



April 24, 2024

Mr. Jeff Templeton  
System Administrator  
Winter Park Police Officers' Retirement System  
9154 Lake Burkett Drive  
Orlando, Florida 32817

**Re: Projection Actuarial Valuation**

Dear Jeff:

As requested, we are pleased to enclose ten (10) copies of the October 1, 2023 Projection Actuarial Valuation Report for the City of Winter Park Police Officers' Retirement System.

We appreciate the opportunity to work with the Board on this important project and look forward to presenting the key financial results of our Projection Actuarial Valuation at the Board Meeting on May 2<sup>nd</sup>.

Upon Board approval of the Actuarial Valuation Report, we will upload an electronic copy of the Actuarial Valuation Report along with the required disclosure information to the State portal as required by the State.

If you should have any questions concerning the above, please do not hesitate to contact us.

Sincerest regards,  
Gabriel, Roeder, Smith & Company

A handwritten signature in black ink that reads "Michelle Jones". The signature is written in a cursive, flowing style.

Shelly L. Jones, A.S.A.  
Consultant and Actuary

Enclosures

# CITY OF WINTER PARK POLICE OFFICERS' RETIREMENT SYSTEM

## PROJECTION ACTUARIAL VALUATION AS OF OCTOBER 1, 2023

This Valuation Determines the Annual Contribution for the System Year October 1, 2024 through September 30, 2025 to be Paid in System Year October 1, 2024 to September 30, 2025

April 24, 2024





**City of Winter Park  
Police Officers' Retirement System**

**TABLE OF CONTENTS**

	<u>Page</u>
Transmittal Letter	1
Executive Summary	4
Risks Associated with Measuring the Accrued Liabilities and Actuarially Determined Contribution	6
Low-Default-Risk Obligation Measure	9
I. Summary of Retirement System Costs .....	10
II. Comparison of Cost Data of Current and Prior Valuations .....	12
III. Characteristics of Participants in Actuarial Valuation .....	13
IV. Statement of System Assets .....	14
V. Reconciliation of System Assets .....	15
VI. Development of Smoothed Value of Assets .....	16
VII. Funding Standard Account .....	17
VIII. Actuarial Gain / (Loss) for System Year .....	18
IX. Amortization of Unfunded Actuarial Accrued Liability .....	19
X. Accounting Disclosure Exhibit .....	20
XI. Outline of Principal Provisions of the Retirement System .....	29
XII. Actuarial Assumptions and Actuarial Cost Methods Used .....	33
XIII. Distribution of System Participants by Attained Age Groups and Service Groups .....	38
XIV. Statistics for Participants Entitled to Deferred Benefits and Participants Receiving Benefits .....	39
XV. Reconciliation of Employee Data .....	40
XVI. Projected Retirement Benefits .....	41
XVII. Summary of Transaction Information .....	42
XVIII. Recent Compensation, Termination and Investment Return Experience .....	43
XIX. Employer Contribution Information .....	44
XX. Thirty (30) Year Projections .....	45
XXI. State Required Exhibit .....	49
XXII. Glossary .....	53





April 24, 2024

Board of Trustees  
c/o Mr. Jeff Templeton, System Administrator  
Winter Park Police Officers' Retirement System  
9154 Lake Burkett Drive  
Orlando, Florida 32817

Dear Board of Trustees:

We are pleased to present our October 1, 2023 Projection Actuarial Valuation Report for the City of Winter Park Police Officers' Retirement System (System). The purpose of this report is to indicate appropriate contribution levels, monitor minimum funding requirements, comment on the actuarial stability of the System and to satisfy State and accounting requirements. Gabriel, Roeder, Smith & Company (GRS), as System actuary, is authorized to prepare an annual Actuarial Valuation under Section 74-204 paragraph 5(h) of the System. This report is prepared for and at the request of the Board of Trustees.

This report consists of this cover letter, executive summary, risk assessment and Low-Default-Risk Obligation Measure followed by detailed Tables I through XIX, thirty (30) year projections on Table XX, the State Required Exhibit on Table XXI and a Glossary on Table XXII. The Tables contain basic System cost figures plus significant details on the benefits, liabilities and experience of the System. We suggest you thoroughly review the report at your convenience and contact us with any questions that may arise.

The findings in this report are based on data or other information through September 30, 2023. The valuation was based upon information furnished by the City concerning System benefits, plan provisions, active members, terminated members, retirees and beneficiaries. We received financial information concerning System assets as of September 30, 2023 from the City.

We do not audit the Member census data and asset information that is provided to us; however, we perform certain reasonableness checks. The System is responsible for the accuracy of the data.

In our opinion the benefits provided for under the current System will be sufficiently funded through the payment of the amount as indicated in this and future Actuarial Valuation reports. This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed. We will continue to update you on the future payment requirements for the System through our actuarial valuation reports. These reports will also continue to monitor emerging experience of the System.

The actuarial assumptions used in this Actuarial Valuation are as adopted by the Board of Trustees. The economic and demographic actuarial assumptions are based on the results of an actuarial Experience Study for the period October 1, 2017 – September 30, 2022. The mortality assumptions are prescribed by statute. Each assumption represents an estimate of future System experience. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. The combined effect of the assumptions is expected to have no significant bias (i.e. not significantly optimistic or pessimistic). All actuarial assumptions and methods used in the valuation follow the guidance in the applicable Actuarial Standards of Practice.

If all actuarial assumptions are met and if all future minimum required contributions are paid, System assets will be sufficient to pay all System benefits, future contributions are expected to remain relatively stable as a percent of payroll and the funded status is expected to improve. System minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act and Police Officers Retirement Chapter 185 with normal cost determined as a level percent of covered payroll and a level percent amortization payment using an initial amortization period of 20 years.

The Unfunded Actuarial Accrued Liability (UAAL) may not be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions. The UAAL would be different if it reflected the market value of assets rather than the actuarial value of assets.

The GASB Net Pension Liability and System Fiduciary Net Position as a Percentage of Total Pension Liability may not be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

The Funded Ratios shown in Table II and Table XX may not be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions. This ratio is based on a smoothed value of assets and would be different if based on market value of assets.

This report should not be relied upon for any purpose other than the purpose described in the primary communication. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

This report was prepared using both our proprietary valuation model and related software and ProVal's valuation model, a software product of Winklevoss Technologies. We performed tests to ensure that our proprietary valuation model reasonably represents that which is intended to be modeled. We are also relying on the ProVal model. We performed tests of the ProVal model with this



assignment and made a reasonable attempt to understand the developer's intended purpose of, general operation of, major sensitivities and dependencies within, and key strengths and limitations of the ProVal model. In our professional judgment, both our proprietary valuation model and related software and the ProVal valuation model have the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the System as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

This report was prepared at the request of the Board and is intended for use by the Board and those designated or approved by the Board. This report may be provided to parties other than the Board only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The signing actuaries are independent of the System sponsor.

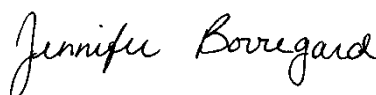
The undersigned are Members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. We are available to respond to any questions with regards to matters covered in this report.

Sincerely,  
Gabriel, Roeder, Smith & Company



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Shelly L. Jones, A.S.A., E.A., C.F.A.  
Consultant and Actuary



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Jennifer M. Borregard, E.A.  
Consultant and Actuary



# EXECUTIVE SUMMARY

## Retirement System Costs

Our Projection Actuarial Valuation develops the required minimum Retirement System payment for the System year beginning October 1, 2024 under the Florida Protection of Public Employee Retirement Benefits Act and Chapter 185. The minimum payment consists of payment of annual normal costs including administrative expenses and amortization of the components of the unfunded actuarial accrued liability over various periods as prescribed by law. The minimum payment is **\$3,305,658 (49.2%)**. The figure in parentheses is the System cost expressed as a percentage of projected covered annual payroll for fiscal year beginning October 1, 2024 (\$6,716,901).

This total cost is to be met by Member, City and State contributions. We anticipate Member contributions will be **\$403,014 (6.0%)** and allowable State contributions will be **\$398,621 (5.9%)**. This leaves a City requirement of **\$2,504,023 (37.3%)**. The City contribution includes an interest adjustment and must be increased if total State contributions are less than expected (\$528,654).

We have allocated expected State contributions as provided under Subsection 2 of Ordinance Section 74-205 ... *all annual premium tax revenues up to the 2012 amount (\$268,589.00) shall be used to offset the City's annual contribution to the Fund; and annual premium tax revenues in excess of \$268,589.00 shall divided (sic) in half, with one-half of the excess used to offset the City's annual contribution to the Fund, and one-half of the excess used to fund the share plan ....* This may not be ... *the statutory default provisions of Chapter 185 premium tax revenues in Section 185.35, F.S.* referenced under Subsection 2 of Ordinance Section 74-205.

## Changes in System Benefits, Actuarial Assumptions and Methods

The System benefits impacting calculations are unchanged from the October 1, 2022 Actuarial Valuation. System benefits are summarized on Table XI.

The salary increase factors, retirement rates and withdrawal rates were updated based upon the results of the Experience Study for the five-year period ended September 30, 2022 approved by the Board. The remaining actuarial assumptions and methods are unchanged from the October 1, 2022 Actuarial Valuation. The actuarial assumptions and methods are outlined on Table XII.

## Comparison of October 1, 2022 and October 1, 2023 Valuation Results

Table II of our report provides information of a comparative nature. The left columns of the Table indicate the costs as calculated for the October 1, 2022 Actuarial Valuation. The center columns indicate the costs as of the October 1, 2023 Actuarial Valuation prior to assumption changes. The right columns indicate the costs as of the October 1, 2023 Actuarial Valuation after assumption changes.

Comparing the left and center columns of Table II shows the effect of System experience during the year. The number of active participants decreased by approximately 3% while covered payroll increased by approximately 6%. Total System membership remained level. Total normal cost and net





City cost both increased as a dollar amount but decreased as a percentage of covered payroll. The unfunded actuarial accrued liability increased both as a dollar amount and as a percentage of covered payroll.

Comparing the center and right columns of Table II shows the effect of the assumption changes. Total normal cost, the unfunded actuarial accrued liability and the net City cost all increased as both a dollar amount and as a percentage of covered payroll.

The present value of vested accrued benefits exceeds the market value of System assets. The Vested Benefit Security Ratio is 87.8% (87.6% prior to assumption changes). This is an increase from 85.3% as of October 1, 2022. The Vested Benefit Security Ratio is based upon the market value of System assets.

### System Experience

Table VIII indicates net System experience resulted in an actuarial loss of \$3,095,182. This suggests actual overall experience was less favorable than expected.

Table XVIII provides figures on recent System experience (salary, turnover and investment yield). The salary experience indicates actual salary increases averaged approximately 11.8%. The average salary increase assumption was 4.5% (prior assumption). Salary experience was generally a source of actuarial loss. The three, five and ten-year average salary increases are 7.0%, 7.3% and 6.5%, respectively.

Employee turnover this year was approximately 80% of the assumed turnover and was an additional source of actuarial loss. Three, five and ten-year turnover is 30%, 70% and 80% of the assumed turnover, respectively.

The smoothed value investment return of 4.26% was less than the 7.50% assumption for investment return. The smoothed value investment return was an additional source of actuarial loss during the year. The three, five and ten-year average annual smoothed value investment returns are 6.40%, 6.94% and 7.31%, respectively. The one, three, five and ten-year average annual market value returns are 8.70%, 3.84%, 4.85% and 6.00%, respectively.

### Conclusion and Recommendations

The Market Value of Assets is less than the Actuarial Value of Assets by \$5,311,082 as of the valuation date. This difference will be gradually recognized in the absence of future offsetting gains. In turn, the actuarially determined contribution rate will increase.

The remainder of this Report includes detailed actuarial valuation results, information relating to the pension fund, financial accounting information, miscellaneous employee data and a summary of plan provisions and actuarial assumptions and methods.

## RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITIES AND ACTUARIALY DETERMINED CONTRIBUTION

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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

Examples of risk that may reasonably be anticipated to significantly affect the system's future financial condition include:

1. Investment risk – actual investment returns may differ from expected returns;
2. Asset / Liability mismatch – changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and the actuarially determined contribution requirements;
3. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the System's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll or other relevant contribution base;
4. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and the actuarially determined contributions differing from expected;
5. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
6. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and the actuarially determined contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the actuarially determined contribution can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in the actuarially determined contribution can be anticipated.

The actuarially determined contribution rate shown on page four may be considered as a minimum contribution rate that complies with the Board’s funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the System. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

### System Maturity Measures

Risks facing a pension system evolve over time. A young system with virtually no investments and paying few benefits may experience little investment risk. An older system with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted system maturity measures include the following:

	<u>2022</u>	<u>2023</u>
Ratio of the market value of assets to payroll	9.60	9.62
Ratio of actuarial accrued liability to payroll	12.48	12.43
Ratio of actives to retirees and beneficiaries	0.91	0.87
Ratio of net cash flow to market value of assets	-0.6%	-2.6%
Duration of the actuarial accrued liability	13.19	13.18

### Ratio of Market Value of Assets to Payroll

The relationship between assets and payroll is a useful indicator of the potential volatility of the actuarially determined contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in the actuarially determined contributions as a percentage of payroll.

### Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of the actuarially determined contributions for a fully funded system. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also the actuarially determined contributions) as a percentage of payroll.

### **Ratio of Actives to Retirees and Beneficiaries**

A young system with many active members and few retirees will have a high ratio of active to retirees. A mature open system may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed system may have significantly more retirees than actives resulting in a ratio below 1.0.

### **Ratio of Net Cash Flow to Market Value of Assets**

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature system or a need for additional contributions.

### **Duration of Actuarial Accrued Liability**

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, a duration of 10 indicates the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

### **Additional Risk Assessment**

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

## LOW-DEFAULT-RISK OBLIGATION MEASURE

Actuarial Standards of Practice No. 4 (ASOP No. 4) was revised and reissued in December 2021 by the Actuarial Standards Board (ASB). It includes a new calculation called a low-default-risk obligation measure (LDROM) to be prepared and issued annually for defined benefit pension plans. The transmittal memorandum for ASOP No. 4 includes the following explanation:

*“The ASB believes that the calculation and disclosure of this measure provides appropriate, useful information for the intended user regarding the funded status of a pension plan. The calculation and disclosure of this additional measure is not intended to suggest that this is the “right” liability measure for a pension plan. However, the ASB does believe that this additional disclosure provides a more complete assessment of a plan’s funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date.”*

The following information has been prepared in compliance with this new requirement. Unless otherwise noted, the measurement date, actuarial cost methods, and assumptions used are the same as for the funding valuation covered in this actuarial valuation report.

- A. Low-default-risk Obligation Measure of benefits earned as of the measurement date: \$118,059,601
- B. Discount rate used to calculate the LDROM: 4.63% based on Fidelity’s “20-Year Municipal GO AA Index” as of September 29, 2023
- C. Other significant assumptions that differ from those used for the funding valuation: None
- D. Actuarial cost method used to calculate the LDROM: Entry Age Normal
- E. Valuation procedures to value any significant plan provisions that are difficult to measure using traditional valuation procedures, and that differ from the procedures used in the funding valuation: None
- F. Commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits: The LDROM is a market-based measurement of the pension obligation. It estimates the amount the plan would need to invest in low default risk securities. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan’s benefit obligation.

The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on the risk in a diversified portfolio.

## Summary of Retirement System Costs as of October 1, 2023

	Prior Assumptions		Current Assumptions	
	Cost Data	% of Payroll	Cost Data	% of Payroll
A. Participant Data Summary (Table III)				
1. Active employees	76	N/A	76	N/A
2. Terminated vested	4	N/A	4	N/A
3. Receiving benefits (including DROPs)	87	N/A	87	N/A
4. Annual payroll of active employees	\$ 6,489,759	100.0%	\$ 6,489,759	100.0%
B. Total Normal Costs				
1. Age retirement benefits	\$ 1,193,422	18.4%	\$ 1,346,270	20.7%
2. Termination benefits	178,782	2.8%	173,057	2.7%
3. Death benefits	27,509	0.4%	28,619	0.4%
4. Disability benefits	76,264	1.2%	75,522	1.2%
5. Estimated expenses	145,610	2.2%	145,610	2.2%
6. Total annual normal costs	\$ 1,621,587	25.0%	\$ 1,769,078	27.3%
C. Total Actuarial Accrued Liability				
1. Age retirement benefits active employees	\$ 25,155,763	387.6%	\$ 25,404,959	391.5%
2. Termination benefits active employees	680,738	10.5%	600,217	9.2%
3. Death benefits active employees	155,133	2.4%	163,946	2.5%
4. Disability benefits active employees	46,624	0.7%	43,666	0.7%
5. Retired or terminated vested participants receiving benefits including DROPs	49,456,462	762.1%	49,456,462	762.1%
6. Terminated vested participants entitled to future benefits	853,368	13.1%	853,368	13.1%
7. Deceased participants whose beneficiaries are receiving benefits	2,144,589	33.0%	2,144,589	33.0%
8. Disabled participants receiving benefits	1,636,952	25.2%	1,636,952	25.2%
9. Miscellaneous liability	49,287	0.8%	49,287	0.8%
10. Share Plan liability	314,236	4.8%	314,236	4.8%
11. Total actuarial accrued liability	\$ 80,493,152	1240.3%	\$ 80,667,682	1243.0%
D. Smoothed Value of Assets (Table VI)	\$ 67,735,403	1043.7%	\$ 67,735,403	1043.7%
E. Unfunded Actuarial Accrued Liability (C-D)	\$ 12,757,749	196.6%	\$ 12,932,279	199.3%

Summary of Retirement System Costs as of October 1, 2023

	Prior Assumptions		Current Assumptions	
	Cost Data	% of Payroll	Cost Data	% of Payroll
F. Minimum Required Contribution				
1. Total normal cost	\$ 1,621,587	25.0%	\$ 1,769,078	27.3%
2. Amortization of unfunded liability	1,294,210	19.9%	1,306,427	20.1%
3. Interest adjustment	112,595	1.7%	118,367	1.8%
4. Total required contribution	\$ 3,028,392	46.7%	\$ 3,193,872	49.2%
G. Expected payroll of active employees for 2024 / 2025 year (\$6,489,759 x 1.035)	\$ 6,716,901	103.5%	\$ 6,716,901	103.5%
H. Contribution Sources (percent of expected 2024 / 2025 payroll)				
1. Expected City	\$ 2,332,751	34.7%	\$ 2,504,023	37.3%
2. Expected State	398,621	5.9%	398,621	5.9%
3. Expected Member	403,014	6.0%	403,014	6.0%
4. Total required contribution	\$ 3,134,386	46.7%	\$ 3,305,658	49.2%
I. Actuarial Gains / (Losses) (Table VIII)	\$ (3,095,182)	(47.7%)	\$ (3,095,182)	(47.7%)
J. Actuarial Present Value of Vested Accrued Benefits				
1. Retired, terminated vested, beneficiaries and disabled receiving benefits including DROPs	\$ 53,238,003	820.3%	\$ 53,238,003	820.3%
2. Terminated vested participants entitled to future benefits, miscellaneous and Share Plan	1,216,891	18.8%	1,216,891	18.8%
3. Active participants entitled to future benefits	16,822,730	259.2%	16,610,503	255.9%
4. Total actuarial present value of vested accrued benefits	\$ 71,277,624	1098.3%	\$ 71,065,397	1095.0%
K. Market Value of Assets (Table V)	\$ 62,424,321	961.9%	\$ 62,424,321	961.9%
L. Unfunded Actuarial Present Value of Vested Accrued Benefits (J. - K., not less than zero)	\$ 8,853,303	136.4%	\$ 8,641,076	133.1%
M. Vested Benefit Security Ratio (K. ÷ J.)	87.6%	N/A	87.8%	N/A

## Comparison of Cost Data of October 1, 2022 and October 1, 2023 Valuations

	October 1, 2022		Prior Assumptions October 1, 2023		Current Assumptions October 1, 2023	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants						
1. Active employees	78	N/A	76	N/A	76	N/A
2. Terminated vested	3	N/A	4	N/A	4	N/A
3. Receiving benefits (including DROPs)	86	N/A	87	N/A	87	N/A
4. Annual payroll of active employees	\$ 6,139,863	100.0%	\$ 6,489,759	100.0%	\$ 6,489,759	100.0%
B. Total Normal Costs	\$ 1,613,690	26.3%	\$ 1,621,587	25.0%	\$ 1,769,078	27.3%
C. Total Actuarial Accrued Liability	\$ 76,624,651	1248.0%	\$ 80,493,152	1240.3%	\$ 80,667,682	1243.0%
D. Smoothed Value of Assets	\$ 66,498,477	1083.1%	\$ 67,735,403	1043.7%	\$ 67,735,403	1043.7%
E. Unfunded Actuarial Accrued Liability	\$ 10,126,174	164.9%	\$ 12,757,749	196.6%	\$ 12,932,279	199.3%
F. Net City Cost	\$ 2,224,395	35.0% <sup>1</sup>	\$ 2,332,751	34.7% <sup>2</sup>	\$ 2,504,023	37.3% <sup>2</sup>
G. Actuarial Gain / (Loss)	\$ (1,678,447)	(27.3%)	\$ (3,095,182)	(47.7%)	\$ (3,095,182)	(47.7%)
H. Unfunded Actuarial Present Value of Vested Accrued Benefits	\$ 10,127,911	165.0%	\$ 8,853,303	136.4%	\$ 8,641,076	133.1%
I. Vested Benefit Security Ratio	85.3%	N/A	87.6%	N/A	87.8%	N/A
J. Funded Ratio (D. / C.)	86.8%	N/A	84.2%	N/A	84.0%	N/A

<sup>1</sup> Percent of expected 2023 / 2024 covered payroll (\$6,354,758)

<sup>2</sup> Percent of expected 2024 / 2025 covered payroll (\$6,716,901)



**Characteristics of Participants in  
Actuarial Valuation as of October 1, 2023**

A. Active System Participants Summary

1. Active participants fully vested	32
2. Active participants partially vested	0
3. Active participants non-vested	44
4. Total active participants	76
5. Annual rate of pay of active participants	\$ 6,489,759

B. Retired and Terminated Vested Participant Summary

1. Retired or terminated vested participants receiving benefits including DROP participants	74
2. Terminated vested participants entitled to future benefits	4
3. Deceased participants whose beneficiaries are receiving benefits	7
4. Disabled participants receiving benefits	6

C. Projected Annual Retirement Benefits

1. Retired or terminated vested receiving benefits including DROP participants	\$ 3,578,289
2. Terminated vested entitled to future benefits	103,364
3. Beneficiaries of deceased participants	198,316
4. Disabled participants	157,657

Table IV

## Statement of System Assets as of October 1, 2023

	<u>Cost Value</u>	<u>Market Value</u>
A. <u>Cash and cash equivalents</u>	\$ 5,468,853	\$ 5,468,853
B. <u>General Investments</u>		
1. U.S. Government obligations	\$ 1	\$ 4
2. Corporate bonds	0	0
3. Fixed income funds	11,966,227	10,059,284
4. Common stocks	29,303,600	38,290,090
5. Commingled funds	0	0
6. Real estate	6,737,112	8,186,542
7. Accrued income	30,824	30,824
C. <u>Receivables</u>		
1. Employee Contribution	0	0
2. State Contribution	0	0
3. Other	345,012	393,060
D. <u>Payables</u>	<u>4,336</u>	<u>4,336</u>
E. <u>Total Fund Assets</u> (A + B + C - D)	\$ 53,847,293	\$ 62,424,321
F. <u>Credit Balance</u>	<u>0</u>	<u>0</u>
G. <u>Net Fund Assets</u> (E - F)	\$ 53,847,293	\$ 62,424,321

## Reconciliation of System Assets

A. <u>Total Market Value of Assets as of October 1, 2022</u>		\$	58,924,322
B. <u>Receipts During Period</u>			
1. Contributions			
a. Employee	\$	439,283	
b. City		2,093,694	
c. State		528,654	
d. Total	\$	<u>3,061,631</u>	
2. Investment Income			
a. Interest, dividends and other	\$	1,347,364	
b. Investment expenses		(221,034)	
c. Net investment income	\$	<u>1,126,330</u>	
3. Realized gains / (losses)		165,172	
4. Unrealized gains / (losses)		<u>3,769,347</u>	
5. Total receipts during period			\$ 8,122,480
C. <u>Disbursements During Period</u>			
1. Pension payments	\$	3,534,704	
2. DROP distributions		899,336	
3. Share plan distribution		12,820	
4. Contribution refunds		30,011	
5. Administrative expenses		145,610	
6. Total disbursements during period			\$ <u>4,622,481</u>
D. <u>Total Market Value of Assets as of September 30, 2023</u>		\$	62,424,321
E. <u>Credit Balance</u>		\$	0
F. <u>Net Market Value of Assets as of September 30, 2023</u> (D - E)		\$	62,424,321
G. <u>Reconciliation of DROP Account Balances</u>			
1. DROP account balances as of October 1, 2022		\$	785,032
2. Benefit payments into DROP accounts			89,465
3. Investment gains / (losses)			28,160
4. Administrative expenses			(3,321)
5. Distributions from DROP accounts			(899,336)
6. DROP account balances as of September 30, 2023		\$	<u>0</u>
H. <u>Share Plan</u>			
1. Balances as of October 1, 2022		\$	186,049
2. Increase from State funds received			130,033
3. Investment credits			15,071
4. Administrative fees			(4,097)
5. Distributions			(12,820)
6. Balances as of September 30, 2023		\$	<u>314,236</u>

## Development of Smoothed Value of Assets as of September 30

	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
A. Preliminary total smoothed value from prior year	\$ 63,895,915	\$ 66,498,477	\$ 67,735,403		
B. Market value beginning of year	69,770,663	58,924,322	62,424,321		
C. Market value end of year	58,924,322	62,424,321			
D. Non-investment net cash flow	(411,681)	(1,560,850)			
E. Investment return					
1. Total market value return: C. - B. - D.	(10,434,660)	5,060,849			
2. Amount for immediate recognition (7.50%)	5,217,362	4,360,792			
3. Amount for phased-in recognition: E.1. - E.2.	(15,652,022)	700,057			
F. Phased-in recognition of investment return:					
1. Current year: 25% of E.3.	(3,913,006)	175,014			
2. First prior year	1,989,886	(3,913,006)	175,014		
3. Second prior year	185,090	1,989,886	(3,913,006)	175,014	
4. Third prior year	(465,089)	185,090	1,989,885	(3,913,004)	175,015
5. Total phased-in recognition of investment return	(2,203,119)	(1,563,016)	(1,748,107)	(3,737,990)	175,015
G. Total smoothed value end of year					
1. Preliminary total smoothed value end of year:					
A. + D. + E.2. + F.5.	66,498,477	67,735,403			
2. Upper corridor limit: 120% of C.	70,709,186	74,909,185			
3. Lower corridor limit: 80% of C.	47,139,458	49,939,457			
4. Total smoothed value end of year:					
G.1., not more than G.2., nor less than G.3.	66,498,477	67,735,403			
H. Difference between total market value and total smoothed value	(7,574,155)	(5,311,082)			
I. Smoothed value rate of return	4.73%	4.26%			
J. Market value rate of return	(15.00%)	8.70%			
K. Credit balance	0	0			
L. Net smoothed value of assets	66,498,477	67,735,403			

Table VII

**Funding Standard Account for  
System Year Ended September 30, 2023**

A. Charges to the Funding Standard Account

1. Prior year funding deficiency	\$ 0
2. City / State normal cost	1,166,510
3. Net amortization charges (outstanding balance: \$9,708,046)	1,221,027
4. Interest charge	<u>104,778</u>
5. Total employer charges	\$ 2,492,315

B. Credits to the Funding Standard Account

1. Prior year credit balance	\$ 0
2. Net State contribution	398,621
3. City contributions	<u>2,093,694</u>
4. Total credits	\$ 2,492,315

C. Credit Balance / (Funding Deficiency)  
(B.4. - A.5.)

\$ 0

**Actuarial Gains / (Losses) for  
System Year Ended September 30, 2023 \***

**A. Derivation of Actuarial Gain / (Loss)**

1. City and State net normal cost previous actuarial valuation	\$ 1,245,299
2. Unfunded actuarial accrued liability previous actuarial valuation	10,126,174
3. Net City and State contributions previous year	2,492,315
4. Interest on:	
(a) City and State net normal cost	\$ 93,397
(b) Unfunded actuarial accrued liability	759,463
(c) Net City and State contributions	69,451
(d) Net total: (a) + (b) - (c)	<u>\$ 783,409</u>
5. Increase / (decrease) in unfunded actuarial accrued liability due to assumptions change	\$ 174,530
6. Expected unfunded actuarial accrued liability current year: (1. + 2. - 3. + 4. + 5.)	\$ 9,837,097
7. Actual unfunded actuarial accrued liability current year	<u>12,932,279</u>
8. Actuarial gain / (loss): (6. - 7.)	\$ (3,095,182)

**B. Approximate Portion of Gain / (Loss)  
due to Investments**

1. Smoothed value of net assets previous year	\$ 66,312,428
2. Net contributions during period	2,931,598
3. Benefits and admin expenses during period	4,609,661
4. Expected net appreciation for period	<u>4,910,505</u>
5. Expected smoothed value of net assets current year: (1. + 2. - 3. + 4.)	\$ 69,544,870
6. Actual smoothed value of net assets current year	\$ 67,421,167
7. Approximate gain / (loss) due to investments: (6. - 5.)	\$ (2,123,703)

**C. Approximate Portion of Gain / (Loss)  
due to Liabilities: A. - B.**

\$ (971,479)

\* Net of Share Plan

### Amortization of Unfunded Actuarial Accrued Liability

#### A. Actuarial Accrued Liability Remaining Unfunded

<u>Date</u>	<u>Unfunded Liability</u>	<u>Amortization Payment</u>
October 1, 2023	\$ 12,932,279	\$ 1,306,427
October 1, 2024	\$ 12,497,791	\$ 1,352,152
October 1, 2025	\$ 11,981,562	\$ 1,399,477
October 1, 2026	\$ 11,375,741	\$ 1,448,459
October 1, 2027	\$ 10,671,828	\$ 1,499,155
...		
...		
October 1, 2043	\$ 0	\$ 0

#### B. Covered Payroll History

<u>Date</u>	<u>Covered Payroll *</u>	<u>Annual Increase</u>
October 1, 2023	\$ 6,489,759	5.7%
October 1, 2022	\$ 6,139,863	10.4%
October 1, 2021	\$ 5,561,786	17.9%
October 1, 2020	\$ 4,715,886	(0.7%)
October 1, 2019	\$ 4,750,916	(0.4%)
October 1, 2018	\$ 4,771,205	7.9%
October 1, 2017	\$ 4,423,901	(2.0%)
October 1, 2016	\$ 4,516,252	5.4%
October 1, 2015	\$ 4,286,032	4.6%
October 1, 2014	\$ 4,096,704	5.1%
October 1, 2013	\$ 3,898,445	N/A
Ten-Year Average Annual Increase		5.2%

\* Excludes DROP payroll

## Accounting Disclosure Exhibit

	<u>10/01/2022</u>	<u>Prior Assumptions 10/01/2023</u>	<u>Current Assumptions 10/01/2023</u>
<b>I. <u>Number of System Members</u></b>			
a. Receiving benefits including DROPs	86	87	87
b. Terminated due deferred benefits	3	4	4
c. Active System members	78	76	76
d. Total	<u>167</u>	<u>167</u>	<u>167</u>
<b>II. <u>Financial Accounting Standards Board Allocation</u> <u>As of October 1, 2023</u></b>			
<b>A. <u>Statement of Accumulated System Benefits</u></b>			
1. Actuarial present value of accumulated vested System benefits			
a. Participants currently receiving benefits including DROP participants	\$ 51,951,022	\$ 53,238,003	\$ 53,238,003
b. Other participants (including Share Plan liability)	<u>17,101,211</u>	<u>18,039,621</u>	<u>17,827,394</u>
c. Total	\$ 69,052,233	\$ 71,277,624	\$ 71,065,397
2. Actuarial present value of accumulated non-vested System benefits	<u>\$ 1,317,205</u>	<u>\$ 1,645,050</u>	<u>\$ 1,626,657</u>
3. Total actuarial present value of accumulated System benefits	\$ 70,369,438	\$ 72,922,674	\$ 72,692,054
<b>B. <u>Statement of Change in Accumulated System Benefits</u></b>			
1. Actuarial present value of accumulated System benefits as of October 1, 2022			\$ 70,369,438
2. Increase (decrease) during year attributable to:			
a. System amendment			\$ 0
b. Change in actuarial assumptions			(230,620)
c. Benefits paid including refunds and DROP and Share Plan distributions			(4,476,871)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period			<u>7,030,107</u>
e. Net increase			\$ 2,322,616
3. Actuarial present value of accumulated System benefits as of October 1, 2023			\$ 72,692,054
<b>C. <u>Significant Matters Affecting Calculations</u></b>			
1. Assumed rate of return used in determining actuarial present values			7.50%
2. Change in System provisions			None affecting calculations.
3. Change in actuarial assumptions			See Table XII, Item M.



Accounting Disclosure Exhibit

III. Net Pension Liability and Related Ratios (GASB No. 67 & No. 68)

Measurement date	9/30/2014	9/30/2015	9/30/2016	9/30/2017	9/30/2018	9/30/2019	9/30/2020	9/30/2021	9/30/2022	9/30/2023	Projected 9/30/2024 *
<b>A. Total Pension Liability (TPL)</b>											
Service Cost	\$ 762,017	\$ 801,632	\$ 846,677	\$ 890,921	\$ 876,049	\$ 1,102,086	\$ 1,094,524	\$ 1,087,823	\$ 1,311,276	\$ 1,465,199	\$ 1,623,468
Interest	4,089,843	4,168,995	4,312,101	4,545,149	4,679,934	4,939,154	5,023,560	5,241,956	5,437,166	5,690,454	6,020,381
Benefit Changes	0	0	0	0	0	325,964	0	0	0	(11,644)	0
Difference Between Actual and Expected Experience	93,720	(663,298)	460,466	992,298	(395,301)	695,352	293,358	685,484	950,543	309,181	1,067,451
Assumption Changes	1,413,198	0	0	237,311	0	2,119,415	(1,806,968)	0	0	0	174,530
Benefit Payments, including											
including Refunds of Member Contributions	(2,963,743)	(3,449,577)	(3,780,341)	(3,078,241)	(3,511,348)	(3,311,451)	(3,466,919)	(4,601,043)	(3,959,451)	(4,476,871)	(4,038,811)
Net Change in Total Pension Liability	\$ 3,395,035	\$ 857,752	\$ 1,838,903	\$ 3,587,438	\$ 1,649,334	\$ 5,870,520	\$ 1,137,555	\$ 2,414,220	\$ 3,739,534	\$ 2,976,319	\$ 4,847,019
Total Pension Liability (TPL) - (beginning of year)	51,959,091	55,354,126	56,211,878	58,050,781	61,638,219	63,287,553	69,158,073	70,295,628	72,709,848	76,449,382	79,425,701
Total Pension Liability (TPL) - (end of year)	\$ 55,354,126	\$ 56,211,878	\$ 58,050,781	\$ 61,638,219	\$ 63,287,553	\$ 69,158,073	\$ 70,295,628	\$ 72,709,848	\$ 76,449,382	\$ 79,425,701	\$ 84,272,720
<b>B. System Fiduciary Net Position</b>											
Contributions - City and State	\$ 2,261,252	\$ 2,355,980	\$ 2,248,187	\$ 2,308,411	\$ 2,537,741	\$ 2,646,295	\$ 3,187,671	\$ 3,121,763	\$ 3,178,322	\$ 2,622,348	\$ 2,560,896
Contributions - Member	240,151	258,906	276,662	273,397	340,784	303,060	326,320	345,566	517,939	439,283	389,386
Net Investment Income	4,077,752	(1,108,385)	4,078,032	5,164,758	3,684,582	2,056,605	4,790,382	12,317,016	(10,434,660)	5,060,849	4,635,544
Benefit Payments, including											
including Refunds of Member Contributions	(2,963,743)	(3,449,577)	(3,780,341)	(3,078,241)	(3,511,348)	(3,311,451)	(3,466,919)	(4,601,043)	(3,959,451)	(4,476,871)	(4,038,811)
Administrative Expenses	(67,201)	(93,432)	(113,629)	(80,671)	(141,577)	(112,798)	(137,159)	(158,274)	(148,491)	(145,610)	(145,610)
Other	0	0	0	0	0	0	0	0	0	0	0
Net Change in System Fiduciary Net Position	\$ 3,548,211	\$ (2,036,508)	\$ 2,708,911	\$ 4,587,654	\$ 2,910,182	\$ 1,581,711	\$ 4,700,295	\$ 11,025,028	\$ (10,846,341)	\$ 3,499,999	\$ 3,401,405
System Fiduciary Net Position - (beginning of year)	40,745,179	44,293,390	42,256,882	44,965,793	49,553,447	52,463,629	54,045,340	58,745,635	69,770,663	58,924,322	62,424,321
System Fiduciary Net Position - (end of year)	\$ 44,293,390	\$ 42,256,882	\$ 44,965,793	\$ 49,553,447	\$ 52,463,629	\$ 54,045,340	\$ 58,745,635	\$ 69,770,663	\$ 58,924,322	\$ 62,424,321	\$ 65,825,726
<b>C. Net Pension Liability (NPL) - (end of year): (A) - (B)</b>	\$ 11,060,736	\$ 13,954,996	\$ 13,084,988	\$ 12,084,772	\$ 10,823,924	\$ 15,112,733	\$ 11,549,993	\$ 2,939,185	\$ 17,525,060	\$ 17,001,380	\$ 18,446,994
<b>D. System Fiduciary Net Position as Percentage of TPL: (B)/(A)</b>	80.02 %	75.17 %	77.46 %	80.39 %	82.90 %	78.15 %	83.57 %	95.96 %	77.08 %	78.59 %	78.11 %
<b>E. Covered Employee Payroll **</b>	\$ 3,999,782	\$ 4,315,097	\$ 4,611,032	\$ 4,556,618	\$ 4,831,702	\$ 5,050,992	\$ 4,993,075	\$ 5,244,887	\$ 6,019,085	\$ 6,692,443	\$ 6,489,759
<b>F. NPL as a Percentage of Covered Employee Payroll: (C) / (E)</b>	276.53 %	323.40 %	283.78 %	265.21 %	224.02 %	299.20 %	231.32 %	56.04 %	291.16 %	254.04 %	284.25 %
<b>G. Notes to Schedule:</b>											
Valuation Date	10/1/2013	10/1/2014	10/1/2015	10/1/2016	10/1/2017	10/1/2018	10/1/2019	10/1/2020	10/1/2021	10/1/2022	10/1/2023
Reporting Date	9/30/2015	9/30/2016	9/30/2017	9/30/2018	9/30/2019	9/30/2020	9/30/2021	9/30/2022	9/30/2023	9/30/2024	9/30/2025

Update procedures used to roll forward TPL excluding DROP account balances and Share Plan to the measurement dates - actual DROP account balances and Share Plan as of measurement dates included in TPL.  
See Table X, Item V. for benefit and assumption changes during the years. For measurement date September 30, 2024 - salary increase factors, retirement rates and withdrawal rates updated.

\* Projected - actual amounts will be available after fiscal year end.

\*\* Reported payroll on which contributions to the System are based as provided under GASB No. 82.



**Accounting Disclosure Exhibit**

**IV. Schedule of Employer Contributions (GASB No. 67 & No. 68)**

<u>Fiscal Year End 9/30</u>	<u>Actuarially Determined Contribution<sup>1</sup></u>	<u>Actual Contribution<sup>1</sup></u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll<sup>2</sup></u>	<u>Actual Contribution as a % of Covered Payroll</u>
2014	\$ 2,261,252	\$ 2,261,252	\$ 0	\$ 3,999,782	56.53%
2015	2,355,980	2,355,980	0	4,315,097	54.60%
2016	2,248,187	2,248,187	0	4,611,032	48.76%
2017	2,308,411	2,308,411	0	4,556,618	50.66%
2018	2,537,741	2,537,741	0	4,831,702	52.52%
2019	2,646,295	2,646,295	0	5,050,992	52.39%
2020	3,187,671	3,187,671	0	4,993,075	63.84%
2021	3,121,763	3,121,763	0	5,244,887	59.52%
2022	3,178,322	3,178,322	0	6,019,085	52.80%
2023	2,622,348	2,622,348	0	6,692,443	39.18%
2024 <sup>3</sup>	2,560,896	2,560,896	0	6,489,759	39.46%

<sup>1</sup> Includes Share Plan effective fiscal year ended September 30, 2019

<sup>2</sup> Reported payroll on which contributions to the System are based as provided under GASB No. 82

<sup>3</sup> Projected - actual amounts will be available after fiscal year end

Accounting Disclosure Exhibit

V. Notes to Schedule of Contributions (GASB No. 67 & No. 68)

**Valuation Date:** Actuarially determined contributions are calculated as of October 1st - two years prior the fiscal year end in which contributions are reported.

**Methods and Assumptions Used to Determine Contribution Rates for Fiscal Year Ended September 30, 2024:**

Actuarial Cost Method	Entry Age
Amortization Method	Level percent of pay, Closed
Amortization Period	20 years
Asset Valuation Method	4-year smoothed market
Inflation	2.75%
Salary Increases	3.50% - 5.25%
Investment Rate of Return	7.50%
Payroll Growth Assumption	3.5% per annum - not greater than historical 10-year average (4.2%) but not less than 0.0%.
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition
Mortality	For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.  For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.  For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, without projected mortality improvements.

**Cost of Living Adjustment** 3.00%

**Benefit Changes**

2022: Service incurred death benefit updated. 2018: Termination benefits updated.

**Assumption Changes**

2019: Mortality assumption updated. 2018: Investment return, salary increase factors and retirement rates updated. 2016: Mortality assumption updated. 2013: Investment return, withdrawal rates, salary increases and retirement ages updated.

Accounting Disclosure Exhibit

VI. Discount Rate (GASB No. 67 & No. 68)

A discount rate of 7.50% was used to measure the TPL as of September 30, 2023 and September 30, 2024. This discount rate was based on the expected rate of return on System investments of 7.50%. The projection of cash flows used to determine this discount rate assumed member contributions will be made at the current member contribution rate and employer contributions will be made at rate equal to the difference between actuarially determined current contribution rates and the member contribution rate. Based on these assumptions, the System's fiduciary net position was projected to be available to make all projected future expected benefit payments of current System members. Therefore, the long-term expected rate of return on System investments was applied to all periods of projected benefit payments to determine the TPL.

VII. Sensitivity of the NPL to the Discount Rate Assumption (GASB No. 67 & No. 68)

Measurement date: September 30, 2023

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	6.50%	7.50%	8.50%
NPL	\$ 27,262,284	\$ 17,001,380	\$ 8,557,393

Measurement date: September 30, 2024 \*

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	6.50%	7.50%	8.50%
NPL	\$ 29,366,484	\$ 18,446,994	\$ 9,444,472

\* Projected - actual amounts will be available after fiscal year end



Accounting Disclosure Exhibit

The following information is not required to be disclosed but is provided for informational purposes.

IX. Components of Pension Expense (GASB No. 68)

Measurement Date	9/30/2014	9/30/2015	9/30/2016	9/30/2017	9/30/2018	9/30/2019	9/30/2020	9/30/2021	9/30/2022	9/30/2023	Projected 9/30/2024 *
Service Cost	\$ 762,017	\$ 801,632	\$ 846,677	\$ 890,921	\$ 876,049	\$ 1,102,086	\$ 1,094,524	\$ 1,087,823	\$ 1,311,276	\$ 1,465,199	\$ 1,623,468
Interest on Total Pension Liability	4,089,843	4,168,995	4,312,101	4,545,149	4,679,934	4,939,154	5,023,560	5,241,956	5,437,166	5,690,454	6,020,381
Current-Period Benefit Changes	0	0	0	0	0	325,964	0	0	0	(11,644)	0
Contributions - Member	(240,151)	(258,906)	(276,662)	(273,397)	(340,784)	(303,060)	(326,320)	(345,566)	(517,939)	(439,283)	(389,386)
Projected Earnings on System Investments	(3,137,232)	(3,396,773)	(3,221,855)	(3,462,486)	(3,810,384)	(3,916,964)	(4,050,022)	(4,357,473)	(5,217,362)	(4,360,792)	(4,635,544)
Administrative Expenses	67,201	93,432	113,629	80,671	141,577	112,798	137,159	158,274	148,491	145,610	145,610
Other Changes in System Fiduciary Net Position	0	0	0	0	0	0	0	0	0	0	0
Recognition of Beginning Deferred Outflows / (Inflows) due to Liabilities	327,591	189,404	283,377	529,299	314,155	744,124	508,918	604,734	615,887	568,712	570,417
Recognition of Beginning Deferred Outflows / (Inflows) due to Assets	(188,104)	712,928	541,693	201,239	226,399	786,573	(262,531)	(1,683,205)	1,787,657	1,622,483	1,250,412
Total Pension Expense	<u>\$ 1,681,165</u>	<u>\$ 2,310,712</u>	<u>\$ 2,598,960</u>	<u>\$ 2,511,396</u>	<u>\$ 2,086,946</u>	<u>\$ 3,790,675</u>	<u>\$ 2,125,288</u>	<u>\$ 706,543</u>	<u>\$ 3,565,176</u>	<u>\$ 4,680,739</u>	<u>\$ 4,585,358</u>

\* Projected - actual amounts will be available after measurement date

**Accounting Disclosure Exhibit**

The following information is not required to be disclosed but is provided for informational purposes.

**X. Recognition of Deferred Outflows and (Inflows) due to Liabilities - Measurement Date (GASB No. 68)**

Recognition of Deferred Outflows due to Differences Between Actual and Expected Experience on Liabilities

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2023	Recognition Amount for FYE 2023	Balance as of 9/30/2023
2018 / 2019	\$ 695,352	4.7	0.0	\$ 103,564	\$ 0
2019 / 2020	293,358	4.5	0.5	65,191	32,594
2020 / 2021	685,484	3.8	0.8	180,391	144,311
2021 / 2022	950,543	4.1	2.1	231,840	486,863
2022 / 2023	309,181	4.2	3.2	73,615	235,566
TOTAL				\$ 654,601	\$ 899,334

Recognition of Deferred (Inflows) due to Differences Between Actual and Expected Experience on Liabilities

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2023	Recognition Amount for FYE 2023	Balance as of 9/30/2023
2018 / 2019	\$ 0	4.7	0.0	\$ 0	\$ 0
2019 / 2020	0	4.5	0.5	0	0
2020 / 2021	0	3.8	0.8	0	0
2021 / 2022	0	4.1	2.1	0	0
2022 / 2023	0	4.2	3.2	0	0
TOTAL				\$ 0	\$ 0

Recognition of Deferred Outflows due to Changes of Assumptions or Other Inputs

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2023	Recognition Amount for FYE 2023	Balance as of 9/30/2023
2018 / 2019	\$ 2,119,415	4.7	0.0	\$ 315,659	\$ 0
2019 / 2020	0	4.5	0.5	0	0
2020 / 2021	0	3.8	0.8	0	0
2021 / 2022	0	4.1	2.1	0	0
2022 / 2023	0	4.2	3.2	0	0
TOTAL				\$ 315,659	\$ 0

**Accounting Disclosure Exhibit**

The following information is not required to be disclosed but is provided for informational purposes.

**X. Recognition of Deferred Outflows and (Inflows) due to Liabilities - Measurement Date (GASB No. 68) (cont'd)**

Recognition of Deferred (Inflows) due to Changes of Assumptions or Other Inputs

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2023	Recognition Amount for FYE 2023	Balance as of 9/30/2023
2018 / 2019	\$ 0	4.7	0.0	\$ 0	\$ 0
2019 / 2020	(1,806,968)	4.5	0.5	(401,548)	(200,776)
2020 / 2021	0	3.8	0.8	0	0
2021 / 2022	0	4.1	2.1	0	0
2022 / 2023	0	4.2	3.2	0	0
TOTAL				\$ (401,548)	\$ (200,776)

**XI. Recognition of Deferred Outflows and (Inflows) due to Assets - Measurement Date (GASB No. 68)**

Recognition of Deferred Outflows / (Inflows) due to Difference Between Projected and Actual Earnings on Pension System Investments

Established	Initial Balance	Initial Recognition Period	Remaining Recognition Period as of 9/30/2023	Recognition Amount for FYE 2023	Balance as of 9/30/2023
2018 / 2019	\$ 1,860,359	5	0	\$ 372,071	\$ 0
2019 / 2020	(740,360)	5	1	(148,072)	(148,072)
2020 / 2021	(7,959,543)	5	2	(1,591,909)	(3,183,816)
2021 / 2022	15,652,022	5	3	3,130,404	9,391,214
2022 / 2023	(700,057)	5	4	(140,011)	(560,046)
TOTAL				\$ 1,622,483	\$ 5,499,280



**Outline of Principal Provisions of the Retirement System**

A. Effective Date:

October 1, 1992. Most recently amended by Ordinance No. 3277-23 adopted August 9, 2023.

B. Eligibility:

All Police Officers shall become members as a condition of employment. Effective September 26, 2016 a new employee who is hired as Police Chief may opt out of the System upon employment.

C. Member:

An actively employed Police Officer who fulfills the Membership Requirements.

D. Contributions:

Employee:	6% of compensation.
State:	Premium Tax Revenue.
City:	Balance required to maintain System on sound actuarial basis.

E. Credited Service:

Total years and fractional parts of years of service as a Police Officer.

F. Purchase of Prior Military Service:

A participant may purchase from 1 year up to 4 years of credited service for military service prior to employment. The cost shall be an amount actuarially determined to fund the cost to the System of adding this credited service.

G. Compensation:

Total pay, excluding special detail pay (includes vacation and comp time accrual as of September 30, 2011).

H. Average Final Compensation (AFC):

Average monthly compensation during the best 60 calendar months out of the last 120 calendar months preceding date of retirement (or termination).

### Outline of Principal Provisions of the Retirement System

I. Normal Retirement:

1. Eligibility:

Earlier of:

- (a) Attainment of age 55 with completion of 10 years of credited service.
- (b) Completion of 20 years of credited service.

2. Benefit:

3% times AFC times credited service.

J. Early Retirement:

1. Eligibility:

Attainment of age 50 with completion of 10 years of credited service.

2. Benefit:

Benefit accrued to date of retirement, reduced by 3% for each year early retirement date precedes normal retirement date, payable immediately.

K. Deferred Retirement:

Computed the same as set forth under Normal Retirement, based upon AFC and credited service as of deferred retirement date.

L. Disability Retirement:

1. Service Incurred:

Accrued benefit, but not less than 42% of AFC.

2. Non-Service Incurred:

- a. Eligibility: 10 or more years of credited service; totally and permanently disabled.
- b. Benefit: Accrued benefit, but not less than 25% of AFC.

Outline of Principal Provisions of the Retirement System

M. Pre-Retirement Death Benefit:

1. Service Incurred:

Police Officers with a spouse as the sole beneficiary receive a life benefit equal to the greater of:

- a. forty-two percent (42%) of the average monthly salary of the Member over the previous twelve (12)
- b. the Member's unreduced accrued benefit

Police Officers, who are not yet eligible for normal or early retirement, with a non-spouse beneficiary receive an immediate benefit payable for ten (10) years. The benefit shall be the greater of:

- a. forty-two percent (42%) of the average monthly salary of the Member over the previous twelve (12)
- b. the Member's unreduced accrued benefit at the time of death

Police Officers, who are eligible for normal or early retirement, with a non-spouse beneficiary receive an immediate benefit payable for life. The benefit shall be the benefit determined as if the Member had retired the day before his death and elected the one hundred percent (100%) Joint and Survivor benefit. The minimum amount payable to such Member shall be forty-two percent (42%) of the AFC at the time of their death.

2. Non-Service Incurred:

- a. Eligible for Retirement: Determined as though had retired on the date of death and elected a 100% joint and survivor benefit.
- b. Not Eligible for Retirement: Less than 10 years of credited service - return of employee contributions.  
10 or more years - accrued benefit payable for 10 years.

N. Termination Benefits:

1. Eligibility:

100% vesting upon the completion of 10 years of credited service. Employees who have not completed 10 years of credited service at date of termination of employment shall only be entitled to the return of their employee contributions.

2. Benefit:

Accrued benefit based upon credited service and AFC as of date of termination, payable at normal retirement date or early retirement date with reduction.

### Outline of Principal Provisions of the Retirement System

O. Normal Form of Retirement Income:

Monthly benefit payable for ten (10) years certain and life thereafter.

P. Deferred Retirement Option Program (DROP)

1. Eligibility:

Participant must be eligible for Normal Retirement.

2. Benefit:

Retirement benefits are transferred to a hypothetical DROP account within the pension fund. Interest is credited or debited quarterly based upon either the rate of return earned by the Fund or a 6.5% fixed rate of return, as elected by the Member. A deduction is made each quarter for administrative expenses. The period of participation in the DROP is limited to at least 12 months but no more than 60 months. The benefit is paid as a lump sum upon actual termination of employment.

Q. Cost of Living Adjustment (COLA)

Participants who terminate employment on or after October 1, 2002 are entitled to a 3% annual COLA on benefit payments beginning at age 60.

Effective March 1, 2013, only participants who retire on or after Early or Normal Retirement Date (including DROPs) are entitled to a 3% annual COLA on benefit payments beginning at age 60.

R. Changes Since Previous Actuarial Valuation

None affecting calculations.

**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

**A. Mortality**

For healthy participants during employment, PUB-2010 Headcount Weighted Safety Employee Female Mortality Table and Safety Below Median Employee Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For healthy participants post employment, PUB-2010 Headcount Weighted Safety Healthy Retiree Female Mortality Table and Safety Below Median Healthy Retiree Male Mortality Table, both set forward 1 year, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For disabled participants, 80% PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table / 20% PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, separate rates for males and females, without projected mortality improvements.

Sample Ages (2023)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	30.70	34.54	27.87
60	25.74	29.47	23.27	26.64
62	23.80	27.46	21.53	24.79

Sample Ages (2043)	Pre-retirement Future Life Expectancy (Years)		Post-retirement Future Life Expectancy (Years)	
	Men	Women	Men	Women
	55	32.33	36.03	29.77
60	27.31	30.92	25.06	28.39
62	25.35	28.88	23.27	26.50

**B. Interest to be Earned by Fund**

7.50% (net of investment expenses), compounded annually - includes inflation at 2.75%.

**C. Allowances for Expenses or Contingencies**

Actual administrative expenses incurred during the prior System year.

**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

D. Employee Withdrawal Rates

Withdrawal rates for males and for females were used in accordance with the following illustrative example.

<u>Service</u>	<u>Withdrawal Rate</u>
< 5	9.0%
5 - 9	3.5%
10 - 19	3.0%
20 & Over	0.0%

E. Disability Rates

Disability rates for males and for females were used in accordance with the following illustrative example.

<u>Age</u>	<u>Disability Rates Per 100 Employees</u>
20	0.14
25	0.15
30	0.18
35	0.23
40	0.30
45	0.51

F. Salary Increase Factors

Current salary is assumed to increase at a rate based on the table below - includes wage inflation of 3.25%.

<u>Age</u>	<u>Salary Increase</u>
< 30	6.50%
30 - 39	6.00%
40 - 49	5.00%
50 +	4.25%

**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

G. Assumed Retirement Age

<u>Age</u>	<u>Annual Rate of Retirement</u>
At First Normal Retirement Eligibility	
All ages	35.0%
Retirement Other Than At First Normal Retirement Eligibility	
< 50	7.5%
50 - 54	13.5%
55 - 57	40.0%
58 - 59	27.5%
60 - 64	25.0%
65 & Over	100.0%

35% of employees are assumed to enter the DROP when first eligible.

All active members on the valuation date are assumed to have a minimum of one year of future service.

H. Loading

Active liabilities and normal costs are increased by 1.61% to account for unused annual leave pay at time of retirement for Police Officers hired prior to October 1, 2011.

I. Payroll Growth Assumption

3.5% per annum. For purposes of financing the unfunded liabilities, the payroll growth assumption is capped at the historical 10-year average (5.2% as of October 1, 2023) and no less than 0.0%.

J. Asset Valuation Method

The method used for determining the smoothed value of assets phases in the deviation between the expected and actual return on assets at the rate of 25% per year. The smoothed value of assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the fair market value of System assets and whose upper limit is 120% of the fair market value of System assets.

**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

K. Cost Method

Normal Retirement, Termination, Disability, and Death Benefits: Entry-Age-Normal Cost Method.

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his entry age to his assumed retirement age to fund his estimated benefits, assuming the System had always been in effect. The normal cost for the System is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the System is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the assets of the System.

Vested Normal Retirement, Termination, Disability, and Death Benefits: Unit Credit Cost Method.

Under this method, the actuarial present value of vested accrued benefits is an amount calculated to be the sum of the present values of each individual's vested accrued or earned benefit under the System as of the valuation date. Each individual's calculation is based on pay and service as of the valuation date.

L. Disclosure of Assumptions

The salary increases, withdrawal and retirement rates were updated based on the most recent experience study performed for the five years ending September 30, 2022. The mortality rates are based upon the July 1, 2023 FRS Actuarial Valuation, as required under F.S., Chapter 2015-157.

M. Changes Since Most Recent Actuarial Valuation

1. Salary Increase Factors were:

<u>Age</u>	<u>Salary Increase</u>
< 30	5.25%
30 - 39	5.00%
40 - 49	4.25%
50 +	3.50%



**Actuarial Assumptions and Actuarial Cost Methods  
Used in the Valuation**

M. Changes Since Most Recent Actuarial Valuation (cont'd)

2. Employee Withdrawal Rates were:

<u>Service</u>	<u>Withdrawal Rate</u>
< 5	10.0%
5 - 9	4.0%
10 - 14	3.5%
15 - 19	3.0%
20 & Over	0.0%

3. Assumed Retirement Age were:

<u>Age</u>	<u>Annual Rate of Retirement</u>
At First Normal Retirement Eligibility	
All ages	35.0%
Retirement Other Than At First Normal Retirement Eligibility	
< 55	13.5%
55 - 57	40.0%
58 - 59	27.5%
60 - 64	25.0%
65 & Over	100.0%

Table XIII

**Distribution by Attained Age Groups  
and Service Groups as of October 1, 2023**

<u>Attained</u> Age Group	-----COMPLETED YEARS OF SERVICE-----							<u>Total</u>
	<u>0 - 4</u>	<u>5 - 9</u>	<u>10 - 14</u>	<u>15 - 19</u>	<u>20 - 24</u>	<u>25 - 29</u>	<u>30 &amp; Over</u>	
Under 25	1	-	-	-	-	-	-	1
25 - 29	6	1	-	-	-	-	-	7
30 - 34	5	11	-	-	-	-	-	16
35 - 39	7	4	2	1	-	-	-	14
40 - 44	3	-	2	6	-	-	-	11
45 - 49	2	-	1	6	1	-	-	10
50 - 54	-	3	1	3	3	2	-	12
55 - 59	2	-	-	2	1	-	-	5
60 - 64	-	-	-	-	-	-	-	-
65 & Over	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>26</b>	<b>19</b>	<b>6</b>	<b>18</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>76</b>
				<u>10/01/2022</u>		<u>10/01/2023</u>		
				40.4 years		40.7 years		
				31.0 years		30.4 years		
				\$ 78,716		\$ 85,392		
				23.1%		19.7%		



**Statistics for Participants Entitled to Deferred Benefits  
and Participants Receiving Benefits**

**A. Entitled to Deferred Benefits**

Current Age Group	<u>Count</u>	Total <u>Annual Benefit</u>	Average <u>Annual Benefit</u>
Less than 40	1	\$ 26,278	26,278
40 - 44	-	-	-
45 - 49	1	16,878	16,878
50 - 54	2	60,208	30,104
55 - 59	-	-	-
60 - 64	-	-	-
65 & Over	-	-	-
TOTAL	<u>4</u>	<u>\$ 103,364</u>	\$ 25,841

**B. Receiving Benefits (including DROPs)**

Current Age Group	<u>Count</u>	Total <u>Annual Benefit</u>	Average <u>Annual Benefit</u>
Less than 50	2	\$ 63,849	\$ 31,925
50 - 54	14	519,287	37,092
55 - 59	20	941,235	47,062
60 - 64	10	492,449	49,245
65 - 69	13	840,153	64,627
70 - 74	13	687,409	52,878
75 - 79	9	274,172	30,464
80 - 84	5	95,714	19,143
85 & Over	1	19,994	19,994
TOTAL	<u>87</u>	<u>\$ 3,934,262</u>	\$ 45,221

## Reconciliation of Employee Data

A. <u>Active Participants</u>	
1. Active participants previous year	78
2. Retired during year	(2)
3. Entered DROP	0
4. Died during year	0
5. Disabled during year	0
6. Terminated during year	(3)
7. New active participants	3
8. Re-instated during year	0
9. Active participants current year	<u>76</u>
B. <u>Participants Receiving Benefits</u>	
1. Participants receiving benefits previous year	83
2. New retired participants	2
3. Former DROPs now receiving benefits	3
4. New terminated vested receiving benefits	0
5. New disabled receiving benefits	0
6. New beneficiaries receiving benefits	0
7. Died or ceased payment during year	(1)
8. Retired or terminated vested receiving benefits current year	<u>87</u>
C. <u>DROP Participants</u>	
1. DROP participants previous year	3
2. Died during year	0
3. Became disabled during year	0
4. Employment terminated and retired during year	(3)
5. Entered DROP during year	0
6. DROP participants current year	<u>0</u>
D. <u>Terminated Vested Participants Entitled to Future Benefits</u>	
1. Terminated vested entitled previous year	3
2. Died during year	0
3. Commenced receiving benefits during year	0
4. New terminated vested	1
5. Terminated vested paid lump sum	0
6. Terminated vested entitled current year	<u>4</u>

### Projected Retirement Benefits

<u>Fiscal Year</u>	<u>Projected Total Annual Payout</u>
2024	\$ 4,011,635
2025	\$ 4,291,311
2026	\$ 4,598,360
2027	\$ 4,924,722
2028	\$ 5,267,693
2029	\$ 5,616,752
2030	\$ 5,860,312
2031	\$ 6,135,521
2032	\$ 6,401,014
2033	\$ 6,666,740

The above projected payout of System benefits during the next ten years is based on assumptions involving all decrements. The actual payouts may differ from the above estimates depending upon the death, salary and retirement experience of the System. However, since the projected payment is recomputed each valuation date, there is an automatic correction to the extent that actual experience varies from expected experience.

## Summary of Transaction Information

Valuation Date	Benefits Paid <sup>1</sup>	Administrative Expenses	Employee Contributions	Net City Contributions	State Contributions <sup>2</sup>	Smoothed Value of Investments <sup>3,4</sup>
10/01/2023	\$ 4,476,871	\$ 145,610	\$ 439,283	\$ 2,093,694	\$ 528,654	\$ 67,735,403
10/01/2022	3,959,451	148,491	517,939	2,773,909	404,413	66,498,477
10/01/2021	4,601,043	158,274	345,566	2,733,656	388,107	63,895,915
10/01/2020	3,466,919	137,159	326,320	2,807,987	379,684	59,151,993
10/01/2019	3,311,451	112,798	303,060	2,295,220	351,075	55,077,941
10/01/2018	3,511,348	141,577	340,784	2,197,306	340,435	51,492,799
10/01/2017	3,078,241	80,671	273,397	2,011,494	296,917	48,974,942
10/01/2016	3,780,341	113,629	276,662	1,954,353	293,834	46,341,508
10/01/2015	3,449,577	93,432	258,906	2,086,101	269,879	44,781,172
10/01/2014	2,963,743	67,201	240,151	2,002,575 <sup>5</sup>	258,677	42,169,692
10/01/2013	2,118,098	83,037	253,261	1,887,377	268,589	38,990,049
10/01/2012	2,367,817	60,677	258,825	1,576,798	260,885	34,143,720
10/01/2011	2,265,835	74,956	274,947	1,473,000	257,694	32,609,103
10/01/2010	1,850,978	51,163	307,769	1,187,235	260,880	33,315,488
10/01/2009	1,893,322	54,654	323,975	896,264	282,690	32,832,782
10/01/2008	1,544,300	85,134	313,146	852,716	264,251	32,985,083
10/01/2007	1,370,531	29,654	306,122	954,730	289,722	31,986,342
10/01/2006	1,118,258	44,673	309,763	783,183	280,855	26,939,887
10/01/2005	1,053,533	43,684	307,361	731,004	225,950	24,747,691
10/01/2004	997,468	38,488	286,296	297,035	385,275	23,133,789

<sup>1</sup> Includes DROP distributions (previously included DROP benefit credits), effective for October 1, 2013 valuation date. Includes Share Plan distributions, effective for October 1, 2020 valuation date.

<sup>2</sup> Includes excess state funds received for Share Plan effective for October 1, 2019 valuation date.

<sup>3</sup> Includes DROP account balances, effective for October 1, 2013 valuation date. Includes Share Plan account balance, effective for October 1, 2019 valuation date.

<sup>4</sup> Net of Excess State Funds and Credit Balance, if any, prior to October 1, 2014 valuation date.

<sup>5</sup> Includes Credit Balance.

Table XVIII

## Recent Compensation, Termination and Investment Return Experience

Valuation Date	Compensation		Termination Ratio of Actual to Expected	Investment Return <sup>1</sup>		
	% Increase / (Decrease)	Assumed Increase		Market Value	Smoothed Actuarial Value	Assumed
10/01/2023	11.8%	4.5%	0.8	8.70%	4.26%	7.50%
10/01/2022	2.9%	4.6%	0.3	(15.00%)	4.73%	7.50%
10/01/2021	6.4%	4.6%	0.0	21.20%	10.32%	7.50%
10/01/2020	11.5%	4.6%	1.8	8.87%	7.57%	7.50%
10/01/2019	4.1%	4.7%	1.0	3.94%	7.92%	7.50%
10/01/2018	10.1%	5.0%	0.8	7.49%	6.78%	7.75%
10/01/2017	1.1%	5.0%	1.3	11.56%	6.97%	7.75%
10/01/2016	8.0%	5.0%	0.6	9.81%	6.64%	7.75%
10/01/2015	7.6%	4.9%	1.0	(2.53%)	8.49%	7.75%
10/01/2014	2.2%	4.8%	0.7	10.07%	9.57%	7.75%
Last 3 Years	7.0%	4.6%	0.3	3.84%	6.40%	7.50%
Last 5 Years	7.3%	4.6%	0.7	4.85%	6.94%	7.50%
Last 10 Years	6.5%	4.8%	0.8	6.00%	7.31%	7.62%

<sup>1</sup> Computed as  $2I/(A+B-I)$ , where A is beginning value, B is ending value and I is investment return.

## Employer Contribution Information

Valuation Date	Contribution Fiscal Year End	Minimum Required Employer Contributions <sup>1</sup>	Actual Net City Contributions Made	Actual Net State Contributions Made <sup>1</sup>	Actual Employer Contributions Made
10/01/2023	09/30/2025	\$ 2,902,644	TBD	TBD	TBD
10/01/2022	09/30/2024	\$ 2,560,896	TBD	TBD	TBD
10/01/2021	09/30/2023	\$ 2,622,348	\$ 2,093,694	\$ 528,654	\$ 2,622,348
10/01/2020	09/30/2022	\$ 3,178,322	\$ 2,773,909	\$ 404,413	\$ 3,178,322
10/01/2019	09/30/2021	\$ 3,121,763	\$ 2,733,656	\$ 388,107	\$ 3,121,763
10/01/2018	09/30/2020	\$ 3,187,671	\$ 2,807,987	\$ 379,684	\$ 3,187,671
10/01/2017	09/30/2019	\$ 2,646,295	\$ 2,295,220	\$ 351,075	\$ 2,646,295
10/01/2016	09/30/2018	\$ 2,537,741	\$ 2,197,306	\$ 340,435	\$ 2,537,741
10/01/2015	09/30/2017	\$ 2,308,411	\$ 2,011,494	\$ 296,917	\$ 2,308,411
10/01/2014	09/30/2016	\$ 2,248,187	\$ 1,954,353	\$ 293,934	\$ 2,248,187
10/01/2013	09/30/2015	\$ 2,355,980	\$ 2,086,101	\$ 269,879	\$ 2,355,980
10/01/2012	09/30/2014	\$ 2,261,252	\$ 2,002,575 <sup>2</sup>	\$ 258,677	\$ 2,261,252
10/01/2011	09/30/2013	\$ 2,155,966	\$ 1,887,377	\$ 268,589	\$ 2,155,966
10/01/2010	09/30/2012	\$ 1,701,669	\$ 1,576,798	\$ 260,885	\$ 1,837,683
10/01/2009	09/30/2011	\$ 1,570,089	\$ 1,473,000	\$ 257,694	\$ 1,730,694
10/01/2008	09/30/2010	\$ 1,448,115	\$ 1,187,235	\$ 260,880	\$ 1,448,115
10/01/2007	09/30/2009	\$ 1,178,954	\$ 896,264	\$ 282,690	\$ 1,178,954
10/01/2006	09/30/2008	\$ 1,116,967	\$ 852,716	\$ 264,251	\$ 1,116,967
10/01/2005	09/30/2007	\$ 1,270,195	\$ 954,730	\$ 289,722	\$ 1,244,452
10/01/2004	09/30/2006	\$ 1,038,295	\$ 783,183	\$ 280,855	\$ 1,064,038
10/01/2004	09/30/2005	\$ 956,954	\$ 731,004	\$ 225,950	\$ 956,954
10/01/2003	09/30/2004	\$ 682,310	\$ 297,035	\$ 385,275	\$ 682,310
10/01/2002	09/30/2003	\$ 628,079	\$ 338,864	\$ 289,215	\$ 628,079
10/01/2001	09/30/2002	\$ 210,644	\$ 0	\$ 274,346	\$ 274,346
10/01/2000	09/30/2001	\$ 155,624	\$ 0	\$ 242,652	\$ 242,652
10/01/1999	09/30/2000	\$ 125,067	\$ 0	\$ 239,738	\$ 239,738
10/01/1998	09/30/1999	\$ 326,956	\$ 86,873	\$ 240,083	\$ 326,956
10/01/1997	09/30/1998	\$ 466,644	\$ 233,480	\$ 243,164	\$ 476,644
10/01/1996	09/30/1997	\$ 533,910	\$ 304,842	\$ 229,075	\$ 533,917
10/01/1995	09/30/1996	\$ 615,441	\$ 323,735	\$ 291,706	\$ 615,441

<sup>1</sup> Includes excess state funds received for Share Plan effective for fiscal year ended September 30, 2019

<sup>2</sup> Includes credit balance



### 30 Year Projections

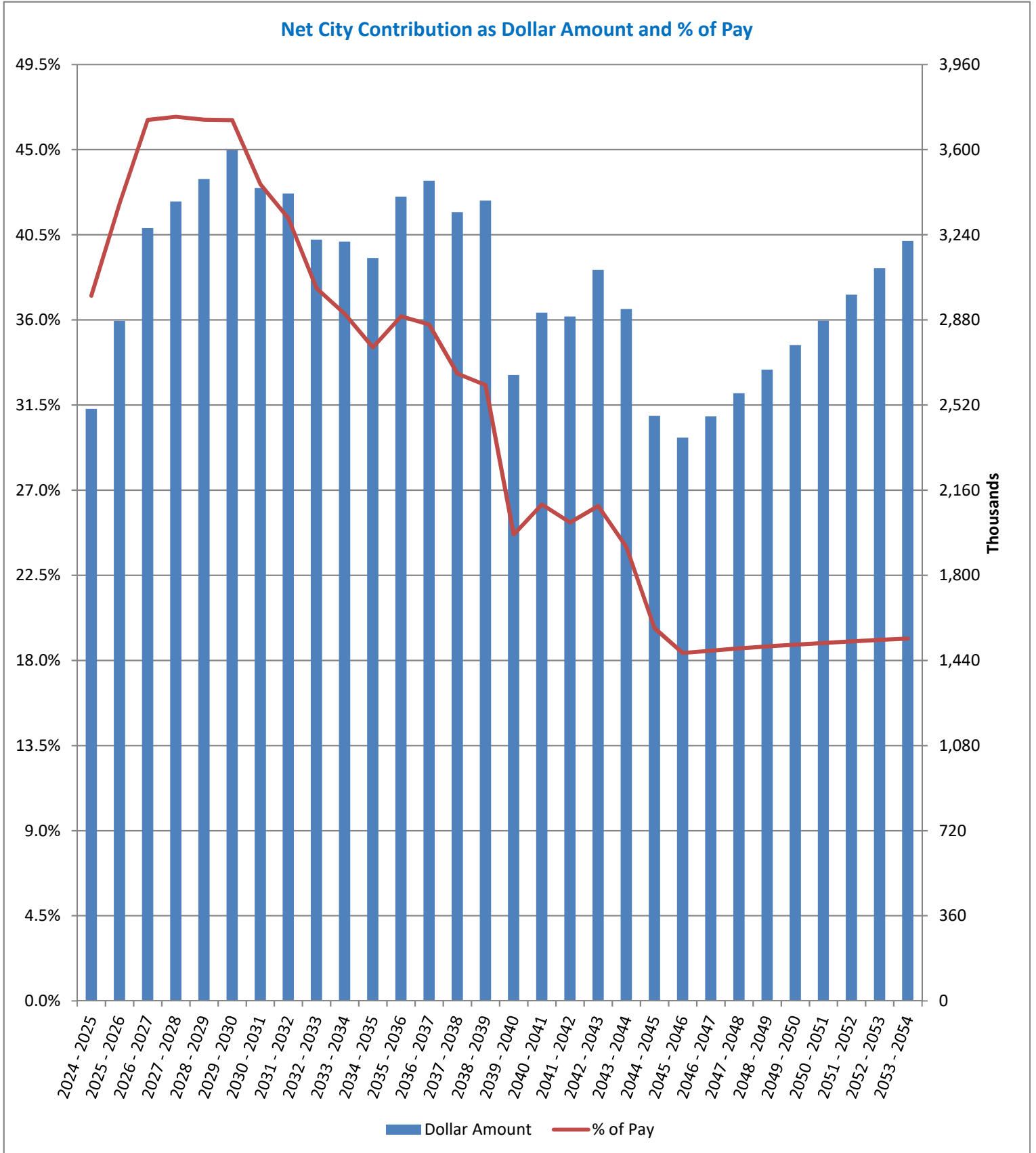
Throughout the forecast period, new members are assumed to be hired each year at a rate sufficient to maintain a constant active employee headcount – stationary population. Newly employed members are assumed to have the same average demographic characteristics (age, gender, salary – adjusted each year for inflation) as those of members hired during the past five (5) years. State monies are projected to be level at the amount received in 2023.

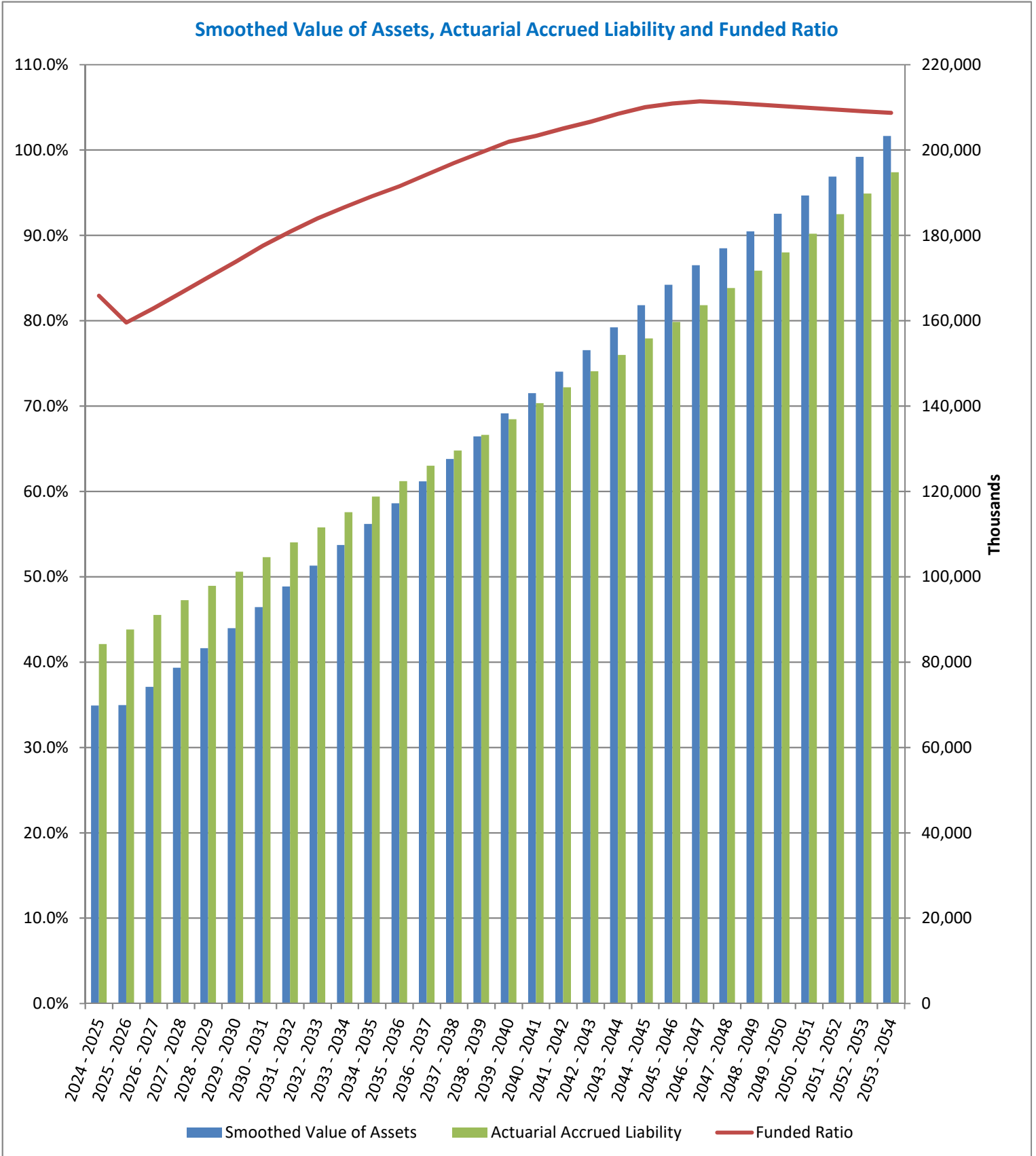
These projections are deterministic – assume all actuarial assumptions are realized.

**Table XX  
(Cont'd)**

**30-Year Projections**

<b>Contribution Fiscal Year</b>	<b>Projected Non-DROP Payroll</b>	<b>Projected Net City Required Contribution Amount</b>	<b>% of Pay</b>	<b>Smoothed Value of Assets</b>	<b>Actuarial Accrued Liability</b>	<b>Funded Ratio</b>
2024 - 2025	6,716,901	2,504,023	37.3%	69,830,027	84,211,164	82.9%
2025 - 2026	6,822,552	2,876,061	42.2%	69,934,106	87,644,620	79.8%
2026 - 2027	7,017,808	3,268,268	46.6%	74,184,967	91,060,676	81.5%
2027 - 2028	7,232,732	3,380,672	46.7%	78,665,582	94,477,887	83.3%
2028 - 2029	7,460,648	3,475,518	46.6%	83,256,541	97,850,241	85.1%
2029 - 2030	7,727,297	3,598,011	46.6%	87,933,057	101,184,956	86.9%
2030 - 2031	7,961,763	3,437,188	43.2%	92,847,575	104,575,043	88.8%
2031 - 2032	8,252,858	3,414,277	41.4%	97,680,667	108,017,287	90.4%
2032 - 2033	8,545,367	3,219,348	37.7%	102,611,585	111,544,904	92.0%
2033 - 2034	8,839,205	3,211,164	36.3%	107,440,989	115,137,958	93.3%
2034 - 2035	9,093,283	3,141,232	34.5%	112,368,632	118,789,267	94.6%
2035 - 2036	9,398,981	3,400,755	36.2%	117,202,716	122,382,345	95.8%
2036 - 2037	9,700,351	3,468,501	35.8%	122,363,857	125,984,907	97.1%
2037 - 2038	10,057,006	3,335,612	33.2%	127,605,868	129,551,722	98.5%
2038 - 2039	10,394,834	3,384,177	32.6%	132,869,021	133,218,737	99.7%
2039 - 2040	10,737,687	2,646,617	24.6%	138,276,767	136,924,925	101.0%
2040 - 2041	11,093,342	2,910,837	26.2%	143,007,049	140,660,306	101.7%
2041 - 2042	11,445,285	2,894,312	25.3%	148,051,615	144,410,409	102.5%
2042 - 2043	11,815,451	3,090,896	26.2%	153,101,283	148,166,484	103.3%
2043 - 2044	12,194,297	2,926,180	24.0%	158,421,930	151,976,585	104.2%
2044 - 2045	12,553,470	2,474,295	19.7%	163,652,047	155,837,036	105.0%
2045 - 2046	12,950,459	2,381,853	18.4%	168,438,006	159,703,048	105.5%
2046 - 2047	13,352,980	2,471,609	18.5%	172,980,520	163,633,847	105.7%
2047 - 2048	13,789,495	2,569,246	18.6%	176,954,036	167,630,655	105.6%
2048 - 2049	14,242,513	2,669,745	18.7%	180,954,734	171,741,148	105.4%
2049 - 2050	14,714,962	2,772,894	18.8%	185,068,904	175,987,098	105.2%
2050 - 2051	15,205,342	2,876,145	18.9%	189,333,364	180,397,841	105.0%
2051 - 2052	15,716,062	2,986,978	19.0%	193,755,190	184,981,362	104.7%
2052 - 2053	16,240,046	3,098,729	19.1%	198,407,678	189,775,769	104.5%
2053 - 2054	16,777,313	3,213,497	19.2%	203,283,997	194,783,728	104.4%





## Actuarial Valuation as of October 1, 2023

## State Required Exhibit

	<u>10/01/2022</u>	<u>Prior Assumptions 10/01/2023</u>	<u>Current Assumptions 10/01/2023</u>
<b>A. Participant Data</b>			
1. Active participants	78	76	76
2. Retired participants and beneficiaries receiving benefits (including DROPs)	80	81	81
3. Disabled participants receiving benefits	6	6	6
4. Terminated vested participants	3	4	4
5. Annual payroll of active participants	\$ 6,139,863	\$ 6,489,759	\$ 6,489,759
6. Expected payroll of active participants for the following year	\$ 6,354,758	\$ 6,716,901	\$ 6,716,901
7. Annual benefits payable to those currently receiving benefits including DROP participants	\$ 3,792,189	\$ 3,934,262	\$ 3,934,262
<b>B. Value of Assets</b>			
1. Smoothed Value of Assets	\$ 66,498,477	\$ 67,735,403	\$ 67,735,403
2. Market Value of Assets	\$ 58,924,322	\$ 62,424,321	\$ 62,424,321
<b>C. Liabilities</b>			
1. Actuarial present value of future expected benefit payments for active members			
a. Retirement benefits	\$ 30,613,611	\$ 33,210,265	\$ 35,455,935
b. Vesting benefits	1,960,503	2,029,531	2,044,097
c. Death benefits	308,800	346,874	382,192
d. Disability benefits	542,564	563,890	597,979
e. Total	<u>\$ 33,425,478</u>	<u>\$ 36,150,560</u>	<u>\$ 38,480,203</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 608,671	\$ 853,368	\$ 853,368
3. Actuarial present value of future expected benefit payments for members currently receiving benefits			
a. Service retired including DROP participants	\$ 48,142,778	\$ 49,456,462	\$ 49,456,462
b. Disability retired	1,648,846	1,636,952	1,636,952
c. Beneficiaries	2,159,398	2,144,589	2,144,589
d. Miscellaneous	29,652	49,287	49,287
e. Total	<u>\$ 51,980,674</u>	<u>\$ 53,287,290</u>	<u>\$ 53,287,290</u>

Actuarial Valuation as of October 1, 2023

State Required Exhibit

	<u>10/01/2022</u>	<u>Prior Assumptions 10/01/2023</u>	<u>Current Assumptions 10/01/2023</u>
4. Share Plan liability	\$ 186,049	\$ 314,236	\$ 314,236
5. Total actuarial present value of future expected benefit payments	\$ 86,200,872	\$ 90,605,454	\$ 92,935,097
6. Actuarial accrued liabilities	\$ 76,624,651	\$ 80,493,152	\$ 80,667,682
7. Unfunded actuarial accrued liabilities	\$ 10,126,174	\$ 12,757,749	\$ 12,932,279
<b>D. <u>Statement of Accumulated System Benefits</u></b>			
1. Actuarial present value of accumulated vested benefits			
a. Participants currently receiving benefits including DROP participants	\$ 51,951,022	\$ 53,238,003	\$ 53,238,003
b. Other participants (including Share Plan liability)	17,101,211	18,039,621	17,827,394
c. Total	<u>\$ 69,052,233</u>	<u>\$ 71,277,624</u>	<u>\$ 71,065,397</u>
2. Actuarial present value of accumulated non-vested System benefits	<u>\$ 1,317,205</u>	<u>\$ 1,645,050</u>	<u>\$ 1,626,657</u>
3. Total actuarial present value of accumulated System benefits	\$ 70,369,438	\$ 72,922,674	\$ 72,692,054
<b>E. <u>Statement of Change in Accumulated System Benefits</u></b>			
1. Actuarial present value of accumulated System benefits as of October 1, 2022			\$ 70,369,438
2. Increase (decrease) during year attributable to:			
a. System amendment			\$ 0
b. Change in actuarial assumptions			(230,620)
c. Benefits paid including refunds and DROP and Share Plan distributions			(4,476,871)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period			7,030,107
e. Net increase			<u>\$ 2,322,616</u>
3. Actuarial present value of accumulated System benefits as of October 1, 2023			\$ 72,692,054

Actuarial Valuation as of October 1, 2023

State Required Exhibit

	<u>10/01/2022</u>	<u>Prior Assumptions 10/01/2023</u>	<u>Current Assumptions 10/01/2023</u>
<b>F. Pension Cost</b>			
1. Total normal cost	\$ 1,613,690	\$ 1,621,587	\$ 1,769,078
2. Payment required to amortize unfunded liability	1,123,964	1,294,210	1,306,427
3. Interest adjustment	105,033	112,595	118,367
4. Total required contribution	<u>\$ 2,842,687</u>	<u>\$ 3,028,392</u>	<u>\$ 3,193,872</u>
5. Item 4 as a percentage of payroll	46.3%	46.7%	49.2%
6. Estimated Member contributions	\$ 381,285	\$ 403,014	\$ 403,014
7. Item 6 as a percentage of payroll	6.0% <sup>1</sup>	6.0% <sup>2</sup>	6.0% <sup>2</sup>
8. Estimated State contribution	\$ 336,501	\$ 398,621	\$ 398,621
9. Item 8 as a percentage of payroll	5.3% <sup>1</sup>	5.9% <sup>2</sup>	5.9% <sup>2</sup>
10. Net amount payable by City	\$ 2,224,395	\$ 2,332,751	\$ 2,504,023
11. Item 10 as a percentage of payroll	35.0% <sup>1</sup>	34.7% <sup>2</sup>	37.3% <sup>2</sup>
<b>G. Past Contributions</b>			
1. Total contribution required (previous valuation)	\$ 3,023,894	\$ 2,942,181	\$ 2,942,181
2. Actual contributions made:			
a. Employees (not including service purchases)	\$ 401,546	N/A	N/A
b. State	528,654	N/A	N/A
c. City	2,093,694	N/A	N/A
d. Total	<u>\$ 3,023,894</u>	N/A	N/A
<b>H. Net Actuarial Gain (Loss)</b>	\$ (1,678,447)	\$ (3,095,182)	\$ (3,095,182)
<b>I. Disclosure of Following Items:</b>			
1. Actuarial present value of future salaries - attained age	\$ 43,234,446	\$ 46,095,765	\$ 50,522,514
2. Actuarial present value of future employee contributions - attained age	\$ 2,594,067	\$ 2,765,746	\$ 3,031,351
3. Actuarial present value of future contributions from other sources	N/A	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 3,090,097	\$ 3,363,698	\$ 3,363,698
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A	N/A

<sup>1</sup> Percent of expected 2023 / 2024 covered payroll as of October 1, 2022 (\$6,354,758)

<sup>2</sup> Percent of expected 2024 / 2025 covered payroll as of October 1, 2023 (\$6,716,901)

State Required Exhibit

	Unfunded Actuarial Accrued Liabilities	Current Unfunded Liabilities	Amortization Payment	Remaining Funding Period
10/01/2008	Assumption Change	\$ 2,297,480	\$ 197,072	15 years
10/01/2009	Actuarial Loss / (Gain)	1,045,399	191,157	6 years
10/01/2010	Actuarial Loss / (Gain)	582,242	92,931	7 years
10/01/2011	Actuarial Loss / (Gain)	1,547,595	220,074	8 years
10/01/2011	System Amendment	(121,838)	(17,326)	8 years
10/01/2012	Actuarial Loss / (Gain)	463,144	59,603	9 years
10/01/2013	Actuarial Loss / (Gain)	(254,528)	(30,010)	10 years
10/01/2013	Assumption Change	980,454	115,601	10 years
10/01/2014	Actuarial Loss / (Gain)	(1,060,554)	(115,708)	11 years
10/01/2015	Actuarial Loss / (Gain)	110,525	11,250	12 years
10/01/2016	Actuarial Loss / (Gain)	1,203,518	115,068	13 years
10/01/2016	Assumption Change	194,973	18,641	13 years
10/01/2017	Actuarial Loss / (Gain)	(63,540)	(5,740)	14 years
10/01/2017	System Amendment	214,203	19,350	14 years
10/01/2018	Actuarial Loss / (Gain)	954,736	81,895	15 years
10/01/2018	Assumption Change	1,864,129	159,900	15 years
10/01/2019	Actuarial Loss / (Gain)	(55,961)	(4,578)	16 years
10/01/2019	Assumption Change	(1,608,034)	(131,544)	16 years
10/01/2020	Actuarial Loss / (Gain)	503,101	39,399	17 years
10/01/2021	Actuarial Loss / (Gain)	(799,211)	(60,117)	18 years
10/01/2022	Actuarial Loss / (Gain)	1,676,363	121,479	19 years
10/01/2022	System Amendment	(11,629)	(843)	19 years
10/01/2023	Actuarial Loss / (Gain)	3,095,182	216,656	20 years
10/01/2023	Assumption Change	174,530	12,217	20 years
	TOTAL	\$ 12,932,279	\$ 1,306,427	

This actuarial valuation and/or cost determination was prepared and completed by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate, and in our opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the System and/or paid from the System's assets for which liabilities or current costs have not been established or other wise provided for in the valuation. All known events or trends which may require material increase in System costs or required contribution rates have been taken into account in the valuation.

*Michelle Jones*

Shelly L. Jones, A.S.A.  
Enrollment Number: 23-08646

*Jennifer Borregard*

Jennifer M. Borregard, E.A.  
Enrollment Number: 23-07624

Dated: April 24, 2024





## Glossary

**Actuarial Accrued Liability.** The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.

**Actuarial Assumptions.** Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members and other items.

**Actuarial Cost Method.** A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.

**Actuarial Equivalent.** Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.

**Actuarial Present Value of Future Benefits.** The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits and inactive, non-retired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

**Actuarial Valuation.** The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 67.

**Actuarial Value of Assets.** The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution.

**Amortization Method.** A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.

## Glossary

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

**Amortization Period.** The period used in calculating the Amortization Payment.

**Annual Required Contribution.** The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The annual required contribution consists of the Employer Normal Cost and Amortization Payment plus interest adjustment.

**Closed Amortization Period.** A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.

**Employer Normal Cost.** The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

**Equivalent Single Amortization Period.** For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.

**Experience Gain/Loss.** A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. Losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

**Funded Ratio.** The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

**GASB.** Governmental Accounting Standards Board.

## Glossary

**GASB No. 67 and GASB No. 68.** These are the governmental accounting standards that set the accounting rules for public retirement plans and the employers that sponsor or contribute to them. Statement No. 67 sets the accounting rules for the plans themselves, while Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement plans.

**Normal Cost.** The annual cost assigned, under the Actuarial Cost Method, to the current plan year.

**Open Amortization Period.** An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

**Unfunded Actuarial Accrued Liability.** The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.

**Valuation Date.** The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.

**Vested Benefit Security Ratio.** The ratio of the Market Value of Assets to the Actuarial Present Value of Vested Accrued Benefits.