OCEAN CITY-WRIGHT FIRE CONTROL
DISTRICT FIREFIGHTERS' PENSION 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 21, 2023

Board of Trustees
Ocean City-Wright Fire Control
Firefighters' Pension Board

Re: Ocean City-Wright Fire Control District Firefighters' Pension Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Ocean City-Wright Fire Control District Firefighters' Pension 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 Ocean City-Wright Fire Control, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

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

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

The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Ocean City-Wright Fire Control, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the District Firefighters' Pension 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: ______________________________
Joseph L. Griffin, ASA, EA, MAAA
Enrolled Actuary #23-6938

By: ______________________________
Tyler A. Koftan, EA, MAAA
Enrolled Actuary #23-8685

JLG/lke

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Ocean City-Wright Fire Control District Firefighters' Pension 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 October 1, 2022 actuarial valuation report, are as follows:

Valuation Date	10/1/2023	10/1/2022
Applicable to Fiscal Year Ending	9/30/2025	9/30/2024
Minimum Required Contribution		
% of Projected Annual Payroll	33.8%	35.0%
Member Contributions (Est.)		
% of Projected Annual Payroll	7.0%	7.0%
District And State Required Contribution		
% of Projected Annual Payroll	**26.8%**	**28.0%**
State Contribution (Est.) [1]	$380,219	$380,219
% of Projected Annual Payroll (Est.)	9.2%	9.2%
District Required Contribution (Est.) [2]		
% of Projected Annual Payroll (Est.)	17.6%	18.8%

[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] The required contribution from the combination of District and State sources for the year ending September 30, 2025, is 26.8% of the actual payroll realized in that year. As a budgeting tool, the District may contribute 17.6% of each Member’s Salary and then make a one-time adjustment to account for the actual State Monies received.

As you can see, the Minimum Required Contribution shows a decrease when compared to the results set forth in the October 1, 2022 actuarial valuation report. The decrease is attributable to a significant District contribution in excess of the requirement, as well as a rise in active payroll which decreased the contribution requirement as a percentage of payroll. The decrease was offset in part by net unfavorable experience realized by the plan as described below.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. The primary source of actuarial loss was an average salary increase of 16.77% which exceeded the 7.41% assumption. This loss was offset in part by a gain associated with an investment return of 6.95% (Actuarial Asset Basis) which exceeded the 6.80% assumption.

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

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

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2022	17.6%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	1.2%
Change in Normal Cost Rate	0.5%
Change in Administrative Expense Percentage	-0.1%
Payroll Change Effect on UAAL Amortization	-1.4%
Investment Return (Actuarial Asset Basis)	-0.1%
Salary Increases	1.3%
Active Decrements	0.1%
Rehired Member Who Had Been Eligible for Refund Only	0.3%
Inactive Mortality	0.1%
UAAL Amortization Impact from Contribution Policy	-2.6%
Assumption Change	0.0%
Other	0.7%
Total Change in Contribution	0.0%
(3) Contribution Determined as of October 1, 2023	17.6%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	10/1/2023	10/1/2022
A. Participant Data		
Actives	52	51
Service Retirees	24	24
Beneficiaries	1	1
Disability Retirees	2	2
Terminated Vested	12	9
Total	91	87
Projected Annual Payroll	4,137,217	3,561,371
Annual Rate of Payments to:		
Service Retirees	1,342,935	1,342,935
Beneficiaries	25,619	25,619
Disability Retirees	35,909	35,909
Terminated Vested	110,106	110,106
B. Assets		
Actuarial Value (AVA) [1]	21,343,779	19,220,917
Market Value (MVA) [1]	20,627,617	17,279,496
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	12,967,375	10,377,910
Disability Benefits	378,362	331,260
Death Benefits	70,654	57,467
Vested Benefits	2,163,378	1,660,297
Refund of Contributions	359,906	329,081
Service Retirees	16,468,670	16,677,556
Beneficiaries	186,516	193,956
Disability Retirees	516,554	520,040
Terminated Vested	628,947	568,698
Share Plan Balances [1]	0	0
Total	33,740,362	30,716,265

C. Liabilities - (Continued)

	10/1/2023	10/1/2022
Present Value of Future Salaries	36,263,143	31,831,062
Present Value of Future Member Contributions	2,538,420	2,228,174
Normal Cost (Retirement)	581,601	490,502
Normal Cost (Disability)	27,050	24,279
Normal Cost (Death)	3,935	3,281
Normal Cost (Vesting)	130,596	106,297
Normal Cost (Refunds)	47,981	42,101
Total Normal Cost	791,163	666,460
Present Value of Future Normal Costs	6,659,022	5,685,441
Accrued Liability (Retirement)	7,899,831	6,026,033
Accrued Liability (Disability)	140,342	113,475
Accrued Liability (Death)	37,942	29,830
Accrued Liability (Vesting)	1,086,980	797,984
Accrued Liability (Refunds)	115,558	103,252
Accrued Liability (Inactives)	17,800,687	17,960,250
Share Plan Balances [1]	0	0
Total Actuarial Accrued Liability (EAN AL)	27,081,340	25,030,824
Unfunded Actuarial Accrued Liability (UAAL)	5,737,561	5,809,907
Funded Ratio (AVA / EAN AL)	78.8%	76.8%

D. Actuarial Present Value of Accrued Benefits

	10/1/2023	10/1/2022
Vested Accrued Benefits		
Inactives + Share Plan Balances [1]	17,800,687	17,960,250
Actives	2,785,728	2,160,641
Member Contributions	1,239,383	1,028,444
Total	21,825,798	21,149,335
Non-vested Accrued Benefits	1,191,538	788,215
Total Present Value Accrued Benefits (PVAB)	23,017,336	21,937,550
Funded Ratio (MVA / PVAB)	89.6%	78.8%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	1,107,908	
Benefits Paid	(1,469,899)	
Interest	1,441,777	
Other	0	
Total	1,079,786	

Valuation Date	10/1/2023	10/1/2022
Applicable to Fiscal Year Ending	9/30/2025	9/30/2024
E. Pension Cost		
Normal Cost (with interest)		
% of Projected Annual Payroll [2]	19.8	19.3
Administrative Expenses (with interest)		
% of Projected Annual Payroll [2]	1.0	1.1
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 28 years (as of 10/1/2023, with interest)		
% of Projected Annual Payroll [2]	13.0	14.6
Minimum Required Contribution		
% of Projected Annual Payroll [2]	33.8	35.0
Expected Member Contributions		
% of Projected Annual Payroll [2]	7.0	7.0
Expected District and State Contribution		
% of Projected Annual Payroll [2]	26.8	28.0

F. Past Contributions

Plan Years Ending:	9/30/2023
Total Required Contribution	1,412,561
District and State Requirement	1,142,399
Actual Contributions Made:	
Members (excluding buyback)	270,162
District	1,613,514
State	380,219
Total	2,263,895

G. Net Actuarial (Gain)/Loss 1,098,187

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

[2] Contributions developed as of 10/1/2023 are expressed as a percentage of Projected Annual Payroll at 10/1/2023 of $4,137,217.

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

Year	Projected Unfunded Actuarial Accrued Liability
2023	5,737,561
2024	5,574,192
2025	5,388,093
2032	3,281,390
2038	292,887
2051	0

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

		Actual	Assumed
Year Ended	9/30/2023	16.77%	7.41%
Year Ended	9/30/2022	11.57%	7.05%
Year Ended	9/30/2021	14.01%	7.36%
Year Ended	9/30/2020	7.57%	7.70%
Year Ended	9/30/2019	12.15%	7.11%

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

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2023	14.90%	6.95%	6.80%
Year Ended	9/30/2022	-15.03%	4.29%	7.00%
Year Ended	9/30/2021	17.89%	11.93%	7.25%
Year Ended	9/30/2020	13.68%	11.50%	7.25%
Year Ended	9/30/2019	3.89%	10.97%	7.25%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2023	$4,137,217
	10/1/2013	1,998,503
(b) Total Increase		107.02%
(c) Number of Years		10.00
(d) Average Annual Rate		7.55%

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

Joseph L. Griffin, EA, ASA, MAAA
Enrolled Actuary #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 Chapter 112 Florida Statutes:

Mr. Keith Brinkman
Bureau of Local
Retirement Systems
Post Office Box 9000
Tallahassee, FL 32315-9000

Mr. Steve Bardin
Municipal Police and Fire
Pension Trust Funds
Division of Retirement
Post Office Box 3010
Tallahassee, FL 32315-3010

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2022	$5,809,907
(2)	Sponsor Normal Cost developed as of October 1, 2022	417,164
(3)	Expected administrative expenses for the year ended September 30, 2023	37,877
(4)	Expected interest on (1), (2) and (3)	424,729
(5)	Sponsor contributions to the System during the year ended September 30, 2023	1,993,733
(6)	Expected interest on (5)	56,570
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2023 (1)+(2)+(3)+(4)-(5)-(6)	4,639,374
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	1,098,187
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2023	5,737,561

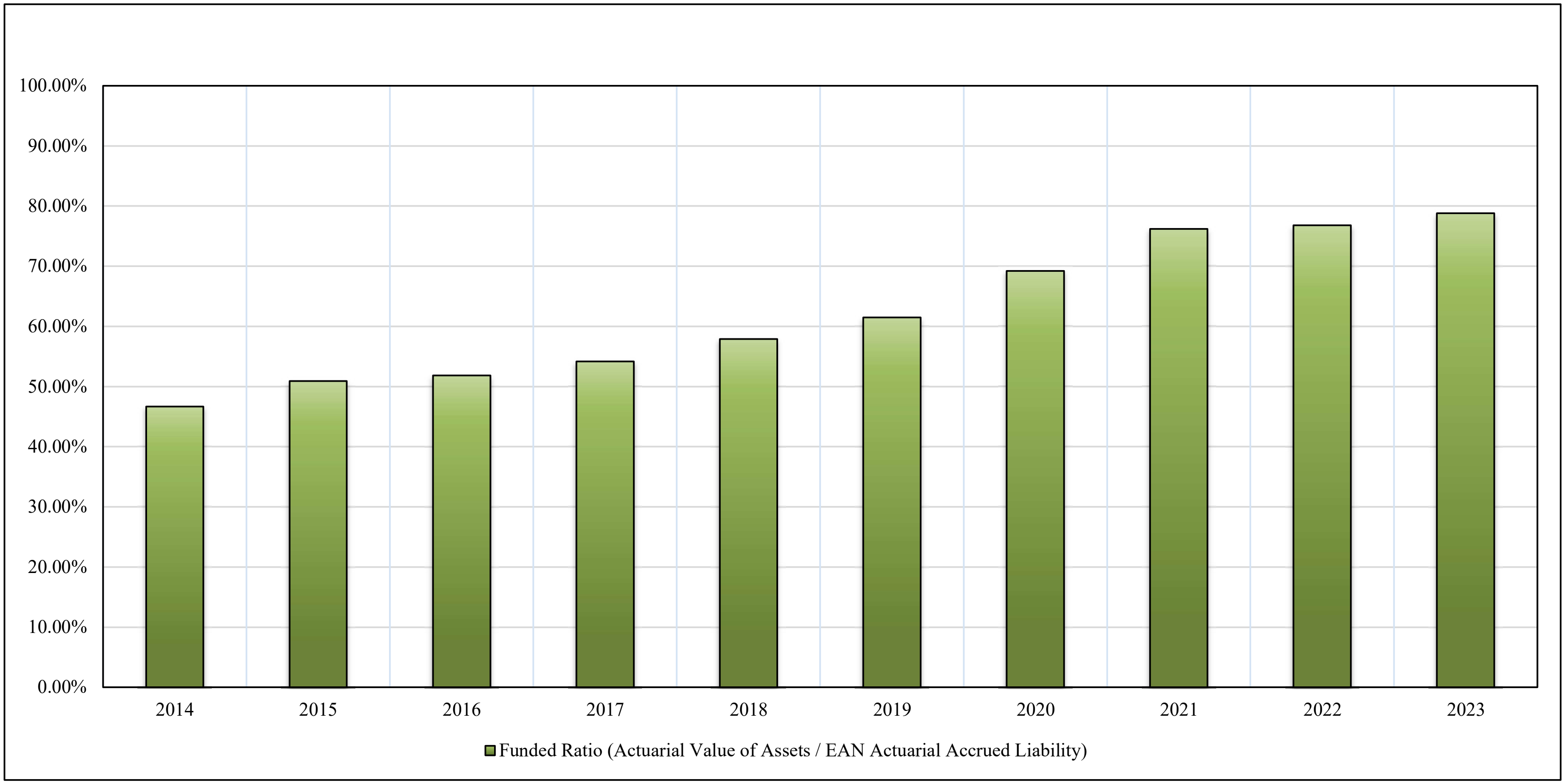
Type of Base	Date Established	Years Remaining	10/1/2023 Amount	Amortization Amount
Initial Base	10/1/2004	21	2,155,603	155,166
Benefit Change	10/1/2005	12	40,821	4,305
Method Change	10/1/2006	13	215,207	21,382
Prior Losses	10/1/2006	13	215,207	21,382
Benefit Change	10/1/2006	13	675,031	67,068
Actuarial Gain	10/1/2007	14	(378,945)	(35,676)
Benefit Change	10/1/2007	14	102,885	9,686
Actuarial Loss	10/1/2008	15	1,426,891	127,920
Method Change	10/1/2008	15	(397,764)	(35,659)
Actuarial Loss	10/1/2009	16	854,626	73,273
Actuarial Gain	10/1/2010	17	(32,890)	(2,707)
Assum. Changes	10/1/2010	17	419,186	34,500
Actuarial Loss	10/1/2011	18	438,140	34,730
Actuarial Gain	10/1/2012	19	(281,520)	(21,555)
Actuarial Gain	10/1/2013	20	(598,458)	(44,377)
Actuarial Gain	10/1/2014	21	(303,322)	(21,834)
Benefit Change	10/1/2014	21	(192,277)	(13,841)
Actuarial Gain	10/1/2015	22	(32,736)	(2,292)
Actuarial Loss	10/1/2016	23	164,759	11,244
Assum. Changes	10/1/2016	23	231,307	15,786
Benefit Change	10/1/2016	23	45,402	3,099
Actuarial Gain	10/1/2017	24	(122,736)	(8,178)
Assum. Changes	10/1/2017	24	295,379	19,682
Benefit Change	10/1/2017	24	66,394	4,424
Actuarial Gain	10/1/2018	25	(479,768)	(31,261)

Type of Base	Date Established	Years Remaining	10/1/2023 Amount	Amortization Amount
Assum. Changes	10/1/2018	25	349,869	22,797
Benefit Change	10/1/2018	25	(732)	(48)
Actuarial Loss	10/1/2019	26	54,817	3,498
Actuarial Gain	10/1/2020	27	(449,887)	(28,149)
Assump Change	10/1/2020	27	(215,028)	(13,454)
Actuarial Gain	10/1/2021	28	(907,397)	(55,741)
Assump Change	10/1/2021	28	488,182	29,989
Actuarial Loss	10/1/2022	14	527,228	49,636
Assump Change	10/1/2022	14	265,900	25,033
Actuarial Loss	10/1/2023	15	1,098,187	98,452
			5,737,561	518,280

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1)	Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2022	$5,809,907
(2)	Expected UAAL as of October 1, 2023	4,639,374
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	(29,408)
	Salary Increases	601,545
	Active Decrements	46,725
	Rehired Member Who Had Been Eligible for Refund Only	138,704
	Inactive Mortality	59,029
	Other	281,592
	Increase in UAAL due to (Gain)/Loss	1,098,187
	Assumption Changes	0
(4)	Actual UAAL as of October 1, 2023	$5,737,561

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	6.80% 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	See table later in this section. This assumption was adopted in conjunction with the experience study dated June 6, 2022. Projected salary at retirement is increased based on individual accruals (as provided by the District) to account for non-regular pay.
Payroll Growth	2.10% for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.
Administrative Expenses	$39,332 annually, based on the average of actual expenses incurred in the prior two fiscal years.
Amortization Method	New UAAL amortization bases are amortized over 15 years. Bases established prior to the valuation date are adjusted proportionally to match the Expected Unfunded Actuarial Accrued Liability as of the valuation date, in order to align prior year bases with the portion of the current year UAAL associated with prior year sources.
Funding Method	Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution: Interest - A half year, based on current 6.80% assumption. Salary - None.
Retirement	See tables later in this section. This assumption was adopted in conjunction with the experience study dated June 6, 2022.
Disability Rate	See table on the following page (1201 times 2). It is assumed that 90% of disablements are service related. This assumption was adopted in conjunction with the experience study dated June 6, 2022.
Termination Rate	See table on the following page. This assumption was adopted in conjunction with the experience study dated June 6, 2022.
Actuarial Asset Method	Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value return (net of fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value of Assets.

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.

Assumption Tables

% Terminating During the Year

Age	Rate
< 30	12.0%
30-39	9.0%
40-44	5.0%
45+	3.0%

% Becoming Disabled During the Year

Age	Rate
20	0.06%
25	0.06%
30	0.08%
35	0.10%
40	0.14%
45	0.20%
50	0.36%
55	0.72%
60	1.80%
65	4.44%

Salary Scale

Service	Rate
0-4	10.00%
5-9	5.75%
10-19	5.25%
20+	4.00%

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

Age	Rate
50-54	10.0%
55+	100.0%

% Retiring During the Year (>= 25 Years of Service)

Age	Rate
25	66.7%
26	100.0%

GLOSSARY

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

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.

- <u>Investment Return</u>: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.

- <u>Salary Increases</u>: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.

- <u>Payroll Growth</u>: The plan's payroll growth assumption, if one is used, causes a predictable annual increase in the plan's amortization payment in order to produce an amortization payment that remains constant as a percentage of payroll if all assumptions are realized. If payroll increases less than the plan's payroll growth assumption, the plan's amortization payment can increase significantly as a percentage of payroll even if all assumptions other than the payroll growth assumption are realized.

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

Impact of Plan Maturity on Risk

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

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

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 327.3% on October 1, 2013 to 167.7% 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 65.7%. 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 40.6% on October 1, 2013 to 78.8% 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, decreased from 8.2% on October 1, 2013 to 3.7% on October 1, 2023. The current Net Cash Flow Ratio of 3.7% indicates that contributions are generally in excess of the plan's benefit payments and administrative expenses.

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

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 $35,082,180. The LDROM should not be considered the “correct” liability measurement; it simply shows a possible outcome if the Board elected to hold a very low risk asset portfolio. The Board actually invests the pension plan’s contributions in a diversified portfolio of stocks and bonds and other investments with the objective of maximizing investment returns at a reasonable level of risk. Consequently, the difference between the plan’s Actuarial Accrued Liability disclosed earlier in this section and the LDROM can be thought of as representing the expected taxpayer savings from investing in the plan’s diversified portfolio compared to investing only in high quality bonds.

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

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

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	10/1/2023	10/1/2022	10/1/2018	10/1/2013
Support Ratio				
Total Actives	52	51	39	36
Total Inactives [1]	31	31	25	11
Actives / Inactives [1]	167.7%	164.5%	156.0%	327.3%
Asset Volatility Ratio				
Market Value of Assets (MVA)	20,627,617	17,279,496	13,213,327	6,793,954
Total Annual Payroll	4,137,217	3,561,371	2,210,640	1,998,503
MVA / Total Annual Payroll	498.6%	485.2%	597.7%	340.0%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	17,800,687	17,960,250	12,685,483	6,053,954
Total Accrued Liability (EAN)	27,081,340	25,030,824	20,658,224	15,820,989
Inactive AL / Total AL	65.7%	71.8%	61.4%	38.3%
Funded Ratio				
Actuarial Value of Assets (AVA)	21,343,779	19,220,917	11,962,849	6,423,421
Total Accrued Liability (EAN)	27,081,340	25,030,824	20,658,224	15,820,989
AVA / Total Accrued Liability (EAN)	78.8%	76.8%	57.9%	40.6%
Net Cash Flow Ratio				
Net Cash Flow [2]	760,303	486,681	309,392	553,737
Market Value of Assets (MVA)	20,627,617	17,279,496	13,213,327	6,793,954
Ratio	3.7%	2.8%	2.3%	8.2%

[1] Excludes terminated participants awaiting a refund of member contributions.

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

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During Fiscal Year	Amount	Increase from Previous Year
2005	23,346.92	N/A
2006	81,748.84	250.1%
2007	117,833.20	44.1%
2008	240,958.80	104.5%
2009	267,235.56	10.9%
2010	208,041.34	-22.2%
2011	212,600.02	2.2%
2012	261,902.86	23.2%
2013	256,099.63	-2.2%
2014	271,574.54	6.0%
2015	293,053.63	7.9%
2016	296,666.27	1.2%
2017	281,984.74	-4.9%
2018	243,013.78	-13.8%
2019	260,766.27	7.3%
2020	287,907.20	10.4%
2021	341,369.51	18.6%
2022	369,467.43	8.2%
2023	380,219.21	2.9%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2023

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	879,732.75	879,732.75
Total Cash and Equivalents	879,732.75	879,732.75
Receivables:		
Member Contributions in Transit	9,802.12	9,802.12
District Contributions in Transit	53,111.59	53,111.59
Custodial Correction of Fees	1,850.00	1,850.00
Investment Income	41,313.99	41,313.99
Total Receivable	106,077.70	106,077.70
Investments:		
Corporate Bonds	5,069,234.29	4,737,117.49
Stocks	10,046,781.84	14,910,625.00
Total Investments	15,116,016.13	19,647,742.49
Total Assets	16,101,826.58	20,633,552.94
LIABILITIES		
Payables:		
Refunds of Member Contributions	873.31	873.31
Investment Expenses	4,967.16	4,967.16
Administrative Expenses	95.40	95.40
Total Liabilities	5,935.87	5,935.87
NET POSITION RESTRICTED FOR PENSIONS	16,095,890.71	20,627,617.07

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

ADDITIONS			
Contributions:			
Member		270,161.94	
District		1,613,513.64	
State		380,219.21	
Total Contributions			2,263,894.79
Investment Income:			
Net Realized Gain (Loss)	(26,300.76)		
Unrealized Gain (Loss)	2,404,181.99		
Net Increase in Fair Value of Investments		2,377,881.23	
Interest & Dividends		322,008.15	
Less Investment Expense[1]		(112,071.99)	
Net Investment Income			2,587,817.39
Total Additions			4,851,712.18
DEDUCTIONS			
Distributions to Members:			
Benefit Payments		1,427,487.07	
Lump Sum DROP Distributions		0.00	
Refunds of Member Contributions		42,411.54	
Total Distributions			1,469,898.61
Administrative Expense			33,692.79
Total Deductions			1,503,591.40
Net Increase in Net Position			3,348,120.78
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			17,279,496.29
End of the Year			20,627,617.07

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

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2023

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return[1]
09/30/2020	13.68%
09/30/2021	17.89%
09/30/2022	-15.03%
09/30/2023	14.90%

Annualized Rate of Return for prior four (4) years: 6.95%

(A) 10/01/2022 Actuarial Assets, including Prepaid Contributions:		$19,220,940.30
(I) Net Investment Income:		
1. Interest and Dividends	322,008.15	
2. Realized Gain (Loss)	(26,300.76)	
3. Unrealized Gain (Loss)	2,404,181.99	
4. Change in Actuarial Value	(1,225,258.44)	
5. Investment Related Expenses	(112,071.99)	
Total		1,362,558.95
(B) 10/01/2023 Actuarial Assets:		$21,343,779.12

Actuarial Asset Rate of Return = 2I/(A+B-I), based on Unlimited Actuarial Assets: 6.95%

10/01/2023 Limited Actuarial Assets	$21,343,779.12
10/01/2023 Market Value of Assets	$20,627,617.07

Actuarial Asset Rate of Return, based on Limited Actuarial Assets: 6.95%

Actuarial Gain/(Loss) due to Investment Return (Limited Actuarial Asset Basis) $29,407.75

[1]Market Value Basis, net of investment related expenses.

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

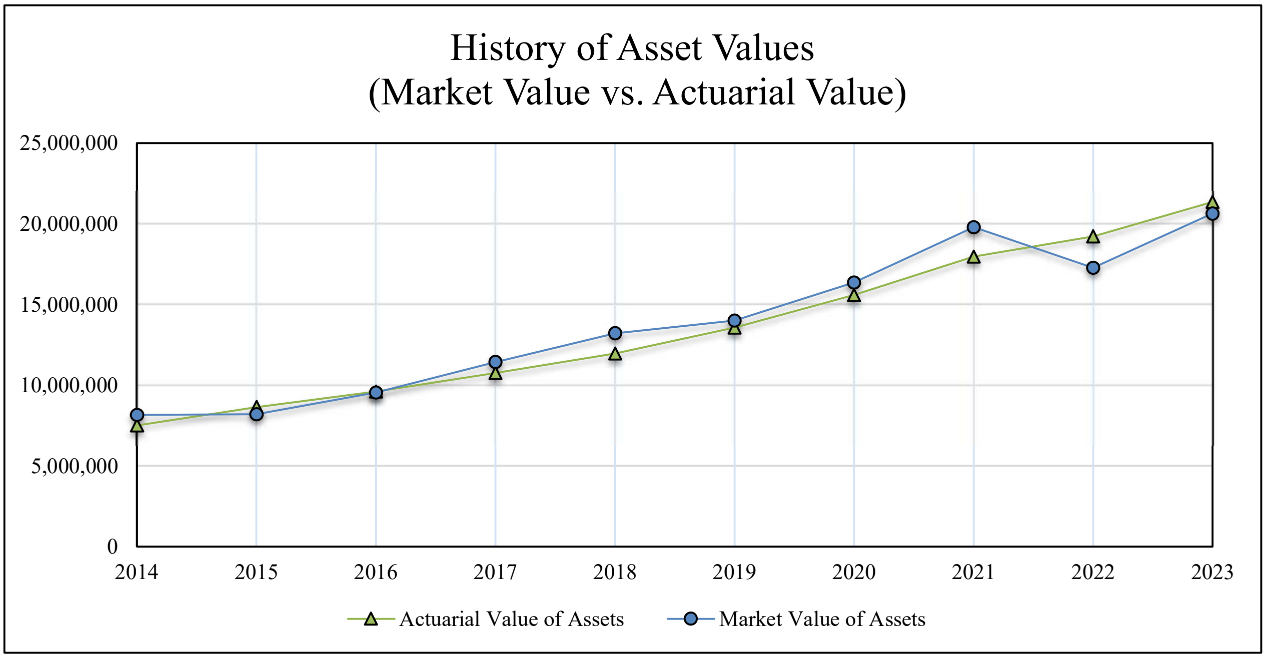
REVENUES		
Contributions:		
Member	270,161.94	
District	1,613,513.64	
State	380,219.21	
Total Contributions		2,263,894.79
Earnings from Investments:		
Interest & Dividends	322,008.15	
Net Realized Gain (Loss)	(26,300.76)	
Unrealized Gain (Loss)	2,404,181.99	
Change in Actuarial Value	(1,225,258.44)	
Total Earnings and Investment Gains		1,474,630.94
EXPENDITURES		
Distributions to Members:		
Benefit Payments	1,427,487.07	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	42,411.54	
Total Distributions		1,469,898.61
Expenses:		
Investment related[1]	112,071.99	
Administrative	33,692.79	
Total Expenses		145,764.78
Change in Net Assets for the Year		2,122,862.34
Net Assets Beginning of the Year		19,220,916.78
Net Assets End of the Year[2]		21,343,779.12

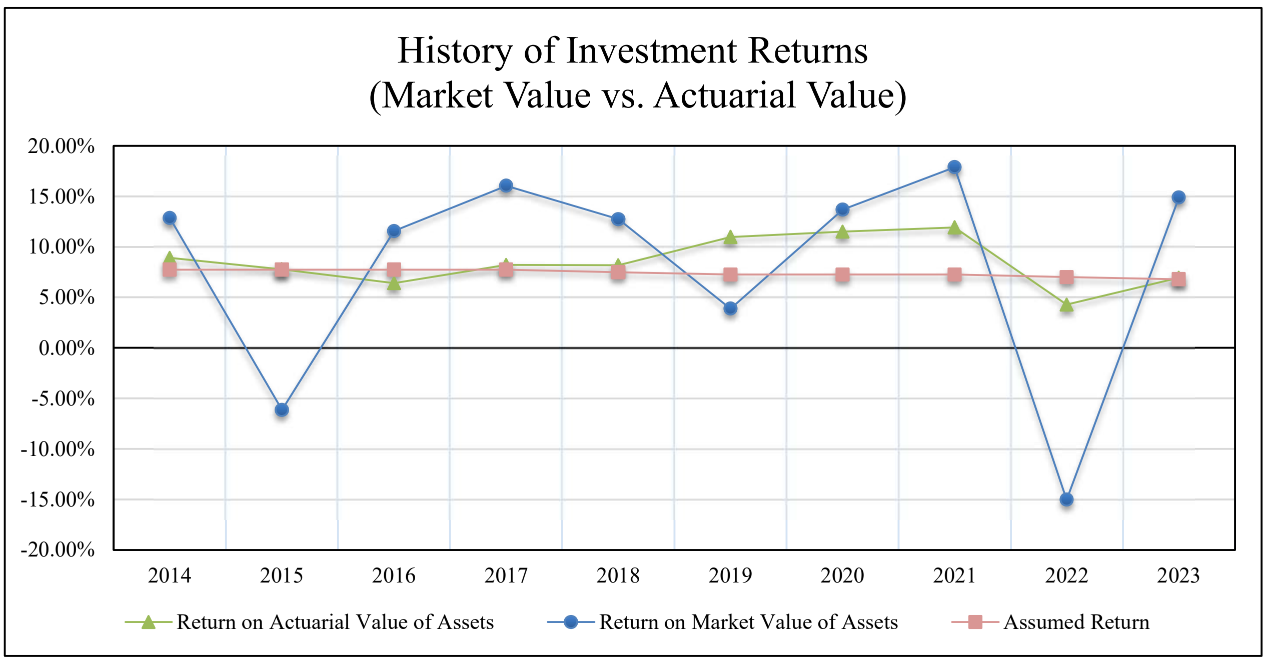
[1] Investment related expenses include investment advisory, custodial and performance monitoring fees.
[2] Net Assets may be limited for actuarial consideration.

DISTRICT CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2023

(1)	Total Required Contribution Rate	36.6%
(2)	Pensionable Payroll Derived from Member Contributions	$3,859,456.29
(3)	Total Required Contribution (1) x (2)	1,412,561.00
(4)	Less Actual Member Contributions	(270,161.94)
(5)	Less Allowable State Contribution	(380,219.21)
(6)	Equals Required District Contribution for Fiscal 2023	762,179.85
(7)	Less 2022 Prepaid Contribution	0.00
(8)	Less Actual District Contributions	(1,613,513.64)
(9)	District Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2023	($851,333.79)

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





STATISTICAL DATA

	10/1/2023	10/1/2022	10/1/2021	10/1/2020
Actives - Hired before 10/1/2014				
Number	13	12	14	15
Average Current Age	41.9	41.7	42.4	41.9
Average Age at Employment	26.5	26.9	27.4	27.7
Average Past Service	15.4	14.8	15.0	14.2
Average Annual Salary	$97,626	$88,903	$83,945	$76,306
Actives - Hired on or after 10/1/2014				
Number	39	39	41	39
Average Current Age	31.7	32.0	32.2	31.5
Average Age at Employment	28.0	28.8	29.6	29.6
Average Past Service	3.7	3.2	2.6	1.9
Average Annual Salary	$73,540	$63,962	$56,628	$48,520
Service Retirees				
Number	24	24	21	22
Average Current Age	60.6	59.6	59.4	59.2
Average Annual Benefit	$55,956	$55,956	$57,559	$58,314
Beneficiaries				
Number	1	1	1	0
Average Current Age	79.6	78.6	77.6	N/A
Average Annual Benefit	$25,619	$25,619	$25,619	N/A
Disability Retirees				
Number	2	2	2	2
Average Current Age	45.9	44.9	43.9	42.9
Average Annual Benefit	$17,955	$17,955	$17,955	$17,955
Terminated Vested				
Number	12	9	10	11
Average Current Age [1]	43.0	42.0	43.7	42.7
Average Annual Benefit [1]	$27,527	$27,527	$24,907	$24,907

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

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24	4		1	1								6
25 - 29	1	2	1		2	2						8
30 - 34	1	1	2		5	5	1					15
35 - 39			1	1	1	3	1					7
40 - 44	1	1	1	1	1	1	1	3				10
45 - 49					1			1	2			4
50 - 54								2				2
55 - 59												0
60 - 64												0
65+												0
Total	7	4	6	3	10	11	3	6	2	0	0	52

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2022	51
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	(3)
iii. Refund of member contributions or full lump sum distribution	(4)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. Continuing participants	44
g. New entrants / Rehires	8
h. Total active life participants in valuation	52

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

	Service Retirees, Vested Receiving Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due Refund)	Total
a. Number prior valuation	24	1	2	4	5	36
Retired	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	3	3
Hired/Terminated in Same Year	0	0	0	0	2	2
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	(1)	(1)
Rehires	0	0	0	0	(1)	(1)
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	24	1	2	4	8	39

SUMMARY OF CURRENT PLAN
(Through Ordinance No. 2020-01)

Credited Service	Total years and fractional parts of years of contributing employment with the District as a Firefighter.
Salary	Total W-2 Compensation, including lump sum sick and vacation payouts at retirement. Effective October 1, 2014, Salary shall not include more than three hundred (300) hours of overtime per calendar year. Additionally, Salary will include the lesser of the amount of sick and vacation leave time accrued as of October 1, 2014, or the actual amount of sick and vacation leave time for which the retiree receives payment at the time of retirement.
Average Final Compensation	Members hired before October 1, 2014: average Salary for the best 3 years during the 5 years immediately preceding retirement or termination. Members hired on or after October 1, 2014: average base pay plus Paramedic or EMT incentive pay.
Member Contributions	7.0% of Salary.
District and State Contributions	Remaining amount required in order to fund to actuarial soundness. District contributions shall not be less than Member contributions.
Normal Retirement	
Date	Earlier of: 1) Age 50 and 25 years of Credited Service, or 2) age 55 and 10 years of Credited Service.
Benefit	3.0% of Average Final Compensation times Credited Service.
Form of Benefit	Ten Year Certain and Life Annuity (options available).
Early Retirement	
Eligibility	Age 50 and 10 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% per year.
Supplement	$10 for each year of Credited Service. Commencing immediately after Retirement and ceasing at the earlier of death or age 65.

Vesting

Schedule	Members hired before October 1, 2014: 100% after seven (7) years of Credited Service. Members hired on or after October 1, 2014: 100% after ten (10) years of Credited Service.

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 for service-incurred disability, and 30% of Average Final Compensation for non-service-incurred disability.
Duration	Payable for life with 10 years certain (options available) or until recovery (as determined by the Board).

Death Benefits

Vested	Monthly accrued benefit payable to designated beneficiary for 10 years at Member's Normal or Early Retirement Date.
Non-Vested	Refund of accumulated contributions without interest.

Deferred Retirement Option Plan

Eligibility	Satisfaction of Normal Retirement requirements.
Participation	Not to exceed 60 months.
Rate of Return	Participant’s election: a) 6.5% annually, or b) Actual net rate of investment return (total return net of brokerage commissions, transaction costs, and management fees) credited each fiscal quarter.
Form of Distribution	Cash lump sum (options available) at termination of employment.

Share Plan

Funded Status	Not currently funded.