



April 26, 2024

Board of Trustees
City of Okeechobee Police Officers' Retirement System
c/o Mr. Scott Baur
Resource Centers, LLC
4360 Northlake Blvd
Suite 206
Palm Beach Gardens, FL 33410

**Re: City of Okeechobee Police Officers' Retirement System
October 1, 2023 Actuarial Valuation Report**

Dear Scott:

As requested, we are pleased to enclose twelve (12) copies of the October 1, 2023 Actuarial Valuation Report for the City of Okeechobee Police Officers' Retirement System.

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.

We appreciate the opportunity to have performed this important assignment on behalf of the Board and look forward to presenting the key results at the May 6th Board Meeting.

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".

Shelly L. Jones, ASA, MAAA, EA
Consultant and Actuary

A handwritten signature in black ink that reads "Jennifer Borregard".

Jennifer M. Borregard, MAAA, EA
Consultant and Actuary

Enclosures

CITY OF OKEECHOBEE POLICE OFFICERS' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF OCTOBER 1, 2023

This Valuation Determines the Annual Contribution for the System Year October 1, 2023 through September 30, 2024 with City contribution to be Paid in Fiscal Year October 1, 2024 through September 30, 2025

April 26, 2024



**City of Okeechobee
Police Officers' Retirement System**

TABLE OF CONTENTS

	<u>Page</u>
Transmittal Letter	1
Executive Summary	4
Risk Associated with Measuring the Accrued Liability 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 Assets	14
V. Reconciliation of System Assets	15
VI. Development of Smoothed Value of Assets	17
VII. Funding Standard Account for System Year	18
VIII. Actuarial Gain / (Loss) for System Year	19
IX. Accounting Disclosure Exhibit	20
X. Outline of Principal Provisions of the Retirement System	29
XI. Actuarial Assumptions and Actuarial Cost Methods Used	33
XII. Distribution of System Participants by Attained Age Groups and Service Groups	36
XIII. Statistics for Participants Entitled to Deferred Benefits and Participants Receiving Benefits	37
XIV. Reconciliation of Participant Data	38
XV. Projected Retirement Benefits	39
XVI. Summary of Transaction Information	40
XVII. Recent Compensation, Termination and Investment Return Experience	41
XVIII. Employer Contribution Information	42
XIX. State Required Exhibit	43
XX. Glossary	47





April 26, 2024

Board of Trustees
City of Okeechobee Police Officers' Retirement System
c/o Mr. Scott Baur
Resource Centers, LLC
4360 Northlake Blvd., Suite 206
Palm Beach Gardens, FL 33410

Dear Board Members:

We are pleased to present our October 1, 2023 Actuarial Valuation report for the City of Okeechobee Police Officers' Retirement System (System). The purpose of our report is to indicate appropriate contribution levels, comment on the actuarial stability of the System and to satisfy State requirements. The Pension Board has retained Gabriel, Roeder, Smith & Company (GRS) to prepare an annual actuarial valuation under Section 3-4 of the System.

Our Report consists of this cover letter, executive summary, risk assessment and low-default-risk obligation measure followed by detailed Tables I through XVIII, the State Required Exhibit on Table XIX and definitions of technical terms on Table XX. 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 asset information through September 30, 2023. The valuation was based upon information furnished by the Board concerning System benefit, plan provision and active members, terminated members, retirees and beneficiaries. We received financial information concerning System assets as of September 30, 2023 from the Board.

We do not audit the Member census data and asset information provided to us; however, we perform certain reasonableness checks. The Board of Trustees 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 reports. These reports will also continue to monitor the future experience of the System.

The actuarial assumptions used in this actuarial valuation are as adopted by the Board of Trustees. 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. Additional information about the actuarial assumptions is included in section XI of this report.

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 and future contributions are expected to remain relatively stable as a percent of payroll. System minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act and Police Officers' Retirement Chapter 185 with normal cost determined as a level percent of covered payroll.

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 smoothed 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.

This report should not be relied on 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 our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement plans. 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., M.A.A.A., E.A., F.C.A.
Consultant and Actuary



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



EXECUTIVE SUMMARY

Retirement System Costs

Our Actuarial Valuation develops the required minimum Pension System payment under the Florida Protection of Public Employee Retirement Benefits Act and Police Officers' Retirement Chapter 185. The minimum payment consists of payment of annual normal costs including expenses. The minimum payment for **System Year ending September 30, 2024** is **\$271,814 (20.8%)**. The figure in parentheses is the System cost expressed as a percentage of projected covered annual payroll for fiscal year beginning October 1, 2023 (\$1,305,756).

This total cost is to be met by Member, City and State contributions. We anticipate Members will contribute **\$65,288 (5.0%)** and the State will contribute **\$103,937 (8.0%)**. The resulting minimum required City contribution **to be paid in fiscal year ending September 30, 2025** (paid quarterly) is **\$102,589 (7.9%)**.

The City contribution must be increased if State contributions are less than \$103,937. State money is allocated based upon mutual consent to follow the default provisions of F.S., 185.35.

The System has a credit balance in the amount of \$109,164 as of September 30, 2023 which the City may apply to offset the minimum required City contribution.

Changes in Actuarial Assumptions, Methods and System Benefits

System provisions remain unchanged from our October 1, 2022 Actuarial Valuation. System benefits are summarized on Table X.

The actuarial assumptions and methods remain unchanged from the October 1, 2022 Actuarial Valuation. The actuarial assumptions and methods are outlined on Table XI.

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 October 1, 2022. The right columns indicate the costs as calculated for October 1, 2023.

Comparing the left and right columns of Table II shows the effect of System experience during the year. The number of active participants increased by approximately 5% while covered payroll increased by approximately 22%. Total System membership increased by approximately 3%.

Total normal cost under aggregate cost method (funding) and the net City minimum funding payment increased as a dollar amount and as a percentage of covered payroll. The total normal cost under the entry age normal actuarial cost method (accounting) increased as a dollar amount but decreased as a percentage of covered payroll.



System assets exceed the value of vested accrued benefits, resulting in a Vested Benefit Security Ratio (VBSR) of 123.7%. This is an increase from 116.6% as of the October 1, 2022 Actuarial Valuation. The VBSR is measured on a market value of assets basis.

System Experience

Table VIII indicates the System experienced an actuarial loss of \$871,556. This suggests actual overall System experience was less favorable than expected.

Table XVII (salary, turnover and investment yield) provides figures on recent System experience. The salary experience indicates actual salary increases averaged approximately 21.3% for fiscal year ended September 30, 2023. The assumed salary increase was 6.0%. Salary experience was generally a source of actuarial loss. Three, five and ten-year average annual salary increases are 11.4%, 10.0% and 7.6%, respectively. Three, five and ten-year assumed average annual salary increases are all 6.0%.

Employee turnover this year was approximately 150% of the assumed turnover and was generally an offsetting source of actuarial gain. The latest three and five-year average turnover ratios are 280% and 300%, respectively.

Smoothed investment return of 4.9% was less than the assumed 7.0% investment return. Smoothed investment return was an additional source of actuarial loss. Three, five and ten-year average smoothed investment returns are 6.3%, 7.0% and 7.0%, respectively. One, three, five and ten-year average annual investment returns are 12.7%, 2.6%, 4.7% and 5.9%, respectively on a market value basis.

Conclusion

The Market Value of Assets is less than the Actuarial Value of Assets by \$914,124 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.

It is highly recommended that Experience Studies be performed regularly to keep the actuarial assumptions and methods up to date with evolving System experience. The Government Finance Officers Association (GFOA) recommends experience studies every five years as a *best practice*. Therefore, we recommend the Board authorize an Experience Study covering the five-year period October 1, 2018 – September 30, 2023 and include a review of the investment return assumption.

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

	<u>2022</u>	<u>2023</u>
Ratio of the market value of assets to payroll	8.75	7.71
Ratio of actuarial accrued liability to payroll (Accounting)	8.60	7.41
Ratio of actives to retirees and beneficiaries	1.18	1.24
Ratio of net cash flow to market value of assets	-1.8%	-5.1%
Duration of the actuarial accrued liability (Accounting)	11.47	11.94

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 (Accounting)

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 plan. 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 plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan 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 plan or a need for additional contributions.

Duration of Actuarial Accrued Liability (Accounting)

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: \$12,822,735 (compared to AAL of \$9,677,460 developed using funding assumptions.)

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 risk securities to provide the benefits with greater certainty. 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.



Table I

Summary of Retirement System Costs as of October 1, 2023

	<u>Cost Data</u>	<u>% of Payroll</u>
A. Participant Data Summary (Table III)		
1. Active employees	21	N/A
2. Terminated vested	2	N/A
3. Receiving benefits (including DROPs)	17	N/A
4. Annual payroll of active employees	\$ 1,305,756	100.0%
B. Total Actuarial Present Value of Future Benefits		
1. Age retirement benefits active employees	\$ 6,740,174	516.2%
2. Termination benefits active employees	326,505	25.0%
3. Death benefits active employees	27,827	2.1%
4. Disability benefits active employees	197,564	15.1%
5. Retired or terminated vested participants receiving benefits including DROPs	4,967,823	380.5%
6. Terminated vested participants entitled to future benefits	230,655	17.7%
7. Deceased participants whose beneficiaries are receiving benefits	459,399	35.2%
8. Disabled participants receiving benefits	0	0.0%
9. Miscellaneous liability (refunds in process)	53,393	4.1%
10. Share Plan liability	40,243	3.1%
11. Total Actuarial Present Value of Future Benefits	<u>\$ 13,043,583</u>	998.9%
C. Net Smoothed Value of Assets (Table VI)	\$ 10,984,440	841.2%
D. Present Value of Future Normal Costs (B. - C.)	\$ 2,059,143	157.7%
E. Present Value of Future Salaries	\$ 13,690,789	1048.5%
F. Normal Cost Accrual Rate (D. / E.)	15.040%	N/A
G. Normal Cost (A.4. x F)	\$ 196,386	15.0%

Summary of Retirement System Costs as of October 1, 2023

	<u>Cost Data</u>	<u>% of Payroll</u>
H. Minimum Required Contribution		
1. Normal cost	\$ 196,386	15.0%
2. Estimated administrative expenses	58,674	4.5%
3. Interest adjustment	16,754	1.3%
4. Total minimum required contribution	<u>\$ 271,814</u>	20.8%
I. Contribution Sources		
1. Expected City	\$ 102,589	7.9%
2. Expected State	103,937	8.0%
3. Expected Member	65,288	5.0%
4. Total required contribution	<u>\$ 271,814</u>	20.8%
J. Actuarial Gain / (Loss) (Table VIII)	\$ (871,556)	(66.7%)
K. Actuarial Present Value of Vested Accrued Benefits		
1. Retired, terminated vested, beneficiaries and disabled receiving benefits including DROPs	\$ 5,427,222	415.6%
2. Terminated vested participants entitled to future benefits and miscellaneous	284,048	21.8%
3. Active participants entitled to future benefits	2,388,570	182.9%
4. Share Plan liability	40,243	3.1%
5. Total actuarial present value of vested accrued benefits	<u>\$ 8,140,083</u>	623.4%
L. Net Market Value of Assets (Table IV)	\$ 10,070,316	771.2%
M. Unfunded Actuarial Present Value of Vested Accrued Benefits (K. - L., not less than zero)	\$ 0	0.0%
N. Vested Benefit Security Ratio (L. ÷ K.)	123.7%	N/A

Table II

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

	October 1, 2022		October 1, 2023	
	Cost Data	% of Annual Compensation	Cost Data	% of Annual Compensation
A. Participants				
1. Active employees	20	N/A	21	N/A
2. Terminated vested	2	N/A	2	N/A
3. Receiving benefits (including DROPs)	17	N/A	17	N/A
4. Annual payroll of active employees	\$ 1,073,721	100.0%	\$ 1,305,756	100.0%
B. Present Value of Future Benefits	\$ 11,899,794	1108.3%	\$ 13,043,583	998.9%
C. Total Normal Costs (including expenses)				
1. Aggregate Cost Method	\$ 148,989	13.9%	\$ 255,060	19.5%
2. Entry Age Normal (EAN) ¹	\$ 330,572	30.8%	\$ 387,374	29.7%
D. Total Actuarial Accrued Liability (EAN) ¹	\$ 9,238,795	860.4%	\$ 9,677,460	741.1%
E. Smoothed Value of Assets	\$ 10,956,636	1020.4%	\$ 10,984,440	841.2%
F. Unfunded Actuarial Accrued Liability ¹	\$ (1,717,841)	(160.0%)	\$ (1,306,980)	(100.1%)
G. Net City Cost	\$ 13,030	1.2%	\$ 102,589	7.9%
H. Actuarial Gain / (Loss)	\$ 269,021	25.1%	\$ (871,556)	(66.7%)
I. Unfunded Actuarial Present Value of Vested Accrued Benefits	\$ 0	0.0%	\$ 0	0.0%
J. Vested Benefit Security Ratio	116.6%	N/A	123.7%	N/A

¹ For purposes of GASB Statement Numbers 67 and 68 only

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

A. Active System Participant Summary

1. Active participants fully vested	7
2. Active participants partially vested	0
3. Active participants non-vested	14
4. Total active participants	21
5. Annual rate of pay of active participants	\$ 1,305,756

B. Retired and Terminated Vested Participant Summary

1. Retired or terminated vested participants receiving benefits including DROP participants	14
2. Terminated vested participants entitled to future benefits	2
3. Deceased participants whose beneficiaries are receiving benefits	3
4. Disabled participants receiving benefits	0

C. Projected Annual Retirement Benefits

1. Retired or terminated vested receiving benefits including DROP participants	\$ 410,056
2. Terminated vested entitled to future benefits	47,521
3. Beneficiaries of deceased participants receiving benefits	48,712
4. Disabled participants receiving benefits	0

Table IV

Statement of System Assets as of October 1, 2023

	<u>Market Value</u>
A. <u>Cash and cash equivalents</u>	\$ 133,189
B. <u>General Investments</u>	
1. U.S. Government obligations	0
2. Corporate bonds	0
3. Mutual Funds - Fixed Income	3,874,760
4. Mutual Funds - Equity	6,066,652
5. Common stock	0
6. Accrued income	0
C. <u>Receivables</u>	
1. Employee contribution	6,195
2. State contribution	103,937
3. City Contribution	3,717
4. Prepaid insurance	0
D. <u>Payables</u>	
1. Investment expense	6,886
2. Administrative expense	2,084
3. Prepaid Member Contribution	0
E. <u>Total System Assets</u> (A + B + C - D)	10,179,480
F. <u>Credit Balance</u>	<u>109,164</u>
G. <u>Net System Assets</u> (E - F)	\$ 10,070,316

Table V

Reconciliation of System Assets

A. <u>Total Market Value of Assets as of October 1, 2022</u>		\$	9,486,273
1. Audit Adjustment			0
2. Market Value as of October 1, 2022		\$	9,486,273
B. <u>Receipts During Period</u>			
1. Contributions			
a. Employee	\$	63,770	
b. City		38,602	
c. State		103,937	
d. Total	\$	206,309	
2. Investment Income			
a. Interest, dividends and other	\$	321,488	
b. Investment expenses		(23,150)	
c. Net investment income	\$	298,338	
3. Realized gains / (losses)		71,849	
4. Unrealized gains / (losses)		805,937	
5. Total receipts during period		\$	1,382,433
C. <u>Disbursements During Period</u>			
1. Pension payments	\$	380,598	
2. DROP distributions		233,034	
3. Share Plan distributions		16,920	
4. Contribution refunds		0	
5. Administrative expenses		58,674	
6. Total disbursements during period		\$	689,226
D. <u>Total Market Value of Assets as of September 30, 2023</u>		\$	10,179,480
E. <u>Credit Balance as of September 30, 2023</u>		\$	109,164
F. <u>Net Market Value of Assets as of September 30, 2023</u> (D - E)		\$	10,070,316

Reconciliation of System Assets

G. Share Plan

1. Balance as of October 1, 2022	\$	52,741
2. Adjustment		0
3. Increase from State funds received		0
4. Investment credits		4,422
5. Administrative fees		0
6. Distributions		(16,920)
7. Balance as of September 30, 2023	\$	40,243

H. Reconciliation of DROP Account Balances

1. DROP account balances as of October 1, 2022	\$	297,784
2. Adjustment		0
3. Benefit credits		89,640
4. Investment gains / (losses)		16,600
5. Administrative expenses		0
6. DROP account distributions		(233,034)
7. DROP account balances as of September 30, 2023	\$	170,990

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	\$ 10,915,354	\$ 11,045,197	\$ 11,093,604		
B. Market value beginning of year	12,045,012	9,486,273	10,179,480		
C. Market value end of year	9,486,273	10,179,480			
D. Net non-investment cash flow	(218,064)	(482,917)			
E. Investment return					
1. Total market value return: C. - B. - D.	(2,340,675)	1,176,124			
2. Amount for immediate recognition (7.0%)	756,443	756,262			
3. Amount for phased-in recognition: E.1. - E.2.	(3,097,118)	419,862			
F. Phased-in recognition of investment return:					
1. Current year: 25% of E.3.	(774,280)	104,966			
2. First prior year	319,538	(774,280)	104,966		
3. Second prior year	124,839	319,538	(774,280)	104,966	
4. Third prior year	(78,633)	124,838	319,538	(774,278)	104,964
5. Total phased-in recognition of investment return	(408,536)	(224,938)	(349,776)	(669,312)	104,964
G. Total smoothed value end of year					
1. Preliminary total smoothed value end of year:					
A. + D. + E.2. + F.5.	11,045,197	11,093,604			
2. Upper corridor limit: 120% of C.	11,383,528	12,215,376			
3. Lower corridor limit: 80% of C.	7,589,018	8,143,584			
4. Total smoothed value end of year:					
G.1., not more than G.2., nor less than G.3.	11,045,197	11,093,604			
H. Difference between total market value and total smoothed value	(1,558,924)	(914,124)			
I. Smoothed value rate of return	3.2%	4.9%			
J. Market value rate of return	(19.6%)	12.7%			
K. Credit balance	88,561	109,164			
L. Net smoothed value of assets	10,956,636	10,984,440			
M. Net market value of assets	9,397,712	10,070,316			

Table VII

Funding Standard Account for
System Year Ended September 30, 2023

A. Charges to the Funding Standard Account

1. Prior year funding deficiency	\$ 0
2. City / State normal cost	121,936
3. Total employer charges	\$ 121,936

B. Credits to the Funding Standard Account

1. Prior year credit balance	\$ 88,561
2. State contribution	103,937
3. City contribution	38,602
4. Total credits	\$ 231,100

C. Credit Balance / (Funding Deficiency)

(B.4. - A.3.)	\$ 109,164
---------------	------------

Table VIII

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

A. Derivation of Actuarial Gain / (Loss)

1. Present value of future payroll	\$ 13,690,789
2. Normal cost for benefits as a percentage of payroll	
(a) Prior valuation	8.674%
(b) Current valuation	15.040%
(c) Difference (a) - (b)	-6.366%
3. Actuarial gain / (loss): (1. x 2.c)	\$ (871,556)

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

1. Smoothed value of net assets previous year	\$ 10,903,895
2. Net contributions during period	185,706
3. Benefits and administrative expenses during period	672,306
4. Expected net appreciation during period	746,242
5. Expected net smoothed value of assets current year: (1. + 2. - 3. + 4.)	\$ 11,163,537
6. Actual smoothed value of net assets current year	\$ 10,944,197
7. Approximate gain / (loss) due to investments: (6. - 5.)	\$ (219,340)

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

\$ (652,216)

* net of Share Plan

Accounting Disclosure Exhibit

	<u>10/01/2022</u>	<u>10/01/2023</u>
I. <u>Number of System Members</u>		
a. Receiving benefits including DROPs	17	17
b. Terminated due deferred benefits	2	2
c. Active System members	20	21
d. Total	<u>39</u>	<u>40</u>
II. <u>Financial Accounting Standards Board Allocation</u> <u>As of October 1, 2023</u>		
A. <u>Statement of Accumulated System Benefits</u>		
1. Actuarial present value of accumulated vested System benefits		
a. Participants currently receiving benefits including DROP participants	\$ 5,668,435	\$ 5,427,222
b. Other participants (including reserve for Share Plan liability)	2,391,889	2,712,861
c. Total	<u>\$ 8,060,324</u>	<u>\$ 8,140,083</u>
2. Actuarial present value of accumulated non-vested System benefits	<u>\$ 208,414</u>	<u>\$ 296,878</u>
3. Total actuarial present value of accumulated System benefits	\$ 8,268,738	\$ 8,436,961
B. <u>Statement of Change in Accumulated System Benefits</u>		
1. Actuarial present value of accumulated System benefits as of October 1, 2022		\$ 8,268,738
2. Increase (decrease) during year attributable to:		
a. System amendment		\$ 0
b. Change in actuarial assumptions		0
c. Benefits paid including refunds, Share plan and DROP distributions		(630,552)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period		798,775
e. Net increase		<u>\$ 168,223</u>
3. Actuarial present value of accumulated System benefits as of October 1, 2023		\$ 8,436,961
C. <u>Significant Matters Affecting Calculations</u>		
1. Assumed rate of return used in determining actuarial present values		7.00%
2. Change in System provisions		None.
3. Change in actuarial assumptions		None.

Accounting Disclosure Exhibit

III. Net Pension Liability and Related Ratios (GASB Statement Numbers 67 & 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 **
A. Total Pension Liability (TPL)											
Service Cost	\$ 251,499	\$ 247,353	\$ 264,445	\$ 235,345	\$ 258,622	\$ 254,066	\$ 279,173	\$ 277,048	\$ 300,327	\$ 274,718	\$ 328,700
Interest	479,146	506,147	543,946	573,285	580,995	607,391	615,045	635,386	642,970	645,176	686,325
Benefit Changes	0	0	0	0	0	0	0	0	0	0	0
Difference Between Actual and Expected Experience	(784)	(219,850)	126,875	(270,100)	(276,621)	(153,927)	(76,855)	(48,536)	(69,960)	(589,604)	149,202
Assumption Changes	0	94,065	0	22,143	0	0	(211,356)	0	0	0	0
Benefit Payments, including Refunds of Member Contributions	(228,350)	(204,176)	(493,697)	(255,731)	(281,028)	(515,688)	(557,786)	(630,299)	(377,386)	(631,205)	(403,033)
Other	0	0	0	0	72,669	0	0	0	0	0	0
Net Change in Total Pension Liability	\$ 501,511	\$ 423,539	\$ 441,569	\$ 304,942	\$ 354,637	\$ 191,842	\$ 48,221	\$ 233,599	\$ 495,951	\$ (300,915)	\$ 761,194
Total Pension Liability (TPL) - (beginning of year)	6,833,362	7,334,873	7,758,412	8,199,981	8,504,923	8,859,560	9,051,402	9,099,623	9,333,222	9,829,173	9,528,258
Total Pension Liability (TPL) - (end of year)	\$ 7,334,873	\$ 7,758,412	\$ 8,199,981	\$ 8,504,923	\$ 8,859,560	\$ 9,051,402	\$ 9,099,623	\$ 9,333,222	\$ 9,829,173	\$ 9,528,258	\$ 10,289,452
B. System Fiduciary Net Position											
Contributions - City and State	\$ 267,849	\$ 263,388	\$ 221,272	\$ 248,448	\$ 233,182	\$ 221,039	\$ 217,461	\$ 187,174	\$ 160,339	\$ 141,745	\$ 102,492
Contributions - Member	43,135	47,740	45,554	45,863	46,212	50,359	53,051	56,261	54,837	62,446	65,288
Net Investment Income	694,790	(95,964)	607,763	903,712	727,699	330,227	1,170,587	1,980,592	(2,340,675)	1,176,125	702,276
Benefit Payments, including Refunds of Member Contributions	(228,350)	(204,176)	(493,697)	(255,731)	(281,028)	(515,688)	(557,786)	(630,299)	(377,386)	(631,205)	(403,033)
Administrative Expenses	(18,097)	(30,198)	(32,120)	(41,855)	(45,827)	(47,116)	(41,667)	(41,277)	(55,854)	(58,674)	(58,674)
Other	0	3,886	(6)	(3,284)	0	0	(2,155)	(3,248)	0	0	2,770
Net Change in System Fiduciary Net Position	\$ 759,327	\$ (15,324)	\$ 348,766	\$ 897,153	\$ 680,238	\$ 38,821	\$ 839,491	\$ 1,549,203	\$ (2,558,739)	\$ 690,437	\$ 411,119
System Fiduciary Net Position - (beginning of year)	6,947,337	7,706,664	7,691,340	8,040,106	8,937,259	9,617,497	9,656,318	10,495,809	12,045,012	9,486,273	10,176,710
System Fiduciary Net Position - (end of year)	\$ 7,706,664	\$ 7,691,340	\$ 8,040,106	\$ 8,937,259	\$ 9,617,497	\$ 9,656,318	\$ 10,495,809	\$ 12,045,012	\$ 9,486,273	\$ 10,176,710	\$ 10,587,829
C. Net Pension Liability (NPL) - (end of year): (A) - (B)	\$ (371,791)	\$ 67,072	\$ 159,875	\$ (432,336)	\$ (757,937)	\$ (604,916)	\$ (1,396,186)	\$ (2,711,790)	\$ 342,900	\$ (648,452)	\$ (298,377)
D. System Fiduciary Net Position as a Percentage of TPL: (B) / (A)	105.07 %	99.14 %	98.05 %	105.08 %	108.56 %	106.68 %	115.34 %	129.06 %	96.51 %	106.81 %	102.90 %
E. Covered Employee Payroll ***	\$ 862,700	\$ 954,800	\$ 911,080	\$ 917,260	\$ 924,250	\$ 1,007,180	\$ 1,061,193	\$ 1,125,784	\$ 1,097,275	\$ 1,248,920	\$ 1,305,756
F. NPL as a Percentage of Covered Employee Payroll: (C) / (E)	(43.10)%	7.02 %	17.55 %	(47.13)%	(82.01)%	(60.06)%	(131.57)%	(240.88)%	31.25 %	(51.92)%	(22.85)%
G. Notes to Schedule:											
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 Statement Number 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 and Share account balances, if any, to the measurement dates - actual DROP and Share account balances, if any, as of measurement dates included in TPL.

See Table IX, Item V. for benefit and assumption changes during the years.

* As reported in Plan's financial statements

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

*** Reported payroll used to determine contribution as provided under GASB Statement Number 82.

Accounting Disclosure Exhibit

IV. Schedule of Employer Contributions (GASB Statement Numbers 67 & 68)

Fiscal Year End 9/30	Actuarially Determined Contribution	Actual Contribution ¹	Contribution Deficiency (Excess)	Covered Payroll ²	Actual Contribution as a % of Covered Payroll
2014	\$ 267,849	\$ 267,849	\$ 0	\$ 862,700	31.05%
2015	263,240	263,388	(148)	954,800	27.59%
2016	219,093	221,272	(2,179)	911,080	24.29%
2017	251,591	248,448	3,143	917,260	27.09%
2018	212,571	233,182	(20,611)	924,250	25.23%
2019	204,611	221,039	(16,428)	1,007,180	21.95%
2020	192,448	217,461	(25,013)	1,061,193	20.49%
2021	185,025	187,174	(2,149)	1,125,784	16.63%
2022	158,267	160,339	(2,072)	1,097,275	14.61%
2023 *	121,936	141,745	(19,809)	1,248,920	11.35%
2024 ³	102,492	102,492	0	1,305,756	7.85%

¹ Includes State contributions in excess of the amount allowable to be used as an offset to the City's contribution requirement.

² Reported payroll used to determine contribution as provided under GASB Statement Number 82.

³ Projected - actual amounts will be available after fiscal year end.

* As reported in Plan's financial statements

Accounting Disclosure Exhibit

V. Notes to Schedule of Contributions (GASB Statement Numbers 67 & 68)

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

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

Actuarial Cost Method	Aggregate
Amortization Method	N/A
Amortization Period	N/A
Asset Valuation Method	4-year smoothed market value
Inflation	2.5%
Salary Increases	6.0%
Investment Rate of Return	7.0%
Retirement Age	100% when first eligible for Normal Retirement or DROP entry.
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	0.5% every odd year
---------------------------	---------------------

Other Information:

Benefit Changes	None
Assumption Changes	2019 - Mortality assumptions updated; 2016 - Mortality assumptions updated; 2014 - Mortality assumptions updated.

Accounting Disclosure Exhibit

VI. Discount Rate (GASB Statement Numbers 67 & 68)

A discount rate of 7.0% was used to measure the TPL. This discount rate was based on the expected rate of return on System investments of 7.0%. 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 rates 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 Statement Numbers 67 & 68)

Measurement date: September 30, 2023

	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
Discount Rate	6.00%	7.00%	8.00%
NPL	\$459,236	(\$648,452)	(\$1,573,792)

Measurement date: September 30, 2024 *

	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
Discount Rate	6.00%	7.00%	8.00%
NPL	\$915,422	(\$298,377)	(\$1,310,698)

* 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 Statement Number 68)

Pension Expense for Fiscal Year Ending September 30, 2024 \$ 308,374

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	\$ 0	\$ 602,414
Changes of assumptions or other inputs	0	87,028
Net difference between projected and actual earnings on pension System investments	876,810	0
Total	<u>\$ 876,810</u>	<u>\$ 689,442</u>

Projected Deferred Outflows for City Contributions after the Measurement Date \$ 0

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

Year Ending 30-Sep	Amount
2025	\$ (2,629)
2026	112,609
2027	375,835
2028	(217,123)
2029	(81,324)
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 Statement Number 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	\$ 251,499	\$ 247,353	\$ 264,445	\$ 235,345	\$ 258,622	\$ 254,066	\$ 279,173	\$ 277,048	\$ 300,327	\$ 274,718	\$ 328,700
Interest on Total Pension Liability	479,146	506,147	543,946	573,285	580,995	607,391	615,045	635,386	642,970	645,176	686,325
Current-Period Benefit Changes	0	0	0	0	0	0	0	0	0	0	0
Contributions - Member	(43,135)	(47,740)	(45,554)	(45,863)	(46,212)	(50,359)	(53,051)	(56,261)	(54,837)	(62,446)	(65,288)
Projected Earnings on System Investments	(488,572)	(542,289)	(529,329)	(562,578)	(623,947)	(663,026)	(664,354)	(719,608)	(835,519)	(647,040)	(702,276)
Administrative Expenses	18,097	30,198	32,120	41,855	45,827	47,116	41,667	41,277	55,854	58,674	58,674
Other Changes in System Fiduciary Net Position	0	(3,886)	6	3,284	0	0	(2,155)	(3,248)	0	0	(2,770)
Other Changes in Total Pension Liability	0	0	0	0	72,669	0	0	0	0	0	0
Recognition of Beginning Deferred Outflows / (Inflows) due to Liabilities	(145)	(23,015)	1,384	(50,274)	(103,470)	(131,371)	(162,261)	(168,527)	(144,144)	(203,245)	(153,742)
Recognition of Beginning Deferred Outflows / (Inflows) due to Assets	(41,244)	86,407	70,720	2,493	(18,255)	89,545	(139,350)	(375,960)	327,603	242,537	175,980
Total Pension Expense	<u>\$ 175,646</u>	<u>\$ 253,175</u>	<u>\$ 337,738</u>	<u>\$ 197,547</u>	<u>\$ 166,229</u>	<u>\$ 153,362</u>	<u>\$ (85,286)</u>	<u>\$ (369,793)</u>	<u>\$ 292,254</u>	<u>\$ 308,374</u>	<u>\$ 325,603</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 Statement Number 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
2017 / 2018	\$ 0	5.2	0.0	\$ 0	\$ 0
2018 / 2019	0	5.5	0.5	0	0
2019 / 2020	0	6.8	2.8	0	0
2020 / 2021	0	5.7	2.7	0	0
2021 / 2022	0	5.8	3.8	0	0
2022 / 2023	0	5.8	4.8	0	0
TOTAL				\$ 0	\$ 0

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
2017 / 2018	\$ (276,621)	5.2	0.0	\$ (10,641)	\$ 0
2018 / 2019	(153,927)	5.5	0.5	(27,987)	(13,992)
2019 / 2020	(76,855)	6.8	2.8	(11,302)	(31,647)
2020 / 2021	(48,536)	5.7	2.7	(8,515)	(22,991)
2021 / 2022	(69,960)	5.8	3.8	(12,062)	(45,836)
2022 / 2023	(589,604)	5.8	4.8	(101,656)	(487,948)
TOTAL				\$ (172,163)	\$ (602,414)

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
2017 / 2018	\$ 0	5.2	0.0	\$ 0	\$ 0
2018 / 2019	0	5.5	0.5	0	0
2019 / 2020	0	6.8	2.8	0	0
2020 / 2021	0	5.7	2.7	0	0
2021 / 2022	0	5.8	3.8	0	0
2022 / 2023	0	5.8	4.8	0	0
TOTAL				\$ 0	\$ 0

Accounting Disclosure Exhibit

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

X. Recognition of Deferred Outflows and (Inflows) Due to Liabilities - Measurement Date (GASB Statement Number 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
2017 / 2018	\$ 0	5.2	0.0	\$ 0	\$ 0
2018 / 2019	0	5.5	0.5	0	0
2019 / 2020	(211,356)	6.8	2.8	(31,082)	(87,028)
2020 / 2021	0	5.7	2.7	0	0
2021 / 2022	0	5.8	3.8	0	0
2022 / 2023	0	5.8	4.8	0	0
TOTAL				\$ (31,082)	\$ (87,028)

XI. Recognition of Deferred Outflows and (Inflows) due to Assets - Measurement Date (GASB Statement Number 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	\$ 332,799	5	0	\$ 66,559	\$ 0
2019 / 2020	(506,233)	5	1	(101,247)	(101,245)
2020 / 2021	(1,260,984)	5	2	(252,197)	(504,393)
2021 / 2022	3,176,194	5	3	635,239	1,905,716
2022 / 2023	(529,085)	5	4	(105,817)	(423,268)
TOTAL				\$ 242,537	\$ 876,810

Outline of Principal Provisions of the Retirement System

A. Effective Date:

January 1, 1972. Most recently amended by Ordinance No. 1187 adopted July 16, 2019.

B. Eligibility:

All actively employed full time Police Officers of the City are eligible on date of employment; Participation is mandatory.

C. Contributions:

Employee:	5.0% of Salary.
State:	Premium Tax Revenue.
City:	Balance required to maintain System on sound actuarial basis.

D. Credited Service:

Service is measured as the total number of years and fractional part of years of continuous service as a Member. No service is credited for any periods of employment for which the Member received a refund of Employee Contributions. [System is being administered and valued based upon total number of years and completed months of service as a Member].

E. Salary:

Total compensation including tax deferred, tax sheltered and tax exempt income derived from elective employee payroll deductions or salary reductions.

For service earned after July 1, 2011, compensation shall not include more than 300 hours of overtime per fiscal year and shall also not include payments for accrued unused sick or annual leave.

F. Average Final Compensation:

Average Final Compensation (AFC) is determined by the average total salary, including accumulated sick and vacation time paid in a lump sum, over the highest 5 years of the last 10.

G. Normal Retirement:

1. Eligibility:

Earlier of:

- (a) Attainment of age 55 with completion of 10 years of Credited Service.
- (b) Completion of 25 years of Credited Service.

2. Benefit:

3.0% times AFC times Credited Service.

Outline of Principal Provisions of the Retirement System

H. 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 age 55.

I. Delayed Retirement:

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

J. Disability Retirement:

1. Service Incurred:

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

2. Non-Service Incurred:

- a. Eligibility: 5 or more years of Credited Service; totally and permanently disabled.
- b. Benefit: The greatest of:
 - (i) Accrued benefit
 - (ii) 2% of AFC times Credited Service
 - (iii) 25% of AFC

K. Pre-Retirement Death Benefit:

- a. Not Vested: Refund of accumulated contributions.
- b. Vested but Not Eligible for Early or Normal Retirement: Greater of (a) 50% of the present value of vested accrued benefit or (b) refund of accumulated contributions.
- c. Eligible for Early or Normal Retirement: Greater of (a) accrued benefit, determined as though the deceased had retired immediately preceding date of death and elected the 10 year certain and life form of payment or (b) 50% of present value of vested accrued benefit.

In the event a vested Member's spouse is the sole beneficiary, the beneficiary shall be entitled to the accrued normal or early retirement benefit payable at the deceased Member's early or normal retirement age less the value of any benefits paid above.

Outline of Principal Provisions of the Retirement System

L. 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 accumulated contributions with 3.0% interest.

2. Benefit:

Accrued benefit based upon credited service and AFC as of date of termination, payable at age 55.

M. Normal Form of Retirement Income:

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

N. Optional Forms of Retirement Income:

In lieu of electing the normal form of payment, the optional forms of payment available are the Single Life Annuity option and the 50%, 66 2/3%, 75% and 100% Joint and Contingent options. A Social Security option is available for Members retiring prior to being eligible for Social Security retirement benefits. A 20% Partial Lump Sum is available for Members who do not participate in the DROP.

O. Deferred Retirement Option Program (DROP):

1. Eligibility:

Member 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 based upon either the quarterly rate of return earned by the Fund or a monthly 6.5% fixed rate of return, as elected by the Member. Members may elect to change their interest crediting election once during the DROP period. The period of participation in the DROP is limited to no more than 60 months. The benefit is paid as a lump sum upon actual termination of employment.

Outline of Principal Provisions of the Retirement System

P. Cost of Living Adjustment (COLA):

Beginning October 1, 1999 and October 1 of every odd-numbered year thereafter, monthly benefits of all retirees (service, disability, DROP), beneficiaries and vested terminated participants who have been in the DROP or in pay status for at least one year on the adjustment date will be increased by 0.5%.

Q. Changes Since Previous Valuation:

None.

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	31.44
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	33.27
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

7.0% (net of investment expenses), compounded annually - includes inflation at 2.5%.

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. Salary Increase Factors

Current salary is assumed to increase at a rate of 6.0% - includes wage inflation of 3.5%.

E. Disability Rates

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

<u>Age</u>	<u>Disability Rates</u> <u>Per 100 Employees</u>
20	0.14
30	0.18
40	0.30
50	1.00

F. Employee Withdrawal Rates

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

<u>Age</u>	<u>Withdrawal Rate</u>
20	6.0%
30	5.0%
40	2.6%
50	0.8%
60	0.2%

G. Rates of Retirement

100% at normal retirement age.

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

Actuarial Assumptions and Actuarial Cost Methods
Used in the Valuation

H. Cost Methods

Normal Retirement, Termination, Disability, and Death Benefits: Aggregate

Under this method the excess of the Actuarial Present Value of Projected Benefits of the group included in the valuation, over the sum of the Smoothed Value of Assets is allocated as a level percentage of earnings of the group between the valuation date and the assumed retirement age. This allocation is performed for the group as a whole, not as a sum of individual allocations. The portion of this Actuarial Present Value allocated to a specific year is called the Normal Cost. Under this method, actuarial gains (losses) reduce (increase) future Normal Costs.

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.

I. 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.

J. Disclosure of Assumptions

The investment return, salary increases, withdrawal and retirement rates were set based upon Plan expected experience. The mortality rates are based upon the July 1, 2023 FRS Actuarial Valuation, as required under F.S., Chapter 2015-157.

K. Changes Since Previous Valuation

None.

Table XII

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

<u>Attained Age Group</u>	<u>COMPLETED YEARS OF SERVICE</u>							<u>Total</u>
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30 & Over</u>	
Under 25	4	-	-	-	-	-	-	4
25-29	3	-	-	-	-	-	-	3
30-34	-	-	-	-	-	-	-	0
35-39	2	1	-	1	-	-	-	4
40-44	1	1	-	1	-	-	-	3
45-49	1	-	-	2	-	-	-	3
50-54	-	-	-	-	-	1	-	1
55-59	-	-	-	-	-	-	-	0
60-64	2	-	-	-	-	-	-	2
65 & Over	1	-	-	-	-	-	-	1
TOTAL	14	2	0	4	0	1	-	21
				<u>10/1/2022</u>				<u>10/01/2023</u>
Average Attained Age				37.8 years				39.7 years
Average Hire Age				30.9 years				33.0 years
Average Pay				\$ 53,686				\$ 62,179
Percent Female				25.0%				33.3%

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

A. Entitled to Deferred Benefits

<u>Current Age Group</u>	<u>Count</u>	<u>Total Annual Benefit</u>	<u>Average Annual Benefit</u>
Less than 40	1	\$ 16,559	\$ 16,559
40 - 44	1	30,962	30,962
45 - 49	-	-	-
50 - 54	-	-	-
55 - 59	-	-	-
60 - 64	-	-	-
65 & Over	-	-	-
TOTAL	2	\$ 47,521	\$ 23,761

B. Receiving Benefits (including DROPs)

<u>Current Age Group</u>	<u>Count</u>	<u>Total Annual Benefit</u>	<u>Average Annual Benefit</u>
Less than 50	2	\$ 18,799	\$ 9,400
50 - 54	-	-	-
55 - 59	3	95,377	31,792
60 - 64	3	88,863	29,621
65 - 69	5	165,402	33,080
70 - 74	3	60,414	20,138
75 - 79	-	-	-
80 - 84	1	29,913	29,913
85 - 89	-	-	-
90 & Over	-	-	-
TOTAL	17	\$ 458,768	\$ 26,986

Reconciliation of Member DataA. Active Participants

1. Active participants previous year	20
2. Retired during year	(1)
3. Entered DROP	0
4. Died during year	0
5. Disabled during year	0
6. Terminated during year	(1)
7. New active participants	1
8. Re-instated during year	2
9. Active participants current year	<u>21</u>

B. Participants Receiving Benefits

1. Participants receiving benefits previous year	14
2. New retired participants	1
3. Former DROPs now receiving benefits	1
4. New terminated vested receiving benefits	0
5. New disabled receiving benefits	0
6. New beneficiaries receiving benefits	0
7. Died or ceased payment during year	0
8. Adjustment / Rehired	(1)
9. Retired or terminated vested receiving benefits current year	<u>15</u>

C. DROP Participants

1. DROP participants previous year	3
2. Died during year	0
3. Became disabled during year	0
4. Employment terminated and retired during year	(1)
5. Entered DROP during year	0
6. DROP participants current year	<u>2</u>

D. Terminated Vested Participants Entitled to Future Benefits

1. Terminated vested entitled previous year	2
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>2</u>

Projected Retirement Benefits

<u>Fiscal Year</u>	<u>Projected Total Annual Payout</u>
2024	\$ 469,815
2025	\$ 581,979
2026	\$ 598,848
2027	\$ 598,067
2028	\$ 598,154
2029	\$ 596,606
2030	\$ 671,661
2031	\$ 669,642
2032	\$ 685,829
2033	\$ 825,104

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 XVI

Summary of Transaction Information

Valuation Date	Benefits Paid ¹	Administrative Expenses	Employee Contributions	Net City Contributions ²	Total State Contributions	Smoothed Value ²
10/01/2023	\$ 630,552	\$ 58,674	\$ 63,770	\$ 17,999	\$ 103,937	\$ 10,984,440
10/01/2022	377,386	55,854	54,837	68,805	89,462	10,956,636
10/01/2021	630,299	41,277	56,261	98,046	86,979	10,828,865
10/01/2020	557,786	41,667	53,051	101,798	90,650	10,166,207
10/01/2019	515,688	47,116	50,359	114,458	90,153	9,695,256
10/01/2018	281,028	45,827	46,212	130,881	81,690	9,313,611
10/01/2017	255,731	41,855	45,863	140,434	78,659	8,449,257
10/01/2016	493,697	32,120	45,554	145,133	73,960	7,919,221
10/01/2015	204,176	30,198	47,740	192,433	70,807	7,619,832
10/01/2014	228,350	18,097	43,135	200,210	67,639	7,075,831
10/01/2013	200,396	25,523	43,802	162,407	75,947	6,534,588
10/01/2012	193,244	27,161	44,252	133,749	74,973	6,044,391
10/01/2011	183,551	15,990	48,866	155,351	84,860	5,712,560
10/01/2010	145,889	19,008	48,398	131,953	78,274	5,666,207
10/01/2009	172,241	20,547	47,364	121,358	83,892	5,424,146
10/01/2008	160,077	18,592	45,883	115,007	134,181	5,228,920
10/01/2007	188,034	14,695	44,796	136,857	134,181	4,973,343
10/01/2006	191,785	27,850	42,062	156,469	134,181	4,479,248
10/01/2005	145,627	20,822	38,927	89,548	134,181	4,057,398
10/01/2004	148,154	17,093	40,698	78,102	118,288	3,804,195

¹ Includes Share Plan, DROP distributions and refunds.

² Net of Credit Balance, if any, effective for the October 1, 2018 Actuarial Valuation. Net of Credit Balance, DROP account balances, Share Plan account balances and excess State Funds reserves, if any, prior to October 1, 2018 Actuarial Valuation.

Table XVII

Recent Compensation, Termination and Investment Return Experience

Valuation Date	Compensation		Termination Ratio of Actual to Expected	Investment Return ¹		
	% Increase (Decrease)	Assumed Increase		Market Value	Smoothed Value	Assumed
10/01/2023	21.3%	6.0%	1.5	12.7%	4.9%	7.0%
10/01/2022	6.3%	6.0%	7.5	(19.6%)	3.2%	7.0%
10/01/2021	7.1%	6.0%	1.6	19.3%	10.9%	7.0%
10/01/2020	8.6%	6.0%	2.8	12.3%	8.6%	7.0%
10/01/2019	7.5%	6.0%	4.1	3.5%	7.5%	7.0%
10/01/2018	(1.3%)	6.0%	0.0	8.2%	6.7%	7.0%
10/01/2017	10.2%	6.0%	N/A	11.2%	7.0%	7.0%
10/01/2016	(0.7%)	6.0%	N/A	8.1%	6.1%	7.0%
10/01/2015	13.5%	6.0%	N/A	(1.2%)	7.7%	7.0%
10/01/2014	5.7%	6.0%	N/A	10.0%	8.0%	7.0%
Last 3 Years	11.4%	6.0%	2.8	2.6%	6.3%	7.0%
Last 5 Years	10.0%	6.0%	3.0	4.7%	7.0%	7.0%
Last 10 Years	7.6%	6.0%	N/A	5.9%	7.0%	7.0%

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

Table XVIII

Employer Contribution Information

<u>Valuation Date</u>	<u>Contribution Fiscal Year End</u>	<u>Minimum Required Employer Contributions</u>	<u>Actual City Contributions Made</u>	<u>Actual State Contributions Made</u>	<u>Actual Employer Contributions Made</u>
10/01/2023	09/30/2025	\$206,526	TBD	TBD	TBD
10/01/2022	09/30/2024	\$102,492	TBD	TBD	TBD
10/01/2021	09/30/2023	\$121,936	\$38,602	\$103,937	\$142,539
10/01/2020	09/30/2022	\$158,267	\$70,877	\$89,462	\$160,339
10/01/2019	09/30/2021	\$185,025	\$100,195	\$86,979	\$187,174
10/01/2018	09/30/2020	\$192,448	\$126,811	\$90,650	\$217,461
10/01/2017	09/30/2019	\$204,611	\$130,886	\$90,153	\$221,039
10/01/2016	09/30/2018	\$212,571	\$151,492	\$81,690	\$233,182
10/01/2015	09/30/2017	\$251,591	\$169,789	\$78,659	\$248,448
10/01/2014	09/30/2016	\$219,093	\$147,312	\$73,960	\$221,272
10/01/2013	09/30/2015	\$263,240	\$196,467	\$70,807	\$267,274
10/01/2012	09/30/2014	\$267,849	\$200,210	\$67,639	\$267,849
10/01/2011	09/30/2013	\$238,354	\$163,381	\$75,947	\$239,328
10/01/2010	09/30/2012	\$208,722	\$155,879	\$74,973	\$230,852
10/01/2009	09/30/2011	\$240,211	\$155,351	\$84,860	\$240,211
10/01/2008	09/30/2010	\$210,227	\$131,953	\$78,274	\$210,227
10/01/2007	09/30/2009	\$205,250	\$121,358	\$83,892	\$205,250
10/01/2006	09/30/2008	\$224,728	\$115,007	\$134,181	\$249,188
10/01/2005	09/30/2007	\$246,578	\$136,857	\$134,181	\$271,038
10/01/2004	09/30/2006	\$266,190	\$156,469	\$134,181	\$290,650

Actuarial Valuation as of October 1, 2023State Required Exhibit

	<u>10/01/2022</u>	<u>10/01/2023</u>
A. <u>Participant Data</u>		
1. Active participants	20	21
2. Retired participants and beneficiaries receiving benefits (including DROPs)	17	17
3. Disabled participants receiving benefits	0	0
4. Terminated vested participants	2	2
5. Annual payroll of active participants	\$ 1,073,721	\$ 1,305,756
6. Annual benefits payable to those currently receiving benefits including DROPs	\$ 467,787	\$ 458,768
B. <u>Value of Assets</u>		
1. Net Smoothed Value of Assets	\$ 10,956,636	\$ 10,984,440
2. Net Market Value of Assets	\$ 9,397,712	\$ 10,070,316
C. <u>Liabilities</u>		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	\$ 5,433,380	\$ 6,740,174
b. Vesting benefits	291,201	326,505
c. Death benefits	18,674	27,827
d. Disability benefits	170,016	197,564
e. Total	<u>\$ 5,913,271</u>	<u>\$ 7,292,070</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 215,331	\$ 230,655
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired including DROP participants	\$ 5,201,575	\$ 4,967,823
b. Disability retired	0	0
c. Beneficiaries	466,860	459,399
d. Miscellaneous (refunds in process)	50,016	53,393
e. Total	<u>\$ 5,718,451</u>	<u>\$ 5,480,615</u>

Actuarial Valuation as of October 1, 2023

State Required Exhibit

	<u>10/01/2022</u>	<u>10/01/2023</u>
4. Reserve for Share Plan liability	\$ 52,741	\$ 40,243
5. Total actuarial present value of future expected benefit payments	\$ 11,899,794	\$ 13,043,583
6. Actuarial accrued liabilities (Entry Age Normal)	\$ 9,238,795	\$ 9,677,460
7. Unfunded actuarial accrued liabilities (Entry Age Normal)	\$ (1,717,841)	\$ (1,306,980)

D. Statement of Accumulated System Benefits

1. Actuarial present value of accumulated vested benefits		
a. Participants currently receiving benefits including DROP participants	\$ 5,668,435	\$ 5,427,222
b. Other participants (including reserve for Share Plan liability)	2,391,889	2,712,861
c. Total	<u>\$ 8,060,324</u>	<u>\$ 8,140,083</u>
2. Actuarial present value of accumulated non-vested System benefits	<u>\$ 208,414</u>	<u>\$ 296,878</u>
3. Total actuarial present value of accumulated System benefits	\$ 8,268,738	\$ 8,436,961

E. Statement of Change in Accumulated System Benefits

1. Actuarial present value of accumulated System benefits as of October 1, 2022	\$ 8,268,738
2. Increase (decrease) during year attributable to:	
a. System amendment	\$ 0
b. Change in actuarial assumptions	0
c. Benefits paid including refunds, Share Plan and DROP distributions	(630,552)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period	798,775
e. Net increase	<u>\$ 168,223</u>
3. Actuarial present value of accumulated System benefits as of October 1, 2023	\$ 8,436,961

Table XIX
(Cont'd)

Actuarial Valuation as of October 1, 2023

State Required Exhibit

	<u>10/01/2022</u>	<u>10/01/2023</u>
F. <u>Pension Cost</u>		
1. Total normal cost	\$ 93,135	\$ 196,386
2. Estimated expenses	55,854	58,674
3. Interest adjustment	7,189	16,754
4. Total required contribution	\$ 156,178	\$ 271,814
5. Item 4 as a percentage of payroll	14.5%	20.8%
6. Estimated employee contributions	\$ 53,686	\$ 65,288
7. Item 6 as a percentage of payroll	5.0%	5.0%
8. Estimated State contributions	\$ 89,462	\$ 103,937
9. Item 8 as a percentage of payroll	8.3%	8.0%
10. Net amount payable by City	\$ 13,030	\$ 102,589
11. Item 10 as a percentage of payroll	1.2%	7.9%
G. <u>Past Contributions</u>		
1. Total contribution required (previous valuation)	\$ 185,706	\$ 156,178
2. Actual contributions made:		
a. Employees	\$ 63,770	N/A
b. State (net)	103,937	N/A
c. City (net)	17,999	N/A
d. Total	\$ 185,706	N/A
H. <u>Net Actuarial Gain (Loss)</u>	\$ 269,021	\$ (871,556)
I. <u>Disclosure of Following Items:</u>		
1. Actuarial present value of future salaries - attained age	\$ 10,873,917	\$ 13,690,789
2. Actuarial present value of future employee contributions - attained age	\$ 543,696	\$ 684,539
3. Actuarial present value of future contributions from other sources	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 438,998	\$ 458,007
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A

State Required Exhibit

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., E.A., M.A.A.A.
Enrollment Number: 23-08646

Jennifer Borregard

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

Dated: April 26, 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.

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.