

NAVARRE BEACH FIRE RESCUE DISTRICT  
FIREFIGHTERS' PENSION TRUST FUND  
ACTUARIAL VALUATION  
AS OF OCTOBER 1, 2024  
CONTRIBUTIONS APPLICABLE TO THE  
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2025



**FOSTER & FOSTER**  
ACTUARIES AND CONSULTANTS

November 29, 2024

Board of Trustees  
Navarre Beach Fire Rescue District  
Firefighters' Pension Board

Re: Navarre Beach Fire Rescue District Firefighters' Pension Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Navarre Beach Fire Rescue 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 Navarre Beach Fire Rescue District, 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.

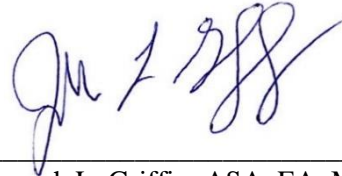
The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the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

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Navarre Beach Fire Rescue District, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the 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.

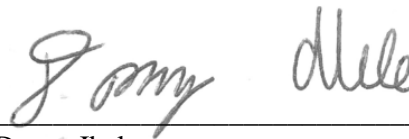
Respectfully submitted,

Foster & Foster, Inc.



By:

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



By:

Danny Ibele

JLG/DDI/lke

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Navarre Beach Fire Rescue District Firefighters' Pension Trust Fund, performed as of October 1, 2024, 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 November 13, 2023 actuarial impact statement, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2024 <u>9/30/2025</u>	10/1/2023 <u>9/30/2024</u>
Minimum Required Contribution % of Projected Annual Payroll	38.85%	39.26%
Member Contributions (Est.) % of Projected Annual Payroll	10.00%	10.00%
<b>District And State Required Contribution</b> <b>% of Projected Annual Payroll</b>	<b>28.85%</b>	<b>29.26%</b>
State Contribution (Est.) <sup>1</sup> % of Projected Annual Payroll (Est.)	\$2,962 0.40%	\$2,962 0.40%
District Required Contribution (Est.) <sup>2</sup> % of Projected Annual Payroll (Est.)	28.45%	28.86%

<sup>1</sup> Represents the amount received in calendar 2024. 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.

<sup>2</sup> The required contribution from the combination of District and State sources for the year ending September 30, 2025, is 28.85% of the actual payroll realized in that year. As a budgeting tool, the District may contribute 28.45% 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 November 13, 2023 actuarial impact statement.

The decrease as a percentage of payroll is attributable to higher payroll than expected, which was offset partially by unfavorable plan experience. The primary source of actuarial loss was an average salary increase of 16.90% which exceeded the 5.00% assumption. This loss was offset in part by gains associated with favorable turnover experience and favorable active disability experience.

## CHANGES SINCE PRIOR VALUATION

### Plan Changes

There have been no changes in benefits since the prior impact statement.

### Actuarial Assumption/Method Changes

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



## CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2023	29.26%
<i>(As set forth in the November 13, 2023 Actuarial Impact Statement)</i>	
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	-0.40%
Change in Normal Cost Rate	-0.74%
Change in Administrative Expense Percentage	0.00%
Payroll Change Effect on UAAL Amortization	-1.53%
Investment Return (Actuarial Asset Basis)	0.01%
Salary Increases	2.50%
Active Decrements	-0.49%
Inactive Mortality	0.00%
UAAL Amortization Impact from Contribution Policy	-0.12%
Assumption Change	0.00%
Other	<u>-0.04%</u>
Total Change in Contribution	-0.81%
(3) Contribution Determined as of October 1, 2024	28.45%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2024</u>	<u>10/1/2023</u>
<b>A. Participant Data</b>		
Actives	11	11
Service Retirees	0	0
Beneficiaries	0	0
Disability Retirees	0	0
Terminated Vested <sup>2</sup>	<u>2</u>	<u>0</u>
<b>Total</b>	<b>13</b>	<b>11</b>
 Projected Annual Payroll	 734,589	 659,185
 Annual Rate of Payments to:		
Service Retirees	0	0
Beneficiaries	0	0
Disability Retirees	0	0
Terminated Vested	0	0
 <b>B. Assets</b>		
Actuarial Value (AVA) <sup>1</sup>	449,979	224,000
Market Value (MVA) <sup>1</sup>	446,874	224,000
 <b>C. Liabilities</b>		
<b>Present Value of Benefits</b>		
<b>Actives</b>		
Retirement Benefits	2,058,089	1,737,924
Disability Benefits	125,103	100,166
Death Benefits	5,540	4,366
Vested Benefits	53,684	50,423
Refund of Contributions	27,213	18,713
Service Retirees	0	0
Beneficiaries	0	0
Disability Retirees	0	0
Terminated Vested <sup>2</sup>	7,999	0
Share Plan Balances <sup>1</sup>	<u>0</u>	<u>0</u>
 <b>Total</b>	 <b>2,277,628</b>	 <b>1,911,592</b>

<sup>2</sup> Includes non-vested terminated members that are due refunds.

C. Liabilities - (Continued)	<u>10/1/2024</u>	<u>10/1/2023</u>
Present Value of Future Salaries	4,394,104	4,001,460
Present Value of Future Member Contributions	439,410	400,146
Normal Cost (Retirement)	117,391	110,603
Normal Cost (Disability)	12,789	11,160
Normal Cost (Death)	336	290
Normal Cost (Vesting)	3,301	3,215
Normal Cost (Refunds)	3,538	2,695
Total Normal Cost	<u>137,355</u>	<u>127,963</u>
Present Value of Future Normal Costs	801,881	754,785
Accrued Liability (Retirement)	1,366,141	1,083,863
Accrued Liability (Disability)	58,966	40,944
Accrued Liability (Death)	2,992	2,027
Accrued Liability (Vesting)	26,639	22,028
Accrued Liability (Refunds)	13,010	7,945
Accrued Liability (Inactives)	7,999	0
Share Plan Balances <sup>1</sup>	0	0
Total Actuarial Accrued Liability (EAN AL)	<u>1,475,747</u>	<u>1,156,807</u>
Unfunded Actuarial Accrued Liability (UAAL)	1,025,768	932,807
Funded Ratio (AVA / EAN AL)	30.5%	19.4%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2024</u>	<u>10/1/2023</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances <sup>1</sup>	7,999	0
Actives	77,003	77,612
Member Contributions	<u>45,652</u>	<u>0</u>
Total	130,654	77,612
Non-vested Accrued Benefits	<u>775,347</u>	<u>699,845</u>
Total Present Value		
Accrued Benefits (PVAB)	906,001	777,457
Funded Ratio (MVA / PVAB)	49.3%	28.8%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	74,122	
Benefits Paid	0	
Interest	54,422	
Other	<u>0</u>	
Total	128,544	

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

E. Pension Cost

Normal Cost (with interest) % of Projected Annual Payroll <sup>2</sup>	19.35	20.09
Administrative Expenses (with interest) % of Projected Annual Payroll <sup>2</sup>	4.14	4.14
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2024, with interest) % of Projected Annual Payroll <sup>2</sup>	15.36	15.03
Minimum Required Contribution % of Projected Annual Payroll <sup>2</sup>	38.85	39.26
Expected Member Contributions % of Projected Annual Payroll <sup>2</sup>	10.00	10.00
Expected District and State Contribution % of Projected Annual Payroll <sup>2</sup>	28.85	29.26

F. Past Contributions

Plan Years Ending:	<u>9/30/2024</u>
Total Required Contribution	249,055
District and State Requirement	195,405
Actual Contributions Made:	
Members (excluding buyback)	53,650
District	193,471
State	<u>2,962</u>
Total	250,083

G. Net Actuarial (Gain)/Loss 137,218

<sup>1</sup> The asset values and liabilities include accumulated Share Plan Balances as of 9/30/2024 and 9/30/2023.

<sup>2</sup> Contributions developed as of 10/1/2024 are expressed as a percentage of Projected Annual Payroll at 10/1/2024 of \$734,589.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2024	1,025,768
2025	980,906
2026	932,903
2029	767,776
2033	488,407
2036	223,249
2039	0

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

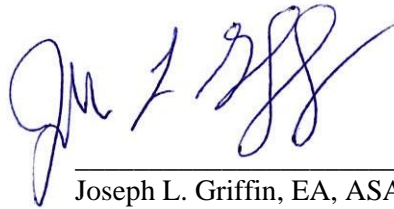
<u>Year Ended</u>	<u>9/30/2024</u>	<u>Actual</u>	<u>Assumed</u>
		16.90%	5.00%

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

<u>Year Ended</u>	<u>9/30/2024</u>	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
		5.86%	6.06%	7.00%

## 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, 2023	\$932,807
(2)	Sponsor Normal Cost developed as of October 1, 2023	62,045
(3)	Expected administrative expenses for the year ended September 30, 2024	26,367
(4)	Expected interest on (1), (2) and (3)	70,562
(5)	Sponsor contributions to the System during the year ended September 30, 2024	196,433
(6)	Expected interest on (5)	6,798
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2024 (1)+(2)+(3)+(4)-(5)-(6)	888,550
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	137,218
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2024	1,025,768

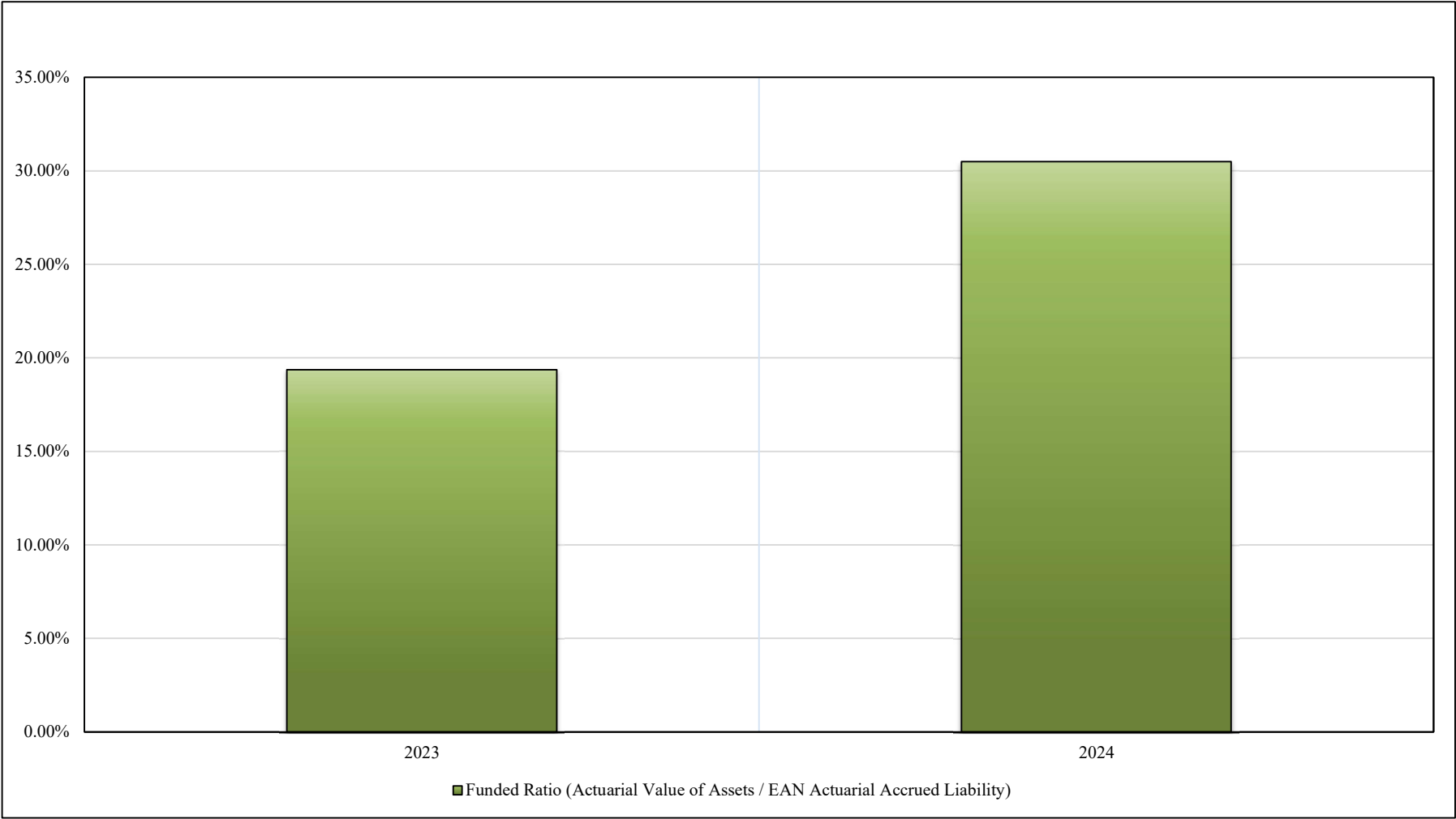
Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2024 <u>Amount</u>	Amortization <u>Amount</u>
Actuarial Loss	10/1/2023	14	888,550	94,954
Actuarial Loss	10/1/2024	15	<u>137,218</u>	<u>14,080</u>
			1,025,768	109,034



DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2023	\$932,807
(2) Expected UAAL as of October 1, 2024	888,550
 (3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	776
Salary Increases	172,898
Active Decrements	(33,638)
Inactive Mortality	0
Other	<u>(2,818)</u>
Increase in UAAL due to (Gain)/Loss	137,218
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2024	\$1,025,768

# HISTORY OF FUNDING PROGRESS



## ACTUARIAL ASSUMPTIONS AND METHODS

### Mortality Rate

#### *Healthy Active Lives:*

**Female:** PubS.H-2010 for Employees, set forward one year.

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

#### *Healthy Retiree Lives:*

**Female:** PubS.H-2010 for Healthy Retirees, set forward one year.

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

#### *Beneficiary Lives:*

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

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

#### *Disabled Lives:*

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

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

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

### Interest Rate

7.00% per year compounded annually, net of investment related expenses.

### Salary Increases

5.00% per year.

### Final Salary Load

None.

### Payroll Growth

None for amortization of the Unfunded Actuarial Accrued Liability.

Administrative Expenses 4% of payroll. Future valuations will utilize a rolling two-year average.

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.

Marriage Assumption 100% of Members are assumed to be married, with males 3 years older than females.

Retirement Age 100% upon first eligibility for Normal Retirement.

Early Retirement 5% per year for each year of eligibility for Early Retirement.

Disability Rate See below table for sample rates; 90% of disablements are assumed to be service related. These rates are averages, based on recent experience studies for five Chapter 175 pension plans nearby to Navarre Beach.

% Becoming Disabled	
During the Year	
Age	Rate
20	0.068%
25	0.070%
30	0.088%
35	0.109%
40	0.154%
45	0.245%
50	0.466%
55	0.848%
60	1.640%
65	3.198%

Termination Rate

% Terminating During the Year	
Service	Rate
0	12.80%
1	11.80%
2	10.20%
3-4	5.00%
5	4.90%
6	4.80%
7-8	4.70%
9	4.50%
10	3.00%
11	2.90%
12-14	2.80%
15-19	2.30%
20+	2.25%

These rates are averages, based on recent experience studies for five Chapter 175 pension plans nearby to Navarre Beach.

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 7.00% assumption.

Salary - None.

Asset Valuation Method

Future valuations will utilize a five-year smoothing method.

Low-Default-Risk Obligation Measure

Based on the Entry Age Normal Actuarial Cost Method and an interest rate of 4.06% 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, 2024. All other assumptions for the Low-Default-Risk Obligation Measure are consistent with the assumptions shown in this section unless otherwise noted.

## GLOSSARY

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

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

(a) The normal cost accrual rate equals:

(i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by

(ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

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

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

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

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

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

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

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

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

## DISCUSSION OF RISK

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

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

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

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.



### Impact of Plan Maturity on Risk

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

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

- The 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 0.5%. 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 increased from 19.4% from last year to 30.5% this year.

### 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 10 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 4.06%, resulting in an LDROM of \$2,203,998. 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>10/1/2024</u>	<u>10/1/2023</u>
<u>Support Ratio</u>		
Total Actives	11	11
Total Inactives <sup>1</sup>	0	0
Actives / Inactives <sup>1</sup>	N/A	N/A

Asset Volatility Ratio

Market Value of Assets (MVA)	446,874	224,000
Total Annual Payroll	734,589	659,185
MVA / Total Annual Payroll	60.8%	34.0%

Accrued Liability (AL) Ratio

Inactive Accrued Liability	7,999	0
Total Accrued Liability (EAN)	1,475,747	1,156,807
Inactive AL / Total AL	0.5%	0.0%

Funded Ratio

Actuarial Value of Assets (AVA)	449,979	224,000
Total Accrued Liability (EAN)	1,475,747	1,156,807
AVA / Total Accrued Liability (EAN)	30.5%	19.4%

Net Cash Flow Ratio

Net Cash Flow <sup>2</sup>	216,140	0
Market Value of Assets (MVA)	446,874	224,000
Ratio	48.4%	0.0%

<sup>1</sup> Excludes terminated participants awaiting a refund of member contributions.

<sup>2</sup> Determined as total contributions minus benefit payments and administrative expenses.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
2024	2,962	N/A

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2024

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	111,067.84	111,067.84
Total Cash and Equivalents	111,067.84	111,067.84
Receivables:		
Member Contributions in Transit	154.18	154.18
Total Receivable	154.18	154.18
Investments:		
Mutual Funds:		
Fixed Income	77,485.26	77,076.11
Equity	259,200.00	265,881.49
Total Investments	336,685.26	342,957.60
Total Assets	447,907.28	454,179.62
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	3,092.39	3,092.39
Administrative Expenses	4,212.96	4,212.96
Total Liabilities	7,305.35	7,305.35
NET POSITION RESTRICTED FOR PENSIONS	440,601.93	446,874.27

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED SEPTEMBER 30, 2024  
Market Value Basis

ADDITIONS

Contributions:

Member	53,650.48
SEP Balance Rollover	220,603.23
District	193,471.00
State	2,962.13

Total Contributions 470,686.84

Investment Income:

Net Realized Gain (Loss)	1,591.63
Unrealized Gain (Loss)	6,272.34
Net Increase in Fair Value of Investments	7,863.97
Interest & Dividends	6,581.93
Less Investment Expense <sup>1</sup>	(4,314.67)

Net Investment Income 10,131.23

Total Additions 480,818.07

DEDUCTIONS

Distributions to Members:

Benefit Payments	0.00
Refunds of Member Contributions	0.00

Total Distributions 0.00

Administrative Expense 33,943.80

Total Deductions 33,943.80

Net Increase in Net Position 446,874.27

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 0.00

End of the Year 446,874.27

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION  
September 30, 2024

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				
		2024	2025	2026	2027	2028
09/30/2024	(3,881)	(3,105)	(2,329)	(1,553)	(777)	0
Total		(3,105)	(2,329)	(1,553)	(777)	0

<u>Development of Investment Gain/Loss</u>	
Market Value of Assets, 09/30/2023	0
Contributions Less Benefit Payments & Admin Expenses	436,743
Expected Investment Earnings*	14,012
Actual Net Investment Earnings	10,131
2024 Actuarial Investment Gain/(Loss)	<u>(3,881)</u>

\*Expected Investment Earnings =  $0.07 * 0.9167 * (0 + 0.5 * 436,743)$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2024	446,874
(2) Gains/(Losses) Not Yet Recognized	<u>(3,105)</u>
(3) Actuarial Value of Assets, 09/30/2024, (1) - (2)	449,979
(4) Limited Actuarial Value of Assets, 09/30/2024	449,979
(A) 09/30/2023 Actuarial Assets:	0
(I) Net Investment Income:	
1. Interest and Dividends	6,582
2. Realized Gain (Loss)	1,592
3. Unrealized Gain (Loss)	6,272
4. Change in Actuarial Value	3,105
5. Investment Expenses	<u>(4,315)</u>
Total	13,236
(B) 09/30/2024 Actuarial Assets:	449,979
Actuarial Assets Rate of Return = $2I/(A+B-I)$ :	6.06%
Market Value of Assets Rate of Return:	5.86%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(776)

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS  
 SEPTEMBER 30, 2024  
 Actuarial Asset Basis

REVENUES

Contributions:		
Member	53,650.48	
SEP Balance Rollover	220,603.23	
District	193,471.00	
State	2,962.13	
 Total Contributions		 470,686.84
Earnings from Investments:		
Interest & Dividends	6,581.93	
Net Realized Gain (Loss)	1,591.63	
Unrealized Gain (Loss)	6,272.34	
Change in Actuarial Value	3,105.00	
 Total Earnings and Investment Gains		 17,550.90

EXPENDITURES

Distributions to Members:		
Benefit Payments	0.00	
Refunds of Member Contributions	0.00	
 Total Distributions		 0.00
Expenses:		
Investment related <sup>1</sup>	4,314.67	
Administrative	33,943.80	
 Total Expenses		 38,258.47
 Change in Net Assets for the Year		 449,979.27
 Net Assets Beginning of the Year		 0.00
 Net Assets End of the Year <sup>2</sup>		 449,979.27

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

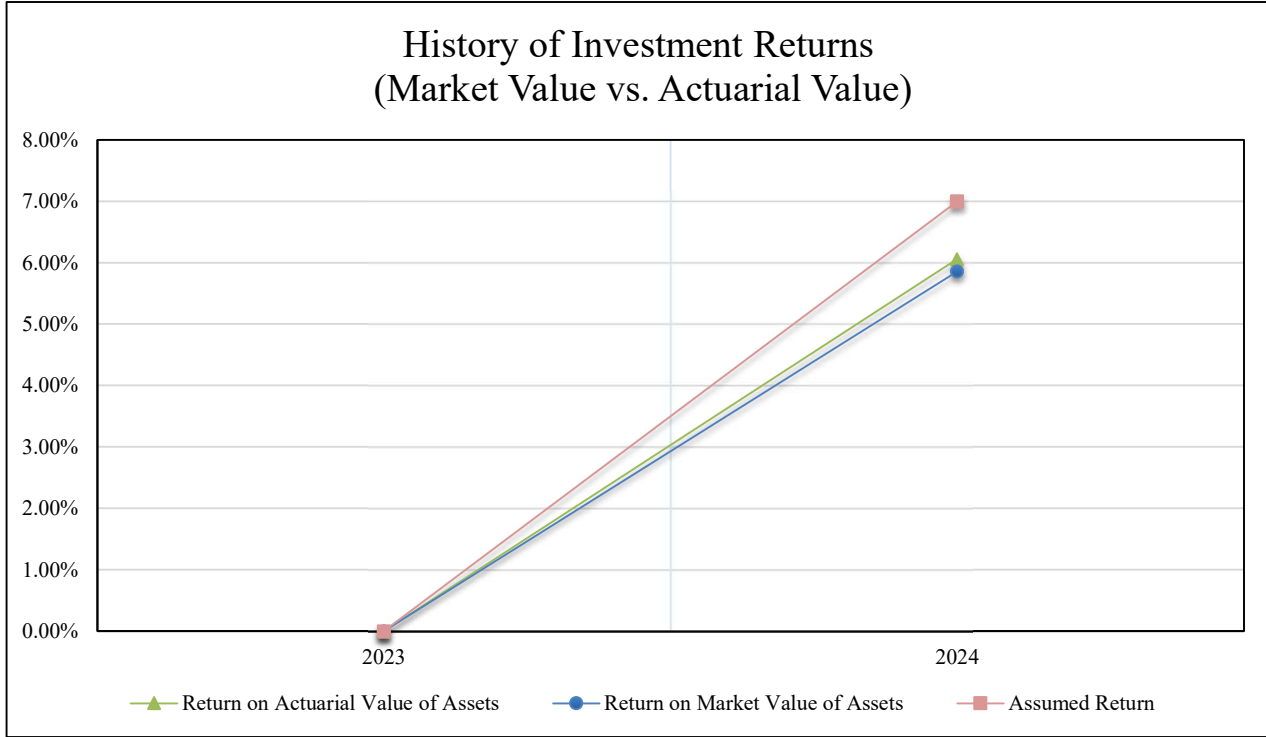
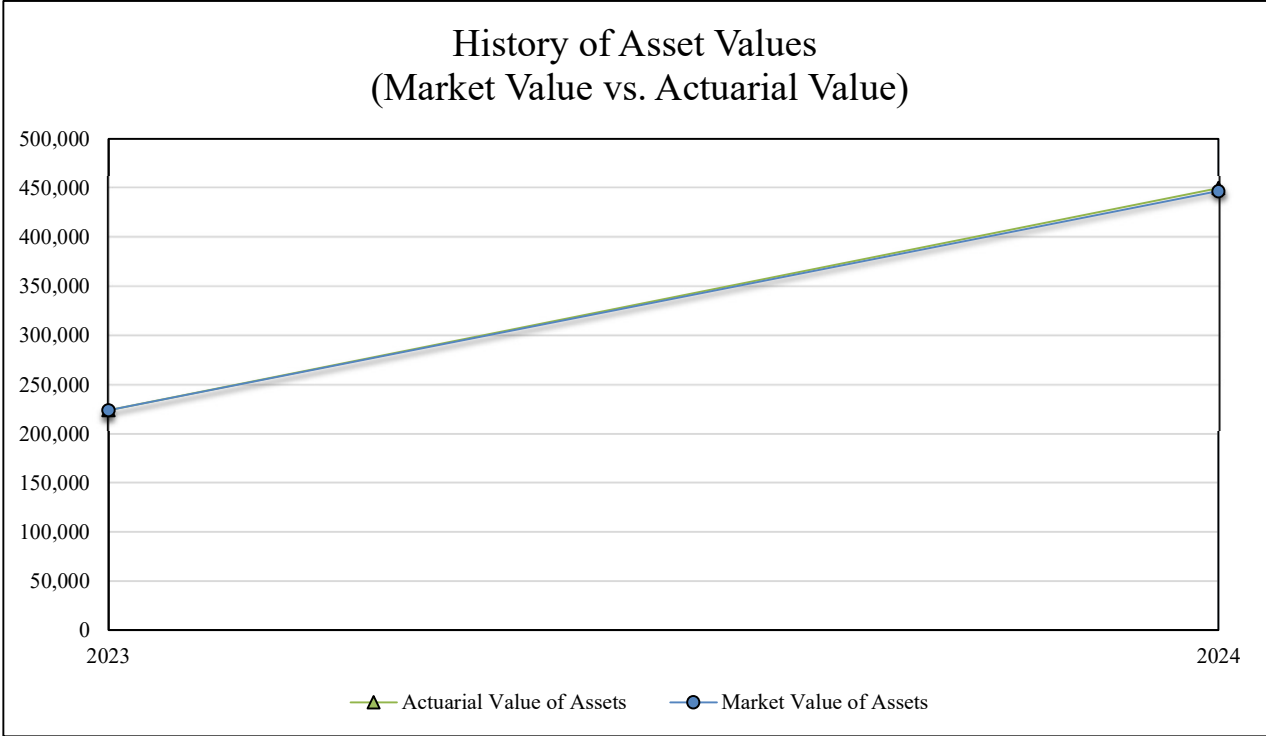
<sup>2</sup>Net Assets may be limited for actuarial consideration.



DISTRICT CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT  
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2024

(1)	District and State Required Contribution Rate	29.26%
(2)	Pensionable Payroll Derived from Member Contributions	\$667,821.90
(3)	District and State Required Contribution (1) x (2)	195,404.69
(4)	Less Allowable State Contribution	<u>(2,962.13)</u>
(5)	Equals Required District Contribution for Fiscal 2024	192,442.56
(6)	Less 2023 Prepaid Contribution	0.00
(7)	Less Actual District Contributions	<u>(414,074.23)</u>
(8)	District Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2024	(\$221,631.67)

# HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



## STATISTICAL DATA

	<u>10/1/2024</u>	<u>10/1/2023</u>
<u>Actives</u>		
Number	11	11
Average Current Age	49.7	48.6
Average Age at Employment	41.9	41.3
Average Past Service	7.8	7.3
Average Annual Salary	\$66,781	\$59,926
<u>Service Retirees</u>		
Number	0	0
Average Current Age	N/A	N/A
Average Annual Benefit	N/A	N/A
<u>Beneficiaries</u>		
Number	0	0
Average Current Age	N/A	N/A
Average Annual Benefit	N/A	N/A
<u>Disability Retirees</u>		
Number	0	0
Average Current Age	N/A	N/A
Average Annual Benefit	N/A	N/A
<u>Terminated Vested <sup>1</sup></u>		
Number	2	0
Average Current Age	N/A	N/A
Average Annual Benefit	N/A	N/A

<sup>1</sup> These members are terminated non-vested members due a refund.

## AGE AND SERVICE DISTRIBUTION

### PAST SERVICE <sup>1</sup>

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

<sup>1</sup> Past service from the later of November 1, 2023 and hire date (used for eligibility and vesting purposes).

## VALUATION PARTICIPANT RECONCILIATION

### 1. Active lives

a. Number in prior valuation 10/1/2023	11
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	(1)
iii. Termed prior to effective date of the Fund	(1)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	<u>0</u>
f. Continuing participants	9
g. New entrants / Rehires	<u>2</u>
h. Total active life participants in valuation	11

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

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

## SUMMARY OF CURRENT PLAN

<u>Effective Date</u>	November 1, 2023.
<u>Eligibility</u>	Active employees who are classified as full-time Firefighters shall participate in the System as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the District as a Firefighter.
<u>Salary</u>	Total W-2 compensation plus tax exempt, tax sheltered, and tax deferred items of income.  For service earned after the effective date, Salary shall not include more than 300 hours of overtime per calendar year and shall not include payments for accrued unused sick or annual leave.
<u>Average Final Compensation</u>	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	10.0% of Salary. Mandatory rollover of Simplified Employee Pension (SEP) Plan are not considered Member Contributions.
<u>District and State Contributions</u>	Remaining amount required in order to pay current costs and amortize any unfunded past service cost as provided in Part VII of Chapter 112, F.S.
<u>Normal Retirement</u>	
Eligibility	Earlier of: 1) age 55 and 5 years of Credited Service, or 2) age 52 and 25 years of Credited Service. Years of service for retirement eligibility are based on the later of the hire date and Effective Date.
Benefit	2.75% of Average Final Compensation for each year of Credited Service. Credited Service for accrued benefit purposes is based on the hire date.
Form of Benefit	Ten Year Certain and Life Annuity (options available).

Early Retirement

Eligibility	Age 50 and 5 Years of Credited Service. Years of service for retirement eligibility are based on the later of the hire date and Effective Date.
Benefit	Accrued benefit, reduced 3% for each year prior to Normal Retirement, based on actual years of Credited Service.

Vesting

Schedule	100% after 5 years of Credited Service. Years of service for vesting eligibility are based on the later of the hire date and Effective Date.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at the Early Retirement Date (reduced as for Early Retirement), or the Normal Retirement Date, both determined using actual years of Credited Service.

Disability

Eligibility	
Service Incurred	Covered from Date of Employment.
Non-Service Incurred	5 years of Credited Service. Years of service for Disability retirement eligibility are based on the later of the hire date and Effective Date.
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 (Service-Incurred), or 25% of Average Final Compensation (Non-Service Incurred).
Duration	Payable for life and ten years certain or until recovery (as determined by the Board). Options available.

Death Benefits

Pre-Retirement

Non-Vested/Not Eligible for Normal or Early Retirement

Refund of accumulated contributions without interest.

Vested or Eligible for Retirement

Monthly accrued benefit payable to designated Beneficiary for 10 years.

Post-Retirement

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

Board of Trustees

Two District appointees, two Members of the System elected by the Membership, and a fifth Member elected by other 4 and appointed by the District.

Chapter 175 Share Account

Annual Allocation

If funded by way of Mutual Consent with the District, annual allocations will be based on a Credited Service methodology.

Investment Earnings

Plan earnings, net of investment-related expenses.

Expenses

Based on the administrative costs associated with the Share Plan, allocated pro rata in comparison to the plan's total asset value as of the allocation date.

Vesting Period (if not eligible for payment of benefits at termination)

10 years of Credited Service.

Non-Vested Forfeitures

Reallocated to the remaining eligible members.