



April 24, 2024

Mr. Jeff Templeton  
System Administrator  
Winter Park Firefighters' 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 Firefighters' 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 FIREFIGHTERS' 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  
Firefighters' 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 .....	17
VII. Funding Standard Account .....	18
VIII. Actuarial Gain / (Loss) for System Year .....	19
IX. Amortization of Unfunded Actuarial Accrued Liability .....	20
X. Accounting Disclosure Exhibit .....	21
XI. Outline of Principal Provisions of the Retirement System .....	30
XII. Actuarial Assumptions and Actuarial Cost Methods .....	34
XIII. Distribution of System Participants by Attained Age Groups and Service Groups .....	39
XIV. Statistics for Participants Entitled to Deferred Benefits and Participants Receiving Benefits .....	40
XV. Reconciliation of Member Data .....	41
XVI. Projected Retirement Benefits .....	42
XVII. Summary of Transaction Information .....	43
XVIII. Recent Compensation, Termination and Investment Return Experience .....	44
XIX. Employer Contribution Information .....	45
XX. Thirty (30) Year Projections .....	46
XXI. State Required Exhibit .....	50
XXII. Glossary .....	54





April 24, 2024

Board of Trustees  
c/o Mr. Jeff Templeton, System Administrator  
Winter Park Firefighters' 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 Firefighters' 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 74-153 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 and active members, terminated members, retirees and beneficiaries. We received financial information 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 Firefighters Retirement Chapter 175 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.

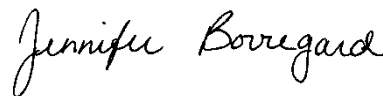
Sincerely,

Gabriel, Roeder, Smith & Company



---

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



---

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 175. 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 **\$2,767,619 (47.1%)**. The figure in parentheses is the System cost expressed as a percentage of projected covered annual payroll for fiscal year beginning October 1, 2024 (\$5,874,827).

This total cost is to be met by Member, City and State contributions. We anticipate Member contributions will be **\$352,490 (6.0%)** and allowable State contributions will be **\$421,258 (7.2%)**. This leaves a City requirement of **\$1,993,871 (33.9%)**. The City contribution includes an interest adjustment and must be increased if total State contributions are less than expected (\$456,867).

## Changes in System Benefits, Actuarial Assumptions and Methods

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

The rates of salary increase, retirement rates, and withdrawal rates have been updated based on the results of an Experience Study. 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 October 1, 2023 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 the covered payroll increased by approximately 12%. Total System membership decreased by approximately 1%. Total normal cost increased as a dollar amount but decreased as a percentage of covered payroll. The unfunded actuarial accrued liability and net City minimum funding requirement both increased 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 update of the actuarial assumptions. Total normal cost, unfunded actuarial accrued liability and the City minimum funding requirement all increased as a dollar amount and as a percentage of covered payroll.





The present value of vested accrued benefits exceeds the market value of System assets, resulting in a Vested Benefit Security Ratio is 89.1% (89.7% prior to assumption changes). This is an increase from 88.9% 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 \$3,912,378. This suggests actual overall System experience was less favorable than expected.

Table XVIII provides information on recent System experience (salary, turnover and investment yield). The salary experience indicates actual salary increases averaged approximately 15.0%. The average salary increase assumption was 6.3% (prior assumption). Salary experience was a major source of actuarial loss. The three, five and ten-year average salary increases are 8.1%, 7.9% and 6.6%, respectively.

Employee turnover this year was approximately 120% of the assumed turnover (prior assumption) and was an offsetting source of actuarial gain. Three, five and ten-year turnover are 90%, 60% and 30% of expected turnover, respectively.

The smoothed value investment return of 3.57% was less than the 7.50% assumption for investment return. 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 5.92%, 6.52% and 6.92%, respectively. The one, three, five and ten-year average annual market value returns are 8.08%, 2.69%, 4.35% and 5.46%, respectively.

### Conclusion and Recommendations

The Market Value of Assets is less than the Actuarial Value of Assets by \$6,541,914 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	12.04	11.49
Ratio of actuarial accrued liability to payroll	14.94	14.35
Ratio of actives to retirees and beneficiaries	0.82	0.78
Ratio of net cash flow to market value of assets	-1.4%	-1.6%
Duration of the actuarial accrued liability	13.14	13.08

**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: \$117,653,577
- 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
<b>A. Participant Data Summary (Table III)</b>				
1. Active employees	60	N/A	60	N/A
2. Terminated vested	0	N/A	0	N/A
3. Receiving benefits (including DROPs)	77	N/A	77	N/A
4. Annual payroll of active employees	\$ 5,676,161	100.0%	\$ 5,676,161	100.0%
<b>B. Total Normal Costs</b>				
1. Age retirement benefits	\$ 1,328,438	23.4%	\$ 1,412,018	24.9%
2. Termination benefits	118,417	2.1%	81,485	1.4%
3. Death benefits	26,700	0.5%	26,517	0.5%
4. Disability benefits	60,111	1.1%	62,905	1.1%
5. Estimated expenses	155,213	2.7%	155,213	2.7%
6. Total annual normal costs	\$ 1,688,879	29.8%	\$ 1,738,138	30.6%
<b>C. Total Actuarial Accrued Liability</b>				
1. Age retirement benefits active employees	\$ 21,248,202	374.3%	\$ 21,341,658	376.0%
2. Termination benefits active employees	271,060	4.8%	204,206	3.6%
3. Death benefits active employees	149,587	2.6%	136,246	2.4%
4. Disability benefits active employees	21,029	0.4%	21,760	0.4%
5. Retired or terminated vested participants receiving benefits including DROPs	54,065,000	952.5%	54,065,000	952.5%
6. Terminated vested participants entitled to future benefits	0	0.0%	0	0.0%
7. Deceased participants whose beneficiaries are receiving benefits	3,219,918	56.7%	3,219,918	56.7%
8. Disabled participants receiving benefits	2,277,886	40.1%	2,277,886	40.1%
9. Miscellaneous liability (refunds in process)	48,189	0.8%	48,189	0.8%
10. Share Plan liability	163,745	2.9%	163,745	2.9%
11. Total actuarial accrued liability	\$ 81,464,616	1435.2%	\$ 81,478,608	1435.5%
D. Net Smoothed Value of Assets (Table VI)	\$ 71,754,150	1264.1%	\$ 71,754,150	1264.1%
E. Unfunded Actuarial Accrued Liability (C-D)	\$ 9,710,466	171.1%	\$ 9,724,458	171.3%

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	\$ 1,688,879	29.8%	\$ 1,738,138	30.6%
2. Amortization of unfunded liability	834,276	14.7%	835,263	14.7%
3. Interest adjustment	98,812	1.7%	100,627	1.8%
4. Total required contribution	\$ 2,621,967	46.2%	\$ 2,674,028	47.1%
G. Expected payroll of active employees for 2024 / 2025 year (\$5,676,161 x 1.035)	\$ 5,874,827	103.5%	\$ 5,874,827	103.5%
H. Contribution Sources (percent of expected 2024 / 2025 payroll)				
1. Expected City	\$ 1,939,988	33.0%	\$ 1,993,871	33.9%
2. Expected State	421,258	7.2%	421,258	7.2%
3. Expected Member	352,490	6.0%	352,490	6.0%
4. Total required contribution	\$ 2,713,736	46.2%	\$ 2,767,619	47.1%
I. Actuarial Gain / (Loss) (Table VIII)	\$ (3,912,378)	(68.9%)	\$ (3,912,378)	(68.9%)
J. Actuarial Present Value of Vested Accrued Benefits				
1. Retired, terminated vested, beneficiaries and disabled receiving benefits including DROPs	\$ 59,562,804	1049.4%	\$ 59,562,804	1049.4%
2. Terminated vested participants entitled to future benefits and miscellaneous	48,189	0.8%	48,189	0.8%
3. Active participants entitled to future benefits	12,930,466	227.8%	13,425,257	236.5%
4. Share Plan liability	163,745	2.9%	163,745	2.9%
5. Total actuarial present value of vested accrued benefits	\$ 72,705,204	1280.9%	\$ 73,199,995	1289.6%
K. Net Market Value of Assets (Table V)	\$ 65,212,236	1148.9%	\$ 65,212,236	1148.9%
L. Unfunded Actuarial Present Value of Vested Accrued Benefits (J. - K., not less than zero)	\$ 7,492,968	132.0%	\$ 7,987,759	140.7%
M. Vested Benefit Security Ratio (K. ÷ J.)	89.7%	N/A	89.1%	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	62	N/A	60	N/A	60	N/A
2. Terminated vested	0	N/A	0	N/A	0	N/A
3. Receiving benefits (including DROPs)	76	N/A	77	N/A	77	N/A
4. Annual payroll of active employees	\$ 5,090,060	100.0%	\$ 5,676,161	100.0%	\$ 5,676,161	100.0%
B. Total Normal Costs	\$ 1,545,102	30.4%	\$ 1,688,879	29.8%	\$ 1,738,138	30.6%
C. Total Actuarial Accrued Liability	\$ 76,022,070	1493.5%	\$ 81,464,616	1435.2%	\$ 81,478,608	1435.5%
D. Smoothed Value of Assets	\$ 70,244,345	1380.0%	\$ 71,754,150	1264.1%	\$ 71,754,150	1264.1%
E. Unfunded Actuarial Accrued Liability	\$ 5,777,725	113.5%	\$ 9,710,466	171.1%	\$ 9,724,458	171.3%
F. Net City Cost	\$ 1,522,177	29.4% <sup>1</sup>	\$ 1,939,988	33.0% <sup>2</sup>	\$ 1,993,871	33.9% <sup>2</sup>
G. Actuarial Gain / (Loss)	\$ (3,500,455)	(68.8%)	\$ (3,912,378)	(68.9%)	\$ (3,912,378)	(68.9%)
H. Unfunded Actuarial Present Value of Vested Accrued Benefits	\$ 7,679,860	150.9%	\$ 7,492,968	132.0%	\$ 7,987,759	140.7%
I. Vested Benefit Security Ratio	88.9%	N/A	89.7%	N/A	89.1%	N/A
J. Funded Ratio (D. / C.)	92.4%	N/A	88.1%	N/A	88.1%	N/A

<sup>1</sup> Percent of expected 2023 / 2024 covered payroll (\$5,176,591)

<sup>2</sup> Percent of expected 2024 / 2025 covered payroll (\$5,874,827)



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

A. Active System Participants Summary

1. Active participants fully vested	25
2. Active participants partially vested	0
3. Active participants non-vested	35
4. Total active participants	60
5. Annual rate of pay of active participants	\$ 5,676,161

B. Retired and Terminated Vested Participant Summary

1. Retired or terminated vested participants receiving benefits including DROP participants	62
2. Terminated vested participants entitled to future benefits	0
3. Deceased participants whose beneficiaries are receiving benefits	10
4. Disabled participants receiving benefits	5

C. Projected Annual Retirement Benefits

1. Retired or terminated vested receiving benefits including DROP participants	\$ 3,707,717
2. Terminated vested entitled to future benefits	0
3. Beneficiaries of deceased participants receiving benefits	307,442
4. Disabled participants receiving benefits	185,324

Table IV

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

	<u>Market Value</u>
A. <u>Cash and cash equivalents</u>	\$ 798,348
B. <u>General Investments</u>	
1. U.S. Government obligations	0
2. Corporate bonds	10,590,135
3. Common stocks	45,868,835
4. Commingled funds	0
5. Convertible securities	0
6. Real estate	7,893,581
7. Accrued income	36,548
C. <u>Receivables</u>	
1. Employee contribution	0
2. State contribution	0
3. Other	39,627
D. <u>Payables</u>	<u>14,838</u>
E. <u>Total System Assets</u> (A + B + C - D)	65,212,236
F. <u>Credit Balance</u>	<u>0</u>
G. <u>Net System Assets</u> (E - F)	\$ 65,212,236

## Reconciliation of System Assets

A. <u>Total Market Value of Assets as of October 1, 2022</u>		\$	61,283,847
B. <u>Receipts During Period</u>			
1. Contributions			
a. Employee (includes Buyback)	\$	390,337	
b. City		1,281,019	
c. State		456,867	
d. Total	\$	<u>2,128,223</u>	
2. Investment Income			
a. Interest, dividends and other	\$	1,349,425	
b. Investment expenses		<u>(212,051)</u>	
c. Net investment income	\$	1,137,374	
3. Realized gains / (losses)		(646,070)	
4. Unrealized gains / (losses)		<u>4,418,739</u>	
5. Total receipts during period	\$		7,038,266
C. <u>Disbursements During Period</u>			
1. Pension payments	\$	2,917,283	
2. DROP distributions		0	
3. Share Plan distributions		12,943	
4. Contribution refunds		24,438	
5. Administrative expenses		<u>155,213</u>	
6. Total disbursements during period	\$		<u>3,109,877</u>
D. <u>Total Market Value of Assets as of September 30, 2023</u>	\$		65,212,236
E. <u>Credit Balance</u>	\$		0
F. <u>Net Market Value of Assets as of September 30, 2023</u> (D - E)	\$		65,212,236

Reconciliation of System Assets

G. Share Plan

1. Balance as of October 1, 2022	\$	135,121
2. Increase from State funds received		35,609
3. Investment credits		9,872
4. Administrative fees		(3,914)
5. Distributions		(12,943)
6. Balance as of September 30, 2023	\$	<u>163,745</u>

H. Reconciliation of DROP Account Balances

1. DROP account balances as of October 1, 2022	\$	2,029,525
2. Benefit credits		943,928
3. Investment gains / (losses)		164,632
4. Administrative expenses		(19,414)
5. DROP account distributions		0
6. DROP account balances as of September 30, 2023	\$	<u>3,118,671</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	\$ 68,386,692	\$ 70,244,345	\$ 71,754,150		
B. Market value beginning of year	74,186,284	61,283,847	65,212,236		
C. Market value end of year	61,283,847	65,212,236			
D. Net non-investment cash flow	(1,055,429)	(981,654)			
E. Investment return					
1. Total market value return: C. - B. - D.	(11,847,008)	4,910,043			
2. Amount for immediate recognition (7.50%)	5,524,393	4,559,477			
3. Amount for phased-in recognition: E.1. - E.2.	(17,371,401)	350,566			
F. Phased-in recognition of investment return:					
1. Current year: 25% of E.3.	(4,342,850)	87,642			
2. First prior year	1,880,863	(4,342,850)	87,642		
3. Second prior year	306,328	1,880,863	(4,342,850)	87,642	
4. Third prior year	(455,652)	306,327	1,880,863	(4,342,851)	87,640
5. Total phased-in recognition of investment return	(2,611,311)	(2,068,018)	(2,374,345)	(4,255,209)	87,640
G. Total smoothed value end of year					
1. Preliminary total smoothed value end of year:					
A. + D. + E.2. + F.5.	70,244,345	71,754,150			
2. Upper corridor limit: 120% of C.	73,540,616	78,254,683			
3. Lower corridor limit: 80% of C.	49,027,078	52,169,789			
4. Total smoothed value end of year:					
G.1., not more than G.2., nor less than G.3.	70,244,345	71,754,150			
H. Difference between total market value and total smoothed value	(8,960,498)	(6,541,914)			
I. Smoothed value rate of return	4.29%	3.57%			
J. Market value rate of return	(16.08%)	8.08%			
K. Credit balance	0	0			
L. Net smoothed value of assets	70,244,345	71,754,150			

**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		1,177,839
3. Net amortization charges		447,296
4. Interest charge		<u>77,142</u>
5. Total employer charges	\$	1,702,277

B. Credits to the Funding Standard Account

1. Prior year credit balance	\$	0
2. Net State contribution		421,258
3. City contribution		<u>1,281,019</u>
4. Total credits	\$	1,702,277

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

\$ 0

**Actuarial Gain / (Loss) for  
System Year Ended September 30, 2023 \***

A. Derivation of Actuarial Gain / (Loss)

1. City and State net normal cost previous actuarial valuation	\$ 1,239,699
2. Unfunded actuarial accrued liability previous actuarial valuation	5,777,725
3. Net City and State contributions previous year	1,702,277
4. Interest on:	
(a) City and State net normal cost	\$ 92,977
(b) Unfunded actuarial accrued liability	433,329
(c) City and State contributions	43,365
(d) Net total: (a) + (b) - (c)	\$ 482,941
5. Increase (decrease) in unfunded actuarial accrued liability due to assumption changes	\$ 13,992
6. Expected unfunded actuarial accrued liability current year: (1. + 2. - 3. + 4. + 5.)	\$ 5,812,080
7. Actual unfunded actuarial accrued liability current year	9,724,458
8. Actuarial gain / (loss): (6. - 7.)	\$ (3,912,378)

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

1. Smoothed value of net assets previous year	\$ 70,109,224
2. Net contributions during period	2,092,614
3. Benefits and admin expenses during period	3,096,934
4. Expected net appreciation for period	5,220,530
5. Expected smoothed value of net assets current year: (1. + 2. - 3. + 4.)	\$ 74,325,434
6. Actual smoothed value of net assets current year	\$ 71,590,405
7. Approximate gain / (loss) due to investments: (6. - 5.)	\$ (2,735,029)

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

\$ (1,177,349)

\* 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	\$ 9,724,458	\$ 835,263
October 1, 2024	\$ 9,555,885	\$ 863,664
October 1, 2025	\$ 9,344,138	\$ 893,029
October 1, 2026	\$ 9,084,942	\$ 923,393
October 1, 2027	\$ 8,773,665	\$ 954,788
...		
...		
October 1, 2043	\$ 0	\$ 0

#### B. Covered Payroll History

<u>Date</u>	<u>Covered Payroll *</u>	<u>Annual Increase</u>
October 1, 2023	\$ 5,676,161	11.5%
October 1, 2022	\$ 5,090,060	5.7%
October 1, 2021	\$ 4,816,227	(2.9%)
October 1, 2020	\$ 4,959,030	(2.7%)
October 1, 2019	\$ 5,095,063	(2.5%)
October 1, 2018	\$ 5,223,658	6.5%
October 1, 2017	\$ 4,905,347	(0.2%)
October 1, 2016	\$ 4,915,236	15.0%
October 1, 2015	\$ 4,275,632	5.1%
October 1, 2014	\$ 4,067,097	0.4%
October 1, 2013	\$ 4,050,149	N/A

Ten-Year Average Annual Increase

3.4%

\* 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	76	77	77
b. Terminated due deferred benefits	0	0	0
c. Active System members	62	60	60
d. Total	<u>138</u>	<u>137</u>	<u>137</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	\$ 57,457,833	\$ 59,562,804	\$ 59,562,804
b. Other participants (including Share Plan liability)	<u>11,505,874</u>	<u>13,142,400</u>	<u>13,637,191</u>
c. Total	\$ 68,963,707	\$ 72,705,204	\$ 73,199,995
2. Actuarial present value of accumulated non-vested System benefits			
	\$ 789,588	\$ 1,008,929	\$ 1,049,683
3. Total actuarial present value of accumulated System benefits			
	\$ 69,753,295	\$ 73,714,133	\$ 74,249,678
<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			\$ 69,753,295
2. Increase (decrease) during year attributable to:			
a. System amendment			\$ 0
b. Change in actuarial assumptions			535,545
c. Benefits paid including refunds and DROP and Share Plan distributions			(2,954,664)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period			<u>6,915,502</u>
e. Net increase			\$ 4,496,383
3. Actuarial present value of accumulated System benefits as of October 1, 2023			\$ 74,249,678
<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	\$ 1,034,774	\$ 1,038,799	\$ 1,094,871	\$ 1,248,662	\$ 1,239,233	\$ 1,430,286	\$ 1,368,477	\$ 1,329,882	\$ 1,294,066	\$ 1,376,441	\$ 1,582,925
Interest	3,762,630	4,027,050	4,273,512	4,508,511	4,613,292	4,786,861	4,979,216	5,233,555	5,307,664	5,694,312	6,076,027
Benefit Changes	0	0	0	0	0	217,683	(11,064)	0	0	(12,629)	0
Difference Between Actual and Expected Experience Assumption Changes	(273,916)	166,585	503,485	977,255	(1,193,864)	86,445	1,082,823	970,011	(212,676)	1,486,920	1,337,156
Benefit Payments, including Refunds of Member Contributions	(1,452,381)	(1,559,126)	(3,712,026)	(2,788,899)	(3,811,824)	(2,883,745)	(2,622,120)	(5,493,651)	(3,913,598)	(2,954,664)	(4,095,680)
Net Change in Total Pension Liability	\$ 3,071,107	\$ 3,673,308	\$ 2,159,842	\$ 3,753,661	\$ 846,837	\$ 4,905,722	\$ 2,851,584	\$ 2,039,797	\$ 2,475,456	\$ 5,590,380	\$ 4,914,420
Total Pension Liability (TPL) - (beginning of year)	48,759,766	51,830,873	55,504,181	57,664,023	61,417,684	62,264,521	67,170,243	70,021,827	72,061,624	74,537,080	80,127,460
Total Pension Liability (TPL) - (end of year)	\$ 51,830,873	\$ 55,504,181	\$ 57,664,023	\$ 61,417,684	\$ 62,264,521	\$ 67,170,243	\$ 70,021,827	\$ 72,061,624	\$ 74,537,080	\$ 80,127,460	\$ 85,041,880
<b>B. System Fiduciary Net Position</b>											
Contributions - City and State	\$ 2,029,490	\$ 2,020,802	\$ 1,969,866	\$ 2,023,791	\$ 2,177,715	\$ 2,341,237	\$ 2,663,494	\$ 2,620,947	\$ 2,643,421	\$ 1,737,886	\$ 1,935,615
Contributions - Member	353,350	305,022	288,518	299,920	419,544	335,772	533,570	302,114	383,409	390,337	340,570
Net Investment Income	4,278,932	(1,433,057)	4,289,420	5,169,895	3,616,777	2,403,016	5,634,924	12,269,438	(11,847,008)	4,910,043	4,816,866
Benefit Payments, including Refunds of Member Contributions	(1,452,381)	(1,559,126)	(3,712,026)	(2,788,899)	(3,811,824)	(2,883,745)	(2,622,120)	(5,493,651)	(3,913,598)	(2,954,664)	(4,095,680)
Administrative Expenses	(73,301)	(87,779)	(114,691)	(109,739)	(152,481)	(118,956)	(148,911)	(155,340)	(168,661)	(155,213)	(155,213)
Other	0	0	0	0	0	0	0	0	0	0	0
Net Change in System Fiduciary Net Position	\$ 5,136,090	\$ (754,138)	\$ 2,721,087	\$ 4,594,968	\$ 2,249,731	\$ 2,077,324	\$ 6,060,957	\$ 9,543,508	\$ (12,902,437)	\$ 3,928,389	\$ 2,842,158
System Fiduciary Net Position - (beginning of year)	42,556,757	47,692,847	46,938,709	49,659,796	54,254,764	56,504,495	58,581,819	64,642,776	74,186,284	61,283,847	65,212,236
System Fiduciary Net Position - (end of year)	\$ 47,692,847	\$ 46,938,709	\$ 49,659,796	\$ 54,254,764	\$ 56,504,495	\$ 58,581,819	\$ 64,642,776	\$ 74,186,284	\$ 61,283,847	\$ 65,212,236	\$ 68,054,394
<b>C. Net Pension Liability (NPL) - (end of year): (A) - (B)</b>											
	\$ 4,138,026	\$ 8,565,472	\$ 8,004,227	\$ 7,162,920	\$ 5,760,026	\$ 8,588,424	\$ 5,379,051	\$ (2,124,660)	\$ 13,253,233	\$ 14,915,224	\$ 16,987,486
<b>D. System Fiduciary Net Position as a Percentage of TPL:</b>											
(B) / (A)	92.02 %	84.57 %	86.12 %	88.34 %	90.75 %	87.21 %	92.32 %	102.95 %	82.22 %	81.39 %	80.02 %
<b>E. Covered Employee Payroll **</b>											
	\$ 4,130,864	\$ 4,351,071	\$ 4,808,627	\$ 4,980,531	\$ 5,095,403	\$ 5,319,825	\$ 5,287,484	\$ 5,035,225	\$ 5,363,409	\$ 5,792,116	\$ 5,676,161
<b>F. NPL as a Percentage of Covered Employee Payroll:</b>											
(C) / (E)	100.17 %	196.86 %	166.46 %	143.82 %	113.04 %	161.44 %	101.73 %	(42.20)%	247.10 %	257.51 %	299.28 %
<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 (GASB No. 68)	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, Share Plan and reserve for excess State funds to the measurement dates - actual DROP account balances, Share Plan and reserve for excess State funds 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)

Fiscal Year End 9/30	Actuarially Determined Contribution <sup>1</sup>	Actual Contribution <sup>1</sup>	Contribution Deficiency (Excess)	Covered Payroll <sup>2</sup>	Actual Contribution as a % of Covered Payroll
2014	\$ 2,029,490	\$ 2,029,490	\$ 0	\$ 4,130,864	49.13%
2015	2,020,802	2,020,802	0	4,351,071	46.44%
2016	1,969,866	1,969,866	0	4,808,627	40.97%
2017	1,974,157	2,023,791	(49,634)	4,980,531	40.63%
2018	2,227,349	2,177,715	49,634	5,095,403	42.74%
2019	2,341,237	2,341,237	0	5,319,825	44.01%
2020	2,663,494	2,663,494	0	5,287,484	50.37%
2021	2,620,947	2,620,947	0	5,035,225	52.05%
2022	2,643,421	2,643,421	0	5,363,409	49.29%
2023	1,737,886	1,737,886	0	5,792,116	30.00%
2024 <sup>3</sup>	1,935,615	1,935,615	0	5,676,161	34.10%

<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	5.0% - 8.5%
Investment Rate of Return	7.50%
Payroll Growth Assumption	3.5% per annum - not greater than historical 10-year average but not less than 0.0% (1.7%).
Retirement Age	Experience-based table of rates 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%

**Other Information:**

Benefit Changes  
2022: Service incurred death benefit updated. 2019: Disability retirement eligibility was updated. 2018: Termination benefits updated. 2013: Compensation updated to include accruals as of September 30, 2011.

Accounting Disclosure Exhibit

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

Assumption Changes

2019: Mortality assumption updated. 2018: Investment return, salary increase factors, rates of retirement and employee withdrawal rates were updated. 2016: Mortality updated. 2013: Active liabilities and normal costs increased by 1.35% to account for unused annual leave pay at time of retirement for members hired prior to October 1, 2011.

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 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	\$ 24,913,305	\$ 14,915,224	\$ 6,696,738

Measurement date: September 30, 2024 \*

	1% Decrease	Current Discount Rate	1% Increase
Discount Rate	6.50%	7.50%	8.50%
NPL	\$ 27,521,030	\$ 16,987,486	\$ 8,323,050

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

**Accounting Disclosure Exhibit**

**VIII. Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - Reporting Date (GASB No. 68)**

Pension Expense for Fiscal Year Ending September 30, 2024 \$ 4,780,990

Summary of Outstanding Deferred Inflows and Outflows of Resources as of September 30, 2024

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between actual and expected experience on liabilities	\$ 1,860,067	\$ 127,606
Changes of assumptions or other inputs	155,742	449,020
Net difference between projected and actual earnings on pension System investments	6,887,943	0
Total	\$ 8,903,752	\$ 576,626

Projected Deferred Outflows for City Contributions after the Measurement Date \$ 1,514,357

Summary of Deferred Outflows and Inflows of Resources that will be Recognized in Pension Expense in Future Years.

Year Ending 30-Sep	Amount
2025	\$ 2,081,647
2026	2,293,109
2027	3,636,988
2028	205,242
2029	110,140
Thereafter	0

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	\$ 1,034,774	\$ 1,038,799	\$ 1,094,871	\$ 1,248,662	\$ 1,239,233	\$ 1,430,286	\$ 1,368,477	\$ 1,329,882	\$ 1,294,066	\$ 1,376,441	\$ 1,582,925
Interest on Total Pension Liability	3,762,630	4,027,050	4,273,512	4,508,511	4,613,292	4,786,861	4,979,216	5,233,555	5,307,664	5,694,312	6,076,027
Current-Period Benefit Changes	0	0	0	0	0	217,683	(11,064)	0	0	(12,629)	0
Contributions - Member	(353,350)	(305,022)	(288,518)	(299,920)	(419,544)	(335,772)	(533,570)	(302,114)	(383,409)	(390,337)	(340,570)
Projected Earnings on System Investments	(3,331,364)	(3,722,504)	(3,576,977)	(3,826,356)	(4,151,771)	(4,225,624)	(4,409,613)	(4,745,986)	(5,524,393)	(4,559,477)	(4,816,866)
Administrative Expenses	73,301	87,779	114,691	109,739	152,481	118,956	148,911	155,340	168,661	155,213	155,213
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	(57,066)	(20,047)	94,381	265,118	27,810	292,608	39,497	119,428	24,200	498,532	692,164
Recognition of Beginning Deferred Outflows / (Inflows) due to Assets	(189,514)	841,598	699,109	430,401	537,402	1,091,437	(184,736)	(1,546,938)	2,196,048	2,018,935	1,654,414
Total Pension Expense	<u>\$ 939,411</u>	<u>\$ 1,947,653</u>	<u>\$ 2,411,069</u>	<u>\$ 2,436,155</u>	<u>\$ 1,998,903</u>	<u>\$ 3,376,435</u>	<u>\$ 1,397,118</u>	<u>\$ 243,167</u>	<u>\$ 3,082,837</u>	<u>\$ 4,780,990</u>	<u>\$ 5,003,307</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	\$ 86,445	5.7	0.7	\$ 15,166	\$ 10,615
2019 / 2020	1,082,823	5.2	1.2	208,235	249,883
2020 / 2021	970,011	5.0	2.0	194,002	388,005
2021 / 2022	0	5.0	3.0	0	0
2022 / 2023	1,486,920	5.4	4.4	275,356	1,211,564
TOTAL				\$ 692,759	\$ 1,860,067

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	5.7	0.7	\$ 0	\$ 0
2019 / 2020	0	5.2	1.2	0	0
2020 / 2021	0	5.0	2.0	0	0
2021 / 2022	(212,676)	5.0	3.0	(42,535)	(127,606)
2022 / 2023	0	5.4	4.4	0	0
TOTAL				\$ (42,535)	\$ (127,606)

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	\$ 1,268,192	5.7	0.7	\$ 222,490	\$ 155,742
2019 / 2020	0	5.2	1.2	0	0
2020 / 2021	0	5.0	2.0	0	0
2021 / 2022	0	5.0	3.0	0	0
2022 / 2023	0	5.4	4.4	0	0
TOTAL				\$ 222,490	\$ 155,742



**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	5.7	0.7	\$ 0	\$ 0
2019 / 2020	(1,945,748)	5.2	1.2	(374,182)	(449,020)
2020 / 2021	0	5.0	2.0	0	0
2021 / 2022	0	5.0	3.0	0	0
2022 / 2023	0	5.4	4.4	0	0
			TOTAL	\$ (374,182)	\$ (449,020)

**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	\$ 1,822,608	5	0	\$ 364,520	\$ 0
2019 / 2020	(1,225,311)	5	1	(245,062)	(245,063)
2020 / 2021	(7,523,452)	5	2	(1,504,690)	(3,009,382)
2021 / 2022	17,371,401	5	3	3,474,280	10,422,841
2022 / 2023	(350,566)	5	4	(70,113)	(280,453)
			TOTAL	\$ 2,018,935	\$ 6,887,943

### Outline of Principal Provisions of the Retirement System

A. Effective Date:

October 1, 1992. Most recently amended by Ordinance No. 3276-23 adopted August 9, 2023.

B. Eligibility:

All regular uniformed members of the Fire Department; includes active volunteers.

C. Member:

An actively employed Firefighter who fulfills the eligibility requirements.

D. Contributions:

Employee:	6.0% 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 Firefighter with member contributions.

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:

3.0% 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. Delayed Retirement:

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

L. Disability Retirement:

1. Service Incurred:

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

Effective July 1, 2019, a Firefighter who becomes totally and permanently unable to perform useful and efficient service as a Firefighter due to a diagnosis of cancer or circumstances that arise out of the treatment of such cancer will be presumed to be disabled in-line of duty subject to the limitations in Chapter 112.1816, Florida Statutes.

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:

Firefighters 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) month period, or
- b. the Member's unreduced accrued benefit at the time of death

Firefighters, 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) month period, or
- b. the Member's unreduced accrued benefit at the time of death

Firefighters, 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 Normal 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 84 months. The benefit is paid as a lump sum upon actual termination of employment.

Q. Cost of Living Adjustment (COLA)

A participant who terminates employment on or after October 1, 2002 is entitled to a 3.0% 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.

E. Disability Rates

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

<u>Age</u>	<u>Withdrawal Rates Per 100 Employees</u>	<u>Disability Rates Per 100 Employees</u>
20	3.04	0.14
25	2.89	0.15
30	2.54	0.18
35	1.93	0.23
40	1.32	0.30
45	0.81	0.51

85% of disabilities are assumed to be service incurred - 15% non-service incurred.

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>
< 40	6.50%
40 - 44	5.50%
45 - 49	5.00%
50 +	4.50%

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

G. Rates of Retirement

<u>Age</u>	<u>Annual Rate of Retirement</u>
At First Normal Retirement Eligibility	
< 50	25%
50 - 59	45%
60 & Over	100%
Retirement Other Than At First Normal Retirement Eligibility	
< 51	15%
51 - 54	5%
55 - 59	45%
60 & Over	100%

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 1.35% to account for unused annual leave pay at time of retirement for Firefighters 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 (3.4% 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. Employee Withdrawal Rates were:

<u>Age</u>	<u>Per 100 Employees</u>
20	4.68
25	4.45
30	3.90
35	2.96
40	2.03
45	1.25

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

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

2. Salary Increase Factors were:

<u>Age</u>	<u>Salary Increase</u>
< 30	8.50%
30 - 39	6.50%
40 - 49	5.25%
50 +	5.00%

3. Rates of Retirement were:

<u>Age</u>	<u>Annual Rate of Retirement</u>
At First Normal Retirement Eligibility	
< 50	25%
50 - 59	50%
60 & Over	100%
Retirement Other Than At First Normal Retirement Eligibility	
< 50	5%
50	30%
51 - 54	10%
55 - 59	35%
60 & Over	100%

Table XIII

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

Attained Age Group	-----COMPLETED YEARS OF SERVICE-----							Total
	<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	2	-	-	-	-	-	-	2
25 - 29	7	4	-	-	-	-	-	11
30 - 34	6	3	2	-	-	-	-	11
35 - 39	2	5	5	3	-	-	-	15
40 - 44	-	1	3	4	-	-	-	8
45 - 49	-	1	-	2	5	-	-	8
50 - 54	-	-	-	3	-	-	-	3
55 - 59	1	-	-	-	1	-	-	2
60 - 64	-	-	-	-	-	-	-	-
65 & Over	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>18</b>	<b>14</b>	<b>10</b>	<b>12</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>60</b>

	<u>10/01/2022</u>	<u>10/01/2023</u>
Average Attained Age	36.6 years	37.4 years
Average Hire Age	27.3 years	27.2 years
Average Pay	\$ 82,098	\$ 94,603
Percent Female	9.7%	8.3%

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

**A. Entitled to Deferred Benefits**

Current Age <u>Group</u>	<u>Count</u>	Total <u>Annual Benefit</u>	Average <u>Annual Benefit</u>
Less than 40	-	\$ -	-
40 - 44	-	-	-
45 - 49	-	-	-
50 - 54	-	-	-
55 - 59	-	-	-
60 - 64	-	-	-
65 & Over	-	-	-
TOTAL	<u>0</u>	<u>\$ -</u>	-

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

Current Age <u>Group</u>	<u>Count</u>	Total <u>Annual Benefit</u>	Average <u>Annual Benefit</u>
Less than 50	7	\$ 368,688	\$ 52,670
50 - 54	15	937,983	62,532
55 - 59	12	759,237	63,270
60 - 64	11	727,985	66,180
65 - 69	9	535,282	59,476
70 - 74	10	542,684	54,268
75 - 79	3	164,577	54,859
80 - 84	6	143,774	23,962
85 - 89	0	-	-
90 - 94	4	20,273	5,068
95 & Over	0	-	-
TOTAL	<u>77</u>	<u>\$ 4,200,483</u>	<u>\$ 54,552</u>

## Reconciliation of Member Data

<b>A. <u>Active Participants</u></b>	
1. Active participants previous year	62
2. Retired during year	0
3. Entered DROP	(1)
4. Died during year	0
5. Disabled during year	0
6. Terminated during year	(2)
7. New active participants	1
8. Re-instated during year	0
9. Active participants current year	<u>60</u>
<b>B. <u>Participants Receiving Benefits</u></b>	
1. Participants receiving benefits previous year	64
2. New retired participants	0
3. Former DROPs now receiving benefits	0
4. New terminated vested receiving benefits	0
5. New disabled receiving benefits	0
6. New beneficiaries receiving benefits	1
7. Died or ceased payment during year	(1)
8. Retired or terminated vested receiving benefits current year	<u>64</u>
<b>C. <u>DROP Participants</u></b>	
1. DROP participants previous year	12
2. Died during year	0
3. Became disabled during year	0
4. Employment terminated and retired during year	0
5. Entered DROP during year	1
6. DROP participants current year	<u>13</u>
<b>D. <u>Terminated Vested Participants Entitled to Future Benefits</u></b>	
1. Terminated vested entitled previous year	0
2. Died during year	0
3. Commenced receiving benefits during year	0
4. New terminated vested	0
5. Terminated vested paid lump sum	0
6. Terminated vested entitled current year	<u>0</u>

### Projected Retirement Benefits

<u>Fiscal Year</u>	<u>Projected Total Annual Payout</u>
2024	\$ 4,239,344
2025	\$ 4,484,886
2026	\$ 4,707,877
2027	\$ 4,876,976
2028	\$ 5,125,195
2029	\$ 5,317,478
2030	\$ 5,488,932
2031	\$ 5,753,236
2032	\$ 6,049,940
2033	\$ 6,394,278

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.

Table XVII

## Summary of Transaction Information

Valuation Date	Benefits Paid <sup>1</sup>	Administrative Expenses	Employee Contributions	Net City Contributions	Total State Contributions <sup>2</sup>	Smoothed Value <sup>3,4</sup>
10/01/2023	\$ 2,954,664	\$ 155,213	\$ 390,337	\$ 1,281,019	\$ 456,867	\$ 71,754,150
10/01/2022	3,913,598	168,661	383,409	2,202,193	441,228	70,244,345
10/01/2021	5,493,651	155,340	302,114	2,156,075	464,872	68,386,692
10/01/2020	2,622,120	148,911	533,570	2,236,866	426,628	64,768,844
10/01/2019	2,883,745	118,956	335,772	1,905,919	435,318	59,880,387
10/01/2018	3,811,824	152,481	419,544	1,796,686 <sup>5</sup>	430,663	56,055,861
10/01/2017	2,788,899	109,739	299,920	1,604,113 <sup>4</sup>	370,044	54,130,146
10/01/2016	3,712,026	114,691	288,518	1,563,461	406,405	51,466,953
10/01/2015	1,559,126	87,779	305,022	1,635,666	385,136	49,902,483
10/01/2014	1,452,381	73,301	353,350	1,645,874 <sup>5</sup>	383,616	45,458,567
10/01/2013	1,631,069	73,376	275,751	1,653,307	385,648	40,648,629
10/01/2012	1,801,288	58,645	332,768	1,520,031	333,964	33,953,123
10/01/2011	1,628,475	81,407	365,921	1,485,504	365,789	31,790,960
10/01/2010	1,390,982	53,060	282,788	1,137,419	399,618	31,299,968
10/01/2009	1,176,207	50,871	302,189	1,153,948	375,084	30,139,278
10/01/2008	936,515	57,115	534,132	960,801	363,890	28,964,427
10/01/2007	945,663	44,399	300,809	1,021,370	333,607	26,896,728
10/01/2006	883,842	41,655	278,223	870,265	297,803	24,212,684
10/01/2005	666,874	40,843	272,488	823,182	258,362	20,589,160
10/01/2004	608,736	38,001	247,266	535,623	249,694	18,848,476

<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 and Excess State Funds, effective for October 1, 2013 valuation date. Includes Share Plan account balance, effective for October 1, 2019 valuation date.

<sup>4</sup> Net of Credit Balance, if any.

<sup>5</sup> Includes use of credit balance

Table XVIII

Recent Compensation, Termination and Investment Return Experience

Valuation Date	Compensation		Termination	Investment Return <sup>1</sup>		
	% Increase (Decrease)	Assumed Increase	Ratio of Actual to Expected	Market Value	Smoothed Value	Assumed
10/01/2023	15.0%	6.3%	1.2	8.08%	3.57%	7.50%
10/01/2022	8.8%	6.3%	0.7	(16.08%)	4.29%	7.50%
10/01/2021	1.0%	6.1%	0.8	19.39%	10.01%	7.50%
10/01/2020	7.5%	6.2%	0.8	9.58%	7.43%	7.50%
10/01/2019	7.8%	6.1%	0.0	4.27%	7.43%	7.50%
10/01/2018	3.3%	7.4%	0.0	6.75%	6.06%	7.75%
10/01/2017	0.2%	7.5%	0.0	10.47%	6.42%	7.75%
10/01/2016	11.7%	7.5%	0.0	9.29%	6.38%	7.75%
10/01/2015	8.7%	7.6%	0.0	(2.98%)	8.22%	7.75%
10/01/2014	3.3%	7.7%	0.0	9.95%	9.62%	7.75%
Last 3 Years	8.1%	6.2%	0.9	2.69%	5.92%	7.50%
Last 5 Years	7.9%	6.2%	0.6	4.35%	6.52%	7.50%
Last 10 Years	6.6%	6.9%	0.3	5.46%	6.92%	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 State Contributions Made <sup>1</sup>	Actual Employer Contributions Made
10/01/2023	09/30/2025	\$ 2,415,129	TBD	TBD	TBD
10/01/2022	09/30/2024	\$ 1,935,615	TBD	TBD	TBD
10/01/2021	09/30/2023	\$ 1,737,886	\$ 1,281,019	\$ 456,867	\$ 1,737,886
10/01/2020	09/30/2022	\$ 2,643,421	\$ 2,202,193	\$ 441,228	\$ 2,643,421
10/01/2019	09/30/2021	\$ 2,620,947	\$ 2,156,075	\$ 464,872	\$ 2,620,947
10/01/2018	09/30/2020	\$ 2,663,494	\$ 2,236,866	\$ 426,628	\$ 2,663,494
10/01/2017	09/30/2019	\$ 2,341,237	\$ 1,905,919	\$ 435,318	\$ 2,341,237
10/01/2016	09/30/2018	\$ 2,227,349	\$ 1,796,686 <sup>2</sup>	\$ 430,663	\$ 2,227,349
10/01/2015	09/30/2017	\$ 1,974,157	\$ 1,604,113	\$ 370,044	\$ 1,974,157
10/01/2014	09/30/2016	\$ 1,969,866	\$ 1,563,461	\$ 406,405	\$ 1,969,866
10/01/2013	09/30/2015	\$ 2,020,802	\$ 1,635,666	\$ 385,136	\$ 2,020,802
10/01/2012	09/30/2014	\$ 2,029,490	\$ 1,645,874 <sup>2</sup>	\$ 383,616	\$ 2,029,490
10/01/2011	09/30/2013	\$ 2,038,955	\$ 1,653,307	\$ 385,648	\$ 2,038,955
10/01/2010	09/30/2012	\$ 1,742,515	\$ 1,520,031	\$ 333,964	\$ 1,853,995
10/01/2009	09/30/2011	\$ 1,701,327	\$ 1,485,504	\$ 365,789	\$ 1,851,293
10/01/2008	09/30/2010	\$ 1,537,037	\$ 1,137,419	\$ 399,618	\$ 1,537,037
10/01/2007	09/30/2009	\$ 1,529,032	\$ 1,153,948	\$ 375,084	\$ 1,529,032
10/01/2006	09/30/2008	\$ 1,324,691	\$ 960,801	\$ 363,890	\$ 1,324,691
10/01/2005	09/30/2007	\$ 1,354,977	\$ 1,021,370	\$ 333,607	\$ 1,354,977
10/01/2004	09/30/2006	\$ 1,168,068	\$ 870,265	\$ 297,803	\$ 1,168,068
10/01/2004	09/30/2005	\$ 1,081,544	\$ 823,182	\$ 258,362	\$ 1,081,544
10/01/2003	09/30/2004	\$ 785,317	\$ 535,623	\$ 249,694	\$ 785,317
10/01/2002	09/30/2003	\$ 676,299	\$ 444,398	\$ 238,801	\$ 683,199
10/01/2001	09/30/2002	\$ 276,166	\$ 136,979	\$ 194,782	\$ 331,761
10/01/2000	09/30/2001	\$ 129,595	\$ 0	\$ 185,140	\$ 185,140
10/01/1999	09/30/2000	\$ 212,241	\$ 60,966	\$ 180,322	\$ 241,288
10/01/1998	09/30/1999	\$ 274,126	\$ 103,912	\$ 170,214	\$ 274,126
10/01/1997	09/30/1998	\$ 333,068	\$ 230,624	\$ 177,010	\$ 407,634
10/01/1996	09/30/1997	\$ 396,140	\$ 270,731	\$ 128,742	\$ 399,473
10/01/1995	09/30/1996	\$ 425,170	\$ 303,333	\$ 124,641	\$ 427,974

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

<sup>2</sup> Includes credit Includes use of 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.

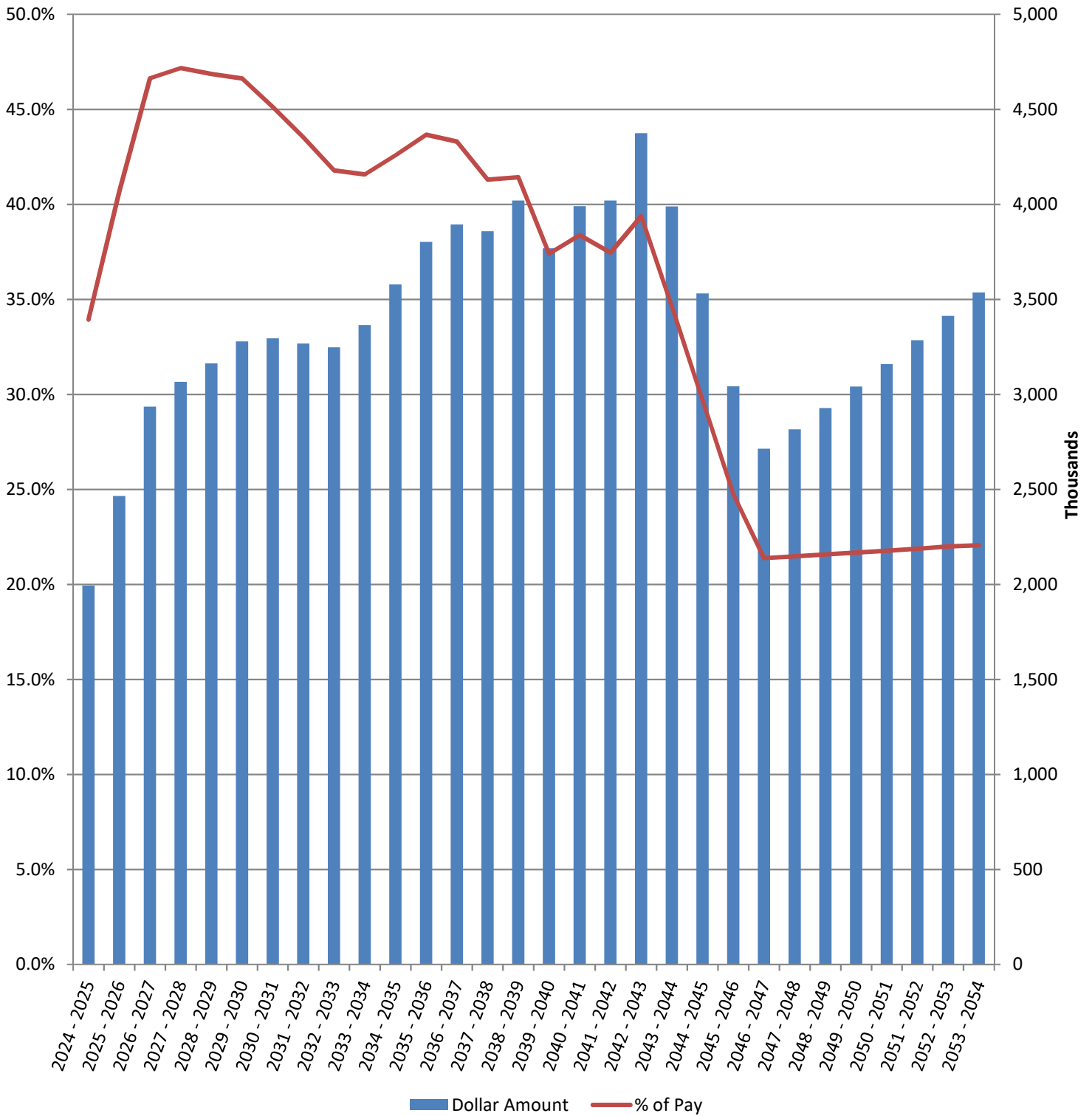
These projections are deterministic – assume all actuarial assumptions are realized.

**Table XX  
(Cont'd)**

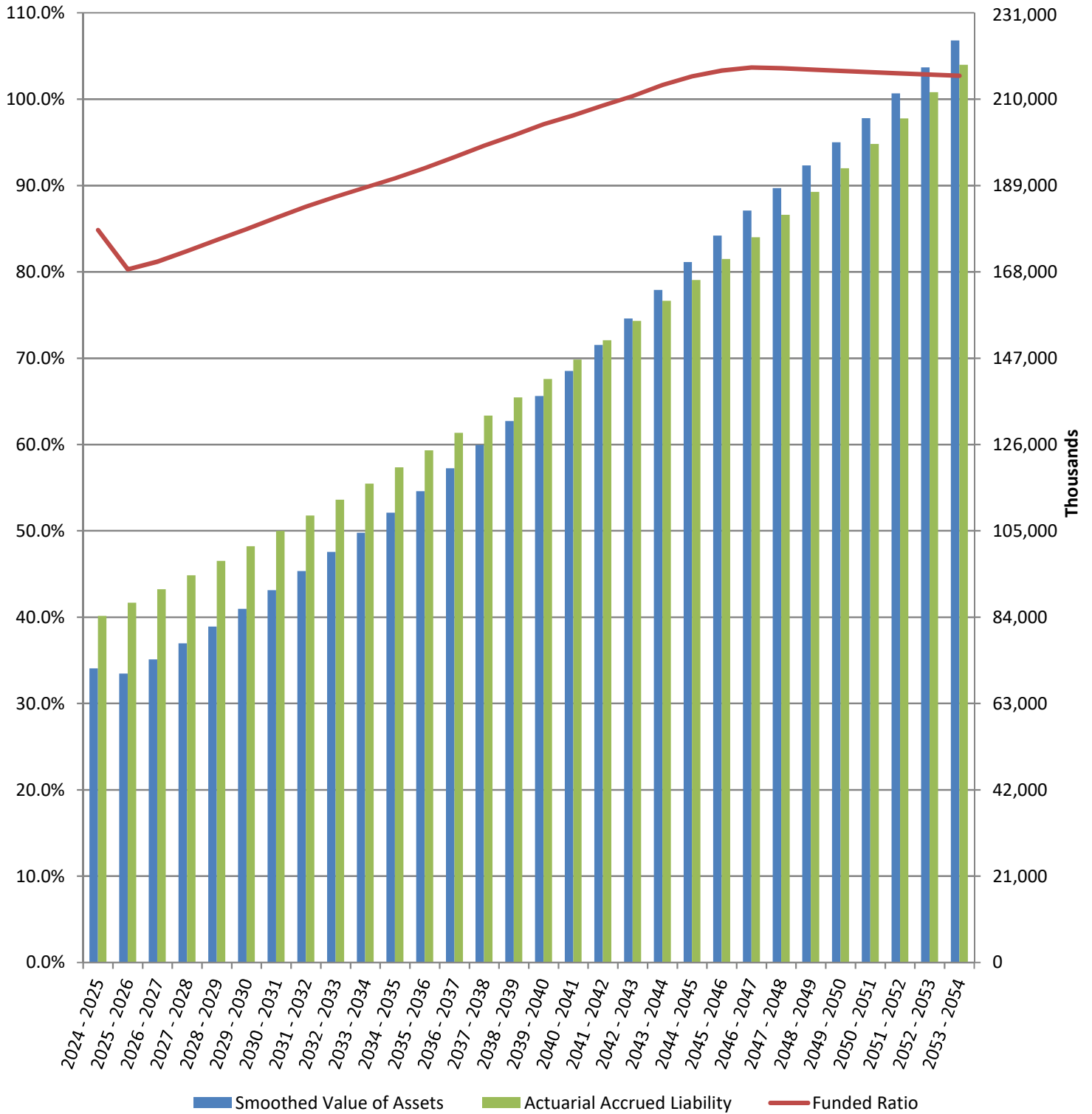
**30-Year Projections**

<b>Contribution Fiscal Year</b>	<b>Projected Non-DROP Payroll</b>	<b>Projected Net City Required Contribution</b>		<b>Smoothed Value of Assets</b>	<b>Actuarial Accrued Liability</b>	<b>Funded Ratio</b>
		<b><u>Amount</u></b>	<b><u>% of Pay</u></b>			
2024 - 2025	5,874,827	1,993,871	33.9%	71,514,593	84,287,825	84.8%
2025 - 2026	6,058,596	2,464,521	40.7%	70,244,562	87,491,441	80.3%
2026 - 2027	6,292,854	2,934,420	46.6%	73,702,084	90,781,460	81.2%
2027 - 2028	6,499,499	3,065,878	47.2%	77,625,730	94,194,542	82.4%
2028 - 2029	6,749,245	3,162,399	46.9%	81,720,794	97,654,766	83.7%
2029 - 2030	7,031,835	3,278,438	46.6%	86,002,950	101,224,695	85.0%
2030 - 2031	7,302,261	3,294,648	45.1%	90,541,166	104,950,572	86.3%
2031 - 2032	7,505,558	3,266,753	43.5%	95,193,260	108,725,154	87.6%
2032 - 2033	7,771,576	3,247,257	41.8%	99,852,654	112,566,223	88.7%
2033 - 2034	8,090,211	3,363,821	41.6%	104,509,798	116,434,533	89.8%
2034 - 2035	8,403,653	3,578,504	42.6%	109,407,844	120,445,745	90.8%
2035 - 2036	8,705,310	3,801,474	43.7%	114,630,994	124,574,540	92.0%
2036 - 2037	8,993,479	3,894,445	43.3%	120,177,163	128,790,184	93.3%
2037 - 2038	9,340,413	3,858,070	41.3%	125,864,922	133,029,671	94.6%
2038 - 2039	9,703,366	4,019,396	41.4%	131,676,197	137,412,767	95.8%
2039 - 2040	10,077,576	3,768,540	37.4%	137,806,733	141,936,114	97.1%
2040 - 2041	10,396,006	3,990,053	38.4%	143,856,607	146,613,888	98.1%
2041 - 2042	10,728,815	4,019,539	37.5%	150,182,669	151,316,224	99.3%
2042 - 2043	11,110,499	4,374,178	39.4%	156,610,734	156,055,754	100.4%
2043 - 2044	11,520,646	3,987,780	34.6%	163,565,063	160,926,212	101.6%
2044 - 2045	11,892,987	3,530,848	29.7%	170,352,066	165,979,124	102.6%
2045 - 2046	12,291,122	3,042,284	24.8%	176,800,650	171,128,751	103.3%
2046 - 2047	12,693,278	2,714,225	21.4%	182,870,114	176,412,785	103.7%
2047 - 2048	13,108,896	2,815,323	21.5%	188,339,249	181,840,029	103.6%
2048 - 2049	13,565,758	2,927,049	21.6%	193,834,669	187,397,564	103.4%
2049 - 2050	14,025,559	3,041,024	21.7%	199,500,186	193,157,235	103.3%
2050 - 2051	14,508,492	3,158,620	21.8%	205,349,209	199,109,469	103.1%
2051 - 2052	15,011,950	3,284,081	21.9%	211,398,621	205,275,373	103.0%
2052 - 2053	15,514,904	3,412,305	22.0%	217,695,042	211,690,822	102.8%
2053 - 2054	16,021,546	3,535,438	22.1%	224,249,125	218,350,400	102.7%

Net City Contribution as Dollar Amount and % of Pay



Smoothed Value of Assets, Actuarial Accrued Liability and Funded Ratio



## 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. <u>Participant Data</u></b>			
1. Active participants	62	60	60
2. Retired participants and beneficiaries receiving benefits (including DROPs)	71	72	72
3. Disabled participants receiving benefits	5	5	5
4. Terminated vested participants	0	0	0
5. Annual payroll of active participants	\$ 5,090,060	\$ 5,676,161	\$ 5,676,161
6. Expected payroll of active employees for the following year	\$ 5,176,591	\$ 5,874,827	\$ 5,874,827
7. Annual benefits payable to those currently receiving benefits including DROPs	\$ 4,114,323	\$ 4,200,483	\$ 4,200,483
<b>B. <u>Value of Assets</u></b>			
1. Net Smoothed Value of Assets	\$ 70,244,345	\$ 71,754,150	\$ 71,754,150
2. Net Market Value of Assets	\$ 61,283,847	\$ 65,212,236	\$ 65,212,236
<b>C. <u>Liabilities</u></b>			
1. Actuarial present value of future expected benefit payments for active members			
a. Retirement benefits	\$ 29,898,605	\$ 34,149,601	\$ 34,950,402
b. Vesting benefits	1,395,904	1,513,254	1,028,697
c. Death benefits	364,264	403,777	385,158
d. Disability benefits	537,954	559,382	591,551
e. Total	<u>\$ 32,196,727</u>	<u>\$ 36,626,014</u>	<u>\$ 36,955,808</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 0	\$ 0	\$ 0
3. Actuarial present value of future expected benefit payments for members currently receiving benefits			
a. Service retired including DROP participants	\$ 52,791,810	\$ 54,065,000	\$ 54,065,000
b. Disability retired	2,272,514	2,277,886	2,277,886
c. Beneficiaries	2,393,509	3,219,918	3,219,918
d. Miscellaneous (refunds in process)	48,138	48,189	48,189
e. Total	<u>\$ 57,505,971</u>	<u>\$ 59,610,993</u>	<u>\$ 59,610,993</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. Reserve for excess State funds / Share Plan liability	\$ 135,121	\$ 163,745	\$ 163,745
5. Total actuarial present value of future expected benefit payments	\$ 89,837,819	\$ 96,400,752	\$ 96,730,546
6. Actuarial accrued liabilities	\$ 76,022,070	\$ 81,464,616	\$ 81,478,608
7. Unfunded actuarial accrued liabilities	\$ 5,777,725	\$ 9,710,466	\$ 9,724,458

D. Statement of Accumulated System Benefits

1. Actuarial present value of accumulated vested benefits			
a. Participants currently receiving benefits including DROP participants	\$ 57,457,833	\$ 59,562,804	\$ 59,562,804
b. Other participants (including Share Plan liability)	11,505,874	13,142,400	13,637,191
c. Total	<u>\$ 68,963,707</u>	<u>\$ 72,705,204</u>	<u>\$ 73,199,995</u>
2. Actuarial present value of accumulated non-vested System benefits	<u>\$ 789,588</u>	<u>\$ 1,008,929</u>	<u>\$ 1,049,683</u>
3. Total actuarial present value of accumulated System benefits	\$ 69,753,295	\$ 73,714,133	\$ 74,249,678

E. Statement of Change in Accumulated System Benefits

1. Actuarial present value of accumulated System benefits as of October 1, 2022		\$ 69,753,295
2. Increase (decrease) during year attributable to:		
a. System amendment		\$ 0
b. Change in actuarial assumptions		535,545
c. Benefits paid including refunds and DROP and Share Plan distributions		(2,954,664)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period		6,915,502
e. Net increase		<u>\$ 4,496,383</u>
3. Actuarial present value of accumulated System benefits as of October 1, 2023		\$ 74,249,678

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	\$ 1,545,102	\$ 1,688,879	\$ 1,738,138
2. Payment required to amortize unfunded liability	579,304	834,276	835,263
3. Interest adjustment	84,257	98,812	100,627
4. Total required contribution	<u>\$ 2,208,663</u>	<u>\$ 2,621,967</u>	<u>\$ 2,674,028</u>
5. Item 4 as a percentage of payroll	43.4%	46.2%	47.1%
6. Estimated employee contributions	\$ 310,595	\$ 352,490	\$ 352,490
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 contributions	\$ 413,438	\$ 421,258	\$ 421,258
9. Item 8 as a percentage of payroll	8.0% <sup>1</sup>	7.2% <sup>2</sup>	7.2% <sup>2</sup>
10. Net amount payable by City	\$ 1,522,177	\$ 1,939,988	\$ 1,993,871
11. Item 10 as a percentage of payroll	29.4% <sup>1</sup>	33.0% <sup>2</sup>	33.9% <sup>2</sup>
<b>G. Past Contributions</b>			
1. Total contribution required (previous valuation)	\$ 2,085,414	\$ 2,246,210	\$ 2,246,210
2. Actual contributions made:			
a. Employees (not including service purchases)	\$ 347,528	N/A	N/A
b. State	456,867	N/A	N/A
c. City	1,281,019	N/A	N/A
d. Total	<u>\$ 2,085,414</u>	N/A	N/A
<b>H. Net Actuarial Gain / (Loss)</b>	<b>\$ (3,500,455)</b>	<b>\$ (3,912,378)</b>	<b>\$ (3,912,378)</b>
<b>I. Disclosure of Following Items:</b>			
1. Actuarial present value of future salaries - attained age	\$ 51,279,696	\$ 55,476,515	\$ 54,823,468
2. Actuarial present value of future employee contributions - attained age	\$ 3,076,782	\$ 3,328,591	\$ 3,289,408
3. Actuarial present value of future contributions from other sources	N/A	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 2,644,218	\$ 2,916,065	\$ 2,916,065
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 (\$5,176,591)

<sup>2</sup> Percent of expected 2024 / 2025 covered payroll as of October 1, 2023 (\$5,874,827)



State Required Exhibit

	Unfunded Actuarial Accrued Liabilities	Unfunded Liabilities	Amortization Payment	Remaining Funding Period
10/01/2008	Assumption Changes	\$ 913,236	\$ 78,813	15 years
10/01/2009	Actuarial Loss / (Gain)	433,046	79,368	6 years
10/01/2010	Actuarial Loss / (Gain)	363,125	58,118	7 years
10/01/2011	Actuarial Loss / (Gain)	847,280	120,871	8 years
10/01/2011	System Amendment	(140,443)	(20,035)	8 years
10/01/2012	Actuarial Loss / (Gain)	(89,691)	(11,584)	9 years
10/01/2013	Actuarial Loss / (Gain)	(480,253)	(56,854)	10 years
10/01/2014	Actuarial Loss / (Gain)	(488,295)	(53,512)	11 years
10/01/2015	Actuarial Loss / (Gain)	251,429	25,717	12 years
10/01/2016	Actuarial Loss / (Gain)	1,090,333	104,799	13 years
10/01/2016	Assumption Changes	(133,184)	(12,801)	13 years
10/01/2017	Actuarial Loss / (Gain)	(320,033)	(29,075)	14 years
10/01/2017	System Amendment	88,557	8,045	14 years
10/01/2018	Actuarial Loss / (Gain)	625,857	54,012	15 years
10/01/2018	Assumption Changes	952,154	82,171	15 years
10/01/2019	Actuarial Loss / (Gain)	759,156	62,505	16 years
10/01/2019	Assumption Changes	(1,492,867)	(122,915)	16 years
10/01/2020	Actuarial Loss / (Gain)	626,195	49,376	17 years
10/01/2021	Actuarial Loss / (Gain)	(1,557,164)	(117,980)	18 years
10/01/2022	Actuarial Loss / (Gain)	3,562,502	260,128	19 years
10/01/2022	System Amendment	(12,852)	(938)	19 years
10/01/2023	Actuarial Loss / (Gain)	3,912,378	276,047	20 years
10/01/2023	Assumption Changes	13,992	987	20 years
	TOTAL	\$ 9,724,458	\$ 835,263	

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.