

DESTIN
FIRE CONTROL DISTRICT FIREFIGHTERS' RETIREMENT TRUST FUND
ACTUARIAL VALUATION
AS OF OCTOBER 1, 2023
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2025



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

November 20, 2023

Board of Trustees
Destin Fire Control District
Firefighters' Pension Board

Re: Destin Fire Control District Firefighters' Retirement Trust Fund

Dear Board:

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

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapters 112 and 175, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the Destin, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

Additionally, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models that apply the funding rules to generate the results. All internally developed models are reviewed as part of the valuation process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

In our opinion, the Minimum Required Contribution set forth in this report constitutes a reasonable actuarially determined contribution under Actuarial Standards of Practice No. 4.

The undersigned, Joseph L. Griffin, is familiar with the immediate and long-term aspects of pension valuations, and meets 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.

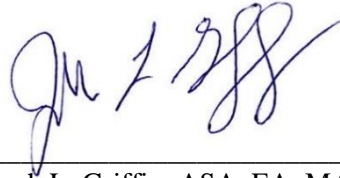
To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Destin, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Fire Control District Firefighters' Retirement Trust Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

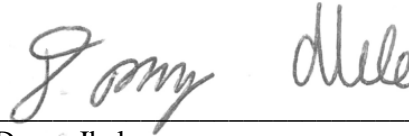
Foster & Foster, Inc.

By:

A handwritten signature in blue ink, appearing to read "JL Griffin", written over a horizontal line.

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

By:

A handwritten signature in black ink, appearing to read "Danny Ibele", written over a horizontal line.

Danny Ibele

JLG/lke

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Destin Fire Control District Firefighters' Retirement Trust Fund, performed as of October 1, 2023, 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, 2025.

The contribution requirements, compared with those set forth in the April 5, 2023 actuarial impact statement, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2023 <u>9/30/2025</u>	10/1/2022 <u>9/30/2024</u>
Minimum Required Contribution	\$1,366,387	\$1,188,204
Member Contributions (Est.)	180,080	179,431
District And State Required Contribution	1,186,307	1,008,773
State Contribution (Est.) ¹	342,717	342,717
District Required Contribution ²	\$843,590	\$666,056

¹ Represents the amount received in calendar 2023. As per a Mutual Consent Agreement between the Membership and the District, all State Monies received each year will be available to offset the District's required contribution.

² Please note that a shortfall contribution of \$12,151.22 is due in addition to the above stated requirements for the fiscal year ending September 30, 2024.

As you can see, the Minimum Required Contribution shows an increase when compared to the results set forth in the April 5, 2023 actuarial impact statement. The increase is attributable to unfavorable asset experience and larger than expected salary increases.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an average salary increase of 18.21% which exceeded the 4.85% assumption, an investment return of 5.54% (Actuarial Asset Basis) which fell short of the 7.40% assumption, and unfavorable retirement experience. There were no significant sources of actuarial gain.

CHANGES SINCE PRIOR VALUATION

Plan Changes

- The required member contributions increased from 6.8% of salary to 8.0% of salary.
- The benefit accrual rate increased from 2.50% to 3.50% for members hired after October 1, 2012.
- The disability benefits have been updated to reflect the benefit accrual rate of 3.50% for members hired after October 1, 2012.

Actuarial Assumption/Method Changes

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

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2023</u>	<u>10/1/2022</u>
A. Participant Data		
Actives	34	35
Service Retirees	22	20
DROP Retirees	3	3
Beneficiaries	1	1
Disability Retirees	3	3
Terminated Vested	<u>12</u>	<u>2</u>
Total	75	71
Projected Annual Payroll	2,066,732	2,057,521
Annual Rate of Payments to:		
Service Retirees	1,375,529	1,285,580
DROP Retirees	136,217	133,546
Beneficiaries	65,035	63,760
Disability Retirees	56,869	56,869
Terminated Vested	25,341	46,284
B. Assets		
Actuarial Value (AVA) ¹	29,764,305	28,604,789
Market Value (MVA) ¹	28,257,357	26,017,472
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	16,400,704	14,725,913
Disability Benefits	86,949	84,821
Death Benefits	33,346	31,594
Vested Benefits	650,616	612,604
Refund of Contributions	105,831	98,917
Service Retirees	19,139,590	18,102,288
DROP Retirees ¹	2,759,625	2,570,848
Beneficiaries	179,527	228,878
Disability Retirees	738,719	744,309
Terminated Vested	274,899	476,574
Share Plan Balances ¹	<u>0</u>	<u>0</u>
Total	40,369,806	37,676,746

C. Liabilities - (Continued)	<u>10/1/2023</u>	<u>10/1/2022</u>
Present Value of Future Salaries	18,392,986	17,415,923
Present Value of Future Member Contributions	1,471,439	1,393,274
Normal Cost (Retirement)	413,216	420,356
Normal Cost (Disability)	6,900	7,126
Normal Cost (Death)	2,381	2,423
Normal Cost (Vesting)	47,548	44,384
Normal Cost (Refunds)	14,634	13,119
Total Normal Cost	484,679	487,408
Present Value of Future Normal Costs	3,987,320	3,776,905
Accrued Liability (Retirement)	13,019,877	11,541,130
Accrued Liability (Disability)	20,797	19,347
Accrued Liability (Death)	10,731	9,803
Accrued Liability (Vesting)	220,780	190,545
Accrued Liability (Refunds)	17,941	16,119
Accrued Liability (Inactives) ¹	23,092,360	22,122,897
Share Plan Balances ¹	0	0
Total Actuarial Accrued Liability (EAN AL)	36,382,486	33,899,841
Unfunded Actuarial Accrued Liability (UAAL)	6,618,181	5,295,052
Funded Ratio (AVA / EAN AL)	81.8%	84.4%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2023</u>	<u>10/1/2022</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances ¹	23,092,360	22,122,897
Actives	9,600,255	8,776,400
Member Contributions	<u>1,369,489</u>	<u>1,285,628</u>
Total	34,062,104	32,184,925
Non-vested Accrued Benefits	<u>896,313</u>	<u>713,264</u>
Total Present Value		
Accrued Benefits (PVAB)	34,958,417	32,898,189
Funded Ratio (MVA / PVAB)	80.8%	79.1%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	1,139,113	
Benefits Paid	(1,459,355)	
Interest	2,380,470	
Other	<u>0</u>	
Total	2,060,228	

Valuation Date	10/1/2023	10/1/2022
Applicable to Fiscal Year Ending	<u>9/30/2025</u>	<u>9/30/2024</u>

E. Pension Cost

Normal Cost ²	\$527,894	\$531,321
Administrative Expenses ²	37,341	32,486
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 10/1/2023) ²	801,153	624,397
Minimum Required Contribution	1,366,388	1,188,204
Expected Member Contributions ²	180,080	179,431
Expected District and State Contribution	1,186,308	1,008,773

F. Past Contributions

Plan Years Ending:	<u>9/30/2023</u>
District and State Requirement	888,360
Actual Contributions Made:	
District	545,643
State	<u>342,717</u>
Total	888,360

G. Net Actuarial (Gain)/Loss

1,464,439

¹ The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2023 and 9/30/2022.

² Contributions developed as of 10/1/2023 displayed above have been adjusted to account for assumed salary increase and interest components.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2023	6,618,181
2024	6,317,923
2025	5,995,448
2030	3,987,788
2034	1,874,980
2039	84,109
2043	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2023	18.21%	4.85%
Year Ended 9/30/2022	5.02%	4.97%
Year Ended 9/30/2021	6.62%	4.94%
Year Ended 9/30/2020	17.15%	4.69%
Year Ended 9/30/2019	1.61%	4.28%

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

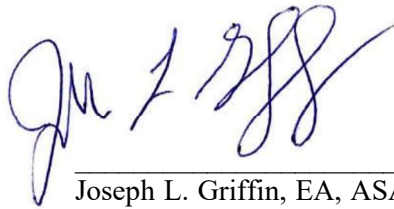
	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended 9/30/2023	10.32%	5.54%	7.40%
Year Ended 9/30/2022	-12.14%	6.51%	7.40%
Year Ended 9/30/2021	20.37%	10.97%	7.40%
Year Ended 9/30/2020	10.22%	8.67%	7.40%
Year Ended 9/30/2019	5.44%	6.38%	7.40%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2023	\$2,066,732
	10/1/2013	2,154,312
(b) Total Increase		-4.07%
(c) Number of Years		10.00
(d) Average Annual Rate		-0.41%

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, Chapters 112 and 175, 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 #23-6938

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 Chapters 112 and 175 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, 2022	\$5,295,052
(2)	Sponsor Normal Cost developed as of October 1, 2022	322,806
(3)	Expected administrative expenses for the year ended September 30, 2023	29,801
(4)	Expected interest on (1), (2) and (3)	416,824
(5)	Sponsor contributions to the System during the year ended September 30, 2023	888,360
(6)	Expected interest on (5)	22,381
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2023 (1)+(2)+(3)+(4)-(5)-(6)	5,153,742
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	1,464,439
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2023	6,618,181

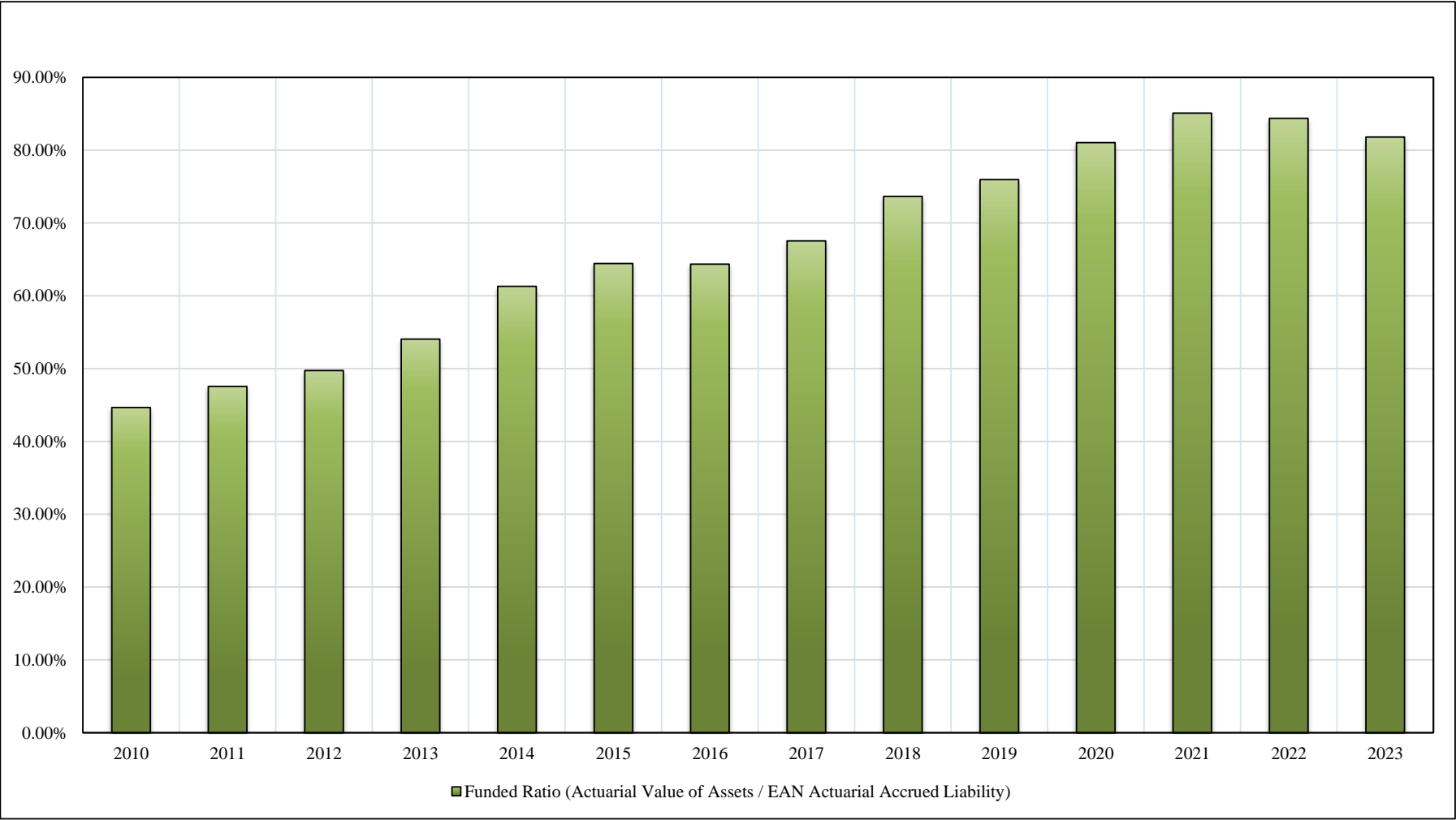
Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2023 <u>Amount</u>	Amortization <u>Amount</u>
Benefit Improv.	10/1/2002	9	231,201	33,606
Benefit Improv.	10/1/2005	12	478,870	57,339
Actuarial Loss	10/1/2006	13	538,784	61,392
Method Change	10/1/2006	13	279,919	31,896
Actuarial Loss	10/1/2007	14	110,363	12,033
Benefit Improv.	10/1/2007	14	991,639	108,123
Benefit Improv.	10/1/2007	14	1,608,876	175,423
Actuarial Loss	10/1/2008	14	1,311,009	142,945
Method Change	10/1/2008	14	(79,683)	(8,688)
Actuarial Gain	10/1/2009	14	(473,293)	(51,605)
Assump Change	10/1/2009	14	165,739	18,071
Actuarial Loss	10/1/2010	14	271,699	29,625
Method Change	10/1/2010	14	(17,652)	(1,925)
Actuarial Gain	10/1/2011	14	(110,807)	(12,082)
Actuarial Gain	10/1/2012	14	(72,109)	(7,862)
Benefit Improv.	10/1/2012	14	352,536	38,439
Actuarial Gain	10/1/2013	15	(203,915)	(21,376)
Actuarial Gain	10/1/2014	16	(1,010,536)	(102,258)
Actuarial Gain	10/1/2015	17	(150,950)	(14,797)

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2023 <u>Amount</u>	Amortization <u>Amount</u>
Assump Change	10/1/2015	17	(14,557)	(1,427)
Assump Change	10/1/2016	18	1,009,063	96,116
Actuarial Gain	10/1/2016	18	(494,601)	(47,112)
Actuarial Loss	10/1/2017	19	268,476	24,916
Assump Change	10/1/2018	10	157,324	21,243
Actuarial Gain	10/1/2018	20	(195,895)	(17,756)
Benefit Improv.	10/1/2018	10	(624)	(84)
Actuarial Loss	10/1/2019	11	52,680	6,672
Actuarial Loss	10/1/2020	12	148,853	17,823
Assump Change	10/1/2020	12	(458,536)	(54,904)
Actuarial Gain	10/1/2021	13	(381,135)	(43,429)
Actuarial Loss	10/1/2022	14	650,240	70,899
Benefits Change	10/1/2022	14	190,764	20,800
Actuarial Loss	10/1/2023	15	1,464,439	153,513
			<u>6,618,181</u>	<u>735,569</u>

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2022	\$5,295,052
(2) Expected UAAL as of October 1, 2023	5,153,742
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	529,327
Salary Increases	572,298
Active Decrements	325,293
Inactive Mortality	87,323
Other	<u>(49,802)</u>
Increase in UAAL due to (Gain)/Loss	1,464,439
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2023	\$6,618,181

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 for Healthy Retirees, set forward one year.

Male: PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year.

Beneficiary Lives:

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

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

Disabled Lives:

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

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

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

Interest Rate

7.40% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Salary Increases

The assumed rates of salary increase are shown below:

<u>Credited Service</u>	<u>Salary Increase</u>
0 – 1	6.5%
2 - 3	6.0%
4 – 5	5.5%
6 – 7	5.0%
8 – 9	4.5%
10+	4.0%

This assumption is based on the results of an experience study dated November 2018.

ACTUARIAL ASSUMPTIONS AND METHODS (CONTINUED)

<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.									
<u>Administrative Expenses</u>	\$34,284 annually, based on the average of actual expenses incurred in the prior two fiscal years.									
<u>Amortization Method</u>	<p>New UAAL amortization bases are amortized over the following amortization periods:</p> <p>Experience: 15 Years. Assumption/Method Changes: 15 Years. Benefit Changes: 15 Years.</p> <p>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.</p>									
<u>Funding Method</u>	<p>Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution:</p> <p>Interest - A half year, based on current 7.40% assumption. Salary - A full year, based on current 5.03% assumption.</p>									
<u>Early Retirement</u>	Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption is based on the results of an experience study dated November 2018.									
<u>Normal Retirement</u>	<p>The assumed rates of normal retirement are below:</p> <table><tr><td>Years Following <u>First Eligibility</u></td><td><u>Rate</u></td></tr><tr><td>0</td><td>80.0%</td></tr><tr><td>1</td><td>80.0%</td></tr><tr><td>2</td><td>100.0%</td></tr></table> <p>This assumption is based on the results of an experience study dated November 2018.</p>		Years Following <u>First Eligibility</u>	<u>Rate</u>	0	80.0%	1	80.0%	2	100.0%
Years Following <u>First Eligibility</u>	<u>Rate</u>									
0	80.0%									
1	80.0%									
2	100.0%									

ACTUARIAL ASSUMPTIONS AND METHODS (CONTINUED)

Disability Rate

Sample rates below (1201).

<u>Age</u>	<u>Rate</u>
20	0.03%
30	0.04%
40	0.07%
50	0.18%

It is assumed that 90% of disablements are service related. This assumption is based on the results of an experience study dated November 2018.

Termination Rate

The assumed rates of withdrawal are shown below:

<u>Credited Service</u>	<u>Rate</u>
0	10.0%
1 - 2	5.0%
3 - 4	4.5%
5 - 6	4.0%
7 - 8	3.5%
9 - 10	3.0%
11 - 14	2.5%
15+	2.0%

This assumption is based on the results of an experience study dated November 2018.

Marital Assumption

100% of active members are assumed to be married, with husbands 3 years older than their 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 market value investment return) over a five-year period.

Low-Default-Risk Obligation Measure

Based on the Entry Age Normal Actuarial Cost Method and an interest rate of 4.87% per year compounded annually, net of investment related expenses. This rate is consistent with the Yield to Maturity of the S&P Municipal Bond 20-Year High Grade Rate Index as of September 30, 2023. All other assumptions for the Low-Default-Risk Obligation Measure are consistent with the assumptions shown in this section unless otherwise noted.

GLOSSARY

Actuarial Value of Assets is the asset value used in the valuation to determine contribution requirements. It represents the plan's Market Value of Assets (see below), with adjustments according to the plan's Actuarial Asset Method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the Market Value of Assets.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

- (a) The normal cost accrual rate equals:
 - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
 - (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

Market Value of Assets is the fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded. Under the Entry Age Normal cost method, it is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.

Payroll Under Assumed Ret. Age is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members, excluding any Members who are assumed to retire with 100% probability on the valuation date.

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

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

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

Total Required Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

Unfunded Actuarial Accrued Liability (UAAL) is the difference between the actuarial accrued liability (described above) and the Actuarial Value of Assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- Investment Return: 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.
- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

Impact of Plan Maturity on Risk

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

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

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 300.0% on October 1, 2013 to 109.7% on October 1, 2023, indicating that the plan has been maturing during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 63.5%. 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 54.1% on October 1, 2013 to 81.8% on October 1, 2023.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, increased from -4.7% on October 1, 2013 to -1.5% on October 1, 2023. The current Net Cash Flow Ratio of -1.5% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

Low Default-Risk Obligation Measure

ASOP No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, was revised as of December 2021 to include a “low-default-risk obligation measure” (LDROM). This liability measure is consistent with the determination of the actuarial accrued liability shown on page 8 in terms of member data, plan provisions, and assumptions/methods, under the Entry Age Normal Cost Method, except that the interest rate is tied to low-default-risk fixed income securities. The S&P Municipal Bond 20 Year High Grade Rate Index (daily rate closest to, but not later than, the measurement date) was selected to represent a current market rate of low risk but longer-term investments that could be included in a low-risk asset portfolio. The interest rate used in this valuation was 4.87%, resulting in an LDROM of \$49,763,520. The LDROM should not be considered the “correct” liability measurement; it simply shows a possible outcome if the Board elected to hold a very low risk asset portfolio. The Board actually invests the pension plan’s contributions in a diversified portfolio of stocks and bonds and other investments with the objective of maximizing investment returns at a reasonable level of risk. Consequently, the difference between the plan’s Actuarial Accrued Liability disclosed earlier in this section and the LDROM can be thought of as representing the expected taxpayer savings from investing in the plan’s diversified portfolio compared to investing only in high quality bonds.

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

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

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2023</u>	<u>10/1/2022</u>	<u>10/1/2018</u>	<u>10/1/2013</u>
<u>Support Ratio</u>				
Total Actives	34	35	29	33
Total Inactives ¹	31	30	24	11
Actives / Inactives ¹	109.7%	116.7%	120.8%	300.0%

Asset Volatility Ratio

Market Value of Assets (MVA)	28,257,357	26,017,472	20,867,421	12,112,873
Total Annual Payroll	2,803,699	2,472,975	1,746,377	2,154,312
MVA / Total Annual Payroll	1,007.9%	1,052.1%	1,194.9%	562.3%

Accrued Liability (AL) Ratio

Inactive Accrued Liability	23,092,360	22,122,897	17,773,648	10,677,525
Total Accrued Liability (EAN)	36,382,486	33,899,841	27,936,944	21,606,264
Inactive AL / Total AL	63.5%	65.3%	63.6%	49.4%

Funded Ratio

Actuarial Value of Assets (AVA)	29,764,305	28,604,789	20,578,226	11,680,485
Total Accrued Liability (EAN)	36,382,486	33,899,841	27,936,944	21,606,264
AVA / Total Accrued Liability (EAN)	81.8%	84.4%	73.7%	54.1%

Net Cash Flow Ratio

Net Cash Flow ²	(412,210)	(750,870)	904,109	(566,475)
Market Value of Assets (MVA)	28,257,357	26,017,472	20,867,421	12,112,873
Ratio	-1.5%	-2.9%	4.3%	-4.7%

¹ Excludes terminated participants awaiting a refund of member contributions.

² Determined as total contributions minus benefit payments and administrative expenses.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
2005	174,765.53	N/A
2006	174,665.20	-0.1%
2007	275,811.05	57.9%
2008	408,448.24	48.1%
2009	478,673.15	17.2%
2010	290,247.28	-39.4%
2011	322,568.25	11.1%
2012	324,981.22	0.7%
2013	342,803.09	5.5%
2014	326,317.85	-4.8%
2015	371,910.26	14.0%
2016	293,567.31	-21.1%
2017	291,352.69	-0.8%
2018	266,748.38	-8.4%
2019	292,293.19	9.6%
2020	258,595.20	-11.5%
2021	327,017.43	26.5%
2022	307,532.81	-6.0%
2023	342,717.25	11.4%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2023

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	294,869.25	294,869.25
Total Cash and Equivalents	294,869.25	294,869.25
Receivables:		
Additional District Contributions	12,151.22	12,151.22
Investment Income	25,959.81	25,959.81
Total Receivable	38,111.03	38,111.03
Investments:		
Mutual Funds:		
Fixed Income	7,542,848.91	6,424,471.58
Equity	15,581,338.83	16,826,874.70
Pooled/Common/Commingled Funds:		
Real Estate	4,346,590.24	4,682,689.66
Total Investments	27,470,777.98	27,934,035.94
Total Assets	27,803,758.26	28,267,016.22
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	7,636.45	7,636.45
Administrative Expenses	2,022.50	2,022.50
Total Liabilities	9,658.95	9,658.95
NET POSITION RESTRICTED FOR PENSIONS	27,794,099.31	28,257,357.27

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2023
Market Value Basis

ADDITIONS

Contributions:

Member	196,308.94
District	545,642.75
State	342,717.25

Total Contributions	1,084,668.94
---------------------	--------------

Investment Income:

Net Realized Gain (Loss)	(96,200.13)	
Unrealized Gain (Loss)	1,778,669.01	
Net Increase in Fair Value of Investments		1,682,468.88
Interest & Dividends		1,052,528.91
Less Investment Expense ¹		(82,902.43)

Net Investment Income	2,652,095.36
-----------------------	--------------

Total Additions	3,736,764.30
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DEDUCTIONS

Distributions to Members:

Benefit Payments	1,421,063.17
Lump Sum DROP Distributions	26,548.04
Refunds of Member Contributions	11,743.45

Total Distributions	1,459,354.66
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Administrative Expense	37,523.97
------------------------	-----------

Total Deductions	1,496,878.63
------------------	--------------

Net Increase in Net Position	2,239,885.67
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	26,017,471.60
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End of the Year	28,257,357.27
-----------------	---------------

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

ACTUARIAL ASSET VALUATION
September 30, 2023

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.

Plan Year Ending	Gain/(Loss)	<u>Gains/Losses Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2023	2024	2025	2026	2027
09/30/2019	(414,603)	0	0	0	0	0
09/30/2020	608,614	121,722	0	0	0	0
09/30/2021	3,235,797	1,294,320	647,161	0	0	0
09/30/2022	(5,861,652)	(3,516,992)	(2,344,662)	(1,172,332)	0	0
09/30/2023	742,503	594,002	445,501	297,000	148,499	0
Total		(1,506,948)	(1,252,000)	(875,332)	148,499	0

<u>Development of Investment Gain/Loss</u>	
Market Value of Assets, 09/30/2022	26,017,472
Contributions Less Benefit Payments & Admin Expenses	(424,361)
Expected Investment Earnings*	1,909,592
Actual Net Investment Earnings	2,652,095
2023 Actuarial Investment Gain/(Loss)	<u>742,503</u>

*Expected Investment Earnings = $0.074 * (26,017,472 - 0.5 * 424,361)$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2023	28,257,357
(2) Gains/(Losses) Not Yet Recognized	(1,506,948)
(3) Actuarial Value of Assets, 09/30/2023, (1) - (2)	<u>29,764,305</u>
(4) Limited Actuarial Value of Assets, 09/30/2023	29,764,305
(A) 09/30/2022 Actuarial Assets:	28,604,789
(I) Net Investment Income:	
1. Interest and Dividends	1,052,529
2. Realized Gain (Loss)	(96,200)
3. Unrealized Gain (Loss)	1,778,669
4. Change in Actuarial Value	(1,080,369)
5. Investment Expenses	(82,902)
Total	<u>1,571,726</u>
(B) 09/30/2023 Actuarial Assets, excluding Shortfall Contribution:	29,752,154
Actuarial Assets Rate of Return = $2I/(A+B-I)$:	5.54%
Market Value of Assets Rate of Return:	10.32%

Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis) (529,327)

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
SEPTEMBER 30, 2023
Actuarial Asset Basis

REVENUES

Contributions:		
Member	196,308.94	
District	545,642.75	
State	342,717.25	
Total Contributions		1,084,668.94
Earnings from Investments:		
Interest & Dividends	1,052,528.91	
Net Realized Gain (Loss)	(96,200.13)	
Unrealized Gain (Loss)	1,778,669.01	
Change in Actuarial Value	(1,080,369.40)	
Total Earnings and Investment Gains		1,654,628.39

EXPENDITURES

Distributions to Members:		
Benefit Payments	1,421,063.17	
Lump Sum DROP Distributions	26,548.04	
Refunds of Member Contributions	11,743.45	
Total Distributions		1,459,354.66
Expenses:		
Investment related ¹	82,902.43	
Administrative	37,523.97	
Total Expenses		120,426.40
Change in Net Assets for the Year		1,159,516.27
Net Assets Beginning of the Year		28,604,789.00
Net Assets End of the Year ²		29,764,305.27

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

²Net Assets may be limited for actuarial consideration.

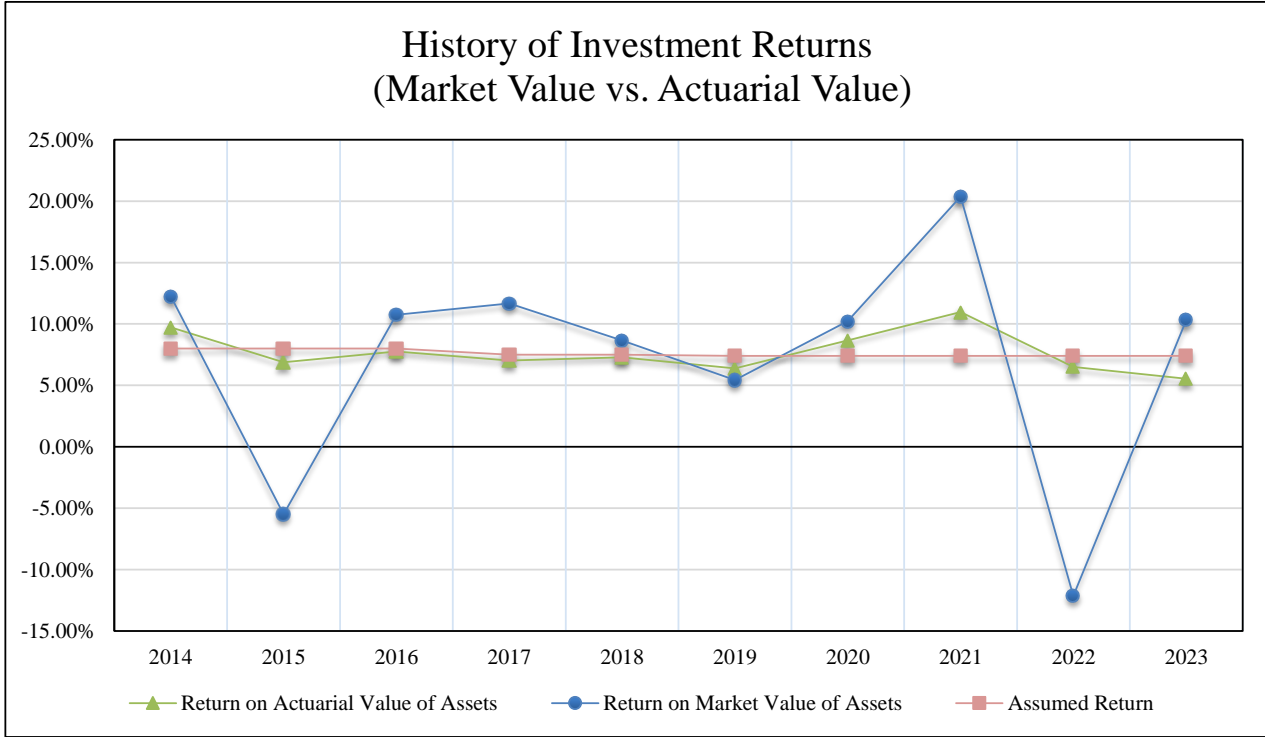
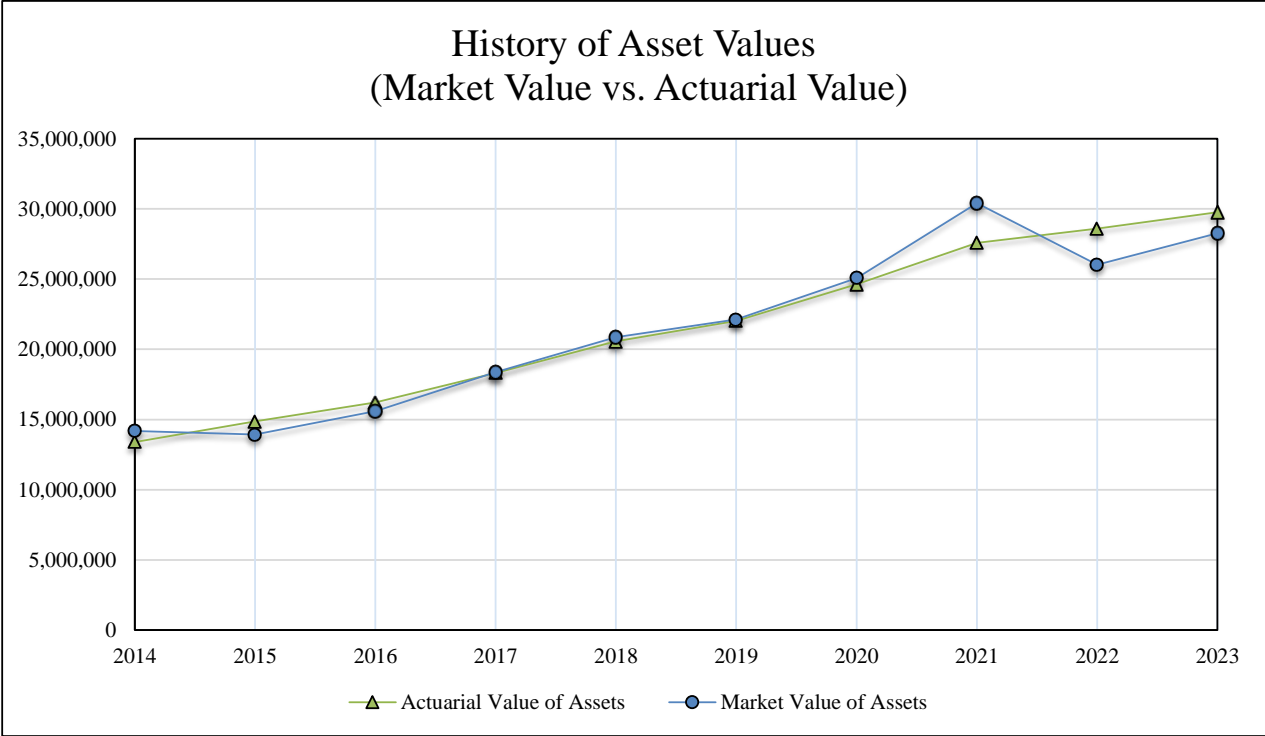
DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2022 to September 30, 2023

Beginning of the Year Balance	339,591.60
Plus Additions	159,541.33
Investment Return Earned	27,283.07
Less Distributions	(26,548.04)
End of the Year Balance	499,867.96

RECONCILIATION OF DISTRICT SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2023

(1) Required District and State Contributions	\$888,360.00
(2) Less Allowable State Contribution	<u>(342,717.25)</u>
(3) Required District Contribution for Fiscal 2023	545,642.75
(4) Less 2022 Prepaid Contribution	0.00
(5) Less Actual District Contributions	<u>(533,491.53)</u>
(6) Equals District's Shortfall/(Prepaid) Contribution as of September 30, 2023	\$12,151.22

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



STATISTICAL DATA

	<u>10/1/2023</u>	<u>10/1/2022</u>	<u>10/1/2021</u>	<u>10/1/2020</u>
<u>Actives - Hired Before 10/1/12</u>				
Number	13	14	14	14
Average Current Age	46.0	45.7	44.7	43.7
Average Age at Employment	25.1	25.9	26.2	27.2
Average Past Service	20.9	19.8	18.5	16.5
Average Annual Salary	\$109,719	\$88,102	\$84,446	\$79,817
<u>Actives - Hired On/After 10/1/12</u>				
Number	21	21	19	19
Average Current Age	33.2	32.1	32.3	33.0
Average Age at Employment	30.3	29.6	30.4	31.7
Average Past Service	2.9	2.5	1.9	1.3
Average Annual Salary	\$65,588	\$59,026	\$56,157	\$53,137
<u>Service Retirees</u>				
Number	22	20	14	14
Average Current Age	56.9	56.5	58.4	57.4
Average Annual Benefit	\$62,524	\$64,279	\$72,000	\$70,544
<u>DROP Retirees</u>				
Number	3	3	5	5
Average Current Age	51.2	50.2	50.9	49.9
Average Annual Benefit	\$45,406	\$44,515	\$55,651	\$54,560
<u>Beneficiaries</u>				
Number	1	1	1	1
Average Current Age	59.4	58.4	57.4	56.4
Average Annual Benefit	\$65,035	\$63,760	\$62,510	\$61,284
<u>Disability Retirees</u>				
Number	3	3	3	3
Average Current Age	48.5	47.5	46.5	45.5
Average Annual Benefit	\$18,956	\$18,956	\$18,956	\$18,956
<u>Terminated Vested</u>				
Number	12	9	12	10
Average Current Age ¹	40.9	41.3	43.8	42.8
Average Annual Benefit ¹	\$12,671	\$15,428	\$22,278	\$22,278

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

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

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

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2022	35
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	(4)
iii. Refund of member contributions or full lump sum distribution	(2)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. DROP	<u>0</u>
g. Continuing participants	28
h. New entrants / Rehires	<u>6</u>
i. Total active life participants in valuation	34

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	20	3	1	3	3	6	36
Retired	2				(1)		1
DROP							
Vested (Deferred Annuity)							
Vested (Due Refund)						4	4
Hired/Terminated in Same Year							
Death, With Survivor							
Death, No Survivor							
Disabled							
Refund of Contributions							
Rehires							
Expired Annuities							
Data Corrections							
b. Number current valuation	22	3	1	3	2	10	41

SUMMARY OF CURRENT PLAN

<u>Board of Trustees</u>	Two District appointees, two Members of the Department elected by the membership, and a fifth Member elected by other 4 and appointed by the District.
<u>Eligibility</u>	Full-time employees who are classified as full-time certified firefighters participate in the System as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the District as a Firefighter.
<u>Salary</u>	Base pay, plus state supplemental education pay, plus EMT and Paramedic educational differential pay.
<u>Average Final Compensation</u>	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	8.0% of Salary.
<u>District and State Contributions</u>	Remaining amount required in order to pay current costs and amortize any unfunded past service cost as provided in Part VII of Chapter 112, F.S.
<u>Normal Retirement</u>	
Date	Earlier of: 1) Age 55 and 10 years of Credited Service or 2) 20 Years of Credited Service regardless of age. Members hired on or after October 1, 2012 become eligible following the earlier of 1) Age 55 with 10 years of Credited Service or 2) Age 52 with 25 years of Credited Service.
Benefit	3.5% of Average Final Compensation <u>times</u> Credited Service
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 10 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% for each year prior to Normal Retirement.

SUMMARY OF CURRENT PLAN (CONTINUED)

Cost-of-Living Adjustment

Service retirees on and after 10/1/02 (hired before 10/1/12) receive annual 2% increases beginning the October 1 following one full year of retirement. Members hired on and after 10/1/12 are not eligible for the cost-of-living adjustment.

Vesting

Schedule

100% after 7 years of contributing service if hired before 10/1/12. Members hired on and after 10/1/12 are 100% vested after 10 years.

Benefit Amount

Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Disability

Eligibility

Service Incurred

Covered from Date of Employment.

Non-Service Incurred

10 years of Credited Service.

Exclusions

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

Benefit

Benefit accrued to date of disability but not less than 42% of Average Final Compensation (if Service Incurred).

Duration

Payable for life and ten years certain or until recovery (as determined by the Board). Options available.

Death Benefits

Pre-Retirement

Vested

Monthly accrued benefit payable to designated beneficiary for 10 years.

Non-Vested

Refund of accumulated contributions without interest.

Post-Retirement

Benefits payable to beneficiary in accordance with option selected at retirement.

Share Plan

Funded Status

Not currently funded.

SUMMARY OF CURRENT PLAN (CONTINUED)

Deferred Retirement Option Plan

Eligibility	Satisfaction of Normal Retirement requirements.
Participation	Not to exceed 60 months.
Rate of Return	<p>At Member's election:</p> <p>(1) Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter, or</p> <p>(2) 6.5% per annum compounded monthly.</p> <p>Members may elect to change form of return one time.</p>
Form of Distribution	Cash lump sum (options available) at termination of employment.