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City of Melbourne

Firefighters' Pension Plan

Actuarial Valuation as of October 1, 2023

February 13, 2024

REPORT TO DETERMINE MINIMUM FUNDING REQUIREMENTS
FOR THE PLAN AND FISCAL YEAR
ENDING SEPTEMBER 30, 2025

FLA

FREIMAN LITTLE ACTUARIES

February 13, 2024

Board of Trustees
City of Melbourne Firefighters' Pension Plan
Melbourne, Florida

RE: Actuarial Valuation as of October 1, 2023

Dear Board Members:

We are pleased to present the actuarial valuation as of October 1, 2023 for the City of Melbourne Firefighters' Pension Plan (the Plan). This report provides a review of the current funded status of the Plan, establishes the minimum funding requirements for the fiscal year ending September 30, 2025 and provides an analysis of experience since the last valuation. In addition to providing the summary and derivation of actuarial findings, this report describes the data, assumptions, and methods used to create these results.

In producing our work product, we rely on various models, internal and external, which were used for their intended purposes. Underlying data, assumptions, methodologies, model inputs and resulting outputs have been reviewed. The 7.125% net assumed return is a prescribed assumption set by another party, as it is set by the Board. While we find all other inputs and outputs to be reasonable individually and in aggregate, this prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement. We continue to recommend lowering the net assumed return.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

Statement by Enrolled Actuary:

"This actuarial valuation and/or cost determination 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."

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We look forward to presenting these results to you in person and are always available to answer any questions you may have.

Sincerely,

Chad M. Little, ASA, EA
Partner, Consulting Actuary
Enrollment Number 23-6619

Paula C. Freiman, ASA, EA
Partner, Consulting Actuary
Enrollment Number 23-5796

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Section 1 Board Summary

This report presents the results of the October 1, 2023 actuarial valuation.

Summary of Principal Valuation Results

Fiscal Year Ending September 30,	2024	2025
Expected Contribution from City	$3,476,122	$3,807,420
Estimated State Contribution	588,390	745,770
City Plus State Contribution Requirement	$4,064,512	$4,553,190
Expected City Contribution % Pay	39.98%	42.51%
Estimated State Contribution % Pay	6.77%	8.33%
City Plus State Contribution % Pay	46.75%	50.84%
Expected Contribution from City % Pay Including DROP Pay	36.24%	36.77%

Plan Year Beginning October 1,	2022	2023
Accrued Liability (AL)	$101,142,299	$105,913,781
Actuarial Value of Assets	83,639,808	85,123,343
Unfunded Accrued Liability (UAL)	$17,502,491	$20,790,438
Funded Percentage	82.70%	80.37%

Plan Year Beginning October 1,	2022	2023
Assumed Net Investment Return	7.125%	7.125%
Individual Salary Increase Assumption	6.000%	6.000%
Funding Method	Entry Age	Entry Age

Summary of Significant Events

Determination of the funded status of the Plan and minimum funding requirements are based on participant data, asset information, Plan provisions, actuarial methods and assumptions, as well as contributions made to the Plan by the State of Florida. Any significant events associated with these items are discussed in the following.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the Plan Administrator. This information includes, but is not limited to, statutory provisions, employee census, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

Participant Data

The number of active members decreased by 8 along with an increase in the inactive population of 5. Average individual salary increases amongst continuing active members were less than expected at 11.6% compared to the 6.0% individual salary increase assumption.

The following provides a summary of the actual to expected pay increases over the last ten years.

Fiscal Year Ending 9/30	Average Individual Salary Actual	Average Individual Salary Expected	Payroll	Payroll Increase
2023	11.6 %	6.0 %	9,368,978	3.54 %
2022	4.8 %	6.0 %	9,049,034	1.16 %
2021	3.8 %	6.0 %	8,945,489	4.60 %
2020	3.7 %	6.0 %	8,551,808	3.90 %
2019	7.3 %	6.0 %	8,230,948	8.16 %
2018	4.2 %	6.0 %	7,610,215	0.58 %
2017	7.2 %	6.0 %	7,566,356	9.77 %
2016	4.6 %	6.0 %	6,893,083	5.82 %
2015	3.7 %	6.0 %	6,513,920	7.21 %
2014	5.6 %	6.0 %	6,075,965	(2.73)%
10-Yr Avg	5.6 %	6.0 %		4.14 %

DROP members paid employee contributions to the plan beginning in fiscal 2018. That pay is excluded from the above payroll figures.

Florida Statutes 112.64(5)(a) requires that the payroll growth assumption not exceed the average payroll growth for the prior ten years. This requirement is met in that the Unfunded Accrued Liability is amortized as a level dollar amount.

The 6.0% long-term individual salary increase assumption still appears reasonable because the geometric average of pay increases over the last 21 years was 6.0%.

A demographic loss was experienced primarily due pay increases higher than expected. In general, should a pattern of consistent gains or losses develop, assumptions may require revision.

Assets

While the return on the Market Value of Assets was 9.70%, the return on the Actuarial Value of Assets was 3.09% producing a loss on an actuarial basis in comparison to the 7.125% net assumed return for the year ending September 30, 2023. The following provides a summary of the actual to the expected return on investments for the 12-month periods ending on the date specified.

Fiscal Year Ending 9/30	% Market Return	% Actuarial Return	% Assumed Return
2023	9.7 %	3.1 %	7.125 %
2022	(11.8)%	3.8 %	7.125 %
2021	17.2 %	8.0 %	7.250 %
2020	1.9 %	6.8 %	7.250 %
2019	4.4 %	7.1 %	7.500 %
2018	8.3 %	8.5 %	7.750 %
2017	12.4 %	9.2 %	8.000 %
2016	10.6 %	9.9 %	8.000 %
2015	0.2 %	8.7 %	8.000 %
2014	11.2 %	10.2 %	8.000 %
2013	13.4 %	3.1 %	8.000 %
2012	19.3 %	(2.5)%	8.000 %
2011	(1.8)%	(0.2)%	8.000 %
2010	6.6 %	3.2 %	8.000 %
2009	(4.2)%	0.7 %	8.000 %
2008	(11.3)%	4.7 %	8.000 %
2007	12.7 %	10.4 %	8.000 %
2006	8.7 %	11.2 %	8.000 %
2005	10.7 %	7.0 %	8.000 %
2004	9.7 %	3.6 %	8.000 %
2003	16.5 %	3.6 %	8.000 %
2002	(7.4)%	2.7 %	8.000 %
2001	(3.0)%	6.0 %	8.000 %
2000	9.9 %	13.5 %	8.000 %
1999	12.5 %	14.5 %	8.000 %
1998	5.2 %	15.7 %	8.000 %
1997	30.2 %	17.2 %	8.000 %
1996	13.3 %	11.4 %	8.000 %
28 Yr Avg	6.9 %	7.1 %	7.857 %
10 Yr Avg	6.1 %	7.5 %	7.599 %

Effective for the 12-month period ended September 30, 2009 the return on the market value of assets has been computed to include DROP balances. Effective for the 12-month period ended September 30, 2014 the return on the actuarial value of assets has been computed to include DROP balances.

Investment returns less than the assumed rate of return result in increased annual minimum required contributions.

Assumptions and Methods

There were no changes in methods or assumptions since the prior valuation.

The net assumed rate of investment return is unchanged from 7.125% used in the prior actuarial valuation as directed by the Board of Trustees. The 7.125% net assumed return is a prescribed assumption set by another party, as it is set by the Board. The prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement. As discussed with the Board we recommend lowering the net assumed return.

See the Required Disclosure Under F.S. 112.664(1) found near the end of section 2 of this report which provides the funding results using a net assumed return assumption 2% higher and 2% lower than the net assumed return used in this actuarial valuation. The Reasonable Actuarially Determined Contribution (RADC) is roughly half-way between the result for the 7.125% net assumed return and that for the 5.125% net assumed return.

The impact of any changes in assumptions and methods may be found in the reconciliation of the funded status and minimum funding requirements found near the end of Section 2 of this report. See "Reconciliations" in the table of contents.

Plan Provisions

There were no changes in Plan provisions since the prior valuation.

A Share allocation of $157,925 was made based on the $903,695 in premium tax revenues for the fiscal year ending September 30, 2023.

State Contributions

Per Ordinance No. 2017-46 effective October 10, 2017, for premium tax revenues received in any Plan year after October 1, 2015 over that for calendar 2012 in the amount of $587,845, 50% is allocated to the Share Plan and 50% is used to reduce the City's annual required pension contributions.

The "Minimum Funding Requirement Expected Contribution from City" shown on page 1 assumes that the premium tax money received from the State will be in the same amount received in the prior year. Should the amounts received be less than expected, the City will need to contribute any potential shortfall to the Plan.

Assessment and Disclosure of Risk

This section is meant to address the assessment and disclosure of risk in a pension funding valuation. This is not meant to be a comprehensive summary but should provide information regarding risks related to this plan. Additional historical information provided in this report also contains relevant information regarding asset size, asset mix, pay increases, benefits and contributions. This information can be used to understand the changes over time to identify trends.

Actuarial Standards of Practice define risk as "The potential of actual future measurements deviating from expected future measurements resulting from actual future experience deviating from actuarially assumed experience…." The following provides examples of potential risk.

Investment Risk: As noted previously, investment returns less than the assumed rate of return result in increased annual minimum required contributions payable in a subsequent year.

Interest Rate Risk: Interest rates are used to discount the value of benefits. If the long-term expectation of returns is higher or lower than the assumed net investment return, the assumed net investment return should be adjusted. When the assumed net investment return is increased the estimated liability is decreased. When the assumed net investment return is decreased the estimated liability is increased. The chart below shows what the funded status of the plan is on a market value of assets basis after changing the net assumed return by 1% or 2%. While we have noted the net assumed return, note that there might have been other changes in assumptions or plan provisions at each valuation date.

	Funded Status on Market Value of Assets Basis					
As of 10/1	2% Decrease	1% Decrease	Valuation Net Assumed Return	1% Increase	2% Increase	Valuation Net Assumed Return Assumption
2023	60.59%	67.60%	74.78%	82.10%	89.53%	7.125%
2022	58.82%	65.53%	72.41%	79.42%	86.54%	7.125%
2021	70.52%	78.56%	86.79%	95.17%	103.67%	7.125%
2020	63.61%	70.76%	78.08%	85.53%	93.06%	7.250%
2019	63.40%	70.80%	78.36%	86.05%	93.82%	7.250%
2018	65.98%	73.51%	81.19%	88.98%	96.85%	7.500%
2017	66.35%	73.77%	81.31%	88.95%	96.64%	7.750%
2016	64.28%	71.22%	78.26%	85.36%	92.48%	8.000%

Longevity and Other Demographic Risks: The estimated liability of the Plan is based on assumptions related to mortality, retirement, disability and termination. To the extent that Plan experience is different than these assumptions the gains and losses affect future required contributions and estimated liability.

Contribution Risk: The possibility that the plan sponsor does not make contributions to the plan according to the funding policy.

Intergenerational equity risk: Intergenerational equity is the concept that resources do not belong to a specific generation and they must be preserved for future generations. One way to alleviate this risk is to pay for benefits over the average future service of the group receiving benefits. Members may feel there are inequities when one is paying more than others, receiving less than others, or paying more than others in relation to what they are receiving.

Plan maturity measures may help understand the risks associated with the plan. As the Plan matures, the ratio of the Market Value of Assets to the Covered Payroll increases. As this ratio gets larger, the impact of asset volatility has a larger effect on the volatility of the Minimum Required Contribution as a percentage of pay.

Year Ending 9/30	Market Value of Assets	Covered Valuation Payroll	Asset Volatility Ratio
2023	$79,203,666	$9,368,978	8.5
2022	73,234,663	9,049,034	8.1
2021	85,459,049	8,945,489	9.6
2020	74,290,140	8,551,808	8.7
2019	74,398,223	8,230,948	9.0
2018	72,896,353	7,610,215	9.6
2017	69,272,334	7,566,356	9.2
2016	63,638,996	6,893,083	9.2
2015	58,341,219	6,513,920	9.0
2014	58,760,194	6,075,965	9.7

Another measure of a pension plan's maturity is the Ratio of Benefit Payments to Contributions. Over the life of a pension plan, it is expected that the majority of the benefits will be paid for by returns rather than contributions. For this to happen, as a plan matures, the plan will eventually pay out more in benefits than it receives in contributions. It is important to understand the magnitude of this difference so that steps can be taken, if necessary, to manage cash flows going forward. The table below provides the Ratio of Benefit Payments to Contributions. Note that there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

Year Ending 9/30	Benefit Payments	Contributions	Ratio of Benefit Payments to Contributions
2023	$5,787,221	$4,869,946	1.19
2022	6,801,401	4,701,077	1.45
2021	6,086,429	4,792,839	1.27
2020	5,823,028	4,484,572	1.30
2019	5,751,398	4,220,086	1.36
2018	5,641,135	3,775,604	1.49
2017	6,047,002	4,030,785	1.50
2016	4,459,046	3,746,662	1.19
2015	4,151,523	3,738,624	1.11
2014	4,161,045	3,329,157	1.25

When looking at Net Cash Flows, it is useful to understand the relative size of the cash flows in comparison to the Market Value of Assets. The following table provides the ratio of the Net Cash Flows divided by the Market Value of Assets. As mentioned previously, there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

Year Ending 9/30	Contributions	Disbursements	Assets	Net Cash Flow Divided by Assets
2023	$4,869,946	$5,952,040	$79,203,666	(0.01)
2022	4,701,077	6,954,600	73,234,663	(0.03)
2021	4,792,839	6,246,480	85,459,049	(0.02)
2020	4,484,572	5,954,421	74,290,140	(0.02)
2019	4,220,086	5,898,346	74,398,223	(0.02)
2018	3,775,604	5,802,152	72,896,353	(0.03)
2017	4,030,785	6,182,799	69,272,334	(0.03)
2016	3,746,662	4,587,348	63,638,996	(0.01)
2015	3,738,624	4,283,601	58,341,219	(0.01)
2014	3,329,157	4,320,839	58,760,194	(0.02)

Low-Default-Risk Obligation Measure

This section aims to address the evaluation and disclosure of a Low-Default-Risk Obligation Measure (LDROM) within a pension funding valuation. The LDROM involves a calculation of liability, assuming that the Plan's investments are in low-default-risk securities. Importantly, the LDROM serves as a supplementary calculation and is not intended to replace the funding measures outlined in this report.

Instead, the LDROM offers an additional perspective by providing a measure of the Plan's cost if its investments were shifted to low-default-risk fixed income securities. This adjustment aligns with return profiles that essentially mirror future cash flows, potentially mitigating contribution volatility. Furthermore, the LDROM serves to illustrate the potential savings the Plan experiences by diversifying its portfolio.

The chart below depicts the Actuarial Accrued Liability for funding purposes in comparison to the LDROM. Notably, the assumed rate of return for funding purposes stands at 7.125%, while the LDROM utilizes an assumed rate of return of 4.87%, based on the S&P Municipal Bond 20 Year High Grade Rate Index (yield to maturity) on Friday, September 29, 2023. All other assumptions and methods are the same as described at the end of this report.

It's essential to understand that the LDROM is not the definitive measure of the Plan's liability. Instead, it provides an estimate of the Plan's cost under the scenario where the Board opts for a portfolio exclusively comprised of low-default-risk fixed income investments.

Valuation Date	Funding Accrued Liability	Funding Net Assumed Return	LDROM Accrued Liability	LDROM Rate
10/01/2023	$105,913,781	7.125%	$134,605,918	4.87%

Section 2 Results Derivation

In this section, the assets and liabilities of the Plan are shown in detail. Assets and liabilities are then compared to determine the funded status and minimum funding requirements. Finally, analysis is performed to explain movement in results from the prior valuation.

While asset information is based on the fair market value of assets, along with any techniques used to smooth out market fluctuations, liabilities are determined through a combination of the benefit provisions, participant census data which contains information for the members who will receive those benefits, and the methods and assumptions used with regard to how benefits will be paid to members. A summary of participant data, an outline of the benefit provisions, and a description of the methods and assumptions used in this valuation are described in Section 4.

Financial Information

Over the life of the Plan, the majority of assets are typically generated from investment return. In this section, we describe how the assets of the Plan are invested, show how the actuarial value of assets is derived, and review the investment results since the prior valuation.

Investment Allocation

Valuation Date	October 1, 2022		October 1, 2023	
U.S. government securities	$ 9,407,883	13 %	$ 10,880,003	14 %
Corporate/Foreign bonds	6,261,026	9 %	4,080,989	5 %
Common/preferred stocks	38,677,293	52 %	45,559,055	57 %
Real estate/Private debt	17,001,691	23 %	16,557,765	21 %
Cash and cash equivalents	2,083,494	3 %	2,186,339	3 %
Net receivables	(196,724)	0 %	(60,485)	0 %
Fair Market Value of Assets	$ 73,234,663	100 %	$ 79,203,666	100 %

Reconciliation of Market Value of Assets

Year Ending			**September 30, 2023**	
			Market Value	**Actuarial Value**
1.	Beginning of year		$73,234,663	$83,639,808
2.	Contributions			
	a.	City	$3,109,878	$3,109,878
	b.	State	903,695	903,695
	c.	Members	856,373	856,373
	d.	Total	$4,869,946	$4,869,946
3.	Investment earnings			
	a.	Unrealized gains and losses	$2,982,059	
	b.	Realized gains and losses	2,232,538	
	c.	Interest and dividends	2,236,779	
	d.	Investment expense	(400,279)	
	e.	Total	$7,051,097	$2,565,629
4.	Deductions			
	a.	Pension benefits	$(5,761,386)	
	b.	Contribution refunds	(25,835)	
	c.	Administrative expenses	(164,819)	
	d.	Total	$(5,952,040)	$(5,952,040)
5.	Net increase		$5,969,003	$1,483,535
6.	End of year		$79,203,666	$85,123,343

Development of Historical Asset Gains (Losses)

		2023	2022
1.	Market Value of Assets - Beginning of Year	$ 73,234,663	$ 85,459,049
2.	Expected Interest on Assets	5,217,970	6,088,957
3.	Contributions	4,869,946	4,701,077
4.	Benefit Payments + Administrative Expenses	(5,952,040)	(6,954,600)
5.	Interest on items (3) and (4)	(70,744)	(101,263)
6.	Expected Value of Assets at End of Year	$ 77,299,795	$ 89,193,220
7.	Market Value of Assets - End of Year	$ 79,203,666	$ 73,234,663
8.	Gain (Loss) for Plan Year = (7) - (6)	$ 1,903,871	$ (15,958,557)

		2021	2020
1.	Market Value of Assets - Beginning of Year	$ 74,290,140	$ 74,398,223
2.	Expected Interest on Assets	5,386,035	5,393,871
3.	Contributions	4,792,839	4,484,572
4.	Benefit Payments + Administrative Expenses	(6,246,480)	(5,954,421)
5.	Interest on items (3) and (4)	(73,869)	(73,137)
6.	Expected Value of Assets at End of Year	$ 78,148,665	$ 78,249,108
7.	Market Value of Assets - End of Year	$ 85,459,049	$ 74,290,140
8.	Gain (Loss) for Plan Year = (7) - (6)	$ 7,310,384	$ (3,958,968)

Note: These gain (loss) calculations include State contribution reserves, if any, DROP account balances and Share account balances in the Market Value of Assets.

Development of Actuarial Value of Assets

The Market Value of Assets is adjusted to recognize investment earnings greater than (or less than) the assumed investment return over a five-year period. The Actuarial Value of Assets shall not be more than 120% or less than 80% of the Market Value of Assets.

1.	Gross Market Value of Assets as of September 30, 2023				$	79,203,666
2.	Phase-In Gains (Losses) Over Five Year Period					
	Year Ending		Original Gain (Loss)	Percent Unrecognized		Unrecognized Gain (Loss)
	a. September 30, 2023	$	1,903,871	80%	$	1,523,097
	b. September 30, 2022		(15,958,557)	60%		(9,575,134)
	c. September 30, 2021		7,310,384	40%		2,924,154
	d. September 30, 2020		(3,958,968)	20%		(791,794)
	e. Total				$	(5,919,677)
3.	Preliminary Gross Actuarial Value of Assets				$	85,123,343
4.	Corridor Around Market Value					
	a. Minimum = 80% of Market Value of Assets				$	63,362,933
	b. Maximum = 120% of Market Value of Assets				$	95,044,399
	c. Corridor Adjustment to Preliminary Actuarial Value				$	0
5.	Actuarial Value of Assets as of October 1, 2023				$	85,123,343

Reconciliation of DROP Account Balances

Year Ending September 30,	2022	2023
DROP Balances as of Beginning of Year	$6,325,931	$5,628,428
Additions	479,870	897,113
Investment Return	201,811	380,504
Distributions	(1,379,184)	(715,307)
DROP Balances as of End of Year	$5,628,428	$6,190,738

Reconciliation of Share Account Balances

Year Ending September 30,	2022	2023
Balances as of Beginning of Year	$154,763	$131,872
Allocations	546	157,925
Forfeiture	2,544	0
Forfeiture re-allocation	2,543	0
Investment Return	(17,281)	12,256
Distributions	(6,155)	(5,006)
Balances as of End of Year	$131,872	$297,047

State Contribution History

Year Ending September 30	Regular	Supplemental	Total
2023	$646,271	$257,424	$903,695
2022	583,997	4,940	588,936
2021	584,114	0	584,114
2020	545,677	2,045	547,722
2019	518,691	0	518,691
2018	543,271	3,567	546,838
2017	508,280	6,703	514,983
2016	510,798	34,763	545,561
2015	499,843	69,994	569,837
2014	500,390	103,616	604,006
2013	512,084	75,762	587,845
2012	489,487	78,491	567,978
2011	495,487	49,815	545,302
2010	525,935	37,974	563,909
2009	505,855	62,143	567,998
2008	519,992	262,030	782,022
2007	497,785	187,105	684,890
2006	481,939	8,382	490,321
2005	468,885	0	468,885
2004	424,627	0	424,627
2003	392,038	0	392,038
2002	340,995	0	340,995
2001	295,965	0	295,965
2000	310,698	0	310,698
1999	286,709	0	286,709
1998	267,933	0	267,933

Enhanced Benefit Account

Year Ended September 30,		2022	2023
1.	Enhanced Benefit Account BOY	(4,077,543)	(5,369,827)
2.	Interest on Beginning Balance		
	a. Return on Actuarial Value of Assets	3.8 %	3.1 %
	b. Interest on Beginning Balance	0	0
3.	Net Investment Income Allocation		
	a. Actuarial Value Beginning of Year (A)	82,791,671	83,639,808
	b. Actuarial Value End of Year (B)	83,639,808	85,123,343
	c. Contributions (C)	4,701,077	4,869,946
	d. Benefits Paid (P)	(6,801,401)	(5,787,221)
	e. Administrative Expenses (E)	(153,199)	(164,819)
	f. Net Investment Income (I) = (B)-(A)-(C)-(P)-(E)	3,101,660	2,565,629
	g. Return on Actuarial Value of Assets = 2I/(A + B - I)	3.8 %	3.1 %
	h. Net Investment Income (if Expected Earned)	5,797,644	5,888,593
	i. Net Investment Income in Excess of Expected	(2,695,984)	(3,322,964)
	j. 50% of (i)	(1,347,992)	(1,661,482)
4.	Premium Tax Distribution Allocation		
	a. Premium Tax Distribution During Year	588,936	903,695
	b. Covered Payroll During Year*	8,570,468	8,703,994
	c. Premium Tax as % of Covered Payroll	6.9 %	10.4 %
	d. Excess of Premium Tax Over 5.6%	1.3 %	4.8 %
	e. 50% x (b) x (d)	55,708	208,896
5.	Allocation to Members in Payment Status/DROP	0	0
6.	Net Allocation to Enhanced Benefit Account	(1,292,284)	(1,452,586)
7.	Enhanced Benefit Account at End of Year	(5,369,827)	(6,822,413)
8.	Comparison of Investment Income to Gains/Losses		
	a. Annual Net Actuarial Gains and (Losses)	(3,054,635)	(4,352,698)
	b. Cumulative Net Actuarial Gains and (Losses)	(3,966,518)	(8,319,216)
	c. (3)(j)	(1,347,992)	(1,661,482)
	d. Cumulative Net Investment Income Allocation	(6,144,557)	(7,806,039)

Note: Per Board direction, no interest is applied to the beginning balance if negative. The premium tax distribution allocation does not actually use State money toward the Enhanced Benefit Account nor are any actuarial gains actually set up as a liability. The covered payroll during year is calculated as an average of the total valuation salary for the current and prior years.

Historical Enhanced Benefit Account Tracking

Year Ending 9/30	EBA BOY	Actuarial ROR	Interest on Beginning Balance	50% of Net Excess Actuarial Investment Income	50% Excess Premium Tax Over 5.6% Payroll	Allocation to Members in Payment Status/ DROP	Net Allocation to EBA	EBA EOY	Annual Net Actuarial Gains and (Losses)	Cumulative Net Actuarial Gains and (Losses)	Cumulative Net Investment Income Allocation
1996	0	11.4%	0	274,468	23,268	0	297,736	297,736	593,282	593,282	274,468
1997	297,736	17.2%	0	837,059	22,558	0	859,617	1,157,353	1,783,513	2,376,795	1,111,527
1998	1,157,353	15.7%	0	838,054	20,994	23,401	835,647	1,993,000	1,376,514	3,753,309	1,949,581
1999	1,993,000	14.5%	0	810,864	15,633	13,711	812,786	2,805,786	1,522,035	5,275,344	2,760,445
2000	2,805,786	13.5%	377,640	781,964	14,307	22,956	1,150,955	3,956,741	1,391,747	6,667,091	3,542,409
2001	3,956,741	6.0%	254,023	(226,370)	15,998	25,831	17,820	3,974,560	(42,738)	6,624,353	3,316,039
2002	3,974,560	2.7%	105,425	(887,504)	18,911	26,722	(789,890)	3,184,671	(154,495)	6,469,858	2,428,535
2003	3,184,671	3.6%	113,406	(736,209)	64,271	26,267	(584,799)	2,599,871	712,792	7,182,650	1,692,326
2004	2,599,871	3.6%	92,512	(744,155)	72,944	27,621	(606,320)	1,993,550	785,731	7,968,381	948,171
2005	1,993,550	7.0%	138,756	(176,580)	83,029	21,889	23,316	2,016,866	(1,470,591)	6,497,790	771,591
2006	2,016,866	11.2%	226,696	573,248	73,312	58,225	815,031	2,831,897	(880,911)	5,616,879	1,344,839
2007	2,831,897	10.4%	295,084	463,530	55,898	57,819	756,693	3,588,590	(302,886)	5,313,993	1,808,369
2008	3,588,590	4.7%	168,664	(684,570)	40,698	57,694	(2,605,934)	982,656	(887,818)	4,426,175	1,123,799
2009	982,656	0.7%	7,272	(1,617,980)	35,024	58,628	(1,634,312)	(651,656)	(2,537,911)	1,888,264	(494,181)
2010	(651,656)	3.2%	0	(1,082,281)	40,106	0	(1,042,175)	(1,693,831)	(1,396,478)	491,786	(1,576,462)
2011	(1,693,831)	(0.2%)	0	(1,848,820)	53,746	0	(1,795,074)	(3,488,905)	(3,758,443)	(3,266,657)	(3,425,282)
2012	(3,488,905)	(2.5%)	0	(2,313,548)	72,792	0	(2,240,756)	(5,729,661)	(4,711,885)	(7,978,542)	(5,738,830)
2013	(5,729,661)	3.1%	0	(1,055,525)	127,202	0	(928,323)	(6,657,984)	(459,535)	(8,438,077)	(6,794,355)
2014	(6,657,984)	10.2%	0	563,505	136,221	0	699,726	(5,958,258)	1,802,297	(6,635,780)	(6,230,850)
2015	(5,958,258)	8.7%	0	198,827	111,195	0	310,022	(5,648,236)	816,622	(5,819,158)	(6,032,023)
2016	(5,648,236)	9.9%	0	573,254	86,056	0	659,310	(4,988,926)	1,881,803	(3,937,355)	(5,458,769)
2017	(4,988,926)	9.2%	0	398,776	57,045	0	455,821	(4,533,105)	862,163	(3,075,192)	(5,059,993)
2018	(4,533,105)	8.5%	0	256,001	63,552	0	319,553	(4,213,552)	710,692	(2,364,500)	(4,803,992)
2019	(4,213,552)	7.1%	0	(139,180)	39,366	0	(99,814)	(4,313,366)	(315,063)	(2,679,563)	(4,943,172)
2020	(4,313,366)	6.8%	0	(149,401)	37,696	0	(111,705)	(4,425,071)	371,713	(2,307,850)	(5,092,573)
2021	(4,425,071)	8.0%	0	296,008	51,520	0	347,528	(4,077,543)	1,395,967	(911,883)	(4,796,565)
2022	(4,077,543)	3.8%	0	(1,347,992)	55,708	0	(1,292,284)	(5,369,827)	(3,054,635)	(3,966,518)	(6,144,557)
2023	(5,369,827)	3.1%	0	(1,661,482)	208,896	0	(1,452,586)	(6,822,413)	(4,352,698)	(8,319,216)	(7,806,039)

Note: Effective October 13, 2009, Ordinance No. 2009-35 reduced EBA funds retroactively to October 1, 2008 by a one-time deduction of $2,073,032, which was related to the cost to provide the increased 3.25% benefit accrual rate.

Present Value of Benefits

Valuation as of October 1,		2022	2023
1.	**Active Members**		
	a. Retirement Benefits	$47,137,511	$49,090,734
	b. Deferred Benefits	1,038,126	1,096,886
	c. Survivor Benefits	454,538	472,127
	d. Disability Retirement	3,790,154	4,381,295
	e. Total for Active Members	$52,420,329	$55,041,042
2.	**Inactive Members**		
	a. Retirement Including DROP	$62,431,447	$65,781,567
	b. Terminated Vested	988,297	1,101,500
	c. Beneficiaries	4,699,268	4,927,041
	d. Disability Retirement	503,186	1,111,196
	e. Total in Payment Status	$68,622,198	$72,921,304
3.	**Enhanced Benefit Account Reserve***	$0	$0
4.	**Share Plan**	$131,871	$297,047
5.	**Present Value of Benefits**	$121,174,398	$128,259,393

*Enhanced Benefit Account balances less than zero are limited to zero.

Accrued Liability

Valuation as of October 1,		2022	2023
1.	**Active Members**		
	a. Retirement Benefits	$ 31,305,693	$ 31,234,957
	b. Deferred Benefits	208,632	232,628
	c. Survivor Benefits	55,656	62,354
	d. Disability Retirement	818,249	1,165,491
	e. Total for Active Members	$ 32,388,230	$ 32,695,430
2.	**Inactive Members**		
	a. Retirement Including DROP	$ 62,431,447	$ 65,781,567
	b. Terminated Vested	988,297	1,101,500
	c. Beneficiaries	4,699,268	4,927,041
	d. Disability Retirement	503,186	1,111,196
	e. Total in Payment Status	$ 68,622,198	$ 72,921,304
3.	**Enhanced Benefit Account Reserve***	$ 0	$ 0
4.	**Share Plan**	$131,871	$297,047
5.	**Accrued Liability**	$ 101,142,299	$ 105,913,781

*Enhanced Benefit Account balances less than zero are limited to zero.

Normal Cost

Valuation as of October 1,		2022	2023
1.	**Preliminary Normal Cost**		
a.	Retirement Benefits	$1,777,839	$1,892,721
b.	Deferred Benefits	82,989	85,860
c.	Survivor Benefits	43,413	42,797
d.	Disability Retirement	331,895	340,788
e.	Total	$2,236,136	$2,362,166
2.	**Total Normal Cost**		
a.	Preliminary Normal Cost	$2,236,136	$2,362,166
b.	Estimated Administrative Expense	153,199	164,819
c.	Total Normal Cost	$2,389,335	$2,526,985
d.	Total Normal Cost as a % of Pay	27.48%	28.21%
3.	**Employer Normal Cost**		
a.	Total Normal Cost	$2,236,136	
b.	Actual Administrative Expense	164,819	
c.	Actual Employee Contributions	(856,373)	
d.	Employer Normal Cost	$1,544,582	
e.	Employer Normal Cost as a % of Pay	17.77%	
4.	**Valuation Payroll**	$8,694,334	$8,957,047

Unfunded Accrued Liability

Actuarial Valuation as of October 1,	2023
Unfunded Accrued Liability	
1. Actuarial Accrued Liability	$105,913,781
2. Actuarial Value of Assets	(85,123,343)
3. Unfunded Accrued Liability	$20,790,438
Determination of Expected Unfunded Accrued Liability	
1. Unfunded Accrued Liability as of Prior Year	$17,502,491
2. Employer Normal Cost (Including Administrative Expenses)	1,544,582
3. Interest for a full year on (1) and (2)	1,357,104
4. Contribution from City and State	
a. Contribution from City	$(3,109,878)
b. Recognized Contribution from State	(903,695)
c. Total Contribution	$(4,013,573)
5. Interest on Contribution for Time on Deposit	(110,789)
6. Change in Plan, Methods or Assumptions	157,925
7. Expected Unfunded Accrued Liability	$16,437,740
Calculation of (Gain) or Loss	
1. Actual Unfunded Accrued Liability	$20,790,438
2. Expected Unfunded Accrued Liability	16,437,740
3. Total (Gain) or Loss	$4,352,698
Reconciliation of Unfunded Accrued Liability	
1. Unfunded Actuarial Liability as of Prior Year	$17,502,491
2. Total Change in Unfunded Accrued Liability	
a. Expected Change in Unfunded Accrued Liability	(1,222,676)
b. Change in Plan, Methods or Assumptions	157,925
c. Change Due to (Gain) or Loss	
i. Portion of (Gain) / Loss Due to Investments	$3,322,964
ii. Portion of (Gain) / Loss Due to Demographics	1,029,734
iii. Total (Gain) or Loss	$4,352,698
d. Total Change in Unfunded Accrued Liability	$3,287,947
3. Unfunded Accrued Liability	$20,790,438
Calculation of Actuarial Asset (Gain) or Loss	
1. Actuarial Value of Assets - Beginning of Year	$83,639,808
2. Contributions	4,869,946
3. Benefit Payments + Administrative Expenses	(5,952,040)
4. Expected Return on Assets	5,888,593
5. Expected Actuarial Value at End of Year	$88,446,307
6. Actuarial Value of Assets - End of Year	$85,123,343
7. Gain (Loss) for Plan Year = (6) - (5)	(3,322,964)
8. Actual Investment Income	$2,565,629
9. Actual % Return	3.09%

Amortization of Unfunded Liability

The Unfunded Accrued Liability is being amortized as a level dollar amount based on the assumed investment return. Future changes in UAL are amortized over a 25-year period.

Amortization Bases

	10/1	Type	Original Amount	Outstanding Amount	Adjusted Outstanding Amount	Years Remaining	Amortization Amount
1.	2017	Fresh Start	17,612,523	12,877,753	12,618,833	12.15183	1,480,972
2.	2018	(Gain)/Loss	(710,692)	(592,278)	(580,370)	20.00000	(51,637)
3.	2018	Assumed Net 7.5%	2,094,555	1,745,565	1,710,469	20.00000	152,185
4.	2019	(Gain)/Loss	315,063	270,987	265,539	21.00000	23,107
5.	2019	Assumed Net 7.25%	2,267,987	1,950,711	1,911,490	21.00000	166,334
6.	2020	(Gain)/Loss	(371,713)	(328,721)	(322,112)	22.00000	(27,466)
7.	2020	FRS '19 Mortality	(2,196,715)	(1,942,648)	(1,903,589)	22.00000	(162,318)
8.	2021	(Gain)/Loss	(1,395,967)	(1,300,033)	(1,273,895)	23.00000	(106,624)
9.	2021	Assumed Net 7.125%	1,166,660	1,086,484	1,064,639	23.00000	89,110
10.	2022	(Gain)/Loss	3,054,635	3,007,199	2,946,736	24.00000	242,472
11.	2023	(Gain)/Loss	4,352,698	4,352,698	4,352,698	25.00000	352,600
				21,127,717	20,790,438		2,158,735

Actions Taken to Reduce Unfunded Actuarial Accrued Liability

The required contributions calculated each year include a payment for the amortization of the unfunded actuarial accrued liability. This payment is designed to reduce the unfunded actuarial accrued liability in an orderly fashion over the next 25 years.

Projected Unfunded Accrued Liability and Amortization Payments

Plan Year Beginning October 1	Outstanding Bases	Amortization Payment
2023	$20,790,438	$2,158,735
2024	19,959,212	2,158,735
2025	19,068,761	2,158,735
2026	18,114,865	2,158,735
2027	17,093,004	2,158,735
2028	15,998,336	2,158,735
2029	14,825,673	2,158,735
2030	13,569,457	2,158,735
2031	12,223,736	2,158,735
2032	10,782,132	2,158,735
2033	9,237,814	2,158,735
2034	7,583,464	2,158,735
2035	5,811,241	909,244
2036	5,251,264	677,763
2037	4,899,363	677,763
2038	4,522,389	677,763
2039	4,118,556	677,763
2040	3,685,949	677,763
2041	3,222,520	677,763
2042	2,726,071	677,758
2043	2,194,254	577,209
2044	1,732,260	387,758
2045	1,440,297	577,525
2046	924,244	595,091
2047	352,605	352,605
2048	0	0

Minimum Funding Requirements

Actuarial Valuation as of October 1, **Minimum Funding for FYE September 30,**		**2022** **2024**	**2023** **2025**
1.	**Total Required Contribution (Prior to Projection)**		
a.	Total Normal Cost	$2,389,335	$2,526,985
b.	Amortization of Unfunded Accrued Liability	1,843,195	2,158,735
c.	Total Required Contribution	$4,232,530	$4,685,720
2.	**Total Required Contribution (Projected to Beginning of Next Fiscal Year)**		
a.	Total Required Contribution	$4,534,098	$5,019,578
b.	Projection Rate to Next Fiscal Year	7.125%	7.125%
3.	**Contribution (Adjusted for Periodic Payments)**	$4,716,587	$5,224,969
4.	**Total Required Contribution (Adjusted for Periodic Payments)**		
a.	Expected City Contributions	$3,476,122	$3,807,420
b.	Estimated State Contributions	588,390	745,770
c.	Expected Member Contributions	652,075	671,779
d.	Total Required Contribution	$4,716,587	$5,224,969
e.	Expected City Contributions as a % of Pay	39.98%	42.51%
f.	Estimated State Contributions as a % of Pay	6.77%	8.33%
g.	Expected Member Contributions as a % of Pay	7.50%	7.50%
h.	Total Required Contribution as a % of Pay	54.25%	58.34%
5.	**Valuation Payroll**		
a.	Payroll Expected	$8,694,334	$8,957,047
b.	Projected to Next Valuation Year	8,694,334	8,957,047
c.	Expected Total Payroll Increase	0.00%	0.00%

Reconciliations

Change in Funded Percentage

	Unfunded Accrued Liability	Funded Percentage	Change in Unfunded Accrued Liability	Change in Funded Percentage
Prior Valuation Report	$17,502,491	82.70%		
Changes in Funded Ratio due to:				
Normal Operation of Plan	$16,279,815	84.45%	$(1,222,676)	1.75%
Actuarial Investment Experience	19,602,779	81.28%	3,322,964	(3.17%)
Demographic Experience	20,632,513	80.49%	1,029,734	(0.79%)
Effect of Share Plan	20,790,438	80.37%	157,925	(0.12%)
Total Changes			$3,287,947	(2.33%)
As of Current Valuation	$20,790,438	80.37%		

Change in City Contribution

	Dollar Amount	% of Pay
Prior Valuation Report	$3,476,122	39.98 %
Changes in Contribution due to:		
Normal Operation of Plan	$0	0.00 %
Change in Expected State Contribution	(151,774)	(1.74)%
Actuarial Investment Experience	298,636	3.43 %
Demographic Experience	184,436	0.84 %
Total Changes	$331,298	2.53 %
As of Current Valuation	$3,807,420	42.51 %

Section 3 Accounting Information

Information Required by GASB 67/68

Supplemental reports provide information under Governmental Accounting Standards Board No. 67/68.

Statement of Accumulated Plan Benefits

Valuation as of October 1,	2022	2023
1. Actuarial present value of accumulated plan benefits		
a. Participants currently receiving benefits	$67,633,901	$71,819,804
b. Inactive vested with deferred benefits and active vested including contributions	23,908,189	22,793,387
c. Total vested plan benefits	$91,542,090	$94,613,191
d. Total non-vested plan benefits	3,393,025	3,147,535
e. Total accumulated plan benefits	$94,935,115	$97,760,726
2. Change in accumulated plan benefits		
a. Accumulated plan benefits beginning of year		$94,935,115
b. Increase (decrease) during year attributable to:		
i. Plan amendment		$0
ii. Change in assumptions or methods		0
iii. Benefits paid		(5,787,221)
iv. Increase for interest and probability of payment due to decrease in discount period and benefits accrued		8,612,832
v. Net increase (decrease)		$2,825,611
c. Accumulated plan benefits end of year		$97,760,726

Note: Share balances are excluded in the above accumulated benefit information.

Other Disclosures Required by the State of Florida

Valuation as of October 1,	2022	2023
Other Disclosures (where applicable)		
Present value of active member:		
Future salaries (attained age)	$82,566,194	$87,220,217
Future contributions (attained age)	$6,192,465	$6,541,516
Employee contributions without interest	$4,903,797	$4,844,350

Required Disclosure Under F.S. 112.664(1)

As required under F.S. Section 112.664(1) we have produced the following information:

(a) Total pension liability calculated based on mortality used in one of the last two Florida Retirement System (FRS) valuations.

(b) Total pension liability calculated using an assumed interest rate that is 200 basis points lower than that assumed in the valuation of the Plan.

(c) Determination of the number of months or years for which the current market value of assets is adequate to sustain the payment of expected retirement benefits.

(d) Recommended contribution to the Plan using the most recent valuation and the contributions necessary prepared pursuant to (a) and (b) stated as a dollar amount and % of payroll.

	2% Decrease (5.125%)	Current Discount Rate (7.125%)	2% Increase (9.125%)
Total pension liability	$130,711,872	$105,913,781	$88,461,276
Plan fiduciary net position	(79,203,666)	(79,203,666)	(79,203,666)
Net pension liability	$51,508,206	$26,710,115	$9,257,610
Plan fiduciary net position as a percentage of the total pension liability	60.59%	74.78%	89.53%
Years of benefit payments:			
Expected for current members:	99	99	99
Paid for with current assets:	12.08	14.29	17.97
City Plus State Contribution Requirement, Plus Expected Employee Contributions			
Dollar Amount	$8,034,326	$5,224,969	$2,885,043
Percent of Payroll	89.70%	58.34%	32.21%
Increase (Decrease)	$2,809,357		$(2,339,926)

Required Disclosure Under F.S. 112.664(2)(b)2.

F.S. Section 112.664(2)(b)2. - For the previous five years, beginning with 2013, a side-by-side comparison of the plan's assumed rate of return compared to the actual rate of return, as well as the percentages of cash, equity, bond and alternative investments in the plan portfolio.

Year Ending September 30,	**2023**	**2022**	**2021**	**2020**	**2019**
Assumed rate of return	7.125%	7.125%	7.25%	7.25%	7.50%
Actual rate of return	9.70%	(11.82%)	17.16%	1.85%	4.41%
Percentages of assets in:					
Cash	3%	3%	5%	4%	3%
Equity	57%	52%	59%	58%	74%
Bond	19%	22%	20%	21%	22%
Alternative	21%	23%	16%	17%	1%
Total	100%	100%	100%	100%	100%

Section 4 Supplementary Information

Summary of Participant Data

Member Statistics

Valuation as of October 1,	2022	2023
Active Participants		
Number	132	124
Average Age	37.1	37.1
Average Credited Service	10.1	10.3
Percent Male	98.5	98.4
Average Valuation Salary	$65,036	$71,155
Total Valuation Salary	$8,584,788	$8,823,200
Total Valuation Salary (Imputed)	$9,099,875	$9,352,592
Payroll Covered in Valuation	$8,694,334	$8,957,047
Terminated With Rights to Deferred Benefits		
Number	5	5
Average Age	42.4	41.4
Percent Male	100.0	100.0
Average Monthly Benefit	$2,067	$2,413
DROP Participants		
Number	9	14
Average Age	54.0	54.2
Percent Male	100.0	100.0
Average Monthly Benefit	$6,221	$6,173
DROP Account Balances	$726,019	$1,703,052

Member Statistics (Continued)

Valuation as of October 1,	2022	2023
Retirees		
Number	98	96
Average Age	66.5	67.0
Percent Male	94.9	94.8
Average Monthly Benefit	$3,887	$3,847
DROP Account Balances	$4,509,662	$4,119,261
Beneficiaries		
Number	14	15
Average Age	71.8	72.9
Percent Male	0.0	0.0
Average Monthly Benefit	$2,675	$2,722
DROP Account Balances	$392,747	$368,425
Disability Retirements		
Number	4	5
Average Age	59.4	54.0
Percent Male	75.0	80.0
Average Monthly Benefit	$1,011	$1,750
Total In Payment Status		
Number	116	116
Average Age	66.9	67.2
Percent Male	82.8	81.9
Average Monthly Benefit	$3,642	$3,611

The average monthly benefit shown includes any supplemental benefit payments.

Number of Active Members by Age and Service as of October 1, 2023

	x < 1	x < 5	x < 10	x < 15	x < 20	x < 25	x < 30	Total
x < 20								
x < 25	1	10						11
x < 30	1	13	4					18
x < 35		4	14	4				22
x < 40		4	8	12	6			30
x < 45		2	1	5	5	1		14
x < 50			2	3	10	3		18
x < 55					4	4	1	9
x < 60					1			1
60+				1				1
Total	2	33	29	25	26	8	1	124

Active Valuation Pay by Age and Service as of October 1, 2023

	x < 1	x < 5	x < 10	x < 15	x < 20	x < 25	x < 30	Total
x < 20								
x < 25	45,015	52,134						51,486
x < 30	42,543	54,491	62,345					55,573
x < 35		55,057	62,277	71,839				62,703
x < 40		58,851	66,037	79,046	82,142			73,504
x < 45		52,585	61,362	71,060	94,596	89,717		77,466
x < 50			64,905	75,650	83,230	100,861		82,869
x < 55					84,466	96,192	94,280	90,768
x < 60					90,814			90,814
60+				188,061				188,061
Total	43,779	54,258	63,473	80,249	85,647	97,134	94,280	71,155

Reconciliation of Plan Participants

	Active	Vested Term.	DROP	Retired	Survivor	Disabled	Total
October 1, 2022	132	5	9	98	14	4	262
Enter DROP	(5)		5				0
Retired	(1)	(1)		2			0
Disability Retirement	(2)					2	0
Vested Termination	(1)	1					0
Nonvested Term	(1)						(1)
Death With Survivor				(1)	1		0
Death No Survivor				(3)		(1)	(4)
New Hires							0
Additions	2						2
October 1, 2023	124	5	14	96	15	5	259

Outline of Plan Provisions

Plan Type: Single-employer Defined Benefit Pension Plan

Legal Authority: The Plan was established and is amended by local ordinance.

Board Composition: The Board consists of five Trustees, two of whom are legal residents of the City who are appointed by the City Commission, two of whom are full-time firefighters who are members of the Plan and who are elected by a majority of the Firefighter members, and a fifth Trustee who is chosen by a majority of the first four Trustees.

Plan Administrator: The Board of Trustees

Funding Requirements: Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended by ordinance.

Effective Date: Ordinance No. 2006-07 adopted January 24, 2006 amended the Plan provisions in their entirety. The following provides the history of subsequent ordinances:

- Ordinance No. 2009-17 adopted effective May 12, 2009 amended the definition of Actuarial Equivalence to be based on assumptions adopted by the Board; included USERRA military service as Credited Service; updated ordinance language with respect to IRC Section 401(a) qualification, 401(a)(9) minimum required distributions, 401(a)(17) pay limitations, 414(d) qualification, 415 benefit limitations, and 503(b) prohibited transactions; simplified language to indicate City contributions are based on the applicable actuarial valuation; revised language regarding the optional form of benefits payable to disability retirees and when payments end; to indicate a survivor may be paid a lump sum if the present value of benefits is less than $1,000; and included language revision to pertaining to domestic relations orders, forfeitures and rollovers.
- Ordinance No. 2009-25 adopted effective June 23, 2009 amended the section of the Plan regarding finances and management to provide for more liberal investment options, including an increase in the allowable percentage allocated for international investments.
- Ordinance No. 2009-35 adopted effective October 13, 2009 changed employee contributions from 4.75% to 6.0% of pay, increased the benefit accrual rate from 3.0% to 3.25% for retirements on and after October 1, 2008 (which is partially paid for with a one-time deduction from the Enhanced Benefit Account), clarified the Enhanced Benefit Account carry-forward methodology, changed the Supplemental Benefit to be payable for the life of the member only, and provides for an additional Supplemental Benefit of $2.50 full years of Credited Service in the fifth year of retirement from available Enhanced Benefit Account funds.
- Ordinance No. 2010-04 adopted effective January 26, 2010 amended language regarding the repeal or termination of the system, allowing for retiree directed payments, to no longer allow the purchase of a non-forfeitable fixed annuity with respect to DROP distributions, to allow the purchase of military and prior firefighter service over up to a five year period, and to allow the purchase of certain prior firefighter outside the state of Florida.
- Ordinance 2011-57 was adopted December 13, 2011. This amendment provides for the use of up to 50% of the cumulative balance is State contributions available for benefit improvement to pay for any increase in the total normal cost rate more than 1.25% of pay. This ordinance states that the 6.0% employee contribution rate is set for three years and that for the fiscal year beginning October 1, 2011 and October 1, 2014 an actuarial valuation is performed to recalculate the cost of the benefit improvement.
- Ordinance No. 2015-06 became effective upon adoption on March 24, 2015 revising (1) the definition of Salary to exclude payments for overtime in excess of 300 hours per fiscal year and payments for accrued sick and annual leave from the definition of Salary [except that for

members employed on March 24, 2015 Salary does include the lesser of (a) the amount of sick and annual leave accrued as of March 24, 2015 and (b) the actual amount of sick and annual leave for which the member receives payment at retirement], (2) employee contributions effective April 1, 2015 from 6.0% to 7.5% of Salary, (3) the Supplemental Benefit to indicate that if there are insufficient funds available in the EBA to pay for both the increased supplement and the variable COLA, the monthly supplement is payable first and then for the remaining funds in the EBA are used to provide the variable COLA on a prorate basis, (4) the maximum pension benefit to be $90,000 annually for members hired on or after March 24, 2015 and also members employed on March 24, 2015 who have not reached the normal retirement date [except that the accrued a benefit in excess of $90,000 annually as of March 24, 2015 is not reduced to $90,000 but no additional benefits will accrue], and (5) DROP interest crediting for members who elect the fixed rate from an annual rate of 6.5% to 1.3% for those who enter the DROP on or after March 24, 2015.

- Ordinance No. 2017-46 became effective upon adoption on October 10, 2017. This ordinance (1) requires employee contributions of 6.5% of Salary from Members who enter the DROP after October 10, 2017, (2) for Members employed after October 10, 2017, the Accrued Benefit is 3.0% x Average Final Compensation x Credited Service, and for Members employed on or before October 10, 2017 and retiring on or after October 1, 2008 the Accrued Benefit is 3.25% x Average Final Compensation x Credited Service, and (3) a Share Plan is established where accumulated excess premium tax revenues as of October 1, 2015 (totaling $258,620) are split where 50% is allocated to the Share Plan and 50% is used to pay down the unfunded liability of the Plan. For premium tax revenues received in any Plan year after October 1, 2015 over that for calendar 2012 in the amount of $587,845, 50% is allocated to the Share Plan and 50% is used to reduce the city's annual required pension contributions. However, the Share Plan becomes operative when the city and the union reach agreement on the details of the Share Plan.
- Ordinance No. 2020-37 was adopted June 9, 2020 to provide details regarding the Share plan individual account provisions such as which members receive a Share allocation, how allocations are made to individual Share accounts, how returns are credited, how a member vests in their Share account, and so forth.
- Ordinance No. 2021-41 was adopted September 29, 2021 to deem certain causes of death and disability as having been in the line-of-duty, and also change the required beginning date to April 1 of the calendar year that next follows the calendar year in which the participant attains or will attain the age of 72 years.
- Ordinance No. 2022-41 was adopted September 27, 2022 to revise trustee terms from two to four years.

Plan Year: The 12-month period from October 1st to the following September 30th.

Member: Full-time firefighters become Members immediately upon hire.

Actuarial Equivalence: Using the funding assumptions as adopted by the board.

Credited Service: Total years and fractional parts of years of service as a firefighter with Member contributions, when required. Credited Service also includes certain military service. Additional Credited Service may be purchased.

Vesting: 100% upon the earlier of earning ten years of Credited Service and reaching the Normal Retirement Date.

Salary: Total compensation for services rendered to the City as a firefighter reported on Form W-2 plus all tax-deferred, tax sheltered, or tax-exempt items of income derived from elective employee payroll deductions.

Effective March 24, 2015 Salary excludes payments for overtime in excess of 300 hours per fiscal year and payments for accrued sick and annual leave from the definition of Salary [except that for members employed on March 24, 2015 Salary does include the lesser of (a) the amount of sick and annual leave accrued as of March 24, 2015 and (b) the actual amount of sick and annual leave for which the member receives payment at retirement].

Effective for benefits calculated after October, 2016, Salary used is that for the fiscal year.

Regular Base Salary: One-twelfth of the employee's annual base pay rate plus any incentive pay.

Employee Contributions: Prior to Ordinance No. 2009-35 adopted October 13, 2009, employees hired prior to May 9, 1978 contributed 5.0% of Salary. Employees hired after May 9, 1978 contributed 4.75% of Salary. Effective October 13, 2009, Ordinance No. 2009-35 revised employee contributions to 6.0% of Salary. Effective December 13, 2011, Ordinance No. 2011-57 put special rules in place related to the multiplier increase from 3.0% to 3.25% associated with the 1.25% employee contribution rate increase from 4.75% to 6.0%. Effective April 1, 2015, Ordinance No. 2015-06 revised employee contributions from 6.0% to 7.5% of Salary. Ordinance No. 2017-46 requires employee contributions of 6.5% of Salary from Members who enter the DROP after October 10, 2017.

A Member who terminates non-vested is entitled to refund of accumulated Employee Contributions with interest at 4% per year. Contributions may be repaid with interest upon reentry into the Plan due to rehire. The annual 4% interest crediting is not applied to employee contributions associated with a service purchase.

Vested Members who terminate employment prior to being eligible to receive an annuity may leave their accumulated contributions in the fund, and upon reaching Early Retirement eligibility begin commencement of the reduced Accrued Benefit plus the Supplemental Benefit, as defined under Early Retirement.

Average Final Compensation: Average of Salary for the five highest years out of the last 10 years of Credited Service.

Normal Retirement Date: For those who were Members prior to May 9, 1978, the first day of the month coincident with or next following the earlier of (i) age 50, regardless of Credited Service, or (ii) 25 years Credited Service, regardless of age. For those becoming Members on or after May 9, 1978, the first day of the month coincident with or next following the earlier of (i) age 55 and completion of 10 years of Credited Service, or (ii) 25 years Credited Service, regardless of age.

For those who did not earn 25 years of Credited Service upon termination of employment, the Normal Retirement Date is the first day of the month coincident with or next following the earlier of (i) age 55 and completion of 10 years of Credited Service, or (ii) the date the member would have earned 25 years of Credited Service.

Normal Retirement Benefit: The Accrued Benefit plus the Supplemental Benefit.

Per Ordinance No. 2015-06, the maximum pension benefit is limited to $90,000 annually for members hired on or after March 24, 2015 and also members employed on March 24, 2015 who have not reached the normal retirement date [except that the accrued a benefit in excess of $90,000 annually as of March 24, 2015 is not reduced to $90,000 but no additional benefits will accrue].

The $90,000 limit does not apply to the Supplemental Benefit.

Accrued Benefit: Per Ordinance No. 2017-46, for Members employed after October 10, 2017:

3.0% x Average Final Compensation x Credited Service

For Members employed on or before October 10, 2017 and retiring on or after October 1, 2008:

3.25% x Average Final Compensation x Credited Service

For members retiring on or after October 1, 1995 the multiplier was 3.0%, as last used in the October 1, 2008 actuarial valuation of the Plan. Prior to October 1, 1995 the multiplier was 2.5%.

This benefit is payable as a 10-year certain and continuous annuity.

Supplemental Benefit: Effective October 1, 2003, a Supplemental Benefit is payable monthly for the joint lives of the member and their beneficiary equal to $5 for each full year of Credited Service. Effective October 13, 2009, Ordinance No. 2009-35 clarified that this benefit is payable over only the life of the member. In addition, Ordinance No. 2009-35 provided for all current and future retirees to potentially receive an additional $2.50 for each full year of Credited Service (for a total of $7.50 for each full year of Credited Service) beginning on the fifth anniversary of retirement. DROP participation counts toward the satisfaction of the five years of retirement. The additional $2.50 is only provided through available funds from the Enhanced Benefit Account, if any.

Effective March 24, 2015 Ordinance No. 2015-06 provides that if there are insufficient funds available in the Enhanced Benefit Account to pay for both the $2.50 increased supplement and the variable cost of living adjustment, the monthly supplement is payable first and then the remaining funds in the Enhanced Benefit Account are used to provide the variable cost of living adjustment on a prorate basis.

Early Retirement Date: The first day of the month coincident with or next following the earlier of attainment of age 50 or the completion of 20 years of Credited Service.

For those who did not earn 20 years of Credited Service upon termination of employment, the Early Retirement Date is the first day of the month coincident with or next following the earlier of attainment of age 50 or the date the member would have earned 20 years of Credited Service.

Early Retirement Benefit: The Accrued Benefit reduced by 3% per year by which the commencement of benefits precedes the Normal Retirement Date, plus the Supplemental Benefit.

Enhanced Benefit Account (EBA): Provides for a lump sum variable cost of living adjustment for all members who retired, became disabled, or terminated vested on or after September 30, 1996, and their beneficiaries.

Commencing annually from March 1, 1997, the sum of (a) and (b), as follows, is credited to or deducted from the EBA to provide a lump sum variable cost of living adjustment:

(a) 50% of positive or negative net investment income compared to fund's investment objective for the preceding fiscal year, and
(b) 50% of the amount by which the premium taxes collected and distributed by the state exceed 5.6% of covered payroll during the preceding fiscal year.

Covered payroll during the preceding fiscal year has historically been the calculated as an average of the total valuation salary for the current and prior valuation.

The ordinance states that the cumulative value of the EBA allocation provided by (a), above, may not exceed the cumulative net actuarial gains and losses from all sources incurred from the inception of this provision. Note that any amount allocated to the EBA based on the language in (b) does not actually reduce premium taxes available to fund other benefits.

Effective October 13, 2009, Ordinance No. 2009-35 reduced EBA funds retroactively to October 1, 2008 by a one-time deduction equal to the cost to provide the increased 3.25% benefit accrual rate minus the amount of any unallocated premium tax money and defined use of EBA funds to first pay for an additional Supplemental Benefit of $2.50 for each full year of Credited Service after the fifth year of retirement (prior to the payment of any lump sum variable cost of living adjustment described in the following).

Each April 1 the EBA is allocated among the retirees as of the preceding September 30 based upon (i) the number of full months of retirement during the preceding fiscal year, and (ii) in proportion to the amount of each retiree's actual monthly retirement benefit. The allocation is limited to a maximum of 3% of the pension benefit (prorated if retired less than a full year). In the event that in any year the balance in the fund would result in a higher payment, the excess is returned to the EBA and carried forward to the next year. Any funds carried forward in the EBA are credited with the rate of return achieved by the fund. Per direction of the Board of Trustees at their January 25, 2017 meeting, in years when the beginning balance of the EBA is negative, there is no interest crediting applied in carrying forward the EBA balance to the next year. This change was made retroactively to when the EBA first became negative with the October 1, 2017 actuarial valuation.

Effective March 24, 2015 Ordinance No. 2015-06 provides that if there are insufficient funds available in the EBA to pay for both the $2.50 increased supplement and the variable cost of living adjustment, the monthly supplement is payable first and then the remaining funds in the EBA are used to provide the variable cost of living adjustment on a prorate basis.

<u>Death Benefits:</u> In the event of death in the line of duty prior to retirement eligibility, 40% of Regular Base Salary is payable to the spouse until their death. If there is no spouse, or upon the death of the spouse, 15% of Regular Base Salary is payable for each unmarried child until the age of 18 (or age 22 if a full-time student). The maximum amount payable to all such children is 40% of Regular Base Salary.

In the event of death not in the line of duty prior to retirement eligibility, the Employee Contributions accumulated with interest is payable or 10-year certain annuity reduced actuarially from the early retirement date.

For Members eligible for retirement at their date of death, the benefit payable is that greater in actuarial value between (i) the benefit defined for line of duty death prior to retirement eligibility and (ii) the benefit payable if the Member had retired on the date of death. The resulting amount is payable on a monthly basis for ten years, or on such other actuarially equivalent basis as approved by the board.

<u>Disability Retirement:</u> The benefit payable to any Member who becomes totally and permanently disabled in the line of duty is the greater of (i) 2% x Average Final Compensation x Credited Service, (ii) 42% x Average Final Compensation, and (iii) 40% x Regular Base Salary. The Supplemental Benefit is also payable.

The benefit payable to any Member who becomes totally and permanently disabled not in the line of duty after having earned 10 years of Credited Service is the greater of (i) 2% x Average Final Compensation x Credited Service, (ii) the Accrued Benefit as reduced for Early Retirement, further reduced actuarially in the event of disability prior to the Early Retirement Date, and (iii) 25% x Average Final Compensation. The Supplemental Benefit is also payable.

Disability Retirement benefits are payable on the first day of the first month after the board determines such entitlement. However, the monthly benefit is payable as of the date the board determined entitlement and any portion due for a partial month is paid together with the first payment.

<u>Optional Forms of Benefit:</u> The Accrued Benefit described above is payable in the form of a 10 year certain and continuous annuity. Members may optionally choose an actuarially equivalent single life annuity, joint and survivor annuity (with 50%, 66 2/3, 75% or 100% continuance), or a Social Security level income option (if a member retires prior to the time at which Social Security benefits are payable). Members who do not participate in the DROP may elect to receive 20% of the present value of their benefits as a single lump sum and the remainder of the value of their benefits as a 10 year certain and continuous annuity, a single life annuity, or a joint and survivor annuity (with 50%, 66 2/3%, 75% or 100% continuance).

Deferred Retirement Option Plan (DROP): Members are eligible to enter the DROP at the Normal Retirement Date. DROP participants are not eligible for death or disability benefits. The maximum DROP participation duration is 60 months. The Accrued Benefit plus Supplemental Benefit is frozen and no further Employee Contributions are payable at DROP entry. The Accrued Benefit accumulates in the DROP account with interest, credited quarterly, as elected by the Member (where this election may be changed by the Member annually effective October 1):

(a) An annual rate of 6.5%, compounded monthly, on the prior month's ending balance for members who enter the DROP before March 24, 2015, and 1.3%, compounded monthly, on the prior month's ending balance for members who enter the DROP on or after March 24, 2015. However, any member who was Normal Retirement eligible by October 1, 2012 receives 6.5% annual crediting even if they enter the DROP on or after March 24, 2015 per the legal opinion dated August 13, 2012.
(b) The average daily balance in the member's DROP account is credited or debited at a rate equal to the net investment return realized for the quarter.
(c) 50% of (a) plus 50% of (b).

A Member's final DROP account value for distribution is the value of the account at the end of the quarter immediately preceding termination of participation in the DROP, plus any monthly periodic additions made to the DROP account subsequent to the end of the previous quarter and prior to distribution.

The Supplemental Benefit is payable once the member actually terminates from employment and begins to receive monthly pension payments after the end of the DROP.

The $90,000 annual limit does limit deposits to the DROP, but does not limit DROP balance payouts.

Ordinance No. 2017-46 requires employee contributions of 6.5% of Salary from Members who enter the DROP after October 10, 2017.

Share Plan: Per Section 175.351(6), Florida Statutes, a defined contribution component (Share Plan) is established to be funded exclusively with Chapter 175 premium tax revenues where the accumulated excess premium tax revenues as of October 1, 2015 (totaling $258,620) are split where 50% is allocated to the Share Plan and 50% is used to pay down the unfunded liability of the Plan. For premium tax revenues received in any Plan year after October 1, 2015 over that for calendar 2012 in the amount of $587,845, 50% is allocated to the Share Plan and 50% is used to reduce the city's annual required pension contributions. Per Ordinance 2017-46, the Share Plan becomes operative when the city and the union reach agreement on the details of the Share Plan.

As stated in the draft IAFF local 1951 collective bargaining agreement for October 1, 2018 through September 30, 2021, individual share accounts are established for active members and members in DROP effective October 1, 2018, as follows:

(a) $129,310 is split evenly among each member during the first pay period in October, 2018, or as soon as practicable thereafter.
(b) An equal share of 50% of premium tax revenues in excess of $587,845 is credited within 30 days of receipt, or as soon as practicable thereafter.

In order to receive a share allocation, active members must be employed on October 1 for the year in which premium tax revenues are received. Members vest in the share account after 10 years of employment as determined by their hire date. The share account of employees who terminate prior to vesting is reallocated to all other share accounts. Share account money is commingled with other assets of the Plan for investment purposes. Share accounts are credited with net gains and losses at the same rate as the other assets of the Plan at the end of each calendar quarter. Share accounts are adjusted annually to account for costs, fees and expenses of share account administration. The share account balance is paid to vested participants upon leaving employment with the City for any reason, other than entering DROP. The Board of Trustees is authorized to adopt any rules necessary for the efficient operation of the Share Plan.

Description of Assumptions and Methods

Assumed Rate of Investment Return: 7.125% per year, net of investment expenses

Salary Increase – Individual: 6.0% per year. Final year salary is increased using individual percentages equal to actual total accrued leave hours as of October 1, 2014 multiplied by hourly rate of pay at October 1, 2014 divided by annualized fiscal 2014 salary after removing pay for overtime in excess of 300 hours.

Administrative Expenses: Prior year's actual expenses added to Normal Cost

Salary Increase – Total Payroll: No payroll growth assumed in amortization of unfunded accrued liability.

Inflation: 2.0% per year. Note this assumption is not used directly in the valuation of benefits.

Mortality: Mortality rates are those required by state statute. Mortality is as assumed in one of the last two valuations for the Florida Retirement System (FRS) for special risk employees, as follows:

The following sex distinct tables are used with fully generational mortality improvements using sex distinct Scale MP-2018.

Active:	Male:	PubS.H-2010(B) male employee set forward 1 year
	Female:	PubS.H-2010 female employee set forward 1 year
Healthy Retiree:	Male:	PubS.H-2010(B) male healthy retiree set forward 1 year
	Female:	PubS.H-2010 female healthy retiree set forward 1 year

The following sex distinct tables are used with no mortality improvement projection.

Disabled Retiree:	Male:	80% PubG.H-2010 male disabled retiree + 20% PubS.H-2010 male disabled retiree
	Female:	80% PubG.H-2010 female disabled retiree + 20% PubS.H-2010 female disabled retiree

Juvenile rates are used for ages 15-17.

The active tables reference the healthy retiree rates, above, at ages 80+.

The healthy retiree tables reference the active mortality rates, above, before age 44.

Retirement: Unisex rates, as follows:

	Service			
Age	<=9	10-19	20-24	>=25
<=39	0%	0%	0%	0%
40-49	0%	0%	5%	100%
50-54	5%	5%	5%	100%
>=55	5%	100%	100%	100%

Termination: Unisex rates, as follows:

Age	Rate	Age	Rate	Age	Rate	Age	Rate
<=19	0.00%	27	2.65%	35	1.90%	43	1.06%
20	3.00%	28	2.60%	36	1.78%	44	0.98%
21	2.95%	29	2.55%	37	1.66%	45	0.90%
22	2.90%	30	2.50%	38	1.54%	46	0.82%
23	2.85%	31	2.38%	39	1.42%	47	0.74%
24	2.80%	32	2.26%	40	1.30%	48	0.66%
25	2.75%	33	2.14%	41	1.22%	49	0.58%
26	2.70%	34	2.02%	42	1.14%	50	0.50%
						>=51	0.00%

Disability: Unisex rates, as follows:

Age	Rate	Age	Rate
<=19	0.000%	40	0.940%
20-30	0.300%	41	0.990%
31	0.364%	42	1.040%
32	0.428%	43	1.090%
33	0.492%	44	1.140%
34	0.556%	45	1.190%
35	0.620%	46	1.240%
36	0.684%	47	1.290%
37	0.748%	48	1.340%
38	0.812%	49	1.390%
39	0.876%	>=50	1.440%

On and Off Duty Disability and Death: 100% of deaths and disabilities are assumed in the line of duty.

Funding Method: Entry Age Normal (level percent of salary).

A description of the funding method is found on the next page entitled "Glossary of Actuarial Terms."

Glossary of Actuarial Terms

Present Value of Benefits (PVB): The present value, as of the valuation date, of all benefits that will become payable by the Plan for the current group of members in the census.

Normal Cost (NC): Under the Individual Entry Age Normal Cost Method, the annual normal cost for each individual active member is determined as the amount, from the date of employment to the date of retirement, sufficient to accumulate the value of the member's benefit at the time of retirement. The annual normal cost is a constant percentage of the member's projected covered pay.

Accrued Liability (AL): This is the portion of the PVB attributable to the past at the valuation date. For active members, AL is the annual NC accumulated from date of entry to the valuation date for each member. For retired and terminated members, the PVB and the AL are equal. The AL is the estimated liability owed by the pension fund at the valuation date.

Unfunded Accrued Liability (UAL): Any excess of the Accrued Liability over the fund assets. A negative UAL indicates fund assets are greater than the Accrued Liability, otherwise known as a surplus. Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Actuarial Value of Assets: The value of assets used in the actuarial valuation of the Plan which is compared to the AL to determine the UAL and minimum funding requirements. A method may be used to smooth out short term volatility in the fair market value of assets. In this valuation, the Actuarial Value of Assets has been calculated to smooth out unexpected fluctuations in the fair market value of assets over a 5-year period, less any reserve of State contributions.