

CITY OF NORTH PORT
POLICE OFFICERS' PENSION - LOCAL OPTION TRUST FUND
ACTUARIAL VALUATION
AS OF OCTOBER 1, 2023
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2025



December 6, 2023

Board of Trustees
City of North Port
Police Officers' Pension Board

Re: City of North Port Police Officers' Pension - Local Option Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of North Port Police Officers' Pension - Local Option Trust 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 North Port, 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.

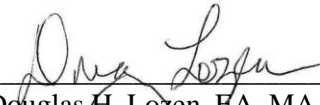
The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the 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 North Port, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Officers' Pension - Local Option Trust 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: 

Douglas H. Lozen, EA, MAAA
Enrolled Actuary #23-7778

By: 

Kevin H. Peng, ASA, EA, MAAA
Enrolled Actuary #23-7783

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of North Port Police Officers' Pension - Local Option Trust 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 <u>9/30/2025</u>	10/1/2022 <u>9/30/2024</u>
Minimum Required Contribution	\$2,972,229	\$2,441,809
Member Contributions (Est.)	531,325	485,584
City And State Required Contribution	2,440,904	1,956,225
State Contribution (Est.) ¹	280,000	280,000
City Required Contribution (Est.) ²	\$2,160,904	\$1,676,225

¹ Based on a Mutual Consent Agreement between the Membership and City, the City may use up to \$280,000 annually for Plan funding. Excess Chapter 185 monies are allocated to the Membership Share Plan.

² Please note that the City has access to a prepaid contribution of \$629,677.39 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2024.

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 actuarial experience described in the next paragraph.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. The primary source of actuarial loss is attributable to an average salary increase of 18.46%, exceeding the 4.94% assumption. 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

	<u>10/1/2023</u>	<u>10/1/2022</u>
A. Participant Data		
Actives	52	55
Service Retirees	34	34
DROP Retirees	3	1
Beneficiaries	7	6
Disability Retirees	10	11
Terminated Vested	<u>23</u>	<u>23</u>
 Total	 129	 130
 Projected Annual Payroll	 6,113,726	 5,584,210
Annual Rate of Payments to:		
Service Retirees	1,806,193	1,803,777
DROP Retirees	277,795	85,182
Beneficiaries	304,456	275,693
Disability Retirees	322,301	345,833
Terminated Vested	148,370	148,370
 B. Assets		
Actuarial Value (AVA) ¹	62,437,737	58,527,642
Market Value (MVA) ¹	59,833,433	53,576,421
 C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	45,306,819	40,248,855
Disability Benefits	1,527,909	1,449,234
Death Benefits	263,465	243,215
Vested Benefits	614,627	586,332
Refund of Contributions	24,669	45,595
Service Retirees	21,463,713	21,556,169
DROP Retirees ¹	4,038,839	1,301,435
Beneficiaries	2,886,158	2,783,955
Disability Retirees	3,648,238	3,899,880
Terminated Vested	945,173	885,164
Share Plan Balances ¹	<u>1,919,001</u>	<u>1,404,874</u>
 Total	 82,638,611	 74,404,708

C. Liabilities - (Continued)	<u>10/1/2023</u>	<u>10/1/2022</u>
Present Value of Future Salaries	40,142,473	37,142,830
Present Value of Future Member Contributions	3,211,398	2,971,426
Normal Cost (Retirement)	1,363,136	1,282,262
Normal Cost (Disability)	103,894	106,623
Normal Cost (Death)	23,712	23,488
Normal Cost (Vesting)	39,431	40,074
Normal Cost (Refunds)	10,799	19,835
Total Normal Cost	<u>1,540,972</u>	<u>1,472,282</u>
Present Value of Future Normal Costs	9,968,463	9,482,395
Accrued Liability (Retirement)	36,330,726	31,796,675
Accrued Liability (Disability)	869,371	776,992
Accrued Liability (Death)	108,372	90,295
Accrued Liability (Vesting)	454,519	418,000
Accrued Liability (Refunds)	6,038	8,874
Accrued Liability (Inactives) ¹	32,982,121	30,426,603
Share Plan Balances ¹	1,919,001	1,404,874
Total Actuarial Accrued Liability (EAN AL)	<u>72,670,148</u>	<u>64,922,313</u>
Unfunded Actuarial Accrued Liability (UAAL)	10,232,411	6,394,671
Funded Ratio (AVA / EAN AL)	85.9%	90.2%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2023</u>	<u>10/1/2022</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances ¹	34,901,122	31,831,477
Actives	20,154,067	17,998,226
Member Contributions	<u>4,746,111</u>	<u>4,598,077</u>
Total	59,801,300	54,427,780
Non-vested Accrued Benefits	<u>1,789,159</u>	<u>2,156,010</u>
Total Present Value		
Accrued Benefits (PVAB)	61,590,459	56,583,790
Funded Ratio (MVA / PVAB)	97.1%	94.7%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	3,737,111	
Benefits Paid	(2,600,297)	
Interest	3,869,855	
Other	<u>0</u>	
Total	5,006,669	

Valuation Date	10/1/2023	10/1/2022
Applicable to Fiscal Year Ending	<u>9/30/2025</u>	<u>9/30/2024</u>

E. Pension Cost

Normal Cost ²	\$1,674,013	\$1,600,307
Administrative Expenses ²	91,494	95,485
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2023) ²	1,206,722	746,017
Minimum Required Contribution	2,972,229	2,441,809
Expected Member Contributions ²	531,325	485,584
Expected City and State Contribution	2,440,904	1,956,225

F. Past Contributions

Plan Years Ending:	<u>9/30/2023</u>
City and State Requirement	1,720,691
Actual Contributions Made:	
City	1,440,691
State	<u>280,000</u>
Total	1,720,691

G. Net Actuarial (Gain)/Loss 3,995,174

¹ The asset values and liabilities include accumulated DROP and Share 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 and interest components.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2023	10,232,411
2024	9,760,104
2025	9,254,736
2028	7,516,298
2032	4,575,127
2035	1,783,566
2038	0

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2023	18.46%	4.94%
Year Ended	9/30/2022	11.73%	5.02%
Year Ended	9/30/2021	4.66%	6.52%
Year Ended	9/30/2020	2.57%	6.61%
Year Ended	9/30/2019	2.87%	7.59%

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

		<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended	9/30/2023	11.62%	6.58%	7.00%
Year Ended	9/30/2022	-14.54%	4.35%	7.00%
Year Ended	9/30/2021	21.93%	10.92%	7.35%
Year Ended	9/30/2020	10.94%	8.77%	7.45%
Year Ended	9/30/2019	2.55%	7.89%	7.55%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2023	\$6,113,726
	10/1/2013	6,963,252
(b) Total Increase		-12.20%
(c) Number of Years		10.00
(d) Average Annual Rate		-1.29%

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.



Douglas H. Lozen, EA, MAAA
Enrolled Actuary #23-7778

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

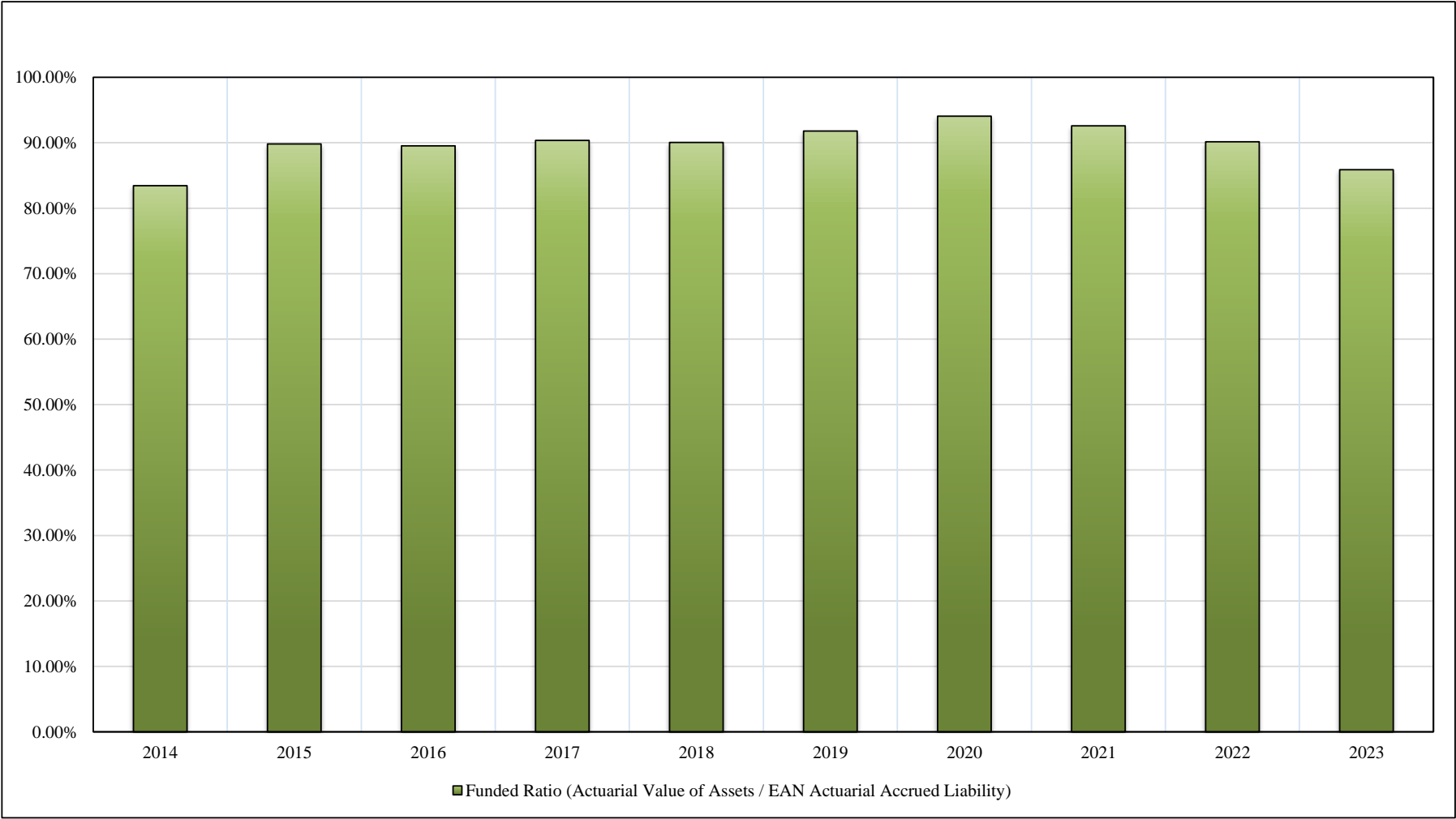
(1) Unfunded Actuarial Accrued Liability as of October 1, 2022	\$6,394,671
(2) Sponsor Normal Cost developed as of October 1, 2022	1,025,545
(3) Expected administrative expenses for the year ended September 30, 2023	87,846
(4) Expected interest on (1), (2) and (3)	522,490
(5) Sponsor contributions to the System during the year ended September 30, 2023	1,720,691
(6) Expected interest on (5)	72,624
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2023 (1)+(2)+(3)+(4)-(5)-(6)	6,237,237
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	3,995,174
(10) Unfunded Actuarial Accrued Liability as of October 1, 2023	10,232,411

<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2023 Amount</u>	<u>Amortization Amount</u>
Consolidation Base	10/1/2020	12	1,994,200	234,648
Assump Change	10/1/2020	12	455,693	53,619
Actuarial Gain	10/1/2021	13	(1,316,754)	(147,244)
Assump Change	10/1/2021	13	2,903,162	324,641
Actuarial Loss	10/1/2022	14	2,200,936	235,202
Actuarial Loss	10/1/2023	15	3,995,174	409,952
			10,232,411	1,110,818

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2022	\$6,394,671
(2) Expected UAAL as of October 1, 2023	6,237,237
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	248,498
Salary Increases	3,391,070
Active Decrements	368,171
Inactive Mortality	(37,776)
Interest Crediting on Share Plan Balances	60,720
Other	<u>(35,509)</u>
Increase in UAAL due to (Gain)/Loss	3,995,174
Assumption Changes	0
(4) Actual UAAL as of October 1, 2023	\$10,232,411

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: PubS.H-2010 for Employees, set forward one year.

Male: PubS.H-2010 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.

75% of active deaths are assumed to be service-incurred.

Interest Rate

7.00% 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

<u>Salary Scale</u>	
<u>Service</u>	<u>New Rate</u>
<5	10.00%
5-9	6.50%
10+	4.50%

The above rates were adopted in conjunction with the September 9, 2021 Experience Study.

Final Year Salary Load

Projected salary at retirement is increased 20% to account for non-regular compensation (no load for Members hired after January 1, 2012).

Payroll Growth

None for purposes of amortization of the Unfunded Actuarial Accrued Liability.

Administrative Expenses

\$84,223 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

New UAAL amortization bases are amortized 15 years.

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 - A half year, based on current 7.00% assumption.

Salary - A full year, based on current 4.96% assumption.

Asset Smoothing Methodology

The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a negligible bias that is above or below the Market Value of Assets.

Normal Retirement

Immediately upon first eligibility. This is based on the September 9, 2021 Experience Study.

Marital Assumption

80% are assumed Married with husbands three years older than their wives.

Early Retirement

Commencing with attainment of Early Retirement Status (age 45 with 10 years of service), Members are assumed to retire with an immediate subsidized benefit at the rate of 15% per year. This assumption is based on the September 9, 2021 Experience Study.

Disability Rates

Sample rates are shown in the table below. These rates were confirmed with the September 9, 2021 Experience Study.

% Becoming Disabled During the Year	
Age	Rate
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%
55	1.55%
59+	2.09%

75% of Disability Retirements are assumed to be service-incurred.

Termination Rates

% Terminating During the Year	
Service	Rate
<1	24.0%
1-4	6.0%
5-19	3.0%
20+	0.0%

The above rates were adopted in conjunction with the September 9, 2021 Experience Study.

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 327.6% on October 1, 2013 to 89.7% 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 45.4%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in lower volatility in contribution requirements when compared to a more 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 77.2% on October 1, 2013 to 85.9% 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 7.1% on October 1, 2013 to 0.0% on October 1, 2023. The current Net Cash Flow Ratio of 0.0% indicates that contributions are generally 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 9 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 \$94,360,039. 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

	<u>10/1/2023</u>	<u>10/1/2022</u>	<u>10/1/2018</u>	<u>10/1/2013</u>
<u>Support Ratio</u>				
Total Actives	52	55	65	95
Total Inactives ¹	58	56	48	29
Actives / Inactives ¹	89.7%	98.2%	135.4%	327.6%
 <u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	59,833,433	53,576,421	44,685,624	26,375,435
Total Annual Payroll	6,639,014	5,920,058	5,913,522	6,963,252
MVA / Total Annual Payroll	901.2%	905.0%	755.7%	378.8%
 <u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	32,982,121	30,426,603	24,202,579	11,343,339
Total Accrued Liability (EAN)	72,670,148	64,922,313	47,299,602	31,636,004
Inactive AL / Total AL	45.4%	46.9%	51.2%	35.9%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	62,437,737	58,527,642	42,592,203	24,410,069
Total Accrued Liability (EAN)	72,670,148	64,922,313	47,299,602	31,636,004
AVA / Total Accrued Liability (EAN)	85.9%	90.2%	90.0%	77.2%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow ²	16,956	(51,713)	553,991	1,874,541
Market Value of Assets (MVA)	59,833,433	53,576,421	44,685,624	26,375,435
Ratio	0.0%	-0.1%	1.2%	7.1%

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

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	48,260.66	_____%
1999	51,574.48	6.9%
2000	51,511.40	-0.1%
2001	56,480.66	9.6%
2002	76,778.55	35.9%
2003	88,977.27	15.9%
2004	132,825.30	49.3%
2005	163,669.80	23.2%
2006	191,599.50	17.1%
2007	232,905.15	21.6%
2008	221,662.73	-4.8%
2009	275,946.30	24.5%
2010	278,182.12	0.8%
2011	257,676.16	-7.4%
2012	282,742.64	9.7%
2013	297,989.02	5.4%
2014	306,641.87	2.9%
2015	341,431.51	11.3%
2016	378,332.56	10.8%
2017	405,720.10	7.2%
2018	453,917.98	11.9%
2019	495,381.00	9.1%
2020	523,055.05	5.6%
2021	540,760.15	3.4%
2022	615,040.26	13.7%
2023	731,991.91	19.0%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2023

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	1,280,214.03	1,280,214.03
Total Cash and Equivalents	1,280,214.03	1,280,214.03
Receivables:		
Member Contributions in Transit	17,065.58	17,065.58
City Contributions in Transit	360,172.75	360,172.75
Investment Income	59,145.52	59,145.52
Total Receivable	436,383.85	436,383.85
Investments:		
Stocks	10,685,112.28	10,862,881.72
Mutual Funds:		
Fixed Income	18,873,121.16	16,493,277.05
Equity	22,238,466.80	25,232,672.54
Pooled/Common/Commingled Funds:		
Real Estate	5,500,000.00	6,297,216.46
Total Investments	57,296,700.24	58,886,047.77
Total Assets	59,013,298.12	60,602,645.65
<u>LIABILITIES</u>		
Payables:		
PLOP Distributions	89,094.99	89,094.99
Investment Expenses	26,642.04	26,642.04
Administrative Expenses	1,700.32	1,700.32
Share Distributions	22,097.93	22,097.93
Prepaid City Contribution	629,677.39	629,677.39
Total Liabilities	769,212.67	769,212.67
NET POSITION RESTRICTED FOR PENSIONS	58,244,085.45	59,833,432.98

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

ADDITIONS

Contributions:

Member	528,061.45
City	1,440,691.00
State	731,991.91

Total Contributions 2,700,744.36

Investment Income:

Net Realized Gain (Loss)	6,638,967.99
Unrealized Gain (Loss)	(1,954,859.20)
Net Increase in Fair Value of Investments	4,684,108.79
Interest & Dividends	1,661,708.52
Less Investment Expense ¹	(105,761.89)

Net Investment Income 6,240,055.42

Total Additions 8,940,799.78

DEDUCTIONS

Distributions to Members:

Benefit Payments	2,420,616.95
Lump Sum DROP Distributions	0.00
Lump Sum Share Distributions	90,585.19
Lump Sum PLOP Distributions	89,094.99
Refunds of Member Contributions	0.00

Total Distributions 2,600,297.13

Administrative Expense 83,490.64

Total Deductions 2,683,787.77

Net Increase in Net Position 6,257,012.01

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 53,576,420.97

End of the Year 59,833,432.98

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

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2023

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return ¹
09/30/2020	10.94%
09/30/2021	21.93%
09/30/2022	-14.54%
09/30/2023	11.62%
Annualized Rate of Return for prior four (4) years:	6.58%
(A) 10/01/2022 Actuarial Assets, including Prepaid Contributions:	\$59,157,319.58
(I) Net Investment Income:	
1. Interest and Dividends	1,661,708.52
2. Realized Gain (Loss)	6,638,967.99
3. Unrealized Gain (Loss)	(1,954,859.20)
4. Change in Actuarial Value	(2,346,917.66)
5. Investment Related Expenses	(105,761.89)
Total	3,893,137.76
(B) 10/01/2023 Actuarial Assets, including Prepaid Contributions:	\$63,067,413.93
Actuarial Asset Rate of Return = $2I/(A+B-I)$, based on Unlimited Actuarial Assets:	6.58%
10/01/2023 Limited Actuarial Assets	\$62,437,736.54
10/01/2023 Market Value of Assets	\$59,833,432.98
Actuarial Asset Rate of Return, based on Limited Actuarial Assets:	6.58%
Actuarial Gain/(Loss) due to Investment Return (Limited Actuarial Asset Basis)	(\$248,498.15)

¹Market Value Basis, net of investment related expenses.

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

REVENUES

Contributions:		
Member	528,061.45	
City	1,440,691.00	
State	731,991.91	
 Total Contributions		 2,700,744.36
Earnings from Investments:		
Interest & Dividends	1,661,708.52	
Net Realized Gain (Loss)	6,638,967.99	
Unrealized Gain (Loss)	(1,954,859.20)	
Change in Actuarial Value	(2,346,917.66)	
 Total Earnings and Investment Gains		 3,998,899.65

EXPENDITURES

Distributions to Members:		
Benefit Payments	2,420,616.95	
Lump Sum DROP Distributions	0.00	
Lump Sum Share Distributions	90,585.19	
Lump Sum PLOP Distributions	89,094.99	
Refunds of Member Contributions	0.00	
 Total Distributions		 2,600,297.13
Expenses:		
Investment related ¹	105,761.89	
Administrative	83,490.64	
 Total Expenses		 189,252.53
 Change in Net Assets for the Year		 3,910,094.35
 Net Assets Beginning of the Year		 58,527,642.19
 Net Assets End of the Year ²		 62,437,736.54

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

²Net Assets may be limited for actuarial consideration.

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

Beginning of the Year Balance	238,883.87
Plus Additions	112,127.56
Investment Return Earned	18,697.10
Less Distributions	0.00
End of the Year Balance	369,708.53

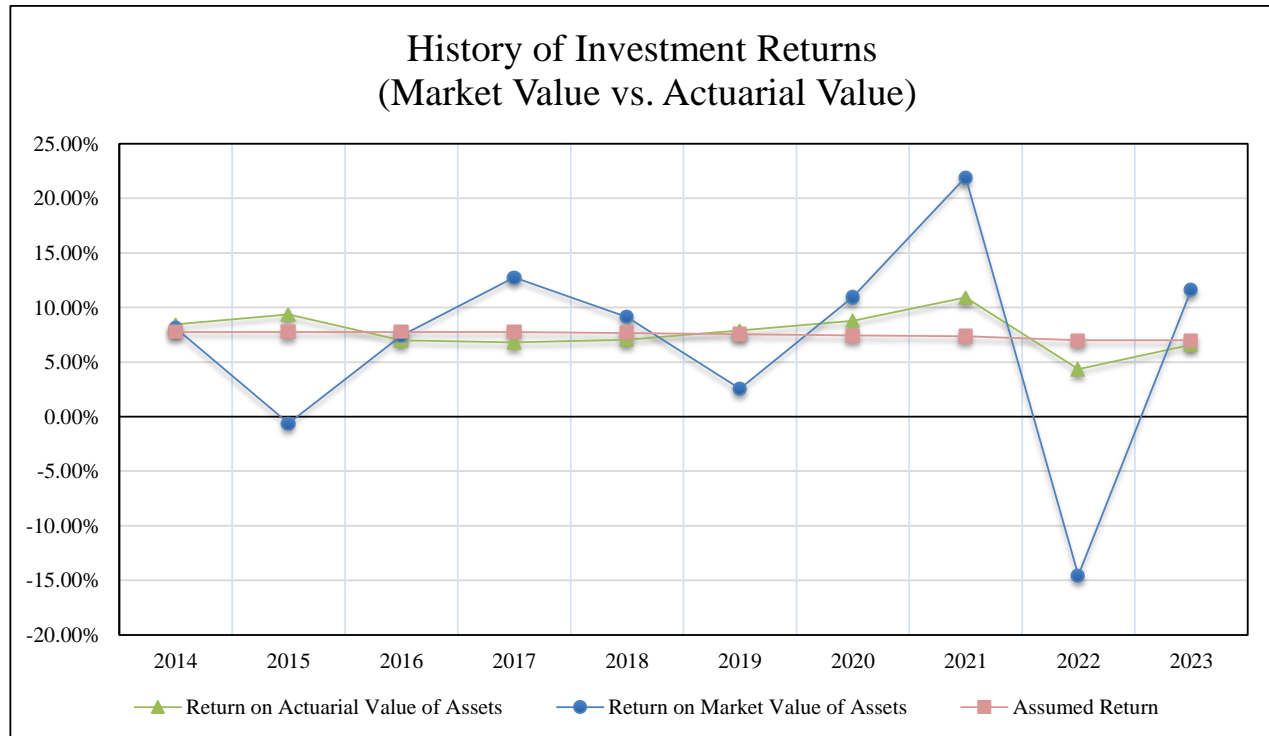
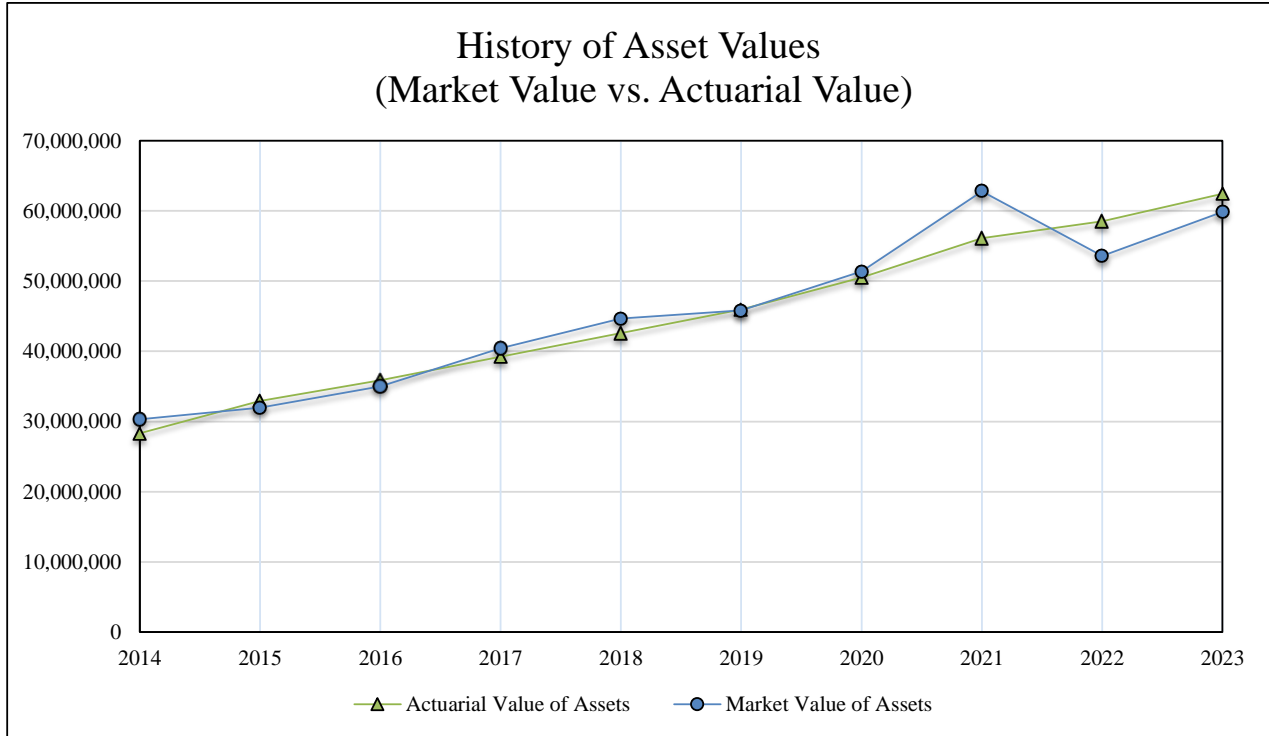
SUPPLEMENTAL CHAPTER 185 SHARE PLAN ACTIVITY
October 1, 2022 through September 30, 2023

9/30/2022 Balance	1,404,873.93
Prior Year Adjustment	0.62
Plus Additions	451,991.91
Investment Return Earned (Est.)	152,720.00
Administrative Fees	0.00
Less Distributions	<u>(90,585.19)</u>
9/30/2023 Balance (Est.)	1,919,001.27

RECONCILIATION OF CITY SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2023

(1) Required City and State Contributions	\$1,720,691.00
(2) Less Allowable State Contribution	<u>(280,000.00)</u>
(3) Required City Contribution for Fiscal 2023	1,440,691.00
(4) Less 2022 Prepaid Contribution	(629,677.39)
(5) Less Actual City Contributions	<u>(1,440,691.00)</u>
(6) Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2023	(\$629,677.39)

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



STATISTICAL DATA

	<u>10/1/2023</u>	<u>10/1/2022</u>	<u>10/1/2021</u>	<u>10/1/2020</u>
<u>Actives</u>				
Number	52	55	58	58
Average Current Age	43.2	42.7	41.8	40.8
Average Age at Employment	28.0	28.1	28.1	28.1
Average Past Service	15.2	14.6	13.7	12.7
Average Annual Salary	\$127,673	\$107,637	\$96,945	\$93,832
<u>Service Retirees</u>				
Number	34	34	34	34
Average Current Age	59.2	59.3	58.2	57.9
Average Annual Benefit	\$53,123	\$53,052	\$52,359	\$52,889
<u>DROP Retirees</u>				
Number	3	1	1	1
Average Current Age	54.6	52.5	51.5	50.5
Average Annual Benefit	\$92,598	\$85,182	\$85,182	\$85,182
<u>Beneficiaries</u>				
Number	7	6	5	4
Average Current Age	62.5	57.9	58.1	57.7
Average Annual Benefit	\$43,494	\$45,949	\$46,365	\$46,753
<u>Disability Retirees</u>				
Number	10	11	11	11
Average Current Age	60.7	61.4	60.4	59.4
Average Annual Benefit	\$32,230	\$31,439	\$31,439	\$31,439
<u>Terminated Vested</u>				
Number	23	23	21	22
Average Current Age ¹	41.6	40.6	40.2	40.9
Average Annual Benefit ¹	\$37,093	\$37,093	\$30,534	\$29,286

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						1						1
30 - 34						2	4					6
35 - 39						2	5	3				10
40 - 44						2	2	8				12
45 - 49							4	7	2			13
50 - 54								6				6
55 - 59								1	1	1		3
60 - 64								1				1
65+												0
Total	0	0	0	0	0	7	15	26	3	1	0	52

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	0
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	(1)
f. DROP	<u>(2)</u>
g. Continuing participants	52
h. New entrants / Rehires	<u>0</u>
i. Total active life participants in valuation	52

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

	Service Retirees, Vested Receiving <u>Benefits</u>	<u>DROP Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	34	1	6	11	4	19	75
Retired	1						1
DROP		2					2
Vested (Deferred Annuity)							0
Vested (Due Refund)							0
Hired/Terminated in Same Year							0
Death, With Survivor	(1)		1				0
Death, No Survivor				(1)			(1)
Disabled							0
Refund of Contributions							0
Rehires							0
Expired Annuities							0
Data Corrections							0
b. Number current valuation	34	3	7	10	4	19	77

SUMMARY OF CURRENT PLAN
(Through Ordinance 2023-15)

<u>Original Plan Effective Date</u>	December 14, 1979
<u>Latest Amendment</u>	October 24, 2023
<u>Credited Service</u>	<p>a.) Total aggregate period of service, including military leave if reemployed by City within 1 year of discharge under honorable conditions.</p> <p>b.) Upon termination, prior Credited Service will be forfeited if refund of contributions elected, or if not reemployed within 5 years, and not vested at termination.</p> <p>The Plan is closed to Police Officers hired after December 31, 2015.</p>
<u>Average Final Compensation</u>	Average total W-2 earnings, plus tax deferred and tax exempt income, during the best 5 years of the last 10 years of service.
<u>Normal Retirement</u>	
Eligibility	The earlier of 1) age 55 and the completion of 10 Years of Service or 2) the completion of 25 Years of Service, regardless of age. For Members hired after May 27, 2014, there is an age 52 requirement, in addition to the completion of 25 years of Credited Service.
<u>Benefit Amount</u>	3.50% of Average Final Compensation for each year of Credited Service. For Member hired after May 27, 2014, the benefit accrual rate is 3.15% for each year of Credited Service.
Form of Benefit	Ten Year Certain and Life Annuity (options available).

Early Retirement

Eligibility	Age 45 and 10 Years of Service.
Benefit Amount	Accrued benefit, reduced by 3% per year for each year prior to the Normal Retirement Date if the Member has less than 15 years of service, 2% per year if the Member has at least 15 but less than 20 years of service or 1% per year of the Member has 20 or more years of service at the time of retirement. The Normal Retirement date is the earlier of 55 and 10 or when the Member would have reached 25 years of service. For Members hired after May 27, 2014, the reduction is a flat 3% per year for each year prior to the Normal Retirement Date (determined as if employment had continued).

Disability

Service Connected

Eligibility	a.) Years of Service: None b.) Total and permanent disability prior to Normal Retirement Date.
-------------	---

Benefit Amount	Greater of 1) 2% times Average Final Compensation times Credited Service, or 2) 60% of earnings in effect at time of disability (80% AFC minimum for intentional violence); 10 year certain and life annuity form of benefit (optional forms available).
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Non-Service Connected

Eligibility	a.) 10 Years of Service. b.) Total and permanent disability prior to Normal Retirement.
-------------	--

Benefit Amount	Same as Service Connected except minimum 50% of earnings.
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Supplemental Benefit

\$165 per month for all service retirees, disability retirees, vested terminated Members, and beneficiaries. The supplemental benefit is not payable for Members hired after May 27, 2014.

Pre-Retirement Death

Coverage from date of hire (service-incurred) or after 5 Years of Service (non-service). Benefit is 60% (Service incurred) or 50% (non-service) of compensation in effect at time of death payable to spouse for life (service incurred) or for life or until remarriage (non-service). If no spouse, children receive benefit in equal shares until age 18 (or age 23 if full-time student). Minimum benefit for vested Members is accrued benefit, less any benefits paid pursuant to other death benefit provisions.

Vesting (Termination)

Less than 10 years of Service

Refund of Member Contributions Contributing without interest.

10 years or more

Accrued benefit payable at age 45 or later, on reduced basis if to commence prior to age 55, or Refund of Member Contributions.

Contributions

Employee

8.0% of total compensation.

Premium Tax

0.85% tax on premiums for casualty insurance.

City

Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability as provided in Part VII of Chapter 112, Florida Statutes. In no event will City contributions be less than 18% of the Members' total pay.

Board of Trustees

- a.) Two City residents appointed by the City Commission,
- b.) Two Police Officers elected by a majority of Police Officers, and
- c.) Fifth Member elected by the Board and appointed (as a ministerial duty) by the City Commission.

Deferred Retirement Option Plan

Eligibility	Satisfaction of Normal Retirement requirements (earlier of 1) Age 55 and 10 years of Credited Service, or 2) the completion of 25 years of Credited Service, regardless of age).
Participation	Not to exceed 36 months.
Rate of Return	Actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs) credited each fiscal quarter.
Form of Distribution	Cash lump sum (options available) at termination of employment.

Share Plan

Chapter 185 State Monies received by the City each year in excess of the \$280,000 applicable frozen amount shall be allocated to each Members share account.