieved by contribution amounts from the City of Kansas City, Missouri and rates as a percentage of payroll from members of the Systems as set out in sections 86.1000 and 86.1010RSMo. for the Police plan and sections 86.1390 and 86.1400RSMo. for the Civilian Employees' plan. In order to evaluate whether the contribution amounts and rates are sufficient, an annual Actuarial Required Contribution Rate (ARC) will be calculated in the annual valuations of the Systems. The ARC may be referred to in the valuations as the Actuarial Determined Contribution Rate (ADC). Such valuations will be prepared in accordance with the principles of practice promulgated by the Actuarial Standards Board. The ARC will be calculated as the normal cost rate plus the amortization payment on the unfunded actuarial liability, based on the amortization methodology set out in this funding policy. The ARC will never be less than the normal cost rate determined under the Entry Age Normal funding method.
- To provide intergenerational equity for members and taxpayers with respect to KCPERS' contribution requirements.

II. Benchmarks

To track progress in achieving the previously outlined funding goals, the following benchmarks will be measured annually as of the actuarial valuation date (with due recognition that a single year's results may not be indicative of long-term trends):

- **Funded ratio** – The funded ratio, defined as the actuarial value of KCPERS' assets divided by KCPERS' actuarial liability, should be increasing over time, before adjustments for changes in benefits, actuarial methods, and/or actuarial assumptions.
- **Evaluation of Contribution Amounts and Rates –** The Retirement Board Trustees have a fiduciary responsibility to ensure the funding of the Systems by maintaining the contribution amounts and rates set out in state statutes. The Trustees recognize that the ARC will fluctuate from year to year, due to the volatility associated with investing in the financial markets. Therefore, valuation results which produce an ARC that is higher or lower than the current contribution amounts and rates will be submitted to the City for inclusion in the next budget cycle.

III. Actuarial Methods and Assumptions

Actuarial Assumptions: The actuarial assumptions used will be those last adopted by the Trustees based upon the advice and recommendation of the actuary. A formal study of KCPERS' experience shall be conducted by the actuary at least every five years and the results of the study used to form the basis of the actuary's recommendations. In addition, the actual experience compared to the actuarial assumptions will be monitored each year in the annual actuarial valuation by including an analysis of the actuarial gain or loss by source.

Actuarial Cost Method: The actuarial cost method is the means by which the total present value of future benefits for current active and inactive members is allocated to each year of service, including past years. The Entry Age cost method will be used.

Asset Valuation Method: The method of valuing assets is intended to recognize a "smoothed" value of assets that is market related. Asset smoothing methods reduce the effect of short term volatility on contributions while still tracking the overall movement of the market value of assets by recognizing the effects of investment gains and losses over a period of years. The asset valuation method uses the difference between the actual and assumed investment return on the market value of assets, recognized evenly over a five year period. No corridor is used with this asset valuation method.

Amortization of the Unfunded Actuarial Liability (UAL): The UAL as of April 30, 2017 is amortized over a closed, 30-year period. Any new UAL generated as a result of actuarial experience in subsequent years will be separately identified as a new amortization base and amortized over a closed 20 year period. Any new UAL generated as a result of changes to benefits will be amortized over a closed 20 year period. Changes in the UAL resulting from changes in the actuarial assumptions or methods used in the valuation will be amortized over a period not to

exceed 25 years, as determined by the Board upon the recommendation of the actuary. All amortization payments will be developed using the level percent of payroll methodology.

IV. Other

Actuarial Audit: The Trustees may have an audit of KCPERS' actuarial valuation results conducted by an independent actuary periodically, as determined by the Trustees. The purpose of such a review is to provide a critique of the reasonableness of the actuarial methods and assumptions in use and to verify the resulting actuarially computed liabilities and contribution rates.

Benefit Changes: An actuarial cost study shall be completed before any change to the benefit structure is made.

Actuarial Projections: The funded status of KCPERS will be monitored on a regular basis, both on a snapshot basis in the actuarial valuation and on a projected basis. The Trustees will periodically have projections of funded status performed to assess the current and expected future progress toward the overall funding goals of KCPERS.

V. Funding Policy Review

It is expected that the funding policy may need to be amended in future years as the funding of the Retirement Systems is a dynamic process which is dependent on a number of variables. Therefore, the funding policy will be reviewed annually following the annual actuarial valuation and amended as necessary by the Trustees.