

# City of Fort Pierce Police Officers' Retirement Trust Fund

Actuarial Valuation Report as of October 1, 2023  
Annual Employer Contribution for the Fiscal Year  
Ending September 30, 2024







March 15, 2024

The Pension Board  
Fort Pierce Police Officers'  
Retirement Trust Fund  
Fort Pierce, Florida

**Re: Fort Pierce Police Officers' Retirement Trust Fund Actuarial Valuation as of October 1, 2023**

Dear Board Members:

The results of the October 1, 2023 Annual Actuarial Valuation of the City of Fort Pierce Police Officers' Retirement Trust Fund are presented in this report.

The computed contribution rate shown on page 8 may be considered as a minimum contribution rate that complies with the Board's funding policy. Users of this report should be aware that contributions made at that rate do not guarantee benefit security. Given the importance of benefit security to any retirement system, we suggest that contributions to the Fund in excess of those presented in this report be considered.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section C of this report. This report includes risk metrics in Section A, but does not include a robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This report was prepared at the request of the Board and is intended for use by the Retirement Plan and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the Plan's funding progress and to determine the required contribution rate for the fiscal year ending September 30, 2024. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The findings in this report are based on data or other information through September 30, 2023. The valuation was based upon information furnished by the Plan Administrator concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator.

This valuation assumed the continuing ability to receive State Chapter 185 contributions that are sufficient to fund this plan. A determination regarding whether or not this will continue to be the case is outside our scope of expertise and was not performed.

This report was prepared using assumptions approved by the Board and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Methods. The investment return assumption was prescribed by the Board and the mortality rates detailed in the Actuarial Assumptions and Methods section were prescribed by Florida Statutes, Chapter 112.63. All actuarial assumptions used in this report are reasonable for the purposes of this valuation. The combined effect of the assumptions is expected to have no significant bias (i.e. not significantly optimistic or pessimistic). All actuarial assumptions and methods used in the valuation follow the guidance in the applicable Actuarial Standards of Practice.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.


Peter N. Strong and Jeffrey Amrose are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

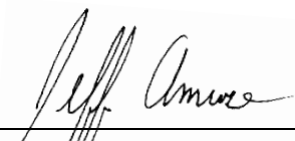
This actuarial valuation and/or cost determination was prepared and completed by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. 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.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

By   
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Enrolled Actuary No. 23-6975

By   
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## **SECTION A**

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### **VALUATION RESULTS, COMMENTS, CONCLUSION AND CERTIFICATION**

## FUNDING OBJECTIVE

The funding objective of the Trust Fund is to establish a benefit level which will be financed by current sources of revenue in accordance with the requirements of Part VII, Chapter 112, Florida Statutes and Chapter 185, Florida Statutes. *These statutes require contributions that avoid deferral of benefit costs to future generations of taxpayers.*

## SOURCES OF REVENUE

Trust Fund sources of revenue are Chapter 185 premium tax monies remitted by the State, 7.0% Police Officer contributions, and investment income from assets.

## RELATIONSHIP OF REVENUES AND BENEFITS

The relationship between revenues and the current benefit level is determined by the actuarial valuation using the individual entry age actuarial cost method. Contribution requirements determined by the entry age actuarial cost method allocate the annual cost of a member's benefit between the entry age of the member and the assumed exit ages.

***The relationship*** between required contributions and anticipated contributions is shown on page 8.



# **DISCUSSION OF VALUATION RESULTS**

## **CHAPTER 185 REVENUE**

Chapter 185 revenue received during the fiscal year ending September 30, 2023 totaled \$544,239 which is more than the amount received during the prior fiscal year (\$453,086). The computed employer contribution requirement was \$304,352 (based on the required employer percentage of 3.43%, which is the excess of the total required contribution rate of 10.43% over the member contribution rate of 7.0%, multiplied by actual payroll of \$8,873,242). The excess of \$239,887 was used to reduce the Unfunded Actuarial Accrued Liability. As of October 1, 2022, the balance in the excess contribution reserve was \$937,844. After adjusting for interest, the balance in the excess contribution reserve is \$1,001,148 as of October 1, 2023.

## **PLAN AMENDMENTS**

No changes made.

## **ASSUMPTIONS AND METHOD CHANGES**

No changes made.

## **ADDITIONAL PAYMENTS TOWARD UNFUNDED ACTUARIAL ACCRUED LIABILITY**

Beginning October 1, 2019, future excess contributions are used to reduce the Unfunded Actuarial Accrued Liability (UAAL) until the UAAL is fully paid off. The excess contribution of \$239,887 with interest was used to reduce the UAAL amortization bases with the least years remaining which was the UAAL amortization base created on September 30, 2005. The net effect was a decrease in the annual required contribution of 0.30% of covered payroll, or \$26,268.

## **REQUIRED CONTRIBUTIONS**

The total calculated contribution requirement is 10.71% of payroll starting October 1, 2023 compared to 10.43% of payroll starting October 1, 2022. The estimated required dollar contribution is \$937,760 this fiscal year compared to the actual required contribution of \$925,479 for the fiscal year ending September 30, 2023 (taking into account actual payroll for 2023 and actual member contributions).

## **OBSERVED EXPERIENCE**

There was a net experience loss for the year of \$1,057,494, which means that actual experience was less favorable than expected. The experience loss attributable to investment return experience was \$572,156. The recognized investment return was 3.7% on the Actuarial (smoothed) Value of Assets (versus 6.75% expected). The investment return on the Market Value of Assets was 7.7%.

There were also demographic experience losses of \$485,338 resulting from higher than expected salary increases (10.4% versus 4.9% expected for continuing active members), more retirements than expected (4





actual versus 3 expected), and lower than expected retiree mortality (0 deaths were reported during the year versus approximately 1 expected).

The net experience loss increased the annual required contribution by 0.67% of covered payroll, or \$58,665.

## **FUNDED RATIO**

The October 1, 2023 actuarial valuation indicates that the accrued Retirement Trust Fund obligations (measured by the Actuarial Accrued Liability) are 85.8% funded by the Actuarial Value of Assets. The funded ratio was 84.6% before the additional UAAL payment. The funded ratio last year was 88.7%.

## **RELATIONSHIP TO MARKET VALUE**

If Market Value had been the basis for the valuation, the total required contribution rate would have been 11.72% (an estimated required dollar contribution of \$1,026,195), and the funded ratio would have been 78.2%. The funded ratio on a market value basis was 77.7% last year.

## **CONCLUSION**

Anticipated revenues from Chapter 185, member contributions and the excess contribution reserve are expected to be sufficient to fund the benefits accruing under the Plan during the current Plan Year in accordance with the provisions of Chapter 112 and Chapter 185, Florida Statutes.



## **RISKS ASSOCIATED WITH THE MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION**

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

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 due to changing conditions; 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

1. Investment risk – actual investment returns may differ from the expected returns;
2. Contribution risk – actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
3. Salary and Payroll risk – actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
4. Longevity risk – members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
5. Other demographic risks – members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 8 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.



## PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	<b>2023</b>	<b>2022</b>
Ratio of the market value of assets to payroll	2.06	2.02
Ratio of actuarial accrued liability to payroll	2.49	2.45
Ratio of actives to retirees and beneficiaries	1.85	2.02
Ratio of net cash flow to market value of assets	(0.5%)	(0.5%)
Duration of the actuarial accrued liability	13.03	12.95

### RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

### RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

### RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

### RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally



expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

## **DURATION OF ACTUARIAL ACCRUED LIABILITY**

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, duration of 10 indicates that the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

## **ADDITIONAL RISK ASSESSMENT**

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.

## LOW-DEFAULT-RISK OBLIGATION MEASURE

Actuarial Standards of Practice No. 4 (ASOP No. 4) was revised and reissued in December 2021 by the Actuarial Standards Board (ASB). It includes a new calculation called a low-default-risk obligation measure (LDROM) to be prepared and issued annually for defined benefit pension plans. The transmittal memorandum for ASOP No. 4 includes the following explanation:

“The ASB believes that the calculation and disclosure of this measure provides appropriate, useful information for the intended user regarding the funded status of a pension plan. The calculation and disclosure of this additional measure is not intended to suggest that this is the “right” liability measure for a pension plan. However, the ASB does believe that this additional disclosure provides a more complete assessment of a plan’s funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date.”

The following information has been prepared in compliance with this new requirement. Unless otherwise noted, the measurement date, actuarial cost methods, and assumptions used are the same as for the funding valuation covered in this actuarial valuation report.

A. Low-default-risk Obligation Measure of benefits earned as of the measurement date: \$27,630,426

B. Discount rate used to calculate the LDROM: 4.63%

C. Other significant assumptions that differ from those used for the funding valuation: none

D. Actuarial cost method used to calculate the LDROM: Entry Age Normal

E. Valuation procedures to value any significant plan provisions that are difficult to measure using traditional valuation procedures, and that differ from the procedures used in the funding valuation: none

F. Commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits: The LDROM is a market-based measurement of the pension obligation. It estimates the amount the plan would need to invest in low risk securities to provide the benefits with greater certainty. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan’s benefit obligation.

**The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on the risk in a diversified portfolio.**



# REQUIRED AND ANTICIPATED CONTRIBUTIONS OF THE TRUST FUND FOR THE PLAN AND FISCAL YEAR BEGINNING

Contributions for	October 1, 2023		October 1, 2022	
	Amount of Contribution		Amount of Contribution	
	Dollars	Percent of Pay	Dollars	Percent of Pay
Normal Cost				
Service pensions	\$ 500,839	5.72 %	\$ 477,265	5.69 %
Disability pensions	8,756	0.10	9,227	0.11
Death pensions	7,005	0.08	6,710	0.08
Deferred service pensions	73,550	0.84	73,812	0.88
Refunds of member contributions	145,348	1.66	139,237	1.66
Total Normal Cost	735,498	8.40	706,251	8.42
Unfunded Actuarial Accrued Liability				
Retired members and beneficiaries	-	0.00	-	0.00
Active and vested terminated members	163,736	1.87	131,688	1.57
Total Unf'd. Actuarial Accrued Liability	163,736	1.87	131,688	1.57
Administrative Expenses	38,526	0.44	36,906	0.44
Total Unadjusted Computed Contribution	937,760	10.71	874,845	10.43
Adjustments to Computed Contribution				
FS 112.64 Compliance	-	0.00	-	0.00
Full funding credit	-	0.00	-	0.00
Total Adjustments	-	0.00	-	0.00
<b>Total Adjusted Contribution Requirement</b>	<b>\$ 937,760</b>	<b>10.71 %</b>	<b>\$ 874,845</b>	<b>10.43 %</b>
Member portion	612,915	7.00	587,145	7.00
Chapter 185	544,239	6.22	453,086	5.40
Extra UAAL Contributions	(219,394)	(2.51)	(165,386)	(1.97)
<b>Total Anticipated Contributions</b>	<b>\$ 937,760</b>	<b>10.71 %</b>	<b>\$ 874,845</b>	<b>10.43 %</b>

Derivation of the contribution requirement and anticipated contribution revenue is shown on pages 9 to 10.



## DERIVATION OF CONTRIBUTION REQUIREMENT AND CONTRIBUTION REVENUE

	After Adtl. UAAL Payment 10/1/2023	Before Adtl. UAAL Payment 10/1/2023	10/1/2022
<b>Contribution Requirement</b>			
1. APV# of Expected Benefit Payments			
Active Members			
(a) Service Pensions	\$ 12,930,938	\$ 12,930,938	\$ 12,398,659
(b) Disability Pensions	122,292	122,292	112,939
(c) Survivor Pensions	165,434	165,434	155,545
(d) Vested Termination Pensions	864,376	864,376	827,809
(e) Refund of Member Contributions*	621,632	621,632	613,301
Total Active	14,704,672	14,704,672	14,108,253
Retired Members	11,959,142	11,959,142	10,951,638
Vested Members	208,998	208,998	195,219
Total APV of Expected Benefit Payments	26,872,812	26,872,812	25,255,110
2. (a) Funding Value of Assets	19,087,291	19,087,291	18,503,666
(b) Reserve for Excess Contributions in Prior Years	1,001,148	1,249,132	937,844
(c) Balance Available for Funding	18,086,143	17,838,159	17,565,822
3. Actuarial Accrued Liability*	21,084,259	21,084,259	19,792,595
4. Unfunded Actuarial Accrued Liability (3-2(c))	2,998,116	3,246,100	2,226,773
5. Contributions Needed to Fund Benefits			
(a) Annual Payment to Amortize Unfunded Liability	158,164	183,130	126,147
(b) Normal Cost	711,724	711,724	679,091
(c) Administrative Expenses	37,352	37,352	35,570
(d) Actuarially Determined Contribution on Valuation Date	907,240	932,206	840,808
6. Valuation Payroll	8,468,335	8,468,335	8,064,820
7. ADC as a percent of Valuation payroll (5(d) divided by 6)	10.71%	11.01%	10.43%
8. Reported Pay for Active Members at Valuation Date	8,521,583	8,521,583	8,163,290
9. Projected Payroll (8 times 102.75%)	8,755,927	8,755,927	8,387,780
10. Total Contribution Requirement (7 multiplied by 9)	937,760	964,028	874,845
11. Present Value of Future Covered Payroll	69,409,344	69,409,344	65,407,958
12. Present Value of Future Member Contributions	4,858,654	4,858,654	4,578,557
13. Accumulated Contributions of Active Members	3,531,852	3,531,852	3,386,869
14. Funded Ratio (2(c) divided by 3)	85.8%	84.6%	88.7%

# Actuarial present value.

\* Includes refunds owed due to past resignations.



## DERIVATION OF CONTRIBUTION REQUIREMENT AND CONTRIBUTION REVENUE (CONTINUED)

Contribution Revenue Anticipated	After Adtl. UAAL Payment '23 - '24 Year	Before Adtl. UAAL Payment '23 - '24 Year	'22 - '23 Year
1. Member Contributions	612,915	612,915	587,145
2. State Contributions*	544,239	544,239	453,086
3. Amount Needed from Excess Contribution Reserve to Meet Contribution Requirement**	(219,394)	(193,126)	(165,386)
4. Additional Funds Needed to Meet Contribution Requirement	0	0	0
<b>5. Total Anticipated Contributions</b>	<b>\$ 937,760</b>	<b>\$ 964,028</b>	<b>\$ 874,845</b>

*\*Anticipated contributions were capped at the Chapter 185 revenue received for FY 97/98 plus the amount used to fund minimum benefits pursuant to Chapter 99-1 of the Florida State Statutes*

*\*\*Starting with the fiscal year ending September 30, 2020, excess contributions are being used to reduce the Unfunded Actuarial Accrued Liability (UAAL) until the UAAL is fully paid off.*

## DERIVATION OF THE 10-YEAR AVERAGE PAYROLL GROWTH RATE

### 10-Year Growth in Covered Payroll

1. Reported Pay at Valuation Date as of 9/30/2013	\$ 6,149,728
2. Reported Pay at Valuation Date as of 10/1/2023	\$ 8,521,583
3. Cumulative Increase	38.57%
<b>4. 10-Year Average Increase (Compound)*</b>	<b>3.32%</b>

*\*For purposes of financing the unfunded liabilities, total payroll is assumed to grow at 3.00% per year. The average increase over the most recent ten years is shown above. Florida administrative code requires using the lesser of the two rates for purposes of amortizing unfunded liabilities as a level percent of pay, but not less than zero.*





## EXPERIENCE GAIN (LOSS)

Year Ended	<u>9/30/2023</u>	<u>9/30/2022</u>
<b>DERIVATION</b>		
(1) UAAL at start of year	2,226,773	1,299,146
(2) Normal cost NC + Admin Exp from prev val	743,157	641,950
(3) Total contributions credited (not added to excess contribution reserve)	925,479	833,720
(4) Additional UAAL Payment	239,887	187,074
(5) Interest accrued $.0675 \times [(1) + 1/2 [(2)-(3)-(4)]]$	136,058	74,906
(6) Expected UAAL before changes [(1)+(2)-(3)-(4)+(5)]	1,940,622	995,208
(7) Effect of assumption changes	0	0
(8) Effect of cost method changes	0	0
(9) Effect of benefit changes	0	0
(10) Expected UAAL after changes	1,940,622	995,208
(11) Actual UAAL	2,998,116	2,226,773
(12) Gain/(Loss) (10) - (11)	(1,057,494)	(1,231,565)

UAAL represents unfunded actuarial accrued liability.



## SOURCES AND FINANCING OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

			Unf'd. Act.	After Additional U.A.A.L. Payment			Before Additional U.A.A.L. Payment		
			Accr. Liab.	Current			Current		
Year	Initial	Years	Initial	U.A.A.L	% of Payroll	Dollar	U.A.A.L.	% of Payroll	Dollar
Established	Years	Remaining	Amount	Amount	Contribution	Contribution	Amount	Contribution	Contribution
Initial Unfunded									
2005	30	12	\$1,448,904	\$53,614	0.07 %	\$5,398	\$301,598	0.36 %	\$30,364
Experience Changes									
2006	30	13	411,612	208,170	0.23	19,669	208,170	0.23	19,669
2007	30	14	(901,009)	(472,044)	(0.49)	(42,102)	(472,044)	(0.49)	(42,102)
2008	30	15	145,518	78,419	0.08	6,636	78,419	0.08	6,636
2009	30	16	(238,359)	(131,319)	(0.12)	(10,588)	(131,319)	(0.12)	(10,588)
2010	30	17	(194,677)	(109,068)	(0.10)	(8,411)	(109,068)	(0.10)	(8,411)
2011	30	18	(167,598)	(95,049)	(0.08)	(7,035)	(95,049)	(0.08)	(7,035)
2012	30	19	4,280	2,531	0.00	180	2,531	0.00	180
2013	30	20	56,249	37,818	0.03	2,600	37,818	0.03	2,600
2014	30	21	(332,047)	(229,694)	(0.18)	(15,279)	(229,694)	(0.18)	(15,279)
2015	30	22	(32,950)	(23,485)	(0.02)	(1,515)	(23,485)	(0.02)	(1,515)
2016	30	23	371,485	284,184	0.21	17,806	284,184	0.21	17,806
2017	30	24	456,238	379,259	0.27	23,126	379,259	0.27	23,126
2018	30	25	65,497	55,183	0.04	3,280	55,183	0.04	3,280
2019	30	26	546,291	496,240	0.34	28,797	496,240	0.34	28,797
2020	30	27	(5,570)	(5,133)	0.00	(291)	(5,133)	0.00	(291)
2021	30	28	(571,922)	(529,267)	(0.35)	(29,391)	(529,267)	(0.35)	(29,391)
2022	30	29	1,231,565	1,216,453	0.78	66,200	1,216,453	0.78	66,200
2023	30	30	1,057,494	1,057,494	0.67	56,460	1,057,494	0.67	56,460
Benefit Changes									
2007	30	14	38,229	20,028	0.02	1,786	20,028	0.02	1,786
2011	30	18	(114,917)	(65,172)	(0.06)	(4,823)	(65,172)	(0.06)	(4,823)
Assumption Changes									
2014	30	21	466,042	322,385	0.25	21,445	322,385	0.25	21,445
2016	30	23	(140,936)	(107,817)	(0.08)	(6,755)	(107,817)	(0.08)	(6,755)
2019	30	26	81,824	74,326	0.05	4,313	74,326	0.05	4,313
2021	30	28	518,750	480,060	0.31	26,658	480,060	0.31	26,658
Totals				\$2,998,116	1.87 %	\$158,164	\$3,246,100	2.16 %	\$183,130



## SCHEDULE OF FUNDING PROGRESS

Valuation Date	Valuation Assets	AAL*	Funded Ratio	Unfunded AAL*	Member Payroll	Ratio to Payroll
9/05	\$ 7,487,837	\$ 8,936,741	83.8 %	\$ 1,448,904	\$ 5,943,309	24.4 %
9/06	7,561,205	9,446,757	80.0	1,885,552	6,838,249	27.6
9/07 <sup>1</sup>	7,883,635	8,940,664	88.2	1,057,029	6,323,737	16.7
9/08	8,449,679	9,668,809	87.4	1,219,130	6,992,600	17.4
9/09	9,062,193	10,060,601	90.1	998,408	6,754,679	14.8
9/10 <sup>2</sup>	9,093,257	9,952,866	91.4	859,609	6,393,190	13.4
9/11 <sup>3</sup>	9,433,638	10,081,314	93.6	647,676	5,696,599	11.4
9/12	10,146,881	10,771,458	94.2	624,577	5,422,508	11.5
9/13	10,574,340	11,160,024	94.8	585,684	6,149,728	9.5
9/14	11,102,171	11,799,196	94.1	697,025	6,179,327	11.3
9/15	11,954,268	12,591,904	94.9	637,636	6,158,780	10.4
9/16	12,482,889	13,290,922	93.9	808,033	6,186,251	13.1
9/17	13,155,821	14,336,673	91.8	1,180,852	6,948,201	17.0
9/18	13,877,052	15,100,620	91.9	1,223,568	7,150,289	17.1
9/19	14,894,605	16,632,967	89.5	1,738,362	7,361,216	23.6
9/20	15,757,984	17,316,536	91.0	1,558,552	7,418,421	21.0
10/21	17,156,934	18,456,080	93.0	1,299,146	6,965,104	18.7
10/22	17,565,822	19,792,595	88.7	2,226,773	8,163,290	27.3
10/23	18,086,143	21,084,259	85.8	2,998,116	8,521,583	35.2

\* Actuarial Accrued Liabilities.

<sup>1</sup> Reflects Plan changes under Ordinance No. L-34.

<sup>2</sup> Reflects Plan changes under Ordinance No. L-212.

<sup>3</sup> Reflects Plan changes under Ordinance No. L-229.

## EXPECTED AMORTIZATION SCHEDULE

### Expected Amortization Schedule

Year	Expected UAAL
2023	\$ 2,998,116
2024	3,031,633
2025	3,062,363
2026	3,089,950
2027	3,114,025
2028	3,134,191
2033	3,160,082
2038	3,033,974
2043	2,349,480
2048	1,128,432
2053	-



## HISTORICAL RELATIONSHIP - CALCULATED VS. ACTUAL CONTRIBUTIONS

Applicable Fiscal/Plan Year	Valuation Date	Calculated Contribution Requirement*		Actual Contributions			From Reserve (d)	Cumulative Excess Contributions (1)
		Dollars	Percent of Pays	Employee	Chapter 185	Totals		
1992-93	9/30/1992	\$370,179	10.8 %	\$ 116,848	\$210,335	\$327,183	\$42,996	\$ 104,339
1993-94	9/30/1993	343,779	10.8	115,744	219,987	335,731	8,048	67,556
1994-95	9/30/1994	365,190	10.6	128,231	235,753	363,984	1,206	64,273
1995-96	9/30/1995 (a)	315,330	8.5	135,142	251,824	386,966	0	67,842
1996-97	9/30/1996	293,349	7.8	137,222	255,072	392,294	0	147,253
1997-98	9/30/1997	259,078	6.8	156,958	294,190	451,148	0	260,952
1998-99	9/30/1998	287,359	6.6	156,068	282,764	438,832	0	479,718
1999-00	9/30/1999	252,278	5.8	163,362	286,792	450,154	0	672,850
2000-01	9/30/2000 (b)	425,804	9.2	160,957	288,412	449,369	0	928,610
2001-02	9/30/2001 (b)	446,844	9.8	168,017	294,190	462,207	0	1,022,703
2002-03	9/30/2002	470,269	10.0	176,880	294,190	471,070	0	1,115,345
2003-04	9/30/2003	586,696	11.8	202,215	294,190	496,405	90,291	1,199,827
2004-05	9/30/2004	716,139	12.7	196,382	294,190	490,572	225,567	1,196,137
2005-06	9/30/2005 (c)	663,804	10.9	242,359	294,190	536,549	127,255	1,051,822
2006-07	9/30/2006	776,406	11.1	239,580	294,190	533,770	242,636	998,682
2007-08	9/30/2007	684,201	10.5	235,688	303,324	539,012	145,189	821,848
2008-09	9/30/2008	772,376	10.8	261,654	276,943	538,597	233,779	732,853
2009-10	9/30/2009	773,858	11.1	235,214	262,634	497,848	276,010	545,271
2010-11	9/30/2010 (b)	728,502	11.09	230,440	241,312	471,752	191,739	299,806
2011-12	9/30/2011 (b)	696,581	11.55	401,082	241,799	642,881	53,700	123,362
2012-13	9/30/2012	732,460	11.72	440,730	249,148	689,878	42,582	76,900
2013-14	9/30/2013	735,234	11.44	449,881	248,113	697,994	37,240	38,489
2014-15	9/30/2014 (a)	651,428	10.08	452,740	265,449	718,189	0	2,739
2015-16	9/30/2015	605,604	9.57	471,774	302,837	774,611	0	72,119
2016-17	9/30/2016 (a)	615,297	9.68	487,044	329,933	816,977	0	211,676
2017-18	9/30/2017	699,649	9.80	502,051	367,113	869,164	0	375,688
2018-19	9/30/2018	746,447	10.16	569,137	402,063	971,200	0	575,247
2019-20	9/30/2019 (a)	806,285	10.66	536,158	412,335	948,493	0	767,352
2020-21	9/30/2020	788,159	10.34	533,239	435,343	968,582	0	821,067
2021-22	10/1/2021 (a)	735,703	10.28	567,708	453,086	1,020,794	0	878,542
2022-23	10/1/2022	874,845	10.43	621,127	544,239	1,165,366	0	937,844
<b>2023-24</b>	<b>10/1/2023</b>	<b>937,760</b>	<b>10.71</b>					<b>1,001,148</b>

(a) After changes in actuarial assumptions.

(b) After changes in plan provisions.

(c) After changes in the funding method.

(d) Amount taken from cumulative excess contributions to satisfy minimum funding requirements.

(1) As of beginning of year.



## SECTION B

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### **SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA SUBMITTED**

## SUMMARY OF BENEFIT PROVISIONS (OCTOBER 1, 2023)

### Normal Retirement:

**Eligibility** - Age 55 with 10 or more years of service, or 25 years of service (with no reduction).

**Mandatory Retirement Age** - None.

**Monthly Pension** - The greater of: 2.0% of final average salary times total service, subject to a maximum of \$1,000 per month; or 1.0% of final average salary times credited service up to 30 years. Normal form of payment is life with 120 months guaranteed. Members hired prior to December 17, 1984 may elect to receive the actuarial equivalent of the monthly pension in a lump sum.

### Early Retirement:

**Eligibility** - Age 45 with 10 or more years of service.

**Monthly Pension** - Same as for Normal Retirement. The pension is reduced 3% for each complete year retirement age precedes 55. Benefits are not reduced if the member has 25 or more years of service.

### Deferred Retirement (vested termination benefit):

**Eligibility** - 10 or more years of service. Benefit begins on or after meeting an age and service requirement for normal or early retirement. Members hired prior to December 17, 1984 may elect to receive reduced benefits payable immediately upon vested termination.

**Monthly Amount** – Same as for Normal Retirement, starting at age 55.

**Final Average Salary:** The average monthly salary during the highest three (3) years of credited service out of the last 10 years.

### Disability Retirement:

**Eligibility** - 10 or more years of service.

**Amount** - A lump sum payment equal to the actuarial equivalent of pension benefit the member accrued as of the date of disability.

### Death Before Retirement:

**Eligibility** - 10 or more years of service.

**Amount** - A lump sum payment equal to the actuarial equivalent of the normal retirement benefit to which the deceased member would have been entitled at normal retirement age.



**Deferred Retirement Option Plan (DROP):**

**Eligibility** - Active members who are eligible for Normal Retirement. Election to participate in the DROP is forfeited if the member does not elect to participate in the DROP within the first 27 years of service (28 years of service if election occurs during the 2011 calendar year). Employment is terminated at the end of the DROP participation period. The maximum participation period is 5 years, but not beyond 30 years of service. Members who are also participating in the Fort Pierce Retirement and Benefits Plan DROP must cease participation in both DROP programs at the same date. If entry date into both programs was not the same, then termination of participation is the earlier of the two termination dates.

**Amount** - The monthly pension is calculated in accordance with Normal Retirement based on frozen years of service and final average salary at the time the member elects to participate in the DROP. This monthly amount is deposited into a self-directed investment account. The monthly pension is paid directly to the member upon termination of DROP participation.

**Member Contributions:** 7.0% of pay.

**Chapter 185 Contributions:** 0.85% of Fort Pierce casualty insurance premiums.

**Changes from Previous Valuation:** No changes were made.



## SUMMARY OF ASSETS AT MARKET VALUE

Item	September 30	
	2023	2022
A. Cash and Cash Equivalents (Operating Cash)	\$ -	\$ -
B. Receivables		
1. State Contribution	\$ -	\$ -
2. Employee Contributions	22,813	21,984
3. Investment Income and Other Receivables	2,940	1,401
4. Total Receivables	<u>\$ 25,753</u>	<u>\$ 23,385</u>
C. Investments		
1. Short-Term Investments	\$ 922,299	\$ 986,053
2. Domestic Equities	5,650,454	4,755,521
3. International Equities	2,611,498	1,934,868
4. Domestic Fixed Income	4,861,734	5,009,748
5. International Fixed Income	-	-
6. Convertibles	1,379,323	1,287,775
7. Real Estate	1,809,491	2,014,934
8. Infrastructure	1,087,717	1,089,066
9. Total Investments	<u>\$ 18,322,516</u>	<u>\$ 17,077,965</u>
D. Liabilities		
1. Benefits Payable	\$ -	\$ -
2. Accrued Expenses and Other Payables	(13,745)	(34,242)
3. Total Liabilities	<u>\$ (13,745)</u>	<u>\$ (34,242)</u>
E. Reserves		
1. State Contribution Reserve	\$ (279,498)	\$ (279,498)
2. DROP accounts	(570,195)	(461,710)
3. Total Reserves	<u>\$ (849,693)</u>	<u>\$ (741,208)</u>
F. Total Market Value of Assets Available for Benefits	\$ 17,484,831	\$ 16,325,900
G. Allocation of Investments		
1. Short-Term Investments	5.0%	5.8%
2. Domestic Equities	30.9%	27.9%
3. International Equities	14.3%	11.3%
4. Domestic Fixed Income	26.5%	29.3%
5. International Fixed Income	0.0%	0.0%
6. Convertibles	7.5%	7.5%
7. Real Estate	9.9%	11.8%
8. Infrastructure	5.9%	6.4%
9. Total Investments	<u>100.0%</u>	<u>100.0%</u>





## RECONCILIATION OF PLAN ASSETS

Item	September 30	
	2023	2022
A. Market Value of Assets at Beginning of Year	\$ 17,067,108	\$ 19,930,319
B. Revenues and Expenditures		
1. Contributions		
a. Employee Contributions	\$ 621,127	\$ 567,708
b. City Contributions	-	-
c. State Contributions	544,239	453,086
d. Other	-	-
e. Total	\$ 1,165,366	\$ 1,020,794
2. Investment Income		
a. Interest, Dividends, and Other Income	\$ 431,039	\$ 555,088
b. Realized Gains/(Losses)	(54,187)	19,473
c. Unrealized Gains/(Losses)	983,641	(3,499,132)
d. Investment Expenses	(83,398)	(86,518)
e. Net Investment Income	\$ 1,277,095	\$ (3,011,089)
3. Benefits and Refunds		
a. Regular Monthly Benefits	\$ (848,355)	\$ (768,656)
b. Lump Sum Distributions	-	-
c. Refunds of Contributions	(120,838)	(68,690)
d. DROP Account Distributions	(168,500)	-
e. Total	\$ (1,137,693)	\$ (837,346)
4. Administrative and Miscellaneous Expenses	\$ (37,352)	\$ (35,570)
C. Market Value of Assets at End of Year	\$ 18,334,524	\$ 17,067,108
D. Reserves		
1. State Contribution Reserve	\$ (279,498)	\$ (279,498)
2. DROP accounts	(570,195)	(461,710)
3. Total Reserves	\$ (849,693)	\$ (741,208)
E. Market Value Net of Reserves	\$ 17,484,831	\$ 16,325,900



## DERIVATION OF FUNDING VALUE OF ASSETS

Year Ended September 30:	2019	2020	2021	2022	2023
A. Funding Value Beginning of Year	\$14,452,299	\$15,661,957	\$16,579,051	\$18,035,476	\$18,503,666
B. Market Value End of Year	15,355,000	16,298,103	19,408,452	16,325,900	17,484,831
C. Market Value Beginning of Year	14,428,075	15,355,000	16,298,103	19,408,452	16,325,900
D. Non-Investment Net Cash Flow	208,089	(70,468)	(44,945)	(89,128)	(90,173)
Projected Rate of Return	7.25 %	7.00 %	7.00 %	6.75 %	6.75 %
E. Investment Income					
E1. Market Total: B - C - D	718,836	1,013,571	3,155,294	(2,993,424)	1,249,104
E2. Amount for Immediate Recognition	1,055,335	1,093,871	1,158,960	1,214,387	1,245,954
E3. Amount for Phased-In Recognition E1-E2	(336,499)	(80,300)	1,996,334	(4,207,811)	3,150
F. Phased-In Recognition of Investment Income					
F1. Current Year	(84,125)	(20,075)	499,084	(1,051,953)	788
F2. First Prior Year	(52,474)	(84,125)	(20,075)	499,084	(1,051,953)
F3. Second Prior Year	50,365	(52,474)	(84,125)	(20,075)	499,084
F4. Third Prior Year	32,468	50,365	(52,474)	(84,125)	(20,075)
F5. Total Recognized Investment Gain / (Loss)	(53,766)	(106,309)	342,410	(657,069)	(572,156)
G. Funding Value* End of Year: A + D + E2 + F5	15,661,957	16,579,051	18,035,476	18,503,666	19,087,291
H. Adjustment from Market Value to Funding Value	306,957	280,948	(1,372,976)	2,177,766	1,602,460
I. Recognized Rate of Return	6.9 %	6.3 %	9.1 %	3.1 %	3.7 %
J. Market Value Rate of Return	4.9 %	6.6 %	19.4 %	-15.5 %	7.7 %

\* Must be within 20% of Market Value



RECONCILIATION OF DROP ACCOUNTS	
Value at beginning of year	\$ 461,710
Payments credited to accounts	248,994
Investment Earnings credited	27,991
Withdrawals from accounts	<u>(168,500)</u>
Value at end of year	570,195

## RECONCILIATION OF MEMBERSHIP FOR THE PLAN YEAR ENDING SEPTEMBER 30, 2023

	Active Members	Vested Terminated Members	Pension Recipients			
			Service Retirement	DROP	Disability Retirement	Beneficiaries
No. at Start of Year	111	2	39	11	4	1
Increase (Decrease) From						
Service Retirement	(2)		2	(3)		
DROP	(2)		3	2		
Disability Retirement						
Deaths						
Data Correction						
Non-Vested Terminations	(10)					
Vested Terminations						
New Entrants/Rehires	12					
Lump Sum Payment/Refund						
No. End of Year	109	2	44	10	4	1

## ACTIVE AND VESTED TERMINATED MEMBERS INCLUDED IN VALUATION

Valuation October 1	Active Members	Vested Members	Valuation Payroll	Average		
				Age	Service	Pay
1985	84	0	\$1,832,316	34.4 yrs.	6.4 yrs.	\$21,813
1986	85	0	2,018,627	35.7	6.7	23,749
1987	84	2	2,230,257	36.1	7.1	26,551
1988	94	2	2,749,957	36.1	7.3	29,255
1989	97	2	2,660,321	36.4	7.3	27,426
1990	102	2	2,939,572	35.9	7.3	28,819
1991	103	2	3,074,088	36.9	7.8	29,846
1992	104	2	3,349,098	37.2	8.3	32,203
1993	94	0	3,093,896	38.5	9.4	32,914
1994	102	0	3,333,068	38.4	9.0	32,677
1995	103	0	3,626,231	39.2	9.6	35,206
1996	103	2	3,663,859	38.8	9.3	35,571
1997	105	2	3,717,397	39.0	9.2	35,404
1998	111	3	4,234,703	37.7	7.9	38,150
1999	106	2	4,224,186	38.1	8.4	39,851
2000	112	3	4,503,739	38.6	7.9	40,212
2001	107	2	4,422,327	38.5	8.1	41,330
2002	102	3	4,572,202	39.7	8.9	44,826
2003	103	3	4,921,744	39.9	9.1	47,784
2004	103	3	5,496,631	40.3	9.9	53,365
2005	105	3	5,943,309	40.9	10.6	56,603
2006	112	3	6,838,249	39.3	9.4	61,056
2007	106	3	6,323,737	38.9	9.4	59,658
2008	117	2	6,992,600	39.1	9.3	59,766
2009	111	2	6,754,679	38.8	9.3	60,853
2010	109	1	6,393,190	39.4	9.7	58,653
2011	105	1	5,696,599	39.5	9.9	54,253
2012	103	1	5,422,508	39.3	10.1	52,646
2013	109	2	6,149,728	39.5	9.5	56,420
2014	109	2	6,179,327	38.6	8.9	56,691
2015	104	2	6,158,780	39.3	9.1	59,219
2016	101	2	6,186,251	38.2	8.7	61,250
2017	110	3	6,948,201	37.9	8.3	63,165
2018	114	1	7,150,289	38.5	8.9	62,722
2019	108	1	7,361,216	38.3	8.4	68,159
2020	106	1	7,418,421	38.5	8.6	69,985
2021	101	2	6,965,104	37.6	7.8	68,961
2022	111	2	8,163,290	37.4	7.8	73,543
<b>2023</b>	<b>109</b>	<b>2</b>	<b>8,521,583</b>	<b>37.6</b>	<b>7.9</b>	<b>78,180</b>

## NUMBER ADDED TO AND REMOVED FROM ACTIVE MEMBERSHIP

Year Ended Sept. 30	Number Added During Year		Terminations During Year										Active Members End of Year
	A	E	Retired		Disability Retirement		Died in Service		Withdrawal		Total		
			A	E	A	E	A	E	A	A	A	E	
1998	19	13	7	1.7	0	0.1	0	0.2	5	1	6	5	111
1999	8	13	4	1.1	0	0.1	0	0.2	9	0	9	6	106
2000	17	11	3	0.8	1	0.1	0	0.2	6	1	7	5	112
2001	11	16	5	0.7	1	0.1	0	0.1	10	0	10	5	107
2002	8	13	0	1.4	0	0.1	0	0.1	12	1	13	5.2	102
2003	11	10	2	1.4	0	0.1	0	0.1	5	3	8	4.3	103
2004	6	6	1	2.0	0	0.0	0	0.1	5	0	5	4.4	103
2005	4	2	0	3.1	0	0.1	0	0.1	2	0	2	3.6	105
2006	16	9	6	5.6	0	0.1	0	0.1	3	0	3	3.3	112
2007	5	11	6	3.7	0	0.1	2	0.1	3	0	3	4.6	106
2008	13	2	0	3.3	0	0.1	0	0.1	2	0	2	3.9	117
2009	12	18	2	3.5	0	0.1	0	0.1	15	1	16	4.8	111
2010	6	8	2	4.0	0	0.1	0	0.1	4	2	6	5.0	109
2011	5	9	4	3.1	0	0.1	0	0.2	5	0	5	4.2	105
2012	14	16	1	2.3	2	0.1	0	0.1	12	1	13	3.6	103
2013	17	11	2	4.4	0	0.1	0	0.1	7	2	9	4.3	109
2014	19	19	3	3.7	1	0.1	0	0.1	13	2	15	5.0	109
2015	11	16	3	1.6	0	0.1	0	0.1	12	1	13	9.1	104
2016	18	21	4	1.7	0	0.1	0	0.1	15	2	17	7.8	101
2017	16	7	1	1.6	0	0.0	1	0.1	4	1	5	7.8	110
2018	10	6	0	1.9	0	0.1	0	0.1	5	1	6	9.1	114
2019	8	14	8	3.7	1	0.1	0	0.1	5	0	5	8.6	108
2020	15	17	2	2.4	0	0.1	0	0.1	15	0	15	8.1	106
2021	13	18	7	3.2	1	0.0	0	0.1	9	1	10	8.8	101
2022	14	4	1	1.6	0	0.1	0	0.0	3	0	3	8.8	111
2023	12	14	4	3.0	0	0.1	0	0.1	10	0	10	9.2	109
2024				2.6		0.0		0.1				8.7	

*A represents actual number. E represents expected number.*



Fort Pierce Police - Active Members

Age Group	Years of Service to Valuation Date-----												Total
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Up	
20-24 NO.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	8.
TOT PAY	150945.	181414.	62415.	59190.	0.	0.	0.	0.	0.	0.	0.	0.	453964.
AVG PAY	50315.	60471.	62415.	59190.	0.	0.	0.	0.	0.	0.	0.	0.	56746.
25-29 NO.	3.	4.	3.	1.	0.	3.	0.	0.	0.	0.	0.	0.	14.
TOT PAY	150945.	231244.	177942.	61884.	0.	224895.	0.	0.	0.	0.	0.	0.	846910.
AVG PAY	50315.	57811.	59314.	61884.	0.	74965.	0.	0.	0.	0.	0.	0.	60494.
30-34 NO.	2.	3.	0.	7.	0.	13.	2.	0.	0.	0.	0.	0.	27.
TOT PAY	100630.	175888.	0.	447142.	0.	1015045.	201301.	0.	0.	0.	0.	0.	1940006.
AVG PAY	50315.	58629.	0.	63877.	0.	78080.	100650.	0.	0.	0.	0.	0.	71852.
35-39 NO.	1.	1.	0.	0.	4.	8.	3.	0.	0.	0.	0.	0.	17.
TOT PAY	50315.	60866.	0.	0.	282208.	612760.	291502.	0.	0.	0.	0.	0.	1297651.
AVG PAY	50315.	60866.	0.	0.	70552.	76595.	97167.	0.	0.	0.	0.	0.	76332.
40-44 NO.	0.	1.	0.	1.	1.	6.	1.	3.	0.	0.	0.	0.	13.
TOT PAY	0.	58864.	0.	65053.	61283.	519480.	102692.	290048.	0.	0.	0.	0.	1097420.
AVG PAY	0.	58864.	0.	65053.	61283.	86580.	102692.	96683.	0.	0.	0.	0.	84417.
45-49 NO.	1.	0.	2.	0.	2.	1.	4.	3.	5.	1.	0.	0.	19.
TOT PAY	50315.	0.	134351.	0.	127127.	79999.	397944.	305468.	582150.	121089.	0.	0.	1798443.
AVG PAY	50315.	0.	67176.	0.	63564.	79999.	99486.	101823.	116430.	121089.	0.	0.	94655.
50-54 NO.	0.	0.	1.	0.	0.	2.	0.	1.	3.	0.	0.	0.	7.
TOT PAY	0.	0.	63931.	0.	0.	179912.	0.	97295.	323357.	0.	0.	0.	664495.
AVG PAY	0.	0.	63931.	0.	0.	89956.	0.	97295.	107786.	0.	0.	0.	94928.
55-59 NO.	0.	0.	0.	0.	0.	1.	1.	0.	1.	0.	0.	0.	3.
TOT PAY	0.	0.	0.	0.	0.	141076.	86899.	0.	120816.	0.	0.	0.	348791.
AVG PAY	0.	0.	0.	0.	0.	141076.	86899.	0.	120816.	0.	0.	0.	116264.
60-64 NO.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOT PAY	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AVG PAY	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65-99 NO.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	1.
TOT PAY	0.	0.	0.	0.	0.	0.	0.	0.	73903.	0.	0.	0.	73903.
AVG PAY	0.	0.	0.	0.	0.	0.	0.	0.	73903.	0.	0.	0.	73903.
TOT NO.	10.	12.	7.	10.	7.	34.	11.	7.	10.	1.	0.	0.	109.
TOT AMT	503150.	708276.	438639.	633269.	470618.	2773167.	1080338.	692811.	1100226.	121089.	0.	0.	8521583.
AVG AMT	50315.	59023.	62663.	63327.	67231.	81564.	98213.	98973.	110023.	121089.	0.	0.	78180.



## SCHEDULE OF NON-ACTIVE PARTICIPANTS DATA

	Terminated Vested		Ord. Disability		Duty Disability		Age & Service		All Others		Totals	
	Count	Benefits	Count	Benefits	Count	Benefits	Count	Benefits	Count	Benefits	Count	Benefits
Under 20	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	0	0	0	0	0	0	0
30 - 34	0	0	0	0	0	0	0	0	0	0	0	0
35 - 39	1	9,537	0	0	0	0	0	0	0	0	1	9,537
40 - 44	0	0	0	0	0	0	0	0	0	0	0	0
45 - 49	0	0	0	0	1	9,006	1	27,710	0	0	2	36,716
50 - 54	1	12,000	1	14,846	0	0	8	223,545	0	0	10	250,391
55 - 59	0	0	0	0	1	16,943	14	330,928	1	13,668	16	361,539
60 - 64	0	0	0	0	0	0	8	157,846	0	0	8	157,846
65 - 69	0	0	0	0	0	0	10	130,938	0	0	10	130,938
70 - 74	0	0	0	0	1	15,753	8	120,454	0	0	9	136,207
75 - 79	0	0	0	0	0	0	3	36,980	0	0	3	36,980
80 - 84	0	0	0	0	0	0	1	11,166	0	0	1	11,166
85 - 89	0	0	0	0	0	0	1	10,204	0	0	1	10,204
90 - 94	0	0	0	0	0	0	0	0	0	0	0	0
95 - 99	0	0	0	0	0	0	0	0	0	0	0	0
100 and Over	0	0	0	0	0	0	0	0	0	0	0	0
Total Count		2		1		3		54		1		61
Total Benefits		21,537		14,846		41,702		1,049,771		13,668		1,141,524
Total PV of Benefits		208,998		159,302		389,717		11,402,365		7,758		12,168,140
Current Average Age		45.26		54.21		60.12		63.47		59.34		62.49





## SECTION C

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### **ACTUARIAL COST METHOD, ACTUARIAL ESTIMATES AND DEFINITIONS OF TECHNICAL TERMS**

## ACTUARIAL COST METHOD

The actuarial cost method is a procedure for allocating the actuarial present value of benefits and expenses to time periods. The method used for your valuation is known as the individual entry-age actuarial cost method, and has the following characteristics:

- (i) The annual normal cost for each individual active member is sufficient to accumulate the value of the member's pension at time of retirement.
- (ii) Each annual normal cost is a constant percentage of the member's year by year projected pensionable compensation.

The entry age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's pensionable compensation between the entry age of the member and the assumed exit ages.

The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the actuarial accrued liability. Deducting accrued assets from the actuarial accrued liability determines the unfunded actuarial accrued liability. The unfunded actuarial accrued liability was financed as a level percent of member payroll.

Active member payroll was estimated to increase 3.0% a year for the purpose of determining the level percent contributions. This is consistent with the estimated base rate of increase in salaries used to calculate actuarial present values. According to the Florida Administrative Code, this payroll growth assumption may not exceed the average growth over the last ten years, but not less than zero. The actual payroll growth over the prior ten years is 3.32%.



## ACTUARIAL ESTIMATES USED FOR THE VALUATION

Financial objective contribution requirements and actuarial present values are calculated by applying estimates of future plan activities (actuarial estimates) to the benefit provisions and people information of the fund, using the entry age actuarial cost method described on page 26.

The principal areas of risk which require estimates of future plan activities are:

- (i) long-term rates of investment return to be generated by the assets of the fund
- (ii) patterns of pay increases to active members
- (iii) rates of mortality among active members, retired members, and beneficiaries
- (iv) rates of withdrawal of active members
- (v) rates of disability among active members
- (vi) the age patterns of actual retirements

In a valuation, the monetary effect of each activity is calculated for as long as a present covered person survives - - - a period of time which can be as long as a century.

Actual activities of the Trust Fund will not coincide exactly with estimated activities due to their nature. Each valuation provides a complete recalculation of estimated future activities and takes into account the effect of accumulated differences between estimated and actual activities. The result is a continual series of adjustments (usually small) to the computed contribution rate.

From time to time one or more of the estimates are modified to reflect experience trends (but not random or temporary year to year fluctuations).

The actuarial estimate regarding the INFLATION rate was adopted effective September 30, 1995. The actuarial estimates regarding the INVESTMENT RETURN and REAL INVESTMENT RETURN rates were adopted effective October 1, 2021. And the actuarial estimate regarding the SALARY INCREASE rates were adopted effective September 30, 2014. These estimates are used, in combination with the other assumptions, to (i) determine the present value of amounts expected to be paid in the future and (ii) establish rates of contribution which are expected to remain relatively level as a percent of total valuation payroll.

**Investment Return:** Six and three-quarters percent (6.75%) per annum, compounded annually and net of investment expenses.

**Inflation:** Two and one-half percent (2.50%) per annum, compounded annually (plus one half percent from other causes). This is the rate at which growth in the supply of money and credit is estimated to exceed growth in the supply of goods and services. It may be thought of as the rate of depreciation of the purchasing power of the dollar. There are a number of indices for measuring the inflation rate. The recent inflation rate, as measured by the Consumer Price Index, has been:

	Year Ended September 30					Average for Period
	2023	2022	2021	2020	2019	
Actual	3.7%	8.2%	5.4%	1.4%	1.7%	4.0%



**Real Investment Return:** Four and one-quarter percent (4.25%) per annum, compounded annually. This is the rate of return assumed to be produced by investing a pool of assets in an inflation free environment. Recent real investment return for the trust fund has been:

	Year Ended September 30					Average for Period
	2023	2022	2021	2020	2019	
Total Rate of Return	3.7 %	3.1 %	9.1 %	6.3 %	6.9 %	5.8 %
less inflation Rate	3.7	8.2	5.4	1.4	1.7	4.0
Actual Real Rate of Return	0.0	(5.1)	3.7	4.9	5.2	1.8

*The total investment return rate was computed using the approximate formula  $i = I$  divided by  $1/2 (A + B - I)$ , where  $I$  is actual realized investment income plus market value adjustments,  $A$  is the beginning of year asset value, and  $B$  is the end of year asset value.*

The preceding investment return rates reflect the particular characteristics of this trust fund and should not be used to measure an investment advisor's performance or for comparison with other retirement systems.

The following schedule illustrates the recent history of investment return based on the actuarial value of assets.

	Year Ended September 30					Average 5 Year
	2023	2022	2021	2020	2019	
Total Investment Return Rate	3.7 %	3.1 %	9.1 %	6.3 %	6.9 %	5.8 %
Assumed Total Return Rate	6.75	6.75	7.00	7.00	7.25	6.9

**Salary Increases:** Employee salaries are estimated to increase between the date of hire and date of retirement. Salary increases occur in recognition of (i) individual merit and seniority, (ii) inflation related depreciation of the purchasing power of salaries, and (iii) competition from other employers for personnel.

A schedule of estimated rates of increases in individual salaries follows:

For Years of Service Attributable to:	Annual Rates of Salary Increase				
	For Years of Service				
	Under 3	3 - 5	6 - 8	9 - 11	12 & Over
Merit & Seniority:	3.5 %	2.5 %	2.0 %	1.0 %	0.5 %
General Increase in Wage Level Due to:					
Inflation	2.5	2.5	2.5	2.5	2.5
Other Causes	0.5	0.5	0.5	0.5	0.5
Total:	6.5	5.5	5.0	4.0	3.5

It is estimated that the group size will remain constant and that total payroll for the group will increase at the rate of the general increase in wage levels due to inflation and other causes, which in this case is 3.0%. A schedule of recent salary change experience follows:



	Year Ended September 30					Average 5 Year
	2023	2022	2021	2020	2019	
% Change in Salary	10.4 %	11.3 %	4.3 %	5.4 %	14.4 %	9.1 %
% Estimated Change	4.9	4.9	4.9	4.7	5.0	4.9
% Change in Total Payroll	4.4	17.2	(6.1)	0.8	3.0	3.6

**Mortality Table:** The Pub-2010 Headcount Weighted Safety Participant Mortality Tables, with ages set forward 1 year and mortality improvements projected to all future years after 2010 using Scale MP-2018. For males, the mortality tables are based on the Below-Median versions of the given table. These are the same rates in use for Special Risk Class members of the Florida Retirement System (FRS) for their July 1, 2022 Actuarial Valuation. Florida Statutes Chapter 112.63(1)(f) mandates the use of the mortality tables used in either of the two most recently published actuarial valuation reports of FRS.

#### FRS Healthy Post-Retirement Mortality for Special Risk Class Members

Sample Attained Ages (in 2023)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.42 %	0.20 %	32.69	36.52
55	0.55	0.35	27.91	31.48
60	0.91	0.60	23.31	26.68
65	1.31	0.92	19.03	22.15
70	2.07	1.43	14.99	17.88
75	3.49	2.38	11.38	13.95
80	6.19	4.08	8.29	10.46

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

#### FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

Sample Attained Ages (in 2023)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.16 %	0.10 %	35.82	39.73
55	0.25	0.16	30.74	34.59
60	0.42	0.22	25.78	29.51
65	0.68	0.30	21.00	24.49
70	1.17	0.54	16.46	19.58
75	2.05	1.05	12.21	14.87
80	6.19	4.08	8.29	10.46

This assumption is used to measure the probabilities of active members dying prior to retirement.



For disabled retirees, the mortality table was 80% of the Pub-2010 Headcount Weighted General Disabled Retiree Table, and 20% of the Pub-2010 Headcount Weighted Safety Disabled Retiree Table, both with no provision being made for future mortality improvements. These are the same rates in use for Special Risk Class members of FRS in the July 1, 2022 FRS Actuarial Valuation.

**Rates of Retirement:** These rates are used to measure the probabilities of an eligible member retiring during the next year.

Early Retirement		Normal Retirement		
Age	Percent Retiring	Years of Service	Age	Percent Retiring
Under 55	2.5 %	10 - 24	55	15.0 %
			56 - 59	25.0
			60	50.0
			61 & Over	100.0
		25	Under 55	25.0
			55 - 59	25.0
			60 & Over	100.0
		26	Under 55	45.0
			55 - 59	45.0
			60 & Over	100.0
		27	Under 55	40.0
			55 - 59	40.0
			60 & Over	100.0
		28 - 29	Under 55	30.0
			55 - 59	30.0
			60 & Over	100.0
		30	Under 60	40.0
		31 - 32		50.0
		33 & Over		100.0
		30 & Over	60 & Over	100.0

**Rates of separation from active membership:** The rates do not apply to members eligible to retire and do not include separation on account of death or disability. This estimate measures the probabilities of members separating from employment for reasons other than death, disability or retirement.

<b>Sample Ages</b>	<b>Years of Service</b>	<b>% of Active Members Separating Within Next Year</b>
ALL	Under 1	25.0 %
	1	18.0
	2	10.0
	3 - 9	8.0
	10 - 14	4.0
	15 & Over	1.0

**Rates of Disability:** These estimates represent the probabilities of active members becoming disabled.

<b>Sample Ages</b>	<b>Percent Becoming Disabled Within Next Year</b>
20	0.07 %
25	0.09
30	0.10
35	0.14
40	0.21
45	0.32
50	0.52
55	0.92

**Administrative Expenses:** Administrative expenses for the next year are assumed to be equal to those of the previous year and this amount is included in the computed contribution requirement.

**Active Member Group Size:** The number of active members was estimated to remain constant.

**Unused Leave Payments:** Such payments, which are included in the calculation of the average pay upon which benefits are computed, were estimated to increase benefits by 10.5%.

**Asset Value:** The funding value of assets is determined by recognizing the difference between actual return and expected return over four years.

**Changes from Previous Valuation:** None.



## DEFINITIONS OF TECHNICAL TERMS

**Accrued Service:** Service credited under the system which was rendered before the date of the actuarial valuation.

**Actuarial Accrued Liability:** The difference between the actuarial present value of future benefit payments and the actuarial present value of future normal costs. Also referred to as "accrued liability" or "past service liability."

**Actuarial Cost Method:** A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future benefit payments" between future normal costs and actuarial accrued liability. Sometimes referred to as the "actuarial valuation cost method."

**Actuarial Equivalent:** A single amount or series of amounts of equal actuarial present value to another single amount or series of amounts, computed on the basis of appropriate actuarial activities.

**Actuarial Present Value:** The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment. Also referred to as "present value."

**Amortization:** Paying off an interest-discounted amount with periodic payments of interest and principal -- as opposed to paying off with lump sum payment.

**Experience Estimates (Assumptions):** Estimates of expected future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement estimates (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic estimates (salary increases and investment income) consist of the underlying rates in an inflation-free environment plus a provision for a long-term average rate of inflation.

**Experience Gain (Loss):** The difference between actual actuarial costs and estimated actuarial costs -- during the period between two valuation dates.

**Funding Value of Assets:** The actuarial value of assets used to determine contribution amounts.

**Normal Cost:** The actuarial cost allocated to the current year by the actuarial cost method. Sometimes referred to as "current service cost."

**Unfunded Actuarial Accrued Liability:** The difference between the actuarial accrued liability and the actuarial value of system assets. Sometimes referred to as "unfunded past service liability," "unfunded accrued liability" or "unfunded supplemental present value."

Most retirement systems have an unfunded actuarial accrued liability. They arise each time new benefits are added and each time an experience loss is realized. Unfunded actuarial accrued liability does not represent a debt that is payable today. What is important is the ability to control the amount of unfunded actuarial accrued liability and the trend in its amount (after due allowance for devaluation of the dollar).





## SECTION D

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### **SUPPLEMENTARY INFORMATION REQUIRED BY FASB STATEMENT No. 35**

FASB NO. 35 INFORMATION		
A. Valuation Date	October 1, 2023	October 1, 2022
B. Actuarial Present Value of Accumulated Plan Benefits		
1. Vested Benefits		
a. Members Currently Receiving Payments	\$ 11,959,142	\$ 10,951,638
b. Terminated Vested Members	208,998	195,219
c. Other Members	6,182,703	6,136,846
d. Total	18,350,843	17,283,703
2. Non-Vested Benefits	1,362,636	1,518,628
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	19,713,479	18,802,331
4. Accumulated Contributions of Active Members	3,531,852	3,386,869
C. Changes in the Actuarial Present Value of Accumulated Plan Benefits		
1. Total Value at Beginning of Year	18,802,331	17,678,471
2. Increase (Decrease) During the Period Attributable to:		
a. Plan Amendment	0	0
b. Change in Actuarial Assumptions	0	0
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	2,129,335	2,198,212
d. Benefits Paid (including DROP Additions)	(1,218,187)	(1,074,352)
e. Net Increase	911,148	1,123,860
3. Total Value at End of Period	19,713,479	18,802,331
D. Market Value of Assets (Net of Excess Contribution Reserve)	\$ 16,483,683	\$ 15,388,056
E. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods		