

CITY OF WINTER HAVEN
POLICE OFFICERS' RETIREMENT SYSTEM

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2024

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2026



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

January 9, 2025

Board of Trustees
City of Winter Haven
Police Officers' Pension Board

Re: City of Winter Haven Police Officers' Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Winter Haven 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 City of Winter Haven, 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 Winter Haven, 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: 

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

By: 

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

DHL/Ike

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Winter Haven Police Officers' Retirement System, 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	35.71%	36.24%
Member Contributions (Est.) % of Projected Annual Payroll	8.20%	8.20%
City And State Required Contribution % of Projected Annual Payroll	27.51%	28.04%
State Contribution (Est.) ¹ % of Projected Annual Payroll (Est.)	\$660,432 12.31%	\$660,432 12.31%
City Required Contribution (Est.) ² % of Projected Annual Payroll (Est.)	15.20%	15.73%

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 27.51% of the actual payroll realized in that year. As a budgeting tool, the City may contribute 15.20% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received. Please note that the City has access to a prepaid contribution of \$61,681.60 that is available to offset a portion of 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 primarily attributable to the 11.2% increase in Projected Annual Payroll (thereby lowering the contribution requirement for the UAAL payment when expressed as a percentage of payroll). This decrease was partially offset by net unfavorable actuarial experience 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 13.38% which exceeded the 4.94% assumption and unfavorable turnover experience. These losses were offset in part by gains associated with an investment return of 8.38% (Actuarial Asset Basis) which exceeded the 7.35% assumption and inactive mortality 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, 2023	15.79%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	-0.06%
Change in Normal Cost Rate	0.48%
Change in Administrative Expense Percentage	0.07%
Payroll Change Effect on UAAL Amortization	-1.52%
Investment Return (Actuarial Asset Basis)	-0.80%
Salary Increases	1.46%
Active Decrements	0.38%
Inactive Mortality	-0.52%
UAAL Amortization Impact from Contribution Policy	0.11%
Assumption Change	0.00%
Other	<u>-0.19%</u>
Total Change in Contribution	-0.59%
(3) Contribution Determined as of October 1, 2024	15.20%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2024</u>	<u>10/1/2023</u>
A. Participant Data		
Actives	68	67
Service Retirees	57	55
DROP Retirees	2	2
Beneficiaries	6	6
Disability Retirees	5	5
Terminated Vested	<u>35</u>	<u>35</u>
 Total	 173	 170
 Projected Annual Payroll	 5,366,897	 4,824,658
 Annual Rate of Payments to:		
Service Retirees	2,416,453	2,272,883
DROP Retirees	133,573	163,588
Beneficiaries	188,885	188,825
Disability Retirees	83,843	83,658
Terminated Vested	276,866	245,367
 B. Assets		
Actuarial Value (AVA) ¹	40,805,285	39,232,759
Market Value (MVA) ¹	42,962,357	36,271,953
 C. Liabilities		
 Present Value of Benefits		
Actives		
Retirement Benefits	18,112,119	17,644,879
Disability Benefits	243,269	205,106
Death Benefits	280,209	249,880
Vested Benefits	2,933,000	2,524,626
Refund of Contributions	407,992	354,708
Service Retirees	26,219,612	24,567,033
DROP Retirees ¹	2,106,896	2,503,850
Beneficiaries	1,670,499	1,714,310
Disability Retirees	788,211	800,211
Terminated Vested	2,456,525	1,965,255
Share Plan Balances ¹	<u>0</u>	<u>0</u>
 Total	 55,218,332	 52,529,858

C. Liabilities - (Continued)	<u>10/1/2024</u>	<u>10/1/2023</u>
Present Value of Future Salaries	42,818,570	36,731,812
Present Value of Future Member Contributions	3,511,123	3,012,009
Normal Cost (Retirement)	750,410	664,690
Normal Cost (Disability)	17,677	14,111
Normal Cost (Death)	20,495	18,603
Normal Cost (Vesting)	173,912	149,369
Normal Cost (Refunds)	75,951	64,223
Total Normal Cost	<u>1,038,445</u>	<u>910,996</u>
Present Value of Future Normal Costs	7,648,991	6,500,884
Accrued Liability (Retirement)	12,295,474	12,692,006
Accrued Liability (Disability)	108,916	103,022
Accrued Liability (Death)	121,409	113,606
Accrued Liability (Vesting)	1,716,572	1,494,067
Accrued Liability (Refunds)	85,227	75,614
Accrued Liability (Inactives) ¹	33,241,743	31,550,659
Share Plan Balances ¹	0	0
Total Actuarial Accrued Liability (EAN AL)	<u>47,569,341</u>	<u>46,028,974</u>
Unfunded Actuarial Accrued Liability (UAAL)	6,764,056	6,796,215
Funded Ratio (AVA / EAN AL)	85.8%	85.2%

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	33,241,743	31,550,659
Actives	4,353,715	5,515,622
Member Contributions	<u>2,372,716</u>	<u>2,413,379</u>
Total	39,968,174	39,479,660
Non-vested Accrued Benefits	<u>1,494,875</u>	<u>1,193,735</u>
Total Present Value		
Accrued Benefits (PVAB)	41,463,049	40,673,395
Funded Ratio (MVA / PVAB)	103.6%	89.2%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	1,216,549	
Benefits Paid	(3,295,288)	
Interest	2,868,393	
Other	<u>0</u>	
Total	789,654	

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	20.06	19.58
Administrative Expenses (with interest) % of Projected Annual Payroll ²	1.78	1.71
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2024, with interest) % of Projected Annual Payroll ²	13.87	14.95
Minimum Required Contribution % of Projected Annual Payroll ²	35.71	36.24
Expected Member Contributions % of Projected Annual Payroll ²	8.20	8.20
Expected City and State Contribution % of Projected Annual Payroll ²	27.51	28.04

F. Past Contributions

Plan Years Ending:	<u>9/30/2024</u>
City and State Requirement	1,305,000
Actual Contributions Made:	
Members (excluding buyback)	438,745
City	644,569
State	<u>660,432</u>
Total	1,743,746

G. Net Actuarial (Gain)/Loss 166,881

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 \$5,366,897.

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	6,764,056
2025	6,490,290
2026	6,196,402
2029	5,178,665
2033	3,436,785
2036	1,693,638
2039	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2024	13.38%	4.94%
Year Ended 9/30/2023	14.28%	4.67%
Year Ended 9/30/2022	10.03%	5.07%
Year Ended 9/30/2021	6.56%	4.70%
Year Ended 9/30/2020	9.14%	5.01%

(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	23.46%	8.38%	7.35%
Year Ended 9/30/2023	12.70%	5.06%	7.35%
Year Ended 9/30/2022	-14.64%	2.56%	7.45%
Year Ended 9/30/2021	16.16%	9.28%	7.45%
Year Ended 9/30/2020	9.02%	8.37%	7.45%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2024	\$5,366,897
	10/1/2014	4,444,661
(b) Total Increase		20.75%
(c) Number of Years		10.00
(d) Average Annual Rate		1.90%

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

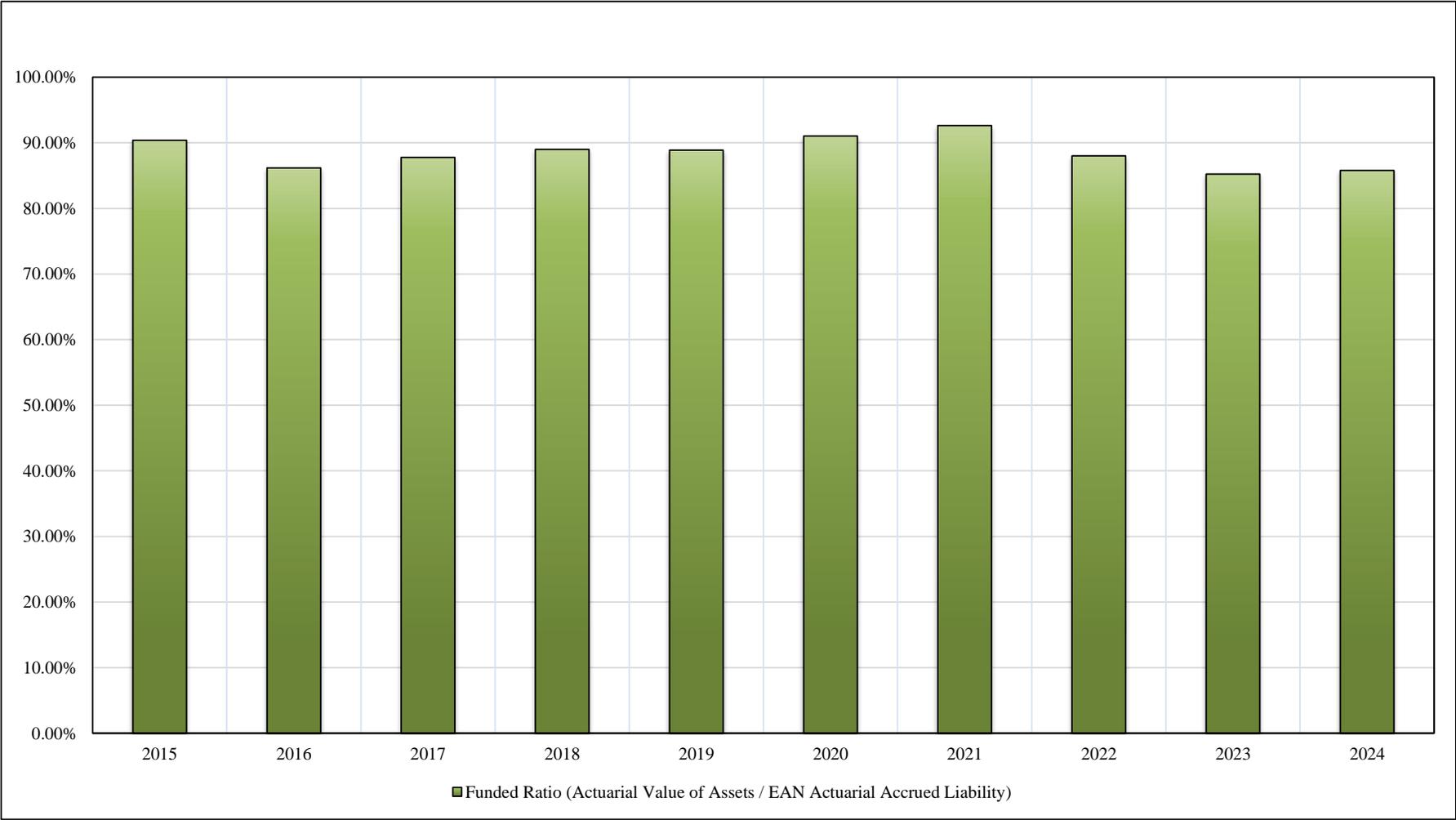
(1) Unfunded Actuarial Accrued Liability as of October 1, 2023	\$6,796,215
(2) Sponsor Normal Cost developed as of October 1, 2023	515,374
(3) Expected administrative expenses for the year ended September 30, 2024	79,768
(4) Expected interest on (1), (2) and (3)	540,333
(5) Sponsor contributions to the System during the year ended September 30, 2024	1,305,000
(6) Expected interest on (5)	29,515
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2024 (1)+(2)+(3)+(4)-(5)-(6)	6,597,175
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	166,881
(10) Unfunded Actuarial Accrued Liability as of October 1, 2024	6,764,056

<u>Type of</u> <u>Base</u>	<u>Date</u> <u>Established</u>	<u>Years</u> <u>Remaining</u>	<u>10/1/2024</u> <u>Amount</u>	<u>Amortization</u> <u>Amount</u>
Consolidation Base	10/1/2019	15	3,659,030	382,551
Actuarial Gain	10/1/2020	11	(256,141)	(32,376)
Assump Change	10/1/2020	11	(267,892)	(33,862)
Actuarial Gain	10/1/2021	12	(316,235)	(37,783)
Actuarial Loss	10/1/2022	13	1,830,078	208,043
Assump Change	10/1/2022	13	450,242	51,184
Actuarial Loss	10/1/2023	14	1,498,093	162,937
Actuarial Loss	10/1/2024	15	166,881	17,447
			6,764,056	718,141

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2023	\$6,796,215
(2) Expected UAAL as of October 1, 2024	6,597,175
 (3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(396,144)
Salary Increases	721,104
Active Decrements	187,637
Inactive Mortality	(257,402)
Other	<u>(88,314)</u>
Increase in UAAL due to (Gain)/Loss	166,881
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2024	\$6,764,056

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: PubS.H-2010 (Below Median) for Employees, set forward one year.

Male: PubS.H-2010 (Below Median) for Employees, set forward one year.

Healthy Retiree Lives:

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

Male: PubS.H-2010 for Healthy Retirees, set forward one year.

Beneficiary Lives:

Female: PubG.H-2010 for Healthy Retirees.

Male: PubG.H-2010 for Healthy Retirees, set back one year.

Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates for healthy lives are projected generationally with Mortality Improvement Scale MP-2018. We feel this assumption sufficiently accommodates future mortality improvements.

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2021 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

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

Interest Rate

7.35% 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

See table below, based on results of the October 23, 2019 experience study.

<u>Salary Scale</u>	
<u>Service</u>	<u>Rate</u>
0	13.00%
1-9	4.50%
10+	4.00%

Final Year Salary Load

<u>Service as of 10/1/2012</u>	<u>Final Salary Load</u>
Less than 1 Year	0%
1 to 5 Years	5%
5 to 10 Years	10%
Greater than 10 Years	15%

These assumptions are based on data provided by the City.

Payroll Growth

None.

Administrative Expenses

\$92,255 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. The following loads are applied for determining the minimum required contribution:

Interest - A half year, based on current 7.35% assumption.

Salary - None.

Disability Rate

See sample rates in the below table, established with the October 23, 2019 experience study. Additionally, it is assumed that 75% of Disability Retirements are service-related.

% Becoming Disabled During the Year	
Age	Rate
25	0.03%
35	0.05%
45	0.10%
55	0.36%
65	2.22%

Termination Rate

See table below, based on results of the October 23, 2019 experience study.

% Terminating During the Year	
Service	Rate
0-4	13.0%
5-9	6.0%
10+	4.5%

Normal Retirement

% Retiring During the Year (10-24 Years of Service)		% Retiring During the Year (>= 25 Years of Service)	
Age	Rate	Service	Rate
55	20.0%	25	60.0%
56+	100.0%	26+	100.0%

The assumed rates were approved in conjunction with an actuarial experience study dated October 23, 2019.

Early Retirement

% Retiring During the Year (10-19 Years of Service)		% Retiring During the Year (All Ages)	
Age	Rate	Service	Rate
50-52	10.0%	20-22	10.0%
53-54	0.0%	23-24	0.0%

The assumed rates were approved in conjunction with an actuarial experience study dated October 23, 2019.

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 an insignificant bias that is above or below the Market Value of Assets.

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 172.3% on October 1, 2014 to 82.9% 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 69.9%. 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 stayed approximately the same from October 1, 2014 to 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, decreased from 0.7% on October 1, 2014 to -3.8% on October 1, 2024. The current Net Cash Flow Ratio of -3.8% 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 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 \$72,223,000. 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	68	67	82	81
Total Inactives ¹	82	79	69	47
Actives / Inactives ¹	82.9%	84.8%	118.8%	172.3%
<u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	42,962,357	36,271,953	34,927,860	28,706,369
Total Annual Payroll	5,366,897	4,824,658	4,492,455	4,444,661
MVA / Total Annual Payroll	800.5%	751.8%	777.5%	645.9%
<u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	33,241,743	31,550,659	28,400,578	16,786,203
Total Accrued Liability (EAN)	47,569,341	46,028,974	40,317,281	30,917,594
Inactive AL / Total AL	69.9%	68.5%	70.4%	54.3%
<u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	40,805,285	39,232,759	35,833,609	26,756,633
Total Accrued Liability (EAN)	47,569,341	46,028,974	40,317,281	30,917,594
AVA / Total Accrued Liability (EAN)	85.8%	85.2%	88.9%	86.5%
<u>Net Cash Flow Ratio</u>				
Net Cash Flow ²	(1,650,472)	(1,274,524)	(809,497)	205,906
Market Value of Assets (MVA)	42,962,357	36,271,953	34,927,860	28,706,369
Ratio	-3.8%	-3.5%	-2.3%	0.7%

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>
1999	192,679.61	_____%
2000	197,295.38	2.4%
2001	193,784.30	-1.8%
2002	216,554.98	11.8%
2003	245,576.05	13.4%
2004	255,047.04	3.9%
2005	284,795.64	11.7%
2006	287,269.99	0.9%
2007	285,106.04	-0.8%
2008	288,684.89	1.3%
2009	279,112.84	-3.3%
2010	274,057.82	-1.8%
2011	270,561.36	-1.3%
2012	271,648.23	0.4%
2013	287,701.30	5.9%
2014	306,575.27	6.6%
2015	321,673.39	4.9%
2016	369,987.86	15.0%
2017	387,357.51	4.7%
2018	433,237.67	11.8%
2019	437,823.03	1.1%
2020	460,620.50	5.2%
2021	460,889.13	0.1%
2022	514,952.64	11.7%
2023	591,065.14	14.8%
2024	660,431.58	11.7%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2024

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	2,051,184.45	2,051,184.45
Cash	7,156.50	7,156.50
Total Cash and Equivalents	2,058,340.95	2,058,340.95
Receivables:		
Investment Income	53,648.87	53,648.87
Total Receivable	53,648.87	53,648.87
Investments:		
U. S. Bonds and Bills	4,876,201.86	4,794,725.55
Federal Agency Guaranteed Securities	5,861,334.50	6,036,383.49
Corporate Bonds	966,101.60	908,577.30
Stocks	11,330,586.51	17,607,013.39
Mutual Funds:		
Equity	7,569,368.08	10,075,225.11
Pooled/Common/Commingled Funds:		
Real Estate	1,792,758.90	2,069,577.23
Total Investments	32,396,351.45	41,491,502.07
Total Assets	34,508,341.27	43,603,491.89
<u>LIABILITIES</u>		
Payables:		
Refunds of Member Contributions	37,404.72	37,404.72
DROP Distributions	534,041.92	534,041.92
Investment Expenses	5,625.00	5,625.00
Administrative Expenses	2,382.00	2,382.00
Prepaid City Contribution	61,681.60	61,681.60
Total Liabilities	641,135.24	641,135.24
NET POSITION RESTRICTED FOR PENSIONS	33,867,206.03	42,962,356.65

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

ADDITIONS

Contributions:

Member	438,745.49
City	644,568.73
State	660,431.58

Total Contributions 1,743,745.80

Investment Income:

Net Realized Gain (Loss)	1,937,936.82	
Unrealized Gain (Loss)	5,670,687.75	
Net Increase in Fair Value of Investments		7,608,624.57
Interest & Dividends		899,922.34
Less Investment Expense ¹		(167,670.82)

Net Investment Income 8,340,876.09

Total Additions 10,084,621.89

DEDUCTIONS

Distributions to Members:

Benefit Payments	2,583,260.90
Lump Sum DROP Distributions	647,558.84
Refunds of Member Contributions	64,468.22

Total Distributions 3,295,287.96

Administrative Expense 98,930.25

Total Deductions 3,394,218.21

Net Increase in Net Position 6,690,403.68

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 36,271,952.97

End of the Year 42,962,356.65

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	16.16%
09/30/2022	-14.64%
09/30/2023	12.70%
09/30/2024	23.46%

Annualized Rate of Return for prior four (4) years: 8.38%

(A) 10/01/2023 Actuarial Assets, including Prepaid Contributions: \$39,297,500.18

(I) Net Investment Income:

1. Interest and Dividends	899,922.34	
2. Realized Gain (Loss)	1,937,936.82	
3. Unrealized Gain (Loss)	5,670,687.75	
4. Change in Actuarial Value	(5,117,877.92)	
5. Investment Related Expenses	(167,670.82)	
Total		3,222,998.17

(B) 10/01/2024 Actuarial Assets, including Prepaid Contributions: \$40,866,966.48

Actuarial Asset Rate of Return = $2I/(A+B-I)$, based on Unlimited Actuarial Assets: 8.38%

10/01/2024 Limited Actuarial Assets \$40,805,284.88

10/01/2024 Market Value of Assets \$42,962,356.65

Actuarial Asset Rate of Return, based on Limited Actuarial Assets: 8.38%

Actuarial Gain/(Loss) due to Investment Return (Limited Actuarial Asset Basis) \$396,144.17

¹Market Value Basis, net of investment related expenses.

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

REVENUES

Contributions:		
Member	438,745.49	
City	644,568.73	
State	660,431.58	
Total Contributions		1,743,745.80
Earnings from Investments:		
Interest & Dividends	899,922.34	
Net Realized Gain (Loss)	1,937,936.82	
Unrealized Gain (Loss)	5,670,687.75	
Change in Actuarial Value	(5,117,877.92)	
Total Earnings and Investment Gains		3,390,668.99
EXPENDITURES		
Distributions to Members:		
Benefit Payments	2,583,260.90	
Lump Sum DROP Distributions	647,558.84	
Refunds of Member Contributions	64,468.22	
Total Distributions		3,295,287.96
Expenses:		
Investment related ¹	167,670.82	
Administrative	98,930.25	
Total Expenses		266,601.07
Change in Net Assets for the Year		1,572,525.76
Net Assets Beginning of the Year		39,232,759.12
Net Assets End of the Year ²		40,805,284.88

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

²Net Assets may be limited for actuarial consideration.

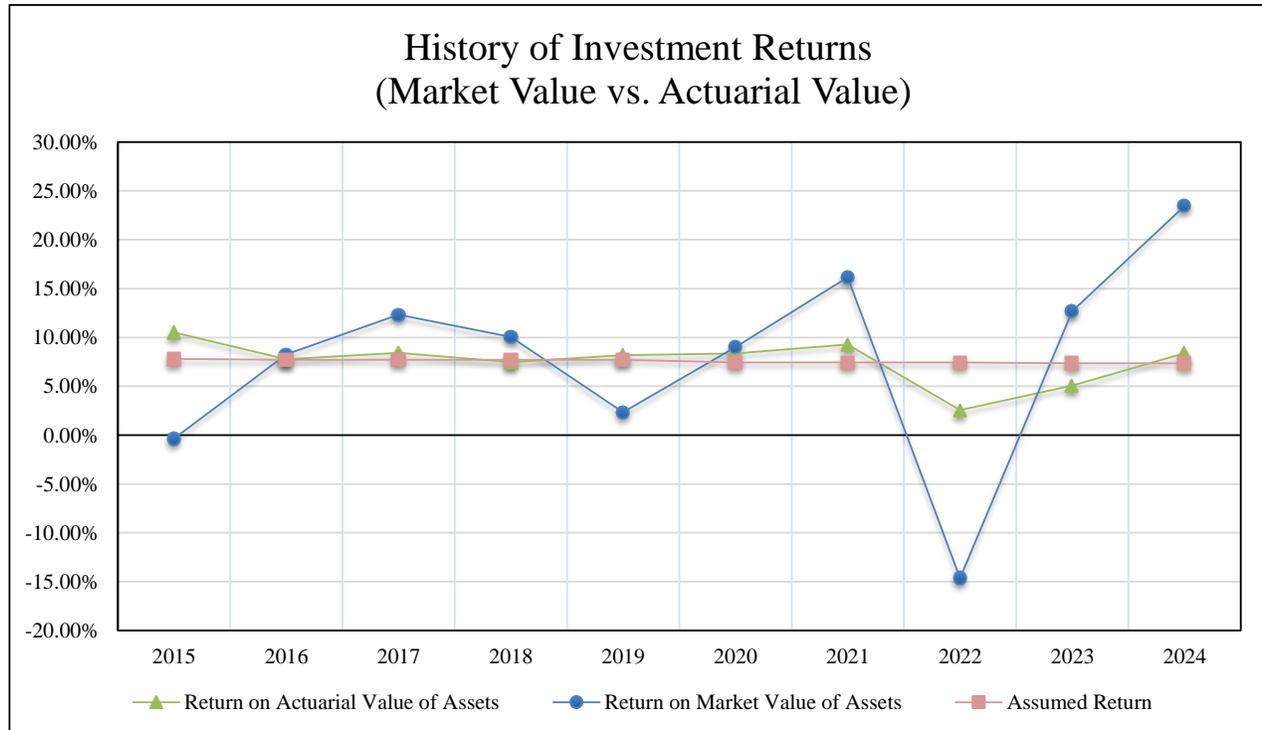
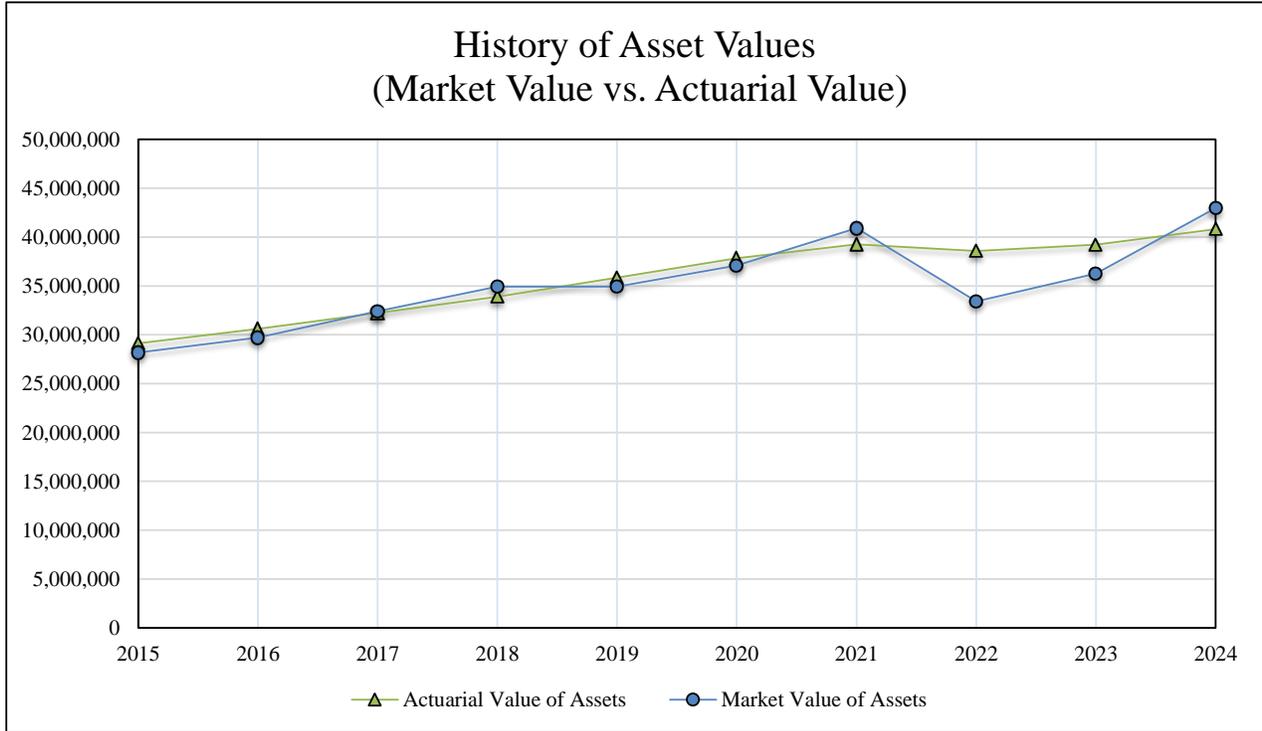
DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2023 to September 30, 2024

Beginning of the Year Balance	412,439.69
Plus Additions	491,175.43
Investment Return Earned	49,327.07
Less Distributions	(647,558.84)
End of the Year Balance	305,383.35

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

(1)	City and State Required Contribution Rate	24.39%
(2)	Pensionable Payroll Derived from Member Contributions	\$5,350,554.76
(3)	City and State Required Contribution (1) x (2)	1,305,000.31
(4)	Less Allowable State Contribution	<u>(660,431.58)</u>
(5)	Equals Required City Contribution for Fiscal 2024	644,568.73
(6)	Less 2023 Prepaid Contribution	(64,741.06)
(7)	Less Actual City Contributions	<u>(641,509.27)</u>
(8)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2024	(\$61,681.60)

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	68	67	72	74
Average Current Age	35.2	36.8	36.9	36.1
Average Age at Employment	27.9	28.9	29.0	28.3
Average Past Service	7.3	7.9	7.9	7.8
Average Annual Salary	\$78,925	\$72,010	\$64,892	\$60,766
<u>Service Retirees</u>				
Number	57	55	52	51
Average Current Age	64.9	64.7	64.3	63.8
Average Annual Benefit	\$42,394	\$41,325	\$40,875	\$39,699
<u>DROP Retirees</u>				
Number	2	2	2	3
Average Current Age	54.6	55.2	53.8	56.2
Average Annual Benefit	\$66,787	\$81,794	\$75,572	\$64,524
<u>Beneficiaries</u>				
Number	6	6	6	6
Average Current Age	71.5	70.5	69.5	68.5
Average Annual Benefit	\$31,481	\$31,471	\$31,461	\$31,451
<u>Disability Retirees</u>				
Number	5	5	5	5
Average Current Age	65.5	64.5	63.5	62.5
Average Annual Benefit	\$16,769	\$16,732	\$16,732	\$16,713
<u>Terminated Vested</u>				
Number	35	35	27	23
Average Current Age ¹	50.0	48.6	47.8	49.0
Average Annual Benefit ¹	\$23,072	\$22,306	\$22,589	\$18,752

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	4											4
25 - 29	4	4	1	2		3						14
30 - 34	1	1	1	3	2	6	1					15
35 - 39			1	2	1	5	4	2				15
40 - 44	1			1		2	2	3	1			10
45 - 49		1				2	2		1			6
50 - 54							1	1	1			3
55 - 59	1											1
60 - 64												0
65+												0
Total	11	6	3	8	3	18	10	6	3	0	0	68

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2023	67
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
ii. Vested in refund of member contributions only	(2)
iii. Refund of member contributions or full lump sum distribution	(4)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(2)
f. DROP	(1)
g. Continuing participants	57
h. New entrants / Rehires	<u>11</u>
i. Total active life participants in valuation	68

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	55	2	6	5	11	24	103
Retired	3	(1)					2
DROP		1					1
Vested (Deferred Annuity)					1		1
Vested (Due Refund)						2	2
Hired/Terminated in Same Year							0
Death, With Survivor							0
Death, No Survivor	(1)						(1)
Disabled							0
Refund of Contributions						(3)	(3)
Rehires							0
Expired Annuities							0
Data Corrections							0
b. Number current valuation	57	2	6	5	12	23	105

SUMMARY OF CURRENT PLAN
(Through Ordinance O-23-33)

<u>EFFECTIVE DATE</u>	September 30, 1955
<u>CREDITED SERVICE</u>	Total years and fractional parts of years of service with the City as a Police Officer.
<u>SALARY</u>	Total compensation reportable on the Member's W-2 form, plus all tax exempt, tax sheltered and tax deferred items of income. Effective July 1, 2011, Salary shall not include more than three hundred (300) hours of overtime per calendar year. Additionally, Salary will include the lesser of the amount of unused sick and annual leave time accrued as of July 1, 2011, or the actual amount at termination or retirement.
<u>AVERAGE FINAL COMPENSATION</u>	Average Salary paid during the five (5) best years of the last ten (10).
<u>NORMAL RETIREMENT</u>	
Eligibility	First day of the month following age 55 and the completion of 10 years of Credited Service or the completion of 25 years of Credited Service or age 60.
Benefit Amount	3.50% of Average Final Compensation <u>times</u> Credited Service.
Form of Benefit	10 years certain and life thereafter (options available).
<u>EARLY RETIREMENT</u>	
Eligibility	The earlier of a.) Age 50 and 10 years of Credited Service, or b.) the completion of 20 years of Credited Service, regardless of age.
Benefit Amount	Accrued benefit, reduced 3% for each year that the commencement of benefits precedes Normal Retirement.
<u>VESTING (TERMINATION)</u>	
Less than 10 years	Refund of Member Contributions without interest.
10 years or more	Accrued benefit payable at Member's otherwise Normal (unreduced) or Early (reduced) Retirement Date.
<u>COST-OF-LIVING ADJUSTMENT</u>	Service and Disability Retirees receive 0.5% increases each October 1 for ten years, beginning the first October 1 following one complete year of retirement.

DISABILITY BENEFIT

Eligibility

- a.) Service Incurred – Date of Employment.
Non-Service Incurred – 10 years of Credited Service.
- b.) Total and permanent disability as determined by the Board of Trustees.

Benefit Amount

Accrued benefit payable for life, with 10 years guaranteed (options available) or until recovery but not less than 42% of Average Final Compensation for Service Incurred.

PRE-RETIREMENT DEATH

In-Service

Spouse to receive the greater of the Member’s accrued benefit or 50% of average salary over the past 12 months. If no spouse, children each receive 15% of average salary over the past 12 months to age 18 (or 22 if in school). Combined children’s benefits cannot exceed 50% of average salary over the past 12 months.

Non-Service or no Spouse or Children

Beneficiary to receive a monthly annuity which is actuarially equivalent to the Member’s accrued benefit.

Contributions

Employee

8.2% of Salary.

Premium Tax

0.85% tax on premiums for casualty insurance.

City

Remaining amount necessary for payment of Normal (current year’s) Cost and amortization of the accrued past service liability, if any, as provided in Part VII of Florida Statutes, Chapter 112.

BOARD OF TRUSTEES

- a.) Two legal residents appointed by the City Commission,
- b.) Two Members of the System elected by the other covered Members, and
- c.) Fifth Member elected by the other 4 and appointed by Commission.