CITY OF PENSACOLA FIREFIGHTERS' RELIEF AND PENSION FUND

ACTUARIAL VALUATION AS OF OCTOBER 1, 2022

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2024

GASB 67/68 DISCLOSURE INFORMATION AS OF SEPTEMBER 30, 2022





April 7, 2023

Board of Trustees City of Pensacola Firefighters' Pension Board

Re: City of Pensacola Firefighters' Relief and Pension Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Pensacola Firefighters' Relief and Pension Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding 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. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have 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 reflect 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 valuations, 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 valuations, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the City of Pensacola, 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 and accounting 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.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2021. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2022 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

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 Pensacola, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighters' Relief and Pension Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

By:

Joseph L. Griffin, ASA, EA, MAAA Enrolled Actuary #23-6938

By:

Tyler A. Koftan, MAAA

JLG/lke

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Pensacola Firefighters' Relief and Pension Fund, performed as of October 1, 2022, 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, 2024.

The contribution requirements, compared with those set forth in the October 1, 2021 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2022 <u>9/30/2024</u>	10/1/2021 <u>9/30/2023</u>
Minimum Required Contribution	\$2,583,259	\$2,033,691
Member Contributions (Est.)	736,265	690,985
City And State Required Contribution	1,846,994	1,342,706
State Contribution (Est.) ¹	615,134	615,134
City Required Contribution	\$1,231,860	\$727,572

¹ As requested by the Division of Retirement, the required contribution from the combination of City and State sources for the year ending September 30, 2023 is \$1,342,706. The City and State contribution for the fiscal year ending September 30, 2024 is \$1,846,994 based on the City's policy of contributing on October 1st. This approach saves approximately \$70,000 over the prior approach of contributing uniformly over the year.

As you can see, the Minimum Required Contribution shows an increase when compared to the results set forth in the October 1, 2021 actuarial valuation report. The increase is attributable to net unfavorable experience 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 5.10% (Actuarial Asset Basis) which fell short of the 7.75% assumption, inactive mortality experience, and an average salary increase of 7.87% which exceeded the 5.66% assumption. There were no significant sources of actuarial gain.

CHANGES SINCE PRIOR VALUATION

Plan Changes

There have been no changes in benefits since the prior valuation.

Actuarial Assumption/Method Changes

There have been no assumption or method changes since the prior valuation.

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2021	
(2) Summary of Contribution Impact by component:	
Change in State Contribution	(42,005)
Change in Normal Cost	108,217
Change in Administrative Expense	(706)
COLAs Higher Than Expected	3,724
Investment Return (Actuarial Asset Basis)	390,910
Salary Increases	61,525
Active Decrements	(10,136)
Inactive Mortality	87,050
Change in Expected Member Contributions	(45,280)
Assumption Change	0
Other	<u>(91,015)</u>
Total Change in Contribution	462,283
(3) Contribution Determined as of October 1, 2022	1,231,860

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2022</u>	10/1/2021
A. Participant Data		
Actives	112	111
Service Retirees	97	96
DROP Retirees	11	11
Beneficiaries	33	31
Disability Retirees	43	44
Terminated Vested	<u>4</u>	<u>3</u>
Total	300	296
Payroll Under Assumed Ret. Age	6,329,377	5,935,070
Annual Rate of Payments to:		
Service Retirees	5,940,394	5,722,148
DROP Retirees	604,231	618,084
Beneficiaries	1,087,756	993,154
Disability Retirees	1,576,830	1,570,719
Terminated Vested	47,923	47,923
B. Assets		
Actuarial Value (AVA) ¹	133,841,981	133,604,842
Market Value (MVA) ¹	116,636,599	149,229,764
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	37,317,835	34,988,864
Disability Benefits	3,130,161	2,927,814
Death Benefits	371,729	350,096
Vested Benefits	636,111	595,818
Refund of Contributions	152,376	148,414
Service Retirees	78,111,754	75,675,081
DROP Retirees ¹	10,967,046	11,227,898
Beneficiaries	9,731,826	9,450,399
Disability Retirees	16,515,252	16,630,556
Terminated Vested	485,196	475,382
Total	157,419,286	152,470,322

C. Liabilities - (Continued)	10/1/2022	10/1/2021
Present Value of Future Salaries	65,984,560	62,214,118
Present Value of Future		
Member Contributions	7,258,302	6,843,553
Normal Cost (Retirement)	1,379,705	1,292,232
Normal Cost (Disability)	202,434	192,749
Normal Cost (Death)	25,355	24,164
Normal Cost (Vesting)	34,347	32,029
Normal Cost (Refunds)	28,732	25,733
Total Normal Cost	1,670,573	1,566,907
Present Value of Future		
Normal Costs	16,762,657	15,819,562
Accrued Liability (Retirement)	23,231,841	21,724,579
Accrued Liability (Disability)	1,192,700	1,081,830
Accrued Liability (Death)	112,744	102,797
Accrued Liability (Vesting)	248,696	225,954
Accrued Liability (Refunds)	59,574	56,284
Accrued Liability (Inactives) 1	115,811,074	113,459,316
Total Actuarial Accrued Liability (EAN AL)	140,656,629	136,650,760
Unfunded Actuarial Accrued		
Liability (UAAL)	6,814,648	3,045,918
Funded Ratio (AVA / EAN AL)	95.2%	97.8%

D. Actuarial Present Value of		
Accrued Benefits	10/1/2022	10/1/2021
Vested Accrued Benefits		
Inactives ¹	115,811,074	113,459,316
Actives	6,719,482	6,526,631
Member Contributions	5,197,224	4,855,700
Total	127,727,780	124,841,647
Non-vested Accrued Benefits	5,000,566	4,571,446
Total Present Value		
Accrued Benefits (PVAB)	132,728,346	129,413,093
Funded Ratio (MVA / PVAB)	87.9%	115.3%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	2,698,138	
Benefits Paid	(9,061,275)	
Interest	9,678,390	
Other	0	
Total	3,315,253	

Valuation Date Applicable to Fiscal Year Ending	10/1/2022 <u>9/30/2024</u>	10/1/2021 <u>9/30/2023</u>
E. Pension Cost		
Normal Cost ²	\$1,766,631	\$1,658,414
Administrative Expenses ²	73,626	74,332
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 16 years		
(as of $10/1/2022$) ²	743,002	300,945
Minimum Required Contribution	2,583,259	2,033,691
Expected Member Contributions ²	736,265	690,985
Expected City and State Contribution	1,846,994	1,342,706
F. Past Contributions		
Plan Years Ending:	9/30/2022	
City and State Requirement	1,979,502	
Actual Contributions Made:		
City State Total	1,380,363 615,134 1,995,497	
G. Net Actuarial (Gain)/Loss	4,582,491	

 $^{^{1}}$ The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2022 and 9/30/2021.

² Contributions developed as of 10/1/2022 displayed above have been adjusted to account for assumed salary increase components.

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

Projected Unfunded
Actuarial Accrued Liability
6,814,648
6,585,730
6,339,069
5,145,871
3,985,680
2,090,092
0

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

		Actual	Assumed
Year Ended	9/30/2022	7.87%	5.66%
Year Ended	9/30/2021	6.82%	5.79%
Year Ended	9/30/2020	9.14%	5.88%
Year Ended	9/30/2019	6.74%	5.79%
Year Ended	9/30/2018	2.80%	5.67%

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

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2022	-17.88%	5.10%	7.75%
Year Ended	9/30/2021	22.94%	11.45%	7.75%
Year Ended	9/30/2020	11.12%	8.61%	7.75%
Year Ended	9/30/2019	2.83%	6.26%	7.75%
Year Ended	9/30/2018	9.20%	7.87%	7.75%
(iii) Average Annual Payroll Growth				

(a) Payroll as of:	10/1/2022	\$6,329,377
	10/1/2012	4,684,469
(b) Total Increase		35.11%
(c) Number of Years		10.00
(d) Average Annual Rate		3.06%

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.

Joseph L. Griffin, EA, ASA, MAAA Enrolled Actuary #20-6938

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, 2021	\$3,045,918
(2)	Sponsor Normal Cost developed as of October 1, 2021	914,049
(3)	Expected administrative expenses for the year ended September 30, 2022	70,231
(4)	Expected interest on (1), (2) and (3)	309,619
(5)	Sponsor contributions to the System during the year ended September 30, 2022	1,995,497
(6)	Expected interest on (5)	112,163
(7)	Expected Unfunded Actuarial Accrued Liability as of	
` _	September 30, 2022 (1)+(2)+(3)+(4)-(5)-(6)	2,232,157
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	4,582,491
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2022	6,814,648

Type of	Date	Years	10/1/2022	Amortization
<u>Base</u>	Established	Remaining	<u>Amount</u>	<u>Amount</u>
Fresh Start	10/1/2018	16	5,647,757	582,741
Benefits Change	10/1/2018	11	896	115
Actuarial Loss	10/1/2019	12	887,010	107,825
Actuarial Gain	10/1/2020	13	(1,440,216)	(166,794)
Assump Change	10/1/2020	13	1,166,209	135,061
Benefits Change	10/1/2020	13	286,472	33,177
Actuarial Gain	10/1/2021	14	(4,315,971)	(478,828)
Actuarial Loss	10/1/2022	15	4,582,491	489,305
			6,814,648	702,602

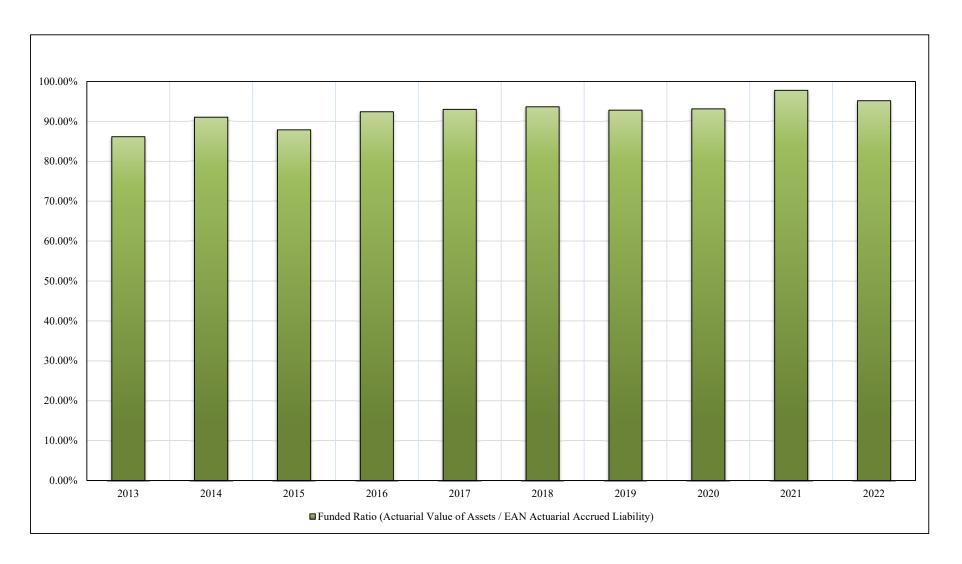
DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2021	\$3,045,918
(2) Expected UAAL as of October 1, 2022	2,232,157
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	3,461,932
Salary Increases	544,866
Active Decrements	(89,768)
Inactive Mortality	770,923
COLAS Greater/(Lower) Than Expected	32,978
Other	(138,440)
Increase in UAAL due to (Gain)/Loss	4,582,491
Assumption Changes	0
(4) Actual UAAL as of October 1, 2022	\$6,814,648

PROJECTED UNFUNDED ACTUARIAL ACCRUED LIABILITY

			Expected	
			Amortization	Expected UAAL
Plan Year	Fiscal Year	Expected UAAL	Payment UAAL	on 9/30
9/30/2022	9/30/2024	6,814,648	702,602	6,585,730
9/30/2023	9/30/2025	6,585,730	702,602	6,339,069
9/30/2024	9/30/2026	6,339,069	702,602	6,073,293
9/30/2025	9/30/2027	6,073,293	702,602	5,786,920
9/30/2026	9/30/2028	5,786,920	702,602	5,478,353
9/30/2027	9/30/2029	5,478,353	702,602	5,145,871
9/30/2028	9/30/2030	5,145,871	702,602	4,787,622
9/30/2029	9/30/2031	4,787,622	702,602	4,401,608
9/30/2030	9/30/2032	4,401,608	702,602	3,985,680
9/30/2031	9/30/2033	3,985,680	702,602	3,537,515
9/30/2032	9/30/2034	3,537,515	702,604	3,054,617
9/30/2033	9/30/2035	3,054,617	702,492	2,534,414
9/30/2034	9/30/2036	2,534,414	594,653	2,090,092
9/30/2035	9/30/2037	2,090,092	593,224	1,612,875
9/30/2036	9/30/2038	1,612,875	1,072,035	582,755
9/30/2037	9/30/2039	582,755	582,755	0

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 are projected generationally with Mortality Improvement Scale MP-2018. We feel this assumption sufficiently accommodates future mortality

improvements.

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

made based on plan demographics.

7.75% per year compounded annually, net of investment

related expenses. This is approximately 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 is based on the

experience study dated October 9, 2017.

Interest Rate

Salary Increases

<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.

Administrative Expenses \$69,623 annually, based on the average of actual

expenses incurred in the prior two fiscal years.

Cost-of-Living Adjustment 1.25% for those hired on or after June 20, 2015.

2.00% for those retiring after June 10, 2015 and hired

before that date.

2.875% per year for those retiring prior to June 10, 2015.

<u>Termination Rates</u> See table later in this section. This is based on the

experience study dated October 9, 2017.

<u>Disability Rates</u> See table later in this section. This is based on the

experience study dated October 9, 2017. 90.0% of disabilities are assumed to be In Line of Duty (ILOD).

Assumed Retirement Age See table later in this section. This is based on the

experience study dated October 9, 2017.

Marriage 100% are assumed married with husbands 3 years older

than wives.

Actuarial Asset Method All assets are valued at market value with an adjustment

made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected actuarial value investment

return) over a five-year period.

<u>Amortization Method</u> New UAAL amortization bases are 15 years.

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.

<u>Funding Method</u> Entry Age Normal Actuarial Cost Method. The

following loads are applied for determining the

minimum required contribution:

Interest – None.

Salary - A full year, based on current 5.75% assumption.

Assumption Tables

% Becoming Disabled

% Terminating Dis		isabled				
During the Year		During the Year		Salary Scale		
Service	Rate		Age	Rate	Service	Rate
0	10.0%		20	0.12%	0 - 1	8.00%
1	8.0%		25	0.13%	2 - 9	6.50%
2	6.0%		30	0.15%	10 - 19	5.00%
3	4.0%		35	0.25%	20+	4.00%
4-5	2.0%		40	0.36%		
6	1.8%		45	1.06%		
7	1.5%		50	1.76%		
8	1.3%		55	2.10%		
9	1.0%		60	2.44%		
10+	0.50%					

% Retiring During the Year % Retiring During the Year (10-23 Years of Service) (24 - 26 Years of Service)

Age	Rate
50	5.0%
51	10.0%
52 - 55	25.0%
56+	100.0%

Age	Rate
<=55	80.0%
56+	100.0%

% Retiring During the Year (>=27 Years of Service)

1001 (>	27 1 cars of Scr vice)
Age	Rate
Any	100.0%

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>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.
- <u>Demographic Assumptions:</u> Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled "Plan Maturity Measures and Other Risk Metrics". Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has increased from 44.4% on October 1, 2012 to 60.2% on October 1, 2022, indicating that the plan has experienced a significant growth in active population.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 82.3%. 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 increased from 82.3% on October 1, 2012 to 95.2% on October 1, 2022.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from -3.3% on October 1, 2012 to -5.5% on October 1, 2022. The current Net Cash Flow Ratio of -5.5% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks in this section 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

	10/1/2022	10/1/2021	10/1/2017	10/1/2012
Support Ratio				
Total Actives Total Inactives ¹ Actives / Inactives ¹	112 186 60.2%	111 184 60.3%	97 190 51.1%	88 198 44.4%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	116,636,599 6,586,730 1,770.8%	149,229,764 6,213,497 2,401.7%	120,622,681 4,611,308 2,615.8%	96,594,332 4,847,354 1,992.7%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	115,811,074 140,656,629 82.3%	113,459,316 136,650,760 83.0%	109,685,586 129,073,012 85.0%	87,089,656 116,699,878 74.6%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	133,841,981 140,656,629 95.2%	133,604,842 136,650,760 97.8%	120,059,817 129,073,012 93.0%	96,017,417 116,699,878 82.3%
Net Cash Flow Ratio				
Net Cash Flow ² Market Value of Assets (MVA) Ratio	(6,407,032) 116,636,599 -5.5%	(6,045,958) 149,229,764 -4.1%	(5,816,513) 120,622,681 -4.8%	(3,231,772) 96,594,332 -3.3%

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 <u>Previous Year</u>
1998	435,288.82	%
1999	446,175.43	2.5%
2000	430,632.86	-3.5%
2001	398,542.75	-7.5%
2002	467,483.17	17.3%
2003	426,820.13	-8.7%
2004	587,798.91	37.7%
2005	579,685.92	-1.4%
2006	674,181.18	16.3%
2007	766,923.14	13.8%
2008	799,134.89	4.2%
2009	530,169.21	-33.7%
2010	638,919.66	20.5%
2011	635,647.22	-0.5%
2012	667,019.50	4.9%
2013	666,509.03	-0.1%
2014	742,106.25	11.3%
2015	698,091.40	-5.9%
2016	628,070.73	-10.0%
2017	538,659.52	-14.2%
2018	546,910.96	1.5%
2019	518,103.44	-5.3%
2020	526,021.01	1.5%
2021	573,129.28	9.0%
2022	615,134.20	7.3%

STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2022

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Checking Account	266,560.63	266,560.63
Money Market	3,894,059.60	3,894,059.60
Cash	(11,810.74)	(11,810.74)
Total Cash and Equivalents	4,148,809.49	4,148,809.49
Receivables:		
Member Contributions in Transit	25,825.94	25,825.94
City Contributions in Transit	234.76	234.76
Investment Income	261,215.69	261,215.69
Total Receivable	287,276.39	287,276.39
Investments:		
U. S. Bonds and Bills	12,897,394.85	11,978,876.25
Federal Agency Guaranteed Securities	3,837,648.89	3,473,062.61
Corporate Bonds	28,083,461.52	24,594,308.41
Equities	42,672,155.41	47,343,257.68
Mutual Funds:		
Infrastructure	2,700,393.50	2,610,529.23
Equity	6,496,946.87	6,256,284.90
Pooled/Common/Commingled Funds:		
Equity	9,311,534.41	9,687,552.98
Real Estate	4,598,670.71	6,389,369.43
Total Investments	110,598,206.16	112,333,241.49
Total Assets	115,034,292.04	116,769,327.37
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	128,415.74	128,415.74
Administrative Expenses	4,113.00	4,113.00
Total Liabilities	132,728.74	132,728.74
NET POSITION RESTRICTED FOR PENSIONS	114,901,563.30	116,636,598.63

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2022 Market Value Basis

ADDITIONS

Contributions:

 Member
 732,734.01

 City
 1,380,362.52

 State
 615,134.20

Total Contributions 2,728,230.73

Investment Income:

Net Realized Gain (Loss) 4,046,383.09 Unrealized Gain (Loss) (32,607,887.84)

Net Increase in Fair Value of Investments (28,561,504.75)
Interest & Dividends 3,050,214.57
Less Investment Expense¹ (674,843.26)

Net Investment Income (26,186,133.44)

Total Additions (23,457,902.71)

DEDUCTIONS

Distributions to Members:

Benefit Payments 8,446,118.31 Lump Sum DROP Distributions 595,373.79 Refunds of Member Contributions 19,782.42

Total Distributions 9,061,274.52

Administrative Expense 73,988.03

Total Deductions 9,135,262.55

Net Increase in Net Position (32,593,165.26)

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 149,229,763.89

End of the Year 116,636,598.63

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

ACTUARIAL ASSET VALUATION September 30, 2022

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth 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.

Gains/(Losses) Not Yet Recognized						
Plan Year					Valuation Year	
Ending	Gain/(Loss)	2022	2023	2024	2025	2026
09/30/2018	1,835,358	0	0	0	0	
09/30/2019	(5,795,160)	(1,159,032)	0	0	0	
09/30/2020	3,889,966	1,555,987	777,994	0	0	
09/30/2021	19,052,420	11,431,452	7,620,968	3,810,484	0	
09/30/2022	(36,292,236)	(29,033,789)	(21,775,342)	(14,516,895)	(7,258,448)	
Total		(17,205,382)	(13,376,380)	(10,706,411)	(7,258,448)	
	· · · · · · · · · · · · · · · · · · ·	evelopment of In	vestment Gain/(I	Loss)		
Market Value of Ass	· · · · · · · · · · · · · · · · · · ·				149,229,764	
Actuarial Value of A	The state of the s				133,604,842	
	Senefit Payments & Ac				(6,407,032)	
	Earnings on Actuaria	I Value*			10,106,103	
Actual Net Investment 2022 Actuarial Investment				_	(26,186,133) (36,292,236)	
2022 Actuariai ilives	tillelit Galli/(LOSS)				(30,292,230)	
*Expected Investment	nt Earnings = 0.0775 *	133,604,842 +	0.5 * (6,407,032	2)]		
	Day	valonment of Act	uarial Value of	A ccatc		
(1) Market Value of	Development of Actuarial Value of Assets (1) Market Value of Assets, 09/30/2022 116,636,599					
(2) Gains/(Losses) Not Yet Recognized					(17,205,382)	
(3) Actuarial Value of Assets, 09/30/2022, (1) - (2)				_	133,841,981	
,	•	, , , , ,			,	
(A) 09/30/2021 Actu	arial Assets:				133,604,842	
(I) Net Investment In	ncome:					
1. Interest and Div					3,050,215	
2. Realized Gain ((Loss)				4,046,383	
Unrealized Gai					(32,607,888)	
4. Change in Actu					32,830,304	
Investment Exp				_	(674,843)	
	Total				6,644,171	
(B) 09/30/2022 Actu	arial Assets:				133,841,981	
Actuarial Asset Rate	of Return = $2I/(A+B-$	D:			5.10%	
Market Value of Ass		<i>/</i> ·			-17.88%	
Actuarial Gain/(Loss) due to Investment R	eturn (Actuarial	Asset Basis)		(3,461,932)	
10/01/2022 Limite	ed Actuarial Assets:				133,841,981	

0

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS SEPTEMBER 30, 2022 Actuarial Asset Basis

	REVENUES	
Contributions: Member City State	732,734.01 1,380,362.52 615,134.20	
Total Contributions		2,728,230.73
Earnings from Investments: Interest & Dividends Net Realized Gain (Loss) Unrealized Gain (Loss) Change in Actuarial Value	3,050,214.57 4,046,383.09 (32,607,887.84) 32,830,304.00	
Total Earnings and Investment Gains		7,319,013.82
Distributions to Members: Benefit Payments Lump Sum DROP Distributions	EXPENDITURES 8,446,118.31 595,373.79	
Refunds of Member Contributions Total Distributions	19,782.42	9,061,274.52
Expenses: Investment related ¹ Administrative	674,843.26 73,988.03	9,001,214.32
Total Expenses		748,831.29
Change in Net Assets for the Year		237,138.74
Net Assets Beginning of the Year		133,604,841.89
Net Assets End of the Year ²		133,841,980.63

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, 2021 to September 30, 2022

Beginning of the Year Balance	2,066,416.67
Plus Additions	542,435.00
Investment Return Earned	24,195.56
Less Distributions	(595,373.79)
End of the Year Balance	2,037,673.44

RECONCILIATION OF CITY SHORTFALL/(PREPAID) CONTRIBUTION FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2022

(1)	Required City and State Contributions	\$1,979,502.00
(2)	Less Allowable State Contribution	(615,134.20)
(3)	Required City Contribution for Fiscal 2022	1,364,367.80
(4)	Less 2021 Prepaid Contribution	0.00
(5)	Less Actual City Contributions	(1,380,362.52)
(6)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2022	(\$15,994.72)

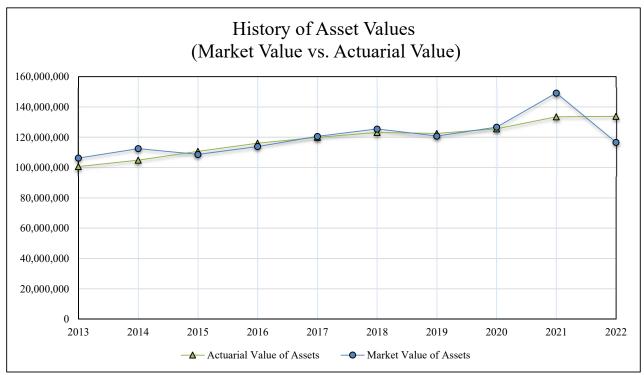
City of Pensacola Firefighters' Relief and Pension Fund

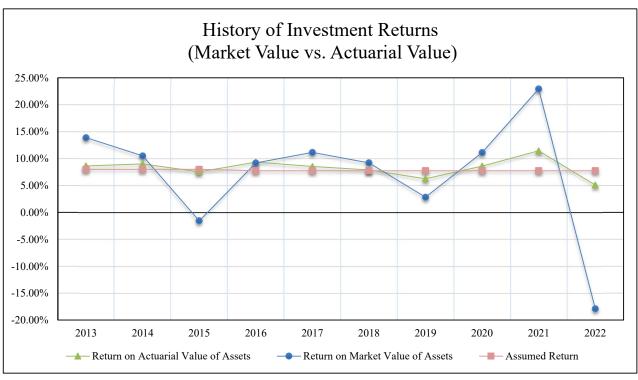
RECENT COMPENSATION AND INVESTMENT EXPERIENCE

Compensation		nsation	Investment Return*		
Valuation	% Increase	Assumed	Market	Actuarial	
Date	(Decrease)	Increase	Value	Value	Assumed
		,			
10/1/2022	7.87%	5.66%	(17.88%)	5.10%	7.75%
10/1/2021	6.82%	5.79%	22.94%	11.45%	7.75%
10/1/2020	9.14%	5.88%	11.12%	8.61%	7.75%
10/1/2019	6.74%	5.79%	2.83%	6.26%	7.75%
10/1/2018	2.80%	5.67%	9.20%	7.87%	7.75%
10/1/2017	7.62%	7.04%	11.14%	8.54%	7.75%
10/1/2016	(3.74%)	7.15%	9.18%	9.34%	7.75%
10/1/2015	11.22%	7.16%	(1.56%)	7.54%	8.00%
10/1/2014	5.98%	6.86%	10.49%	9.02%	8.00%
10/1/2013	(4.15%)	6.62%	13.88%	8.64%	8.00%
Last 5 Years	6.65%	5.76%	4.73%	7.84%	7.75%
Last 10 Years	4.91%	6.36%	6.59%	8.22%	7.82%

^{*}Computed as 2I/(A+B-I), where A is beginning value, B is ending value and I is investment return

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





STATISTICAL DATA

	10/1/2022	10/1/2021	10/1/2020	10/1/2019
Actives				
Number	112	111	110	101
Average Current Age	36.3	36.0	35.1	34.9
Average Age at Employment	26.5	26.4	26.4	26.4
Average Past Service	9.8	9.6	8.7	8.5
Average Annual Salary	\$58,810	\$55,977	\$52,819	\$47,622
Service Retirees				
Number	97	96	99	95
Average Current Age	67.2	67.0	66.5	66.5
Average Annual Benefit	\$61,241	\$59,606	\$57,631	\$57,095
DROP Retirees				
Number	11	11	12	17
Average Current Age	53.1	53.5	52.9	51.4
Average Annual Benefit	\$54,930	\$56,189	\$54,468	\$52,560
<u>Beneficiaries</u>				
Number	33	31	30	30
Average Current Age	78.0	76.3	77.2	76.4
Average Annual Benefit	\$32,962	\$32,037	\$31,572	\$32,865
Disability Retirees				
Number	43	44	49	52
Average Current Age	72.9	72.3	71.8	71.3
Average Annual Benefit	\$36,670	\$35,698	\$34,540	\$34,402
Terminated Vested				
Number	4	3	3	3
Average Current Age 1	48.0	47.0	46.0	45.0
Average Annual Benefit 1	\$23,962	\$23,962	\$23,962	\$23,962

¹ The Average Current Age and Average Annual Benefit exclude participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

A	AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 -	19												0
20 -	24	3	1	2	2								8
25 -	29	1	1	1	2	5	6						16
30 -	34		1	4	5	6	11	1	1				29
35 -	39	1	1		2		6	2	10				22
40 -	44	1		1	1		1	3	5	2			14
45 -	49						1	1	8	6			16
50 -	54						1		1	1	2		5
55 -	59									1	1		2
60 -	64												0
	65+												0
,	Total	6	4	8	12	11	26	7	25	10	3	0	112

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2021	111
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	(1)
iii. Refund of member contributions or full lump sum distribution received	(1)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. DROP	<u>(2)</u>
g. Continuing participants	106
h. New entrants / Rehires	6
i. Total active life participants in valuation	112

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 <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	96	11	31	44	2	1	185
Retired	3	(2)	0	0	0	0	1
DROP	0	2	0	0	0	0	2
Vested (Deferred Annuity)	0	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0	1	1
Hired/Terminated in Same Year	0	0	0	0	0	0	0
Death, With Survivor	(2)	0	2	0	0	0	0
Death, No Survivor	0	0	0	(1)	0	0	(1)
Disabled	0	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0	0
Rehires	0	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0
b. Number current valuation	97	11	33	43	2	2	188

SUMMARY OF CURRENT PLAN

(Through Ordinance 11-21)

<u>Eligibility</u> Employees who are classified as full-time Firefighters

shall participate in the System as a condition of

employment.

<u>Credited Service</u> Complete years of service. For vested members,

service also includes major fractional parts of a

year.

Salary Regular wages, longevity pay, station or watch captain

pay, special duty pay, bonuses, lump-sum payments not

made at termination, inclusive of certain elective

deferrals, deferred compensation or tax-sheltered annuity programs, and any other payments required by law to be

included in pension calculations.

Additionally, Salary includes basic life support (BLS) pay and a maximum of 300 hours of overtime pay per

plan year.

Average Final Compensation Average Salary for the best 2 years out of the last 5 years

of Credited Service for Members with 20 or more years

of Credited Service as of June 10, 2015.

Average Salary for the last 5 years of Credited Service

for Members with less than 20 years of Credited Service

as of June 10, 2015.

Member Contributions 11.00% of Salary.

<u>City and State Contributions</u>

Remaining amount required in order to pay current

costs and amortize unfunded past service cost, if any, as

provided in Part VII of Chapter 112, Florida Statutes.

Normal Retirement

Date Earlier of Age 52 and 10 years of Credited Service, or 25

years of Credited Service.

Benefit At 25 years of service, the retirement benefit is 75% of

average final compensation. Otherwise, the benefit is 75% of first \$2,400 of average final compensation, plus 70% of the next \$1,200 of average final compensation, plus 65% of any additional amount. This benefit is reduced by 2% for each of the first 18 years, 4% for the next year and 6% for each of the next 5 years by which

service is less than 25 years.

Form of Benefit If single, single life annuity (options available). If

married, 75% joint and survivor annuity.

Early Retirement

Eligibility Age 50 and 10 Years of Credited Service.

Benefit Accrued benefit, reduced 3% per year.

Vesting

Schedule 100% after 10 years of Credited Service.

Benefit Amount Accrued benefit multiplied by the number of years of

service at termination (maximum 25 years) divided by

25 years. Payable at age 52.

Disability

Eligibility Total and permanent disability.

Benefit

Service Incurred The benefit is 75% of first \$2,400 of average final

compensation, plus 70% of the next \$1,200 of average final compensation, plus 65% of any additional amount. This benefit is reduced by 1% for each of the first 18 years, 2% for the next year and 4% for each of the next 5 years by which service is less than 25 years. Minimum

benefit is 42% of AFC.

Non-Service Incurred The benefit is 75% of first \$2,400 of average final

compensation, plus 70% of the next \$1,200 of average final compensation, plus 65% of any additional amount. This benefit is reduced by 2% for each of the first 18 years, 4% for the next year and 6% for each of the next 5 years by which service is less than 25 years. Minimum

benefit is 25% of AFC.

Duration Payable as a 75% joint and survivor benefit. Options

available.

Death Benefits

Pre-Retirement

Vested 75% of monthly accrued benefit payable to designated

beneficiary for life.

Non-Vested Refund of accumulated contributions without interest.

Post-Retirement Benefits payable to beneficiary in accordance with

option selected at retirement.

<u>Board of Trustees</u> a. Two City Council appointees,

b. Two Members of the Department elected by the

membership, and

c. Fifth Member elected by other 4 appointed by City

Council.

<u>Deferred Retirement Option Plan</u>

Eligibility Satisfaction of Normal Retirement requirements (Earlier

of Age 52 and 10 years of Credited Service, or 25 years

of Credited Service).

Participation Not to exceed 60 months.

Rate of Return 1.3% annually.

Form of Distribution Cash lump sum (options available) at termination of

employment.

Cost-of-Living Adjustment

Eligibility All members in payment status.

Increased annually based on Consumer Price Index,

limited to 3.00% per year for retirees who retired prior to June 10, 2015. The limit is 2.00% per year for retirees who are hired before June 10, 2015 and retire after June 10, 2015. The limit is 1.25% per year for Members who

are hired on or after June 10, 2015.

No increases are provided during DROP participation for Members who were hired after July 1, 1999 and enter

DROP after June 10, 2015.

STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2022

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Checking Account	266,561
Money Market	3,894,060
Cash	(11,811)
Total Cash and Equivalents	4,148,810
Receivables:	
Member Contributions in Transit	25,826
City Contributions in Transit	235
Investment Income	261,216
Total Receivable	287,277
Investments:	
U. S. Bonds and Bills	11,978,876
Federal Agency Guaranteed Securities	3,473,063
Corporate Bonds	24,594,308
Equities	47,343,258
Mutual Funds:	
Infrastructure	2,610,529
Equity	6,256,285
Pooled/Common/Commingled Funds:	
Equity	9,687,553
Real Estate	6,389,369
Total Investments	112,333,241
Total Assets	116,769,328
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	128,416
Administrative Expenses	4,113
Prior Year Payable	200
Total Liabilities	132,729
NET POSITION RESTRICTED FOR PENSIONS	116,636,599

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2022

Market Value Basis

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Member	732,734
City	1,380,363
State	615,134

Total Contributions 2,728,231

Investment Income:

Net Increase in Fair Value of Investments (28,561,505)
Interest & Dividends 3,050,214
Less Investment Expense¹ (674,843)

Net Investment Income (26,186,134)

Total Additions (23,457,903)

DEDUCTIONS

Distributions to Members:

Benefit Payments 8,446,118
Lump Sum DROP Distributions 595,374
Refunds of Member Contributions 19,782

Total Distributions 9,061,274

Administrative Expense 73,988

Total Deductions 9,135,262

Net Increase in Net Position (32,593,165)

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 149,229,764

End of the Year 116,636,599

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

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2022)

Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees comprised of:

- a. Two City Council appointees,
- b. Two Members of the Department elected by the membership, and
- c. Fifth Member elected by other four appointed by City Council.

Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	182
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	3
Active Plan Members	111
	296

Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

A summary of the benefit provisions can be found in the October 1, 2021 Actuarial Valuation Report for the City of Pensacola Firefighters' Relief and Pension Fund prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: 11.00% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII Chapter 112, Florida Statutes.

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2022:

Asset Class	Target Allocation
Domestic Equity	37.0%
International Equity	15.0%
Bonds	25.0%
Convertibles	10.0%
Private Real Estate	8.0%
Infrastructure	5.0%
Total	100.0%

Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

Rate of Return:

For the year ended September 30, 2022, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was -17.88 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement requirements (Earlier of Age 52 and 10 years of Credited Service, or 25 years of Credited Service).

Participation: Not to exceed 60 months.

Rate of Return: 1.3% annually.

The DROP balance as September 30, 2022 is \$2,037,673.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2022 were as follows:

Total Pension Liability \$ 139,184,402
Plan Fiduciary Net Position \$ (116,636,599)
Sponsor's Net Pension Liability \$ 22,547,803
Plan Fiduciary Net Position as a percentage of Total Pension Liability 83.80%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2021 updated to September 30, 2022 using the following actuarial assumptions:

Inflation2.70%Salary IncreasesService basedDiscount Rate7.75%Investment Rate of Return7.75%

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.

Mortality Rate 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.

Mortality Rate Beneficiary Lives:

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

Male: PubG.H-2010 (Above Median) for Healthy Retirees, set back one year.

Mortality Rate Disabled Lives:

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

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

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

The most recent actuarial experience study used to review the other significant assumptions was dated October 9, 2017.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2022 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2022 are summarized in the following table:

	Long Term Expected Real Rate of		
Asset Class	Return ¹		
Domestic Equity	7.1%		
International Equity	3.1%		
Bonds	2.0%		
Convertibles	6.4%		
Private Real Estate	6.4%		
Infrastructure	5.6%		

¹ Source: Burgess Chambers.

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.75 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

		Current	
	1% Decrease	Discount Rate	1% Increase
	6.75%	7.75%	8.75%
Sponsor's Net Pension Liability	\$ 38,524,218	\$ 22,547,803	\$ 9,306,573

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS Last 2 Fiscal Years

	09/30/2022	09/30/2021
Total Pension Liability		
Service Cost	1,569,316	1,497,129
Interest	10,453,664	10,322,867
Changes of benefit terms	-	411,685
Differences between Expected and Actual Experience	(1,624,615)	(1,424,849)
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(9,061,274)	(8,497,992)
Net Change in Total Pension Liability	1,337,091	2,308,840
Total Pension Liability - Beginning	137,847,311	135,538,471
Total Pension Liability - Ending (a)	\$ 139,184,402	\$ 137,847,311
Dian Eidaniam, Nat Dagitian		
Plan Fiduciary Net Position	1 200 272	1 224 021
Contributions - Employer	1,380,363	1,324,931
Contributions - State	615,134	573,129
Contributions - Employee	732,734	619,231
Net Investment Income	(26,186,134)	28,553,234
Benefit Payments, including Refunds of Employee Contributions	(9,061,274)	(8,497,992)
Administrative Expense	(73,988)	(65,256)
Net Change in Plan Fiduciary Net Position	(32,593,165)	22,507,277
Plan Fiduciary Net Position - Beginning	149,229,764	126,722,487
Plan Fiduciary Net Position - Ending (b)	\$ 116,636,599	\$ 149,229,764
Net Pension Liability - Ending (a) - (b)	\$ 22,547,803	\$ (11,382,453)
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	83.80%	108.26%
Covered Payroll Net Pension Liability as a percentage of Covered Payroll	\$ 6,661,211 338.49%	\$ 5,629,353 -202.20%

Notes to Schedule of Changes in Net Pension Liability and Related Ratios:

Changes in benefit terms:

For Measurement date 09/30/2021, Ordinance 11-21 amended the plan to provide for the following benefit changes:

- 1. Change the normal form of benefit for all married Firefighters to a 75% joint and survivor annuity (previously a ten-year certain and life annuity for Firefighters hired on or after June 10, 2015).
- 2. Survivor benefits no longer cease or reduce upon remarriage of the widow or widower.
- 3. Salary included in pension calculations now include basic life support (BLS) and up to 300 hours of annual overtime pay.

SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

				ntributions in lation to the					
	A	Actuarially	A	Actuarially	Co	ontribution			Contributions as
	Γ	Determined	D	Determined	Γ	eficiency			a percentage of
Fiscal Year Ended	C	ontribution	Co	ontributions		(Excess)	Cov	ered Payroll	Covered Payroll
09/30/2022	\$	1,979,502	\$	1,995,497	\$	(15,995)	\$	6,661,211	29.96%
09/30/2021	\$	1,837,352	\$	1,898,060	\$	(60,708)	\$	5,629,353	33.72%

Notes to Schedule:

Valuation Date: 10/01/2020 (AIS 02/23/2022)

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates can be found in the October 1, 2020 Actuarial Valuation for the City of Pensacola Firefighters' Relief and Pension Fund prepared by Foster & Foster Actuaries and Consultants.

SCHEDULE OF INVESTMENT RETURNS

Last 2 Fiscal Years

	Annual Money-Weighted Rate of Return
Fiscal Year Ended	Net of Investment Expense
09/30/2022	-17.88%
09/30/2021	22.94%

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2023)

Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees comprised of:

- a. Two City Council appointees,
- b. Two Members of the Department elected by the membership, and
- c. Fifth Member elected by other four appointed by City Council.

Employees who are classified as full-time Firefighters shall participate in the System as a condition of employment.

Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	182
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	3
Active Plan Members	111
	296

Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

A summary of the benefit provisions can be found in the October 1, 2021 Actuarial Valuation Report for the City of Pensacola Firefighters' Relief and Pension Fund prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: 11.00% of Salary.

City and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Part VII Chapter 112, Florida Statutes.

Net Pension Liability

The measurement date is September 30, 2022.

The measurement period for the pension expense was October 1, 2021 to September 30, 2022.

The reporting period is October 1, 2022 through September 30, 2023.

The Sponsor's Net Pension Liability was measured as of September 30, 2022.

The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2021 updated to September 30, 2022 using the following actuarial assumptions:

Inflation	2.70%
Salary Increases	Service based
Discount Rate	7.75%
Investment Rate of Return	7.75%

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.

Mortality Rate 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.

Mortality Rate Beneficiary Lives:

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

Male: PubG.H-2010 (Above Median) for Healthy Retirees, set back one year.

Mortality Rate Disabled Lives:

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

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

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

The most recent actuarial experience study used to review the other significant assumptions was dated October 9, 2017.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2022 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2022 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return ¹
713Set Class	Target / mocation	Real Rate of Retain
Domestic Equity	37.0%	7.1%
International Equity	15.0%	3.1%
Bonds	25.0%	2.0%
Convertibles	10.0%	6.4%
Private Real Estate	8.0%	6.4%
Infrastructure	5.0%	5.6%
Total	100.0%	

¹ Source: Burgess Chambers.

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above "Long Term Expected Real Rate of Returns" by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

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Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.75 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)			
	Total Pension	Plan Fiduciary	Net Pension	
	Liability	Net Position	Liability	
	(a)	(b)	(a)-(b)	
Reporting Period Ending September 30, 2022	\$ 137,847,311	\$ 149,229,764	\$ (11,382,453)	
Changes for a Year:				
Service Cost	1,569,316	-	1,569,316	
Interest	10,453,664	-	10,453,664	
Differences between Expected and Actual Experience	(1,624,615)	-	(1,624,615)	
Changes of assumptions	-	-	-	
Changes of benefit terms	-	-	-	
Contributions - Employer	-	1,380,363	(1,380,363)	
Contributions - State	-	615,134	(615,134)	
Contributions - Employee	-	732,734	(732,734)	
Net Investment Income	-	(26,186,134)	26,186,134	
Benefit Payments, including Refunds of Employee Contributions	(9,061,274)	(9,061,274)	-	
Administrative Expense		(73,988)	73,988	
Net Changes	1,337,091	(32,593,165)	33,930,256	
Reporting Period Ending at September 30, 2023	\$ 139,184,402	\$ 116,636,599	\$ 22,547,803	

Sensitivity of the Net Pension Liability to changes in the Discount Rate.

			Cur	rent Discount		
	19	% Decrease		Rate	19	% Increase
_		6.75%		7.75%		8.75%
Sponsor's Net Pension Liability	\$	38,524,218	\$	22,547,803	\$	9,306,573

Pension Plan Fiduciary Net Position.

Detailed information about the pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

FINAL PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

FISCAL YEAR SEPTEMBER 30, 2022

For the year ended September 30, 2022, the Sponsor has recognized a Pension Expense of -\$2,402,422. On September 30, 2022, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	-	1,481,890
Changes of assumptions	1,151,316	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	15,558,970
Employer and State Contributions subsequent to the measurement date	1,995,497	
Total	\$ 3,146,813	\$ 17,040,860

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State Contributions subsequent to the measurement date has been recognized as a reduction of the Net Pension Liability in the year ended September 30, 2022. Other amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:	
2023	\$ (3,783,780)
2024	\$ (3,425,433)
2025	\$ (4,602,057)
2026	\$ (4,078,274)
2027	\$ -
Thereafter	\$ _

PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

FISCAL YEAR SEPTEMBER 30, 2023

For the year ended September 30, 2023, the Sponsor will recognize a Pension Expense of \$3,439,129. On September 30, 2023, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	-	2,376,786
Changes of assumptions	767,544	-
Net difference between Projected and Actual Earnings on Pension Plan investments	18,206,322	-
Employer and State Contributions subsequent to the measurement date	TBD	
Total	TBD	\$ 2,376,786

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State Contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2023. Other amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:	
2024	\$ 3,750,278
2025	\$ 2,573,654
2026	\$ 3,097,437
2027	\$ 7,175,711
2028	\$ -
Thereafter	\$ -

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS Last 2 Fiscal Years

Reporting Period Ending	09/30/2023	09/30/2022
Measurement Date	09/30/2022	09/30/2021
Total Pension Liability		
Service Cost	1,569,316	1,497,129
Interest	10,453,664	10,322,867
Changes of benefit terms	-	411,685
Differences between Expected and Actual Experience	(1,624,615)	(1,424,849)
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(9,061,274)	(8,497,992)
Net Change in Total Pension Liability	1,337,091	2,308,840
Total Pension Liability - Beginning	137,847,311	135,538,471
Total Pension Liability - Ending (a)	\$ 139,184,402	\$ 137,847,311
Plan Fiduciary Net Position		
Contributions - Employer	1,380,363	1,324,931
Contributions - State	615,134	573,129
Contributions - Employee	732,734	619,231
Net Investment Income	(26,186,134)	28,553,234
Benefit Payments, including Refunds of Employee Contributions	(9,061,274)	(8,497,992)
Administrative Expense	(73,988)	(65,256)
Net Change in Plan Fiduciary Net Position	(32,593,165)	22,507,277
Plan Fiduciary Net Position - Beginning	149,229,764	126,722,487
Plan Fiduciary Net Position - Ending (b)	\$ 116,636,599	\$ 149,229,764
Net Pension Liability - Ending (a) - (b)	\$ 22,547,803	\$ (11,382,453)
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	02.000/	100.260/
Plan Fiductary Net Position as a percentage of the Total Pension Liability	83.80%	108.26%
Covered Payroll	\$ 6,661,211	\$ 5,629,353
Net Pension Liability as a percentage of Covered Payroll	338.49%	-202.20%

Notes to Schedule of Changes in Net Pension Liability and Related Ratios:

Changes in benefit terms:

For Measurement date 09/30/2021, Ordinance 11-21 amended the plan to provide for the following benefit changes:

- 1. Change the normal form of benefit for all married Firefighters to a 75% joint and survivor annuity (previously a ten-year certain and life annuity for Firefighters hired on or after June 10, 2015).
- 2. Survivor benefits no longer cease or reduce upon remarriage of the widow or widower.
- 3. Salary included in pension calculations now include basic life support (BLS) and up to 300 hours of annual overtime pay.

SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

				ntributions in ation to the					
	A	Actuarially	A	Actuarially		Contribution			Contributions as
	Γ	Determined	Determined			Deficiency			a percentage of
Fiscal Year Ended	C	ontribution	Co	ontributions		(Excess)	Cov	vered Payroll	Covered Payroll
09/30/2022	\$	1,979,502	\$	1,995,497	\$	(15,995)	\$	6,661,211	29.96%
09/30/2021	\$	1,837,352	\$	1,898,060	\$	(60,708)	\$	5,629,353	33.72%

Notes to Schedule

Valuation Date: 10/01/2020 (AIS 02/23/2022)

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates can be found in the October 1, 2020 Actuarial Valuation for the City of Pensacola Firefighters' Relief and Pension Fund prepared by Foster & Foster Actuaries and Consultants.

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The following information is not required to be disclosed but is provided for informational purposes

FINAL COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2022

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 8,815,984	\$ 5,173,962	\$ 7,080,433	\$ -
Employer and State Contributions made after 09/30/2021	-	-	1,995,497	-
Total Pension Liability Factors:				
Service Cost	1,497,129	-	-	1,497,129
Interest	10,322,867	-	-	10,322,867
Changes in benefit terms	411,685	-	-	411,685
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	(1,424,849)	1,424,849	-	-
Current year amortization of experience difference	_	(404,795)	(65,009)	(339,786)
Change in assumptions about future economic or				
demographic factors or other inputs	-	_	-	-
Current year amortization of change in assumptions	-	_	(383,772)	383,772
Benefit Payments, including Refunds of Employee				
Contributions	(8,497,992)	_	-	-
Net change	2,308,840	1,020,054	1,546,716	12,275,667
Plan Fiduciary Net Position:				
Contributions - Employer	1,324,931	_	(1,324,931)	_
Contributions - State	573,129	_	(573,129)	_
Contributions - State Contributions - Employee	619,231	_	(373,127)	(619,231)
Projected Net Investment Income	9,586,712	_	_	(9,586,712)
Difference between projected and actual earnings on	9,300,712	-	-	(9,300,712)
Pension Plan investments	18,966,522	18,966,522	_	_
Current year amortization	10,700,322	(5,731,494)	(1,194,092)	(4,537,402)
Benefit Payments, including Refunds of Employee	-	(3,731,494)	(1,194,092)	(4,337,402)
Contributions	(8,497,992)			
Administrative Expenses	(65,256)	-	-	65,256
_		12 225 029	(2,002,152)	
Net change	22,507,277	13,235,028	(3,092,152)	(14,678,089)
Ending Balance	\$ (11,382,453)	\$ 19,429,044	\$ 5,534,997	\$ (2,402,422)
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,	, , ,-	. (, , , , , , , , , , , , , , , , , ,

PRELIMINARY COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2023

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (11,382,453)	\$ 19,429,044	\$ 5,534,997	\$ -
Employer and State Contributions made after 09/30/2022	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	1,569,316	-	-	1,569,316
Interest	10,453,664	-	-	10,453,664
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	(1,624,615)	1,624,615	-	-
Current year amortization of experience difference	-	(729,719)	-	(729,719)
Change in assumptions about future economic or				
demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(383,772)	383,772
Benefit Payments, including Refunds of Employee				
Contributions	(9,061,274)	-	-	-
Net change	1,337,091	894,896	(383,772)	11,677,033
Plan Fiduciary Net Position:				
Contributions - Employer	1,380,363	_	(1,380,363)	_
Contributions - State	615,134	_	(615,134)	_
Contributions - Employee	732,734	-	-	(732,734)
Projected Net Investment Income	11,317,034	_	-	(11,317,034)
Difference between projected and actual earnings on	, ,			, ,- , ,- ,
Pension Plan investments	(37,503,168)	_	37,503,168	_
Current year amortization	-	(4,956,848)	(8,694,724)	3,737,876
Benefit Payments, including Refunds of Employee		() , , ,	, , ,	, ,
Contributions	(9,061,274)	_	_	_
Administrative Expenses	(73,988)	-	-	73,988
Net change	(32,593,165)	(4,956,848)	26,812,947	(8,237,904)
	(- , ,)	() , •)	- 7 - 7	(-7 7 1)
Ending Balance	\$ 22,547,803	\$ 15,367,092	TBD	\$ 3,439,129

^{*} Employer and State Contributions subsequent to the measurement date made after September 30, 2022 but made on or before September 30, 2023 need to be added.

AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on Pension Plan Investments

Plan Year		rences Between eted and Actual	Recognition													
Ending		Earnings	Period (Years)	2022	2023	2024	2025	2026		2027	,	2028	2029		2030	
2022	\$	37,503,168	5	\$ - \$	7,500,632	\$ 7,500,634 \$	7,500,634	\$ 7,500,634	\$ 1	7,500,634	\$	_	\$	_	\$	_
2021	\$	(18,966,522)	5	\$ (3,793,306) \$	(0.500.004)	\$ (3,793,304) \$	(3,793,304)	\$		-	\$	_	\$	_	\$	-
2020	\$	(4,025,985)	5	\$ (805,197) \$	(805,197)	\$ (805,197) \$	(805,197)	\$ - 5	\$	-	\$	_	\$	_	\$	_
2019	\$	5,970,460	5	\$ 1,194,092 \$	1,194,092	\$ 1,194,092 \$	-	\$ - 5	\$	-	\$	_	\$	-	\$	_
2018	\$	(1,791,736)	5	\$ (358,347) \$	(358,347)	\$ - \$	-	\$ - 9	\$	-	\$	-	\$	-	\$	-
2017	\$	(3,873,220)	5	\$ (774,644) \$	-	\$ - \$	-	\$ - 5	\$	-	\$	-	\$	-	\$	-
Net Increas	e (Decr	ease) in Pension	Expense	\$ (4,537,402) \$	3,737,876	\$ 4,096,225 \$	2,902,133	\$ 3,707,330	\$ 1	7,500,634	\$		\$	-	\$ 	-

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2022	2023	2024	2025	2026		2027		2028		2029		2030	
2020 \$	1,918,859	5	\$ 383,772	\$ 383,772	\$ 383,772	\$ 383,772	\$	- \$		- \$		- \$		- \$		-
Net Increase ((Decrease) in Pension	Expense	\$ 383,772	\$ 383,772	\$ 383,772	\$ 383,772	\$	- \$		- \$		- \$		- \$		

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Plan Year		d and Actual	Recognition											
Ending	Experience		Period (Years)		2022	2023	2024	2025	2026	2027	2028	2029		2030
2022	\$	(1,624,615)	5	\$	- \$	(324,923) \$	(324,923) \$	(324,923) \$	(324,923) \$	(324,923) \$	- \$	6	- \$	-
2021	\$	(1,424,849)	5	\$	(284,969) \$	(284,970) \$	(284,970) \$	(284,970) \$	(284,970) \$	- \$	- 9	3	- \$	-
2020	\$	(511,791)	5	\$	(102,358) \$	(102,358) \$	(102,358) \$	(102,358) \$	- \$	- \$	- \$	S	- \$	-
2019	\$	(87,339)	5	\$	(17,468) \$	(17,468) \$	(17,468) \$	- \$	- \$	- \$	- \$	6	- \$	-
2018	\$	260,034	4	\$	65,009 \$	- \$	- \$	- \$	- \$	- \$	- \$	6	- \$	-
Net Increas	se (Decreas	se) in Pension	Expense	\$	(339.786) \$	(729,719) \$	(729,719) \$	(712,251) \$	(609,893) \$	(324,923) \$	- 9	<u> </u>	- \$	