

TOWN OF MEDLEY  
POLICE OFFICERS' RETIREMENT SYSTEM  
ACTUARIAL VALUATION  
AS OF OCTOBER 1, 2023  
CONTRIBUTIONS APPLICABLE TO THE  
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2025



**FOSTER & FOSTER**  
ACTUARIES AND CONSULTANTS

December 5, 2023

Board of Trustees  
Town of Medley  
Police Officers' Pension Board

Re: Town of Medley Police Officers' Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Town of Medley Police Officers' Retirement System. 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 Town of Medley, 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 Town of Medley, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Officers' Retirement System. 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:   
Patrick T. Donlan, EA, ASA, MAAA  
Enrolled Actuary #23-6595

By:   
Sara E. Carlson, ASA, EA, MAAA  
Enrolled Actuary #23-8546

PTD/mw

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Town of Medley Police Officers' Retirement System, 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 % of Projected Annual Payroll	26.2%	25.4%
Member Contributions (Est.) % of Projected Annual Payroll	5.0%	5.0%
<b>Town And State Required Contribution     % of Projected Annual Payroll</b>	<b>21.2%</b>	<b>20.4%</b>
State Contribution (Est.) <sup>1</sup> % of Projected Annual Payroll (Est.)	\$221,685 6.1%	\$221,685 6.1%
Town Required Contribution (Est.) <sup>2</sup> % of Projected Annual Payroll (Est.)	15.1%	14.3%

<sup>1</sup> Represents the amount received in calendar 2023. As per a Mutual Consent Agreement between the Membership and the Town, all State Monies received each year will be available to offset the Town's required contribution.

<sup>2</sup> The required contribution from the combination of Town and State sources for the year ending September 30, 2025, is 21.2% of the actual payroll realized in that year. As a budgeting tool, the Town may contribute 15.1% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received.

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 the net unfavorable actuarial experience described in the next paragraph. The increase was offset in part by the Town making contributions in excess of the minimum actuarial requirement over the past year.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an investment return of 4.66% (Actuarial Asset Basis) which fell short of the 7.25% assumption, an average salary increase of 7.27% which exceeded the 5.21% assumption, and inactive mortality experience. These losses were offset in part by a gain associated with favorable turnover experience.

## 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.



## CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2022	13.8%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	0.5%
Change in Normal Cost Rate	-0.3%
Change in Administrative Expense Percentage	0.0%
Payroll Change Effect on UAAL Amortization	0.1%
Investment Return (Actuarial Asset Basis)	2.6%
Salary Increases	0.7%
Active Decrements	-0.7%
Inactive Mortality	0.4%
UAAL Amortization Impact from Contribution Policy	-1.8%
Other	<u>-0.2%</u>
Total Change in Contribution	1.3%
(3) Contribution Determined as of October 1, 2023	15.1%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2023</u>	<u>10/1/2022</u>
<b>A. Participant Data</b>		
Actives	40	39
Service Retirees	24	24
DROP Retirees	1	0
Beneficiaries	2	2
Disability Retirees	0	0
Terminated Vested	<u>5</u>	<u>3</u>
 Total	 72	 68
 Projected Annual Payroll	 3,624,313	 3,397,412
 Annual Rate of Payments to:		
Service Retirees	1,729,560	1,723,494
DROP Retirees	136,498	0
Beneficiaries	52,072	52,072
Disability Retirees	0	0
Terminated Vested	46,054	0
 <b>B. Assets</b>		
Actuarial Value (AVA) <sup>1</sup>	34,600,634	33,462,458
Market Value (MVA) <sup>1</sup>	32,264,020	29,330,892
 <b>C. Liabilities</b>		
 Present Value of Benefits		
Actives		
Retirement Benefits	17,989,052	17,609,214
Disability Benefits	921,508	910,445
Death Benefits	59,261	55,753
Vested Benefits	955,784	907,301
Refund of Contributions	74,824	69,820
Service Retirees	19,500,496	19,751,338
DROP Retirees <sup>1</sup>	1,485,267	0
Beneficiaries	507,022	518,409
Disability Retirees	0	0
Terminated Vested	<u>238,958</u>	<u>19,330</u>
 Total	 41,732,172	 39,841,610

C. Liabilities - (Continued)	<u>10/1/2023</u>	<u>10/1/2022</u>
Present Value of Future Salaries	31,081,421	29,145,421
Present Value of Future Member Contributions	1,554,071	1,457,271
Normal Cost (Retirement)	666,848	632,450
Normal Cost (Disability)	63,117	62,463
Normal Cost (Death)	3,189	2,954
Normal Cost (Vesting)	54,219	53,985
Normal Cost (Refunds)	<u>11,754</u>	<u>11,608</u>
Total Normal Cost	799,127	763,460
Present Value of Future Normal Costs	6,448,383	6,092,909
Accrued Liability (Retirement)	12,614,077	12,539,496
Accrued Liability (Disability)	416,852	413,730
Accrued Liability (Death)	33,364	31,444
Accrued Liability (Vesting)	469,997	457,396
Accrued Liability (Refunds)	17,756	17,558
Accrued Liability (Inactives) <sup>1</sup>	<u>21,731,743</u>	<u>20,289,077</u>
Total Actuarial Accrued Liability (EAN AL)	35,283,789	33,748,701
Unfunded Actuarial Accrued Liability (UAAL)	683,155	286,243
Funded Ratio (AVA / EAN AL)	98.1%	99.2%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2023</u>	<u>10/1/2022</u>
Vested Accrued Benefits		
Inactives <sup>1</sup>	21,731,743	20,289,077
Actives	7,396,963	7,062,362
Member Contributions	<u>1,419,989</u>	<u>1,391,437</u>
Total	30,548,695	28,742,876
Non-vested Accrued Benefits	<u>1,207,331</u>	<u>1,717,660</u>
Total Present Value Accrued Benefits (PVAB)	31,756,026	30,460,536
Funded Ratio (MVA / PVAB)	101.6%	96.3%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	927,636	
Benefits Paid	(1,776,149)	
Interest	2,144,003	
Other	<u>0</u>	
Total	1,295,490	

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 (with interest) % of Projected Annual Payroll <sup>2</sup>	22.8	23.1
Administrative Expenses (with interest) % of Projected Annual Payroll <sup>2</sup>	1.4	1.4
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2023, with interest) % of Projected Annual Payroll <sup>2</sup>	2.0	0.9
Minimum Required Contribution % of Projected Annual Payroll <sup>2</sup>	26.2	25.4
Expected Member Contributions % of Projected Annual Payroll <sup>2</sup>	5.0	5.0
Expected Town and State Contribution % of Projected Annual Payroll <sup>2</sup>	21.2	20.4

F. Past Contributions

Plan Years Ending:	<u>9/30/2023</u>
Town and State Requirement	677,639
Actual Contributions Made:	
Members (excluding buyback)	187,193
Town	1,000,000
State	<u>221,685</u>
Total	1,408,878

G. Net Actuarial (Gain)/Loss 949,569

<sup>1</sup> The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2023 and 9/30/2022.

<sup>2</sup> Contributions developed as of 10/1/2023 are expressed as a percentage of Projected Annual Payroll at 10/1/2023 of \$3,624,313.

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	683,155
2024	657,695
2025	630,389
2028	536,011
2032	375,012
2035	220,967
2038	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2023	7.27%	5.21%
Year Ended 9/30/2022	6.73%	5.17%
Year Ended 9/30/2021	4.73%	5.15%
Year Ended 9/30/2020	5.19%	5.21%
Year Ended 9/30/2019	5.88%	5.36%

(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	11.48%	4.66%	7.25%
Year Ended 9/30/2022	-16.52%	5.81%	7.50%
Year Ended 9/30/2021	22.84%	10.59%	7.50%
Year Ended 9/30/2020	6.33%	7.71%	7.50%
Year Ended 9/30/2019	2.75%	8.45%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2023	\$3,624,313
	10/1/2013	2,879,647
(b) Total Increase		25.86%
(c) Number of Years		10.00
(d) Average Annual Rate		2.33%

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.



Sara E. Carlson, ASA, EA, MAAA  
Enrolled Actuary #23-8546

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	\$286,243
(2)	Sponsor Normal Cost developed as of October 1, 2022	593,589
(3)	Expected administrative expenses for the year ended September 30, 2023	46,438
(4)	Expected interest on (1), (2) and (3)	65,471
(5)	Sponsor contributions to the System during the year ended September 30, 2023	1,221,685
(6)	Expected interest on (5)	36,470
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2023 (1)+(2)+(3)+(4)-(5)-(6)	(266,414)
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	949,569
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2023	683,155

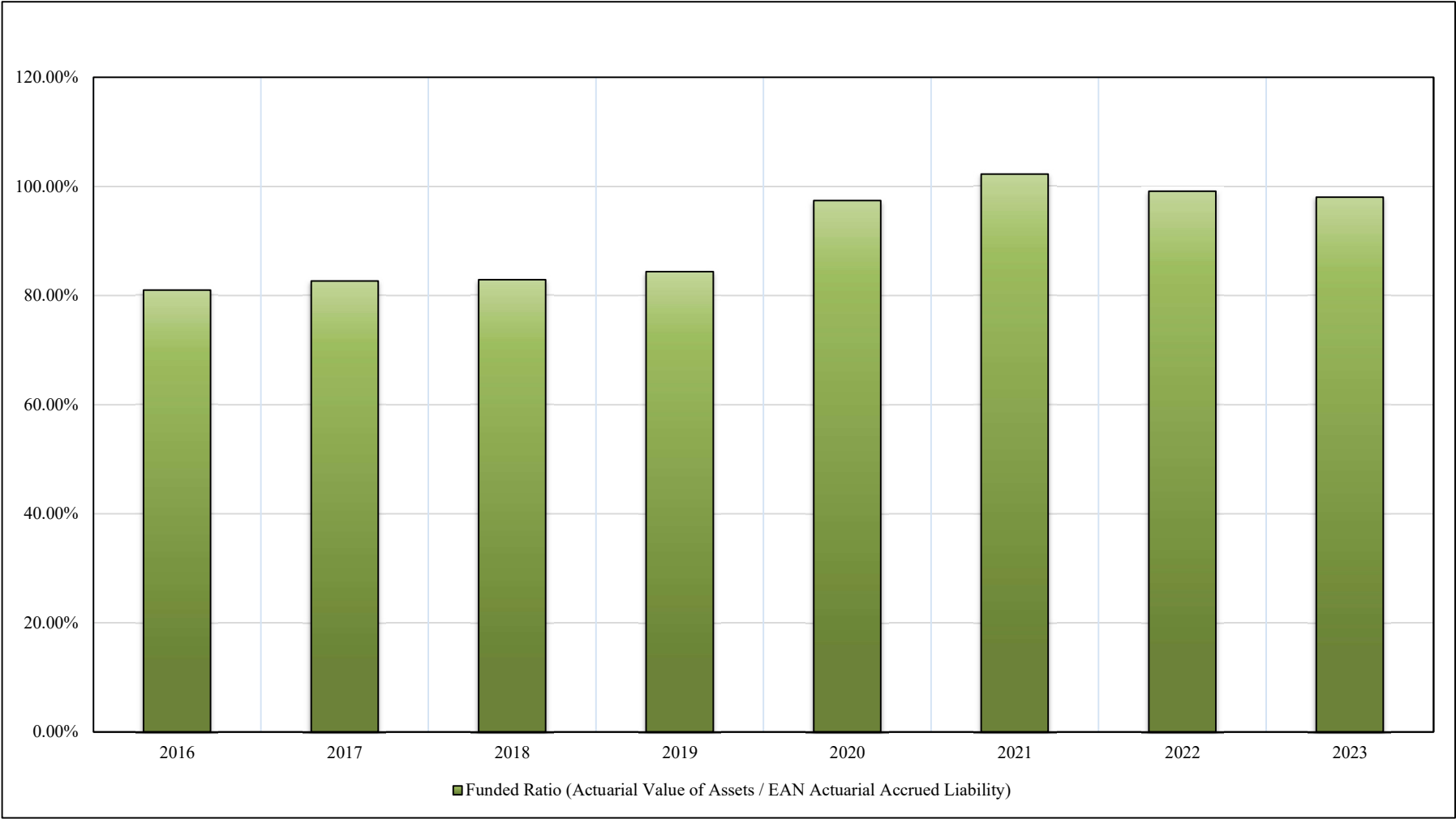
<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2023 Amount</u>	<u>Amortization Amount</u>
Consolidation Base	10/1/2022	14	275,069	29,768
Reconciliation Base	10/1/2023	14	(541,483)	(58,599)
Actuarial Loss	10/1/2023	15	<u>949,569</u>	<u>98,750</u>
			683,155	69,919



DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2022	\$286,243
(2) Expected UAAL as of October 1, 2023	(266,414)
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	860,323
Salary Increases	243,862
Active Decrements	(221,843)
Inactive Mortality	123,900
Other	<u>(56,673)</u>
Increase in UAAL due to (Gain)/Loss	949,569
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2023	\$683,155

# 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 (Below Median) for Healthy Retirees, set forward one year.

#### *Beneficiary Lives:*

**Female:** PubG.H-2010 (Below Median) for Healthy Retirees.

**Male:** PubG.H-2010 (Below Median) 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.

### Interest Rate

7.25% per year compounded annually, net of investment related expenses. This assumption is in line with other Florida municipal pension plans.

Salary Increases

Salary Scale	
Service	Rate
<1	8.00%
1-9	5.75%
10-14	4.75%
15+	4.00%

Projected salary in the year of retirement is increased to account for non-regular compensation, based on census data provided by the Town for individual accrued sick and annual leave. This assumption was developed from the May 31, 2022 Experience Study.

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

\$48,753 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

New UAAL amortization bases are amortized over 15 Years.

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 7.25% assumption.

Salary - None.

Retirement Age

% Retiring During the Year (>= 25 Years of Service)	
Age	Rate
50-51	5.0%
52+	100.0%

% Retiring During the Year (10-24 Years of Service)		
Age	Service	Rate
50-54	10-24	5.0%
55	10-24	50.0%
56	11-24	100.0%

If age at 10 Years of Service > 55, then 50% at 10 Years and 100% at 11+ Years

The current assumption was developed from the May 31, 2022 Experience Study.

Termination Rates

% Terminating During the Year Sample Rates	
Age	Rate
20	8.25%
30	5.50%
40	2.86%
50	0.88%
56+	0.22%

This assumption was developed based on an experience study performed May 31, 2022.

Disability Rates

% Becoming Disabled During the Year	
Age	Rate
20	0.14%
30	0.18%
40	0.30%
50	1.00%
60+	2.00%

It is assumed that 75% of disablements and active Member deaths are service related. This assumption was developed from those used by other plans containing Florida municipal Police Officers.

Asset Valuation 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.

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 284.6% on October 1, 2013 to 142.9% 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 61.6%. 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 69.8% on October 1, 2013 to 98.1% 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 6.1% on October 1, 2013 to -1.3% on October 1, 2023. The current Net Cash Flow Ratio of -1.3% 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 8 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 \$46,263,048. 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	40	39	36	37
Total Inactives <sup>1</sup>	28	26	23	13
Actives / Inactives <sup>1</sup>	142.9%	150.0%	156.5%	284.6%
 <u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	32,264,020	29,330,892	25,725,672	16,430,607
Total Annual Payroll	3,999,109	3,794,607	2,975,501	2,879,647
MVA / Total Annual Payroll	806.8%	773.0%	864.6%	570.6%
 <u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	21,731,743	20,289,077	19,164,035	8,911,113
Total Accrued Liability (EAN)	35,283,789	33,748,701	27,416,800	20,386,416
Inactive AL / Total AL	61.6%	60.1%	69.9%	43.7%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	34,600,634	33,462,458	22,731,015	14,222,962
Total Accrued Liability (EAN)	35,283,789	33,748,701	27,416,800	20,386,416
AVA / Total Accrued Liability (EAN)	98.1%	99.2%	82.9%	69.8%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow <sup>2</sup>	(412,573)	(429,473)	(255,612)	1,001,161
Market Value of Assets (MVA)	32,264,020	29,330,892	25,725,672	16,430,607
Ratio	-1.3%	-1.5%	-1.0%	6.1%

<sup>1</sup> Excludes terminated participants awaiting a refund of member contributions.

<sup>2</sup> 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>
2006	50,461.55	N/A
2007	58,214.43	15.4%
2008	44,764.83	-23.1%
2009	73,584.94	64.4%
2010	64,298.13	-12.6%
2011	56,266.95	-12.5%
2012	72,718.45	29.2%
2013	73,866.06	1.6%
2014	109,520.58	48.3%
2015	120,320.93	9.9%
2016	110,856.60	-7.9%
2017	-	-100.0%
2018	262,555.72	N/A
2019	198,747.03	-24.3%
2020	149,539.83	-24.8%
2021	153,526.07	2.7%
2022	225,066.38	46.6%
2023	221,685.14	-1.5%

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2023

<u>ASSETS</u>	MARKET VALUE
Total Receivable	0.00
Investments:	
Mutual Funds:	
Fixed Income	9,507,186.94
Equity	22,779,568.15
Total Investments	32,286,755.09
Total Assets	32,286,755.09
<u>LIABILITIES</u>	
Payables:	
Administrative Expenses	22,735.19
Total Liabilities	22,735.19
NET POSITION RESTRICTED FOR PENSIONS	32,264,019.90

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

ADDITIONS

Contributions:

Member	187,193.05
Buy-Back	2,931.39
Town	1,000,000.00
State	221,685.14

Total Contributions 1,411,809.58

Investment Income:

Net Increase in Fair Value of Investments	3,347,701.75
Less Investment Expense <sup>1</sup>	(2,000.00)

Net Investment Income 3,345,701.75

Total Additions 4,757,511.33

DEDUCTIONS

Distributions to Members:

Benefit Payments	1,776,149.21
Lump Sum DROP Distributions	0.00
Refunds of Member Contributions	0.00

Total Distributions 1,776,149.21

Administrative Expense 48,233.96

Total Deductions 1,824,383.17

Net Increase in Net Position 2,933,128.16

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 29,330,891.74

End of the Year 32,264,019.90

<sup>1</sup>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.

Plan Year Ending	Gain/(Loss)	<u>Gains/Losses Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2023	2024	2025	2026	2027
09/30/2021	4,505,468	1,802,186	901,092	0	0	0
09/30/2022	(8,543,558)	(5,126,134)	(3,417,422)	(1,708,710)	0	0
09/30/2023	1,234,168	987,334	740,500	493,666	246,832	0
Total		(2,336,614)	(1,775,830)	(1,215,044)	246,832	0

Development of Investment Gain/Loss

Market Value of Assets, 09/30/2022	29,330,892
Contributions Less Benefit Payments & Admin Expenses	(412,574)
Expected Investment Earnings*	2,111,534
Actual Net Investment Earnings	3,345,702
2023 Actuarial Investment Gain/(Loss)	1,234,168

\*Expected Investment Earnings = 0.0725 \* (29,330,892 - 0.5 \* 412,574)

Development of Actuarial Value of Assets

(1) Market Value of Assets, 09/30/2023	32,264,020
(2) Gains/(Losses) Not Yet Recognized	(2,336,614)
(3) Actuarial Value of Assets, 09/30/2023, (1) - (2)	34,600,634
(4) Limited Actuarial Value of Assets, 09/30/2023	34,600,634
(A) 09/30/2022 Actuarial Assets:	33,462,458
(I) Net Investment Income:	
1. Earnings and Investment Gains	3,347,702
2. Change in Actuarial Value	(1,794,952)
3. Investment Expenses	(2,000)
Total	1,550,750
(B) 09/30/2023 Actuarial Assets:	34,600,634
Actuarial Assets Rate of Return = 2I/(A+B-I):	4.66%
Market Value of Assets Rate of Return:	11.48%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(860,323)

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

REVENUES

Contributions:		
Member	187,193.05	
Buy-Back	2,931.39	
Town	1,000,000.00	
State	221,685.14	
 Total Contributions		 1,411,809.58
Earnings from Investments:		
Earnings and Investment Gains	3,347,701.75	
Change in Actuarial Value	(1,794,952.00)	
 Total Earnings and Investment Gains		 1,552,749.75
 EXPENDITURES		
Distributions to Members:		
Benefit Payments	1,776,149.21	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
 Total Distributions		 1,776,149.21
Expenses:		
Investment related <sup>1</sup>	2,000.00	
Administrative	48,233.96	
 Total Expenses		 50,233.96
 Change in Net Assets for the Year		 1,138,176.16
 Net Assets Beginning of the Year		 33,462,457.74
 Net Assets End of the Year <sup>2</sup>		 34,600,633.90

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

<sup>2</sup>Net Assets may be limited for actuarial consideration.



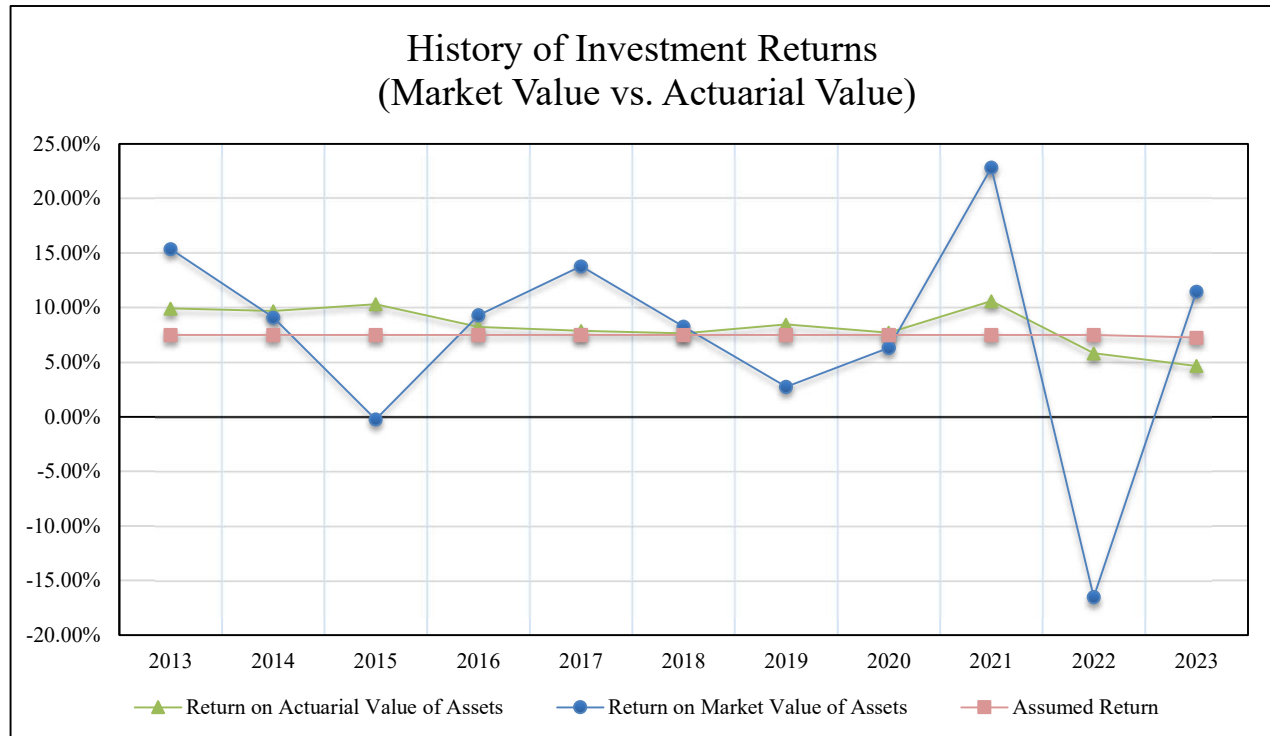
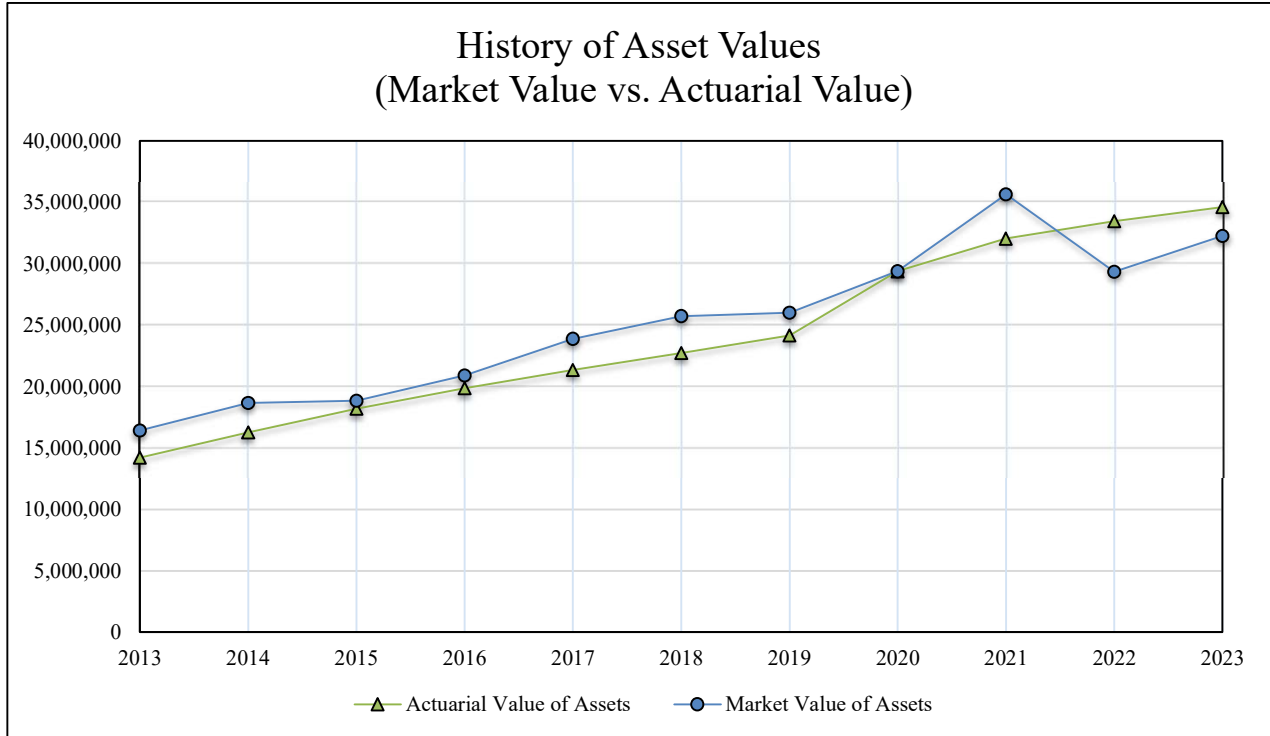
DEFERRED RETIREMENT OPTION PLAN ACTIVITY  
October 1, 2022 to September 30, 2023

Beginning of the Year Balance	0.00
Plus Additions	125,122.80
Investment Return Earned	1,943.07
Less Distributions	0.00
End of the Year Balance	127,065.87

TOWN CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT  
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2023

(1)	Town and State Required Contribution Rate	18.1%
(2)	Pensionable Payroll Derived from Member Contributions	\$3,743,861.00
(3)	Town and State Required Contribution (1) x (2)	677,638.84
(4)	Less Allowable State Contribution	<u>(221,685.14)</u>
(5)	Equals Required Town Contribution for Fiscal 2023	455,953.70
(6)	Less 2022 Prepaid Contribution	0.00
(7)	Less Actual Town Contributions	<u>(1,000,000.00)</u>
(8)	Town Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2023	(\$544,046.30)

# 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	40	39	37	36
Average Current Age	41.3	41.7	41.8	42.3
Average Age at Employment	31.6	31.6	32.2	31.9
Average Past Service	9.7	10.1	9.6	10.4
Average Annual Salary	\$99,978	\$97,298	\$92,670	\$91,868
<u>Service Retirees</u>				
Number	24	24	24	22
Average Current Age	64.1	63.1	62.1	62.1
Average Annual Benefit	\$72,065	\$71,812	\$71,584	\$71,202
<u>DROP Retirees</u>				
Number	1	0	0	0
Average Current Age	64.0	N/A	N/A	N/A
Average Annual Benefit	\$136,498	N/A	N/A	N/A
<u>Beneficiaries</u>				
Number	2	2	2	2
Average Current Age	52.5	51.5	50.5	49.5
Average Annual Benefit	\$26,036	\$26,036	\$26,036	\$26,036
<u>Disability Retirees</u>				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
<u>Terminated Vested</u>				
Number	5	3	3	2
Average Current Age <sup>1</sup>	41.6	N/A	N/A	N/A
Average Annual Benefit <sup>1</sup>	\$46,054	N/A	N/A	N/A

<sup>1</sup> 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	1	1	1									3
25 - 29	2		1									3
30 - 34	1		1		1	3						6
35 - 39						3	3					6
40 - 44			1			2	2					5
45 - 49						2	2	1				5
50 - 54							5	2		1		8
55 - 59						1	2			1		4
60 - 64												0
65+												0
<b>Total</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>11</b>	<b>14</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>40</b>

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2022	39
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
ii. Vested in refund of member contributions only	(1)
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	0
f. DROP	<u>(1)</u>
g. Continuing participants	36
h. New entrants / Rehires	<u>4</u>
i. Total active life participants in valuation	40

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

	Service Retirees, Vested Receiving	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	24	0	2	0	0	3	29
Retired							
DROP		1					1
Vested (Deferred Annuity)					1		1
Vested (Due Refund)						1	1
Hired/Terminated in Same Year							
Death, With Survivor							
Death, No Survivor							
Disabled							
Refund of Contributions							
Rehires							
Expired Annuities							
Data Corrections							
b. Number current valuation	24	1	2	0	1	4	32

## SUMMARY OF CURRENT PLAN

<u>Eligibility</u>	Employees who are classified as full-time sworn police officers shall participate in the System as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the Town as a Police Officer.
<u>Salary</u>	Total W-2 compensation plus tax exempt, tax sheltered, and tax deferred items of income (including overtime payments up to 300 hours per calendar year, but not including payments for extra duty or special detail work for second party employer). Additionally, Salary shall exclude payments for unused, accrued sick and annual leave hours earned on or after December 5, 2011.
<u>Average Final Compensation</u>	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	5.0% of Salary.
<u>Town and State Contributions</u>	Remaining amount required in order to pay current costs and amortize any unfunded past service cost over 30 years.
<u>Normal Retirement</u>	
Date	Earlier of: 1) age 55 and 10 years of Credited Service, or 2) age 52 and 25 years of Credited Service.
Benefit	3.25% of Average Final Compensation <u>times</u> Credited Service (maximum 81.25% for those hired on and after October 1, 2008).
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 10 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% for each year prior to Normal Retirement.
<u>Vesting</u>	
Schedule	100% after 10 years of Credited Service.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date (no imputing).

Disability

Eligibility

Service Incurred

Covered from Date of Employment.

Non-Service Incurred

10 years of Credited Service.

Exclusions

Disability resulting from use of drugs, illegal participation in riots, service in military, etc.

Benefit

Benefit accrued to date of disability under 2.5% benefit accrual rate but not less than 42% of Average Final Compensation (if Service Incurred) or 25% of Average Final Compensation (if not in-line-of-duty).

Duration

Payable for life and ten years certain or until recovery (as determined by the Board). Options available.

Death Benefits

Pre-Retirement

Vested

Monthly accrued benefit payable to designated beneficiary for 10 years at otherwise Normal Retirement Date or Early Retirement Date (reduced).

Non-Vested

Refund of accumulated contributions without interest.

Post-Retirement

Benefits payable to beneficiary in accordance with option selected at retirement.

Cost-of-Living Adjustment (COLA)

Effective January 1, 2015, all future retirees, including terminated vested members, disability retirees and pre-retirement death beneficiaries are entitled to a 1.0% annual COLA from benefit commencement date until the date the member attains or would have attained age 62 (the first COLA for members who retired under the Early Retirement Incentive in 2021 will be the date that they would have otherwise reached their Normal Retirement Date).

Deferred Retirement Option Plan

Eligibility

Satisfaction of Normal Retirement requirements.

Participation

Not to exceed 36 months.

Rate of Return

Actual Net Investment Return for Plan assets.

Distribution

Cash lump sum at termination of employment.