CITY OF PALM COAST
FIREFIGHTERS' RETIREMENT SYSTEM AND TRUST FUND

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2024

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

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

December 23, 2024

Board of Trustees
City of Palm Coast
Firefighters' Pension Board

Re: City of Palm Coast Firefighters' Retirement System and Trust Fund

Dear Board:

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

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapters 112 and 175, 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 Palm Coast, 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 Palm Coast, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighters' Retirement System and Trust Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

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

By: ______________________________
Luke M. Schoenhofen, FSA, EA, MAAA
Enrolled Actuary #23-8968

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Palm Coast Firefighters' Retirement System and Trust Fund, 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 November 8, 2024 actuarial impact statement, are as follows:

Valuation Date	10/1/2024	10/1/2023
Applicable to Fiscal Year Ending	9/30/2026	9/30/2025
Minimum Required Contribution [1]		
% of Projected Annual Payroll	24.6%	24.7%
Member Contributions (Est.)		
% of Projected Annual Payroll	5.0%	5.0%
City And State Required Contribution		
% of Projected Annual Payroll	19.6%	19.7%
State Contribution (Est.) [2]	$827,363	$827,363
% of Projected Annual Payroll	15.8%	15.8%
City Required Contribution [3]		
% of Projected Annual Payroll	3.8%	3.9%

[1] The City must contribute an amount equal to the applicable Normal Cost (adjusted for interest), less the available State Contribution. The Minimum Required Contribution disclosed above reflects this statutory requirement under Chapter 112.66(13).

[2] Beginning with the fiscal year ending September 30, 2025, the City may use all State Monies to assist with its funding requirements.

[3] The City has access to a $301,147.26 reserve to use at its discretion for future funding.

CHANGES SINCE PRIOR VALUATION

Plan Changes

Ordinance 2024-16, adopted and effective November 12, 2024 provided for the addition of the City's full-time firefighters to the plan. Please see the Actuarial Impact Statement dated November 8, 2024 for full details.

Actuarial Assumption/Method Changes

The above-referenced Actuarial Impact Statement provides details regarding the incorporation of assumption and method changes associated with adding full-time firefighters to the plan.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	10/1/2024	10/1/2023
A. Participant Data		
Actives	99	95
Service Retirees	26	28
Beneficiaries	2	2
Disability Retirees	0	0
Terminated Vested	8	6
Total	135	131
Projected Annual Payroll	5,232,550	4,952,884
Annual Rate of Payments to:		
Service Retirees	184,546	210,956
Beneficiaries	4,604	4,604
Disability Retirees	0	0
Terminated Vested	66,300	36,300
B. Assets		
Actuarial Value (AVA) [1]	6,819,920	5,965,944
Market Value (MVA) [1]	7,025,317	5,564,274
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	9,148,512	8,256,387
Disability Benefits	409,111	360,646
Death Benefits	51,179	45,930
Vested Benefits	729,051	633,327
Refund of Contributions	93,355	79,610
Service Retirees	1,566,814	1,673,486
Beneficiaries	42,402	43,281
Disability Retirees	0	0
Terminated Vested	453,755	184,496
Share Plan Balances [1]	1,785,772	1,196,684
City Reserve [1]	301,147	301,147
Total	14,581,098	12,774,994

C. Liabilities - (Continued)	10/1/2024	10/1/2023
Present Value of Future Salaries	41,307,955	40,887,063
Present Value of Future Member Contributions	2,065,398	2,044,353
Normal Cost (Retirement)	1,006,064	958,545
Normal Cost (Disability)	47,178	44,843
Normal Cost (Death)	5,095	4,864
Normal Cost (Vesting)	71,721	67,520
Normal Cost (Refunds)	13,519	12,671
Total Normal Cost	1,143,577	1,088,443
Present Value of Future Normal Costs	8,774,342	8,665,748
Accrued Liability (Retirement)	1,485,666	678,906
Accrued Liability (Disability)	55,780	9,098
Accrued Liability (Death)	7,743	3,494
Accrued Liability (Vesting)	92,843	18,654
Accrued Liability (Refunds)	14,834	0
Accrued Liability (Inactives)	2,062,971	1,901,263
Share Plan Balances [1]	1,785,772	1,196,684
City Reserve [1]	301,147	301,147
Total Actuarial Accrued Liability (EAN AL)	5,806,756	4,109,246
Unfunded Actuarial Accrued Liability (UAAL)	(1,013,164)	(1,856,698)
Funded Ratio (AVA / EAN AL)	117.4%	145.2%

D. Actuarial Present Value of Accrued Benefits	10/1/2024	10/1/2023
Vested Accrued Benefits		
Inactives + Share Plan Balances [1]	3,848,743	3,097,947
Actives	173,621	397,195
Member Contributions	0	0
Total	4,022,364	3,495,142
Non-vested Accrued Benefits	242,798	159,283
Total Present Value Accrued Benefits (PVAB)	4,265,162	3,654,425
Funded Ratio (MVA / PVAB)	164.7%	152.3%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	781,692	
Benefits Paid	(412,333)	
Interest	241,378	
Other	0	
Total	610,737	

	10/1/2024	10/1/2023
Valuation Date	10/1/2024	10/1/2023
Applicable to Fiscal Year Ending	9/30/2026	9/30/2025
E. Pension Cost		
Normal Cost (with interest)		
% of Projected Annual Payroll [2]	22.6	22.7
Administrative Expenses (with interest)		
% of Projected Annual Payroll [2]	2.0	2.0
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 27 years (as of 10/1/2024, with interest)		
% of Projected Annual Payroll [2]	(0.9)	(2.7)
Minimum Required Contribution [3]		
% of Projected Annual Payroll [2 3]	24.6	24.7
Expected Member Contributions		
% of Projected Annual Payroll [2]	5.0	5.0
Expected City and State Contribution		
% of Projected Annual Payroll [2 3]	19.6	19.7
F. Past Contributions		
Plan Years Ending:	9/30/2024	
City and State Requirement	140,193	
Actual Contributions Made:		
City	0	
State	200,000	
Total	200,000	
G. Net Actuarial (Gain)/Loss	(91,858)	

[1] The asset values and liabilities include accumulated Share Plan and City Reserve Balances as of 9/30/2024 and 9/30/2023.

[2] Contribution requirements include a 0.5 year interest load, based on the plan assumption for investment return.

[3] Reflects normal cost minimum funding requirements of Chapter 112, Florida Statutes.

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

Year	Projected Unfunded Actuarial Accrued Liability
2024	(1,013,164) [1]

I. 5 Year Comparison of Investment Return on Market Value and Actuarial Value

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2024	19.85%	7.70%	7.00%
Year Ended	9/30/2023	8.99%	4.34%	6.00%
Year Ended	9/30/2022	-13.59%	3.39%	6.00%
Year Ended	9/30/2021	19.22%	9.14%	6.00%
Year Ended	9/30/2020	5.57%	7.74%	7.00%

[1] Based on current State law and the existing UAAL bases, the UAAL is projected to never be positive.

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

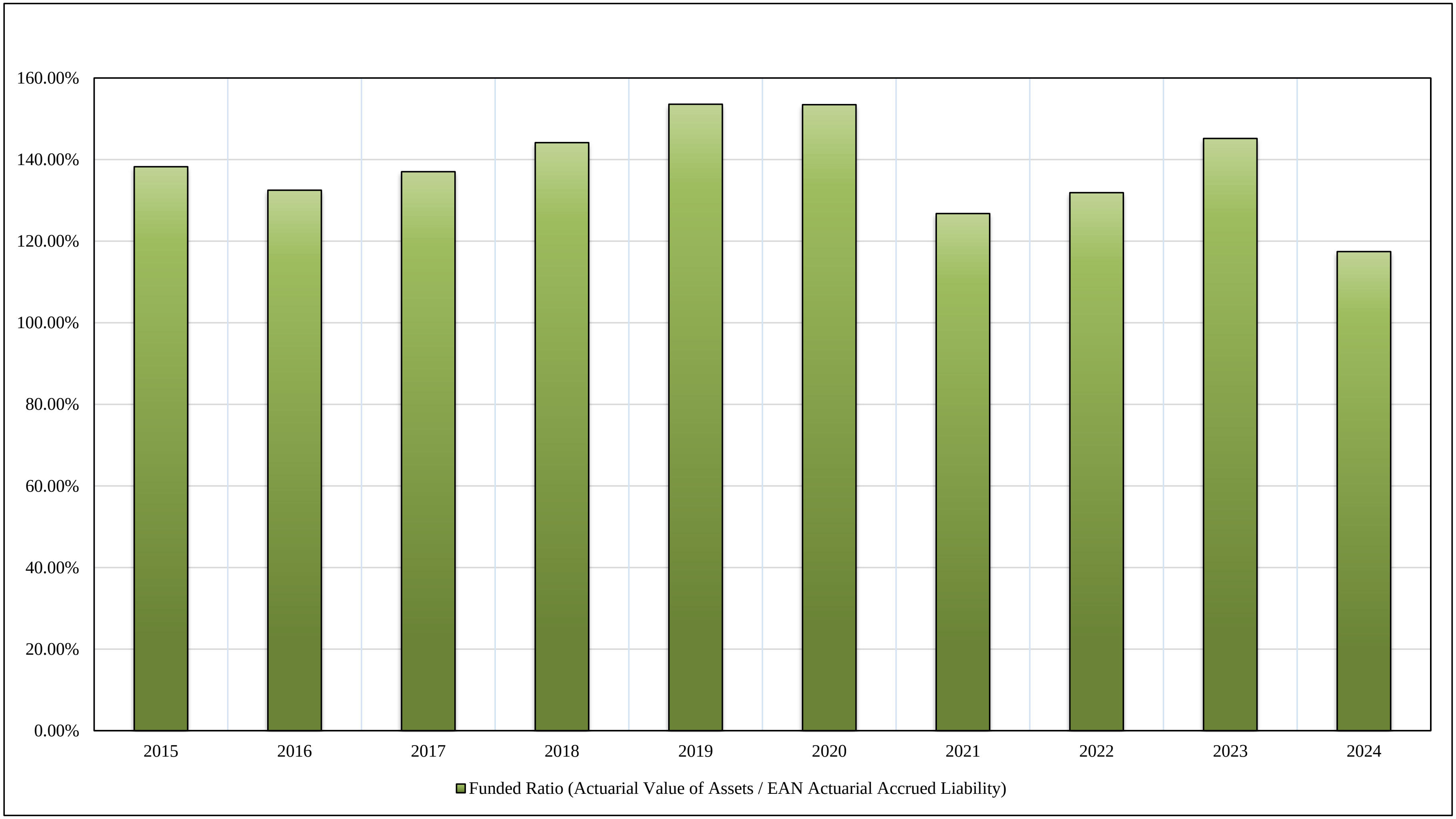
(1)	Unfunded Actuarial Accrued Liability as of October 1, 2023	($1,856,698)
(2)	Sponsor Normal Cost developed as of October 1, 2023	1,088,443
(3)	Expected administrative expenses for the year ended September 30, 2024	99,058
(4)	Expected interest on (1), (2) and (3)	(50,311)
(5)	Sponsor contributions to the System during the year ended September 30, 2024	200,000
(6)	Expected interest on (5)	1,798
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2024 (1)+(2)+(3)+(4)-(5)-(6)	(921,306)
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(91,858)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2024	(1,013,164)

Type of Base	Date Established	Years Remaining	10/1/2024 Amount	Amortization Amount
Consolidation Base	10/1/2021	27	(2,083,166)	(162,420)
Benefit Change	10/1/2021	12	784,517	92,311
Actuarial Gain	10/1/2022	13	(176,987)	(19,791)
Actuarial Loss	10/1/2023	14	21,823	2,332
Benefit Change	10/1/2023	14	(394,093)	(42,115)
Reconciliation Base	10/1/2024	15	926,600	95,080
Actuarial Gain	10/1/2024	15	(91,858)	(9,426)
			(1,013,164)	(44,029)

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1)	Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2023	($1,856,698)
(2)	Expected UAAL as of October 1, 2024	(921,306)
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	(43,117)
	Active Decrements	(8,705)
	Inactive Mortality	(22,081)
	Interest Crediting on Share Plan Balances	124,202
	Other	(142,157)
	Increase in UAAL due to (Gain)/Loss	(91,858)
	Assumption Changes	0
(4)	Actual UAAL as of October 1, 2024	($1,013,164)

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

<u>Mortality Rate</u>	*Healthy Active Lives:* **Female:** PubS.H-2010 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 (Below Median) for Healthy Retirees, set forward one year. *Beneficiary Lives:* **Female:** PubG.H-2010 (Below Median) for Healthy Retirees. **Male:** PubG.H-2010 (Below Median) for Healthy Retirees, set back one year. *Disabled Lives:* 80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees. All rates for healthy lives are projected generationally with Mortality Improvement Scale MP-2018. We feel this assumption sufficiently accommodates future mortality improvements. The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2021 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.
<u>Interest Rate</u>	7.00% (6.00% prior to passage of Ordinance 2024-16) 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.
<u>Payroll Growth</u>	None.

Salary Increases (Full-Time Only)

Salary Scale	
Service	Rate
0	7.40%
1	5.70%
2-6	5.40%
7-10	5.30%
11-12	5.10%
13-15	5.00%
16+	4.80%

The above rates are those set forth in the July 1, 2022 Valuation Report for the Florida Retirement System for Special Risk participants.

Administrative Expenses

2.00% of payroll, implemented in conjunction with passage of Ordinance 2024-16. Beginning with the October 1, 2026 valuation, this will revert to the prior method of using a two-year average.

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. An interest load of 0.5 years (previously 1.5 years for the Volunteer-only plan) at the valuation assumption is applied for determination of the Minimum Required Contribution. Additionally, the Normal Cost begins October 1, 2023 for Full-Time participants.

Asset Valuation Method

Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value return. It is possible that over time this technique will produce an insignificant bias above or below Market Value.

Normal Retirement

Full-Time — The earlier of attainment of age 55 with 10 years of Credited Service, or the completion of 25 years of Credited Service, regardless of age.

Volunteers — The earlier of attainment of age 55 with 10 years of credited service, age 52 with 25 years of credited service, or age 62 with 5 years of credited service. Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year. This assumption was established with the November, 2020 actuarial experience study.

Early Retirement

Full-Time — 5% per year of eligibility (attainment of age 50 with the completion of 10 years of Credited Service).

Volunteers — None. This assumption was established with the November, 2020 actuarial experience study.

Termination Rates

Full-Time % Terminating During the Year	
Service	Rate
0-2	8.9%
3-4	7.9%
5	6.0%
6	5.7%
7	5.6%
8-9	5.4%
10-14	4.4%
15-19	3.8%
20-24	1.2%
25+	0.0%

Volunteer % Terminating During the Year	
Service	Rate
0-1	25.0%
2-5	15.0%
6-10	5.0%
11+	0.0%

The Volunteer rates were established with the November, 2020 actuarial experience study. The Full-Time rates are based on experience for similar-sized plans in NE Florida.

Disability Rates

Full-Time % Becoming Disabled During the Year		Volunteer % Becoming Disabled During the Year	
Age	Rate	Age	Rate
20	0.068%	20	0.030%
25	0.075%	25	0.030%
30	0.092%	30	0.040%
35	0.117%	35	0.050%
40	0.156%	40	0.070%
45	0.253%	45	0.100%
50	0.474%	50	0.180%
55	0.801%	55	0.360%
60	1.319%	60	0.900%
64+	1.99%	64+	2.220%

The Volunteer rates were established with the November, 2020 actuarial experience study. The Full-Time rates are based on experience for similar-sized plans in NE Florida. Additionally, 90% (Full-Time) and 75% (Volunteer) of Disability Retirements are assumed to be duty-related.

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.

- <u>Investment Return</u>: 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.

- <u>Salary Increases</u>: 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.

- <u>Payroll Growth</u>: The plan's payroll growth assumption, if one is used, causes a predictable annual increase in the plan's amortization payment in order to produce an amortization payment that remains constant as a percentage of payroll if all assumptions are realized. If payroll increases less than the plan's payroll growth assumption, the plan's amortization payment can increase significantly as a percentage of payroll even if all assumptions other than the payroll growth assumption are realized.

- <u>Demographic Assumptions:</u> 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 increased from 163.6% on October 1, 2014 to 275.0% on October 1, 2024, indicating that the plan has experienced a significant growth in active population.

- 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, has increased from 31.0% as of October 1, 2014 to 35.5% as of October 1, 2024.

- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has decreased from 126.1% on October 1, 2014 to 117.4% 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 5.4% indicates that contributions are generally in excess of the plan's benefit payments and administrative expenses.

Low Default-Risk Obligation Measure

ASOP No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, was revised as of December 2021 to include a “low-default-risk obligation measure” (LDROM). This liability measure is consistent with the determination of the actuarial accrued liability shown on page 10 in terms of member data, plan provisions, and assumptions/methods, under the Entry Age Normal Cost Method, except that the interest rate is tied to low-default-risk fixed income securities. The S&P Municipal Bond 20 Year High Grade Rate Index (daily rate closest to, but not later than, the measurement date) was selected to represent a current market rate of low risk but longer-term investments that could be included in a low-risk asset portfolio. The interest rate used in this valuation was 4.06%, resulting in an LDROM of $7,646,370. The LDROM should not be considered the “correct” liability measurement; it simply shows a possible outcome if the Board elected to hold a very low risk asset portfolio. The Board actually invests the pension plan’s contributions in a diversified portfolio of stocks and bonds and other investments with the objective of maximizing investment returns at a reasonable level of risk. Consequently, the difference between the plan’s Actuarial Accrued Liability disclosed earlier in this section and the LDROM can be thought of as representing the expected taxpayer savings from investing in the plan’s diversified portfolio compared to investing only in high quality bonds.

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

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

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	10/1/2024	10/1/2023	10/1/2019	10/1/2014
Support Ratio				
Total Actives	99	95	23	36
Total Inactives	36	36	30	22
Actives / Inactives	275.0%	263.9%	76.7%	163.6%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	2,062,971	1,901,263	1,138,632	883,664
Total Accrued Liability (EAN)	5,806,756	4,109,246	2,974,232	2,849,783
Inactive AL / Total AL	35.5%	46.3%	38.3%	31.0%
Funded Ratio				
Actuarial Value of Assets (AVA)	6,819,920	5,965,944	4,567,621	3,594,367
Total Accrued Liability (EAN)	5,806,756	4,109,246	2,974,232	2,849,783
AVA / Total Accrued Liability (EAN)	117.4%	145.2%	153.6%	126.1%
Net Cash Flow Ratio				
Net Cash Flow [1]	379,693	81,300	(32,540)	210,170
Market Value of Assets (MVA)	7,025,317	5,564,274	4,581,418	3,810,744
Ratio	5.4%	1.5%	-0.7%	5.5%

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

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During Fiscal Year	Amount	Increase from Previous Year
2003	14,328.55	N/A
2004	62,129.98	333.6%
2005	96,546.34	55.4%
2006	128,816.42	33.4%
2007	242,231.00	88.0%
2008	380,757.00	57.2%
2009	499,181.00	31.1%
2010	339,246.90	-32.0%
2011	359,373.51	5.9%
2012	377,962.48	5.2%
2013	364,571.49	-3.5%
2014	381,967.45	4.8%
2015	324,642.30	-15.0%
2016	273,487.45	-15.8%
2017	232,596.92	-15.0%
2018	263,090.68	13.1%
2019	247,471.42	-5.9%
2020	271,790.64	9.8%
2021	308,196.92	13.4%
2022	350,084.88	13.6%
2023	676,590.95	93.3%
2024	827,363.49	22.3%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2024

ASSETS	MARKET VALUE
Cash and Cash Equivalents:	
Cash	98,364.95
Total Cash and Equivalents	98,364.95
Total Receivable	0.00
Investments:	
Mutual Funds:	
Fixed Income	2,058,637.74
Equity	4,208,614.36
Pooled/Common/Commingled Funds:	
Real Estate	660,450.33
Total Investments	6,927,702.43
Total Assets	7,026,067.38
LIABILITIES	
Payables:	
Administrative Expenses	750.00
Total Liabilities	750.00
NET POSITION RESTRICTED FOR PENSIONS	7,025,317.38

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

<u>ADDITIONS</u>		
Contributions:		
State	827,363.49	
Total Contributions		827,363.49
Investment Income:		
Earnings/(Losses) as disclosed in FMPTF statement	1,093,096.74	
Less Investment Expense[1]	(11,747.78)	
Net Investment Income		1,081,348.96
Total Additions		1,908,712.45
<u>DEDUCTIONS</u>		
Distributions to Members:		
Benefit Payments	200,297.88	
Lump Sum Share Distributions	212,034.70	
Total Distributions		412,332.58
Administrative Expense		35,336.90
Total Deductions		447,669.48
Net Increase in Net Position		1,461,042.97
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		5,564,274.41
End of the Year		7,025,317.38

[1]Investment 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	19.22%
09/30/2022	-13.59%
09/30/2023	8.99%
09/30/2024	19.85%

Annualized Rate of Return for prior four (4) years: 7.70%

(A) 10/01/2023 Actuarial Assets:		$5,965,944.01
(I) Net Investment Income:		
1. Interest and Dividends	1,093,096.74	
2. Realized Gain (Loss)	0.00	
3. Unrealized Gain (Loss)	0.00	
4. Change in Actuarial Value	(607,066.81)	
5. Investment Related Expenses	(11,747.78)	
Total		474,282.15
(B) 10/01/2024 Actuarial Assets:		$6,819,920.17

Actuarial Asset Rate of Return = 2I/(A+B-I), based on Unlimited Actuarial Assets: 7.70%

10/01/2024 Limited Actuarial Assets	$6,819,920.17
10/01/2024 Market Value of Assets	$7,025,317.38

Actuarial Asset Rate of Return, based on Limited Actuarial Assets: 7.70%

Actuarial Gain/(Loss) due to Investment Return (Limited Actuarial Asset Basis) $43,116.56

[1]Market Value Basis, net of investment related expenses.

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

REVENUES		
Contributions:		
State	827,363.49	
Total Contributions		827,363.49
Earnings from Investments:		
Earnings/(Losses) as disclosed in FMPTF statement	1,093,096.74	
Change in Actuarial Value	(607,066.81)	
Total Earnings and Investment Gains		486,029.93
EXPENDITURES		
Distributions to Members:		
Benefit Payments	200,297.88	
Lump Sum Share Distributions	212,034.70	
Total Distributions		412,332.58
Expenses:		
Investment related[1]	11,747.78	
Administrative	35,336.90	
Total Expenses		47,084.68
Change in Net Assets for the Year		853,976.16
Net Assets Beginning of the Year		5,965,944.01
Net Assets End of the Year[2]		6,819,920.17

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

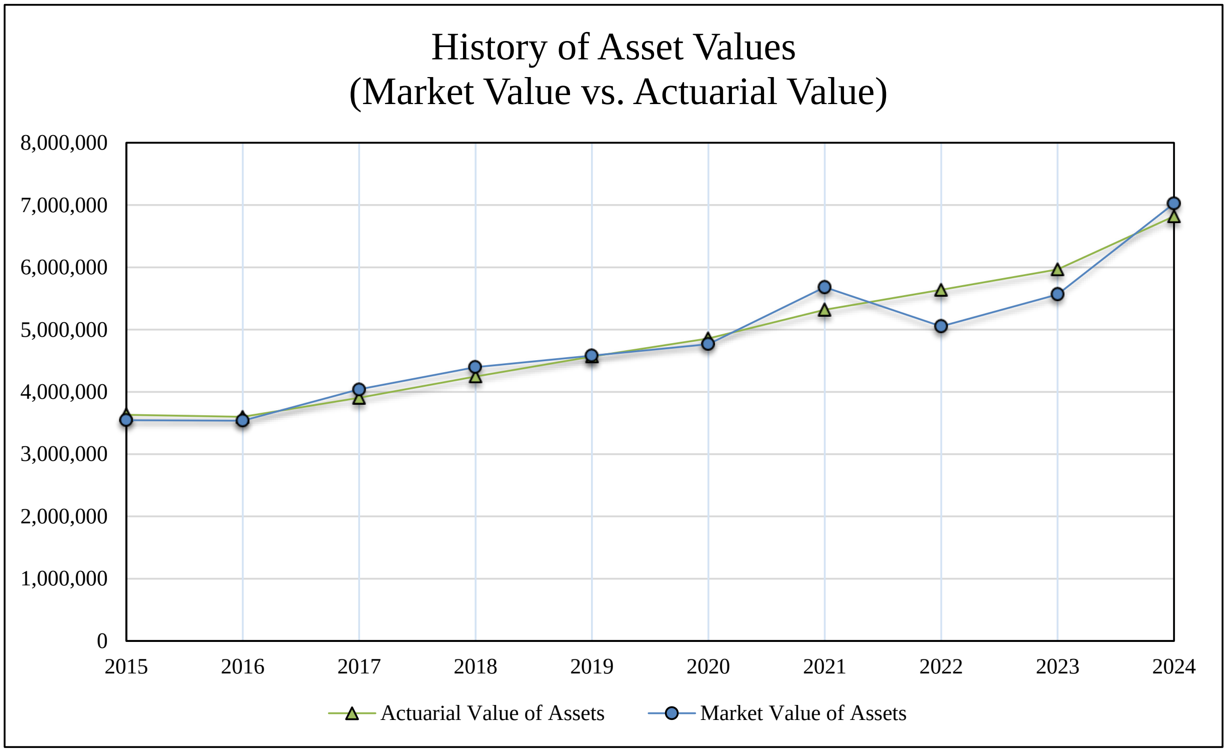
SUPPLEMENTAL CHAPTER 175 SHARE PLAN ACTIVITY
October 1, 2023 through September 30, 2024

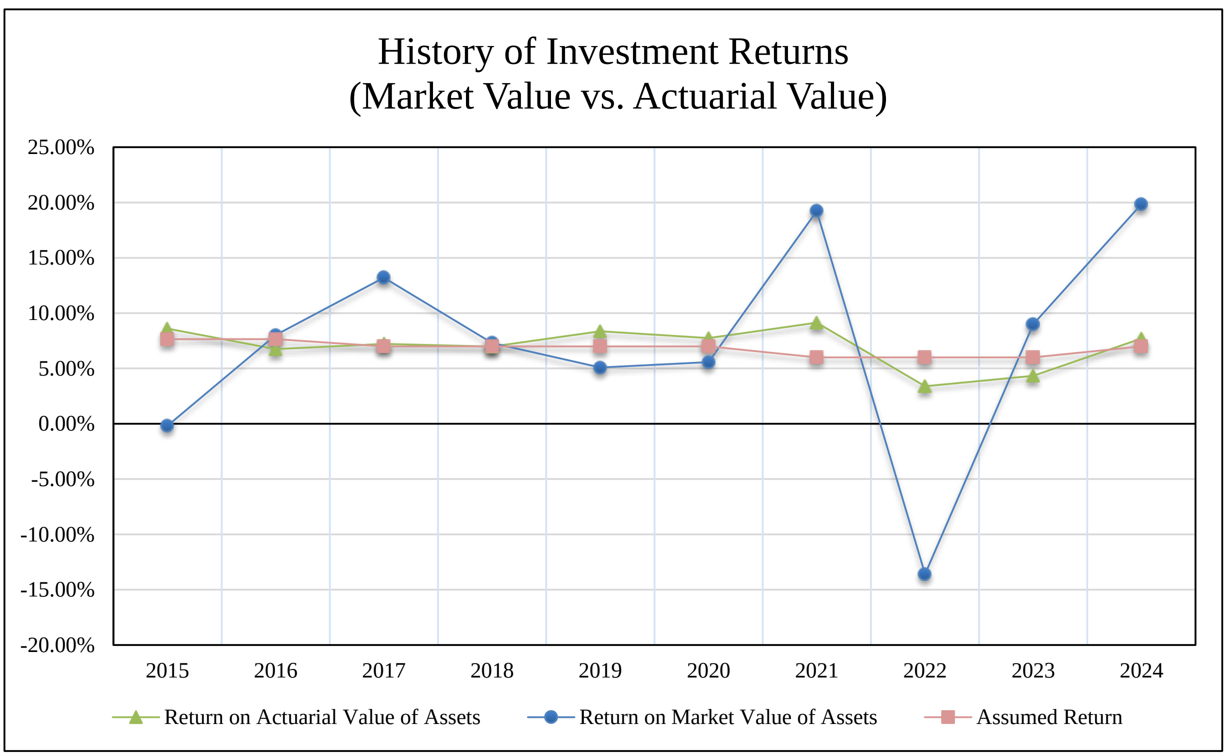
9/30/2023 Balance	1,196,684.34
Prior Year Adjustment	(18,100.79)
Plus Additions	627,363.49
Investment Return Earned (Est.)	191,860.00
Administrative Fees	0.00
Less Distributions	(212,034.70)
9/30/2024 Balance (Est.)	1,785,772.34

CITY CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2024

(1)	City and State Required Contribution	140,193.00
(2)	Less Allowable State Contribution	(200,000.00)
(3)	Equals Required City Contribution for Fiscal 2024	0.00
(4)	Less 2023 Prepaid Contribution	0.00
(5)	Less Actual City Contributions	0.00
(6)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2024	$0.00

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





STATISTICAL DATA

	10/1/2024	10/1/2023	10/1/2022	10/1/2021
Actives - Full-Time				
Number	67	0	0	0
Average Current Age	36.6	N/A	N/A	N/A
Average Age at Employment [1]	36.6	N/A	N/A	N/A
Average Past Service [1]	0.0	N/A	N/A	N/A
Average Annual Salary	$78,097	N/A	N/A	N/A
Actives - Volunteer				
Number	32	28	27	33
Average Current Age	39.6	45.5	39.7	40.1
Average Age at Employment	37.7	42.7	37.1	36.9
Average Past Service	1.9	2.8	2.6	3.2
Service Retirees				
Number	26	28	31	28
Average Current Age	76.4	76.7	76.0	77.5
Average Annual Benefit	$7,098	$7,534	$7,445	$7,128
Beneficiaries				
Number	2	2	1	0
Average Current Age	62.2	61.2	39.8	N/A
Average Annual Benefit	$2,302	$2,302	$1,879	N/A
Disability Retirees				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
Terminated Vested				
Number	8	6	6	5
Average Current Age	42.7	39.1	38.1	38.9
Average Annual Benefit	$8,288	$6,050	$6,050	$3,900

[1] Credited Service for benefit accrual purposes begins January 19, 2025 for Full-Time Firefighters.

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	6											6
20 - 24	13	2	2					1				18
25 - 29	9						1					10
30 - 34	11			1								12
35 - 39	9											9
40 - 44	15		1									16
45 - 49	10							1				11
50 - 54	3		1									4
55 - 59	3			1								4
60 - 64	2		1					1				4
65+	2		1	1		1						5
Total	83	2	6	3	0	1	1	3	0	0	0	99

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2023	95
b. Terminations	
i. Vested (partial or full) with deferred annuity	(2)
ii. Vested in refund of member contributions only	0
ii. Nonvested termination	(7)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	(1)
d. Disabled	0
e. Retired	0
f. Continuing participants	85
g. New entrants / Rehires	14
h. Total active life participants in valuation	99

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

	Service Retirees, Vested Receiving Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due Refund)	Total
a. Number prior valuation	28	2	0	6	0	36
Retired						0
Vested (Deferred Annuity)				2		2
Vested (Due Refund)						0
Hired/Terminated in Same Year						0
Death, With Survivor						0
Death, No Survivor	(2)					(2)
Disabled						0
Refund of Contributions						0
Rehires						0
Expired Annuities						0
Data Corrections						0
b. Number current valuation	26	2	0	8	0	36

SUMMARY OF CURRENT PLAN
(Through Ordinance 2024-16)

Credited Service

Full-Time	The aggregate number of years, and fractional parts of years of service earned while employed as a Full-Time Firefighter with the Palm Coast Fire Department after January 19, 2025. Solely for purposes of vesting or eligibility for retirement, credited service for Full-Time Members includes the aggregate number of years and fractional parts of years of service earned while employed as a Full-Time Firefighter with the Palm Coast Fire Department before January 19, 2025.
Volunteer	Total years and fractional parts of years of service with the City as Volunteer Firefighter. Credited Service is based on "Length of Service Award Pension Program – Qualification Criteria."

Compensation (Full-Time Only) — The fixed monthly remuneration paid a Full-Time Firefighter. Compensation shall include up to 300 hours per year in overtime compensation but shall not include payments for accrued unused sick or annual leave.

Average Final Compensation (AFC) — Five highest years of the last ten years of Credited Service before retirement, DROP entry, termination, or death.

Normal Retirement

Full-Time

Date	Earlier of age 55 with the completion of 10 years of Credited Service, or the completion of 25 years of Credited Service, regardless of age.
Benefit	3% of AFC for each year of Credited Service. Credited Service for determination of the accrued benefit begins January 19, 2025.
Form of Benefit	Ten-Year Certain and Life thereafter (options available).

Volunteer

Date — Earlier of age 62 with the completion of 5 years of Credited Service, age 55 with the completion of 10 years of Credited Service, or age 52 with the completion of 25 years of Credited Service.

Benefit Accrual Rate

Credited Service	Monthly Benefit Accrual (for each year of Credited Service)
Less than 10 years	$85
At least 10 years	$100

Form of Benefit — Ten-Year Certain and Life thereafter (options available).

Early Retirement

Date — Age 50 with the completion of 10 years of Credited Service.

Benefit Amount — Accrued benefit, reduced 3% per year from Age 55 (or 62 for Volunteers).

Disability Benefits

Eligibility

Service Incurred — Covered from Date of Employment.

Non-Service Incurred — Ten years of Credited Service.

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

Benefit — Benefit accrued to date of disability. For Full-Time Firefighters, the Service-Incurred benefit is not less than 42% of AFC, while the Non-Service Incurred benefit is not less than 25% of AFC.

Duration — Payable for life (with the first ten years guaranteed) or until recovery (as determined by the Board).

Death Benefits

Eligibility	Ten years of Credited Service for Full-Time Firefighters and five years of Credited Service for Volunteer Firefighters.
Benefit	Accrued benefit paid to Beneficiary for ten years, beginning at the Member's Normal Retirement Date (unreduced) or Early Retirement Date (reduced).
Post-Retirement	According to option selected, if any.

Vesting (Termination)

Eligibility	Ten years of Credited Service for Full-Time Firefighters and five years of Credited Service for Volunteer Firefighters. Credited Service for Full-Time Firefighters includes all years of full time firefighter service with the City of Palm Coast (including those years and fractional parts of years prior to January 19, 2025).
Benefit	Accrued benefit payable at the Member's election, on his otherwise Early or Normal Retirement Date. Full-Time Firefighters who terminate prior to the completion of 10 years of Credited Service are entitled only to a refund of accumulated member contributions (without interest).

Contributions

Full-Time Firefighters	5% of Compensation.
Premium Tax (State Monies)	1.85% tax on premiums for fire insurance policies.
City	Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over a period not exceeding 30 years.

Deferred Retirement Option Plan (DROP)	Available for Full-Time Firefighters for a period up to 60 months following attainment of Normal Retirement eligibility. Interest crediting is based on the plan's net-of-fees investment performance.

Supplement Benefit (Share Accounts)

Eligibility	Volunteer Firefighters only.
Initial Crediting	80% of the $1,505,738 Excess State Monies Reserve, established as of September 30, 2014, is allocated to eligible Volunteer Firefighters.
Annual Crediting	Annual Premium tax revenues received by the City in excess of the $200,000 applicable frozen amount shall be allocated to eligible accounts (Volunteers only) on a pro-rata basis (based on Credited Service). The last crediting of State Monies is for the fiscal year ending September 30, 2024. Beginning with fiscal 2025, the City is entitled to all future State Monies to assist with Plan funding.
Investment earnings	Eligible Share Accounts shall be credited or debited annually, based on the Plan's net-of-fees investment performance for the immediately preceding Plan Year.
Maximum Benefit	$3,000 combined for benefits payable under the "Length of Service Award Pension Program" and allocations pursuant to the Supplement Benefit program.
Vesting	Five years of Credited Service.
Eligibility for Distribution	Eligible for Normal or Early Retirement.

Board of Trustees

a. Two appointees of City Council;

b. Two Firefighters elected by the members of the department; and

c. Fifth member elected by the other four and appointed by Council as a ministerial duty.