THE PUBLIC SCHOOL RETIREMENT SYSTEM OF THE SCHOOL DISTRICT OF KANSAS CITY, MISSOURI

ACTUARIAL VALUATION REPORT AS OF JANUARY 1, 2025

SUBMITTED: MAY 30, 2025

CavMac
Actuarial Consulting Services

TABLE OF CONTENTS

		Page
	Actuarial Certification Letter	
Section I	Executive Summary	1
Section II	Scope of the Report	14
Section III	Assets	15
	Table 1 – Net Assets at Market Value	16
	Table 2 – Statement of Changes in Net Assets	17
	Table 3 – Development of Actuarial Value of Assets	18
	Table 4 – Schedule of Deferred Actuarial Value of Assets Experience	19
Section IV	System Liabilities	20
	Table 5 – Present Value of Future Benefits	21
	Table 6 – Actuarial Accrued Liability	22
	Table 7 – Actuarial (Gain)/Loss for 2024	23
	Table 8 – (Gain)/Loss Analysis by Source	24
	Table 9 – Actuarial Balance Sheet	25
	Table 10 – Pension Benefit Obligation Funded Status	26
Section V	Employer Contributions	27
	Table 11 – Normal Cost Rate	29
	Table 12 – Projected Unfunded Actuarial Accrued Liability	30
	Table 13 – Amortization of the Unfunded Actuarial Accrued Liability	31
	Table 14 – Development of the Actuarial Contribution Rate (ACR)	32
Section VI	Historical Funding and Other Information	33
	Table 15 – Schedule of Funding Progress	34
	Table 16 – Historical Contribution Rates	35
	Table 17 – Solvency Test	36
	Table 18 – Schedule of Changes in Plan Fiduciary Net Position	37
Section VII	Risk Considerations	38
	Table 19 – Historical Asset Volatility Ratio	42
	Table 20 – Historical Membership	43
	Table 21 – Historical Cash Flows	45
	Table 22 – Liability Maturity Measurements	46
	Table 23 – Comparison of Valuation Results under Alternate Investment Return Scenarios	47
Appendix A	Summary of Membership Data	48
Appendix B	Historical Membership Data	82
Appendix C	Summary of Benefit Provisions	86
Appendix D	Actuarial Cost Method and Assumptions	94
Appendix E	Glossary of Terms	100

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May 30, 2025

Board of Trustees
Public School Retirement System of the
School District of Kansas City, Missouri
3100 Broadway, Suite 1211
Kansas City, MO 64111

Dear Members of the Board:

In accordance with your request, we have completed the annual actuarial valuation of the Public School Retirement System of the School District of Kansas City, Missouri as of January 1, 2025. The major findings of the valuation are contained in this report, including the actuarial contribution rate which is used to set the statutory contribution rates for the 12-month period beginning July 1, 2026 and ending June 30, 2027. There were no changes to the plan provisions or actuarial assumptions and methods since the prior valuation.

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

We further certify that all costs, liabilities, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the System. Nevertheless, the emerging costs will vary from those presented in this report to the extent actual experience differs from that projected by the actuarial assumptions. The Board of Trustees has the final decision regarding the selection of assumptions and adopted the set of assumptions reflected in Appendix D of this report. In our opinion, the set of assumptions and methods used for funding purposes in this report meet the parameters set by applicable Actuarial Standards of Practice.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results. Future actuarial 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; 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); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements.

Actuarial computations presented in this report are for purposes of determining the actuarial contribution rates for funding the System and 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.

The consultants who worked on this assignment are pension actuaries. CavMac's advice is not intended to be a substitute for qualified legal or accounting counsel.

This is to certify that the independent consulting actuaries, signing below, are members of the American Academy of Actuaries and have experience in performing valuations for public retirement plans, that the valuation was prepared in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement plan and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

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

Sincerely,

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

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

SECTION I – EXECUTIVE SUMMARY

This report presents the results of the January 1, 2025 actuarial valuation of the Public School Retirement System of the School District of Kansas City, Missouri (System). The primary purposes of performing a valuation are to:

- estimate the liabilities for future benefits expected to be paid by the System;
- determine the actuarial contribution rate based on the System's funding policy and determine the contribution rates, effective July 1 of the calendar year following the valuation date;
- disclose certain asset and liability measurements as of the valuation date;
- assess and disclose the key risks associated with funding the System;
- monitor any deviation between actual plan experience and experience anticipated by the actuarial assumptions; and
- analyze and report on any significant trends in assets, liabilities, and contributions over the past several years.

Effective July 1, 2021, the employer contribution rate is the greater of (1) the actuarial contribution rate, as determined in the valuation prepared in the prior calendar year, less the member contribution rate, or (2) 12.00% of pay, until the System is fully funded. More detail on the contribution policy can be found in Appendix C of this report. The results of the January 1, 2025 actuarial valuation are used to set the employer contribution rate for July 1, 2026 through June 30, 2027. A summary of the calculation of the employer contribution rate, effective July 1, 2026, is shown below. The employer contribution rate has remained at 12.00% since it was set at that rate, effective January 1, 2020.

Employer Contribution Rate Beginning July 1, 2026	
1. Actuarial Contribution Rate	17.74%
2. Member Contribution Rate	(9.00%)
3. Employer Actuarial Contribution Rate	8.74%
4. Funded Ratio on Valuation Date	68.50%
5. Minimum Employer Contribution Rate [If (4) < 100%, then 12.00%]	12.00%
6. Employer Contribution Rate Effective July 1, 2026 to June 30, 2027 [Maximum of (3) and (5)]	12.00%

Prior to July 1, 2021, the System was funded with fixed employee and employer contribution rates. The change to determine the employer contribution rate based on the actuarial contribution rate is expected to improve the funded status of the System over time and provide a more sustainable path toward full funding.

SECTION I – EXECUTIVE SUMMARY

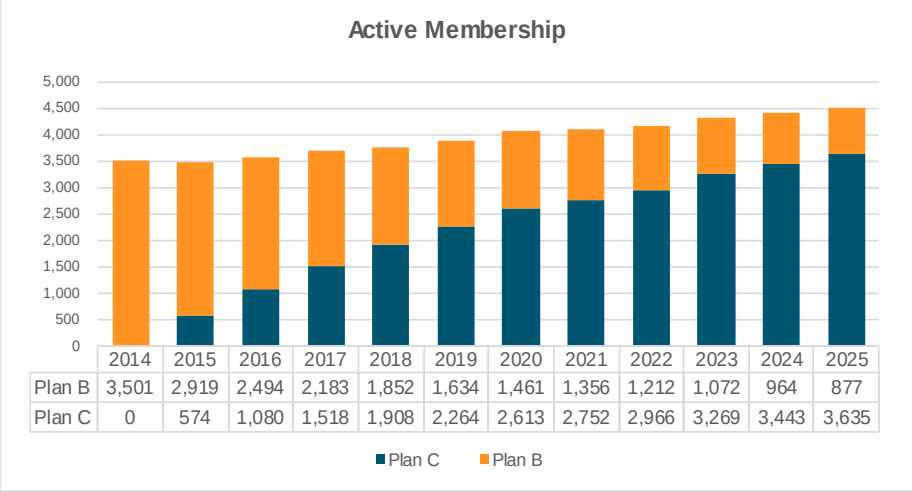
The actuarial valuation results provide a "snapshot" view of the System's financial condition on January 1, 2025, which reflects net unfavorable experience for the past plan year as demonstrated by an unfunded actuarial accrued liability that was higher than expected. The net experience on liabilities resulted in a loss of $0.3 million. There was unfavorable experience on the actuarial value of assets resulting in an actuarial loss of $14.4 million, so the aggregate impact of asset and liability experience was an actuarial loss of $14.7 million. The System's unfunded actuarial accrued liability increased from $313.8 million in the January 1, 2024 valuation to $324.8 million in the January 1, 2025 valuation. A detailed analysis of the change in the unfunded actuarial accrued liability is shown on page 6.

In the following pages, changes in the membership, assets, liabilities, and contributions of the System over the last year are discussed in more detail.

MEMBERSHIP

The size of the active membership increased about 2.4%, from 4,407 in the 2024 valuation to 4,512 in the current valuation. Growth in the active membership is a positive factor for the System's funding as it results in higher covered payroll and, therefore, higher contributions.

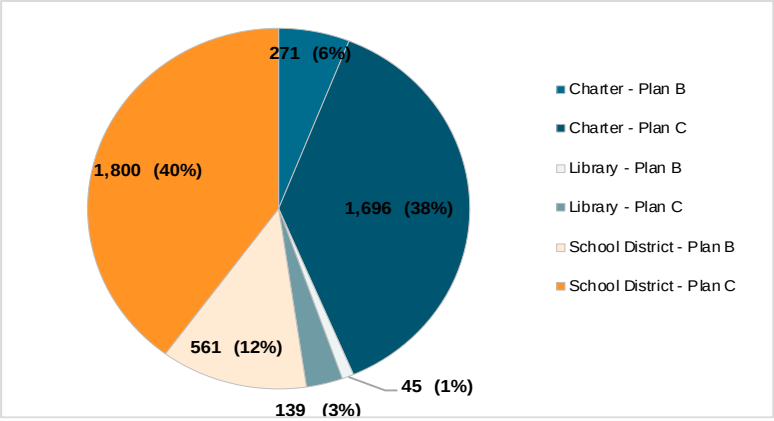
There are different benefit provisions applicable to the current active members. The number of actives covered by Plan C, which was effective for members hired on and after January 1, 2014, increased from 3,443 last year (about 78%) to 3,635 in the 2025 valuation (about 81%). The increase in Plan C members tends to lower the actuarial contribution rate as the benefit structure in Plan C has a lower cost. The following graph shows the historical number of active members, split between Plan B and Plan C.



	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Plan B	3,501	2,919	2,494	2,183	1,852	1,634	1,461	1,356	1,212	1,072	964	877
Plan C	0	574	1,080	1,518	1,908	2,264	2,613	2,752	2,966	3,269	3,443	3,635

SECTION I – EXECUTIVE SUMMARY

The System covers employees of the Kansas City School District, the Kansas City Library and Charter Schools in Kansas City. The current allocation of active membership among these groups, by Plan, is shown below:



Group	Count	Average Reported Salary	Average Age	Average Service	Average Entry Age
KC School District	2,361	$54,924	46.5	8.2	38.3
Charter Schools	1,967	$52,102	40.7	5.4	35.3
Library	184	$58,247	44.5	8.0	36.5
Total	4,512	$53,829	43.9	6.9	37.0

Total projected covered payroll (on which contributions will be paid) increased by 6.7% from the prior valuation (the assumption was 2.85%) due to the combined impact of the increase in active membership and salary increases in 2024. When the actual increase in covered payroll is more than expected, it reduces the UAAL contribution rate since the UAAL payment is divided by higher covered payroll than expected based on the actuarial assumptions.

The number of total terminated members (vested and non-vested) increased by 5.3% from the 2024 valuation. The number of in-pay members remained steady, decreasing slightly from 4,073 in the 2024 valuation to 4,047 in the 2025 valuation.

ASSETS

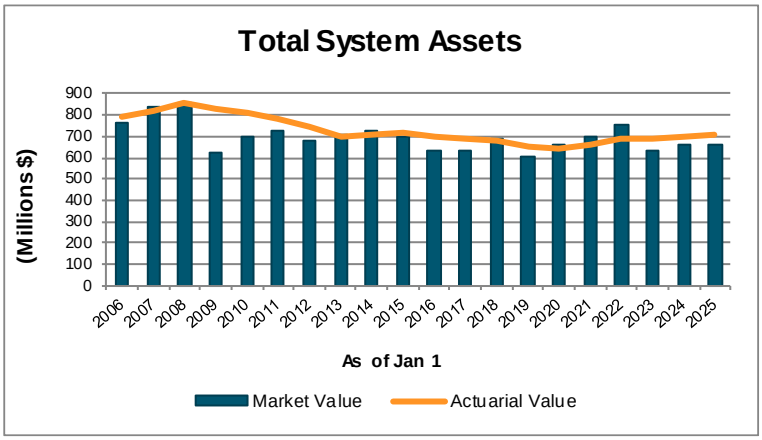
As of January 1, 2025, the System had total assets of $662.5 million when measured on a market value basis, an increase of $2.6 million from the January 1, 2024 value of $659.9 million. The market value of assets is not used directly in the calculation of the System's funded status and the actuarial contribution rate. An asset valuation method, which smoothes the effect of market fluctuations, is used to determine the value of assets used in the valuation, called the "actuarial value of assets". Gains and losses, determined as the difference between the actual and

expected value of assets, are recognized equally over a five-year period. See Table 3 for a detailed development of the actuarial value of assets. The rate of return on the market value of assets was 5.2%, but due to the use of an asset smoothing method the return on the actuarial value of assets was 5.1%. Because the investment return on the actuarial value of assets was lower than the actuarial assumed rate of return (7.25%), an actuarial loss on assets occurred. Due to the unfavorable investment experience during 2024, along with the scheduled recognition of the deferred investment experience in the actuarial value of assets, the net deferred asset loss of $42.3 million in the January 1, 2024 valuation increased to a net deferred asset loss of $43.9 million in the January 1, 2025 valuation.

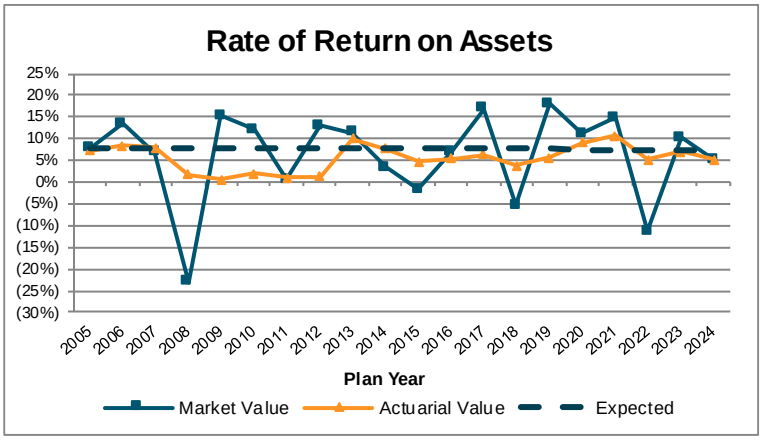
The components of the change in the market and actuarial value of assets for the System (in millions) are set forth below:

	Market Value ($M)	Actuarial Value ($M)
Assets, January 1, 2024	$659.9	$702.2
- Employers and Member Contributions	56.3	56.3
- Benefit Payments and Refunds	(85.7)	(85.7)
- Administrative Expenses	(1.7)	(1.7)
- Net Investment Income	33.7	35.3
Assets, January 1, 2025	$662.5	$706.4
Estimated Rate of Return	5.2%	5.1%

The market value of assets is about 7.0% lower than the actuarial value of assets indicating a net unrecognized asset loss exists. Unless offset by future investment gains or other favorable actuarial experience, the recognition of the $43.9 million net deferred loss will flow through the asset smoothing method over the next four years and negatively impact the funded ratio and actuarial contribution rate. If the net deferred loss was recognized immediately in the actuarial value of assets, the funded percentage would decrease from 69% to 64% and the actuarial contribution rate for the System would increase from 17.74% to 18.98% of payroll.



The actuarial value of assets has been equal to or greater than the market value of assets over most of this period. However, over the longer term we expect the actuarial value of assets to be both higher and lower than the market value of assets.



The rate of return on the actuarial value of assets has been less volatile than the market value return, which is the main reason for using an asset smoothing method. The compound rate over the past 20 years for market and actuarial value of assets is 5.7% and 5.5% respectively.

LIABILITIES

The actuarial accrued liability is that portion of the present value of future benefits that will not be paid by future employer normal costs or member contributions. The difference between this liability and asset values at the same date is referred to as the unfunded actuarial accrued liability (UAAL). The unfunded actuarial accrued liability will be reduced if the employer's contributions exceed the employer's normal cost for the year, after allowing for interest earned on the previous balance of the unfunded actuarial accrued liability. Benefit improvements, experience gains and losses, and changes in actuarial assumptions and procedures 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 January 1, 2025 are:

Actuarial Accrued Liability	$1,031,257,385
Actuarial Value of Assets	706,408,237
Unfunded Actuarial Accrued Liability	$324,849,148

The existence of an unfunded actuarial accrued liability means that the System's assets on an actuarial basis are below the target amount for an ongoing plan using the actuarial cost method and actuarial assumptions in place. Consequently, contributions in excess of the normal cost will be needed in order for the System to reach fully funded status, if all assumptions are met in the future. Because the actuarial accrued liability includes projections of future salary increases and years of service, this measure does not provide a reliable indication of the level of funding relative to actual benefits earned to date. In addition, note that if the market value of assets were used instead of the actuarial value of assets, the amount of UAAL would be different. This information is shown on page 12 of this report.

SECTION I – EXECUTIVE SUMMARY

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

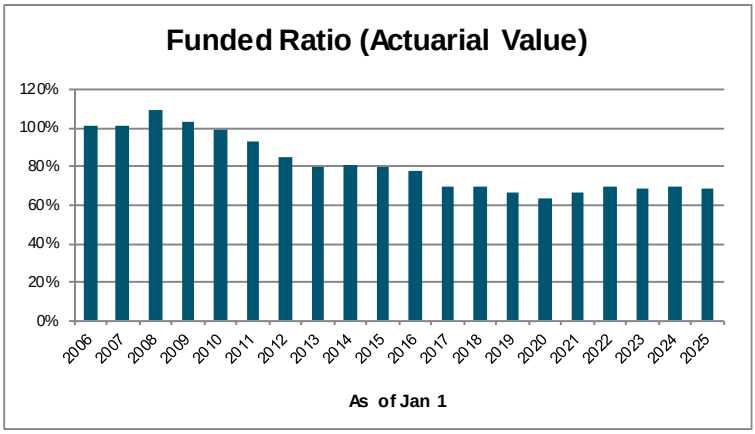
	($ Millions)
Unfunded Actuarial Accrued Liability, January 1, 2024	$ 313.8
- Expected increase from amortization method	0.5
- Actual versus actuarial contributions	(7.3)
- Investment experience	14.4
- Liability experience, including new hires	4.4
- Updated mortality assumption	1.8
- Other experience	(2.8)
Unfunded Actuarial Accrued Liability, January 1, 2025	$ 324.8

The experience loss for the 2024 plan year of $14.7 million reflects the aggregate impact of an actuarial loss of $0.3 million on System liabilities and an actuarial loss of $14.4 million on System assets (actuarial value). The largest source of liability experience was an actuarial loss of $2.1 million resulting from salary increases that were larger than assumed.

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). Longer term historical information is shown in the graph following the chart:

	1/1/2021*	1/1/2022	1/1/2023	1/1/2024	1/1/2025
Actuarial Accrued Liability ($M)	$997.6	$998.1	$1,006.8	$1,016.0	$1,031.3
Actuarial Value of Assets ($M)	$663.2	$692.3	$689.1	$702.2	$706.4
Funded Ratio (Actuarial Value)	66.5%	69.4%	68.5%	69.1%	68.5%
Market Value of Assets ($M)	$694.2	$753.5	$632.1	$659.9	$662.5
Funded Ratio (Market Value)	69.6%	75.5%	62.8%	64.9%	64.2%

*Results reflects the impact of changes to the actuarial assumptions, including a decrease in the investment return assumption from 7.50% to 7.25% in 2021.



The System's funded ratio was very strong (around 100%) in the early part of the period. Funded ratios declined from 2009 to 2013 as the market downturn of 2008 was fully reflected in the asset smoothing method. Actual investment experience will continue to be the largest driver of the System's funded ratio in future years. However, changes to the contribution rates, beginning in 2019, are expected to improve the System's long-term funding.

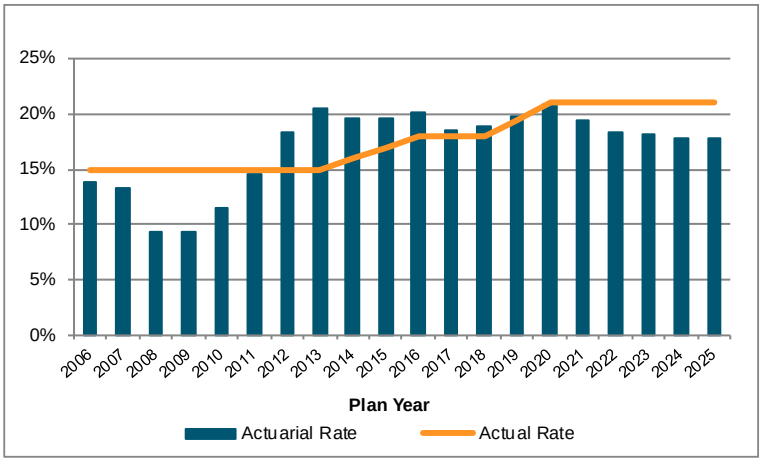
As mentioned earlier in this report, due to the asset smoothing method there is currently a $43.9 million difference between the market value and the actuarial value of assets. To the extent there is not favorable investment experience to offset the net deferred investment loss of $43.9 million, it will be recognized in future years and the System's funded status will decrease. The System's funded status will continue to be heavily dependent on future investment experience.

CONTRIBUTION RATES

Contributions to the System consist of:

- The "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;
- An "administrative expense" component for the expenses expected to be paid from the trust for the year; and
- An "unfunded actuarial accrued liability contribution" for the excess of the portion of projected liabilities allocated to service to date over the actuarial value of assets.

Over the last decade, the System's total contribution rates have increased to address higher funding needs:



The actuarial contribution rate increased dramatically from 2009 to 2013 due to the recognition of the large asset loss from 2008 in the asset smoothing method. The contribution shortfall was reduced with increases in the member and employer contribution rates. Based on legislation passed in 2018, the employer contribution rate increased to 12% on January 1, 2020. Effective July 1, 2021, the employer contribution rate is based on the valuation results.

As of January 1, 2025, the actuarial accrued liability exceeds the actuarial value of assets, so an unfunded actuarial accrued liability (UAAL) exists. The "legacy UAAL", the amount in the January 1, 2017 valuation, is amortized over a closed 30-year period (22 years remaining). Subsequent pieces of UAAL, determined each year in the valuation process, are amortized over separate, closed 20-year periods. The amortization payments on each of the UAAL bases are determined as a level percentage of payroll, so the dollar amount of UAAL contributions increase each year. The resulting UAAL contribution rate in this valuation is 7.58% of payroll. The System's actuarial contribution rate is the sum of the normal cost, the administrative expense cost, and the UAAL amortization contribution or 17.74% of payroll (9.55% normal cost plus 0.61% administrative expense plus 7.58% UAAL contribution).

In our opinion, the amortization policy meets the requirements of Actuarial Standard of Practice Number 4. This approach is intended to promote stable contributions, balance cost among generations of taxpayers and members, and ensure adequate prefunding of benefits. The amortization schedule will fully fund the UAAL within 22 years.

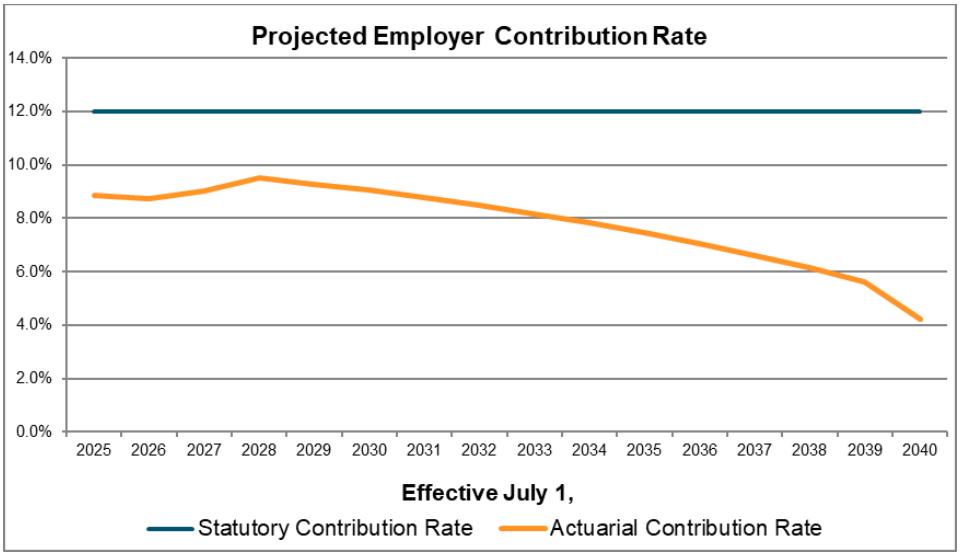
The various factors contributing to the change in the actuarial contribution rate from the January 1, 2024 valuation to the January 1, 2025 valuation are shown in the following table:

Total Actuarial Contribution Rate	
As of January 1, 2024	17.85%
- Change in normal cost and administrative expense rate	(0.06%)
- Actual versus actuarial contributions	(0.21%)
- Payroll growth greater than expected	(0.28%)
- Investment experience	0.41%
- Liability experience	0.01%
- Updated mortality assumption	0.05%
- Other experience	(0.03%)
As of January 1, 2025	17.74%

In 2018, the Missouri General Assembly passed legislation that increased the employer contribution rate from 9.00% to 10.50% of pay, effective January 1, 2019, and 12.00% of pay, effective January 1, 2020. Effective July 1, 2021, the employer contribution rate is the greater of (1) the actuarial contribution rate less the member contribution rate, determined in the actuarial valuation in the prior calendar year or (2) 12.00% of pay, until the System is fully funded. Once the System is fully funded, the employer contribution rate may increase or decrease in subsequent years, depending on the valuation results, and the employee contribution rate may decrease from 9.00% depending on valuation results. However, such changes are subject to statutory limitations. These legislative changes to the determination of the employer contribution rate represent a significant step in strengthening the long-term funding of the System and providing a sustainable path to full funding.

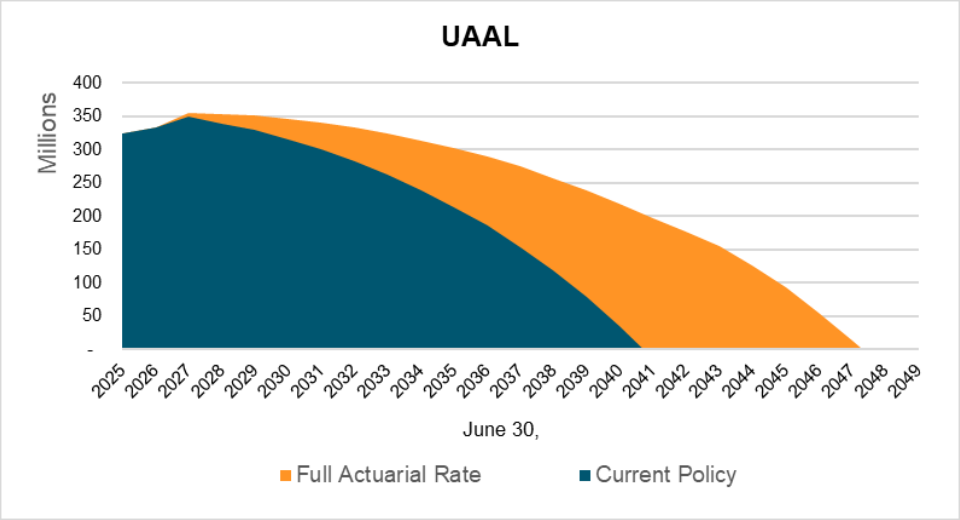
The current contribution rate is 21.00% of pay (9.00% for employee and 12.00% employer). In the current valuation, 9.55% is needed to fund the normal cost for current active members and 0.61% is needed to fund the administrative expenses, for a total ongoing cost of 10.16% of payroll. The remainder, 10.84% of payroll, is available to fund the UAAL. The following graphs reflect the projected employer contribution rate and funded ratio, assuming all assumptions are met in the future, including a 7.25% return on the market value of assets each year. To the extent actual experience is different than assumed, the actual valuation results of the System will vary from these projections, perhaps significantly.

As the deferred investment experience in the current valuation is recognized over the next four years, the actuarial employer contribution rate increases, but remains under 10.0%. Under statutory provisions, the employer contribution rate remains at a minimum of 12.00% until the System reaches full funding.

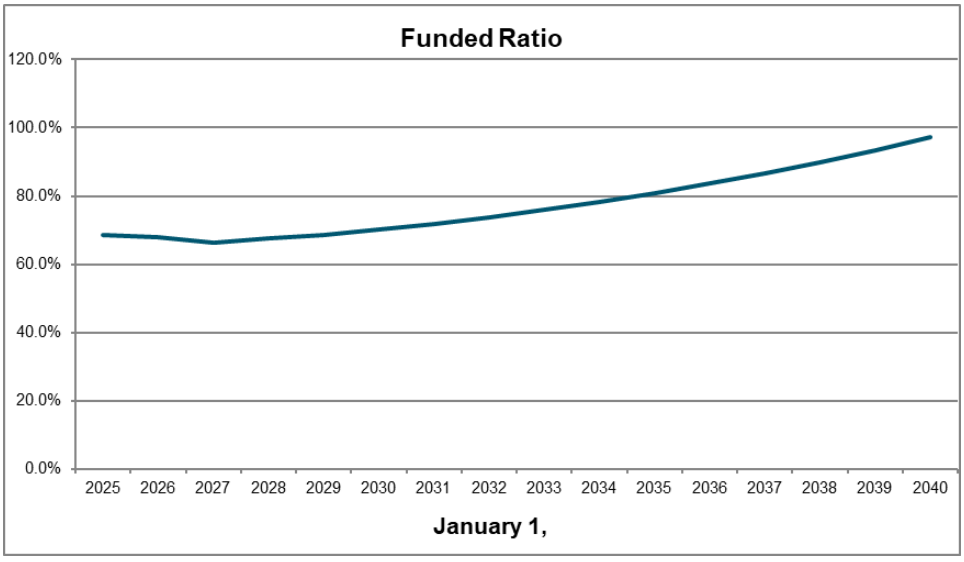


By contributing more than the actuarial employer contribution rate, the System is funded more rapidly, assuming all assumptions are met. Actual investment experience will heavily impact the date the System actually reaches full funding. However, with the use of an asset smoothing method and the current contribution rate above the actuarial contribution rate, the employer contribution rate is likely to remain 12.00% for the next few years absent negative asset returns. For example, a negative 7% return in 2025 followed by returns of 7.25% in all future years is projected to ultimately increase the employer contribution rate above the current 12.00% after all the deferred investment experience has been recognized.

The current funding policy accelerates the funding of the System due to contributions exceeding the actuarially determined amounts. If all assumptions are met, the System is expected to reach 100% funded 7 years earlier due to the funding policy.



The funded ratio is expected to decline initially as the deferred investment experience is recognized and then steadily improve and reach 100% in 2041 (16 years), which is ahead of the UAAL amortization schedule. This is due to the combined impact of (i) recognizing deferred asset experience over the next four years and (ii) making contributions above the actuarial contribution rate. The contributions above the actuarial contribution rate are an intentional feature of the System's current funding policy, which is designed to more rapidly move the System's funding status to 100% as well as stabilize contribution rates.



COMMENTS

The System's actuarial contribution rate decreased from 17.85% in the January 1, 2024 valuation to 17.74% in the January 1, 2025 valuation. Due to the 2024 investment return of 5.2%, the net deferred investment loss of $42.3 million in the January 1, 2024 valuation increased to $43.9 million in the January 1, 2025 valuation. To the extent there is not favorable investment experience in the future to offset the net deferred investment loss of $43.9 million, it will be recognized in the next four years and the System's funded status will decrease.

The System does not use the actual market value of assets in developing the actuarial contribution rate but utilizes an asset valuation method to smooth out the peaks and valleys in investment returns from year to year. Due to the current year's scheduled recognition of prior investment experience and the actual investment return for 2024, the System experienced a loss on the actuarial value of assets of $14.4 million. In addition to the unfavorable experience on the actuarial value of assets, there was a net loss on liabilities of $0.3 million. The aggregate impact of the asset and the liability experience was an actuarial loss of $14.7 million.

The net deferred investment loss (actuarial value greater than market value of assets) is $43.9 million, about 6.6% of market value. Absent investment gains in future years, this net deferred investment loss will eventually be reflected in the actuarial value of assets. While the use of an asset smoothing method is a common procedure for public retirement systems, it is important to identify the potential impact of the deferred investment experience. This is accomplished by comparing the key valuation results from the January 1, 2025 actuarial valuation using both the actuarial and market value of assets.

	Using Actuarial Value of Assets	Using Market Value of Assets
Actuarial Accrued Liability	$1,031,257,385	$1,031,257,385
Asset Value	706,408,237	662,534,519
Unfunded Actuarial Accrued Liability	$324,849,148	$368,722,866
Funded Ratio	68.5%	64.2%
Normal Cost Rate	9.55%	9.55%
Administrative Expenses	0.61%	0.61%
UAAL Contribution Rate	7.58%	8.82%
Actuarial Contribution Rate	17.74%	18.98%
Employee Contribution Rate	(9.00%)	(9.00%)
Employer Contribution Rate	(12.00%)	(12.00%)
Contribution Shortfall/(Margin)	(3.26%)	(2.02%)

The actuarial contribution rate has been, and will continue to be, heavily impacted by actual investment returns from year to year. Despite the use of an asset smoothing method, actual returns that are significantly different from the 7.25% assumption will create volatility in the System's actuarial contribution rate, although the statutory provisions regarding changes in the actual employer contribution rate should help to mitigate some of the volatility.

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 VII of this report for an in-depth discussion of the specific risks facing the Public School Retirement System of the School District of Kansas City, Missouri.

Summary of Principal Valuation Results

	1/1/2025 Valuation	1/1/2024 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members			
- Plan B	877	964	(9.0%)
- Plan C	3,635	3,443	5.6%
Total	4,512	4,407	2.4%
Retirees, Disableds, and Beneficiaries	4,047	4,073	(0.6%)
Terminated Members			
- Vested Members	827	788	4.9%
- Non-Vested Members	3,079	2,920	5.4%
Total	3,906	3,708	5.3%
Total Members	12,465	12,188	2.3%
Projected Annual Salaries of Active Members	$ 282,715,300	$ 265,017,203	6.7%
Annual Retirement Payments for Retirees, Disableds, and Beneficiaries	$ 80,629,236	$ 80,802,900	(0.2%)
2. ASSETS AND LIABILITIES			
a. Market Value of Assets	$ 662,534,519	$ 659,895,294	0.4%
b. Actuarial Value of Assets	706,408,237	702,224,863	0.6%
c. Total Actuarial Accrued Liability	1,031,257,385	1,016,027,955	1.5%
d. Unfunded Actuarial Accrued Liability [c - b]	$ 324,849,148	$ 313,803,092	3.5%
e. Funded Ratio (Actuarial Value of Assets) [b / c]	68.50%	69.11%	(0.9%)
f. Funded Ratio (Market Value of Assets) [a / c]	64.25%	64.95%	(1.1%)
g. Projected Benefit Obligation	$ 998,697,491	$ 986,366,212	1.3%
3. CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost	9.55%	9.58%	(0.3%)
Administrative Expense	0.61%	0.64%	(4.7%)
Amortization of Unfunded Actuarial Accrued Liability	7.58%	7.63%	(0.7%)
Actuarial Contribution Rate	17.74%	17.85%	(0.6%)
Member Contribution Rate	(9.00%)	(9.00%)	0.0%
Employer Contribution Rate	(12.00%)	(12.00%)	0.0%
Contribution Rate Shortfall/(Margin)	(3.26%)	(3.15%)	3.5%

*Contribution rates are effective July 1 of the following fiscal year.

SECTION II – SCOPE OF THE REPORT

This report presents the actuarial valuation of the Public School Retirement System of the School District of Kansas City, Missouri as of January 1, 2025. This valuation was prepared at the request of the System's Board of Trustees. The report is based on the plan provisions, actuarial assumptions and actuarial methods in effect as of January 1, 2025.

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 resulting from this valuation is presented in the previous section. Section III describes the assets and investment experience of the System. Sections IV and V describe how the obligations of the System are to be met under the actuarial cost method in use. Section VI includes additional information regarding the System's funding history. Section VII includes a number of risks for the System to consider.

This report includes several appendices:

- Appendix A Schedules of valuation data classified by various categories of members.
- Appendix B Schedules of historical valuation data measurements utilized in the System's annual financial report.
- Appendix C A summary of the current benefit structure, as determined by the provisions of governing law on the valuation date.
- Appendix D A summary of the actuarial methods and assumptions used to estimate liabilities and determine contribution rates.
- Appendix E A glossary of actuarial terms.

SECTION III - 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 is January 1 of each year. On that date, the assets available for the payment of benefits are appraised. The assets are compared with the liabilities of the System. The actuarial process then leads to a method of determining the contributions needed by members and the employer in the future to balance the System assets and liabilities.

MARKET VALUE OF ASSETS

The current market value represents the "snapshot" or "cash-out" value of System assets as of the valuation date. In addition, the market value of assets provides a basis for measuring investment performance over time. On January 1, 2025, the market value of assets for the System was $662.5 million. Table 1 summarizes the market value of assets by asset category. Table 2 summarizes the changes in the market value of assets between January 1, 2024 and January 1, 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 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. This methodology smoothes the difference between the actual return and the expected return (based on the actuarial assumption) on the market value of assets equally over a five-year period. Table 3 shows the development of the actuarial value of assets (AVA) as of January 1, 2025. Table 4 shows the schedule of deferred experience to be recognized in the actuarial value of assets in future years.

TABLE 1

Net Assets at Fair (Market) Value as of January 1, 2025

INVESTMENTS, AT MARKET VALUE		
Cash and short term investments	$	6,367,347
Commingled domestic fixed income		100,791,132
High yield fixed income		16,786,264
Global fixed income		19,879,859
Domestic equity		141,178,014
International equity		129,643,576
Pooled real estate funds		61,010,624
Alternative equity fund		74,347,193
Private equity		102,316,569
Commodities		0
Total Investments, at Market Value	$	652,320,578
RECEIVABLES		
Plan member contributions	$	986,838
Employer contributions		1,944,068
Securities sold		5,517,689
Accrued interest and dividends		1,505,220
Total Receivables	$	9,953,815
OTHER ASSETS		
Cash	$	1,757,432
Fixed assets		10,263
Other assets		88,267
Total Other Assets	$	1,855,962
TOTAL ASSETS	$	664,130,355
LIABILITIES		
Due to broker for securities purchased	$	1,140,749
Accounts payable		446,806
Accrued payroll expenses		8,281
Total Liabilities	$	1,595,836
NET ASSETS AVAILABLE FOR BENEFITS	$	662,534,519

Note: Based on unaudited asset information.

TABLE 2

Statement of Changes in Net Assets as of January 1, 2025

ADDITIONS TO NET ASSETS		
Contributions		
Plan members	$	24,165,781
Employers		32,100,787
Total Contributions	$	56,266,568
Investment Income		
Net appreciation (depreciation) in fair value of investments	$	29,517,284
Interest/Dividends		8,960,239
Other income		0
Investment income before expenses	$	38,477,523
Less: investment expenses		(4,661,537)
Net investment income	$	33,815,986
TOTAL ADDITIONS TO NET ASSETS	$	90,082,554
DEDUCTIONS FROM NET ASSETS		
Benefits paid directly to participants	$	80,044,931
Refunds of contributions		5,676,826
Other		0
Administrative expenses		1,721,572
TOTAL DEDUCTION FROM ASSETS	$	87,443,329
NET INCREASE (DECREASE)	$	2,639,225
NET ASSETS AVAILABLE FOR BENEFITS		
Beginning of year	$	659,895,294
End of year	$	662,534,519

Note: Based on unaudited asset information.

TABLE 3

Development of Actuarial Value of Assets as of January 1, 2025

1. Deferral of Investment Return for 2024		
a. Market Value, January 1, 2024	$	659,895,294
b. Contributions for 2024		56,266,568
c. Benefit Payments and Administrative Expenses for 2024		87,443,329
d. Expected Rate of Return During 2024		7.25%
e. Expected Return - Weighted for Timing* (a. x d.) + [(b. - c.) x (((1 + d.)$^{.5}$) - 1)]	$	46,732,025
f. Actual Investment Return, Net of Investment Expenses	$	33,815,986
g. Investment Gain/(Loss) for the Year (f. - e.)	$	(12,916,039)
h. Deferred Investment Return (g. x 80%)	$	(10,332,831)
2. Actuarial Value, January 1, 2025		
a. Market Value, January 1, 2025	$	662,534,519
b. Total Deferred Investment Gain/(Loss)		(43,873,718)
c. Actuarial Value, January 1, 2025 (a. - b.)	$	706,408,237
d. Ratio of Actuarial Value of Assets to Market Value of Assets		106.6%
e. Approximate Actuarial Value Rate of Return for 2024, Net of Investment Expenses		5.1%

* Contributions and benefit payments are assumed to occur mid-year.

The table below shows the development of gain/(loss) to be recognized in the current year.

Plan Year Ended	Asset Gain/(Loss)	Gain/(Loss) Recognized in Prior Years	Gain/(Loss) Recognized This Year	Gain/(Loss) Deferred to Future Years
12/31/2020	$ 23,436,801	$ 18,749,440	$ 4,687,361	$ 0
12/31/2021	50,744,952	30,446,970	10,148,990	10,148,992
12/31/2022	(135,926,107)	(54,370,442)	(27,185,221)	(54,370,444)
12/31/2023	17,800,941	3,560,188	3,560,188	10,680,565
12/31/2024	(12,916,039)	0	(2,583,208)	(10,332,831)
Total	$(56,859,452)	$(1,613,844)	$(11,371,890)	$(43,873,718)

TABLE 4

Schedule of Deferred Actuarial Value of Assets Experience

Plan Year Ended	Gain/(Loss) Deferred to Future Years	Gain/(Loss) to be Recognized in Plan Year Ending			
		2025	2026	2027	2028
12/31/2021	$10,148,992	10,148,992			
12/31/2022	(54,370,444)	(27,185,221)	(27,185,223)		
12/31/2023	10,680,565	3,560,188	3,560,188	3,560,189	
12/31/2024	(10,332,831)	(2,583,208)	(2,583,208)	(2,583,208)	(2,583,207)
Total	($43,873,718)	($16,059,249)	($26,208,243)	$976,981	($2,583,207)

SECTION IV – 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, January 1, 2025. In this section, the discussion will focus on the commitments of the System, which are referred to as its liabilities.

Table 5 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 5 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 reflect the benefit provisions in place as of January 1, 2025.

ACTUARIAL ACCRUED LIABILITY

A fundamental principle in financing the liabilities of a prefunded 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 6 contains the calculation of actuarial accrued liability to the System. The Entry Age Normal actuarial cost method is used to develop the actuarial accrued liability.

Table 7 develops the experience gain/(loss) for the year ended December 31, 2024.

Table 8 shows the liability gain/(loss) by source.

Table 9 shows the actuarial balance sheet.

PENSION BENEFIT OBLIGATION

Table 10 shows the System's liability on a Pension Benefit Obligation (PBO) basis.

TABLE 5

Present Value of Future Benefits as of January 1, 2025

1. Active Members		
a. Retirement Benefits	$	398,338,992
b. Death Benefits		8,963,251
c. Withdrawal Benefits		66,430,768
d. Subtotal	$	473,733,011
2. Benefit Recipients		
a. Retiree Benefits	$	646,097,942
b. Survivor Benefits		25,050,994
c. Disability Benefits		5,604,357
d. Subtotal	$	676,753,293
3. Inactive Members		
a. Vested Retirement Benefits	$	35,411,234
b. Non-vested Account Balance		14,826,947
c. Subtotal	$	50,238,181
4. Total (1d. + 2d. + 3c.)	$	1,200,724,485

TABLE 6

Actuarial Accrued Liability as of January 1, 2025

1.	Present Value of Future Benefits (PVFB)	$	1,200,724,485
2.	Present Value of Future Normal Costs (PVFNC)		
	a. Retirement benefits	$	96,341,429
	b. Death benefits		4,510,958
	c. Withdrawal benefits		68,614,713
	d. Total	$	169,467,100
3.	Actuarial Accrued Liability (AAL) (1. - 2d.)	$	1,031,257,385
4.	Actuarial Value of Assets (AVA)	$	706,408,237
5.	Unfunded Actuarial Accrued Liability (UAAL) (3. - 4.)	$	324,849,148
6.	Funded Ratio (AVA / AAL) (4. / 3.)		68.5%

TABLE 7

Actuarial (Gain)/Loss for 2024

Liabilities			
1.	Actuarial accrued liability as of January 1, 2024	$	1,016,027,955
2.	Normal cost for 2024, including new hires		26,361,159
3.	Benefit payments during 2024		(85,721,757)
4.	Interest at 7.25% on (1), (2) and (3) to December 31, 2024		72,520,165
5.	Updated mortality assumption		1,813,679
6.	Expected actuarial accrued liability as of December 31, 2024	$	1,031,001,201
7.	Actuarial accrued liability as of December 31, 2024		1,031,257,385
8.	Actuarial (gain) / loss on actuarial accrued liability (7. - 6.)	$	256,184
Assets			
9.	Actuarial value of assets as of January 1, 2024	$	702,224,863
10.	Contributions during 2024		56,266,568
11.	Benefit payments and administrative expenses during 2024		(87,443,329)
12.	Interest at 7.25% on (9), (10) and (11) to December 31, 2024		49,800,919
13.	Expected actuarial value of assets as of December 31, 2024	$	720,849,021
14.	Actuarial value of assets as of December 31, 2024		706,408,237
15.	Actuarial (gain) / loss on actuarial assets (13. – 14.)	$	14,440,784
16.	Total actuarial (gain) / loss (8. + 15.)	$	14,696,968

TABLE 8

(Gain)/Loss Analysis by Source

The System experienced a net actuarial loss on liabilities of about $0.3 million during the plan year ended December 31, 2024. The major components of the actuarial experience are shown below:

Liability Sources		(Gain)/Loss
Retirement	$	(621,000)
Termination		(594,000)
Disability		0
Mortality		(244,000)
Salary		2,072,000
Miscellaneous		(357,000)
Total Liability (Gain)/Loss	$	256,000
Asset (Gain)/Loss	$	14,441,000
Net Actuarial (Gain)/Loss	$	14,697,000

Comments

The purpose of conducting an actuarial valuation of a retirement system is to determine the costs and liabilities for the benefits under the system, to determine the annual level of contribution required to support these benefits and, finally, to analyze the system's overall experience as it compares with the actuarial assumptions used in the valuation. The costs and liabilities of a retirement system reported in the valuation depend not only upon the level of benefits provided, but also upon factors such as investment return on invested funds, mortality rates for active and retired members, withdrawal rates among active members, rates at which salaries increase, and rates of retirement for ages at which members retire. The actuarial assumptions employed as to these and other contingencies in the current valuation are set forth in Appendix D of this report.

Net demographic actuarial experience for the year was a loss of $0.3 million, about 0.02% of actuarial accrued liability. The largest source of experience was a loss of $2.1 million due to salary increases being larger than assumed.

Another significant component of the experience for the year ending December 31, 2024 was the investment experience. Due to the current year's scheduled recognition of prior investment experience and the unfavorable investment experience during 2024, there was a loss on the actuarial value of assets of $14.4 million. As of January 1, 2025, there is a net deferred investment loss of $43.9 million. Absent favorable investment experience, the net deferred loss will flow through the valuation over the next few years and increase both the UAAL and the actuarial contribution rate.

TABLE 9

Actuarial Balance Sheet

Assets		
Current assets (actuarial value)	$	706,408,237
Present value of future normal costs		169,467,100
Present value of future contributions to fund unfunded actuarial accrued liability		324,849,148
Total Assets	$	1,200,724,485
Liabilities		
Present value of future retirement benefits for:		
Active employees	$	473,733,011
Members currently receiving a benefit		676,753,293
Terminated vested members		35,411,234
Inactive employees due refunds		14,826,947
Total Liabilities	$	1,200,724,485

TABLE 10

Pension Benefit Obligation Funded Status

The Pension Benefit Obligation (PBO) is statutorily required to be used in the determination of whether a cost-of-living allowance can be granted to retirees. PBO is a different actuarial cost method than is used for funding purposes, which is Entry Age Normal (EAN). Instead of spreading costs evenly over a member's working lifetime, as with EAN, PBO accounts for benefits as they are accrued, while also reflecting future expected pay increases. If the funded ratio, after reflecting the effect of the proposed increase, exceeds 100%, and other safeguards are met, a cost-of-living allowance may be provided. See Appendix C for additional details.

Projected Benefit Obligation		January 1, 2025	January 1, 2024
1.	Retired members and beneficiaries currently receiving benefits and terminated members not yet receiving benefits	$ 726,991,474	$ 732,968,099
2.	Current active participants		
a.	Accumulated member contributions, including interest	141,216,332	130,564,354
b.	Employer-financed vested benefits	130,489,685	122,833,759
Total Projected Benefit Obligation (PBO)		$ 998,697,491	$ 986,366,212
Projected Benefit Obligation funded status			
1.	Actuarial Value of Assets (AVA)	$ 706,408,237	$ 702,224,863
a.	Unfunded Projected Benefit Obligation	292,289,254	284,141,349
b.	Funding Ratio (AVA / PBO)	71%	71%
2.	Market Value of Assets (MVA)	$ 662,534,519	$ 659,895,294
a.	Unfunded Projected Benefit Obligation	336,162,972	326,470,918
b.	Funding Ratio (MVA / PBO)	66%	67%

SECTION V – EMPLOYER CONTRIBUTIONS

The previous two sections were devoted to a discussion of the assets and liabilities of the System. A comparison of Tables 3 and 5 indicates that current assets fall short of meeting the present value of future benefits (total liability). This is expected, except for a completely closed fund, where no further contributions are anticipated. In an active open 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" is often applied to a system in which contributions at the normal cost rate are sufficient to pay for the benefits of existing employees as well as for those of new employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely funded or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated. Under these circumstances, an unfunded actuarial accrued liability (UAAL) exists. Likewise, when the actuarial value of assets is greater than the actuarial accrued liability, a surplus exists.

DESCRIPTION OF CONTRIBUTION RATE COMPONENTS

The Entry Age Normal (EAN) actuarial cost method is used for the valuation. Under this 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).

The calculation of the employer contribution rate is outlined in Appendix C.

As of January 1, 2025, the valuation assets were less than the actuarial accrued liability, so an unfunded actuarial accrued liability exists. The actuarial contribution rate, based on the January 1, 2025 actuarial valuation, will be used to determine the employer contribution rate for the year beginning July 1, 2026. The System's funding policy is to amortize the UAAL, as a level percent of pay amount, using a "layered" approach with the legacy UAAL amortized over a closed 30-year period commencing January 1, 2017 and new bases over closed 20-year periods.

SECTION V – EMPLOYER CONTRIBUTIONS

CONTRIBUTION RATE SUMMARY

Table 11 develops the normal cost rate for the System. Table 12 projects the unfunded actuarial accrued liability to July 1, 2026. In Table 13, the amortization payment related to the unfunded actuarial accrued liability as of July 1, 2026 is developed. In Table 14, the actuarial contribution rate for the System is calculated.

The actuarial contribution rate shown in this report is based on the actuarial assumptions and cost methods described in Appendix D.

TABLE 11

Normal Cost Rate

1. Normal Cost		
a. Retirement Benefits	$	14,124,604
b. Death Benefits		684,035
c. Termination Benefits		9,132,049
d. Total	$	23,940,688
2. Expected Payroll for Current Actives	$	250,810,662
3. Normal Cost Rate for 2025		9.55%

TABLE 12

Projected Unfunded Actuarial Accrued Liability at July 1, 2026

1.	Unfunded Actuarial Accrued Liability at January 1, 2025	$ 324,849,148
2.	Total Contribution Rate for Year Ending June 30, 2025	21.00%
3.	Normal Cost Rate	9.55%
4.	Administrative Expense Rate	0.61%
5.	Contribution Rate Applied to UAAL for 2025 [(2) - (3) - (4)]	10.84%
6.	Expected Payroll for January to June, 2025	$ 141,357,650
7.	Expected UAAL Contribution [(5) * (6)]	$ 15,323,169
8.	Projected UAAL at July 1, 2025 [(1) * $1.0725^{.5}$ - (7) * $1.0725^{.25}$]	$ 320,825,242
9.	Total Contribution Rate for Year Ending June 30, 2026	21.00%
10.	Normal Cost Rate	9.55%
11.	Administrative Expense Rate	0.61%
12.	Contribution Rate Applied to UAAL for Year Ending June 30, 2026 [(9) - (10) - (11)]	10.84%
13.	Expected Payroll for Year Ending June 30, 2026	$ 286,743,993
14.	Expected UAAL Contribution [(12) * (13)]	$ 31,083,049
15.	Projected UAAL at July 1, 2026 [(8) * 1.0725 - (14) * $1.0725^{.5}$]	$ 311,894,977

TABLE 13

Amortization of the Unfunded Actuarial Accrued Liability

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. This policy will fully amortize the individual, as well as the total, unfunded actuarial accrued liability, within a reasonable timeframe and/or reduce the amount of the UAAL by a reasonable amount within a sufficiently short period.

Amortization Bases	Original Amount	Remaining Payments	Projected Balance as of July 1, 2026	Annual Contribution*
2017 UAAL Base	$ 297,102,390	22	$ 315,921,614	$ 22,292,126
2018 Experience Base	1,054,285	13	956,659	96,794
2019 Experience Base	28,100,770	14	26,128,078	2,501,832
2020 Assumption Change	23,365,556	15	22,151,622	2,017,317
2020 Experience Base	14,051,512	15	13,321,478	1,213,168
2021 Assumption Change	(26,519,293)	16	(25,546,162)	(2,222,207)
2021 Experience Base	(18,210,267)	16	(17,542,037)	(1,525,945)
2022 Experience Base	(34,548,817)	17	(33,749,294)	(2,814,825)
2023 Experience Base	8,770,867	18	8,659,612	694,795
2024 Experience Base	(7,275,800)	19	(7,239,028)	(560,390)
2025 Experience Base	8,832,435	20	8,832,435	661,433
Total			**$ 311,894,977**	**$ 22,354,098**

* Contribution amount reflects mid-year timing.

1. Total UAAL Amortization Payments	$ 22,354,098
2. Projected Payroll for Plan Year Ending June 30, 2027	$ 294,916,197
3. UAAL Amortization Payment Rate	7.58%

TABLE 14

Development of the Actuarial Contribution Rate

The contribution rate developed in this exhibit is based on the Funding Policy, the January 1, 2025 actuarial valuation and applies to the year beginning July 1, 2026 and ending June 30, 2027.

1.	Normal Cost Rate (See Table 10)	9.55%
2.	Administrative Expense Load	0.61%
3.	UAAL Contribution Rate (See Table 12)	7.58%
4.	Actuarial Contribution Rate (1) + (2) + (3)	17.74%
5.	Funded Ratio as of January 1, 2025	68.50%
6.	Member Contribution Rate Effective July 1, 2025	9.00%
7.	Employer Contribution Rate Effective July 1, 2025	12.00%
8.	Member Contribution Rate Effective July 1, 2026*	9.00%
9.	Employer Contribution Rate Effective July 1, 2026**	12.00%
10.	Contribution Shortfall/(Margin) (4) - (8) - (9)	(3.26%)

* If the System is at least 100% funded as of the current valuation, then the members contribute the lesser of (a) 9.00% or (b) one-half of the actuarial contribution rate. If the System is less than 100% funded, then the members contribute 9.00%.

** The employer contribution rate is the greater of (1) the employer share of the actuarial contribution rate, or (2) 12.00% of pay, until the system is fully funded.

Once the System is fully funded, the member and employer contribution rates may increase or decrease in subsequent years, but they may not increase by more than 1.00% or decrease by more than 0.50% from the rate in effect for the previous year. An exception to the limitation on the magnitude of contribution rate increases and decreases exists only when the system is fully funded and the total actuarial contribution rate for employer and employee rate falls below 18.00%.

HISTORICAL FUNDING AND OTHER INFORMATION

In this section, we provide some historical information regarding the funding progress of the System. These exhibits retain some of the information that used to be required for accounting purposes and are included because they help explain the System's funding history.

TABLE 15

Schedule of Funding Progress

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 an on-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 System'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 System's funding.

Actuarial Valuation Date	Actuarial Value of Assets (AVA) (a)	Actuarial Accrued Liabilities (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b - a) / c]
1/1/2001	$696,071,310	$682,531,577	($13,539,734)	102.0%	$165,795,367	(8.2%)
1/1/2002	718,703,692	701,725,938	(16,977,755)	102.4%	171,523,233	(9.9%)
1/1/2003	717,681,067	701,114,370	(16,566,697)	102.4%	168,391,474	(9.8%)
1/1/2004	738,612,110	716,126,707	(22,485,404)	103.1%	186,528,530	(12.1%)
1/1/2005	763,684,602	747,711,194	(15,973,408)	102.1%	195,866,663	(8.2%)
1/1/2006	788,788,666	780,663,389	(8,125,277)	101.0%	187,445,140	(4.3%)
1/1/2007	824,302,795	818,027,315	(6,275,480)	100.8%	199,221,110	(3.2%)
1/1/2008	854,123,580	781,284,025	(72,839,554)	109.3%	202,311,837	(36.0%)
1/1/2009	832,609,879	804,623,080	(27,986,799)	103.5%	205,326,108	(13.6%)
1/1/2010	814,536,473	819,534,391	4,997,918	99.4%	194,474,437	2.6%
1/1/2011	786,297,998	844,232,490	57,934,492	93.1%	162,417,257	35.7%
1/1/2012	742,279,611	874,286,498	132,006,887	84.9%	155,893,016	84.7%
1/1/2013	697,028,072	868,663,383	171,635,311	80.2%	157,303,005	109.1%
1/1/2014	710,828,744	875,451,114	164,622,370	81.2%	157,014,537	104.8%
1/1/2015	712,390,611	891,543,036	179,152,425	79.9%	170,845,124	104.9%
1/1/2016	694,641,248	895,230,295	200,589,047	77.6%	179,013,516	112.1%
1/1/2017	684,412,437	981,514,827	297,102,390	69.7%	194,132,739	153.0%
1/1/2018	678,288,805	980,436,626	302,147,821	69.2%	196,277,971	153.9%
1/1/2019	654,259,324	988,234,763	333,975,439	66.2%	203,310,599	164.3%
1/1/2020	645,373,172	1,020,121,813	374,748,641	63.3%	217,255,306	172.5%
1/1/2021	663,210,594	997,587,405	334,376,811	66.5%	228,084,635	146.6%
1/1/2022	692,264,054	998,058,955	305,794,901	69.4%	234,540,261	130.4%
1/1/2023	689,114,479	1,006,764,612	317,650,133	68.4%	252,084,684	126.0%
1/1/2024	702,224,863	1,016,027,955	313,803,092	69.1%	265,017,203	118.4%
1/1/2025	706,408,237	1,031,257,385	324,849,148	68.5%	282,715,300	114.9%

Note: Years prior to 1/1/2014 were provided by prior Actuary

TABLE 16

Historical Contribution Rates

Actuarial Valuation Date	Actuarial Contribution Rate	Actual Contribution Rate	Contribution Shortfall/(Margin)
1/1/2006	13.78%	15.00%	(1.22%)
1/1/2007	13.28%	15.00%	(1.72%)
1/1/2008	9.39%	15.00%	(5.61%)
1/1/2009	9.35%	15.00%	(5.65%)
1/1/2010	11.50%	15.00%	(3.50%)
1/1/2011	14.64%	15.00%	(0.36%)
1/1/2012	18.30%	15.00%	3.30%
1/1/2013	20.52%	15.00%	5.52%
1/1/2014	19.68%	16.00%	3.68%
1/1/2015	19.56%	17.00%	2.56%
1/1/2016	20.18%	18.00%	2.18%
1/1/2017	18.61%	18.00%	0.61%
1/1/2018	18.82%	18.00%	0.82%
1/1/2019	19.82%	19.50%	0.32%
1/1/2020	20.80%	21.00%	(0.20%)
1/1/2021	19.49%	21.00%	(1.51%)
1/1/2022	18.40%	21.00%	(2.60%)
1/1/2023	18.25%	21.00%	(2.75%)
1/1/2024	17.85%	21.00%	(3.15%)
1/1/2025	17.74%	21.00%	(3.26%)

Note: Years prior to 1/1/2014 were provided by prior Actuary.
For valuations 1/1/2020 and after, contribution rates are effective July 1 of the following year.

TABLE 17

Solvency Test

In a system that has been following the discipline of level percent of payroll financing, the liabilities for active participant accumulated contributions (liability 1) and the liabilities for future benefits to retirees, beneficiaries, and inactive participants (liability 2) will be fully covered by assets if all assumptions are met. In addition, the liabilities for service already rendered by active participants (liability 3) are normally partially covered by the remainder of the present assets. Generally, if the system has been using level percent of payroll financing, the funded portion of liability 3 will increase over time. The schedule below illustrates the history of the liabilities of the system and their relative funded status.

Valuation Date January 1,	Active Participants' Accumulated Contributions (1)	Retirees, Beneficiaries and Inactive Participants (2)	Active Participants (Employer Financed) (3)	Valuation Assets	Percent Covered By Valuation Assets (1)	(2)	(3)
1996	$ 108,123,636	$ 177,617,507	$ 117,169,151	$ 389,103,803	100%	100%	88%
1997	104,554,877	231,762,583	91,329,968	428,419,710	100%	100%	101%
1998	115,847,655	228,328,855	108,592,620	482,599,919	100%	100%	127%
1999	117,478,379	274,442,924	172,607,724	624,225,667	100%	100%	135%
2000	113,334,820	343,382,932	184,049,309	660,830,255	100%	100%	111%
2001	115,781,706	389,055,603	184,779,937	696,071,310	100%	100%	103%
2002	119,968,776	406,094,033	187,309,245	718,703,692	100%	100%	103%
2003	112,468,027	435,548,298	165,766,206	717,681,067	100%	100%	102%
2004	125,754,562	430,145,689	179,264,397	738,612,110	100%	100%	102%
2005	127,221,118	431,366,177	201,836,083	763,684,602	100%	100%	102%
2006	133,811,729	477,844,206	177,531,611	788,788,666	100%	100%	100%
2007	136,978,872	498,841,373	187,966,845	824,302,795	100%	100%	100%
2008	140,844,707	492,273,102	156,840,245	854,123,580	100%	100%	141%
2009	140,096,771	503,450,518	161,075,791	832,609,879	100%	100%	117%
2010	139,860,248	524,692,426	154,981,717	814,536,473	100%	100%	97%
2011	110,538,745	611,806,997	121,886,748	786,297,998	100%	100%	52%
2012	99,513,420	654,828,752	119,944,326	742,279,611	100%	98%	0%
2013	100,767,726	653,949,421	113,946,236	697,028,072	100%	91%	0%
2014	98,272,633	660,003,861	117,174,620	710,828,744	100%	93%	0%
2015	98,966,336	674,794,654	117,782,046	712,390,611	100%	91%	0%
2016	101,173,695	677,295,366	116,761,234	694,641,248	100%	88%	0%
2017	105,887,868	717,052,296	158,574,663	684,412,437	100%	81%	0%
2018	103,069,314	739,004,732	138,362,580	678,288,805	100%	78%	0%
2019	106,618,062	744,459,772	137,156,929	654,259,324	100%	74%	0%
2020	112,913,289	759,819,775	147,388,749	645,373,172	100%	70%	0%
2021	121,889,145	730,344,984	145,353,276	663,210,594	100%	74%	0%
2022	123,670,335	729,504,462	144,884,158	692,264,054	100%	78%	0%
2023	125,148,669	732,293,898	149,322,045	689,114,479	100%	77%	0%
2024	130,564,354	732,968,099	152,495,502	702,224,863	100%	78%	0%
2025	141,216,332	726,991,474	163,049,579	706,408,237	100%	78%	0%

Note: Years prior to 1/1/2014 were provided by prior Actuary.

TABLE 18

Schedule of Changes in Plan Fiduciary Net Position

Fiscal Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Additions:										
Member Contributions	14,645,901	16,280,327	16,964,351	17,619,145	18,524,657	19,531,341	20,141,089	21,204,065	22,636,197	24,165,781
Employer Contributions	14,499,260	16,528,188	16,926,562	17,527,854	21,488,838	25,771,854	26,717,489	28,210,227	30,018,726	32,100,787
Net Investment Income	(10,025,518)	44,337,774	103,767,714	(33,250,914)	106,033,718	73,263,969	99,639,237	(82,676,608)	62,395,550	33,815,986
Total Additions to Plan Net Positions	$19,119,643	$77,146,289	$137,658,627	$1,896,085	$146,047,213	$118,567,164	$146,497,815	($33,262,316)	$115,050,473	$90,082,554
Deductions:										
Benefits	76,235,124	76,898,255	78,181,575	79,333,689	80,228,574	80,473,732	80,337,163	80,409,066	80,411,325	80,044,931
Refunds	3,399,065	3,270,723	3,581,147	4,084,837	4,937,877	4,316,797	5,250,026	6,008,392	5,143,598	5,676,826
Depreciation Expense	250,979	92,179	15,855	17,150	11,020	9,830	5,562	9,097	0	0
Administrative	1,648,449	1,552,025	1,520,665	1,499,928	1,546,381	1,614,905	1,645,412	1,717,384	1,691,393	1,721,572
Total Deductions from Plan Net Position	81,533,617	81,813,182	83,299,242	84,935,604	86,723,852	86,415,264	87,238,163	88,143,939	87,246,316	87,443,329
Change in Net Position	($62,413,974)	($4,666,893)	$54,359,385	($83,039,519)	$59,323,361	$32,151,900	$59,259,652	($121,406,255)	$27,804,157	$2,639,225

SECTION VII – RISK CONSIDERATIONS

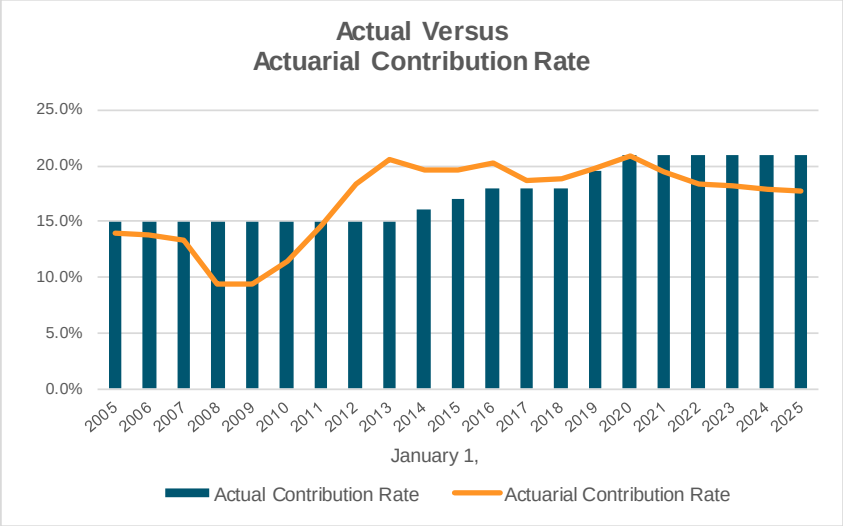
Actuarial Standards of Practice are issued by the Actuarial Standards Board and are binding on credentialed actuaries practicing in the United States. These standards generally identify what the actuary should consider, document and disclose when performing an actuarial assignment. In September, 2017,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

While actuarial assumptions allow for a projection of how future contributions and investment returns will meet the cash flow needs for future benefit payments, actual experience will not unfold exactly as anticipated by the assumptions. In this section, we discuss some of the risk factors that can have a significant impact – positive or negative – on the actuarial projection of liability and contribution rates.

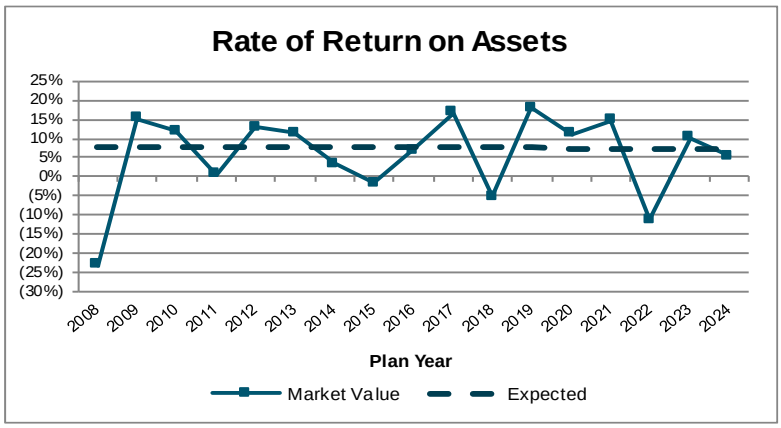
There are a number of risks inherent in the funding of a defined benefit plan. These include:

- economic risks, such as investment return and inflation;
- demographic risks such as mortality, payroll growth, aging population including the impact of baby boomers, and retirement ages;
- contribution risk; and
- external risks such as the regulatory and political environment (not required to be addressed under ASOP 51).

There is a direct correlation between healthy, well-funded plans and consistent contributions equal to the full actuarial contribution rate each year. For many years, the Public School Retirement System of the School District of Kansas City, Missouri was funded by fixed contribution rates for both the members and the employers. While this approach worked well for many years, the investment experience during the Great Recession created a significant unfunded actuarial accrued liability. Around the same time, the active membership of the System declined by nearly 30% (dropping from 4,862 in 2008 to 3,493 in 2015). As the following graph shows, less than the full actuarial contribution rate was contributed to the System between 2012 and 2019, despite increases in the contribution rate for both members and employers. However, in 2018 the Missouri General Assembly passed legislation that changed the contribution policy for funding the System. Under the new policy, employers must contribute the greater of (i) their share of the actuarial contribution rate and (ii) 12.0% of pay, until the System is fully funded.



The most significant risk factor is investment return because of the volatility of the returns and the size of plan assets compared to payroll (see Table 19). A perusal of historical rates over 10-20 years reveals that the actual return each year is rarely close to the average return for the same period. This is an expected result given the underlying capital market assumptions and the asset allocation. However, the valuation is a measurement based on a single investment return, usually around the median of the distribution of returns. The magnitude of variations in investment returns and the short timeframe in which they occur makes the management of this risk very challenging.



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/volatility 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 because of the magnitude of the increase. In the January 1, 2025 valuation, the asset volatility ratio was 2.34. Given the standard deviation of the portfolio, around 12%, the rate of return in any given year is expected to be within one standard deviation of the expected return (higher or lower) roughly two-thirds of the time. That means there is a one in three chance the return will be at least one

standard deviation (12%) from the expected return. To put that in context, a return 12% different than the expected return of 7.25% translates to about $80 million and a change of 2.10% in the contribution rate (without reflecting asset smoothing). The distribution of returns would indicate that such an event would be expected to happen once every three years (half higher than 19.25% and half lower than -4.75%). While the asset smoothing method would spread the increase in the contribution rate over five years, the ultimate impact would be as shown in the table below:

	One Standard Deviation	
	Above 7.25%	Below 7.25%
1. Rate of Return	19.25%	-4.75%
2. Ratio of Assets to Payroll	2.34	2.34
3. Asset Gain/(Loss) as a Percent of Payroll [(1) - 7.25%] * (2)	28%	(28%)
4. Ultimate Impact on Contribution Rate	(2.10%)	2.10%

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 December 31, 2023 and with the 30-year spot rate used for all durations beyond 30. Using these assumptions, we calculate a liability of approximately $1.10 billion. This amount approximates the termination liability if the plan (or all covered employment) ended on the valuation date and all of the accrued benefits had to be paid with cash-flow matched bonds. This assurance of funded status and benefit security is typically more relevant for corporate plans than for governmental plans since governments rarely have the need or option to completely terminate a plan. However, this informational disclosure is required for all plans whether corporate or governmental and care should be taken to ensure the "one size fits all" metric is not misconstrued.

A key demographic risk for all retirement systems, including KCPSRS, is improvements in mortality (longevity) greater than anticipated. While the mortality assumption used in the valuation reflects some improvement in mortality experience and this assumption is evaluated and refined in each 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 could also be significant but would be more easily absorbed. While either of these

events could happen, it represents a small probability and thus represents much less risk than the volatility associated with investment returns.

Finally, the unfunded actuarial accrued liability is amortized as a level percentage of payroll. The underlying assumption used in developing the payment schedule assumes an increasing payroll over time which is dependent on a stable employment level, i.e., active member count remains the same. We would note that the active population declined significantly for about a decade from a high of 5,090 in 2004 to 3,493 in 2015. Since then, the active population has steadily increased (see Table 20). 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 plan demographics change over time, along with the funded status, the risk factors may also change. The following exhibits summarize certain historical information that provide an indication as to how key risk metrics have changed over time.

TABLE 19

HISTORICAL ASSET VOLATILITY RATIO

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

Valuation Date	Market Value of Assets	Covered Payroll	Asset Volatility Ratio	Increase in ACR with a Return 12% Lower than Assumed*
1/1/2011	$730,278,733	$162,417,257	4.50	4.04%
1/1/2012	681,930,607	155,893,016	4.37	3.93%
1/1/2013	702,966,521	157,303,005	4.47	4.02%
1/1/2014	726,553,301	157,014,537	4.63	4.16%
1/1/2015	698,523,480	170,845,124	4.09	3.68%
1/1/2016	636,109,506	179,013,516	3.55	3.19%
1/1/2017	631,442,613	194,132,739	3.25	2.92%
1/1/2018	685,801,998	196,277,971	3.49	3.14%
1/1/2019	602,762,479	203,310,599	2.96	2.66%
1/1/2020	662,085,840	217,255,306	3.05	2.74%
1/1/2021	694,237,740	228,084,635	3.04	2.73%
1/1/2022	753,497,392	234,540,261	3.21	2.88%
1/1/2023	632,091,137	252,084,684	2.51	2.26%
1/1/2024	659,895,294	265,017,203	2.49	2.24%
1/1/2025	662,534,519	282,715,300	2.34	2.10%

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

The assets as of January 1, 2025 are 234% of payroll, so underperforming the investment return assumption by 12% (i.e., earn -4.75% for one year) is equivalent to 28.1% of payroll. While the actual impact in the first year is mitigated by the asset smoothing method and amortization of the UAAL, this illustrates the risk associated with volatile investment returns.

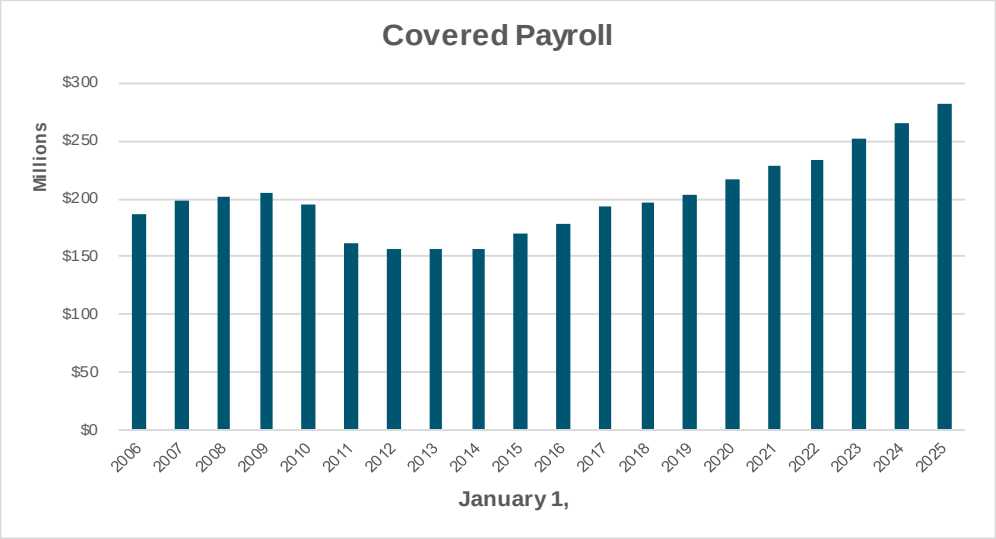
TABLE 20

HISTORICAL MEMBERSHIP

Member and employer contributions to the System are made based on covered payroll. In addition, the payment on the unfunded actuarial accrued liability is calculated anticipating covered payroll increases each year in the future. To the extent actual payroll does not meet the assumed rate of increase (currently 2.85%), a higher rate of pay is necessary to collect the same dollar amount of payment on the unfunded actuarial accrued liability. A reduction in the number of active members usually results in a decline in the dollar amount of covered payroll, as can be seen in the table below. From 2004 to 2012, the number of active members declined significantly which creates challenges for funding the System, but since 2012 we have seen the number of active members steadily increase.

	Number of Active Members						
Actuarial Valuation Date	Charter Schools	School District	Library	Total	Covered Payroll	Number of Retired Members	Active/ Retired
1/1/2006	462	4,228	118	4,808	$187,445,140	3,140	1.53
1/1/2007	588	4,030	139	4,757	199,221,110	3,198	1.49
1/1/2008	784	3,937	141	4,862	202,311,837	3,283	1.48
1/1/2009	820	3,680	148	4,648	205,326,108	3,247	1.43
1/1/2010	973	3,222	141	4,336	194,474,437	3,317	1.31
1/1/2011	1,061	2,296	133	3,490	162,417,257	3,670	0.95
1/1/2012	1,133	2,022	129	3,284	155,893,016	3,829	0.86
1/1/2013	1,108	2,152	136	3,396	157,303,005	3,859	0.88
1/1/2014	1,147	2,215	139	3,501	157,014,537	3,885	0.90
1/1/2015	1,245	2,112	136	3,493	170,845,124	4,011	0.87
1/1/2016	1,336	2,095	143	3,574	179,013,516	4,049	0.88
1/1/2017	1,481	2,076	144	3,701	194,132,739	4,032	0.92
1/1/2018	1,555	2,065	140	3,760	196,277,971	4,112	0.91
1/1/2019	1,586	2,172	140	3,898	203,310,599	4,113	0.95
1/1/2020	1,640	2,285	149	4,074	217,255,306	4,145	0.98
1/1/2021	1,650	2,306	152	4,108	228,084,635	4,099	1.00
1/1/2022	1,738	2,281	159	4,178	234,540,261	4,094	1.02
1/1/2023	1,797	2,378	166	4,341	252,084,684	4,086	1.06
1/1/2024	1,863	2,365	179	4,407	265,017,203	4,073	1.08
1/1/2025	1,967	2,361	184	4,512	282,715,300	4,047	1.11

This table shows the change in active membership among the participating employers over the last 20 years. Charter Schools have become a much larger portion of the total active membership. To the extent the demographic behavior of Charter School members is different than other KCPSRS members, the actuarial assumptions will need to be modified or actuarial gains/losses are likely to be created each year.



From 2004 to 2012, the System experienced a significant decline in the number of active members, as partially shown in the graph below. As a result, the covered payroll of the membership declined for a period and the ratio of actives to retirees declined significantly. This had a significant impact on the System's funding as the contributions were fixed for most of the period and, therefore, did not respond to the impact of the investment losses from calendar year 2008. As a result, the funded ratio of the System declined rather dramatically. The size of the active membership has stabilized in recent years and has actually grown since 2012. In addition, the contribution rates have increased and moved to an actuarial-based contribution rate effective July 1, 2021. This addressed a significant risk factor for the System that existed prior to the change.

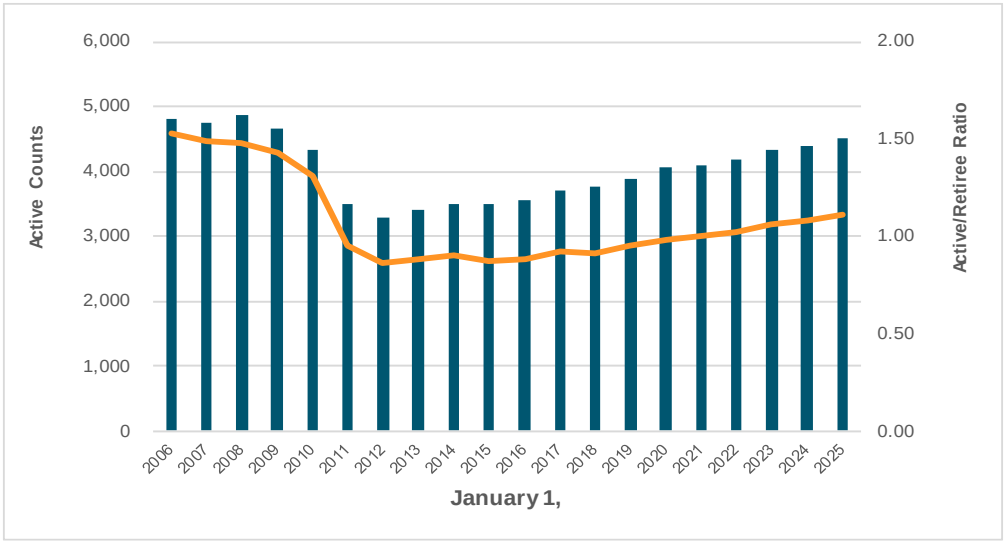


TABLE 21

HISTORICAL CASH FLOWS

Plans with negative cash flows will experience increased sensitivity to investment return volatility. Cash flows, for this purpose, are measured as contributions less benefit payments. If the System has negative cash flows and then experiences returns below the assumed rate, there are fewer assets to be reinvested to earn the higher returns that typically follow. Negative cash flows can also impact the system's asset allocation and is a consideration in setting the investment policy of the system. KCPSRS has higher negative cash flows than many public retirement systems and so this metric should be closely monitored as it is by KCPSRS' investment consultant. The higher the net cash flow is as a percent of the market value of assets, the greater the risk to the system's funding.

Fiscal Year End	Market Value of Assets (MVA)	Contributions	Benefit Payments	Net Cash Flow	Net Cash Flow as a Percent of MVA
12/31/10	$730,278,733	$27,094,752	$71,323,384	($44,228,632)	(6.06%)
12/31/11	681,930,607	24,054,927	76,133,226	(52,078,299)	(7.64%)
12/31/12	702,966,521	22,948,176	76,813,694	(53,865,518)	(7.66%)
12/31/13	726,553,301	24,404,265	77,412,174	(53,007,909)	(7.30%)
12/31/14	698,523,480	26,646,322	78,535,383	(51,889,061)	(7.43%)
12/31/15	636,109,506	29,145,161	79,634,189	(50,489,028)	(7.94%)
12/31/16	631,442,613	32,808,515	80,168,978	(47,360,463)	(7.50%)
12/31/17	685,801,998	33,890,913	81,762,722	(47,871,809)	(6.98%)
12/31/18	602,762,479	35,146,999	83,418,526	(48,271,527)	(8.01%)
12/31/19	662,085,840	40,013,495	85,166,451	(45,152,956)	(6.82%)
12/31/20	694,237,740	45,303,195	84,790,529	(39,487,334)	(5.69%)
12/31/21	753,497,392	46,858,578	85,587,189	(38,728,611)	(5.14%)
12/31/22	632,091,137	49,414,292	86,417,458	(37,003,166)	(5.85%)
12/31/23	659,895,294	52,654,923	85,554,923	(32,900,000)	(4.99%)
12/31/24	662,534,519	56,266,568	85,721,757	(29,455,189)	(4.45%)

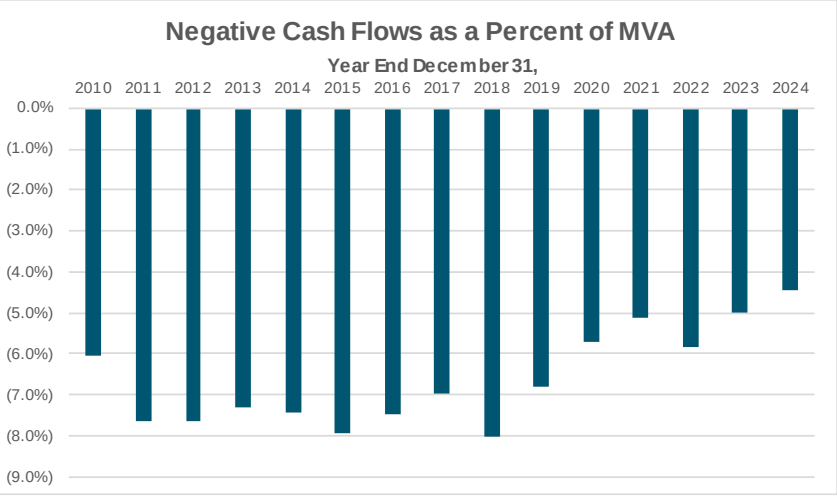


TABLE 22

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. The continued retirement of the baby boomers is expected to further exacerbate the aging of the retirement system population. With more of the total liability residing with retirees, investment volatility has a greater impact on the funding of the system since it is more difficult to restore the system financially after losses occur when there is comparatively less payroll over which to spread the cost.

Fiscal Year End	Retiree Liability (a)	Total Actuarial Accrued Liability (b)	Retiree Percentage (a) / (b)	Covered Payroll (c)	Ratio (b) / (c)
12/31/10	$580,324,640	$844,232,490	68.7%	$162,417,257	5.20
12/31/11	622,135,967	874,286,498	71.2%	155,893,016	5.61
12/31/12	620,358,237	868,663,383	71.4%	157,303,005	5.52
12/31/13	621,249,525	875,451,114	71.0%	157,014,537	5.58
12/31/14	645,100,053	891,543,036	72.4%	170,845,124	5.22
12/31/15	648,136,960	895,230,295	72.4%	179,013,516	5.00
12/31/16	684,767,536	981,514,827	69.8%	194,132,739	5.06
12/31/17	704,534,913	980,436,626	71.9%	196,277,971	5.00
12/31/18	710,111,431	988,234,763	71.9%	203,310,599	4.86
12/31/19	725,892,076	1,020,121,813	71.2%	217,255,306	4.70
12/31/20	695,451,559	997,587,405	69.7%	228,084,635	4.37
12/31/21	693,949,392	998,058,955	69.5%	234,540,261	4.26
12/31/22	690,857,179	1,006,764,612	68.6%	252,084,684	3.99
12/31/23	685,927,834	1,016,027,955	67.5%	265,017,203	3.83
12/31/24	676,753,293	1,031,257,385	65.6%	282,715,300	3.65

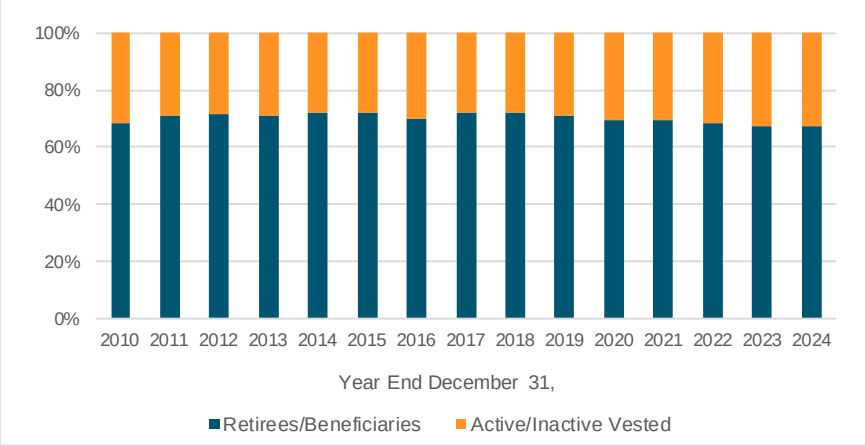


TABLE 23

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

This exhibit compares the key January 1, 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	**6.75%**	**7.00%**	**7.25%**	**7.50%**	**7.75%**
Contributions					
Total Normal Cost	10.31%	9.91%	9.55%	9.20%	8.88%
Administrative Expenses	0.61%	0.61%	0.61%	0.61%	0.61%
Amortization of UAAL	8.66%	8.12%	7.58%	7.04%	6.50%
Actuarial Contribution Rate	19.58%	18.64%	17.74%	16.85%	15.99%
Member Contribution	(9.00%)	(9.00%)	(9.00%)	(9.00%)	(9.00%)
Employer Contribution	(12.00%)	(12.00%)	(12.00%)	(12.00%)	(12.00%)
Contribution Rate Shortfall/(Margin)	(1.42%)	(2.36%)	(3.26%)	(4.15%)	(5.01%)
Actuarial Accrued Liability	$1,082,457	$1,056,297	$1,031,257	$1,007,278	$984,301
Actuarial Value of Assets	706,408	706,408	706,408	706,408	706,408
Unfunded Actuarial Accrued Liability	$376,049	$349,889	$324,849	$300,869	$277,892
Funded Ratio	65.3%	66.9%	68.5%	70.1%	71.8%

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

MEMBER CENSUS INFORMATION

A. ACTIVE MEMBERS	January 1, 2025	January 1, 2024	% Change
1. Number of Active Members			
(a) Plan B	877	964	(9.0%)
(b) Plan C	3,635	3,443	5.6%
(c) Total	4,512	4,407	2.4%
2. Active Member Averages			
(a) Age	43.9	43.5	0.9%
(b) Service	6.9	6.8	1.5%
(c) Expected Annual Pay	$ 62,659	$ 60,136	4.2%
B. TERMINATED VESTED MEMBERS			
1. Number of Terminated Vested Members	827	788	4.9%
2. Terminated Vested Members Averages			
(a) Age	44.6	44.5	0.2%
(b) Estimated Monthly Benefit	$ 699	$ 684	2.2%
C. TERMINATED NON-VESTED MEMBERS			
1. Number of Terminated Non-Vested Members	3,079	2,920	5.4%
2. Terminated Non-Vested Members Averages			
(a) Age	43.9	43.4	1.2%
(b) Account Balance	$ 4,816	$ 4,783	0.7%
D. RETIREES, DISABLEDS, AND BENEFICIARIES			
1. Number of Members			
(a) Retired	3,727	3,762	(0.9%)
(b) Disabled	61	62	(1.6%)
(c) Beneficiaries	259	249	4.0%
(e) Total	4,047	4,073	(0.6%)
2. Average Age			
(a) Retired	74.6	74.2	0.5%
(b) Disabled	72.7	71.8	1.3%
(c) Beneficiaries	76.5	75.8	0.9%
(e) Total	74.6	74.2	0.5%
3. Average Monthly Benefit			
(a) Retired	$ 1,707	$ 1,698	0.5%
(b) Disabled	1,050	1,046	0.4%
(c) Beneficiaries	1,169	1,144	2.2%
(e) Total	$ 1,664	$ 1,654	0.6%

MEMBER DATA RECONCILIATION

January 1, 2024 to January 1, 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 Members	Terminated Vested	Non-vested with Balance	Retirees	Beneficiaries*	Disabled	Total
Total as of January 1, 2024	4,407	788	2,920	3,762	249	62	12,188
New Entrants	724	0	123	0	21	0	868
Rehires/Transfers	74	(24)	(50)	0	0	0	0
Retirements	(73)	(21)	0	94	0	0	0
Disablements	0	0	0	0	0	0	0
Deaths	(5)	0	(1)	(129)	(9)	(1)	(145)
Vested Terminations	(134)	134	0	0	0	0	0
Non-vested Terminations	(311)	0	311	0	0	0	0
Refunds Paid	(170)	(50)	(224)	0	(2)	0	(446)
Payments Ended	0	0	0	0	0	0	0
Data Adjustments	0	0	0	0	0	0	0
Total as of January 1, 2025	4,512	827	3,079	3,727	259	61	12,465

* Includes beneficiaries who were owed a single lump sum payment and were not paid prior to the valuation date.

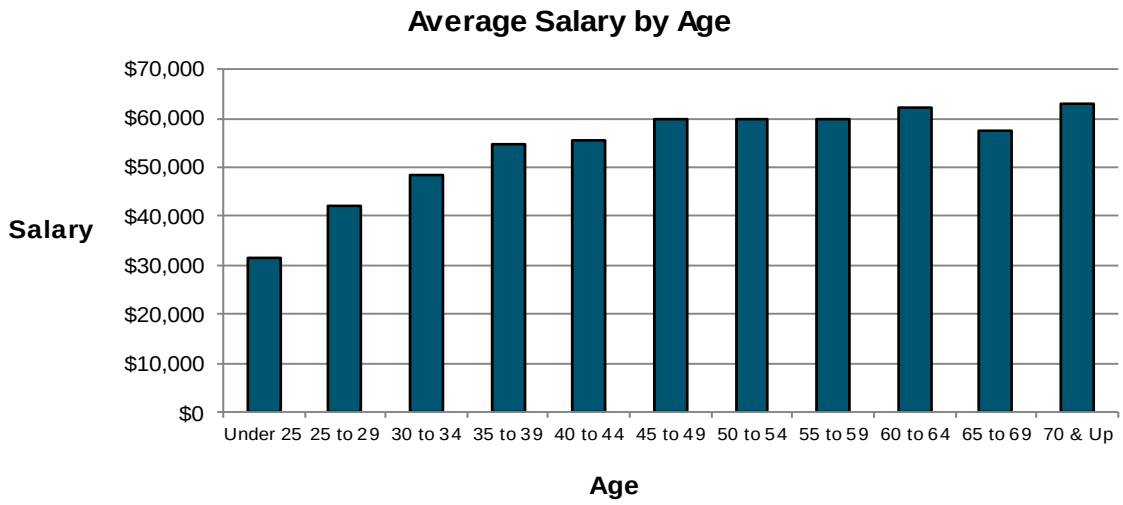
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

Total – All Plans

Age	Number			2024 Reported Compensation*		
	Male	Female	Total	Male	Female	Total
Under 25	47	146	193	$ 1,401,965	$ 4,671,748	$ 6,073,713
25 to 29	156	402	558	6,443,550	17,018,578	23,462,128
30 to 34	171	430	601	7,556,024	21,669,665	29,225,689
35 to 39	203	401	604	11,102,596	21,890,942	32,993,538
40 to 44	180	358	538	10,129,436	19,739,760	29,869,196
45 to 49	113	368	481	7,036,544	21,729,837	28,766,381
50 to 54	131	363	494	8,797,401	20,831,855	29,629,256
55 to 59	125	319	444	7,136,339	19,357,078	26,493,417
60 to 64	89	246	335	5,884,029	14,936,641	20,820,670
65 to 69	54	140	194	2,943,521	8,202,448	11,145,969
70 & Up	23	47	70	1,422,961	2,975,131	4,398,092
Total	1,292	3,220	4,512	$69,854,366	$173,023,683	$242,878,049

* Partial year pay amounts have not been annualized.



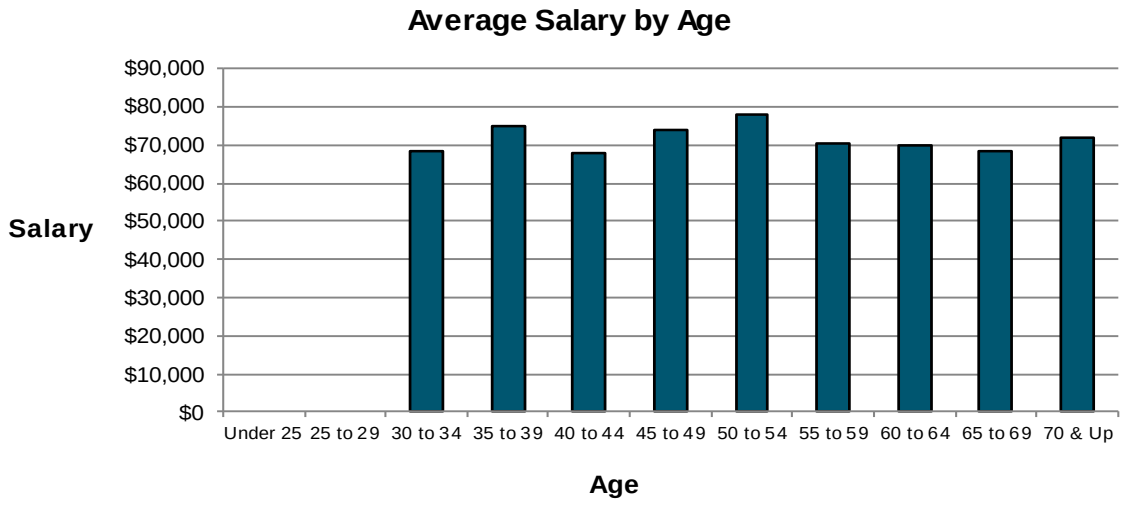
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

Total – Plan B

Age	Number			2024 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	7	15	22	471,678	1,034,160	1,505,838
35 to 39	22	70	92	1,594,619	5,278,402	6,873,021
40 to 44	32	79	111	2,291,687	5,230,759	7,522,446
45 to 49	28	99	127	2,116,515	7,271,802	9,388,317
50 to 54	34	101	135	2,910,842	7,576,196	10,487,038
55 to 59	43	97	140	3,153,231	6,727,000	9,880,231
60 to 64	38	110	148	2,715,443	7,630,397	10,345,840
65 to 69	13	59	72	879,161	4,051,385	4,930,546
70 & Up	10	20	30	797,603	1,356,788	2,154,391
Total	227	650	877	$16,930,779	$46,156,889	$63,087,668

* Partial year pay amounts have not been annualized.



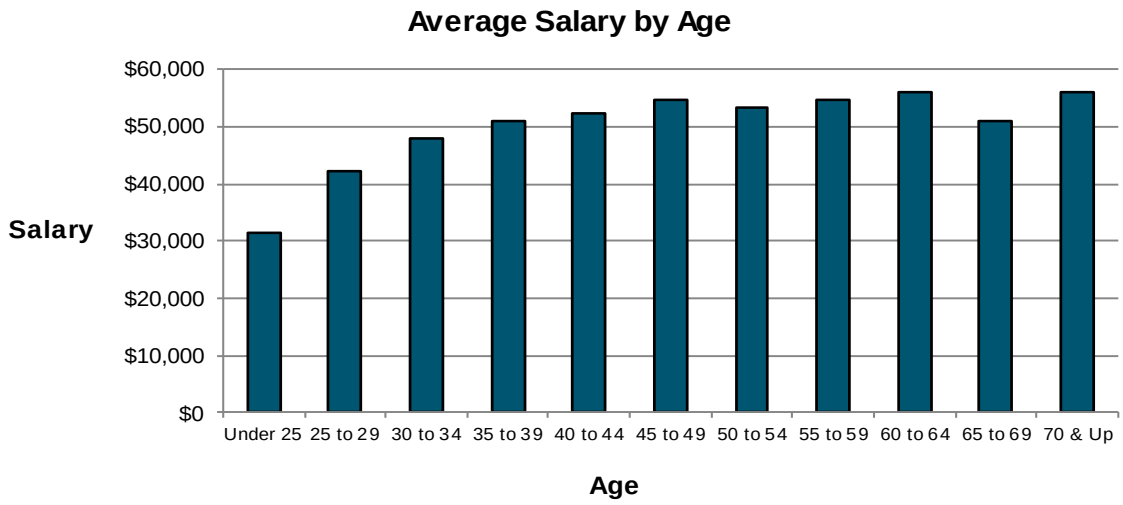
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

Total – Plan C

Age	Number			2024 Reported Compensation*		
	Male	Female	Total	Male	Female	Total
Under 25	47	146	193	$ 1,401,965	$ 4,671,748	$ 6,073,713
25 to 29	156	402	558	6,443,550	17,018,578	23,462,128
30 to 34	164	415	579	7,084,346	20,635,505	27,719,851
35 to 39	181	331	512	9,507,977	16,612,540	26,120,517
40 to 44	148	279	427	7,837,749	14,509,001	22,346,750
45 to 49	85	269	354	4,920,029	14,458,035	19,378,064
50 to 54	97	262	359	5,886,559	13,255,659	19,142,218
55 to 59	82	222	304	3,983,108	12,630,078	16,613,186
60 to 64	51	136	187	3,168,586	7,306,244	10,474,830
65 to 69	41	81	122	2,064,360	4,151,063	6,215,423
70 & Up	13	27	40	625,358	1,618,343	2,243,701
Total	1,065	2,570	3,635	$52,923,587	$126,866,794	$179,790,381

* Partial year pay amounts have not been annualized.



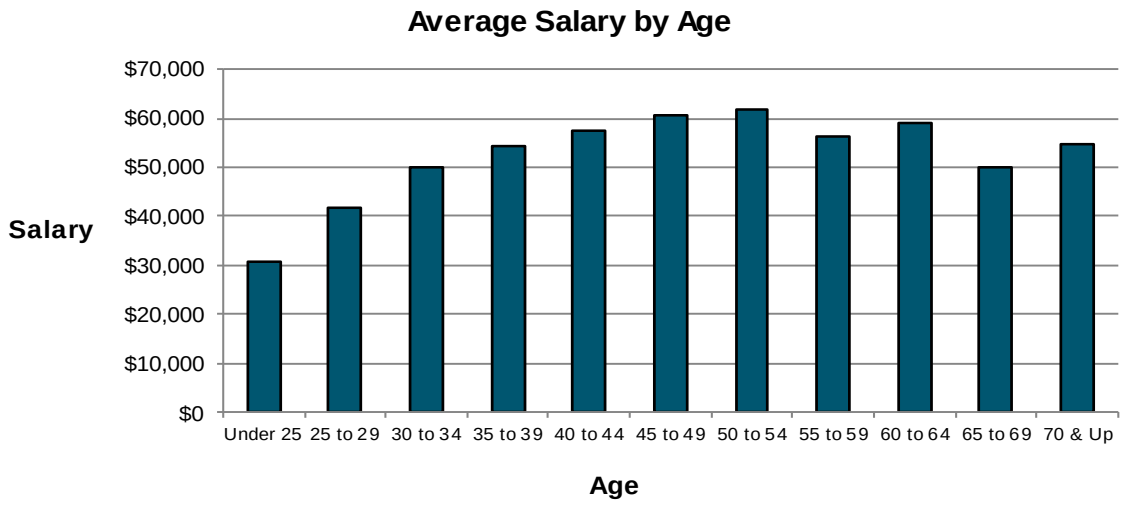
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

Charter Schools – All Plans

Age	Number			2024 Reported Compensation*		
	Male	Female	Total	Male	Female	Total
Under 25	31	96	127	$ 910,175	$ 2,991,579	$ 3,901,754
25 to 29	85	210	295	3,535,155	8,801,695	12,336,850
30 to 34	93	232	325	4,104,077	12,106,578	16,210,655
35 to 39	108	219	327	5,823,931	11,990,057	17,813,988
40 to 44	79	152	231	4,603,276	8,666,052	13,269,328
45 to 49	47	138	185	3,013,666	8,160,645	11,174,311
50 to 54	61	127	188	4,111,032	7,489,886	11,600,918
55 to 59	54	88	142	3,008,512	5,007,673	8,016,185
60 to 64	27	52	79	1,582,063	3,066,587	4,648,650
65 to 69	12	33	45	517,237	1,735,030	2,252,267
70 & Up	7	16	23	300,334	958,822	1,259,156
Total	604	1,363	1,967	$31,509,458	$70,974,604	$102,484,062

* Partial year pay amounts have not been annualized.



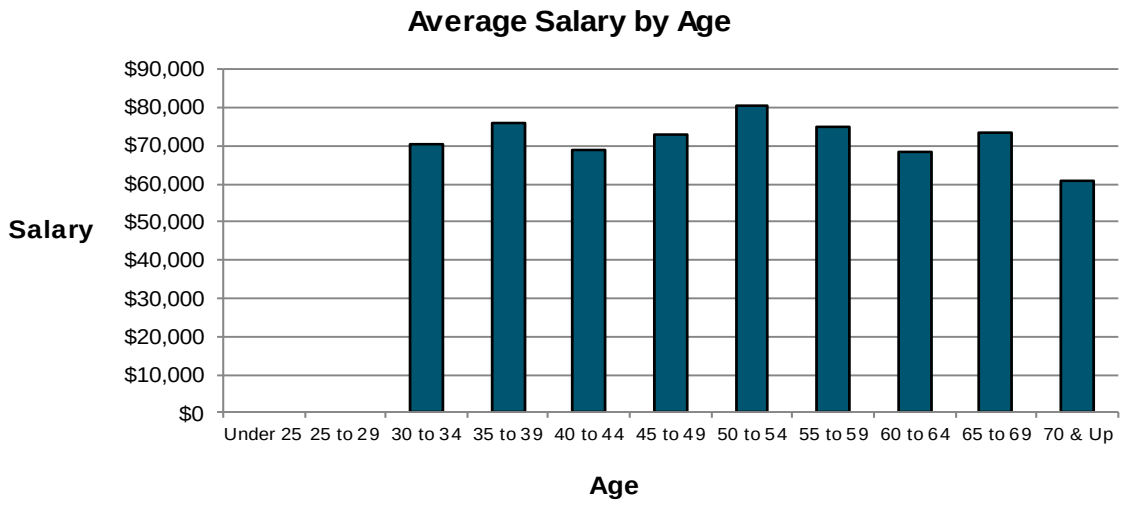
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

Charter Schools – Plan B

Age	Number			2024 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	3	8	11	230,094	542,267	772,361
35 to 39	9	49	58	630,166	3,762,200	4,392,366
40 to 44	13	36	49	989,866	2,381,954	3,371,820
45 to 49	7	32	39	534,876	2,306,644	2,841,520
50 to 54	15	29	44	1,222,820	2,314,903	3,537,723
55 to 59	11	19	30	979,635	1,267,344	2,246,979
60 to 64	10	13	23	660,516	908,436	1,568,952
65 to 69	1	8	9	59,520	600,563	660,083
70 & Up	1	7	8	63,856	423,696	487,552
Total	70	201	271	$5,371,349	$14,508,007	$19,879,356

* Partial year pay amounts have not been annualized.



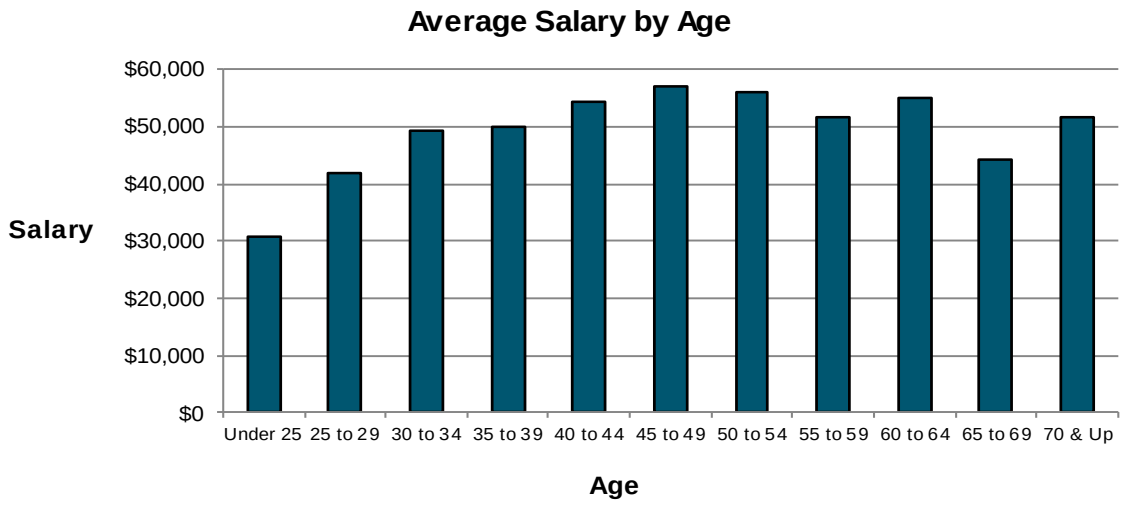
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

Charter Schools – Plan C

Age	Number			2024 Reported Compensation*		
	Male	Female	Total	Male	Female	Total
Under 25	31	96	127	$ 910,175	$ 2,991,579	$ 3,901,754
25 to 29	85	210	295	3,535,155	8,801,695	12,336,850
30 to 34	90	224	314	3,873,983	11,564,311	15,438,294
35 to 39	99	170	269	5,193,765	8,227,857	13,421,622
40 to 44	66	116	182	3,613,410	6,284,098	9,897,508
45 to 49	40	106	146	2,478,790	5,854,001	8,332,791
50 to 54	46	98	144	2,888,212	5,174,983	8,063,195
55 to 59	43	69	112	2,028,877	3,740,329	5,769,206
60 to 64	17	39	56	921,547	2,158,151	3,079,698
65 to 69	11	25	36	457,717	1,134,467	1,592,184
70 & Up	6	9	15	236,478	535,126	771,604
Total	534	1,162	1,696	$26,138,109	$56,466,597	$82,604,706

* Partial year pay amounts have not been annualized.



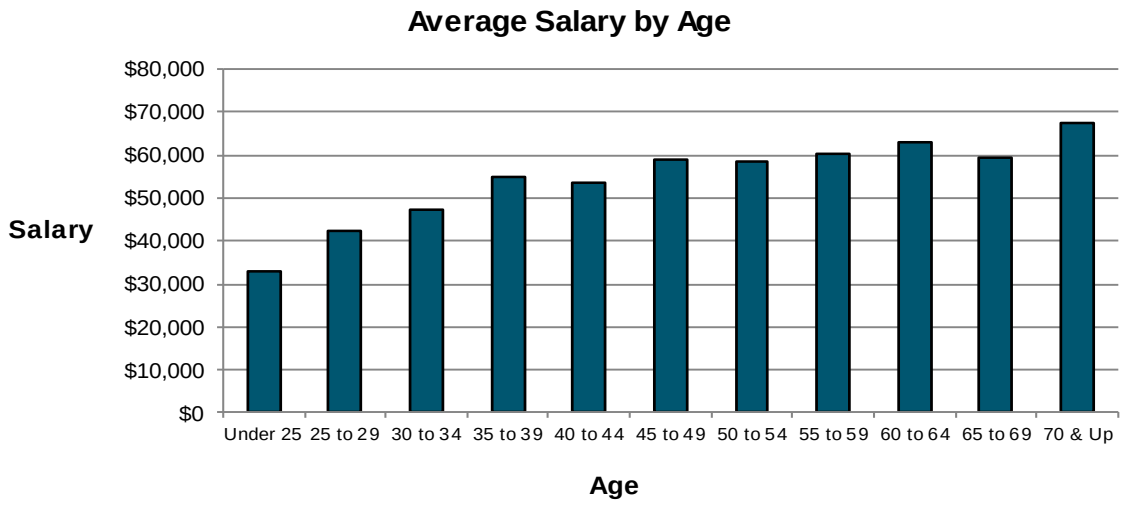
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

School District & Retirement System – All Plans

	Number			2024 Reported Compensation*		
Age	Male	Female	Total	Male	Female	Total
Under 25	15	48	63	$ 480,061	$ 1,606,593	$ 2,086,654
25 to 29	61	179	240	2,557,081	7,624,353	10,181,434
30 to 34	73	185	258	3,251,642	8,904,483	12,156,125
35 to 39	88	163	251	4,884,891	8,873,178	13,758,069
40 to 44	87	189	276	4,835,086	9,946,466	14,781,552
45 to 49	59	213	272	3,646,287	12,403,214	16,049,501
50 to 54	65	224	289	4,274,099	12,614,133	16,888,232
55 to 59	66	219	285	3,724,496	13,480,879	17,205,375
60 to 64	59	183	242	4,091,582	11,115,385	15,206,967
65 to 69	38	102	140	2,195,177	6,130,197	8,325,374
70 & Up	15	30	45	1,085,310	1,951,857	3,037,167
Total	626	1,735	2,361	$35,025,712	$94,650,738	$129,676,450

* Partial year pay amounts have not been annualized.



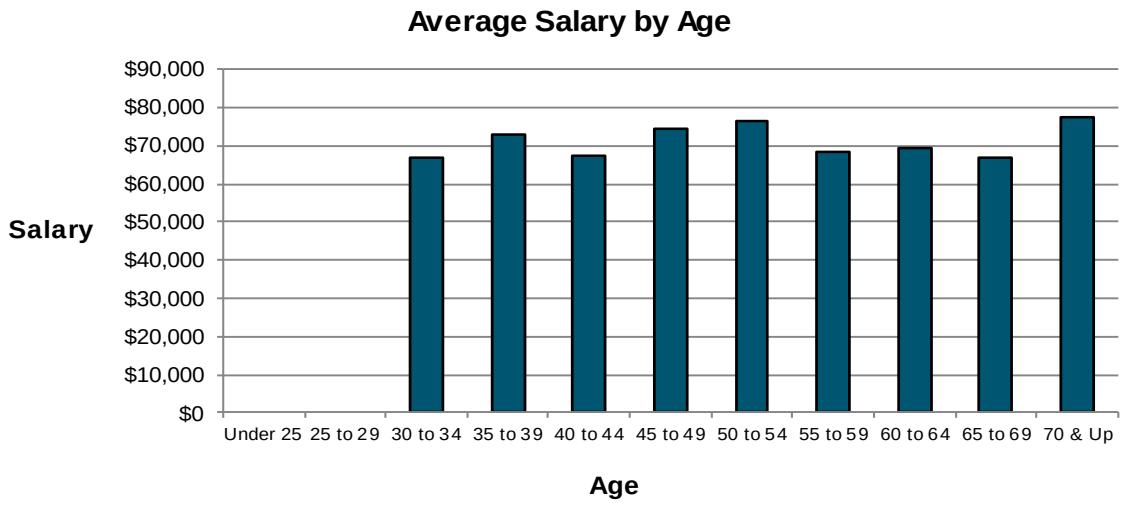
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

School District & Retirement System – Plan B

	Number			2024 Reported Compensation*		
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	4	7	11	241,584	491,893	733,477
35 to 39	13	21	34	964,453	1,516,202	2,480,655
40 to 44	18	41	59	1,236,264	2,747,127	3,983,391
45 to 49	18	62	80	1,409,649	4,556,684	5,966,333
50 to 54	16	69	85	1,422,910	5,055,760	6,478,670
55 to 59	27	74	101	1,770,265	5,130,278	6,900,543
60 to 64	25	89	114	1,844,543	6,079,405	7,923,948
65 to 69	9	47	56	619,219	3,132,930	3,752,149
70 & Up	8	13	21	696,430	933,092	1,629,522
Total	138	423	561	$10,205,317	$29,643,371	$39,848,688

* Partial year pay amounts have not been annualized.



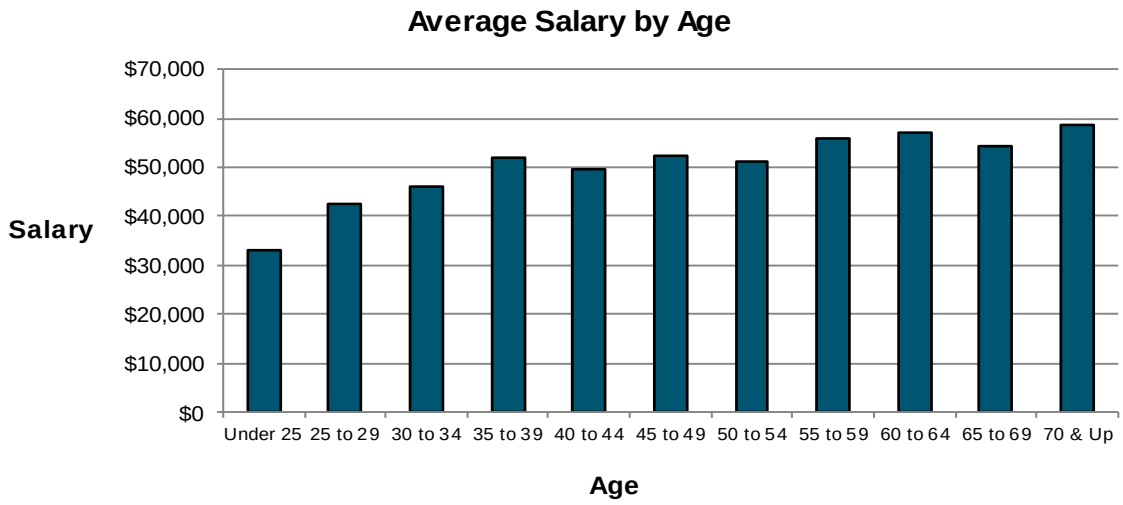
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

School District & Retirement System – Plan C

	Number			2024 Reported Compensation*		
Age	Male	Female	Total	Male	Female	Total
Under 25	15	48	63	$ 480,061	$ 1,606,593	$ 2,086,654
25 to 29	61	179	240	2,557,081	7,624,353	10,181,434
30 to 34	69	178	247	3,010,058	8,412,590	11,422,648
35 to 39	75	142	217	3,920,438	7,356,976	11,277,414
40 to 44	69	148	217	3,598,822	7,199,339	10,798,161
45 to 49	41	151	192	2,236,638	7,846,530	10,083,168
50 to 54	49	155	204	2,851,189	7,558,373	10,409,562
55 to 59	39	145	184	1,954,231	8,350,601	10,304,832
60 to 64	34	94	128	2,247,039	5,035,980	7,283,019
65 to 69	29	55	84	1,575,958	2,997,267	4,573,225
70 & Up	7	17	24	388,880	1,018,765	1,407,645
Total	488	1,312	1,800	$24,820,395	$65,007,367	$89,827,762

* Partial year pay amounts have not been annualized.



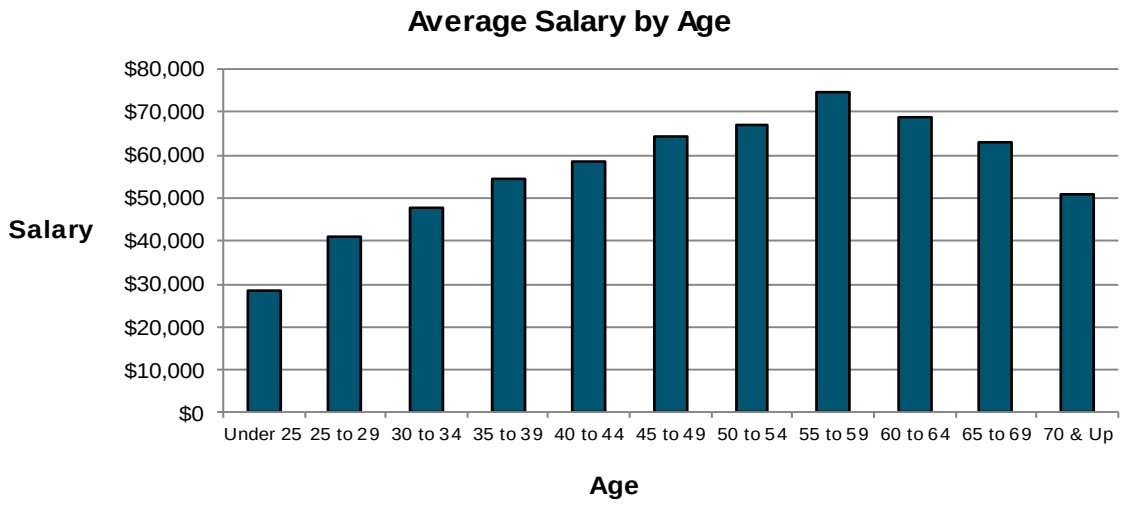
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

Library – All Plans

Age	Number			2024 Reported Compensation*		
	Male	Female	Total	Male	Female	Total
Under 25	1	2	3	$ 11,729	$ 73,576	$ 85,305
25 to 29	10	13	23	351,314	592,530	943,844
30 to 34	5	13	18	200,305	658,604	858,909
35 to 39	7	19	26	393,774	1,027,707	1,421,481
40 to 44	14	17	31	691,074	1,127,242	1,818,316
45 to 49	7	17	24	376,591	1,165,978	1,542,569
50 to 54	5	12	17	412,270	727,836	1,140,106
55 to 59	5	12	17	403,331	868,526	1,271,857
60 to 64	3	11	14	210,384	754,669	965,053
65 to 69	4	5	9	231,107	337,221	568,328
70 & Up	1	1	2	37,317	64,452	101,769
Total	62	122	184	$3,319,196	$7,398,341	$10,717,537

* Partial year pay amounts have not been annualized.



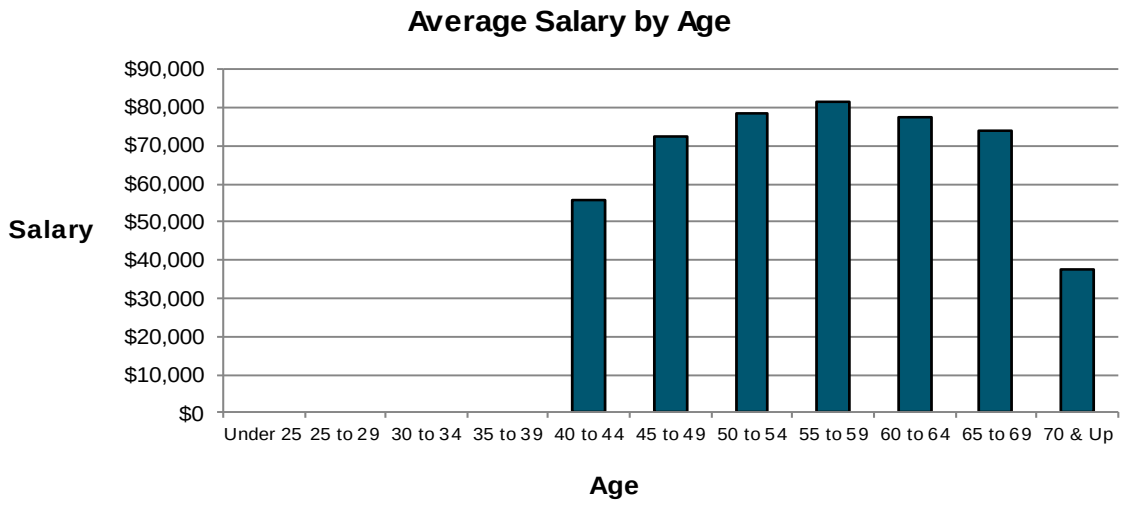
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

Library – Plan B

Age	Number			2024 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	0	0	0	0	0
35 to 39	0	0	0	0	0	0
40 to 44	1	2	3	65,557	101,678	167,235
45 to 49	3	5	8	171,990	408,474	580,464
50 to 54	3	3	6	265,112	205,533	470,645
55 to 59	5	4	9	403,331	329,378	732,709
60 to 64	3	8	11	210,384	642,556	852,940
65 to 69	3	4	7	200,422	317,892	518,314
70 & Up	1	0	1	37,317	0	37,317
Total	19	26	45	$1,354,113	$2,005,511	$3,359,624

* Partial year pay amounts have not been annualized.



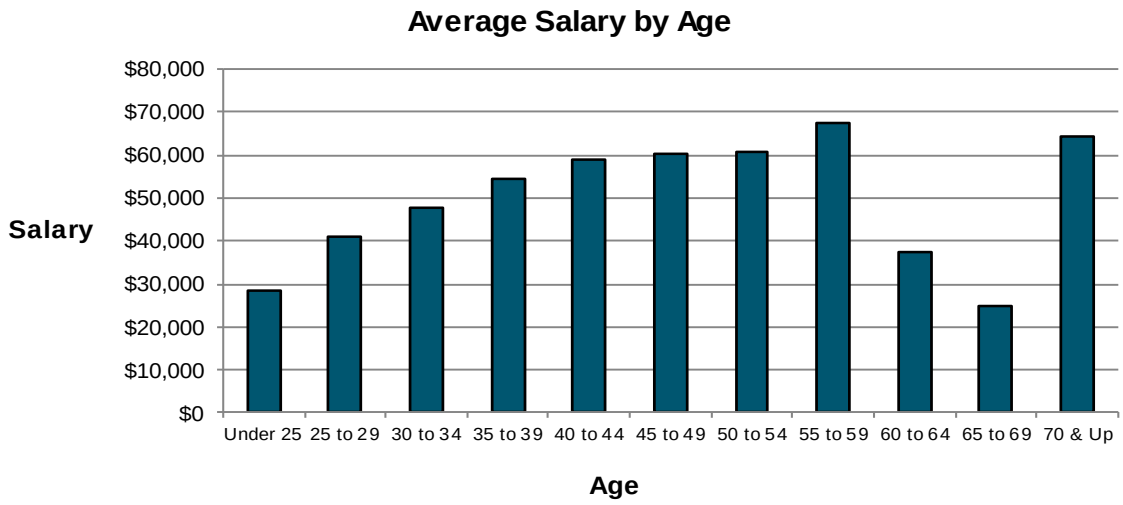
SUMMARY OF ACTIVE MEMBERS

as of January 1, 2025

Library – Plan C

Age	Number			2024 Reported Compensation*		
	Male	Female	Total	Male	Female	Total
Under 25	1	2	3	$ 11,729	$ 73,576	$ 85,305
25 to 29	10	13	23	351,314	592,530	943,844
30 to 34	5	13	18	200,305	658,604	858,909
35 to 39	7	19	26	393,774	1,027,707	1,421,481
40 to 44	13	15	28	625,517	1,025,564	1,651,081
45 to 49	4	12	16	204,601	757,504	962,105
50 to 54	2	9	11	147,158	522,303	669,461
55 to 59	0	8	8	0	539,148	539,148
60 to 64	0	3	3	0	112,113	112,113
65 to 69	1	1	2	30,685	19,329	50,014
70 & Up	0	1	1	0	64,452	64,452
Total	43	96	139	$ 1,965,083	$5,392,830	$7,357,913

* Partial year pay amounts have not been annualized.

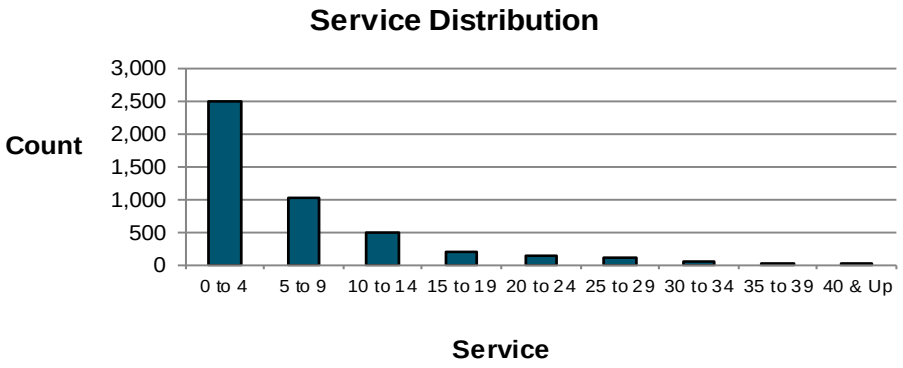


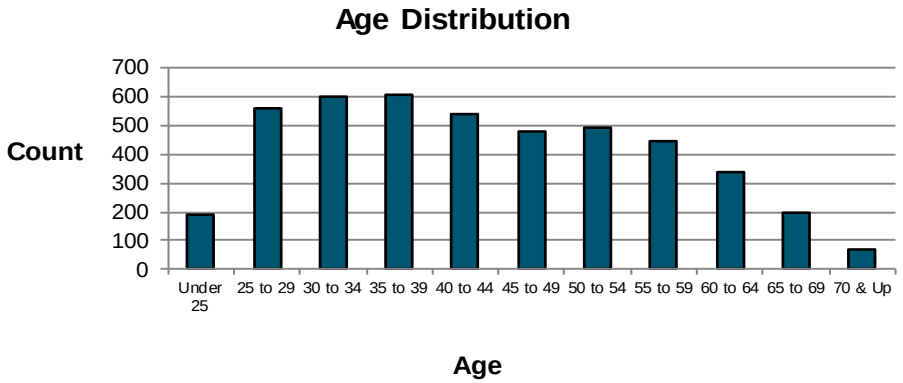
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

Total – All Plans

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	193	0	0	0	0	0	0	0	0	193
25 to 29	508	50	0	0	0	0	0	0	0	558
30 to 34	366	198	37	0	0	0	0	0	0	601
35 to 39	333	143	114	14	0	0	0	0	0	604
40 to 44	275	131	84	40	8	0	0	0	0	538
45 to 49	220	124	52	38	39	8	0	0	0	481
50 to 54	223	120	56	26	36	29	4	0	0	494
55 to 59	180	102	63	29	22	24	16	8	0	444
60 to 64	111	78	46	21	27	22	15	11	4	335
65 to 69	73	47	22	9	12	14	7	7	3	194
70 & Up	24	19	8	5	6	1	0	3	4	70
Total	2,506	1,012	482	182	150	98	42	29	11	4,512



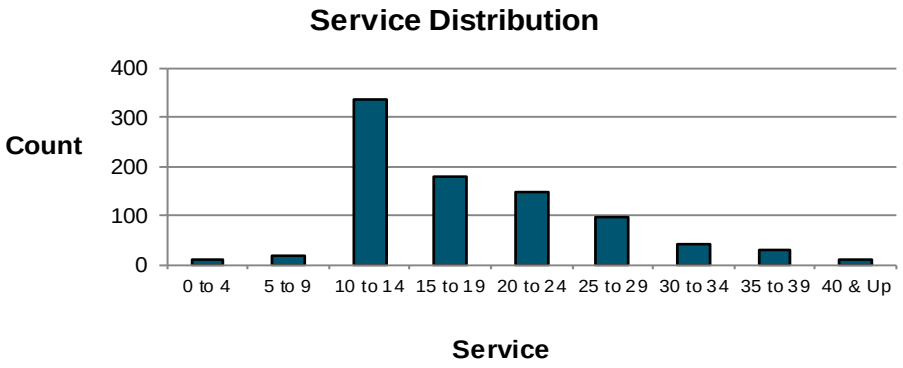


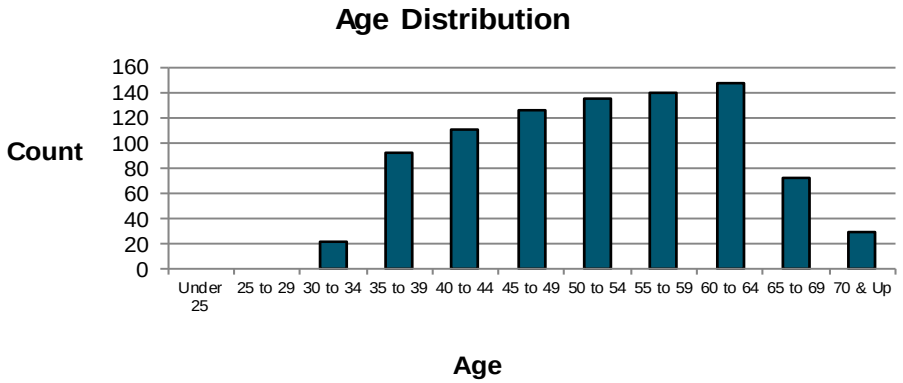
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

Total – Plan B

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	1	21	0	0	0	0	0	0	22
35 to 39	0	2	76	14	0	0	0	0	0	92
40 to 44	0	2	61	40	8	0	0	0	0	111
45 to 49	0	3	39	38	39	8	0	0	0	127
50 to 54	0	0	40	26	36	29	4	0	0	135
55 to 59	0	1	40	29	22	24	16	8	0	140
60 to 64	5	4	40	20	27	22	15	11	4	148
65 to 69	2	2	16	9	12	14	7	7	3	72
70 & Up	4	2	5	5	6	1	0	3	4	30
Total	11	17	338	181	150	98	42	29	11	877



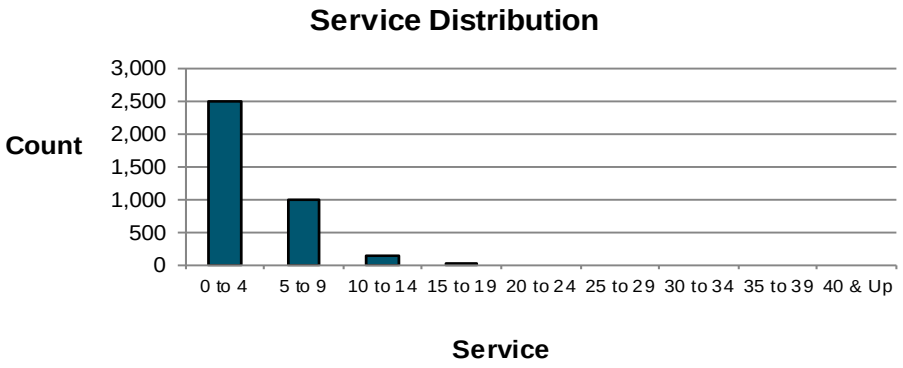


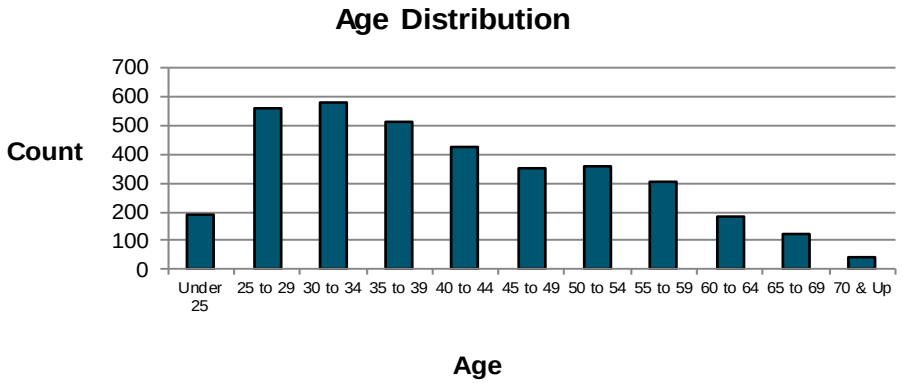
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

Total – Plan C

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	193	0	0	0	0	0	0	0	0	193
25 to 29	508	50	0	0	0	0	0	0	0	558
30 to 34	366	197	16	0	0	0	0	0	0	579
35 to 39	333	141	38	0	0	0	0	0	0	512
40 to 44	275	129	23	0	0	0	0	0	0	427
45 to 49	220	121	13	0	0	0	0	0	0	354
50 to 54	223	120	16	0	0	0	0	0	0	359
55 to 59	180	101	23	0	0	0	0	0	0	304
60 to 64	106	74	6	1	0	0	0	0	0	187
65 to 69	71	45	6	0	0	0	0	0	0	122
70 & Up	20	17	3	0	0	0	0	0	0	40
Total	2,495	995	144	1	0	0	0	0	0	3,635



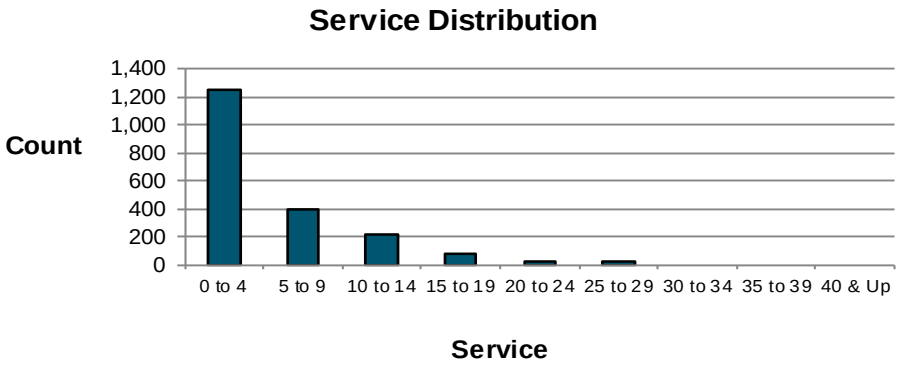


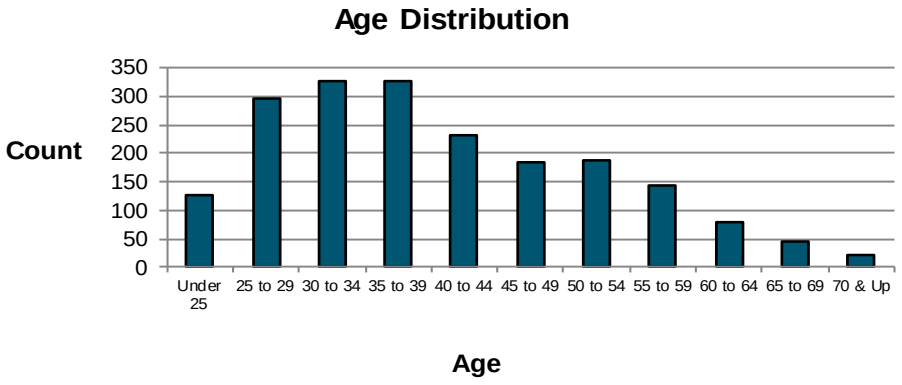
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

Charter Schools – All Plans

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	127	0	0	0	0	0	0	0	0	127
25 to 29	273	22	0	0	0	0	0	0	0	295
30 to 34	195	108	22	0	0	0	0	0	0	325
35 to 39	184	67	67	9	0	0	0	0	0	327
40 to 44	131	44	34	21	1	0	0	0	0	231
45 to 49	96	44	24	10	8	3	0	0	0	185
50 to 54	94	42	26	10	9	7	0	0	0	188
55 to 59	70	38	14	12	5	3	0	0	0	142
60 to 64	38	19	14	5	2	1	0	0	0	79
65 to 69	29	8	5	2	0	1	0	0	0	45
70 & Up	13	4	3	2	1	0	0	0	0	23
Total	1,250	396	209	71	26	15	0	0	0	1,967



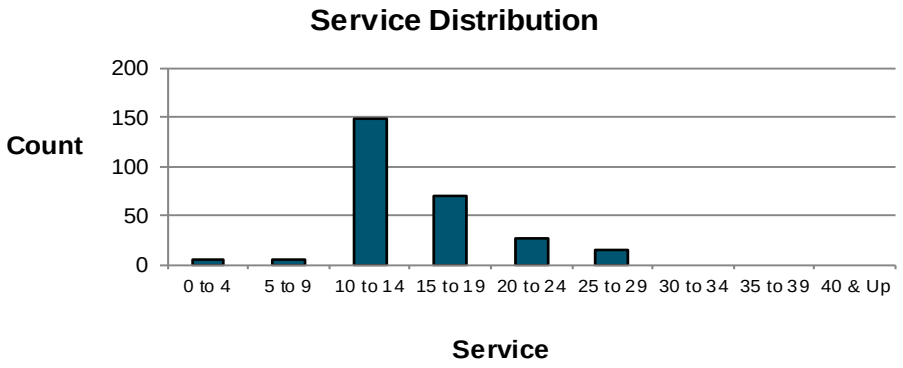


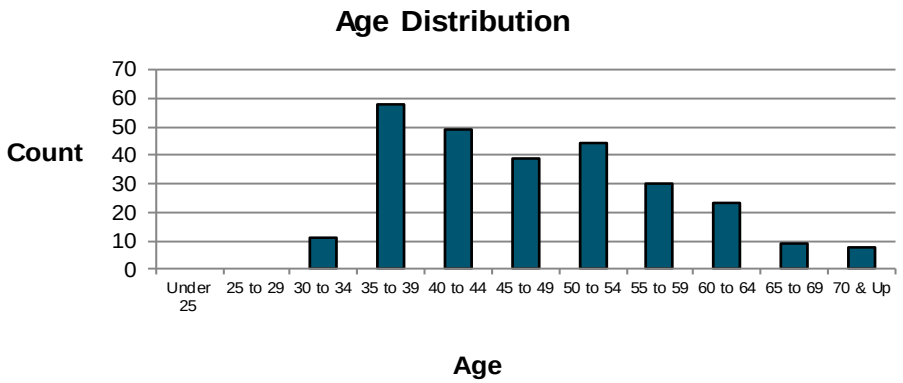
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

Charter Schools – Plan B

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	11	0	0	0	0	0	0	11
35 to 39	0	1	48	9	0	0	0	0	0	58
40 to 44	0	1	26	21	1	0	0	0	0	49
45 to 49	0	2	16	10	8	3	0	0	0	39
50 to 54	0	0	18	10	9	7	0	0	0	44
55 to 59	0	1	9	12	5	3	0	0	0	30
60 to 64	2	1	13	4	2	1	0	0	0	23
65 to 69	1	0	5	2	0	1	0	0	0	9
70 & Up	3	0	2	2	1	0	0	0	0	8
Total	6	6	148	70	26	15	0	0	0	271



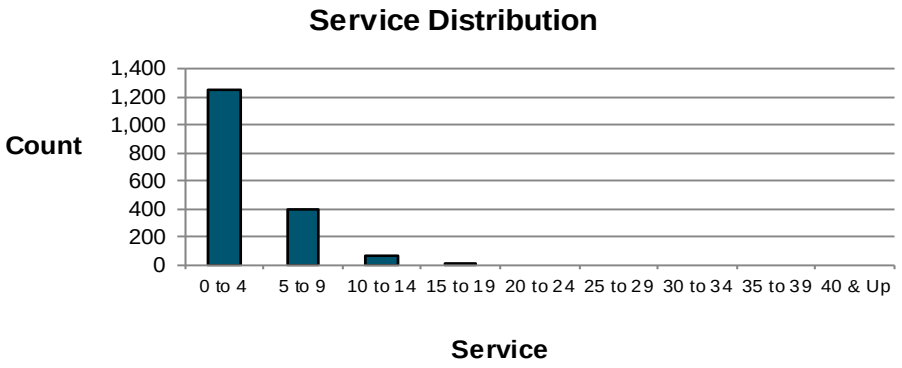


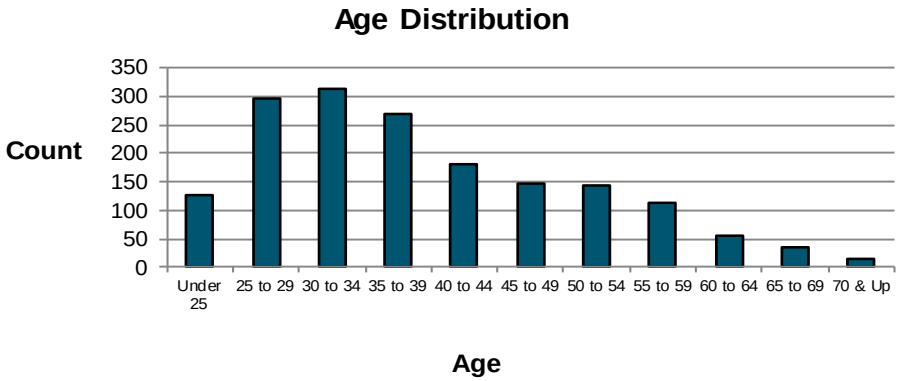
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

Charter Schools – Plan C

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	127	0	0	0	0	0	0	0	0	127
25 to 29	273	22	0	0	0	0	0	0	0	295
30 to 34	195	108	11	0	0	0	0	0	0	314
35 to 39	184	66	19	0	0	0	0	0	0	269
40 to 44	131	43	8	0	0	0	0	0	0	182
45 to 49	96	42	8	0	0	0	0	0	0	146
50 to 54	94	42	8	0	0	0	0	0	0	144
55 to 59	70	37	5	0	0	0	0	0	0	112
60 to 64	36	18	1	1	0	0	0	0	0	56
65 to 69	28	8	0	0	0	0	0	0	0	36
70 & Up	10	4	1	0	0	0	0	0	0	15
Total	1,244	390	61	1	0	0	0	0	0	1,696



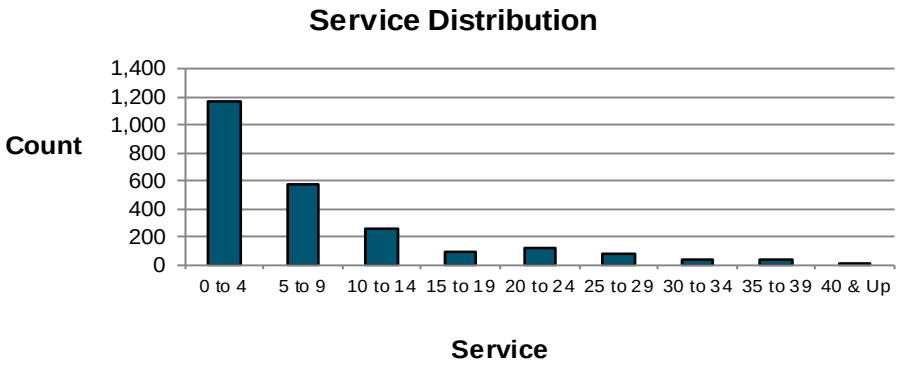


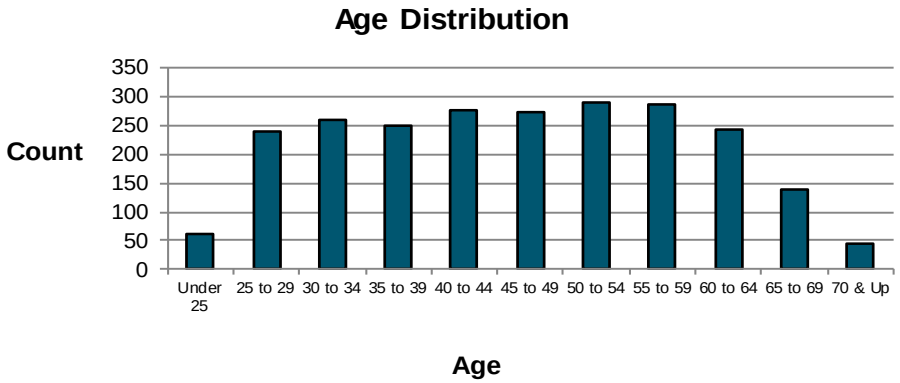
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

School District & Retirement System – All Plans

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	63	0	0	0	0	0	0	0	0	63
25 to 29	213	27	0	0	0	0	0	0	0	240
30 to 34	161	82	15	0	0	0	0	0	0	258
35 to 39	131	69	46	5	0	0	0	0	0	251
40 to 44	127	76	47	19	7	0	0	0	0	276
45 to 49	115	73	26	24	29	5	0	0	0	272
50 to 54	125	72	27	13	27	21	4	0	0	289
55 to 59	106	61	46	16	15	19	14	8	0	285
60 to 64	71	58	29	13	22	21	15	11	2	242
65 to 69	42	39	17	5	10	11	6	7	3	140
70 & Up	11	14	5	2	5	1	0	3	4	45
Total	1,165	571	258	97	115	78	39	29	9	2,361



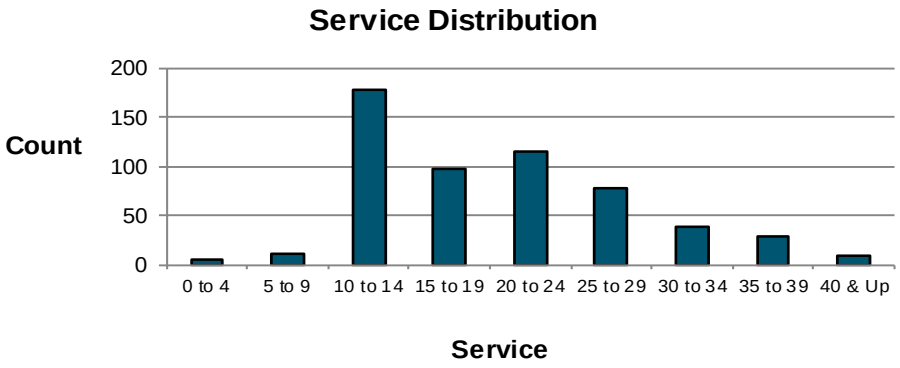


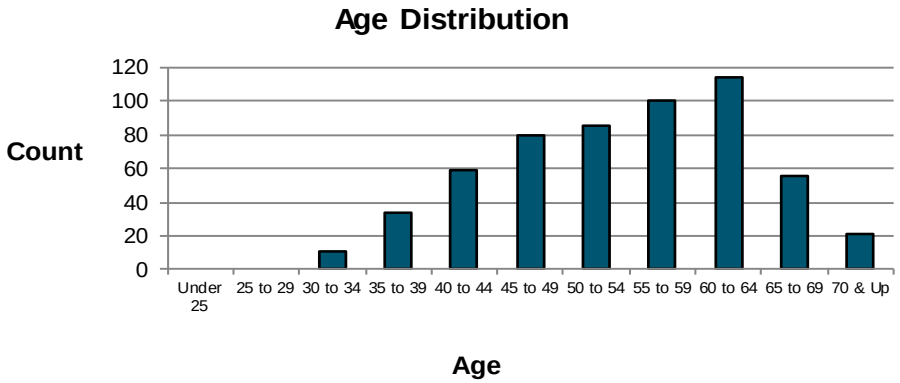
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

School District & Retirement System – Plan B

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	1	10	0	0	0	0	0	0	11
35 to 39	0	1	28	5	0	0	0	0	0	34
40 to 44	0	1	32	19	7	0	0	0	0	59
45 to 49	0	1	21	24	29	5	0	0	0	80
50 to 54	0	0	20	13	27	21	4	0	0	85
55 to 59	0	0	29	16	15	19	14	8	0	101
60 to 64	3	3	24	13	22	21	15	11	2	114
65 to 69	1	2	11	5	10	11	6	7	3	56
70 & Up	1	2	3	2	5	1	0	3	4	21
Total	5	11	178	97	115	78	39	29	9	561



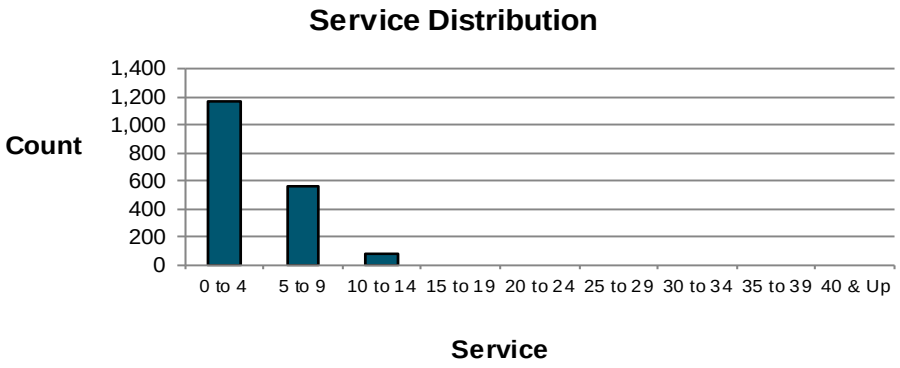


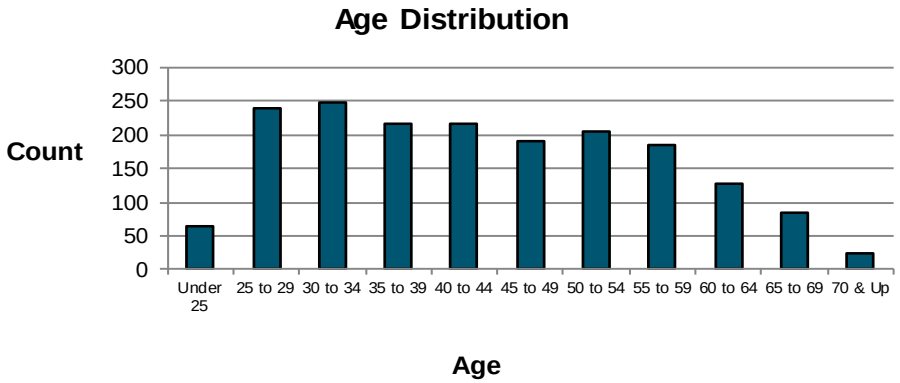
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

School District & Retirement System – Plan C

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	63	0	0	0	0	0	0	0	0	63
25 to 29	213	27	0	0	0	0	0	0	0	240
30 to 34	161	81	5	0	0	0	0	0	0	247
35 to 39	131	68	18	0	0	0	0	0	0	217
40 to 44	127	75	15	0	0	0	0	0	0	217
45 to 49	115	72	5	0	0	0	0	0	0	192
50 to 54	125	72	7	0	0	0	0	0	0	204
55 to 59	106	61	17	0	0	0	0	0	0	184
60 to 64	68	55	5	0	0	0	0	0	0	128
65 to 69	41	37	6	0	0	0	0	0	0	84
70 & Up	10	12	2	0	0	0	0	0	0	24
Total	1,160	560	80	0	0	0	0	0	0	1,800



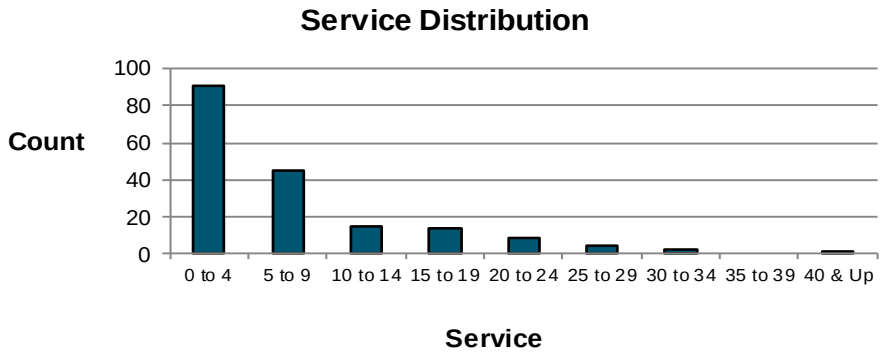


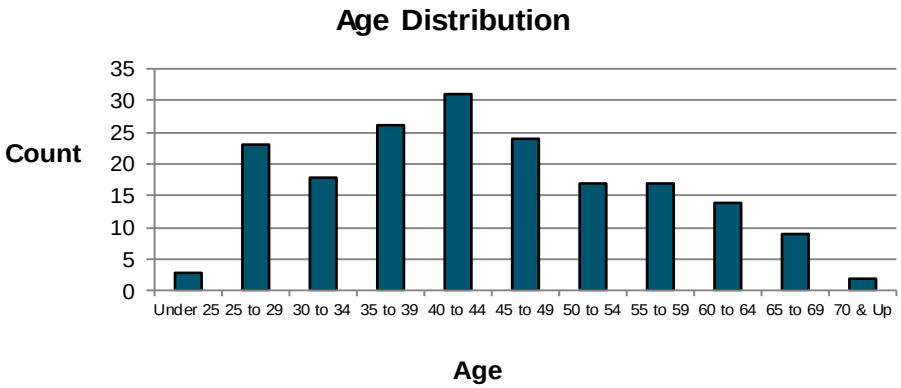
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

Library – All Plans

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	3	0	0	0	0	0	0	0	0	3
25 to 29	22	1	0	0	0	0	0	0	0	23
30 to 34	10	8	0	0	0	0	0	0	0	18
35 to 39	18	7	1	0	0	0	0	0	0	26
40 to 44	17	11	3	0	0	0	0	0	0	31
45 to 49	9	7	2	4	2	0	0	0	0	24
50 to 54	4	6	3	3	0	1	0	0	0	17
55 to 59	4	3	3	1	2	2	2	0	0	17
60 to 64	2	1	3	3	3	0	0	0	2	14
65 to 69	2	0	0	2	2	2	1	0	0	9
70 & Up	0	1	0	1	0	0	0	0	0	2
Total	91	45	15	14	9	5	3	0	2	184



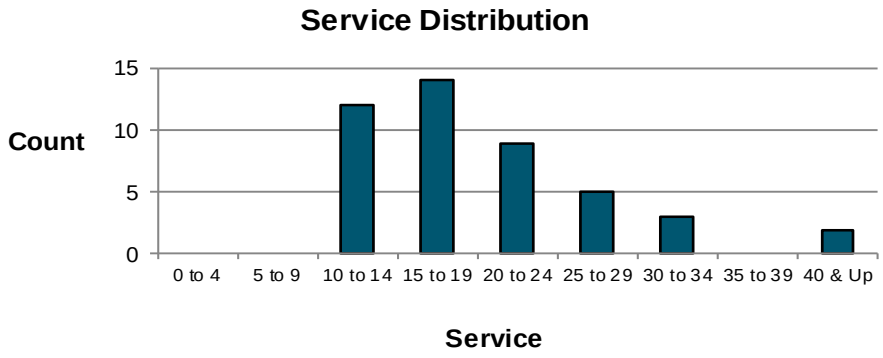


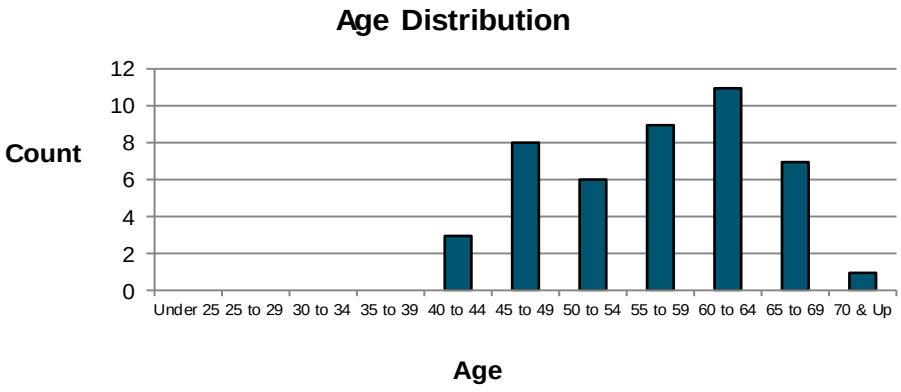
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

Library – Plan B

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0
30 to 34	0	0	0	0	0	0	0	0	0	0
35 to 39	0	0	0	0	0	0	0	0	0	0
40 to 44	0	0	3	0	0	0	0	0	0	3
45 to 49	0	0	2	4	2	0	0	0	0	8
50 to 54	0	0	2	3	0	1	0	0	0	6
55 to 59	0	0	2	1	2	2	2	0	0	9
60 to 64	0	0	3	3	3	0	0	0	2	11
65 to 69	0	0	0	2	2	2	1	0	0	7
70 & Up	0	0	0	1	0	0	0	0	0	1
Total	0	0	12	14	9	5	3	0	2	45



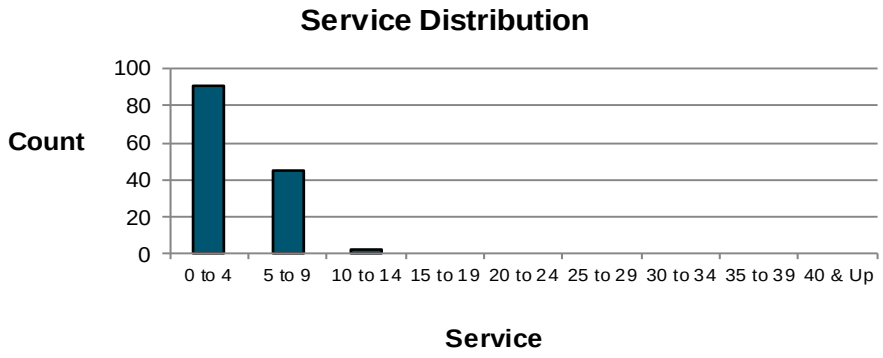


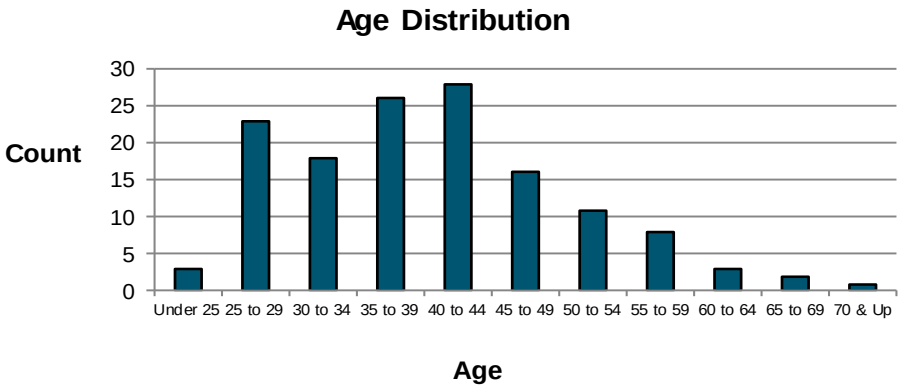
DISTRIBUTION OF ACTIVE MEMBERS

as of January 1, 2025

Library – Plan C

	Years of Service									
Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	3	0	0	0	0	0	0	0	0	3
25 to 29	22	1	0	0	0	0	0	0	0	23
30 to 34	10	8	0	0	0	0	0	0	0	18
35 to 39	18	7	1	0	0	0	0	0	0	26
40 to 44	17	11	0	0	0	0	0	0	0	28
45 to 49	9	7	0	0	0	0	0	0	0	16
50 to 54	4	6	1	0	0	0	0	0	0	11
55 to 59	4	3	1	0	0	0	0	0	0	8
60 to 64	2	1	0	0	0	0	0	0	0	3
65 to 69	2	0	0	0	0	0	0	0	0	2
70 & Up	0	1	0	0	0	0	0	0	0	1
Total	91	45	3	0	0	0	0	0	0	139

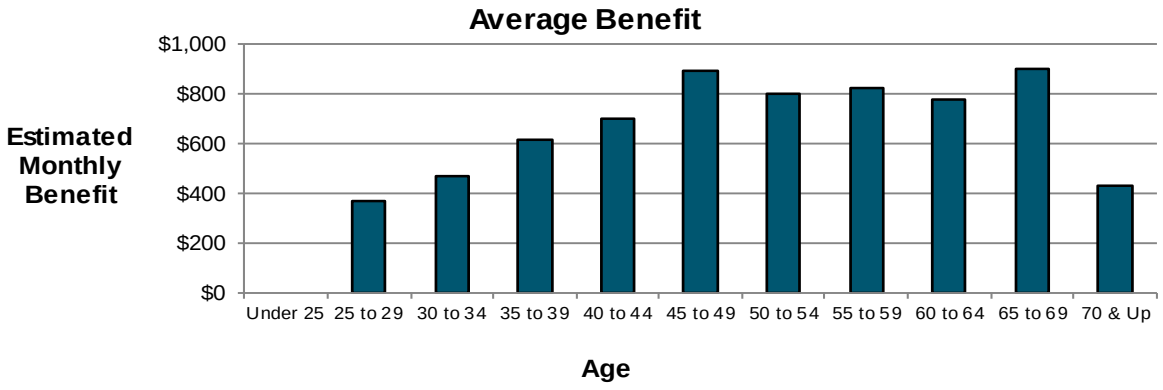


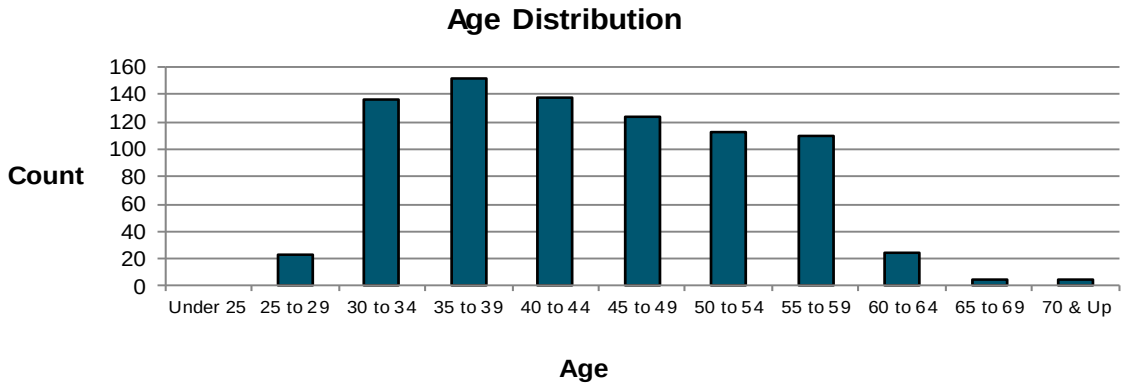


SUMMARY OF TERMINATED VESTED MEMBERS

as of January 1, 2025

Age	Number			Estimated Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 25	0	0	0	$ 0	$ 0	$ 0
25 to 29	2	21	23	729	7,680	8,409
30 to 34	25	111	136	11,031	52,256	63,287
35 to 39	32	120	152	20,719	72,937	93,656
40 to 44	32	105	137	21,370	75,030	96,400
45 to 49	45	78	123	41,476	68,532	110,008
50 to 54	32	80	112	29,431	60,714	90,145
55 to 59	28	82	110	21,652	69,283	90,935
60 to 64	9	15	24	7,422	11,319	18,741
65 to 69	2	3	5	730	3,771	4,501
70 & Up	3	2	5	1,752	398	2,150
Total	210	617	827	$156,312	$421,920	$578,232





SCHEDULE OF RETIREES, DISABLEDS, AND BENEFICIARIES BY BENEFIT TYPE

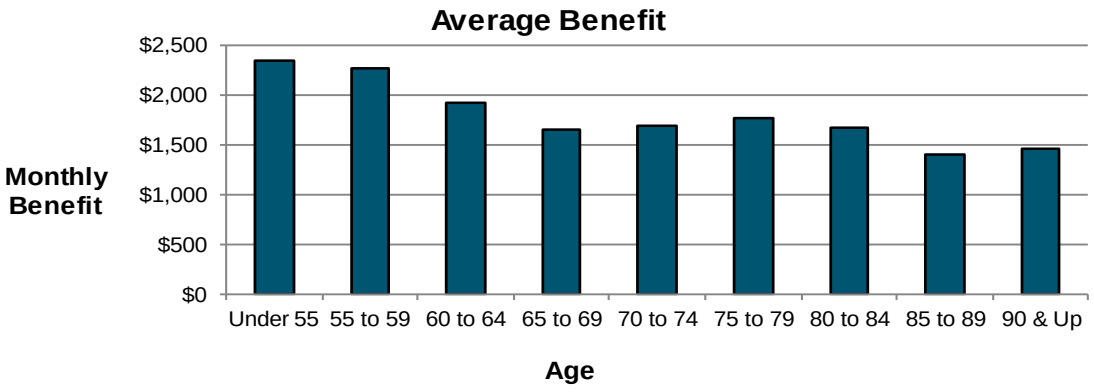
as of January 1, 2025

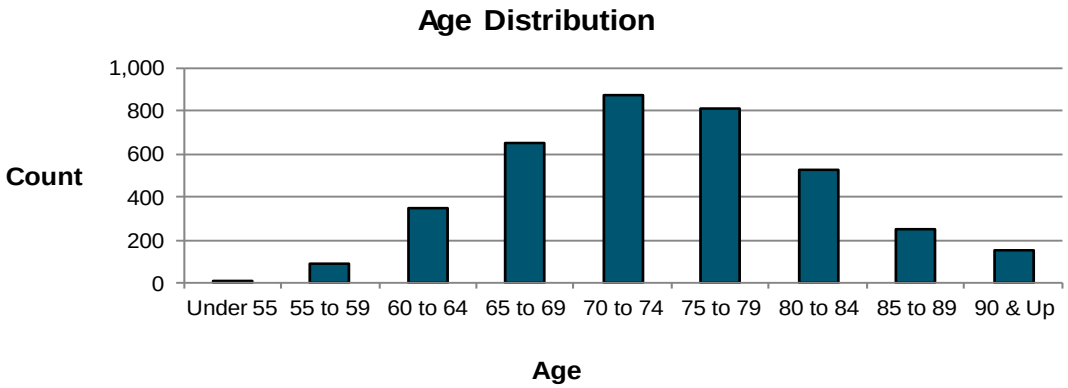
Amount of Monthly Benefits	Total Monthly Benefits	Total Number of Recipients	Type of Benefit			
			Retired	Surviving Spouses	Surviving Children	Disability
$1 to 500	192,931	565	501	54	1	9
501 to 1,000	613,414	828	738	64	3	23
1,001 to 1,500	787,559	636	551	62	4	19
1,501 to 2,000	946,582	541	497	36	2	6
2,001 to 2,500	1,256,092	559	536	18	1	4
2,501 to 3,000	1,208,062	444	434	10	-	-
3,001 to 3,500	807,880	250	249	1	-	-
3,501 to 4,000	466,722	125	123	2	-	-
4,001 to 4,500	281,394	67	66	1	-	-
4,501 to 5,000	102,704	22	22	-	-	-
Over 5,000	55,763	10	10	-	-	-

SUMMARY OF ALL RETIRED MEMBERS

as of January 1, 2025

Age	Number			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 55	2	9	11	$ 4,949	$ 20,987	$ 25,936
55 to 59	33	54	87	72,422	125,526	197,948
60 to 64	98	249	347	177,043	490,294	667,337
65 to 69	182	472	654	308,223	771,411	1,079,634
70 to 74	214	665	879	309,738	1,177,144	1,486,882
75 to 79	209	608	817	329,910	1,115,131	1,445,041
80 to 84	120	410	530	181,073	703,027	884,100
85 to 89	63	190	253	103,182	253,994	357,176
90 & Up	33	116	149	56,000	161,543	217,543
Total	954	2,773	3,727	$ 1,542,540	$ 4,819,057	$ 6,361,597



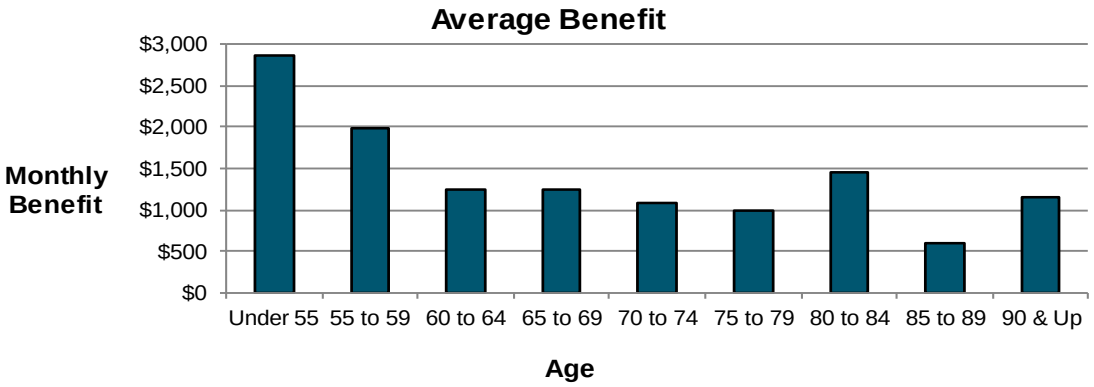


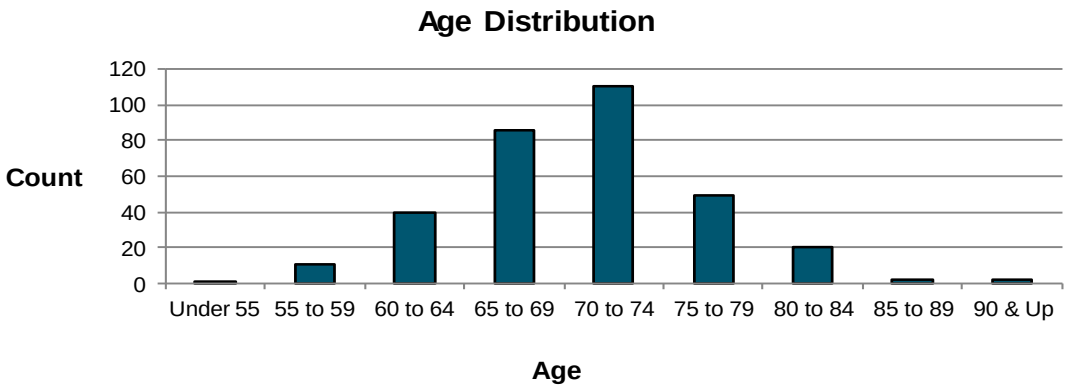
SUMMARY OF RETIRED MEMBERS

as of January 1, 2025

Charter Schools
(Last employer prior to retirement)

Age	Number			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 55	0	1	1	$ 0	$ 2,856	$ 2,856
55 to 59	4	7	11	8,668	13,076	21,744
60 to 64	12	28	40	13,845	35,589	49,434
65 to 69	29	57	86	49,062	58,604	107,666
70 to 74	29	81	110	27,321	92,831	120,152
75 to 79	15	34	49	14,655	33,768	48,423
80 to 84	8	13	21	6,188	24,369	30,557
85 to 89	1	1	2	213	980	1,193
90 & Up	1	1	2	436	1,885	2,321
Total	99	223	322	$ 120,388	$ 263,958	$ 384,346



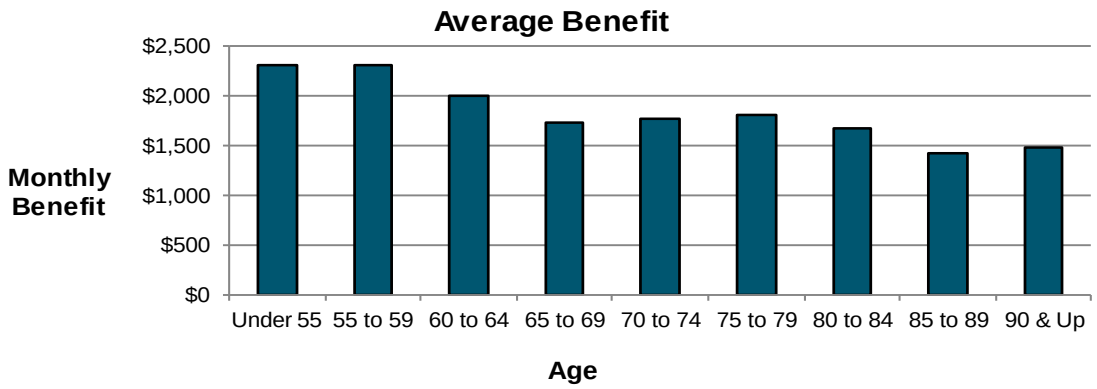


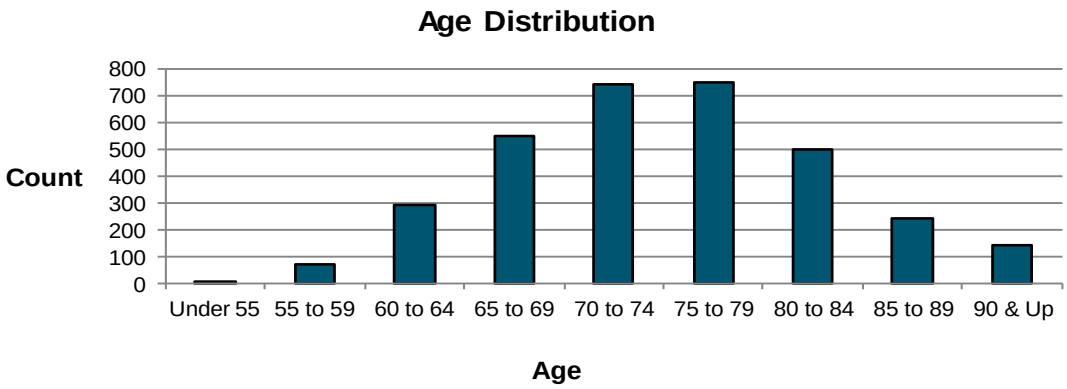
SUMMARY OF RETIRED MEMBERS

as of January 1, 2025

School District & Retirement System
(Last employer prior to retirement)

Age	Number			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 55	2	8	10	$ 4,949	$ 18,131	$ 23,080
55 to 59	28	47	75	60,683	112,450	173,133
60 to 64	82	213	295	154,248	435,836	590,084
65 to 69	145	407	552	248,271	703,496	951,767
70 to 74	177	568	745	268,704	1,057,240	1,325,944
75 to 79	190	557	747	306,081	1,044,869	1,350,950
80 to 84	111	389	500	173,152	664,757	837,909
85 to 89	62	183	245	102,969	245,202	348,171
90 & Up	31	114	145	54,489	159,423	213,912
Total	828	2,486	3,314	$ 1,373,546	$ 4,441,404	$ 5,814,950



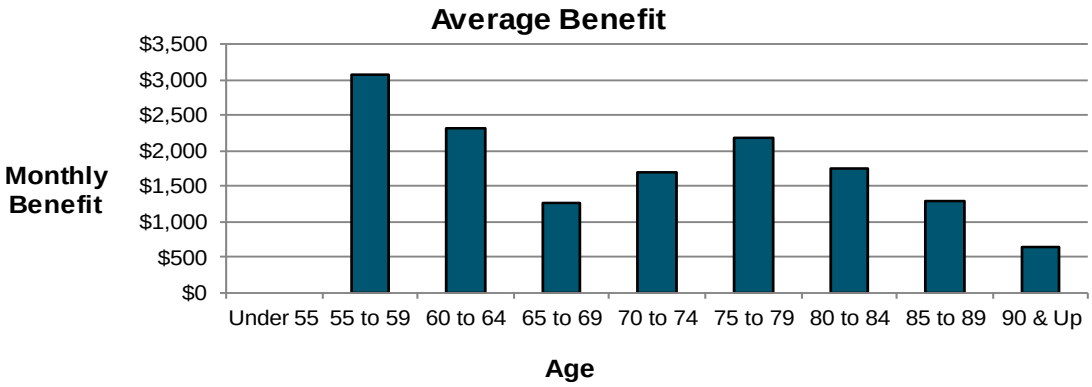


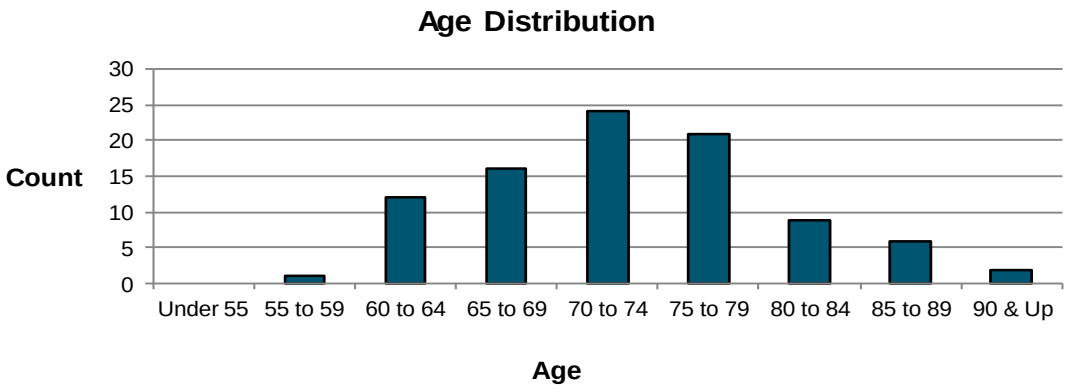
SUMMARY OF RETIRED MEMBERS

as of January 1, 2025

Library
(Last employer prior to retirement)

Age	Number			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 55	0	0	0	$ 0	$ 0	$ 0
55 to 59	1	0	1	3,071	0	3,071
60 to 64	4	8	12	8,950	18,869	27,819
65 to 69	8	8	16	10,890	9,311	20,201
70 to 74	8	16	24	13,713	27,073	40,786
75 to 79	4	17	21	9,174	36,494	45,668
80 to 84	1	8	9	1,733	13,901	15,634
85 to 89	0	6	6	0	7,812	7,812
90 & Up	1	1	2	1,075	235	1,310
Total	27	64	91	$ 48,606	$ 113,695	$ 162,301



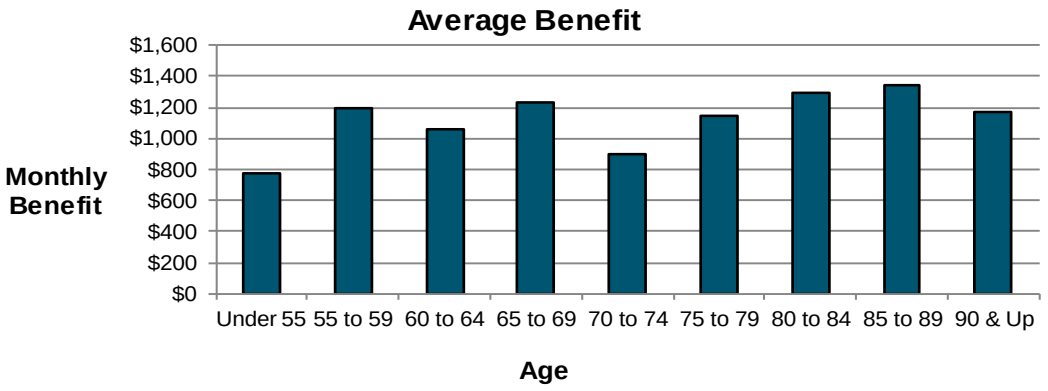


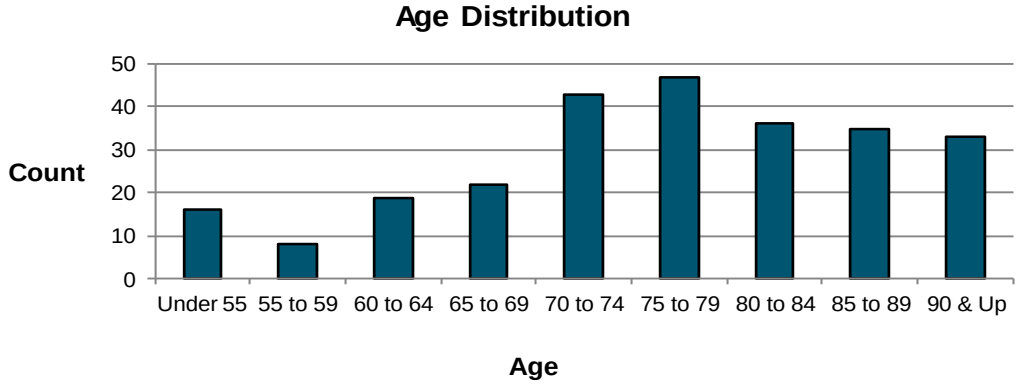
SUMMARY OF BENEFICIARIES

as of January 1, 2025

Age	Number*			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 55	7	9	16	$ 5,354	$ 7,106	$ 12,460
55 to 59	1	7	8	1,890	7,690	9,580
60 to 64	11	8	19	7,865	12,199	20,064
65 to 69	4	18	22	6,114	20,930	27,044
70 to 74	9	34	43	7,848	30,851	38,699
75 to 79	15	32	47	13,671	39,892	53,563
80 to 84	12	24	36	11,804	34,696	46,500
85 to 89	7	28	35	8,299	38,804	47,103
90 & Up	7	26	33	7,393	31,037	38,430
Total	73	186	259	$ 70,238	$ 223,205	$ 293,443

* Includes 8 beneficiaries who were owed a single lump sum payment and were not paid prior to the valuation date.

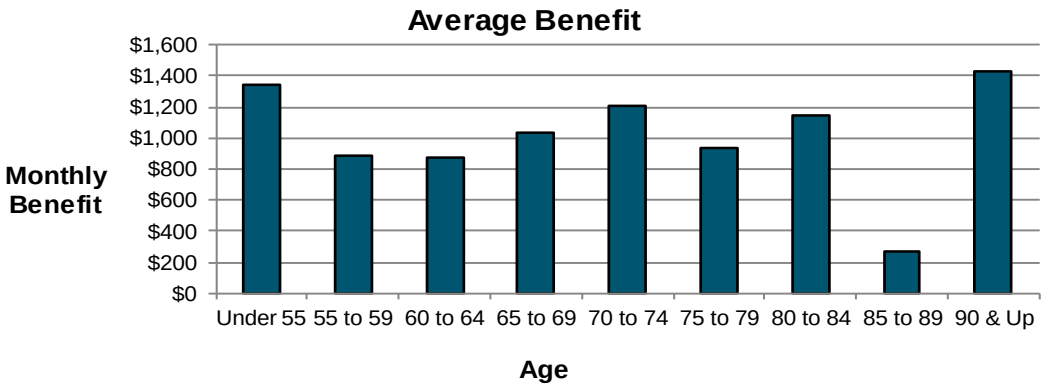


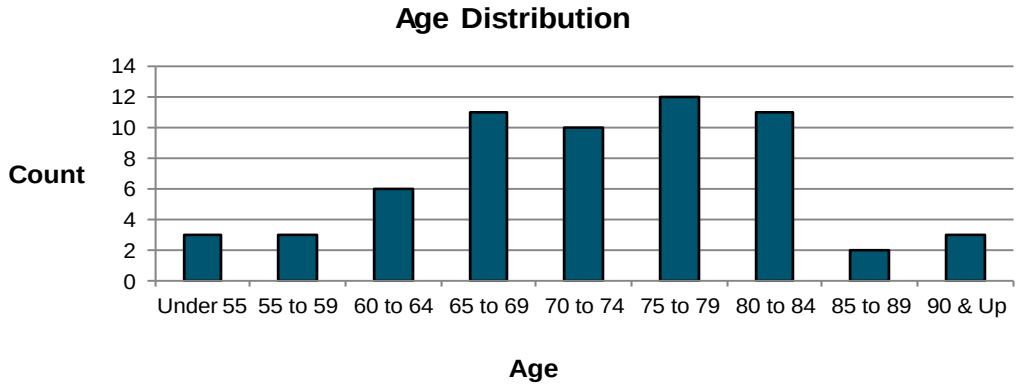


SUMMARY OF DISABLED MEMBERS

as of January 1, 2025

Age	Number			Monthly Benefit		
	Male	Female	Total	Male	Female	Total
Under 55	0	3	3	$ 0	$ 4,042	$ 4,042
55 to 59	0	3	3	0	2,660	2,660
60 to 64	3	3	6	2,849	2,403	5,252
65 to 69	4	7	11	3,420	8,025	11,445
70 to 74	1	9	10	831	11,236	12,067
75 to 79	6	6	12	5,802	5,423	11,225
80 to 84	1	10	11	1,799	10,750	12,549
85 to 89	0	2	2	0	530	530
90 & Up	0	3	3	0	4,293	4,293
Total	15	46	61	$ 14,701	$ 49,362	$ 64,063





HISTORICAL MEMBERSHIP PROFILE

as of January 1

	2025	2024	2023	2022	2021	2020	2019	2018	2017	2016
Active Members	4,512	4,407	4,341	4,178	4,108	4,074	3,898	3,760	3,701	3,574
Average Age	43.9	43.5	43.1	43.0	42.8	42.7	42.7	42.8	43.5	44.0
Average Years of Service	6.9	6.8	6.9	7.2	7.4	7.1	7.2	7.5	8.1	8.1
Inactive Vested	827	788	673	568	521	529	531	522	490	461
Average Age	44.6	44.5	45.1	45.9	47.3	47.8	48.6	49.8	50.5	50.5
Average Estimated Monthly Benefit	$699	$684	$680	$651	$640	$650	$647	$678	$671	$689
Retirees, Disabled and Survivors	4,047	4,073	4,086	4,094	4,099	4,145	4,113	4,112	4,032	4,049
Average Age	74.6	74.2	73.9	73.5	73.2	72.9	72.5	72.3	72.2	72.0
Average Monthly Benefit	$1,664	$1,654	$1,649	$1,641	$1,632	$1,631	$1,625	$1,607	$1,589	$1,580

HISTORICAL ACTIVE MEMBER DATA

Valuation January 1	Active Members	Annual Payroll	Annual Average Pay	% Increase in Average Pay
2016	3,574	$179,013,516	$50,088	2.41%
2017	3,701	194,132,739	52,454	4.72%
2018	3,760	196,277,971	52,202	(0.48%)
2019	3,898	203,310,599	52,158	(0.08%)
2020	4,074	217,255,306	53,327	2.24%
2021	4,108	228,084,635	55,522	4.12%
2022	4,178	234,540,261	56,137	1.11%
2023	4,341	252,084,684	58,071	3.45%
2024	4,407	265,017,203	60,136	3.56%
2025	4,512	282,715,300	62,659	4.20%

AVERAGE MONTHLY BENEFIT AMOUNTS FOR NEW RETIREES

	Years of Credited Service							All
Members Retiring During	<5	5-10	10-15	15-20	20-25	25-30	30+	Members
Fiscal Year Ending 01/01/2016								
Average monthly benefit	$436	$625	$977	$1,403	$2,174	$2,678	$3,414	$1,579
Number of retirees	9	23	39	17	21	27	9	145
Fiscal Year Ending 01/01/2017								
Average monthly benefit	$478	$493	$1,019	$1,415	$2,036	$2,568	$2,740	$1,570
Number of retirees	4	26	24	17	22	24	12	129
Fiscal Year Ending 01/01/2018								
Average monthly benefit	$549	$611	$935	$1,490	$2,435	$2,786	$3,087	$1,792
Number of retirees	11	32	31	30	33	35	24	196
Fiscal Year Ending 01/01/2019								
Average monthly benefit	$730	$701	$961	$1,818	$2,245	$2,643	$2,928	$1,684
Number of retirees	2	35	22	27	16	18	18	138
Fiscal Year Ending 01/01/2020								
Average monthly benefit	$465	$680	$928	$1,640	$2,253	$3,469	$2,787	$1,569
Number of retirees	6	38	24	22	15	18	8	131
Fiscal Year Ending 01/01/2021								
Average monthly benefit	$396	$515	$1,082	$1,466	$1,742	$2,944	$2,939	$1,508
Number of retirees	1	19	20	30	17	8	10	105
Fiscal Year Ending 01/01/2022								
Average monthly benefit	$495	$676	$1,124	$1,628	$2,055	$2,794	$3,326	$1,649
Number of retirees	8	37	17	29	13	14	20	138
Fiscal Year Ending 01/01/2023								
Average monthly benefit	$394	$696	$1,130	$1,688	$2,548	$3,227	$3,525	$1,868
Number of retirees	4	26	21	18	14	14	16	113
Fiscal Year Ending 01/01/2024								
Average monthly benefit	$395	$705	$1,062	$1,955	$1,998	$2,730	$3,805	$1,739
Number of retirees	5	30	18	16	18	13	14	114
Fiscal Year Ending 01/01/2025								
Average monthly benefit	$445	$705	$1,167	$2,171	$2,354	$2,844	$3,363	$1,772
Number of retirees	5	23	17	17	13	6	13	94

RETIREES AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

Year Ended December 31	Added to Rolls		Removed from Rolls		Rolls End of Year		% Increase in Annual Benefits	Average Annual Benefits
	Number	Annual Benefits	Number	Annual Benefits	Number	Annual Benefits		
2015	159	$2,949,800	122	$1,900,088	4,049	$76,786,236		$18,964
2016	151	2,791,834	167	2,697,334	4,032	76,880,736	0.12%	19,068
2017	215	4,456,931	135	2,040,515	4,112	79,297,152	3.14%	19,284
2018	153	2,992,593	152	2,161,017	4,113	80,128,728	1.05%	19,482
2019	155	2,832,629	123	1,866,173	4,145	81,095,184	1.21%	19,565
2020	120	2,115,087	166	2,971,863	4,099	80,238,408	-1.06%	19,575
2021	153	2,936,961	158	2,615,829	4,094	80,559,540	0.40%	19,677
2022	131	2,730,477	139	2,490,945	4,086	80,799,072	0.30%	19,775
2023	131	2,663,346	144	2,659,518	4,073	80,802,900	0.00%	19,839
2024	108	2,231,824	134	2,405,488	4,047	80,629,236	-0.21%	19,923

Effective Date

January 1, 1944, most recently amended in 2018.

Plan Type

Plan B applies to anyone who retires on or after June 30, 1999 and was hired prior to January 1, 2014. Plan C applies to members hired on or after January 1, 2014. All members with Plan A benefits have terminated or retired.

Eligibility for coverage

All regular, full-time employees of the School District of Kansas City, Missouri, the Kansas City, Missouri Public Library District, the Retirement System, and the Charter Schools located within the boundaries of the Kansas City School District become members as a condition of employment. Regular employment means working at least five hours per day, five days per week, nine months per year. Temporary and part-time employees are excluded.

Service

Creditable service is member service, which is service for which required contributions have been made. There is no cap on creditable service. Prior to 1990, creditable service could not exceed 35 years. The Plan B maximum retirement benefit is 60% of Average final compensation, which will be reached upon attainment of 30 years of service. The Plan C maximum retirement benefit is 60% of Average final compensation, which will be reached upon attainment of 34.25 years of service.

Annual compensation

A member's annual compensation level will be the regular compensation shown on the employer's salary and wage schedules, excluding extra pay, overtime pay, or any pay not on the schedule.

Average final compensation

The average final compensation is the highest average annual compensation paid during any four consecutive years of service.

Normal retirement

Eligibility

Plan B: Members may retire after (a) the completion of five years of creditable service and the attainment of age 60, or (b) having a total of at least 75 credits, with each year of creditable service and year of age, both prorated for fractional years, equal to one credit.

Plan C: Members may retire after (a) the completion of five years of creditable service and the attainment of age 62, or (b) having a total of at least 80 credits, with each year of creditable service and year of age, both prorated for fractional years, equal to one credit.

Benefit

Plan B: The normal retirement benefit payable monthly equals one twelfth of 2.00% (1.75% for members who retired prior to June 30, 1999) of the member's average final compensation multiplied by years of creditable service, subject to a maximum of 60% of average final compensation. Any member whose years of creditable service exceed 34.25 years on August 28, 1993 shall have a maximum greater than 60%, which shall be equal to 1.75% times the member's years of creditable service on August 28, 1993.

Plan C: The normal retirement benefit payable monthly equals one twelfth of 1.75% of the member's average final compensation multiplied by years of creditable service, subject to a maximum of 60% of average final compensation.

Minimum benefit

Effective January 1, 1996, any member with at least 10 years of creditable service, but less than 20 years, is entitled to a minimum benefit of $150 per month, plus $15 for each year of creditable service in excess of 10 years, or the actuarial equivalent if an option was elected. Any member with at least 20 years of creditable service at retirement is entitled to a minimum benefit of $300 per month, or the actuarial equivalent of $300 if an option was elected. Beneficiaries of deceased members who retired with at least 10 years of creditable service and elected one of the optional plans for payment of benefits may receive the actuarial equivalent of the minimum benefit available for the option chosen.

Early retirement

Eligibility

Members may retire at any time after the completion of five years of creditable service and the attainment of age 55.

Benefit

Plan B: A member eligible for early retirement will receive a reduced benefit, with the reduction based on the number of months preceding eligibility for a normal retirement benefit. The reduction factors are as follows:

Age	Reduction Factor
59	0.91653
58	0.84084
57	0.77211
56	0.70959
55	0.65264

Plan C: A member eligible for early retirement will receive a reduced benefit, with the reduction based on the number of months preceding eligibility for a normal retirement benefit. The reduction factors are as follows:

Age	Reduction Factor
61	0.91450
60	0.83727
59	0.76738
58	0.70402
57	0.64647
56	0.59412
55	0.54644

Disability retirement

Eligibility

A member with at least five years of creditable service who is certified to be totally incapacitated for performance of duty by the Medical Board is eligible for a disability retirement.

Benefit

A disabled vested member will receive a benefit, calculated as for normal retirement, based on creditable service and average final compensation at actual disability retirement date, or the minimum disability benefit whichever is greater. The minimum disability retirement benefit will be the lesser of (a) 25% of the member's average final compensation, or (b) the member's service retirement benefit calculated on the member's average final compensation and the maximum number of years of creditable service the member would have earned had the member remained an employee until age 60. Disability benefits are payable immediately.

Vested termination benefits

Eligibility

A member who has at least five years of creditable service earns a vested interest in his or her accrued benefit, provided the member leaves his or her contributions in the System.

Benefit

The vested benefit is calculated as a normal retirement benefit based on service and average final compensation at date of termination and is payable at minimum normal retirement date.

Non-vested benefits

Benefit

If the member's termination is for reasons other than death or retirement and if the member has not met the vesting or retirement requirements, the member's contributions with interest will be refunded.

Death Benefit

Prior to retirement

For a member who dies before retirement and was either an active employee or an inactive vested member who met the other requirements (age or points) for either normal or early retirement, the member's designated beneficiary is entitled to receive either (a) the member's accumulated contributions and interest, or if the designated beneficiary is the member's spouse, dependent child or dependent parent, (b) a monthly retirement benefit calculated under Option 1 as if the deceased member had at least ten years of creditable service at time of death. If the beneficiary is a child, the optional monthly benefit is payable until the beneficiary reaches age nineteen.

For an inactive vested member who dies before retirement and has not met the other (age or points) requirements for retirement, the member's accumulated contributions and interest will be payable to the member's designated beneficiary.

All members are guaranteed to have their designated beneficiaries receive at least their accumulated contributions and interest, upon the member's death.

Postretirement

The benefit payment option selected by the retiree will determine what, if any, benefits are payable upon death after retirement.

Normal form of benefit payments

The normal form of benefit payment is the normal retirement benefit amount paid monthly for the life of the member. If the member should die before receiving payments totaling the amount of their contributions to the plan, the designated beneficiary shall receive a lump sum payment of the remaining amount.

Optional forms of benefit payments

Members may elect from the following optional forms of benefit payment:

Option 1

Option 1 provides a reduced retirement benefit that will continue on to a designated survivor. Upon a retiree's death, the retiree's designated survivor will receive for life, the same level of monthly retirement benefit. In the event the retiree's designated survivor predeceases the retiree, the retiree's monthly retirement benefit will be adjusted to the amount that would have been paid in the normal form of payment.

Option 2

Option 2 provides a reduced retirement benefit that will continue on to a designated survivor. Upon a retiree's death, the retiree's designated survivor will receive for life, a monthly benefit equal to one-half of the retiree's monthly retirement benefit. In the event the retiree's designated survivor predeceases the retiree, the retiree's monthly retirement benefit will be adjusted to the amount that would have been paid in the normal form of payment.

Option 3

Option 3 provides that upon a retiree's death, no benefits are payable to the retiree's estate or any beneficiary. Retirement benefits payable under this option will be actuarially increased from the normal form.

Each of the above options produces benefits which are actuarially equivalent to the normal form of benefit which is a monthly annuity payable for the lifetime of the retiree.

Cost-of-living allowances

The Board of Trustees shall determine annually whether or not the system can provide an increase in benefits for those retirees who, as of the January 1 preceding the date of such increase, have been retired at least one year. Any such increase also applies to optional retirement allowances paid to a retiree's survivor. The Board makes its determination as follows:

1. The actuary recommends to the Board what portion of the investment return is available for increases and the amount available to be paid on the first day of the 14th month following the end of the valuation year. The actuary's recommendation is subject to the following safeguards:

    a. The System's funded ratio as of the January 1st of the preceding year of the proposed increase must be at least 100% after adjusting for the effect of proposed increase. The funded ratio is the ratio of assets to the pension benefit obligation.

    b. The actuarial contribution rate, after adjusting for the effect of the proposed increase, may not exceed the statutory contribution rate.

    c. The actuary must certify that the proposed increase will not impair the actuarial soundness of the System.

2. The Board reviews the actuary's recommendation and shall, in their discretion, determine if an increase may be granted. In accordance with Board policy, if an increase is permissible, the amount of the increase will be equal to the lesser of 3% or the percentage increase in the CPI for the preceding year, subject to a cumulative increase of 100% subsequent to December 31, 2000.

3. This provision does not guarantee an annual increase to any retired member.

APPENDIX C – SUMMARY OF BENEFIT PROVISIONS

Administration of the retirement system

The Board of Trustees is responsible for the general administration and proper operation of the retirement system. The Board consists of 12 members – four members appointed by the Board of Education, one member appointed by the Board of Trustees of the library district, four members elected by and from the active and terminated vested members of the retirement system, two members elected by and from the retirees of the retirement system, and the Superintendent of Schools of the School District of Kansas City, Missouri. Administrative expenses are paid out of the general reserve fund.

Employee contributions

Contributions for Employees are as follows;

- Effective July 1, 2021, if the System is at least 100% funded, as determined in the valuation prepared for the prior calendar year, the members contribute the lesser of (a) 9.00% or (b) one-half of the actuarial contribution rate. If the System is less than 100% funded, the members contribute 9.00%.
- Effective January 1, 2016, members contribute 9.00%.
- Effective January 1, 2015, members contributed 8.50%.
- Effective January 1, 2014, members contributed 8.00%.
- Effective January 1, 1999, members contributed 7.50%.
- Prior to January 1, 1999, members contributed 5.90%.
- Prior to 1990, members contributed 5.00% of earnable annual compensation plus 2.00% of earnable compensation in excess of $6,500, the contribution earning base.

Employer contributions

Effective July 1, 2021 and for each subsequent twelve-month period beginning July 1 of each year, the employer contribution rate shall be the greater of (1) the actuarial contribution rate, as determined in the valuation prepared for the prior calendar year, less the member contribution rate, or (2) 12.00% of pay, until the system is fully funded. Once the System is fully funded, the employer contribution rate may increase or decrease in subsequent years, depending on the actuarial contribution rate developed in the annual actuarial valuation and the applicable employee contribution rate. Effective July 1, 2021, the employer contribution rate shall not increase by more than 1.00% or decrease by more than 0.50% from the corresponding rate in effect immediately before such increase or decrease. An exception to the limitation on the magnitude of employer rate increases and decreases exists only when the system is fully funded and the total actuarial contribution rate for employer and employee rate falls below 18%.

APPENDIX C – SUMMARY OF BENEFIT PROVISIONS

Prior to July 1, 2021, the employers of members contribute at the fixed rate of covered compensation as follows;

- Effective January 1, 2020, 12.00%.
- Effective January 1, 2019, 10.50%.
- Effective January 1, 2016, 9.00%.
- Effective January 1, 2015, 8.50%.
- Effective January 1, 2014, 8.00%.
- Effective January 1, 1999, 7.50%.
- Effective July 1, 1996, 5.99%.
- Effective July 1, 1995, 3.99%.
- Effective July 1, 1993, 1.99%.
- Prior to July 1, 1993, employer contributions were actuarially determined.

Changes from the Prior Valuation

None.

APPENDIX D – 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 have 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). Effective with the January 1, 2017 valuation, the existing UAAL on that date is amortized over a closed 30-year period and subsequent pieces of UAAL, arising from actuarial gains and losses each year, will be amortized over a closed 20-year period. The amortization payments on each of the UAAL bases will be determined on a level percentage of payroll basis.

For contribution rates beginning July 1, 2021 and later, there is a 18-month lag between the valuation date in which the employer contribution rates are determined and the effective date of those contribution rates. Therefore, the unfunded actuarial accrued liability is projected from the valuation date to July 1 of the year in which the contribution rate will apply based on the scheduled statutory contribution rates and expected payroll in the intervening years to better approximate the UAAL at that point in time.

CALCULATION OF THE ACTUARIAL VALUE OF ASSETS

The actuarial value of assets is based on a five-year smoothing method and is determined by spreading the effect of each year's investment return in excess of or below the expected return. The Market Value of assets on the valuation date is reduced by the sum of the following:

I. 80% of the return to be spread during the first year preceding the valuation date,
II. 60% of the return to be spread during the second year preceding the valuation date,
III. 40% of the return to be spread during the third year preceding the valuation date, and
IV. 20% of the return to be spread during the fourth year preceding the valuation date.

APPENDIX D – ACTUARIAL COST METHOD AND ASSUMPTIONS

ACTUARIAL ASSUMPTIONS

System contribution requirements and actuarial present values are calculated by applying assumptions to the benefit provisions and membership information of the System, using the actuarial cost method.

The principal areas of risk which require assumptions about future activities of the System are:

(i) Long-term rates of investment return to be generated by the assets of the System

(ii) Patterns of salary increases to members

(iii) Rates of mortality among active members, retirees and beneficiaries

(iv) Rates of termination of active members

(v) The age patterns of actual retirements

APPENDIX D – ACTUARIAL COST METHOD AND ASSUMPTIONS

Investment Return Assumption: (net of investment expenses): 7.25% per year, compounded annually (2.25% long-term price inflation and a 5.00% real rate of return).

Price Inflation: 2.25%

General Wage Growth (Wage Inflation): 2.85%

Payroll Growth Assumption: 2.85% per year.

Interest Crediting Rate on Member Accounts: 2.50% per year.

Salary Increase Rates: Rates vary by years of service.

Rates by Service				
Years	Inflation	Productivity	Merit	Total
<1	2.25%	0.60%	6.65%	9.50%
1	2.25	0.60	4.65	7.50
2	2.25	0.60	3.65	6.50
3	2.25	0.60	2.65	5.50
4	2.25	0.60	2.40	5.25
5	2.25	0.60	2.15	5.00
6	2.25	0.60	1.90	4.75
7	2.25	0.60	1.80	4.65
8 – 19	2.25	0.60	1.65	4.50
20 – 25	2.25	0.60	1.15	4.00
26+	2.25	0.60	1.00	3.85

Mortality Table: This assumption is used to measure the probabilities of members dying and the probabilities of each pension payment being made after retirement.

Healthy Retirees: Pub-2010 General Members (Below Median) Retiree Mortality Table with a one-year age setback for males and a one-year age set-forward for females, projected 7 years from valuation date using most recent MP-Scale.

Beneficiaries: Pub-2010 General Members (Below Median) Contingent Survivor Mortality Table with a one-year age setback for males and a one-year age set-forward for females, projected 7 years from valuation date using most recent MP-Scale.

Disabled Retirees: Pub-2010 Non-Safety Disabled Retiree Mortality Table with a one-year age setback for males and a one-year age set-forward for females.

Active Members: Pub-2010 General Members (Below Median) Employee Mortality Table with a one-year age setback for males and a one-year age set-forward for females, projected 15 years from valuation date using most recent MP-Scale.

Rates of Retirement: These rates are used to measure the probability of eligible members retiring under the regular retirement provisions. The age-related rates used are shown in the tables below.

The first year of normal retirement eligibility is the earlier of age 60 and 5 years of creditable service or 75 credits for Plan B members, and the earlier of age 62 and 5 years of creditable service or 80 credits for Plan C members.

Retirement Rates When Eligible for Unreduced Benefits		
Age	First Eligible Rate	Ultimate Rate
45 – 52	12%	12%
53 – 54	15	12
55	20	12
56 – 61	15	12
62	15	20
63	30	20
64	20	20
65	20	28
66 – 74	30	28
75	100	100

Retirement Rates When Eligible for Reduced Benefits	
Age	Rate
55 – 59	5%

Terminated vested members are assumed to begin receiving their benefits upon reaching age 60 if they participated in Plan B, and age 62 if they participated in Plan C.

Rates of Separation from Active Membership: This assumption measures the probability of a member terminating employment. The rates do not apply to members who are eligible to retire. Rates vary by service. Sample rates are as follows:

Years	Rate
<1	26.0%
1	25.0
5	14.0
10	8.5
15	4.5
20	2.5
25+	1.0

Forfeiture of Vested Benefits: Members terminating in vested status are given the option of taking a refund of their accumulated member contributions (and thereby forfeiting the employer-provided benefit) or deferring their vested benefit. Active members who terminate in the future with a vested benefit are assumed to take a deferred vested annuity, unless a refund of contributions and interest is greater than the actuarial present value of their vested deferred benefit.

Rates of Disability: None.

Active Member Group Size: Assumed to remain constant.

Future Benefit Increases or Additional Benefits: When funding is adequate, the Board may authorize cost of living adjustments (COLAs), as noted in the summary of plan provisions. In the past, the Board has also sometimes granted an additional monthly payment to retirees (13th check.) This valuation assumes that no future COLAs and no future 13th checks will be awarded.

MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption: All members are assumed to be married for purposes of death benefits. In each case, the male was assumed to be 4 years older than the female.

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

Administrative Expense: The actuarial contribution rate includes an explicit component for administrative expenses, based on the actual administrative expenses for the prior year.

Missing Gender: Records that are missing a gender are assumed to be female if the record belongs to a member, and male if the record belongs to a beneficiary.

APPENDIX D – ACTUARIAL COST METHOD AND ASSUMPTIONS

CHANGES FROM THE PRIOR VALUATION

There have been no changes to the System's actuarial methods or assumptions since the prior valuation.

APPENDIX E – GLOSSARY OF TERMS

Actuarial Accrued Liability	The difference between the actuarial present value of system benefits and the actuarial present value of future normal costs. Also referred to as "accrued liability" or "actuarial accrued 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 singe 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 a 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 valuation assets. Most retirement systems have unfunded actuarial accrued liability. They arise each time new benefits are added and each time an actuarial loss is realized.