

CITY OF TARPON SPRINGS
POLICE OFFICERS' PENSION PLAN
ACTUARIAL VALUATION
AS OF OCTOBER 1, 2024
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2026



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

March 7, 2025

Board of Trustees
City of Tarpon Springs
Police Officers' Pension Board

Re: City of Tarpon Springs Police Officers' Pension Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Tarpon Springs Police Officers' Pension Plan. 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 Tarpon Springs, 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 Tarpon Springs, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Officers' Pension Plan. 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 Tarpon Springs Police Officers' Pension Plan, performed as of October 1, 2024, 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, 2026.

The contribution requirements, compared with those set forth in the October 1, 2023 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2024 <u>9/30/2026</u>	10/1/2023 <u>9/30/2025</u>
Minimum Required Contribution % of Projected Annual Payroll	42.45%	45.75%
Member Contributions (Est.) % of Projected Annual Payroll	8.00%	8.00%
City And State Required Contribution % of Projected Annual Payroll	34.45%	37.75%
State Contribution (Est.) ¹ % of Projected Annual Payroll (Est.)	\$415,395 8.93%	\$415,395 8.93%
City Required Contribution (Est.) ² % of Projected Annual Payroll (Est.)	25.52%	28.82%

¹ Represents the amount received in calendar 2024. As per a Mutual Consent Agreement between the Membership and the City, all State Monies received each year will be available to offset the City's required contribution.

² The required contribution from the combination of City and State sources for the year ending September 30, 2026, is 34.45% of the actual payroll realized in that year. As a budgeting tool, the City may contribute 25.52% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received. Please note that a shortfall contribution of \$277,596.64 is due in addition to the above stated requirements for the fiscal year ending September 30, 2025.

As you can see, the Minimum Required Contribution shows a decrease when compared to the results set forth in the October 1, 2023 actuarial valuation report. The decrease is attributable to the 23.7% increase in the projected annual payroll, resulting in an otherwise lower UAAL amortization payment, when expressed as percentage of payroll. The decrease was offset in part by unfavorable plan experience as described in the next paragraph.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an average salary increase of 17.05% which exceeded the 5.32% assumption and unfavorable retirement experience. These losses were offset in part by a gain associated with an investment return of 8.27% (Actuarial Asset Basis) which exceeded the 7.25% assumption.

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, 2023	28.31%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	0.51%
Change in Normal Cost Rate	-0.41%
Change in Administrative Expense Percentage	-0.38%
Payroll Change Effect on UAAL Amortization	-4.12%
Investment Return (Actuarial Asset Basis)	-0.73%
Salary Increases	2.53%
Active Decrements	0.42%
Inactive Mortality	0.21%
UAAL Amortization Impact from Contribution Policy	-0.61%
Assumption Change	0.00%
Interest Crediting on DROP Balances	-0.15%
Other	<u>-0.06%</u>
Total Change in Contribution	-2.79%
(3) Contribution Determined as of October 1, 2024	25.52%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2024</u>	<u>10/1/2023</u>
A. Participant Data		
Actives	50	44
Service Retirees	33	32
DROP Retirees	3	3
Beneficiaries	5	5
Disability Retirees	3	3
Terminated Vested	<u>14</u>	<u>11</u>
Total	108	98
Projected Annual Payroll	4,649,448	3,757,985
Annual Rate of Payments to:		
Service Retirees	1,655,715	1,577,019
DROP Retirees	179,385	179,385
Beneficiaries	209,412	208,664
Disability Retirees	72,551	72,297
Terminated Vested	56,220	56,220
B. Assets		
Actuarial Value (AVA) ¹	34,874,707	32,123,085
Market Value (MVA) ¹	36,728,544	29,955,999
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	19,810,603	16,698,565
Disability Benefits	997,430	829,265
Death Benefits	267,711	229,949
Vested Benefits	834,246	634,426
Refund of Contributions	325,265	251,333
Service Retirees	20,191,863	19,315,395
DROP Retirees ¹	3,108,177	2,835,288
Beneficiaries	2,509,706	2,520,712
Disability Retirees	866,180	872,532
Terminated Vested	601,128	500,772
Share Plan Balances ¹	<u>0</u>	<u>0</u>
Total	49,512,309	44,688,237

C. Liabilities - (Continued)	<u>10/1/2024</u>	<u>10/1/2023</u>
Present Value of Future Salaries	34,474,697	26,143,385
Present Value of Future Member Contributions	2,757,976	2,091,471
Normal Cost (Retirement)	761,305	623,194
Normal Cost (Disability)	89,746	82,987
Normal Cost (Death)	29,293	28,025
Normal Cost (Vesting)	57,254	41,387
Normal Cost (Refunds)	56,873	43,738
Total Normal Cost	<u>994,471</u>	<u>819,331</u>
Present Value of Future Normal Costs	6,928,414	5,291,171
Accrued Liability (Retirement)	14,280,380	12,502,842
Accrued Liability (Disability)	407,785	336,924
Accrued Liability (Death)	66,167	57,334
Accrued Liability (Vesting)	482,468	382,562
Accrued Liability (Refunds)	70,041	72,705
Accrued Liability (Inactives) ¹	27,277,054	26,044,699
Share Plan Balances ¹	0	0
Total Actuarial Accrued Liability (EAN AL)	<u>42,583,895</u>	<u>39,397,066</u>
Unfunded Actuarial Accrued Liability (UAAL)	7,709,188	7,273,981
Funded Ratio (AVA / EAN AL)	81.9%	81.5%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2024</u>	<u>10/1/2023</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances ¹	27,277,054	26,044,699
Actives	6,650,185	6,097,714
Member Contributions	<u>2,452,928</u>	<u>2,284,799</u>
Total	36,380,167	34,427,212
Non-vested Accrued Benefits	<u>1,616,883</u>	<u>1,303,627</u>
Total Present Value Accrued Benefits (PVAB)	37,997,050	35,730,839
Funded Ratio (MVA / PVAB)	96.7%	83.8%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	1,602,424	
Benefits Paid	(1,859,299)	
Interest	2,523,086	
Other	<u>0</u>	
Total	2,266,211	

Valuation Date	10/1/2024	10/1/2023
Applicable to Fiscal Year Ending	<u>9/30/2026</u>	<u>9/30/2025</u>

E. Pension Cost

Normal Cost (with interest) % of Projected Annual Payroll ²	21.39	21.80
Administrative Expenses (with interest) % of Projected Annual Payroll ²	1.49	1.87
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2024, with interest) % of Projected Annual Payroll ²	19.57	22.08
Minimum Required Contribution % of Projected Annual Payroll ²	42.45	45.75
Expected Member Contributions % of Projected Annual Payroll ²	8.00	8.00
Expected City and State Contribution % of Projected Annual Payroll ²	34.45	37.75

F. Past Contributions

Plan Years Ending:	<u>9/30/2024</u>
City and State Requirement	1,638,265
Actual Contributions Made:	
City	1,222,870
State	<u>415,395</u>
Total	1,638,265

G. Net Actuarial (Gain)/Loss 988,822

¹ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2024 and 9/30/2023.

² Contributions developed as of 10/1/2024 are expressed as a percentage of Projected Annual Payroll at 10/1/2024 of \$4,649,448.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2024	7,709,188
2025	7,292,301
2026	6,845,189
2029	5,299,787
2033	2,663,510
2036	865,968
2039	0

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2024	17.05%	5.32%
Year Ended	9/30/2023	12.23%	4.60%
Year Ended	9/30/2022	6.98%	4.98%
Year Ended	9/30/2021	7.44%	5.34%
Year Ended	9/30/2020	0.91%	5.07%

(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	9/30/2024	22.17%	8.27%	7.25%
Year Ended	9/30/2023	10.93%	3.89%	7.25%
Year Ended	9/30/2022	-14.05%	1.48%	7.50%
Year Ended	9/30/2021	17.99%	7.76%	7.50%
Year Ended	9/30/2020	3.54%	6.03%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2024	\$4,649,448
	10/1/2014	3,276,876
(b) Total Increase		41.89%
(c) Number of Years		10.00
(d) Average Annual Rate		3.56%

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

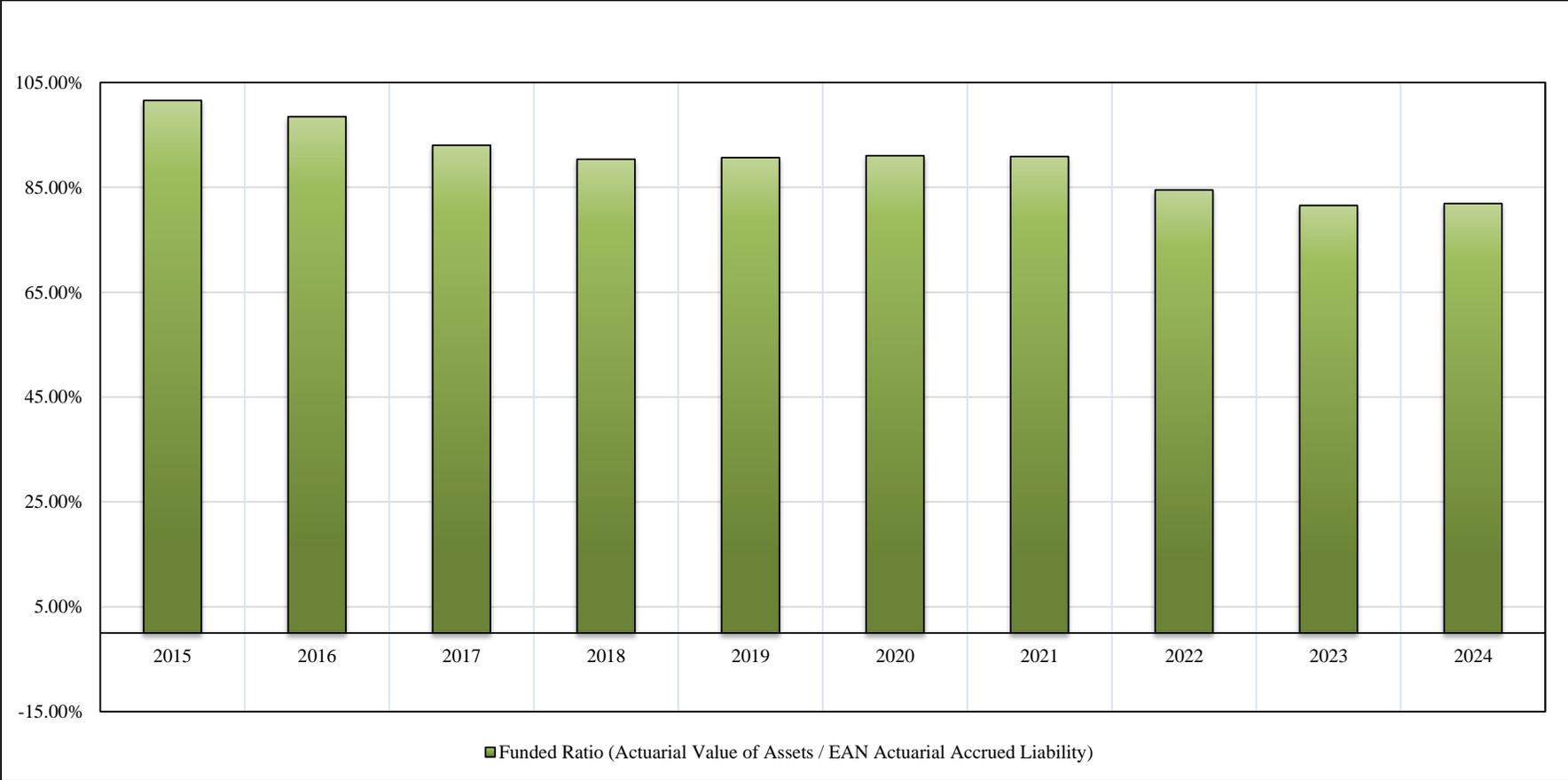
(1) Unfunded Actuarial Accrued Liability as of October 1, 2023	\$7,273,981
(2) Sponsor Normal Cost developed as of October 1, 2023	518,692
(3) Expected administrative expenses for the year ended September 30, 2024	70,186
(4) Expected interest on (1), (2) and (3)	567,513
(5) Sponsor contributions to the System during the year ended September 30, 2024	1,638,265
(6) Expected interest on (5)	71,741
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2024 (1)+(2)+(3)+(4)-(5)-(6)	6,720,366
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	988,822
(10) Unfunded Actuarial Accrued Liability as of October 1, 2024	7,709,188

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2024 <u>Amount</u>	Amortization <u>Amount</u>
Consolidation	10/1/2019	10	2,418,566	324,792
Actuarial Loss	10/1/2020	11	209,519	26,377
Assump Change	10/1/2020	11	(187,516)	(23,607)
Actuarial Loss	10/1/2021	12	303,317	36,083
Actuarial Loss	10/1/2022	13	1,839,262	208,110
Assump Change	10/1/2022	13	804,360	91,012
Actuarial Loss	10/1/2023	14	1,332,858	144,241
Actuarial Loss	10/1/2024	15	988,822	102,833
			7,709,188	909,841

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2023	\$7,273,981
(2) Expected UAAL as of October 1, 2024	6,720,366
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(327,518)
Salary Increases	1,129,222
Active Decrements	187,062
Inactive Mortality	93,931
Interest Crediting on DROP Balances	(66,320)
Other	<u>(27,555)</u>
Increase in UAAL due to (Gain)/Loss	988,822
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2024	\$7,709,188

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, 2023 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

7.25% 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

Salary Scale	
Service	Rate
0	20.00%
1	5.00%
2+	4.00%

This assumption was adopted based on the October 19, 2021 experience study. Projected salary in the year of retirement is increased individually based on data provided by the City to account for non-regular compensation.

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

\$69,171 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.

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

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

Funding Method

Entry Age Normal Actuarial Cost Method.

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

Retirement Rate

% Retiring During the Year (10-24 Years of Service)	
Age	Rate
45-50	2.00%
51	20.00%
52+	100%

% Retiring During the Year (>= 25 Years of Service)	
Service	Rate
25+	100.00%

This assumption was adopted based on the October 19, 2021 experience study.

Termination Rate

% Terminating During the Year	
Service	Rate
0-4	8.50%
5-9	6.80%
10-14	4.80%
15+	0.00%

This assumption was adopted based on the October 19, 2021 experience study.

Disability Rates

Sample rates below, developed from tables in use by other plans with Florida Police Officers. Additionally, 75% of Disability Retirements are assumed to be duty-related. This assumption was confirmed as part of the October 19, 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%
60 +	2.09%

Low-Default-Risk Obligation Measure

Based on the Entry Age Normal Actuarial Cost Method and an interest rate of 4.06% 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, 2024. 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 164.3% on October 1, 2014 to 106.4% on October 1, 2024, 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 64.1%. 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 decreased from 96.2% on October 1, 2014 to 81.9% on October 1, 2024.
- 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, stayed approximately the same from October 1, 2014 to October 1, 2024. The current Net Cash Flow Ratio of 0.3% 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 11 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 4.06%, resulting in an LDROM of \$65,270,556. 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>10/1/2024</u>	<u>10/1/2023</u>	<u>10/1/2019</u>	<u>10/1/2014</u>
<u>Support Ratio</u>				
Total Actives	50	44	46	46
Total Inactives ¹	47	46	38	28
Actives / Inactives ¹	106.4%	95.7%	121.1%	164.3%

Asset Volatility Ratio

Market Value of Assets (MVA)	36,728,544	29,955,999	29,009,102	23,686,144
Total Annual Payroll	5,163,200	4,116,857	3,722,054	3,276,876
MVA / Total Annual Payroll	711.4%	727.6%	779.4%	722.8%

Accrued Liability (AL) Ratio

Inactive Accrued Liability	27,277,054	26,044,699	20,355,298	9,645,390
Total Accrued Liability (EAN)	42,583,895	39,397,066	33,029,976	23,021,932
Inactive AL / Total AL	64.1%	66.1%	61.6%	41.9%

Funded Ratio

Actuarial Value of Assets (AVA)	34,874,707	32,123,085	29,945,056	22,153,260
Total Accrued Liability (EAN)	42,583,895	39,397,066	33,029,976	23,021,932
AVA / Total Accrued Liability (EAN)	81.9%	81.5%	90.7%	96.2%

Net Cash Flow Ratio

Net Cash Flow ²	96,160	(1,266,847)	(677,818)	(59,098)
Market Value of Assets (MVA)	36,728,544	29,955,999	29,009,102	23,686,144
Ratio	0.3%	-4.2%	-2.3%	-0.2%

¹ Excludes terminated participants awaiting a refund of member contributions.

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

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	120,237.16	_____%
1999	116,440.92	-3.2%
2000	115,119.99	-1.1%
2001	114,815.87	-0.3%
2002	142,487.69	24.1%
2003	158,745.48	11.4%
2004	172,017.47	8.4%
2005	184,920.00	7.5%
2006	190,437.69	3.0%
2007	203,738.08	7.0%
2008	195,436.47	-4.1%
2009	199,747.68	2.2%
2010	194,614.15	-2.6%
2011	187,045.43	-3.9%
2012	192,555.79	2.9%
2013	198,510.20	3.1%
2014	200,055.74	0.8%
2015	207,813.50	3.9%
2016	220,273.25	6.0%
2017	225,484.43	2.4%
2018	247,970.50	10.0%
2019	262,762.25	6.0%
2020	274,483.06	4.5%
2021	274,792.98	0.1%
2022	305,167.93	11.1%
2023	354,935.53	16.3%
2024	415,395.24	17.0%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2024

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	577,186.48	577,186.48
Cash	716.90	716.90
Total Cash and Equivalents	577,903.38	577,903.38
Receivables:		
Additional City Contributions	277,596.64	277,596.64
Investment Income	70,874.90	70,874.90
Total Receivable	348,471.54	348,471.54
Investments:		
U. S. Bonds and Bills	5,068,656.12	5,170,907.30
Federal Agency Guaranteed Securities	6,349,906.25	6,571,774.74
Corporate Bonds	920,573.10	879,003.25
Stocks	4,545,044.18	6,141,657.80
Mutual Funds:		
Equity	11,720,531.29	17,042,787.21
Total Investments	28,604,710.94	35,806,130.30
Total Assets	29,531,085.86	36,732,505.22
<u>LIABILITIES</u>		
Payables:		
Administrative Expenses	2,729.53	2,729.53
Prior Refunds	1,231.93	1,231.93
Total Liabilities	3,961.46	3,961.46
NET POSITION RESTRICTED FOR PENSIONS	29,527,124.40	36,728,543.76

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2024
Market Value Basis

ADDITIONS

Contributions:			
Member		382,437.15	
City		1,222,869.90	
State		415,395.24	
Total Contributions			2,020,702.29
Investment Income:			
Net Realized Gain (Loss)	290,198.71		
Unrealized Gain (Loss)	5,436,983.84		
Net Increase in Fair Value of Investments		5,727,182.55	
Interest & Dividends		1,044,634.64	
Less Investment Expense ¹		(95,432.95)	
Net Investment Income			6,676,384.24
Total Additions			8,697,086.53
<u>DEDUCTIONS</u>			
Distributions to Members:			
Benefit Payments		1,859,298.94	
Lump Sum DROP Distributions		0.00	
Refunds of Member Contributions		0.00	
Total Distributions			1,859,298.94
Administrative Expense			65,243.08
Total Deductions			1,924,542.02
Net Increase in Net Position			6,772,544.51
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			29,955,999.25
End of the Year			36,728,543.76

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

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2024

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	
09/30/2021	17.99%	
09/30/2022	-14.05%	
09/30/2023	10.93%	
09/30/2024	22.17%	
Annualized Rate of Return for prior four (4) years:		8.27%
(A) 10/01/2023 Actuarial Assets, including Prepaid Contributions:		\$32,242,616.10
(I) Net Investment Income:		
1. Interest and Dividends	1,044,634.64	
2. Realized Gain (Loss)	290,198.71	
3. Unrealized Gain (Loss)	5,436,983.84	
4. Change in Actuarial Value	(4,020,922.32)	
5. Investment Related Expenses	(95,432.95)	
Total		2,655,461.92
(B) 10/01/2024 Actuarial Assets, excluding Shortfall Contribution:		\$34,597,110.39
Actuarial Asset Rate of Return = $2I/(A+B-I)$, based on Unlimited Actuarial Assets:		8.27%
10/01/2024 Limited Actuarial Assets, including Shortfall Contribution		\$34,874,707.03
10/01/2024 Market Value of Assets, including Shortfall Contribution		\$36,728,543.76
Actuarial Asset Rate of Return, based on Limited Actuarial Assets:		8.27%
Actuarial Gain/(Loss) due to Investment Return (Limited Actuarial Asset Basis)		\$327,517.67

¹Market Value Basis, net of investment related expenses.

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 SEPTEMBER 30, 2024
 Actuarial Asset Basis

REVENUES

Contributions:		
Member	382,437.15	
City	1,222,869.90	
State	415,395.24	
Total Contributions		2,020,702.29
Earnings from Investments:		
Interest & Dividends	1,044,634.64	
Net Realized Gain (Loss)	290,198.71	
Unrealized Gain (Loss)	5,436,983.84	
Change in Actuarial Value	(4,020,922.32)	
Total Earnings and Investment Gains		2,750,894.87

EXPENDITURES

Distributions to Members:		
Benefit Payments	1,859,298.94	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
Total Distributions		1,859,298.94
Expenses:		
Investment related ¹	95,432.95	
Administrative	65,243.08	
Total Expenses		160,676.03
Change in Net Assets for the Year		2,751,622.19
Net Assets Beginning of the Year		32,123,084.84
Net Assets End of the Year²		34,874,707.03

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

²Net Assets may be limited for actuarial consideration.

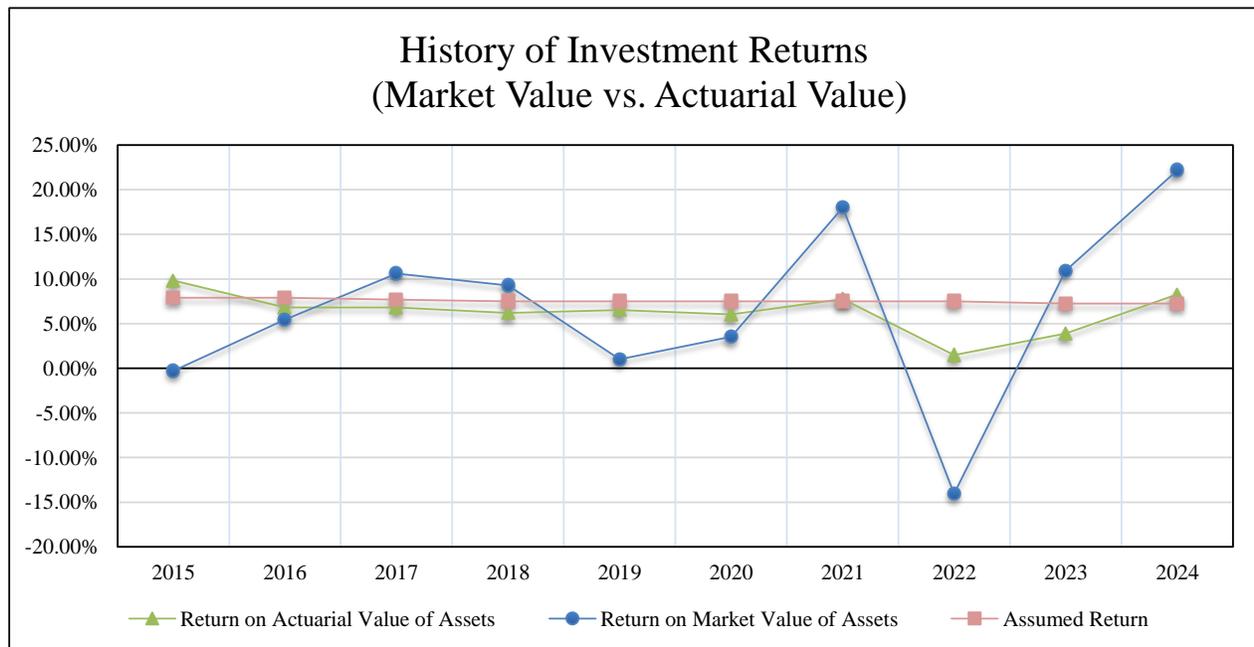
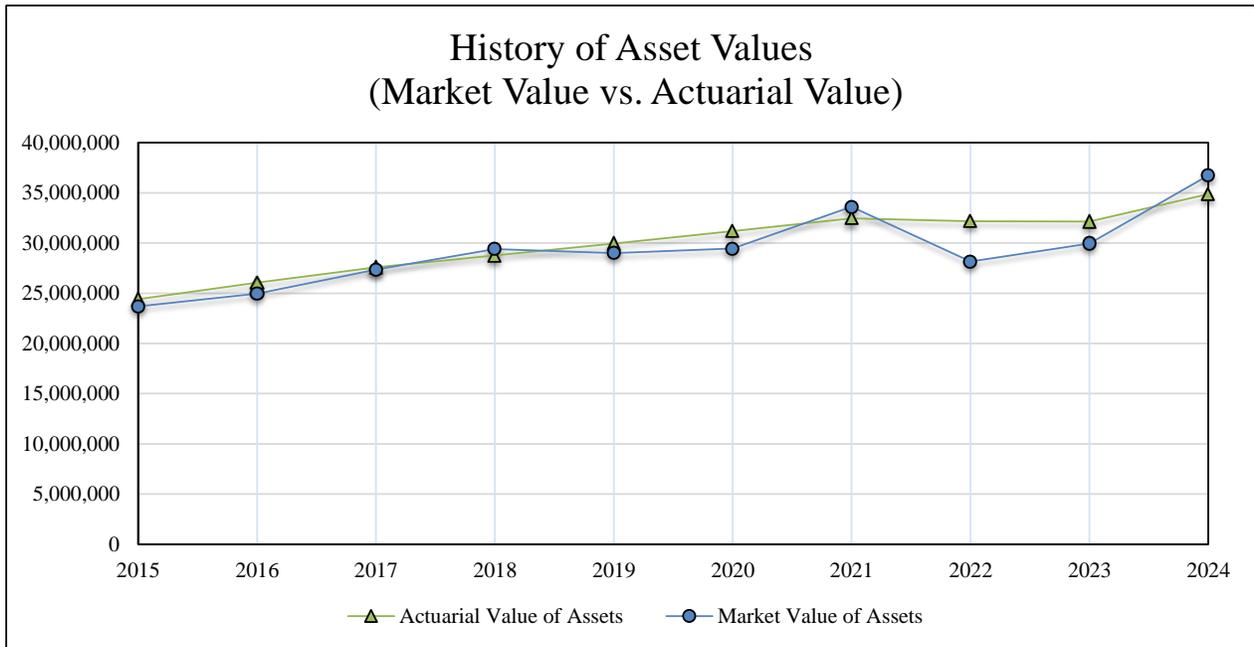
DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2023 to September 30, 2024

Beginning of the Year Balance	372,005.04
Plus Additions	179,384.64
Investment Return Earned	99,792.57
Less Distributions	0.00
End of the Year Balance	651,182.25

RECONCILIATION OF CITY SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2024

(1) City and State Required Contribution Rate	34.27%
(2) Pensionable Payroll Derived from Member Contributions	\$4,780,464.38
(3) City and State Required Contribution (1) x (2)	1,638,265.14
(4) Less Allowable State Contribution	<u>(415,395.24)</u>
(5) Equals Required City Contribution for Fiscal 2024	1,222,869.90
(6) Less 2023 Prepaid Contribution	(119,531.26)
(7) Less Actual City Contributions	<u>(825,742.00)</u>
(8) Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2024	\$277,596.64

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



STATISTICAL DATA

	<u>10/1/2024</u>	<u>10/1/2023</u>	<u>10/1/2022</u>	<u>10/1/2021</u>
<u>Actives</u>				
Number	50	44	45	46
Average Current Age	39.1	41.0	41.0	41.3
Average Age at Employment	31.0	32.0	32.1	32.3
Average Past Service	8.1	9.0	8.9	9.0
Average Annual Salary	\$103,264	\$93,565	\$86,289	\$83,143
<u>Service Retirees</u>				
Number	33	32	30	29
Average Current Age	64.1	63.4	62.8	62.7
Average Annual Benefit	\$50,173	\$49,282	\$46,005	\$46,380
<u>DROP Retirees</u>				
Number	3	3	6	5
Average Current Age	54.3	53.3	54.7	54.9
Average Annual Benefit	\$59,795	\$59,795	\$69,197	\$70,360
<u>Beneficiaries</u>				
Number	5	5	5	4
Average Current Age	67.5	66.5	70.3	68.1
Average Annual Benefit	\$41,882	\$41,733	\$29,542	\$30,228
<u>Disability Retirees</u>				
Number	3	3	2	2
Average Current Age	54.9	53.9	54.7	53.7
Average Annual Benefit	\$24,184	\$24,099	\$16,153	\$16,153
<u>Terminated Vested</u>				
Number	14	11	7	7
Average Current Age ¹	52.2	51.2	55.7	54.7
Average Annual Benefit ¹	\$18,740	\$18,740	\$15,380	\$15,380

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	2	1										3
25 - 29	4	1				1						6
30 - 34	1	1	1			6						9
35 - 39	2	1	1		1	3	3					11
40 - 44					1		2	4				7
45 - 49		1					2	1				4
50 - 54					1		2	2		1		6
55 - 59						3						3
60 - 64												0
65+							1					1
Total	9	5	2	0	3	13	10	7	0	1	0	50

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2023	44
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	(2)
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>0</u>
g. Continuing participants	41
h. New entrants / Rehires	<u>9</u>
i. Total active life participants in valuation	50

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)	Total
a. Number prior valuation	32	3	5	3	3	8	54
Retired	1						1
DROP							0
Vested (Deferred Annuity)							0
Vested (Due Refund)						2	2
Hired/Terminated in Same Year						1	1
Death, With Survivor							0
Death, No Survivor							0
Disabled							0
Refund of Contributions							0
Rehires							0
Expired Annuities							0
Data Corrections							0
b. Number current valuation	33	3	5	3	3	11	58

SUMMARY OF CURRENT PLAN
(THROUGH ORDINANCE 2020-01)

CREDITED SERVICE	Years and completed months of service with the City as a Police Officer.
SALARY	Total compensation for services rendered to the City as a Police Officer reportable on the Member's W-2 form, plus all tax deferred, tax sheltered, and tax exempt items of income. Effective June 20, 2012, Salary shall not include more than three hundred (300) hours of overtime pay per calendar year. Additionally, lump sum payments of unused sick and vacation pay shall not utilize hours in excess of those accrued as of June 20, 2012.
AVERAGE MONTHLY EARNINGS	Average pensionable earnings during the five (5) best years of the last ten (10) years of Credited Service.
NORMAL RETIREMENT	
Eligibility	Earlier of 1.) Age 50 and the completion of 10 years of Credited Service, or 2.) the completion of 25 years of Credited Service, regardless of age.
Benefit Amount	3% of Average Monthly Earnings times Credited Service
Form of Benefit	10 years certain and life thereafter (options available). 100% is continued to Spouse
Minimum Monthly Benefit	\$450
EARLY RETIREMENT	
Eligibility	Age 45 and the completion of 10 years of Credited Service
Benefit Amount	Accrued benefit, reduced 3% per year that the commencement of benefits precedes Normal Retirement.

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

Service Incurred: Accrued Benefit, but not less than 50% of Average Monthly Earnings.

Non-Service Incurred: Accrued Benefit, but not less than 25% of Average Monthly Earnings.

Duration

Payable for life with 120 monthly payments guaranteed or until recovery (as determined by the Board).

BENEFIT ADJUSTMENT

2.1% increase every fifth year.

DEATH

Service Incurred Spouse receives 100% of Average Monthly Earnings.

Non-Service Incurred

Vested Spouse receives 25% of Average Monthly Earnings.

Non-Vested Refund of Member Contributions.

VESTING (TERMINATION)

Less than 10 years of Credited Service Refund of Member Contributions without interest.

10 years or more Accrued benefit payable at age 50 or later, on a reduced basis if to commence prior to Normal Retirement Date or Refund of Member Contributions.

CONTRIBUTIONS

Employee	8.0% of Earnings.
Premium Tax	0.85% tax on premiums for applicable insurance policies.
City	Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over 30 years.

BOARD OF TRUSTEES

- a) Two Commission appointees,
- b) Two Members of the System elected by a majority of the other covered Police Officers, and
- c) A fifth Member elected by the other 4 and appointed by Commission.

DEFERRED RETIREMENT

OPTION PLAN (DROP)

Eligibility	Satisfaction of requirements for Normal Retirement
Participation	Not to exceed 60 months
Rate of Return	Net rate of return, less 0.25% administrative expense.
Distribution	Lump sum (options available) at termination of employment.