



April 1, 2025

Board of Trustees City of Palm Bay Police & Firefighters' Pension Fund Conlan Professional Center 1501 Robert J. Conlan Blvd. NE Suite 260 Palm Bay, FL 32905-3567

Re: City of Palm Bay Police and Firefighters' Pension Fund (Firefighters)

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Palm Bay Police and Firefighters' Pension Fund (Firefighters). 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 Bay, 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 Bay, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police and Firefighters' Pension Fund (Firefighters). 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:

Bradley R. Heinrichs, FSA, EA, MAAA

Enrolled Actuary #23-6901

By:

Patrick T. Donlan, EA, ASA, MAAA

Enrolled Actuary #23-6595

PTD/lke

Enclosures

TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	6
	b. Changes Since Prior Valuation	8
	c. Comparative Summary of Principal Valuation Results	9
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	15
	b. Detailed Actuarial (Gain)/Loss Analysis	17
	c. History of Funding Progress	18
	d. Actuarial Assumptions and Methods	19
	e. Glossary	23
	f. Discussion of Risk	25
	g. Partial History of Premium Tax Refunds	29
Ш	Trust Fund	30
IV	Member Statistics	
	a. Statistical Data	38
	b. Age and Service Distribution	39
	c. Valuation Participant Reconciliation	40
V	Summary of Current Plan	41

SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Palm Bay Police and Firefighters' Pension Fund (Firefighters), 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 2, 2024 actuarial impact statement, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2024 9/30/2026	10/1/2023 9/30/2025
Minimum Required Contribution	\$7,252,911	\$5,931,526
Member Contributions (Est.)	835,790	747,994
City And State Required Contribution	6,417,121	5,183,532
City And State Required Contribution State Contribution (Est.) ¹	6,417,121 972,052	5,183,532 972,052

¹ Represents the amount received in calendar 2024. As per a Mutual Consent Agreement between the Membership and the City, State Monies received each year up to \$825,324 will be available to offset the City's required contribution. Firefighter monies received in excess of \$825,324 will be equally shared between the City and the Firefighter Share Plan.

² Please note that the City has access to a prepaid contribution of \$295,969.20 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 an increase when compared to the results set forth in the October 2, 2024 actuarial impact statement. The increase is attributable to a reduction in the investment return assumption, an increase in the projected annual payroll and unfavorable actuarial experience as described below.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an investment return of 4.52% (Actuarial Asset Basis) which fell short of the 7.50% assumption and an average salary increase of 13.18% which exceeded the 4.77% assumption. There were no significant sources of actuarial gain.

CHANGES SINCE PRIOR VALUATION

Plan Changes

Ordinance No. 2024- 59 was adopted on September 19, 2024. This ordinance provided an increase in the supplemental benefit to \$30 per month per year of service and it is payable until the member is age eligible to receive Medicare coverage under the Federal Guidelines, effective for members who terminate employment or enter DROP on or after October 1, 2024. The benefit will not be paid to disabled members who are being retained on the City's insurance at the expenses of the City. For the eligible members, the \$30 per month per year of service will apply to all years of service not just service after October 1, 2024. The impact of this change on funding requirements is outlined in our Actuarial Impact Statement dated October 2, 2024.

Actuarial Assumption/Method Changes

As approved by its October 4, 2024 Board meeting, the investment rate of return assumption was reduced from 7.5% to 7.4% in conjunction with 10/1/2024 valuation.

There have been no method changes since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2024</u>	Old Assump <u>10/1/2024</u>	10/1/2023
A. Participant Data			
Actives	128	128	122
Service Retirees	83	83	82
DROP Retirees	2	2	4
Beneficiaries	5	5	3
Disability Retirees	9	9	10
Terminated Vested	<u>4</u>	<u>4</u>	<u>2</u>
Total	231	231	223
Projected Annual Payroll	8,774,974	8,774,974	7,844,932
Annual Rate of Payments to:			
Service Retirees	5,781,442	5,781,442	5,590,069
DROP Retirees	169,172	169,172	302,184
Beneficiaries	221,327	221,327	139,902
Disability Retirees	356,107	356,107	402,692
Terminated Vested	2,988	2,988	2,988
B. Assets			
Actuarial Value (AVA) ¹	105,085,199	105,085,199	103,258,662
Market Value (MVA) ¹	104,351,091	104,351,091	91,403,520
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	63,190,785	61,955,887	52,781,279
Disability Benefits	3,415,738	3,359,160	3,041,285
Death Benefits	928,381	910,027	832,087
Vested Benefits	1,769,573	1,719,918	1,614,855
Refund of Contributions	229,561	228,920	216,372
Service Retirees	80,421,041	79,592,227	77,740,895
DROP Retirees ¹	5,532,535	5,500,499	7,737,092
Beneficiaries	2,982,200	2,951,065	1,842,627
Disability Retirees	4,372,167	4,330,364	5,189,869
Terminated Vested	80,654	80,099	61,362
Share Plan Balances ¹	265,543	265,543	103,846
Total	163,188,178	160,893,709	151,161,569

C. Liabilities - (Continued)	New Assump <u>10/1/2024</u>	Old Assump <u>10/1/2024</u>	10/1/2023
Present Value of Future Salaries	78,470,392	77,998,589	70,526,142
Present Value of Future			
Member Contributions	6,874,006	6,832,676	6,178,090
Normal Cost (Retirement)	1,993,131	1,943,108	1,764,741
Normal Cost (Disability)	250,015	246,409	225,776
Normal Cost (Death)	79,593	78,276	72,111
Normal Cost (Vesting)	105,721	102,612	96,593
Normal Cost (Refunds)	41,068	41,035	40,070
Total Normal Cost	2,469,528	2,411,440	2,199,291
Present Value of Future			
Normal Costs	21,294,502	20,664,659	18,992,225
Accrued Liability (Retirement)	45,731,532	45,038,753	37,285,328
Accrued Liability (Disability)	1,296,763	1,283,228	1,109,081
Accrued Liability (Death)	234,344	231,393	199,287
Accrued Liability (Vesting)	944,266	923,217	868,197
Accrued Liability (Refunds)	32,631	32,662	31,760
Accrued Liability (Inactives) 1	93,388,597	92,454,254	92,571,845
Share Plan Balances ¹	265,543	265,543	103,846
Total Actuarial Accrued Liability (EAN AL)	141,893,676	140,229,050	132,169,344
Unfunded Actuarial Accrued			
Liability (UAAL)	36,808,477	35,143,851	28,910,682
Funded Ratio (AVA / EAN AL)	74.1%	74.9%	78.1%

D. Actuarial Present Value of Accrued Benefits	New Assump <u>10/1/2024</u>	Old Assump <u>10/1/2024</u>	10/1/2023
Vested Accrued Benefits			
Inactives + Share Plan Balances ¹	93,654,140	92,719,797	92,675,691
Actives	22,877,183	22,440,618	16,405,808
Member Contributions	6,132,820	6,132,820	5,490,446
Total	122,664,143	121,293,235	114,571,945
Non-vested Accrued Benefits	6,190,825	6,083,935	6,851,447
Total Present Value			
Accrued Benefits (PVAB)	128,854,968	127,377,170	121,423,392
Funded Ratio (MVA / PVAB)	81.0%	81.9%	75.3%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	1,477,798	0	
Plan Experience	0	4,800,658	
Benefits Paid	0	(7,666,154)	
Interest	0	8,819,274	
Other	0	0	
Total	1,477,798	5,953,778	

Valuation Date Applicable to Fiscal Year Ending	New Assump 10/1/2024 <u>9/30/2026</u>	Old Assump 10/1/2024 9/30/2026	10/1/2023 9/30/2025
E. Pension Cost			
Normal Cost ²	\$2,685,104	\$2,623,210	\$2,393,799
Administrative Expenses ²	310,461	310,610	281,283
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 25 years (as of 10/1/2024) ²	4,257,346	4,090,832	3,256,444
Minimum Required Contribution	7,252,911	7,024,652	5,931,526
Expected Member Contributions ²	835,790	836,193	747,994
Expected City and State Contribution	6,417,121	6,188,459	5,183,532
F. Past Contributions			
Plan Years Ending:	9/30/2024		
City and State Requirement	4,249,792		
Actual Contributions Made:			
City State Total	3,277,740 972,052 4,249,792		
G. Net Actuarial (Gain)/Loss	6,562,295		

 $^{^1\,}$ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2024 and 9/30/2023 .

 $^{^{\}rm 2}$ Contributions developed as of 10/1/2024 displayed above have been adjusted to account for assumed salary increase and interest components.

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

	Projected Unfunded
Year	Actuarial Accrued Liability
2024	36,808,477
2025	35,327,012
2026	33,735,918
2032	21,388,182
2038	4,386,674
2043	1,352,536
2049	0

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

		Actual	Assumed
Year Ended	9/30/2024	13.18%	4.77%
Year Ended	9/30/2023	6.84%	4.80%
Year Ended	9/30/2022	6.70%	4.78%
Year Ended	9/30/2021	3.59%	4.79%
Year Ended	9/30/2020	3.71%	5.44%

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

		Market Value	Actuarial Value	<u>Assumed</u>
Year Ended	9/30/2024	17.43%	4.52%	7.50%
Year Ended	9/30/2023	7.01%	2.86%	7.50%
Year Ended	9/30/2022	-18.62%	4.11%	7.65%
Year Ended	9/30/2021	20.31%	11.04%	7.65%
Year Ended	9/30/2020	11.37%	8.50%	7.75%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2024 10/1/2014	\$8,774,974 5,090,530
(b) Total Increase		72.38%
(c) Number of Years		10.00
(d) Average Annual Rate		5.60%

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.

Patrick T. Donlan, EA, ASA, MAAA

Enrolled Actuary #23-6595

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	\$28,910,682
(2)	Sponsor Normal Cost developed as of October 1, 2023	1,512,075
(3)	Expected administrative expenses for the year ended September 30, 2024	258,427
(4)	Expected interest on (1), (2) and (3)	2,291,398
(5)	Sponsor contributions to the System during the year ended September 30, 2024	4,249,792
(6)	Expected interest on (5)	141,234
(7)	Expected Unfunded Actuarial Accrued Liability as of	
(,)	September 30, 2024 (1)+(2)+(3)+(4)-(5)-(6)	28,581,556
(8)	Change to UAAL due to Assumption Change	1,664,626
(9)	Change to UAAL due to Actuarial (Gain)/Loss	6,562,295
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2024	36,808,477

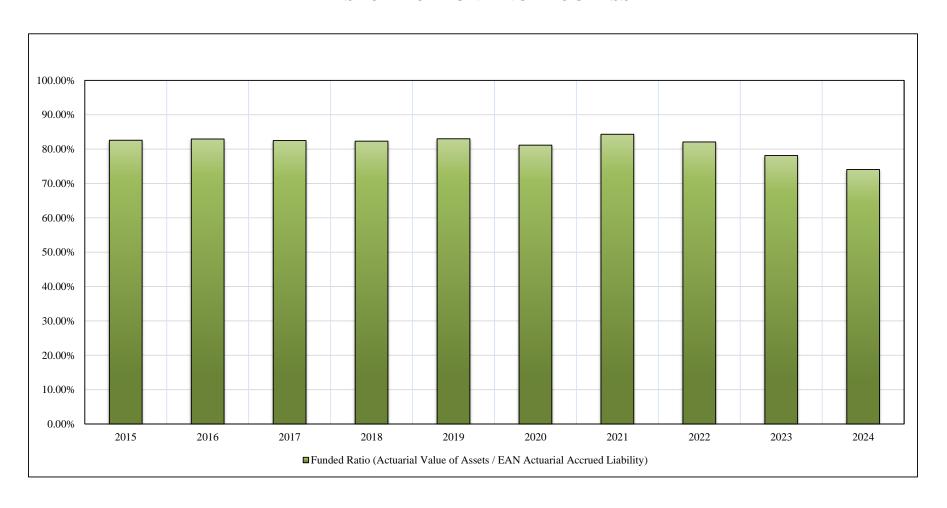
Type of	Date	Years	10/1/2024	Amortization
Base	Established	Remaining	<u>Amount</u>	<u>Amount</u>
		-		
A	10/1/2003	9	2,641	384
В	10/1/2004	10	303	41
C	10/1/2005	11	35,499	4,496
D	10/1/2005	11	9,074	1,149
E	10/1/2006	12	(668)	(80)
F	10/1/2006	12	23,015	2,756
Actuarial Loss	10/1/2007	13	4,105,078	467,757
Actuarial Loss	10/1/2008	14	2,403,005	262,011
Actuarial Loss	10/1/2009	15	3,019,930	316,572
Actuarial Loss	10/1/2010	16	1,349,270	136,535
Method Change	10/1/2010	16	(2,172,504)	(219,840)
Benefit Change	10/1/2010	16	(191,188)	(19,347)
Actuarial Loss	10/1/2011	17	2,182,657	213,959
Assumption Change	10/1/2011	17	3,477,888	340,926
Actuarial Gain	10/1/2012	18	(988,151)	(94,124)
Actuarial Gain	10/1/2013	19	(1,353,417)	(125,606)
Actuarial Loss	10/1/2014	20	455,812	41,315
Assumption Change	10/1/2015	21	2,159,812	191,600
Actuarial Gain	10/1/2015	21	(1,390,870)	(123,386)
Actuarial Loss	10/1/2016	22	520,550	45,282
Actuarial Loss	10/1/2017	23	1,412,584	120,695
Actuarial Loss	10/1/2018	24	1,226,634	103,102
Benefits Change	10/1/2018	24	(24,864)	(2,090)
Actuarial Loss	10/1/2019	25	424,161	35,120
Asmp/Mthd Change	10/1/2020	11	3,085,795	390,828

Type of	Date	Years	10/1/2024	Amortization
<u>Base</u>	Established	Remaining	<u>Amount</u>	<u>Amount</u>
Actuarial Gain	10/1/2020	11	(148,164)	(18,766)
Benefits Change	10/1/2020	11	462,717	58,605
Actuarial Gain	10/1/2021	12	(2,324,581)	(278,342)
Actuarial Loss	10/1/2022	13	2,330,501	265,551
Assump Change	10/1/2022	13	2,124,009	242,022
Actuarial Loss	10/1/2023	14	5,408,866	589,753
Benefits Change	10/1/2023	14	956,162	104,255
Actuarial Loss	10/1/2024	15	6,562,295	687,909
Assump Change	10/1/2024	15	1,664,626	174,499
			36,808,477	3,915,541

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2023	\$28,910,682
(2) Expected UAAL as of October 1, 2024	28,581,556
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	3,042,892
Salary Increases	2,916,120
Active Decrements	(177,993)
Inactive Mortality	318,087
Interest Crediting on Share Plan Balances and DROP Balances	422,440
Other	40,749
Increase in UAAL due to (Gain)/Loss	6,562,295
Assumption Changes	1,664,626
(4) Actual UAAL as of October 1, 2024	\$36,808,477

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 (Above Median) for Healthy

Retirees, set forward one year.

Male: PubS.H-2010 (Above Median) for Healthy

Retirees, set forward one year.

Beneficiary Lives:

Female: PubG.H-2010 (Above Median) for Healthy

Retirees.

Male: PubG.H-2010 (Above 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, 2023 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

90% of active deaths are assumed to be service-incurred.

7.40% (prior year 7.50%) 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.

See table later in this section. This assumption was adopted based on the July 7, 2020 experience study.

Interest Rate

Salary Increase - Individual

<u>Payroll Growth</u> 0.00% for purposes of amortizing the Unfunded

Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida

Statutes.

Termination See table later in this section. This assumption was

adopted based on the July 7, 2020 experience study.

<u>Disability</u> See sample rates in the table later in this section. This

assumption was adopted based on the July 7, 2020 experience study. 90% of Disabilities are assumed to be

service connected.

Service Retirement See table later in this section. This assumption was

adopted based on the July 7, 2020 experience study.

Form of Payment: 10-Year Certain and Continuous annuity.

<u>Percentage Married At Retirement</u> 100% of active members are assumed married at

retirement.

Spouse Ages: For active members reaching retirement, wives are

assumed to be three years younger than husbands. Where spousal information was included for retirees, that information was used. If the age of the spouse was not provided, we have assumed that all spouses are still alive, and that female spouses are three years younger

than their husbands.

<u>Administrative Expenses</u> \$285,535 annually, based on the average of actual

expenses incurred in the prior two fiscal years.

<u>Amortization Method</u> 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 7.40% assumption.

Salary - A full year, based on current 4.85% assumption.

Actuarial Value of Assets:

The market value of assets is adjusted to recognize, over a four-year period, investment earnings greater than (or less than) the assumed investment return. The Actuarial Value of Assets shall not be more than 120% nor less than 80% of the market value of assets. Details are shown in the Asset Information Section of the report.

Assum	ption	<u>Tables</u>

% Terminating		% Becoming Disabled		
During t	he Year	_	Durir	ng the Year
Service	Rate	_	Age	Rate
<5	6.00%		20	0.14%
5-9	2.50%		25	0.15%
10+	2.00%		30	0.18%
			35	0.23%
			40	0.30%
			45	0.51%
			50	1.00%
			55	1.55%
			60	2.09%

Salary Scale			% Retiring Dur	ing the Year
Age	Rate	Service	Age	Rate
<25	7.25%	<10	55-59	20.00%
25 -29	6.25%		60+	100.00%
30 - 34	5.25%	10-19	50-54	5.00%
35 - 39	4.75%		55	75.00%
40 - 44	4.25%		56-57	50.00%
45 +	4.00%		58+	100.00%
		20-24	45-54	5.00%
			55	75.00%
			56-57	50.00%
			58+	100.00%
		25	45-55	75.00%
			56-57	50.00%
			58+	100.00%
		26-27	45-57	50.00%
			58+	100.00%
		28+	Any	100.00%

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.

<u>Entry Age Normal Cost Method</u> - 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.

<u>Market Value of Assets</u> 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.

<u>Normal (Current Year's) Cost</u> 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.

<u>Payroll Under Assumed Ret. Age</u> 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.

<u>Projected Annual Payroll</u> is the projected annual rate of pay for the fiscal year following the fiscal year beginning on the valuation date of all covered Members.

<u>Present Value of Benefits</u> is the single sum value on the valuation date of all future benefits to be paid to current plan participants.

<u>Total Annual Payroll</u> is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members.

<u>Total Required Contribution</u> 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.

<u>Unfunded Actuarial Accrued Liability (UAAL)</u> 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.
- 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 134.7% on October 1, 2014 to 128.0% 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 65.8%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has decreased from 82.2% on October 1, 2014 to 74.1% 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, increased from -3.7% on October 1, 2014 to -2.7% on October 1, 2024. The current Net Cash Flow Ratio of -2.7% 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 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 \$223,912,888. 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 Total Inactives ¹ Actives / Inactives ¹	128 100 128.0%	122 100 122.0%	109 93 117.2%	101 75 134.7%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	104,351,091 9,241,235 1,129.2%	91,403,520 7,999,361 1,142.6%	87,715,010 6,505,877 1,348.2%	74,668,730 5,419,284 1,377.8%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	93,388,597 141,893,676 65.8%	92,571,845 132,169,344 70.0%	81,091,702 107,442,500 75.5%	59,331,752 85,091,425 69.7%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	105,085,199 141,893,676 74.1%	103,258,662 132,169,344 78.1%	89,181,677 107,442,500 83.0%	69,972,056 85,091,425 82.2%
Net Cash Flow Ratio				
Net Cash Flow ² Market Value of Assets (MVA) Ratio	(2,795,386) 104,351,091 -2.7%	(3,350,639) 91,403,520 -3.7%	(2,116,814) 87,715,010 -2.4%	(2,786,171) 74,668,730 -3.7%

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

Received During <u>Fiscal Year</u>	<u>Amount</u>	Increase from Previous Year
1998	137,359.61	%
1999	183,210.18	33.4%
2000	194,012.88	5.9%
2001	202,046.08	4.1%
2002	241,347.74	19.5%
2003	267,090.23	10.7%
2004	304,874.85	14.1%
2005	361,705.29	18.6%
2006	442,391.15	22.3%
2007	562,486.88	27.1%
2008	724,397.17	28.8%
2009	610,510.09	-15.7%
2010	603,953.91	-1.1%
2011	595,169.63	-1.5%
2012	614,483.16	3.2%
2013	622,785.72	1.4%
2014	639,517.60	2.7%
2015	590,203.45	-7.7%
2016	559,910.41	-5.1%
2017	506,773.86	-9.5%
2018	522,880.25	3.2%
2019	497,478.45	-4.9%
2020	526,140.72	5.8%
2021	549,528.93	4.4%
2022	580,173.81	5.6%
2023	1,028,081.17	77.2%
2024	1,118,779.26	8.8%

STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2024

ASSETS Geological Cools Fracingles (1)	MARKET VALUE
Cash and Cash Equivalents: Short Term Investments Deposits Prepaid Expenses Cash	2,322,426.23 852.03 17,842.38 36,055.36
Total Cash and Equivalents	2,377,176.00
Receivables: Accounts Receivable State Contributions From General Trust Fund From Broker for Investments Sold Investment Income	94.56 406,211.04 439.96 73,628.08 261,652.19
Total Receivable	742,025.83
Investments: Federal Agency Guaranteed Securities Corporate Bonds Stocks Pooled/Common/Commingled Funds: Equity Real Estate	12,033,973.44 24,967,105.99 24,205,372.07 28,594,801.38 12,170,184.59
Total Investments	101,971,437.47
Total Assets	105,090,639.30
LIABILITIES Payables: DROP Distributions Accounts Payable To Broker for Investments Purchased Prepaid City Contribution	241,634.03 133,142.61 68,802.18 295,969.20
Total Liabilities	739,548.02
NET POSITION RESTRICTED FOR PENSIONS	104,351,091.28

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

ADDITIONS

Con	tribu	ıtioı	ns:
0011		40101	

Member	759,696.42
City	3,277,740.37
State	1,118,779.26

Total Contributions 5,156,216.05

Investment Income:

Miscellaneous Income 3,833.83

Realized & Unrealized Gain (Loss) 13,295,266.39

Net Increase in Fair Value of Investments 13,299,100.22

Interest & Dividends 2,876,744.92

Less Investment Expense¹ (432,887.52)

Net Investment Income 15,742,957.62

Total Additions 20,899,173.67

DEDUCTIONS

Distributions to Members:

Benefit Payments6,194,251.57Lump Sum DROP Distributions1,345,522.10Lump Sum Share Distributions1,892.64Refunds of Member Contributions124,488.17

Total Distributions 7,666,154.48

Administrative Expense 285,448.07

Total Deductions 7,951,602.55

Net Increase in Net Position 12,947,571.12

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 91,403,520.16

End of the Year 104,351,091.28

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 recognizing the total actuarial investment gain or loss for each Plan Year over a four year period. In the first year, 25% of the gain or loss is recognized. In the second year 50%, in the third year 75%, and in the fourth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year	<u>G</u>	ains/(Losses) Not	Yet Recognized	cognized by Valuation	Vaar
Ending	Gain/Loss	2024	2025	2026	2027
09/30/2021	11,825,856	0	0	0	0
09/30/2022	(28,978,053)	(7,244,514)	0	0	0
09/30/2023	(430,106)	(215,052)	(107,525)	0	0
09/30/2024	8,967,278	6,725,458	4,483,638	2,241,818	0
Total		(734,108)	4,376,113	2,241,818	0
		elopment of Inves			
	Assets, including Prep			91,780,694	
Contributions Less	s Benefit Payments &	Admin Expense	S	(2,876,591)	
Expected Investme	ent Earnings*	_		6,775,680	
Actual Net Investr				15,742,958	
2024 Actuarial Inv	vestment Gain/(Loss)			8,967,278	
*Expected Investm	nent Earnings = 0.075	5 * [91,780,694 +	0.5 * (2,876,591))]	
	Deve	lopment of Actuar	rial Value of Ass	ets	
(1) Market Value	of Assets, 09/30/202			104,351,091	
(2) Gains/(Losses) Not Yet Recognized	d		(734,108)	
(3) Actuarial Valu	ie of Assets, 09/30/20	024, (1) - (2)		105,085,199	
(4) Limited Actuarial Value of Assets, 09/30/2024 105,085,199				105,085,199	
(A) 09/30/2023 Actuarial Assets, including Prepaid Contributions: 103,635,836					
(I) Net Investment	t Income:				
1. Interest and l				2,880,579	
	Inrealized Gain (Los	c)		13,295,266	
3. Change in A		3)		(11,121,034)	
4. Investment E				(432,888)	
4. Hivestilient L	Total			4,621,924	
	1000			.,021,22.	
(B) 09/30/2024 Ac	ctuarial Assets, include	ding Prepaid Cont	ributions:	105,381,168	
Actuarial Asset Rate of Return = $2I/(A+B-I)$: 4.52%					
	Assets Rate of Return			17.43%	
Actuarial Gain/(Lo	oss) due to Investmer	nt Return (Actuaria	al Asset Basis)	(3,042,892)	

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

REVENUES

	REVENUES	
Contributions: Member City State	759,696.42 3,277,740.37 1,118,779.26	
Total Contributions		5,156,216.05
Earnings from Investments: Interest & Dividends Miscellaneous Income Realized & Unrealized Gain (Loss) Change in Actuarial Value	2,876,744.92 3,833.83 13,295,266.39 (11,121,034.00)	
Total Earnings and Investment Gains		5,054,811.14
	EXPENDITURES	
Distributions to Members: Benefit Payments Lump Sum DROP Distributions Lump Sum Share Distributions Refunds of Member Contributions	6,194,251.57 1,345,522.10 1,892.64 124,488.17	
Total Distributions		7,666,154.48
Expenses: Investment related ¹ Administrative	432,887.52 285,448.07	
Total Expenses		718,335.59
Change in Net Assets for the Year		1,826,537.12
Net Assets Beginning of the Year		103,258,662.16
Net Assets End of the Year ²		105,085,199.28

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	3,429,491.48
Plus Additions	267,148.06
Investment Return Earned	567,522.45
Less Distributions	(1,345,522.10)
End of the Year Balance	2,918,639.89

SUPPLEMENTAL CHAPTER 175 SHARE PLAN ACTIVITY

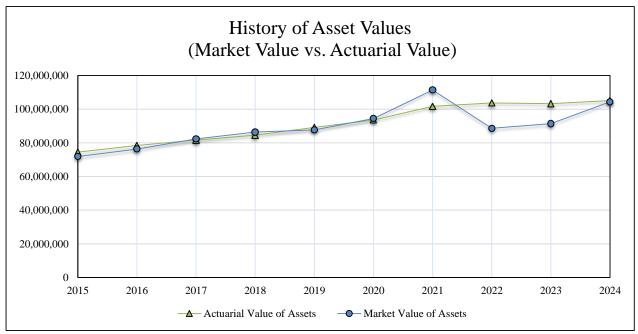
October 1, 2023 through September 30, 2024

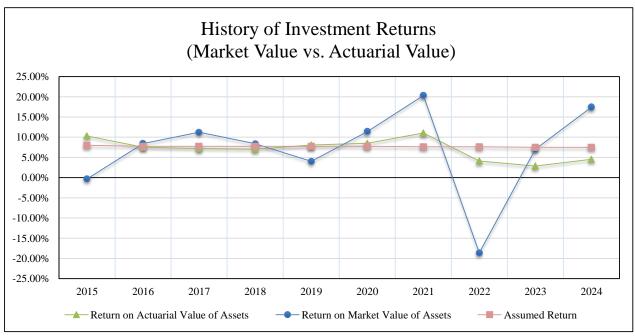
9/30/2023 Balance	103,846.27
Prior Year Adjustment	0.00
Plus Additions	146,727.63
Investment Return Earned	18,861.31
Administrative Fees	(2,000.00)
Less Distributions	(1,892.64)
9/30/2024 Balance	265,542.57

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

(1)	Required City and State Contributions	\$4,249,792.00
(2)	Less Allowable State Contribution	(972,051.63)
(3)	Required City Contribution for Fiscal 2024	3,277,740.37
(4)	Less 2023 Prepaid Contribution	(377,173.76)
(5)	Less Actual City Contributions	(3,196,535.81)
(6)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2024	(\$295,969.20)

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





STATISTICAL DATA

	10/1/2024	10/1/2023	10/1/2022	10/1/2021
Actives				
Number Average Current Age Average Age at Employment Average Past Service Average Annual Salary	128 37.6 27.1 10.5 \$72,197	122 37.3 27.0 10.3 \$65,569	120 38.0 28.0 10.0 \$64,230	107 37.6 27.4 10.2 \$62,066
Service Retirees				
Number Average Current Age Average Annual Benefit	83 64.1 \$69,656	82 63.3 \$68,172	77 62.7 \$66,762	72 62.4 \$64,933
DROP Retirees				
Number Average Current Age Average Annual Benefit	2 54.7 \$84,586	4 56.9 \$75,546	7 57.5 \$71,360	12 55.2 \$75,304
<u>Beneficiaries</u>				
Number Average Current Age Average Annual Benefit	5 67.2 \$44,265	3 69.9 \$46,634	3 68.9 \$45,494	3 67.9 \$44,387
<u>Disability Retirees</u>				
Number Average Current Age Average Annual Benefit	9 64.9 \$39,567	10 62.6 \$40,269	10 61.6 \$40,052	10 60.6 \$38,966
Terminated Vested				
Number Average Current Age ¹ Average Annual Benefit ¹	4 50.1 \$2,988	2 49.1 \$2,988	3 48.1 \$2,988	5 51.1 \$24,612

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	3										7
25 - 29	5	6	2	7	1	3						24
30 - 34	1		4	1		11	3					20
35 - 39	2	1	1			9	9	3				25
40 - 44						1	12	6	2			21
45 - 49						1	4	7	3	4		19
50 - 54						1	1		3	1		6
55 - 59						1			1	1		3
60 - 64						1		1		1		3
65+												0
Total	12	10	7	8	1	28	29	17	9	7	0	128

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2023	122
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	(2)
iii. Refund of member contributions or full lump sum distribution	(4)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>0</u>
g. Continuing participants	116
h. New entrants / Rehires	12
i. Total active life participants in valuation	128

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

	Service Retirees, Vested Receiving Benefits	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	82	4	3	10	1	1	101
Retired DROP Vested (Deferred Annuity) Vested (Due Refund) Hired/Terminated in Same Year Death, With Survivor Death, No Survivor Disabled Refund of Contributions Rehires Expired Annuities Data Corrections	2 (1)	(2)	2	(1)		2	0 0 0 2 0 0 0 0 0 0 0
b. Number current valuation	83	2	5	9	1	3	103

SUMMARY OF CURRENT PLAN

(Through Ordinance 2024-59)

The following summary is intended to state the plan of benefits valued in this report. It is not intended as a restatement or summary of benefits for any other purposes.

Membership: Effective May 2, 1974, any full-time firefighter or police officer having

permanent status becomes a Plan Member immediately upon hire.

Collective Bargaining

Agreements: Certain employees covered by the Plan are members of the Palm Bay

Professional Firefighters (PBPF), IAFF, Local 2446.

Average Final

Compensation (AFC): 1/12 of the average annual compensation of the best five years of the last

ten years of credited service prior to retirement, DROP, termination or

death.

Compensation: Base pay, excluding overtime, bonuses, and any other non-regular

compensation received by a Member.

For firefighter Members, Compensation also includes holiday pay.

Effective October 1, 2021, longevity pay is also included.

Credited Service: Years and complete months of uninterrupted service. Service is not

considered to be interrupted by authorized leave of absence, vacation, or

service (voluntary or involuntary) in the Armed Forces of the United

States, with certain stipulations.

Service is not considered to be interrupted for purposes of vesting or eligibility where leave is granted pursuant to the Family and Medical Leave Act. The Member may receive Credited Service for purposes of benefit accrual if the Member contributes the employee contributions (with interest) that would have been contributed during the period of absence within 90 days after the member's return from leave.

Members may voluntarily leave accumulated contributions in the fund for a period of five years after leaving the employ of the police or fire department pending the possibility of being re-employed without losing

credit for that time.

Re-employed Members do not receive credit for time where accumulated

contributions were withdrawn.

Members may purchase up to 4 years of service for prior military or sworn firefighter service/law enforcement experience (for which no benefit is payable). Firefighters must pay the full actuarial cost at the

time of purchase.

NORMAL RETIREMENT

Fire Eligibility:
(Normal Retirement Date)

The earlier of (1) age 55 (with 10 years of service if hired on or after March 15, 2012) or (2) upon completion of 25 years of Credited Service, regardless of age.

Members are 100% vested upon Normal Retirement Benefit eligibility.

Firefighter Benefit:

For firefighters with less than 20 years service: 2.00% x Credited Service prior to October 1, 1991, plus 2.50% x AFC x Credited Service on and after October 1, 1991.

For firefighters with 20 or more years of service:

3.00% x AFC x Credited Service for the first 20 years of Credited Service (3.20% if hired on or after March 15, 2012), plus 5.00% x AFC x Credited Service over 20 years (3.20% if hired on or after March 15, 2012).

<u>In addition</u>, Firefighters receive a Supplemental Benefit of \$189 per month payable over the life of the retiree only. Firefighters who retire on or after October 1, 2006, receive \$458 per month, instead of \$189.

<u>In addition</u>, Firefighters who terminate after October 1, 2008, receive a Supplemental Benefit equal to \$25 per month times years of Credited Service accrued prior to March 15, 2012, plus \$12 per month times years of Credited Service earned after March 15, 2012. The benefit is \$25 per month for all years of Credited Service for those firefighters eligible for Normal Retirement on March 15, 2012. Effective 10/1/2024, the benefit is \$30 per month for all years of Credited Service. This benefit will be payable for the life of the retiree, but shall cease when the member attains the age of Medicare eligibility.

Maximum Benefit:

100% of Average Final Compensation for firefighters hired before March 15, 2012 and 90% of Average Final Compensation for firefighters hired after that date, exclusive of the Supplemental Benefits.

Normal Form of

Benefit: 10-year Certain and Continuous annuity.

COLA:

Firefighters that retire on or after September 30, 2001 are eligible to receive a 3.00% (2.00% if hired on or after March 15, 2012) annual increase each September 30th after having been retired for six years (the supplemental benefits are not increased).

EARLY RETIREMENT

Eligibility:

Members may retire and receive the Early Retirement Benefit on the first day of any month prior to their Normal Retirement Date after attaining the earlier of (1) age 45 and completion of 20 years of Credited Service, or (2) age 50 and completion of 10 years of Credited Service.

Benefit: The monthly Early Retirement Benefit payable is reduced by 3.00% each

year the Early Retirement Benefit commences prior to the Normal

Retirement Date.

The Supplemental Benefits payable to firefighters are not reduced for

early commencement.

Normal Form of

Benefit: 10-year Certain and Continuous annuity.

COLA: Firefighters that retire on or after September 30, 2001 are eligible to

receive a 3.00% (2.00% if hired on or after March 15, 2012) annual increase each September 30th after having been retired for six years (the

supplemental benefits are not increased).

DEFERRED RETIREMENT OPTION PLAN (DROP)

Eligibility - Fire: The earlier of the completion of 25 years of Credited Service, regardless

of age, or age 55 and the completion of 10 years of Credited Service.

Benefit: Once the DROP is entered into, monthly benefits are frozen and no

further Participant Contributions are made. The benefit payable under the DROP is calculated as described upon the Normal Retirement Benefit. Upon DROP participation, monthly benefits that would have been payable had the Member terminated employment and elected to receive monthly pension payments are paid into the DROP account.

Maximum DROP

Period: Members are limited to 60 months of DROP participation.

Interest Rate Credited

To DROP Account: DROP account interest crediting is posted quarterly based on the actual

pension fund returns, net of money manager fees and other expenses.

Normal Form of

DROP Account: At the end of a Member's participation in the DROP, the distribution of

the accumulated DROP account is payable in the following forms of distribution: (1) Annual installments payable each December (no less than 10% or \$10,000, whichever is greater), (2) Rollover to another qualified retirement plan, or (3) Lump sum balance paid directly to the

Member.

Normal Form of

Monthly Benefit: 10-year Certain and Continuous annuity.

Cost of Living Adjustments, if any, are applicable to the benefit of the

Member while in the DROP.

COLA:

Firefighters that retire on or after September 30, 2001 are eligible to receive a 3.00% (2.00% if hired on or after March 15, 2012) annual increase each September 30th after having been retired for six years (the supplemental benefits are not increased).

DISABILITY RETIREMENT

Eligibility: In Line of Duty: Immediate.

Not In Line of Duty: 10 years.

DROP participants are not eligible for this benefit.

Disabled Definition: Unable, by reason of medically determinable physical or mental

impairment, to render useful and efficient service as a police officer or

firefighter.

Benefit: In Line of Duty Disability: 75% of Average Final Compensation, but not

less than the accrued Normal Retirement Benefit. For firefighters hired after March 15, 2012 the minimum Line of Duty Disability benefit will be

66% of Average Final Compensation.

Not In Line of Duty Disability: 25% of Average Final Compensation, but

not less than the accrued Normal Retirement Benefit.

Normal Form of

Benefit: 10-year Certain and Continuous annuity, ceasing upon recovery prior to

Normal Retirement Eligibility.

<u>In addition</u>, Firefighters who become Disabled after October 1, 2008, receive a Supplemental Benefit equal to \$25 per month times years of Credited Service accrued prior to March 15, 2012, plus \$12 per month times years of Credited Service earned after March 15, 2012. The benefit is \$25 per month for all years of Credited Service for those firefighters eligible for Normal Retirement on March 15, 2012. Effective 10/1/2024, the benefit is \$30 per month for all years of Credited Service. This benefit will be payable for the life of the retiree, but shall cease

when the member attains the age of Medicare eligibility.

COLA: Firefighters that retire on or after September 30, 2001 are eligible to

receive a 3.00% annual increase each September 30th after having been retired for six years. Firefighters that are hired after March 15, 2012 will receive a 2.00% annual increase each September 30th after six years of

retirement.

DEATH WHILE IN SERVICE (FIREFIGHTER)

Benefit: Effective October 1, 2006, the beneficiary of any member whose death

was directly caused by performance of the member's duty as a firefighter (as approved by the Board) shall be entitled to a monthly pension equal to the greater of the member's accrued benefit or 75% of the member's

average final compensation.

Normal Form of

Benefit: Life annuity to the designated beneficiary.

COLA: Beneficiaries of Firefighters that die on or after September 30, 2001 are

eligible to receive a 3.00% annual increase each September 30th after having been retired for six years. Beneficiaries of Firefighters that are hired after March 15, 2012 will receive a 2.00% annual increase each

September 30th after six years of retirement.

DEATH WHILE NOT IN SERVICE WITH MORE THAN 10 YEARS OF SERVICE(FIREFIGHTER)

Benefit: Effective October 1, 2006, the beneficiary of any member who had at

least 10 years of Credited Service, whose death was not directly caused by performance of the member's duty as a firefighter, shall be entitled to a monthly pension equal to the greater of the member's accrued benefit

or 25% of the member's average final compensation.

COLA: Beneficiaries of Firefighters that die on or after September 30, 2001 are

eligible to receive a 3.00% annual increase each September 30th after having been retired for six years. Beneficiaries of Firefighters that are hired after March 15, 2012 will receive a 2.00% annual increase each

September 30th after six years of retirement.

<u>WITHDRAWAL – LESS THAN 5 YEARS OF CREDITED SERVICE</u> (10 YEARS IF HIRED ON OR AFTER MARCH 15, 2012)

Eligibility: First day of work, up to 5 years (10 years if hired on or after

March 15, 2012) of Credited Service.

Benefit: Accumulated contributions with 0.00% interest.

Form of Benefit: Lump Sum.

<u>WITHDRAWAL – AFTER EARNING AT LEAST 5 YEARS OF CREDITED</u> SERVICE (10 YEARS IF HIRED ON OR AFTER MARCH 15, 2012)

Eligibility: At least 5 years (10 years if hired on or after March 15, 2012) of Credited

Service.

Benefit: Participants who terminate employment prior to their Normal Retirement

Date are entitled to their Normal Retirement Benefit calculated based on Credited Service and Average Final Compensation at their date of termination, multiplied by the Vesting Percentage, with deferred

commencement at their Normal Retirement Date. This benefit is payable

on a reduced basis as described under Early Retirement.

<u>In addition</u>, Firefighters who terminate after October 1, 2008, receive a Supplemental Benefit equal to \$25 per month times years of Credited Service accrued prior to March 15, 2012, plus \$12 per month times years of Credited Service earned after March 15, 2012. The benefit is \$25 per month for all years of Credited Service for those firefighters eligible for Normal Retirement on March 15, 2012. Effective 10/1/2024, the benefit is \$30 per month for all years of Credited Service. This benefit will be payable for the life of the retiree, but shall cease when the member

attains the age of Medicare eligibility.

Vesting Percentage:

Vesting
Percentage
0%
50%
60%
70%
80%
90%
100%

Form of Benefit: 10-year Certain and Continuous annuity.

COLA: Firefighters that terminate on or after September 30, 2001 are eligible to

receive a 3.00% annual increase each September 30th after having been retired for six years. Firefighters that are hired after March 15, 2012 will receive a 2.00% annual increase each September 30th after six years of

retirement.

MEMBER CONTRIBUTIONS

Contributions: Firefighters are required to contribute 8.76% of compensation effective

October 1, 2008.

Interest Crediting

Rate: 3.0% per year.

DATA SOURCES

Asset Data: The asset information is taken from audited statements furnished by the

Retirement Office.

Member Data: The member data is supplied by the Retirement Office. It is reviewed for

reasonableness and consistency, but no audit was performed. Foster & Foster, Inc. is not aware of any errors or omissions in the data that would

have a significant effect on the results of our calculations.

Furlough Impact: For the 2012 actuarial valuation report, individual Salaries were adjusted

up by a ratio of the total number of normal work days in a year divided by the number of days actually worked after taking mandatory furloughs.

SHARE PLAN

Initial Allocation as of October 1, 2015 \$7,840.02

Future Allocations ½ of Annual State Monies received above

\$825,324

Earnings Annually equal to the net of fees return for the

overall Trust Fund.

Expenses Members share in actual expenses specific to the

Share Plan administration.