CITY OF PENSACOLA
POLICE OFFICERS' RETIREMENT FUND

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2023

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2025

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

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April 29, 2024

Board of Trustees
City of Pensacola
Police Officers’ Pension Board

Re: City of Pensacola Police Officers' Retirement Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Pensacola Police Officers' Retirement Fund. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapters 112 and 185, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the City of Pensacola, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

Additionally, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models that apply the funding rules to generate the results. All internally developed models are reviewed as part of the valuation process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

In our opinion, the Minimum Required Contribution set forth in this report constitutes a reasonable actuarially determined contribution under Actuarial Standard of Practice No. 4.

The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Pensacola, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Officers' Retirement Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By: ______________________________

Joseph L. Griffin, ASA, EA, MAAA
Enrolled Actuary #23-6938

By: ______________________________

Tyler A. Koftan, EA, MAAA
Enrolled Actuary #23-8685

JLG/lke

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Pensacola Police Officers' Retirement Fund, performed as of October 1, 2023, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2025.

The contribution requirements, compared with those set forth in the October 1, 2022 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2023 9/30/2025	10/1/2022 9/30/2024
Minimum Required Contribution	$4,864,175	$4,309,018
Member Contributions (Est.)	202,521	218,349
City And State Required Contribution	**4,661,654**	**4,090,669**
State Contribution (Est.) [1]	755,911	755,911
City Required Contribution (Est.) [2]	$3,905,743	$3,334,758

[1] Represents the amount received in calendar 2023.

[2] The City has access to the September 30, 2023 Contribution Surplus Account Balance of $1,214,869.91 to help offset portion of the above stated requirements for fiscal 2024. Please see page 19 of this report for details of the account balance reconciliation.

As you can see, the Minimum Required Contribution shows an increase when compared to the results set forth in the October 1, 2022 actuarial valuation report. The increase is attributable to net unfavorable plan experience as described below.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an investment return of 4.79% (Actuarial Asset Basis) which fell short of the 7.125% assumption, an average salary increase of 11.45% which exceeded the 4.00% assumption, and more retirements than expected. There were no significant sources of actuarial gain.

CHANGES SINCE PRIOR VALUATION

Plan Changes

There have been no changes in benefits since the prior valuation.

Actuarial Assumption/Method Changes

There have been no assumption or method changes since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	10/1/2023	10/1/2022
A. Participant Data		
Actives	45	55
Service Retirees	134	131
DROP Retirees	7	3
Beneficiaries	28	27
Disability Retirees	12	13
Terminated Vested	18	16
Total	244	245
Projected Annual Payroll	3,744,834	4,037,524
Annual Rate of Payments to:		
Service Retirees	6,921,682	6,590,487
DROP Retirees	425,916	200,332
Beneficiaries	731,144	696,961
Disability Retirees	266,374	264,226
Terminated Vested	279,454	236,744
B. Assets		
Actuarial Value (AVA) [1]	124,736,342	122,927,837
Market Value (MVA) [1]	115,484,891	109,616,680
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	30,272,285	32,421,534
Disability Benefits	2,463,618	2,806,308
Death Benefits	250,413	274,109
Vested Benefits	321,899	379,823
Refund of Contributions	4,838	7,197
Service Retirees	99,971,380	96,426,247
DROP Retirees [1]	7,025,598	3,458,486
Beneficiaries	7,756,888	7,564,744
Disability Retirees	3,257,794	3,315,959
Terminated Vested	2,249,456	1,811,673
Total	153,574,169	148,466,080

C. Liabilities - (Continued)

	10/1/2023	10/1/2022
Present Value of Future Salaries	20,476,667	22,684,495
Present Value of Future Member Contributions	1,064,787	1,179,594
Normal Cost (Retirement)	549,067	603,793
Normal Cost (Disability)	99,877	118,159
Normal Cost (Death)	10,294	11,745
Normal Cost (Vesting)	21,231	22,404
Normal Cost (Refunds)	1,720	1,650
Total Normal Cost	682,189	757,751
Present Value of Future Normal Costs	3,698,671	4,226,128
Accrued Liability (Retirement)	27,255,881	29,020,627
Accrued Liability (Disability)	1,915,957	2,140,388
Accrued Liability (Death)	192,921	207,531
Accrued Liability (Vesting)	247,088	290,775
Accrued Liability (Refunds)	2,535	3,522
Accrued Liability (Inactives) [1]	120,261,116	112,577,109
Total Actuarial Accrued Liability (EAN AL)	149,875,498	144,239,952
Unfunded Actuarial Accrued Liability (UAAL)	25,139,156	21,312,115
Funded Ratio (AVA / EAN AL)	83.2%	85.2%
Contribution Surplus Account	1,214,870	1,063,956
Total Amortization Charge	26,354,026	22,376,071
Amortization Amount	3,924,902	3,315,536

D. Actuarial Present Value of Accrued Benefits

	10/1/2023	10/1/2022
Vested Accrued Benefits		
Inactives [1]	120,261,116	112,577,109
Actives	15,856,223	17,844,820
Member Contributions	1,647,462	1,820,381
Total	137,764,801	132,242,310
Non-vested Accrued Benefits	4,181,210	4,072,700
Total Present Value Accrued Benefits (PVAB)	141,946,011	136,315,010
Funded Ratio (MVA / PVAB)	81.4%	80.4%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	4,320,225	
Benefits Paid	(8,112,655)	
Interest	9,423,431	
Other	0	
Total	5,631,001	

Valuation Date	10/1/2023	10/1/2022
Applicable to Fiscal Year Ending	9/30/2025	9/30/2024
E. Pension Cost		
Normal Cost [2]	$709,477	$788,061
Administrative Expenses [2]	72,800	72,800
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2023) [2]	4,081,898	3,448,157
Minimum Required Contribution	4,864,175	4,309,018
Expected Member Contributions [2]	202,521	218,349
Expected City and State Contribution	4,661,654	4,090,669
F. Past Contributions		
Plan Years Ending:	9/30/2023	
City and State Requirement	3,884,353	
Actual Contributions Made:		
City	3,248,120	
State	755,911	
Total	4,004,031	
G. Net Actuarial (Gain)/Loss	5,890,590	

[1] The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2023 and 9/30/2022.

[2] Contributions developed as of 10/1/2023 displayed above have been adjusted to account for assumed salary increase components.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

Year	Projected Unfunded Actuarial Accrued Liability
2023	26,354,026
2024	24,027,198
2025	21,534,585
2028	12,939,637
2032	2,288,534
2035	1,823,265
2038	0

I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

		Actual	Assumed
Year Ended	9/30/2023	11.45%	4.00%
Year Ended	9/30/2022	4.85%	4.00%
Year Ended	9/30/2021	5.29%	4.00%
Year Ended	9/30/2020	8.58%	4.00%
Year Ended	9/30/2019	7.80%	4.00%

(ii) 5 Year Comparison of Investment Return on Market Value and Actuarial Value

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2023	9.02%	4.79%	7.125%
Year Ended	9/30/2022	-15.52%	6.04%	7.125%
Year Ended	9/30/2021	22.47%	10.62%	7.125%
Year Ended	9/30/2020	8.50%	7.44%	7.125%
Year Ended	9/30/2019	4.15%	7.96%	7.125%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2023	$3,744,834
	10/1/2013	4,870,112
(b) Total Increase		-23.11%
(c) Number of Years		10.00
(d) Average Annual Rate		-2.59%

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my 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 plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Joseph L. Griffin, EA, ASA, MAAA
Enrolled Actuary #23-6938

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112 Florida Statutes:

Mr. Keith Brinkman
Bureau of Local
Retirement Systems
Post Office Box 9000
Tallahassee, FL 32315-9000

Mr. Steve Bardin
Municipal Police and Fire
Pension Trust Funds
Division of Retirement
Post Office Box 3010
Tallahassee, FL 32315-3010

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2022	$21,312,115
(2)	Sponsor Normal Cost developed as of October 1, 2022	547,800
(3)	Expected administrative expenses for the year ended September 30, 2023	70,000
(4)	Expected interest on (1), (2) and (3)	1,560,013
(5)	Sponsor contributions to the System during the year ended September 30, 2023	4,004,031
(6)	Expected interest on (5)	237,331
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2023 (1)+(2)+(3)+(4)-(5)-(6)	19,248,566
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	5,890,590
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2023	25,139,156
(11)	Contribution Surplus Account as of October 1, 2023	1,214,870
(12)	Total Amortization Charge as of October 1, 2023	26,354,026

Type of Base	Date Established	Years Remaining	10/1/2023 Amount	Amortization Amount
		8	23,475,568	3,687,716
Actuarial Gain	10/1/2018	10	(454,583)	(60,767)
Actuarial Loss	10/1/2019	11	49,262	6,171
Method Change	10/1/2019	11	(328,321)	(41,127)
Actuarial Loss	10/1/2020	12	721,495	85,362
Assump Change	10/1/2020	12	(1,385,412)	(163,911)
Actuarial Gain	10/1/2021	13	(4,737,477)	(532,897)
Actuarial Loss	10/1/2022	14	3,122,904	335,841
Actuarial Loss	10/1/2023	15	5,890,590	608,514
			26,354,026	3,924,902

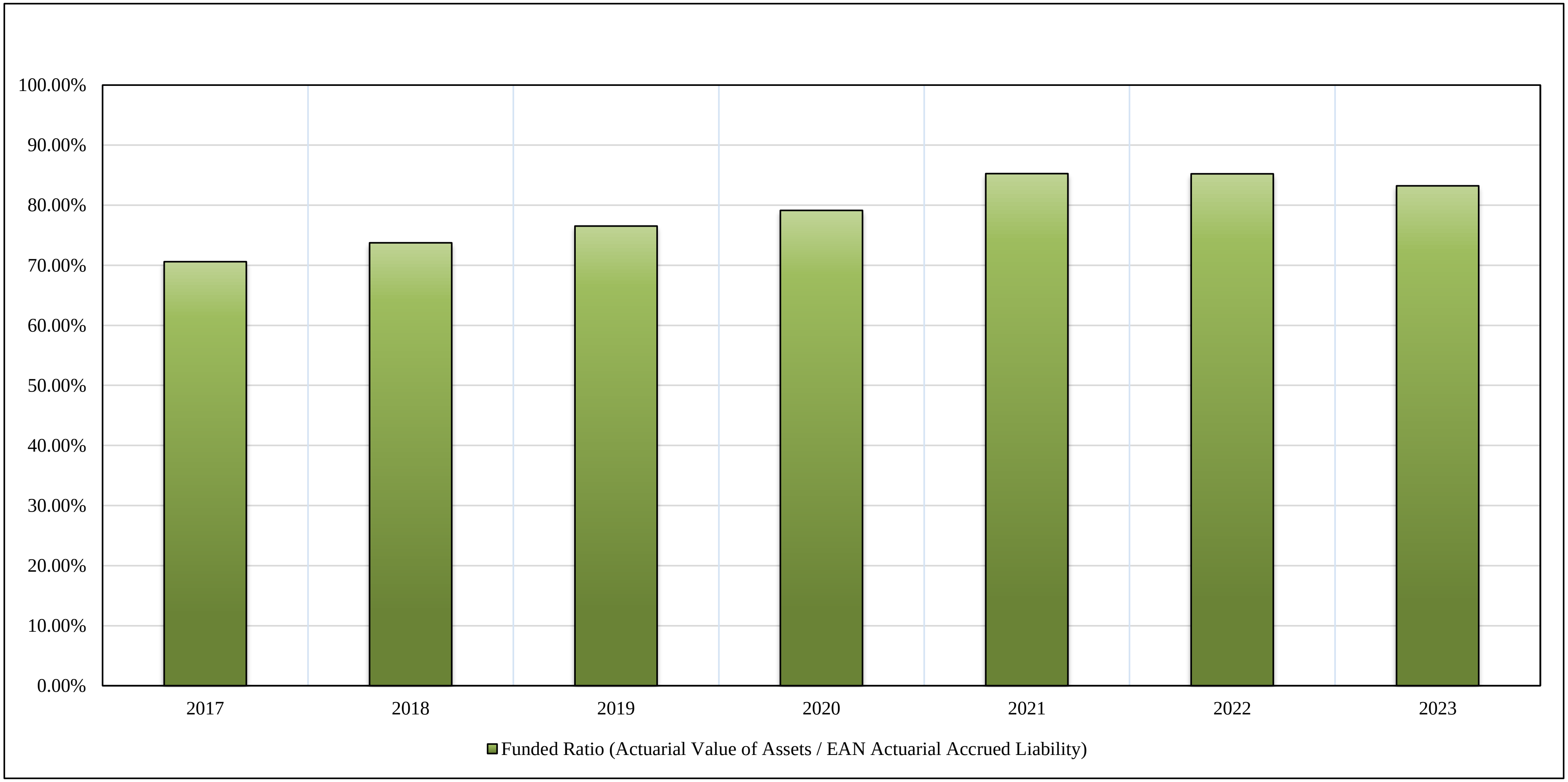
PROJECTED OUTSTANDING AMORTIZATION BASES

Plan Year	Fiscal Year	Expected Outstanding Amortization Bases	Expected Amortization Payment	Expected Outstanding Amortization Bases on 9/30
9/30/2023	9/30/2025	26,354,026	3,924,902	24,027,198
9/30/2024	9/30/2026	24,027,198	3,924,902	21,534,585
9/30/2025	9/30/2027	21,534,585	3,924,902	18,864,374
9/30/2026	9/30/2028	18,864,374	3,924,902	16,003,910
9/30/2027	9/30/2029	16,003,910	3,924,902	12,939,637
9/30/2028	9/30/2030	12,939,637	3,924,902	9,657,035
9/30/2029	9/30/2031	9,657,035	3,924,902	6,140,547
9/30/2030	9/30/2032	6,140,547	3,924,904	2,373,508
9/30/2031	9/30/2033	2,373,508	237,186	2,288,534
9/30/2032	9/30/2034	2,288,534	237,184	2,197,509
9/30/2033	9/30/2035	2,197,509	297,955	2,034,897
9/30/2034	9/30/2036	2,034,897	332,899	1,823,265
9/30/2035	9/30/2037	1,823,265	411,457	1,512,399
9/30/2036	9/30/2038	1,512,399	944,354	608,518
9/30/2037	9/30/2039	608,518	608,518	0
9/30/2038	9/30/2040	0	0	

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1)	Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2022	$21,312,115
(2)	Expected UAAL as of October 1, 2023	19,248,566
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	2,828,258
	Salary Increases	1,584,861
	Active Decrements	564,329
	Inactive Mortality	358,501
	Cost-of-Living Adjustments Greater/(Lower) Than Expected	457,150
	Other	97,491
	Increase in UAAL due to (Gain)/Loss	5,890,590
	Assumption Changes	0
(4)	Actual UAAL as of October 1, 2023	$25,139,156

HISTORY OF FUNDING PROGRESS



CONTRIBUTION SURPLUS ACCOUNT RECONCILIATION
October 1, 2022 through September 30, 2023

(1)	9/30/2022 Contribution Surplus Account Balance	1,063,956.18
(2)	Minimum Required City and State Contribution for Plan Year Beginning 10/1/2022	3,884,353.00
(3)	City Contributions Deposited on or around 10/1/2022	3,248,199.93
(4)	State Contributions Deposited on 8/22/2023	755,911.26
(5)	Shortfall/(Excess) Contribution for Plan Year Beginning 10/1/2022 (with interest) {[(2) - (3)] x 1.07125} - [(4) x (1 + (0.07125 * (41/365)))]	(80,482.16)
(6)	Actual Non-Investment Expenses for Plan Year Beginning 10/1/2022	75,017.79
(7)	Expected Non-Investment Expenses for Plan Year Beginning 10/1/2022	70,000.00
(8)	Interest at 7.125% {[(1) - [(6) - (7)]} x 0.07125	75,449.36
(9)	9/30/2023 Contribution Surplus Account Balance (1) - (5) - [(6) - (7)] + (8)	1,214,869.91

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate	*Healthy Active Lives:* **Female:** PubS.H-2010 (Below Median) for Employees, set forward one year. **Male:** PubS.H-2010 (Below Median) for Employees, set forward one year. *Healthy Retiree Lives:* **Female:** PubS.H-2010 for Healthy Retirees, set forward one year. **Male:** PubS.H-2010 for Healthy Retirees, set forward one year. *Beneficiary Lives:* **Female:** PubG.H-2010 for Healthy Retirees. **Male:** PubG.H-2010 for Healthy Retirees, set back one year. *Disabled Lives:* 80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees. All rates for healthy lives are projected generationally with Mortality Improvement Scale MP-2018. We feel this assumption sufficiently accommodates future mortality improvements. The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2021 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics. 15% of active deaths are assumed to be service-incurred.
Interest Rate	7.125% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.
Salary Increases	4.00% compounded annually. This assumption was utilized by the prior actuary.

Payroll Growth

0.00% for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Administrative Expenses

$70,000 annually.

Cost-of-Living Adjustments

2.5% annually. The assumption is 2.0% per year after 10 years of benefit payments for retirees who retire on or after January 1, 2013.

Retirement Rates

% Retiring During the Year		
Service	Age	Rate
< 25 Years	45 - 49	5%
	50 - 56	10%
	57	50%
	58	70%
	59	90%
	60	100%
25 Years	45 - 57	50%
	58	70%
	59	90%
	60	100%
26 - 29 Years	45 - 56	25%
	57	50%
	58	70%
	59	90%
	60	100%
30+ Years	All Ages	100%

The assumed rates of retirement were utilized by the prior actuary.

Termination Rates

% Terminating During the Year	
Age	Rate
25 - 39	6.0%
40 - 44	2.0%
45+	0.0%

The assumed rates of termination were utilized by the prior actuary.

Disability Rates

See sample rates in table that follows.

Age	Probability of Disablement
25	0.2387%
30	0.2800%
35	0.3867%
40	0.5733%
45	1.0600%
50	1.8467%
55	3.0600%
60	4.7867%
65	0.0000%

45% of disabilities are assumed to be in Line of Duty. The disability assumptions were utilized by the prior actuary.

Marriage

80% of active participants are assumed to be married with spouses three years younger. This assumption was utilized by the prior actuary.

Actuarial Asset Method

All assets are valued at market value with an adjustment to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

Amortization Method

New UAAL amortization bases are amortized over 15 years.

The amortization payment is subject to a minimum based on a 30-year amortization of the UAAL, if the UAAL is positive, in order to comply with Actuarial Standard of Practice No. 4.

Bases established prior to the valuation date are adjusted proportionally to match the Expected Unfunded Actuarial Accrued Liability as of the valuation date, in order to align prior year bases with the portion of the current year UAAL associated with prior year sources.

Funding Method

Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution:

Interest - None; assuming an October 1 deposit.

Salary - A full year, based on current 4.00% assumption.

Low-Default-Risk Obligation Measure

Based on the Entry Age Normal Actuarial Cost Method and an interest rate of 4.87% per year compounded annually, net of investment related expenses. This rate is consistent with the Yield to Maturity of the S&P Municipal Bond 20-Year High Grade Rate Index as of September 30, 2023. All other assumptions for the Low-Default-Risk Obligation Measure are consistent with the assumptions shown in this section unless otherwise noted.

GLOSSARY

Actuarial Value of Assets is the asset value used in the valuation to determine contribution requirements. It represents the plan's Market Value of Assets (see below), with adjustments according to the plan's Actuarial Asset Method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the Market Value of Assets.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

(a) The normal cost accrual rate equals:

(i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by

(ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

Market Value of Assets is the fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded. Under the Entry Age Normal cost method, it is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.

Payroll Under Assumed Ret. Age is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members, excluding any Members who are assumed to retire with 100% probability on the valuation date.

Projected Annual Payroll is the projected annual rate of pay for the fiscal year following the fiscal year beginning on the valuation date of all covered Members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current plan participants.

Total Annual Payroll is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members.

Total Required Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

Unfunded Actuarial Accrued Liability (UAAL) is the difference between the actuarial accrued liability (described above) and the Actuarial Value of Assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.

- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.

- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled “Plan Maturity Measures and Other Risk Metrics”. Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 33.3% on October 1, 2020 to 22.7% on October 1, 2023, indicating that the plan has been maturing during the period.

- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 80.2%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.

- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 79.1% on October 1, 2020 to 83.2% on October 1, 2023.

- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from -2.2% on October 1, 2020 to -3.4% on October 1, 2023. The current Net Cash Flow Ratio of -3.4% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

Low Default-Risk Obligation Measure

ASOP No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, was revised as of December 2021 to include a “low-default-risk obligation measure” (LDROM). This liability measure is consistent with the determination of the actuarial accrued liability shown on page 10 in terms of member data, plan provisions, and assumptions/methods, under the Entry Age Normal Cost Method, except that the interest rate is tied to low-default-risk fixed income securities. The S&P Municipal Bond 20 Year High Grade Rate Index (daily rate closest to, but not later than, the measurement date) was selected to represent a current market rate of low risk but longer-term investments that could be included in a low-risk asset portfolio. The interest rate used in this valuation was 4.87%, resulting in an LDROM of $198,566,475. The LDROM should not be considered the “correct” liability measurement; it simply shows a possible outcome if the Board elected to hold a very low risk asset portfolio. The Board actually invests the pension plan’s contributions in a diversified portfolio of stocks and bonds and other investments with the objective of maximizing investment returns at a reasonable level of risk. Consequently, the difference between the plan’s Actuarial Accrued Liability disclosed earlier in this section and the LDROM can be thought of as representing the expected taxpayer savings from investing in the plan’s diversified portfolio compared to investing only in high quality bonds.

The actuarial valuation reports the funded status and develops contributions based on the expected return of the plan’s investment portfolio. If instead, the plan switched to investing exclusively in high quality bonds, the LDROM illustrates that reported funded status would be lower (which also implies that the Actuarially Determined Contributions would be higher), perhaps significantly. Unnecessarily high contribution requirements in the near term may not be affordable and could imperil plan sustainability and benefit security.

It is important to note that the actuary has identified the risks above as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	10/1/2023	10/1/2022	10/1/2021	10/1/2020
Support Ratio				
Total Actives	45	55	59	62
Total Inactives [1]	198	189	184	186
Actives / Inactives [1]	22.7%	29.1%	32.1%	33.3%
Asset Volatility Ratio				
Market Value of Assets (MVA)	115,484,891	109,616,680	134,152,805	111,724,639
Covered Non-DROP Payroll	3,744,834	4,037,524	4,010,318	3,959,536
MVA / Total Annual Payroll	3,083.8%	2,714.9%	3,345.2%	2,821.7%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	120,261,116	112,577,109	108,576,297	110,159,826
Total Accrued Liability (EAN)	149,875,498	144,239,952	140,251,882	139,546,417
Inactive AL / Total AL	80.2%	78.0%	77.4%	78.9%
Funded Ratio				
Actuarial Value of Assets (AVA)	124,736,342	122,927,837	119,577,314	110,431,718
Total Accrued Liability (EAN)	149,875,498	144,239,952	140,251,882	139,546,417
AVA / Total Accrued Liability (EAN)	83.2%	85.2%	85.3%	79.1%
Net Cash Flow Ratio				
Net Cash Flow [2]	(3,980,056)	(3,758,168)	(2,452,108)	(2,433,345)
Market Value of Assets (MVA)	115,484,891	109,616,680	134,152,805	111,724,639
Ratio	-3.4%	-3.4%	-1.8%	-2.2%

[1] Excludes terminated participants awaiting a refund of member contributions.

[2] Determined as total contributions minus benefit payments and administrative expenses.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During Fiscal Year	Amount	Increase from Previous Year
1998	619,399.23	_____%
1999	584,429.37	-5.6%
2000	579,318.13	-0.9%
2001	581,500.95	0.4%
2002	657,853.43	13.1%
2003	717,421.06	9.1%
2004	706,380.19	-1.5%
2005	662,758.94	-6.2%
2006	662,758.94	0.0%
2007	662,758.94	0.0%
2008	662,758.94	0.0%
2009	527,249.04	-20.4%
2010	486,189.84	-7.8%
2011	474,151.54	-2.5%
2012	477,013.80	0.6%
2013	473,910.37	-0.7%
2014	473,282.65	-0.1%
2015	512,807.52	8.4%
2016	533,483.40	4.0%
2017	542,276.76	1.6%
2018	572,693.45	5.6%
2019	601,682.12	5.1%
2020	623,810.51	3.7%
2021	640,286.22	2.6%
2022	683,115.97	6.7%
2023	755,911.26	10.7%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2023

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Checking Account	9,071,297.59	9,071,297.59
Money Market	196,863.74	196,863.74
Cash	(22,640.17)	(22,640.17)
Total Cash and Equivalents	9,245,521.16	9,245,521.16
Receivables:		
Member Contributions in Transit	7,551.87	7,551.87
City Contributions in Transit	145.21	145.21
Investment Income	268,612.61	268,612.61
Total Receivable	276,309.69	276,309.69
Investments:		
U. S. Bonds and Bills	7,935,157.00	7,290,736.75
Federal Agency Guaranteed Securities	12,196,788.87	11,087,485.07
Corporate Bonds	9,573,622.36	8,534,989.20
Municipal Obligations	398,484.50	373,626.50
Stocks	47,863,630.82	56,028,280.82
Mutual Funds:		
Fixed Income	2,809,924.12	2,809,924.12
Pooled/Common/Commingled Funds:		
Equity	8,253,164.49	8,253,164.49
Real Estate	9,869,354.23	11,656,619.57
Total Investments	98,900,126.39	106,034,826.52
Total Assets	108,421,957.24	115,556,657.37
LIABILITIES		
Payables:		
Investment Expenses	61,876.40	61,876.40
Administrative Expenses	9,890.00	9,890.00
Total Liabilities	71,766.40	71,766.40
NET POSITION RESTRICTED FOR PENSIONS	108,350,190.84	115,484,890.97

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2023
Market Value Basis

ADDITIONS			
Contributions:			
Member		203,586.07	
City		3,248,119.93	
State		755,911.26	
Total Contributions			4,207,617.26
Investment Income:			
Net Realized Gain (Loss)	82,435.41		
Unrealized Gain (Loss)	7,554,298.59		
Net Increase in Fair Value of Investments		7,636,734.00	
Interest & Dividends		2,748,341.31	
Less Investment Expense[1]		(536,808.77)	
Net Investment Income			9,848,266.54
Total Additions			14,055,883.80
DEDUCTIONS			
Distributions to Members:			
Benefit Payments		7,801,812.30	
Lump Sum DROP Distributions		310,842.52	
Refunds of Member Contributions		0.00	
Total Distributions			8,112,654.82
Administrative Expense			75,017.79
Total Deductions			8,187,672.61
Net Increase in Net Position			5,868,211.19
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			109,616,679.78
End of the Year			115,484,890.97

[1]Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION
September 30, 2023

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Gains/Losses Not Yet Recognized

Plan Year Ending	Gain/(Loss)	Amounts Not Yet Recognized by Valuation Year 2023	2024	2025	2026	2027
09/30/2020	1,616,151	323,231	0	0	0	0
09/30/2021	17,007,250	6,802,900	3,401,450	0	0	0
09/30/2022	(30,202,460)	(18,121,476)	(12,080,984)	(6,040,492)	0	0
09/30/2023	2,179,868	1,743,894	1,307,920	871,946	435,972	0
Total		(9,251,451)	(7,371,614)	(5,168,546)	435,972	0

Development of Investment Gain/Loss

Market Value of Assets, 09/30/2022	109,616,680
Contributions Less Benefit Payments & Admin Expenses	(3,980,055)
Expected Investment Earnings*	7,668,399
Actual Net Investment Earnings	9,848,267
2023 Actuarial Investment Gain/(Loss)	2,179,868

*Expected Investment Earnings = 0.07125 * (109,616,680 - 0.5 * 3,980,055)

Development of Actuarial Value of Assets

(1) Market Value of Assets, 09/30/2023	115,484,891
(2) Gains/(Losses) Not Yet Recognized	(9,251,451)
(3) Actuarial Value of Assets, 09/30/2023, (1) - (2)	124,736,342
(4) Limited Actuarial Value of Assets, 09/30/2023	124,736,342
(A) 09/30/2022 Actuarial Assets:	122,927,837
(I) Net Investment Income:	
1. Interest and Dividends	2,748,341
2. Net Increase in Fair Value of Investments	7,636,734
3. Change in Actuarial Value	(4,059,706)
4. Investment Expenses	(536,809)
Total	5,788,561
(B) 09/30/2023 Actuarial Assets:	124,736,342
Actuarial Assets Rate of Return = 2I/(A+B-I):	4.79%
Market Value of Assets Rate of Return:	9.02%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(2,828,258)

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
SEPTEMBER 30, 2023
Actuarial Asset Basis

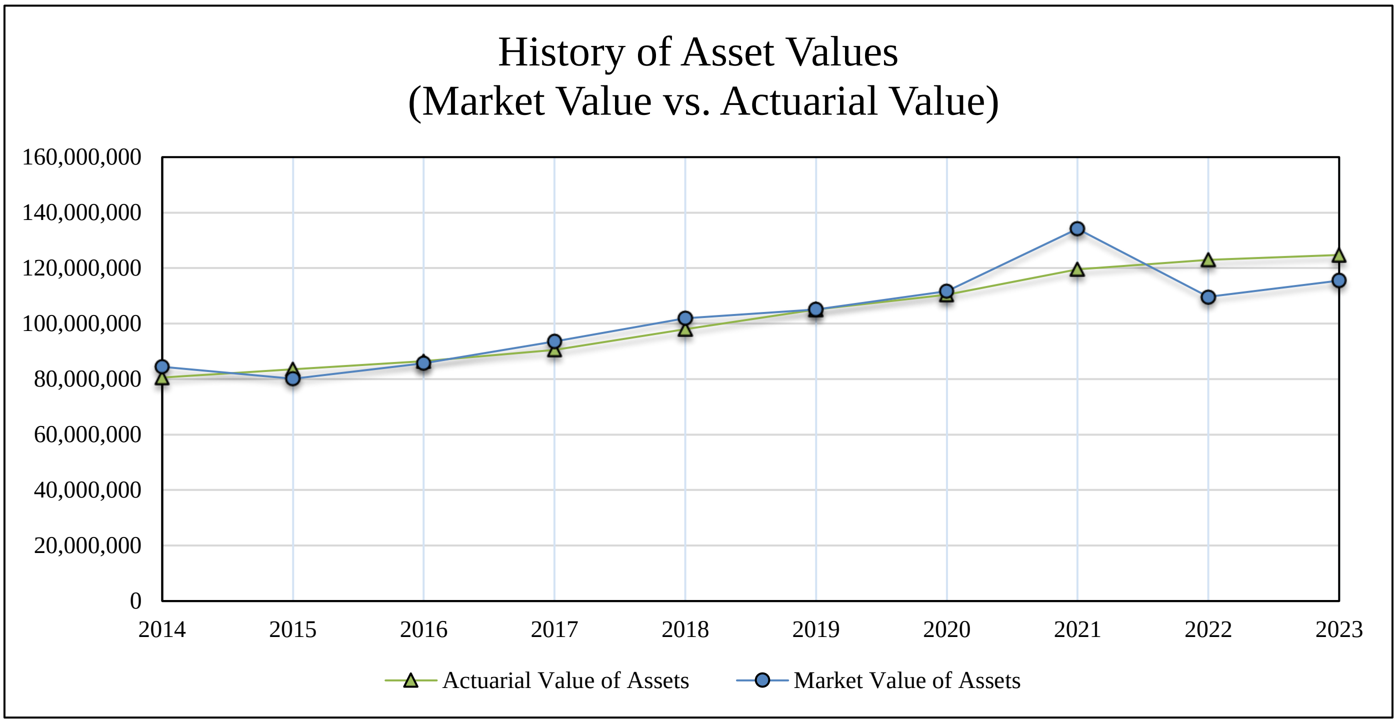
REVENUES		
Contributions:		
Member	203,586.07	
City	3,248,119.93	
State	755,911.26	
Total Contributions		4,207,617.26
Earnings from Investments:		
Interest & Dividends	2,748,341.31	
Net Realized Gain (Loss)	82,435.41	
Unrealized Gain (Loss)	7,554,298.59	
Change in Actuarial Value	(4,059,706.00)	
Total Earnings and Investment Gains		6,325,369.31
EXPENDITURES		
Distributions to Members:		
Benefit Payments	7,801,812.30	
Lump Sum DROP Distributions	310,842.52	
Refunds of Member Contributions	0.00	
Total Distributions		8,112,654.82
Expenses:		
Investment related[1]	536,808.77	
Administrative	75,017.79	
Total Expenses		611,826.56
Change in Net Assets for the Year		1,808,505.19
Net Assets Beginning of the Year		122,927,836.78
Net Assets End of the Year[2]		124,736,341.97

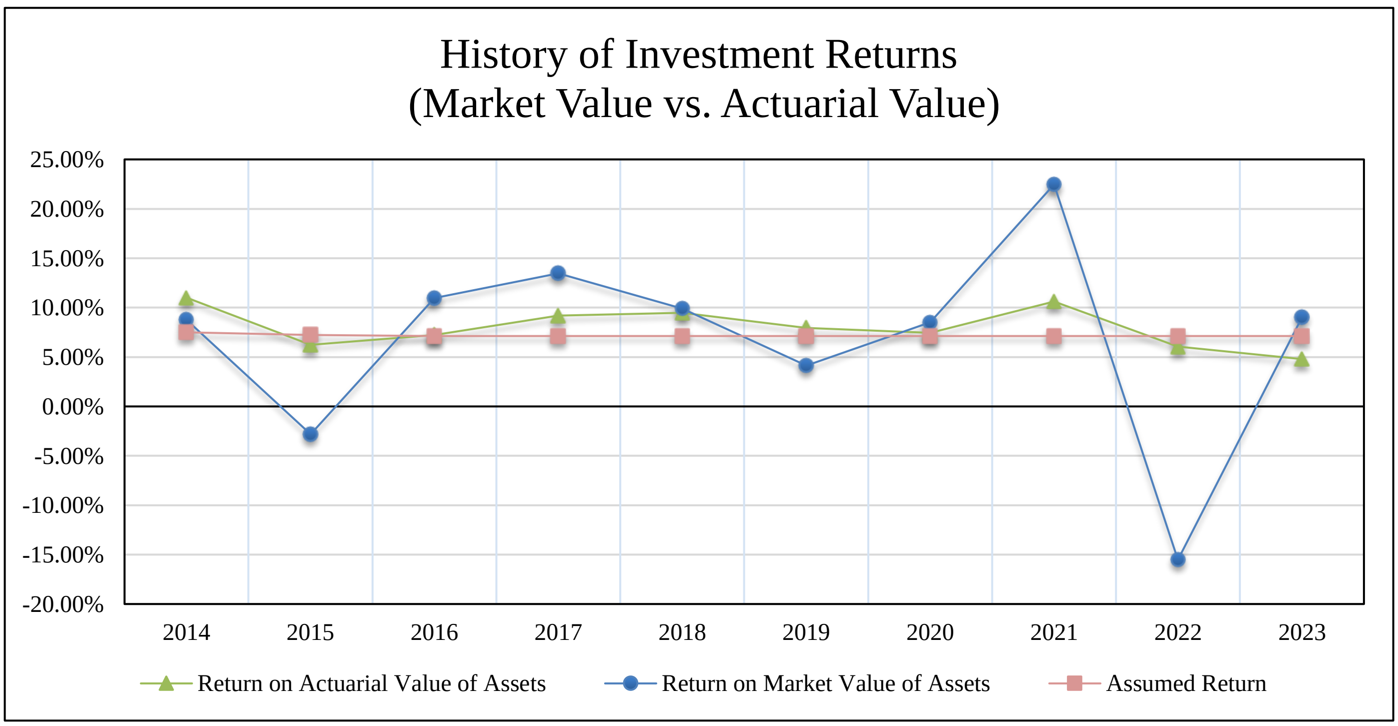
[1]Investment related expenses include investment advisory, custodial and performance monitoring fees.
[2]Net Assets may be limited for actuarial consideration.

DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2022 to September 30, 2023

Beginning of the Year Balance	366,132.80
Plus Additions	335,574.93
Investment Return Earned	5,226.64
Less Distributions	(310,842.52)
End of the Year Balance	396,091.85

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





STATISTICAL DATA

	10/1/2023	10/1/2022	10/1/2021	10/1/2020
Actives				
Number	45	55	59	62
Average Current Age	46.1	45.9	45.6	44.3
Average Age at Employment	26.7	26.9	27.1	26.9
Average Past Service	19.4	19.0	18.5	17.4
Average Annual Salary	$83,219	$73,410	$70,940	$66,712
Service Retirees				
Number	134	131	124	123
Average Current Age	66.3	66.0	65.8	65.8
Average Annual Benefit	$51,654	$50,309	$48,736	$47,421
DROP Retirees				
Number	7	3	6	9
Average Current Age	53.5	56.0	55.9	53.7
Average Annual Benefit	$60,845	$66,777	$58,854	$66,153
Beneficiaries				
Number	28	27	26	25
Average Current Age	75.3	74.8	74.1	74.2
Average Annual Benefit	$26,112	$25,813	$24,147	$25,251
Disability Retirees				
Number	12	13	13	15
Average Current Age	74.4	74.7	73.7	72.6
Average Annual Benefit	$22,198	$20,325	$19,733	$18,537
Terminated Vested				
Number	18	16	16	15
Average Current Age [1]	44.3	43.7	42.7	43.8
Average Annual Benefit [1]	$16,438	$15,783	$15,783	$12,438

[1] The Average Current Age and Average Annual Benefit exclude participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24												0
25 - 29												0
30 - 34							1					1
35 - 39							2	2				4
40 - 44							3	9	2			14
45 - 49							1	4	8			13
50 - 54							1	2	5	2		10
55 - 59									3			3
60 - 64												0
65+												0
Total	0	0	0	0	0	0	8	17	18	2	0	45

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2022	55
b. Terminations	
i. Vested (partial or full) with deferred annuity	(3)
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distribution	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(2)
f. DROP	(5)
g. Continuing participants	45
h. New entrants / Rehires	0
i. Total active life participants in valuation	45

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving Benefits	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due Refund)	Total
a. Number prior valuation	131	3	27	13	15	1	190
Retired	4	(1)			(1)		2
DROP		5					5
Vested (Deferred Annuity)					3		3
Vested (Due Refund)							0
Hired/Terminated in Same Year							0
Death, With Survivor	(1)		1				0
Death, No Survivor	(1)			(1)			(2)
Disabled							0
Refund of Contributions							0
Rehires							0
Expired Annuities							0
Data Corrections	1						1
b. Number current valuation	134	7	28	12	17	1	199

SUMMARY OF CURRENT PLAN

Eligibility	Employees who are classified as full-time Police Officers hired prior to January 1, 2013 shall participate in the System as a condition of employment.
Credited Service	Aggregate number of years of service and fractional parts of years of service
Compensation	Total cash compensation, educational incentive pay, court pay, automobile and/or meals and uniform expense, accumulated sick leave at retirement and vacation pay at retirement, special duty pay, shift differential pay, or special bonuses.
	Effective January 1, 2013, compensation shall be limited to an officer's base pay and senior officer pay exclusive of overtime for earnings on or after January 1, 2013, but shall include overtime which had been earned as of December 21, 2012.
Average Final Compensation	Average Compensation for the best 2 years out of the last 5 years of Credited Service for Members with 20 or more years of Credited Service as of January 1, 2013.
	Average Compensation for the last 5 years of Credited Service for Members with less than 20 years of Credited Service as of January 1, 2013.
Member Contributions	5.20% of Salary.
City and State Contributions	Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII of Chapter 112, Florida Statutes.
Normal Retirement	
Date	Earlier of (1) Age 55 and 12 years of Credited Service, or (2) 25 years of Credited Service, regardless of Age.
Benefit	3.00% of Average Final Compensation for each full year of Credited Service.
Form of Benefit	Ten Year Certain and Life Annuity (options available).
Early Retirement	
Eligibility	Age 50 and 12 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% per year for each year preceding age 55.

Vesting

Less than 12 years of Credited Service	Refund of Member Contributions.
12 or more years of Credited Service	Accrued benefit payable at the Member's otherwise Normal Retirement Date or Refund of Member Contributions

Disability

Eligibility	
Line of Duty	Total and permanent disability.
Non Line of Duty	Total and permanent disability with at least 12 years of Credited Service.
Benefit	
Line of Duty	3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 42% of AFC.
Non Line of Duty	3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 25% of AFC.
Form of Benefit	Payable as a 10-year Certain and Life Annuity. Options available.

Death Benefits

Pre-Retirement	
Line of Duty	3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 42% of AFC.
Non Line of Duty	For members with 12 or more years of Credited Service: 3.00% of Average Final Compensation for each full year of Credited Service. Minimum benefit is 25% of AFC. For members with less than 12 years of Credited Service: Refund of accumulated contributions without interest.
Post-Retirement	Benefits payable to beneficiary in accordance with option selected at retirement.

Board of Trustees	a. Two City Council appointees, b. Two Members of the Department elected by the membership, and c. Fifth Member chosen by a majority of the other four trustees
Deferred Retirement Option Plan	
Eligibility	Satisfaction of Retirement requirements.
Participation	Not to exceed 60 months.
Rate of Return	
Members who entered DROP Prior to January 1, 2013	4.00% annual interest.
Members who entered DROP On or after January 1, 2013	1.30% annual interest.
Form of Distribution	Cash lump sum (options available) at termination of employment.
Cost-of-Living Adjustment	
Eligibility	All members in payment status.
Increase	Increased annually effective each January 1st based on Consumer Price Index as of the previous September 30th, limited to 3.00% per year for retirees and DROP participants. The limit is 2.00% per year after 10 years of benefit payments for retirees who retire on or after January 1, 2013. Additionally, Members who entered the DROP on or after January 1, 2013 shall not receive any cost-of-living adjustments while participating in the DROP.