

RETIREMENT SYSTEM FOR GENERAL EMPLOYEES
OF THE ST. LUCIE COUNTY FIRE DISTRICT

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2023

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2025



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

March 25, 2024

Board of Trustees
Retirement System for General Employees
General Employees' Pension Board

Re: Retirement System for General Employees of the St. Lucie County Fire District

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Retirement System for General Employees of the St. Lucie County Fire District. 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 Chapter 112, 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 Retirement System for General Employees, 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.

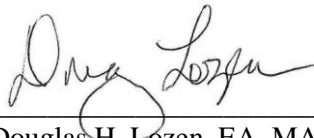
The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the 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 Retirement System for General Employees, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the of the St. Lucie County Fire District. 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: 

Douglas H. Lozen, EA, MAAA
Enrolled Actuary #23-7778

By: 

Kevin H. Peng, ASA, EA, MAAA
Enrolled Actuary #23-7783

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Retirement System for General Employees of the St. Lucie County Fire District, 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 Applicable to Fiscal Year Ending	10/1/2023 <u>9/30/2025</u>	10/1/2022 <u>9/30/2024</u>
Minimum Required Contribution	\$2,440,927	\$2,110,748
Member Contributions (Est.)	222,680	191,141
District Required Contribution ¹ % of Projected Annual Payroll ²	\$2,218,247 38.4%	\$1,919,607 38.7%

¹ Please note that the District has access to a prepaid contribution of \$5,058.00 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2024.

² Based on payroll under the Assumed Retirement Age, projected one year utilizing the applicable salary increase average.

As you can see, the Minimum Required Contribution shows an increase when compared to the results set forth in the October 1, 2022 actuarial valuation report. The increase is attributable to active member growth and the net unfavorable actuarial experience described in the next paragraph.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an investment return of 4.38% (Actuarial Asset Basis) which fell short of the 7.40% assumption, an average salary increase of 8.81% which exceeded the 5.46% assumption, and unfavorable turnover experience. There were no significant sources of actuarial gain.

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

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

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2023</u>	<u>10/1/2022</u>
A. Participant Data		
Actives	70	63
Service Retirees	32	31
DROP Retirees	3	4
Beneficiaries	4	4
Disability Retirees	1	1
Terminated Vested	<u>37</u>	<u>31</u>
Total	147	134
Projected Annual Payroll	5,463,829	4,697,047
Annual Rate of Payments to:		
Service Retirees	1,082,297	1,066,894
DROP Retirees	86,595	101,998
Beneficiaries	51,906	51,906
Disability Retirees	24,555	24,555
Terminated Vested	231,950	231,950
B. Assets		
Actuarial Value (AVA) ¹	22,377,759	20,914,952
Market Value (MVA) ¹	20,809,385	18,704,418
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	21,210,642	18,125,590
Disability Benefits	952,974	891,688
Death Benefits	241,111	220,328
Vested Benefits	1,571,446	1,416,608
Refund of Contributions	35,335	27,353
Service Retirees	10,856,291	10,893,242
DROP Retirees ¹	3,428,872	3,437,101
Beneficiaries	428,550	439,922
Disability Retirees	302,209	306,940
Terminated Vested	<u>1,870,919</u>	<u>1,766,121</u>
Total	40,898,349	37,524,893

C. Liabilities - (Continued)	<u>10/1/2023</u>	<u>10/1/2022</u>
Present Value of Future Salaries	43,313,132	38,665,221
Present Value of Future Member Contributions	1,637,236	1,461,545
Normal Cost (Retirement)	708,043	604,256
Normal Cost (Disability)	58,551	51,821
Normal Cost (Death)	12,727	11,058
Normal Cost (Vesting)	117,594	105,377
Normal Cost (Refunds)	8,327	5,985
Total Normal Cost	<u>905,242</u>	<u>778,497</u>
Present Value of Future Normal Costs	6,762,433	6,026,502
Accrued Liability (Retirement)	15,769,674	13,282,253
Accrued Liability (Disability)	523,137	496,264
Accrued Liability (Death)	143,707	132,305
Accrued Liability (Vesting)	802,284	735,495
Accrued Liability (Refunds)	10,273	8,748
Accrued Liability (Inactives) ¹	<u>16,886,841</u>	<u>16,843,326</u>
Total Actuarial Accrued Liability (EAN AL)	<u>34,135,916</u>	<u>31,498,391</u>
Unfunded Actuarial Accrued Liability (UAAL)	11,758,157	10,583,439
Funded Ratio (AVA / EAN AL)	65.6%	66.4%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2023</u>	<u>10/1/2022</u>
Vested Accrued Benefits		
Inactives ¹	16,886,841	16,843,326
Actives	8,336,963	6,958,345
Member Contributions	924,662	737,334
Total	<u>26,148,466</u>	<u>24,539,005</u>
Non-vested Accrued Benefits	<u>2,177,516</u>	<u>1,770,622</u>
Total Present Value Accrued Benefits (PVAB)	28,325,982	26,309,627
Funded Ratio (MVA / PVAB)	73.5%	71.1%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	1,358,135	
Benefits Paid	(1,242,712)	
Interest	1,900,932	
Other	0	
Total	<u>2,016,355</u>	

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	\$976,018	\$838,094
Administrative Expenses ²	89,104	78,287
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2023) ²	1,375,805	1,194,367
Minimum Required Contribution	2,440,927	2,110,748
Expected Member Contributions ²	222,680	191,141
Expected District Contribution	2,218,247	1,919,607
F. Past Contributions		
Plan Years Ending:	<u>9/30/2023</u>	
District Requirement	1,664,486	
Actual Contributions Made:		
District	1,664,486	
G. Net Actuarial (Gain)/Loss	1,427,673	

¹ The asset values and liabilities include accumulated DROP 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	11,758,157
2024	11,257,795
2025	10,720,406
2028	8,857,650
2032	5,664,239
2035	2,593,902
2038	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2023	8.81%	5.46%
Year Ended 9/30/2022	6.83%	4.84%
Year Ended 9/30/2021	7.47%	4.94%
Year Ended 9/30/2020	4.98%	5.01%
Year Ended 9/30/2019	8.72%	5.22%

(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	8.09%	4.38%	7.40%
Year Ended 9/30/2022	-13.32%	5.41%	7.50%
Year Ended 9/30/2021	21.67%	9.92%	7.75%
Year Ended 9/30/2020	8.31%	7.33%	8.00%
Year Ended 9/30/2019	3.90%	5.60%	8.00%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2023	\$5,463,829
	10/1/2013	2,881,172
(b) Total Increase		89.64%
(c) Number of Years		10.00
(d) Average Annual Rate		6.61%

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.



Douglas H. Lozen, EA, MAAA
Enrolled Actuary #23-7778

Please let us know when the report is approved by the Board and unless otherwise directed we will provide a copy of the report to the following office to comply with Chapter 112 Florida Statutes:

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

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

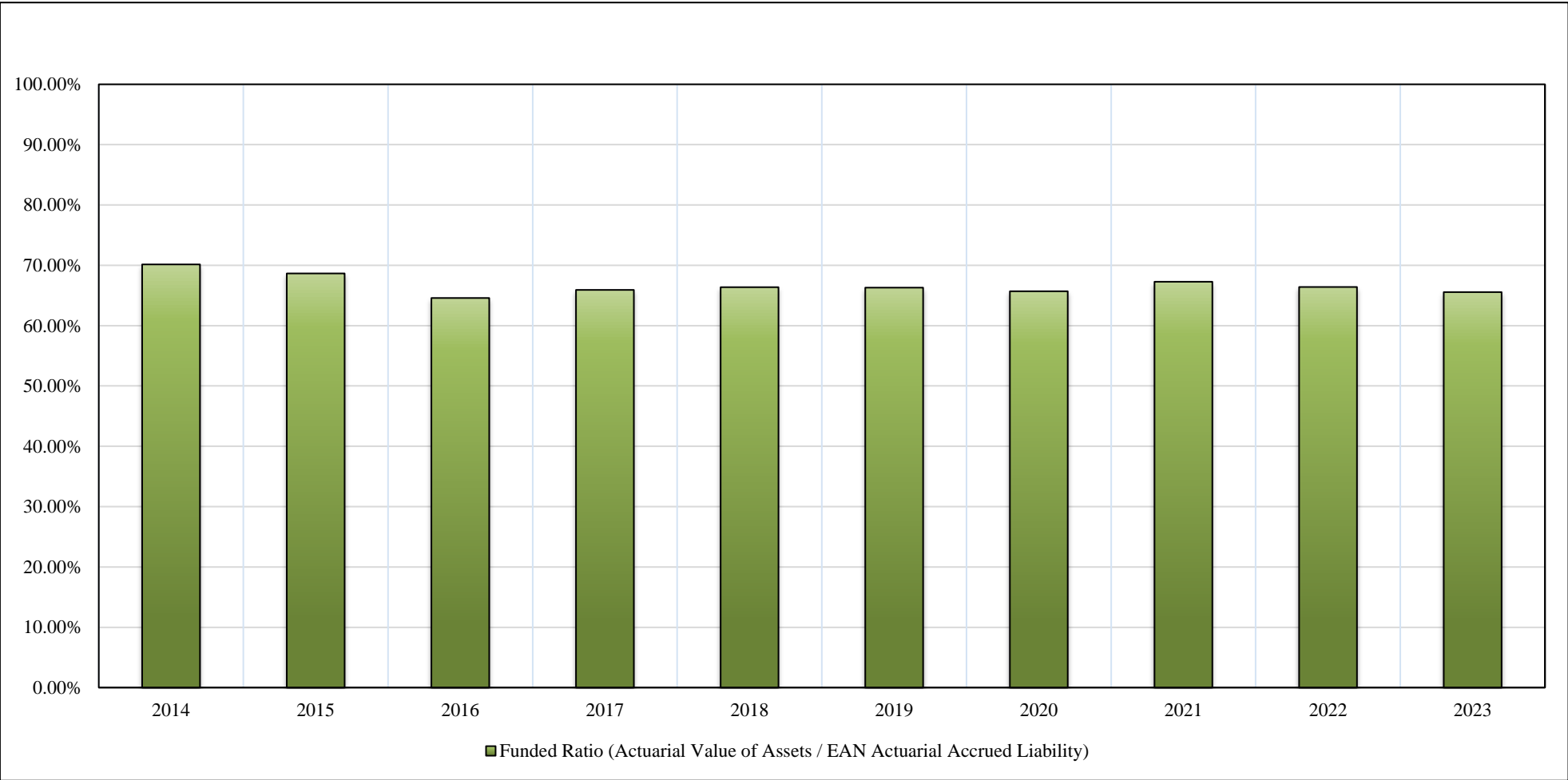
(1)	Unfunded Actuarial Accrued Liability as of October 1, 2022	\$10,583,439
(2)	Sponsor Normal Cost developed as of October 1, 2022	600,949
(3)	Expected administrative expenses for the year ended September 30, 2023	72,720
(4)	Expected interest on (1), (2) and (3)	830,335
(5)	Sponsor contributions to the System during the year ended September 30, 2023	1,664,486
(6)	Expected interest on (5)	92,473
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2023 (1)+(2)+(3)+(4)-(5)-(6)	10,330,484
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	1,427,673
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2023	11,758,157

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2023 <u>Amount</u>	Amortization <u>Amount</u>
Consolidation Base	10/1/2022	14	10,330,484	1,126,380
Actuarial Loss	10/1/2023	15	<u>1,427,673</u>	<u>149,659</u>
			11,758,157	1,276,039

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2022	\$10,583,439
(2) Expected UAAL as of October 1, 2023	10,330,484
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	640,676
Salary Increases	472,153
Active Decrements	181,050
Inactive Mortality	118,707
Other	<u>15,087</u>
Increase in UAAL due to (Gain)/Loss	1,427,673
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2023	\$11,758,157

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

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

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

Healthy Retiree Lives:

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

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

PubG.H-2010 for Disabled Retirees, set forward three years.

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 non-special-risk employees, with appropriate adjustments made based on plan demographics.

10% of active member deaths are assumed to be duty-related.

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

Salary Scale	
Service	Rate
0	9.00%
1-3	8.75%
4-9	5.75%
10+	4.00%

The above rates were established with an Experience Study performed July 15, 2022.

Additionally, benefits at retirement are increased to account for non-regular compensation, using information provided by the District. The load varies due to the compensation limitation implemented as of October 1, 2014:

<u>Credited Service on 10/1/2014</u>	<u>Liability Load</u>
Less than 5 Years	None
Between 5 and 10 Years	3.00%
10 or more Years	7.00%

Payroll Growth

0.00% for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Administrative Expenses

\$82,643 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.

The amortization payment is subject to a minimum based on a 30-year amortization of the UAAL, if the UAAL is positive, in order to comply with Actuarial Standard of Practice No. 4.

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.

Actuarial Asset Method

The Actuarial Value of Assets reflects a five-year smoothing methodology. The annual difference between expected and actual investment earnings (Market Value, net of investment-related expenses), is phased-in over a five-year period.

Funding Method

Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution:

Interest - 1/4th of a year, based on current 7.40% assumption.

Salary - A full year, based on current 5.86% assumption.

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.

Retirement Rates

The below rates were established with an Experience Study performed July 15, 2022.

% Retiring During the Year (<25 Years of Service)		% Retiring During the Year (>= 25 Years of Service)	
Age	Rate	Service	Rate
60-61	30.0%	25	30.0%
62-63	50.0%	26-34	20.0%
64+	100.0%	35	100.0%

Termination Rates

See table below. This assumption was established with an Experience Study performed on July 15, 2022.

% Terminating During the Year	
Service	Rate
0	15.0%
1-5	8.5%
6-10	5.0%
11-20	3.0%
20+	0.0%

Disability Rates

See table below for sample rates. These rates were established with an Experience Study performed by the Plan's prior actuary and confirmed with an Experience Study performed on July 15, 2022. Duty-related disability assumption is 50%.

% Becoming Disabled During the Year	
Age	Rate
20	0.04%
25	0.04%
30	0.04%
35	0.05%
40	0.10%
45	0.17%
50	0.36%
55	0.59%
60	0.90%
65 +	1.00%

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 stayed about the same from October 1, 2013 to October 1, 2023, indicating that the plan's maturity level has not significantly changed 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 49.5%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in lower volatility in contribution requirements when compared to a more 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 decreased from 71.5% on October 1, 2013 to 65.6% 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 0.5% on October 1, 2013 to 2.6% on October 1, 2023. The current Net Cash Flow Ratio of 2.6% indicates that contributions are generally in excess of 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 9 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 \$45,931,385. 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	70	63	57	44
Total Inactives ¹	56	56	43	37
Actives / Inactives ¹	125.0%	112.5%	132.6%	118.9%

Asset Volatility Ratio

Market Value of Assets (MVA)	20,809,385	18,704,418	14,681,884	10,765,229
Total Annual Payroll	5,463,829	4,697,047	3,923,142	2,881,172
MVA / Total Annual Payroll	380.9%	398.2%	374.2%	373.6%

Accrued Liability (AL) Ratio

Inactive Accrued Liability	16,886,841	16,843,326	12,738,351	9,420,550
Total Accrued Liability (EAN)	34,135,916	31,498,391	22,443,860	15,050,545
Inactive AL / Total AL	49.5%	53.5%	56.8%	62.6%

Funded Ratio

Actuarial Value of Assets (AVA)	22,377,759	20,914,952	14,895,760	10,760,286
Total Accrued Liability (EAN)	34,135,916	31,498,391	22,443,860	15,050,545
AVA / Total Accrued Liability (EAN)	65.6%	66.4%	66.4%	71.5%

Net Cash Flow Ratio

Net Cash Flow ²	535,584	470,253	131,456	53,533
Market Value of Assets (MVA)	20,809,385	18,704,418	14,681,884	10,765,229
Ratio	2.6%	2.5%	0.9%	0.5%

¹ Excludes terminated participants awaiting a refund of member contributions.

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

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2023

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Prepaid Expenses	2,550.00	2,550.00
Money Market	291,366.00	291,366.00
Cash	2.19	2.19
Total Cash and Equivalents	293,918.19	293,918.19
Receivables:		
Member Contributions in Transit	747.83	747.83
Member Contribution	62.77	62.77
From Broker for Investments Sold	803.60	803.60
Investment Income	37,121.58	37,121.58
Total Receivable	38,735.78	38,735.78
Investments:		
Fixed Income	4,114,958.33	3,756,897.13
Equities	8,421,013.87	10,349,235.14
Mutual Funds:		
Equity	1,512,526.44	1,981,915.84
Pooled/Common/Commingled Funds:		
Real Estate	4,388,613.01	4,426,923.51
Total Investments	18,437,111.65	20,514,971.62
Total Assets	18,769,765.62	20,847,625.59
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	13,923.73	13,923.73
Administrative Expenses	885.00	885.00
To Broker for Investments Purchased	18,348.28	18,348.28
Prepaid Member Contribution	25.57	25.57
Prepaid City Contribution	5,058.00	5,058.00
Total Liabilities	38,240.58	38,240.58
NET POSITION RESTRICTED FOR PENSIONS	18,731,525.04	20,809,385.01

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

ADDITIONS

Contributions:

Member	199,160.31	
City	1,664,486.00	
Total Contributions		1,863,646.31
Investment Income:		
Net Realized Gain (Loss)	266,337.06	
Unrealized Gain (Loss)	709,552.24	
Net Increase in Fair Value of Investments	975,889.30	
Interest & Dividends	661,622.44	
Less Investment Expense ¹	(68,128.36)	
Net Investment Income		1,569,383.38
Total Additions		3,433,029.69

DEDUCTIONS

Distributions to Members:

Benefit Payments	1,156,190.78	
Lump Sum DROP Distributions	82,432.61	
Refunds of Member Contributions	4,088.71	
Total Distributions		1,242,712.10
Administrative Expense		85,350.13
Total Deductions		1,328,062.23
Net Increase in Net Position		2,104,967.46
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		18,704,417.55
End of the Year		20,809,385.01

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	(592,459)	0	0	0	0	0
09/30/2020	76,891	15,379	0	0	0	0
09/30/2021	2,474,038	989,614	494,806	0	0	0
09/30/2022	(4,509,027)	(2,705,417)	(1,803,612)	(901,807)	0	0
09/30/2023	165,063	132,050	99,037	66,024	33,011	0
Total		(1,568,374)	(1,209,769)	(835,783)	33,011	0

<u>Development of Investment Gain/Loss</u>	
Market Value of Assets, including Prepaid Contributions, 09/30/2022	18,709,501
Contributions Less Benefit Payments & Admin Expenses	535,584
Expected Investment Earnings*	1,404,320
Actual Net Investment Earnings	1,569,383
2023 Actuarial Investment Gain/(Loss)	<u>165,063</u>

*Expected Investment Earnings = $0.074 * (18,709,501 + 0.5 * 535,584)$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2023	20,809,385
(2) Gains/(Losses) Not Yet Recognized	<u>(1,568,374)</u>
(3) Actuarial Value of Assets, 09/30/2023, (1) - (2)	22,377,759
(4) Limited Actuarial Value of Assets, 09/30/2023	22,377,759
(A) 09/30/2022 Actuarial Assets, including Prepaid Contributions:	20,920,035
(I) Net Investment Income:	
1. Interest and Dividends	661,622
2. Realized Gain (Loss)	266,337
3. Unrealized Gain (Loss)	709,552
4. Change in Actuarial Value	(642,160)
5. Investment Expenses	<u>(68,128)</u>
Total	927,223
(B) 09/30/2023 Actuarial Assets, including Prepaid Contributions:	22,382,843
Actuarial Assets Rate of Return = $2I/(A+B-I)$:	4.38%
Market Value of Assets Rate of Return:	8.09%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(640,676)

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

REVENUES

Contributions:		
Member	199,160.31	
City	1,664,486.00	
Total Contributions		1,863,646.31
Earnings from Investments:		
Interest & Dividends	661,622.44	
Net Realized Gain (Loss)	266,337.06	
Unrealized Gain (Loss)	709,552.24	
Change in Actuarial Value	(642,160.00)	
Total Earnings and Investment Gains		995,351.74

EXPENDITURES

Distributions to Members:		
Benefit Payments	1,156,190.78	
Lump Sum DROP Distributions	82,432.61	
Refunds of Member Contributions	4,088.71	
Total Distributions		1,242,712.10
Expenses:		
Investment related ¹	68,128.36	
Administrative	85,350.13	
Total Expenses		153,478.49
Change in Net Assets for the Year		1,462,807.46
Net Assets Beginning of the Year		20,914,951.55
Net Assets End of the Year ²		22,377,759.01

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

²Net Assets may be limited for actuarial consideration.

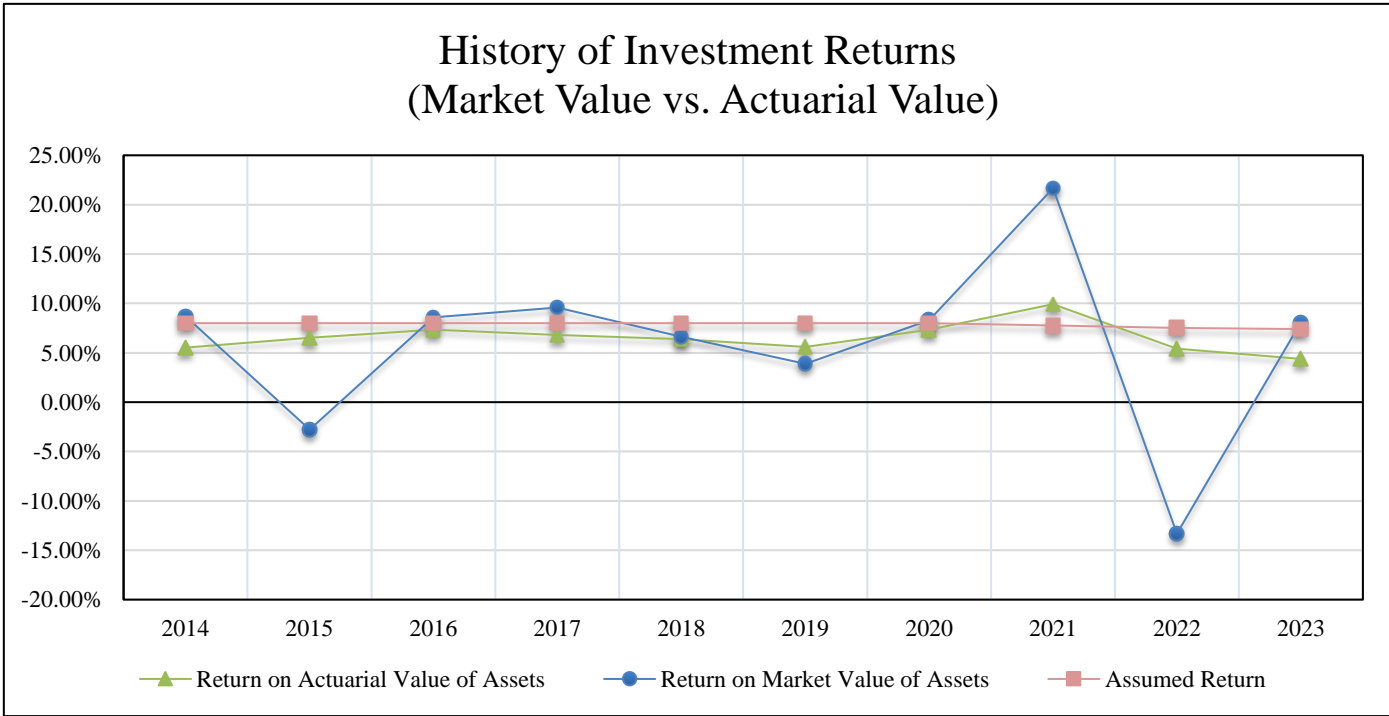
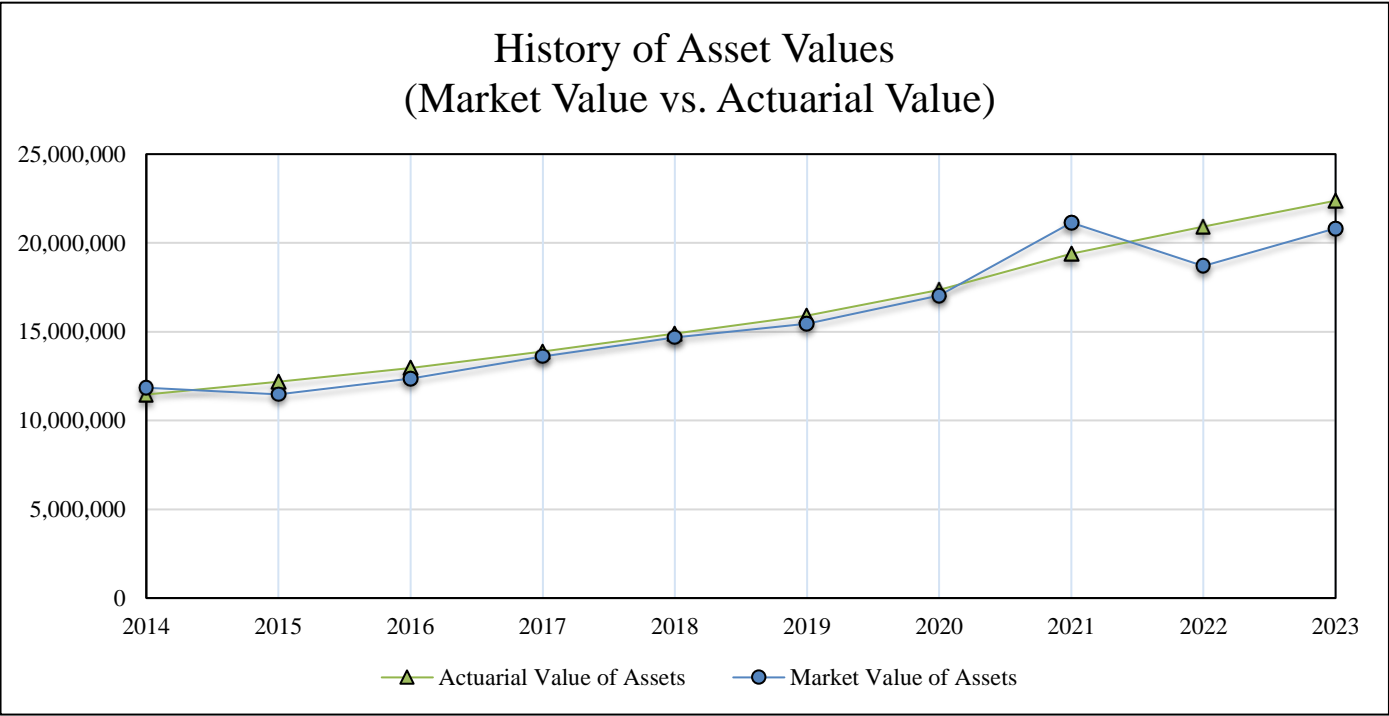
DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2022 to September 30, 2023

Beginning of the Year Balance	2,207,730.22
Plus Additions	89,162.02
Investment Return Earned	166,282.77
Less Distributions	(82,432.61)
End of the Year Balance	2,380,742.40

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

(1) Required District Contributions	\$1,664,486.00
(2) Less 2022 Prepaid Contribution	(5,058.00)
(3) Less Actual District Contributions	<u>(1,664,486.00)</u>
(4) Equals District's Shortfall/(Prepaid) Contribution as of September 30, 2023	(\$5,058.00)

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</u>				
Number	70	63	59	60
Average Current Age	45.1	44.8	44.8	45.1
Average Age at Employment	36.0	35.7	35.3	36.2
Average Past Service	9.1	9.1	9.5	8.9
Average Annual Salary	\$78,055	\$74,556	\$73,463	\$69,949
<u>Service Retirees</u>				
Number	32	31	29	29
Average Current Age	72.9	72.1	71.5	71.3
Average Annual Benefit	\$33,822	\$34,416	\$34,275	\$33,817
<u>DROP Retirees</u>				
Number	3	4	3	3
Average Current Age	65.3	64.9	64.9	63.0
Average Annual Benefit	\$28,865	\$25,500	\$25,880	\$33,366
<u>Beneficiaries</u>				
Number	4	4	4	2
Average Current Age	79.0	78.0	77.0	82.1
Average Annual Benefit	\$12,977	\$12,977	\$12,977	\$8,418
<u>Disability Retirees</u>				
Number	1	1	1	1
Average Current Age	55.6	54.6	53.6	52.6
Average Annual Benefit	\$24,555	\$24,555	\$24,555	\$24,555
<u>Terminated Vested</u>				
Number	37	31	27	24
Average Current Age ¹	50.9	49.9	48.9	48.5
Average Annual Benefit ¹	\$14,497	\$14,497	\$14,497	\$15,095

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	1											1
25 - 29	2	2				1						5
30 - 34	1	1	2	1	2	2						9
35 - 39	3					4						7
40 - 44	1			1	1	3		3	1			10
45 - 49	1					2		1	2			6
50 - 54	2	1	1	3		3	1		4			15
55 - 59				1		5	3	2	3			14
60 - 64		1				1			1			3
65+												0
Total	11	5	3	6	3	21	4	6	11	0	0	70

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2022	63
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	(2)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	0
g. Continuing participants	58
h. New entrants / Rehires	12
i. Total active life participants in valuation	<u>70</u>

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

	Service Retirees, Vested Receiving <u>Benefits</u>	<u>DROP 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	31	4	4	1	16	15	71
Retired	1	(1)					0
DROP							0
Vested (Deferred Annuity)							0
Vested (Due Refund)						3	3
Hired/Terminated in Same Year						4	4
Death, With Survivor							0
Death, No Survivor							0
Disabled							0
Refund of Contributions							0
Rehires						(1)	(1)
Expired Annuities							0
Data Corrections							0
b. Number current valuation	32	3	4	1	16	21	77

SUMMARY OF CURRENT PLAN
(Through Resolution No. 715-21)

CREDITED SERVICE

Total years and fractional parts of years of service with the District as a General Employee.

FINAL AVERAGE SALARY

Average Salary during the five (5) highest consecutive years out of the last ten (10).

SALARY

Total salary or wages, including lump sum payments. Effective October 1, 2014, compensation is limited to 300 hours of overtime pay per year. Unused sick and vacation time as of September 30, 2014 that is not used prior to retirement may be included in pensionable compensation, but hours after September 30, 2014 are excluded.

CONTRIBUTIONS

Employee

Effective October 1, 2019, Members will contribute 3.78% of Pensionable Wages (including Members in the DROP).

District

Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability, if any, over 30 years.

NORMAL RETIREMENT

Eligibility

First day of the month following attainment of Age 60 and the completion of 5 years of Credited Service or the completion of 25 years of Credited Service, regardless of age.

Benefit Amount

3.00% of Average Final Compensation for each year of Credited Service. Maximum benefit is 100% of Average Final Compensation if hired after December 31, 1979.

Form of Benefit

Life annuity (options available).

VESTING (TERMINATION)

Schedule

100% after 5 years of Credited Service.

Benefit Amount

Member will receive the vested portion the accrued benefit payable at age 60.

DISABILITY BENEFIT

Eligibility

Service Incurred – Immediate eligibility.

Non-Service Incurred – 5 years of Credited Service.

Benefit Amount

Service Incurred – Accrued Benefit with a minimum of 66 2/3% of Final Average Salary. The Duty Disability benefit converts to a Normal Retirement benefit at the date the Member would have attained Normal Retirement. At that point in time, the benefit is recalculated, based on projected service to the benefit conversion date and Final Average Salary at the time of the Disability Retirement.

Non-Service Incurred – Accrued benefit, payable immediately.

PRE-RETIREMENT DEATH

Eligibility

Service Incurred – Immediate eligibility.

Non-Service Incurred – 5 years of Credited Service.

Benefit Amount

Service Incurred – Accrued Benefit with a minimum of 75% of Salary at the time of death (subject to Workers' Compensation benefit offsets).

Non-Service Incurred – Accrued benefit, payable immediately.

BOARD OF TRUSTEES

Shall consist of:

- (a) Two legal residents appointed by the Fire District.
- (b) Two Members of the System elected by the other covered Plan Members, and
- (c) Fifth Trustee elected by the other four Trustees by majority vote.

DEFERRED RETIREMENT OPTION PLAN

Eligibility	Satisfaction of Normal Retirement requirements. A Member shall not participate in the DROP beyond the time of attaining 32 years of service.
Participation	Not to exceed 72 months.
Rate of Return	<p>At Member's election:</p> <ul style="list-style-type: none">(a) Actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs) credited each fiscal quarter. This option is only available to Members who entered the DROP prior to October 1, 2014, or(b) Actuarial rate of return provided for in the most recent actuarial valuation (less 0.5% for members entering DROP after June 8, 2021). These accounts are not transferable to the DROP Member's spouse or beneficiary, or(c) Actuarial rate of return provided for in the most recent actuarial valuation less 1.00%. These accounts are transferable to the DROP Member's spouse or minor beneficiary up to age 18.
Form of Distribution	Cash lump sum (options available) at termination of employment.