TOWN OF INDIAN RIVER SHORES PUBLIC SAFETY OFFICERS AND FIREFIGHTERS' DEFINED BENEFIT PLAN ACTUARIAL VALUATION AS OF OCTOBER 1, 2024

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2026





December 3, 2024

Board of Trustees Town of Indian River Shores Public Safety Officers and Firefighters' Defined Benefit Plan

Re: Town of Indian River Shores Public Safety Officers and Firefighters' Defined Benefit Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Town of Indian River Shores Public Safety Officers and Firefighters' Defined Benefit Plan. 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, 175, and 185, 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 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 Town of Indian River Shores, 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 Town of Indian River Shores, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Public Safety Officers and Firefighters' Defined Benefit Plan. 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

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Luke M. Schoenhofen, FSA, EA, MAAA

Enrolled Actuary #23-8968

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Enclosures

TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	6
	b. Changes Since Prior Valuation	8
	c. Contribution Impact of Annual Changes	9
	d. Comparative Summary of Principal Valuation Results	10
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	16
	b. Detailed Actuarial (Gain)/Loss Analysis	17
	c. History of Funding Progress	18
	d. Actuarial Assumptions and Methods	19
	e. Glossary	22
	f. Discussion of Risk	24
	g. Partial History of Premium Tax Refunds	28
Ш	Trust Fund	29
IV	Member Statistics	
	a. Statistical Data	35
	b. Age and Service Distribution	36
	c. Valuation Participant Reconciliation	37
V	Summary of Current Plan	38

SUMMARY OF REPORT

The regular annual actuarial valuation of the Town of Indian River Shores Public Safety Officers and Firefighters' Defined Benefit Plan, 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, 2026.

The contribution requirements, compared with those set forth in the October 1, 2023 actuarial valuation report, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2024 <u>9/30/2026</u>	10/1/2023 <u>9/30/2025</u>
Minimum Required Contribution % of Projected Annual Payroll	18.84%	25.88%
Member Contributions (Est.) ¹ % of Projected Annual Payroll	5.89%	8.09%
Town And State Required Contribution ² % of Projected Annual Payroll	12.95%	17.79%
Town Required Contribution (Est.) ³ % of Projected Annual Payroll (Est.)	\$249,779 12.95%	\$280,305 17.79%

¹ All Members are required to contribute a variable contribution rate that is based in part on the funding cost of the Plan. The base Member Contribution Rate is 5.0% of earnings, with an upward or downward adjustment (up to a maximum of 9.0%) to reflect 31.25% of the total minimum required contribution above 16.0% of payroll.

² Please note that the Town has access to a prepaid contribution of \$2,343.02 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2025.

³ The dollar amounts are for illustration purposes only. The Town should budget based on the percent of payroll rates disclosed in the table above.

³ All State Monies are allocated to the Share Plan.

As you can see, the Minimum Required Contribution shows a decrease when compared to the results set forth in the October 1, 2023 actuarial valuation report. The decrease is mainly attributable to net favorable plan experience. The decrease was offset in part by the application of the normal cost minimum funding requirements of Chapter 112, Florida Statutes.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial gain included an investment return of 22.19% (Actuarial Asset Basis) which exceeded the 6.75% assumption and favorable turnover experience. These gains were offset in part by losses associated with unfavorable retirement experience and inactive mortality experience.

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, 2023	17.79%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	0.00%
Change in Normal Cost Rate	1.18%
Change in Administrative Expense Percentage	-0.62%
Payroll Change Effect on UAAL Amortization	-0.48%
Investment Return (Actuarial Asset Basis)	-19.97%
Salary Increases	0.01%
Active Decrements	-0.85%
Inactive Mortality	0.63%
Interest Crediting on Share Plan Balances	2.11%
UAAL Amortization Impact from Contribution Policy	-0.25%
Decrease in Member Contribution Rate	2.20%
Application of Normal Cost Minimum	12.19%
Assumption Change	0.00%
Other	<u>-0.99%</u>
Total Change in Contribution	-4.84%
(3) Contribution Determined as of October 1, 2024	12.95%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	10/1/2024	10/1/2023
A. Participant Data		
Actives	19	17
Service Retirees	18	17
DROP Retirees	3	3
Beneficiaries	0	0
Disability Retirees	1	1
Terminated Vested	<u>11</u>	<u>9</u>
Total	52	47
Projected Annual Payroll	1,743,305	1,453,731
Annual Rate of Payments to:		
Service Retirees	968,300	955,122
DROP Retirees	119,472	79,755
Beneficiaries	0	0
Disability Retirees	37,339	37,339
Terminated Vested	71,620	37,108
B. Assets		
Actuarial Value (AVA) ¹	20,144,482	16,834,259
Market Value (MVA) 1	20,144,482	16,834,259
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	3,304,063	3,719,925
Disability Benefits	275,451	201,785
Death Benefits	35,642	34,469
Vested Benefits	514,152	466,412
Refund of Contributions	16,045	8,899
Service Retirees	11,256,677	11,251,830
DROP Retirees ¹	1,836,167	1,170,144
Beneficiaries	0	0
Disability Retirees	408,709	413,805
Terminated Vested	624,797	388,296
Share Plan Balances ¹	2,486,526	1,815,357
Total	20,758,229	19,470,922

C. Liabilities - (Continued)	10/1/2024	10/1/2023
Present Value of Future Salaries	13,832,043	12,219,392
Present Value of Future		
Member Contributions	814,707	988,549
Normal Cost (Retirement)	217,413	176,119
Normal Cost (Disability)	41,383	26,062
Normal Cost (Death)	2,826	2,285
Normal Cost (Vesting)	49,804	40,824
Normal Cost (Refunds)	6,250	3,098
Total Normal Cost	317,676	248,388
Present Value of Future		
Normal Costs	2,303,823	1,916,500
Accrued Liability (Retirement)	1,628,681	2,277,252
Accrued Liability (Disability)	46,206	49,445
Accrued Liability (Death)	14,801	15,919
Accrued Liability (Vesting)	149,327	171,348
Accrued Liability (Refunds)	2,515	1,026
Accrued Liability (Inactives) 1	14,126,350	13,224,075
Share Plan Balances ¹	2,486,526	1,815,357
Total Actuarial Accrued Liability (EAN AL)	18,454,406	17,554,422
Unfunded Actuarial Accrued		
Liability (UAAL)	(1,690,076)	720,163
Funded Ratio (AVA / EAN AL)	109.2%	95.9%

D. Actuarial Present Value of		
Accrued Benefits	10/1/2024	10/1/2023
Vested Accrued Benefits		
Inactives + Share Plan Balances ¹	16,612,876	15,039,432
Actives	703,958	1,201,703
Member Contributions	614,179	616,938
Total	17,931,013	16,858,073
Non-vested Accrued Benefits	74,135	69,093
Total Present Value		
Accrued Benefits (PVAB)	18,005,148	16,927,166
Funded Ratio (MVA / PVAB)	111.9%	99.5%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	1,055,186	
Benefits Paid	(1,083,229)	
Interest	1,106,025	
Other	0	
Total	1,077,982	

Valuation Date	10/1/2024	10/1/2023
Applicable to Fiscal Year Ending	9/30/2026	9/30/2025
E. Pension Cost		
Normal Cost (with interest)		
% of Projected Annual Payroll ²	18.84	17.66
Administrative Expenses (with interest)		
% of Projected Annual Payroll ²	3.83	4.45
Payment Required to Amortize		
Unfunded Actuarial Accrued		
Liability over 10 years		
(as of $10/1/2024$, with interest)		
% of Projected Annual Payroll ²	(16.02)	3.77
Minimum Required Contribution		
% of Projected Annual Payroll ^{2 3}	18.84	25.88
Expected Member Contributions		
% of Projected Annual Payroll ²	5.89	8.09
Expected Town and State Contribution		
% of Projected Annual Payroll ^{2 3}	12.95	17.79
F. Past Contributions		
Plan Years Ending:	9/30/2024	
Total Required Contribution	434,835	
Town and State Requirement	298,907	
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Actual Contributions Made:		
Members (excluding buyback)	135,928	
Town	298,907	
State ⁴	354,804	
Total	789,639	
G. Net Actuarial (Gain)/Loss	(2,354,088)	

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

² Contributions developed as of 10/1/2024 are expressed as a percentage of Projected Annual Payroll at 10/1/2024 of \$1,743,305.

³ Reflects normal cost minimum funding requirements of Chapter 112, Florida Statutes.

⁴ State Contribution is allocated to the Share Plan.

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

Projected Unfunded

Year Actuarial Accrued Liability

2024 (1,690,076) ¹

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

		<u>Actual</u>	Assumed
Year Ended	9/30/2024	11.79%	9.24%
Year Ended	9/30/2023	9.80%	6.85%
Year Ended	9/30/2022	8.18%	5.70%
Year Ended	9/30/2021	6.80%	6.32%
Year Ended	9/30/2020	11.71%	5.25%

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

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2024	22.19%	22.19%	6.75%
Year Ended	9/30/2023	10.19%	10.19%	6.75%
Year Ended	9/30/2022	-13.10%	-13.10%	6.75%
Year Ended	9/30/2021	16.41%	16.41%	6.75%
Year Ended	9/30/2020	3.68%	3.68%	6.75%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2024 10/1/2014	\$1,743,305 1,346,057
(b) Total Increase		29.51%
(c) Number of Years		10.00
(d) Average Annual Rate		2.62%

¹ Based on current State law and the existing UAAL bases, the UAAL is projected to never be positive.

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 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

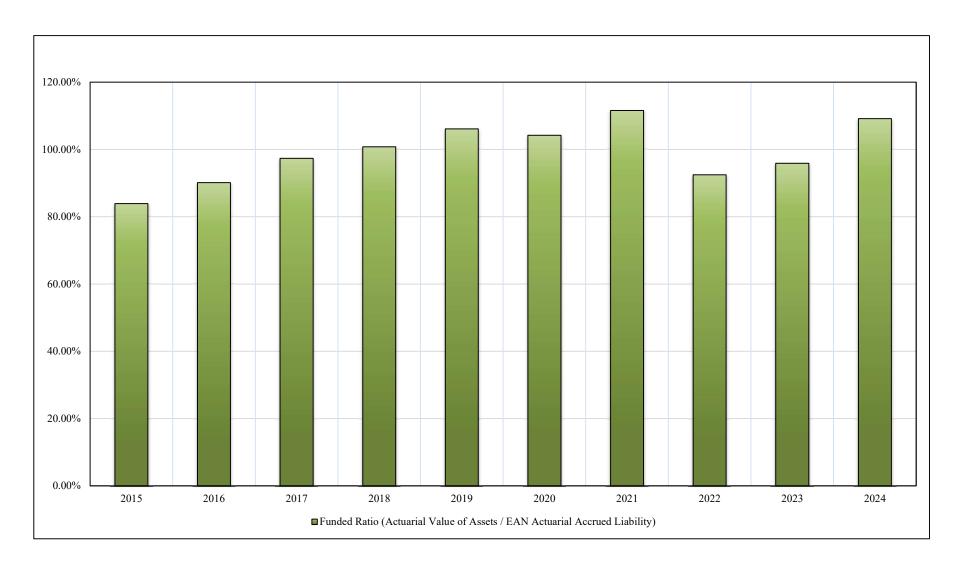
(1)	Unfunded Actuarial Accrued Liability as of October 1, 2023	\$720,163
(2)	Sponsor Normal Cost developed as of October 1, 2023	130,781
(3)	Expected administrative expenses for the year ended September 30, 2024	62,591
(4)	Expected interest on (1), (2) and (3)	59,551
(5)	Sponsor contributions to the System during the year ended September 30, 2024	298,907
(6)	Expected interest on (5)	10,167
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2024 (1)+(2)+(3)+(4)-(5)-(6)	664,012
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(2,354,088)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2024	(1,690,076)

Type of	Date	Years	10/1/2024	Amortization
<u>Base</u>	Established	Remaining	<u>Amount</u>	<u>Amount</u>
Actuarial Gain	10/1/2018	4	(195,345)	(53,720)
Benefit Change	10/1/2018	4	15	4
Actuarial Loss	10/1/2019	5	49,371	11,204
Assump Change	10/1/2019	5	(576,437)	(130,818)
Actuarial Loss	10/1/2020	6	485,498	94,680
Assump Change	10/1/2020	6	(238,792)	(46,568)
Actuarial Gain	10/1/2021	7	(1,017,713)	(175,360)
Actuarial Loss	10/1/2022	8	2,588,631	402,175
Actuarial Gain	10/1/2023	9	(431,216)	(61,343)
Actuarial Gain	10/1/2024	10	(2,354,088)	(310,357)
			(1,690,076)	(270,103)

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2023	\$720,163
(2) Expected UAAL as of October 1, 2024	664,012
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(2,553,871)
Salary Increases	730
Active Decrements	(109,013)
Inactive Mortality	80,030
Interest Crediting on Share Plan Balances	269,636
Other	(41,600)
Increase in UAAL due to (Gain)/Loss	(2,354,088)
Assumption Changes	0
(4) Actual UAAL as of October 1, 2024	(\$1,690,076)

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 (Below Median) 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.

6.75% 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.

See table on the following page. These rates were adopted as a result of the July 24, 2020 experience study.

Interest Rate

Salary Increases

Salary Scale				
	Service	Rate		
	0-1	15.00%		
	2-10	6.00%		
	11+	4.50%		

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

\$64,632 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

New UAAL amortization bases are amortized over 10 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.

Termination Rates

See table below. These rates were adopted as a result of the July 24, 2020 experience study.

% Terminating

During the	he Year
Service	Rate
<15	6.5%
15+	0.0%

Normal Retirement

For Members retiring with less than 25 years of Credited Service, 50% per year prior to age 55, with 100% assumed retirement at age 55.

For Members retiring with at least 25 years of Credited Service, 50% per year for the first two years of eligibility, and 100% upon the completion of 27 years of Credited Service.

Regardless of the number of years of Credited Service, 100% retirement is assumed at age 55.

Rates for Normal Retirement were studied and confirmed as a result of the July 24, 2020 experience study.

Disability Rates

See table of sample rates below. These rates were studied as a result of the July 24, 2020 experience study.

% Becoming Disabled
During the Year

	me rear
Age	Rate
20	0.09%
25	0.11%
30	0.13%
35	0.17%
40	0.22%
45	0.35%
50	0.66%
55	1.04%
60	1.80%
65+	4.44%

In addition, 75% of disabilities (90% for Firefighters) are assumed to be service-incurred.

Final Salary Load

Funding Method

Asset Method

Low-Default-Risk Obligation Measure

None.

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

Interest - A half year, based on current 6.75% assumption.

Salary - None.

Fair Market Value, net of investment-related expenses.

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.

<u>Entry Age Normal Cost Method</u> - 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.

<u>Market Value of Assets</u> 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.

<u>Normal (Current Year's) Cost</u> 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.

<u>Payroll Under Assumed Ret. Age</u> 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.

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

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

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

<u>Total Required Contribution</u> 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.

<u>Unfunded Actuarial Accrued Liability (UAAL)</u> 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>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 200.0% on October 1, 2014 to 73.1% on October 1, 2024, 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 76.5%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 90.1% on October 1, 2014 to 109.2% on October 1, 2024.
- 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 3.4% on October 1, 2014 to -1.8% on October 1, 2024. The current Net Cash Flow Ratio of -1.8% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

Low Default-Risk Obligation Measure

ASOP No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, was revised as of December 2021 to include a "low-default-risk obligation measure" (LDROM). This liability measure is consistent with the determination of the actuarial accrued liability shown on page 11 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 \$23,981,441. 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

	10/1/2024	10/1/2023	10/1/2019	10/1/2014
Support Ratio				
Total Actives Total Inactives ¹ Actives / Inactives ¹	19 26 73.1%	17 23 73.9%	20 16 125.0%	22 11 200.0%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	20,144,482 1,743,305 1,155.5%	16,834,259 1,584,283 1,062.6%	18,047,045 1,635,675 1,103.3%	11,916,458 1,537,287 775.2%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	14,126,350 18,454,406 76.5%	13,224,075 17,554,422 75.3%	10,946,395 17,002,314 64.4%	7,571,187 13,233,119 57.2%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	20,144,482 18,454,406 109.2%	16,834,259 17,554,422 95.9%	18,047,045 17,002,314 106.1%	11,916,458 13,233,119 90.1%
Net Cash Flow Ratio				
Net Cash Flow ² Market Value of Assets (MVA) Ratio	(360,138) 20,144,482 -1.8%	(897,167) 16,834,259 -5.3%	3,976 18,047,045 0.0%	402,224 11,916,458 3.4%

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 <u>Fiscal Year</u>	Amount	Increase from Previous Year
2013	176,730.65	N/A
2014	180,816.27	2.3%
2015	173,796.85	-3.9%
2016	257,370.29	48.1%
2017	131,990.17	-48.7%
2018	166,590.78	26.2%
2019	169,971.77	2.0%
2020	180,713.73	6.3%
2021	196,895.35	9.0%
2022	144,476.37	-26.6%
2023	239,474.01	65.8%
2024	354,804.19	48.2%

STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2024

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	493,061.57	493,061.57
Cash	51.48	51.48
Total Cash and Equivalents	493,113.05	493,113.05
Receivables:		
State Contributions	87,343.88	87,343.88
Investment Income	29,430.46	29,430.46
Total Receivable	116,774.34	116,774.34
Investments:		
U. S. Bonds and Bills	1,705,717.54	1,762,569.62
Federal Agency Guaranteed Securities	1,085,890.54	1,089,547.05
Corporate Bonds	1,325,123.61	1,346,385.36
Municipal Obligations	248,093.38	239,202.99
Stocks	1,682,218.39	1,996,537.76
Mutual Funds:		
Fixed Income	464,963.43	457,202.32
Equity	8,224,573.95	10,935,802.15
Pooled/Common/Commingled Funds:		
Real Estate	1,518,264.10	1,725,487.16
Total Investments	16,254,844.94	19,552,734.41
Total Assets	16,864,732.33	20,162,621.80
LIABILITIES		
Payables:		
Investment Expenses	14,384.54	14,384.54
Administrative Expenses	1,411.84	1,411.84
Prepaid Town Contribution	2,343.02	2,343.02
Total Liabilities	18,139.40	18,139.40
NET POSITION RESTRICTED FOR PENSIONS	16,846,592.93	20,144,482.40

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

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Member	135,927.99
Town	298,907.16
State	354,804.19

Total Contributions 789,639.34

Investment Income:

Net Realized Gain (Loss) 894,283.28 Unrealized Gain (Loss) 2,281,380.24

Net Increase in Fair Value of Investments3,175,663.52Interest & Dividends556,422.00Less Investment Expense¹(61,723.69)

Net Investment Income 3,670,361.83

Total Additions 4,460,001.17

DEDUCTIONS

Distributions to Members:

Benefit Payments1,003,442.78Lump Sum DROP Distributions10,777.80Lump Sum Share Distributions69,008.31Refunds of Member Contributions0.00

Total Distributions 1,083,228.89

Administrative Expense 66,548.40

Total Deductions 1,149,777.29

Net Increase in Net Position 3,310,223.88

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 16,834,258.52

End of the Year 20,144,482.40

Actuarial Asset Rate of Return 22.2%

Actuarial Gain/(Loss) due to Investment Return 2,553,870.51

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

DEFERRED RETIREMENT OPTION PLAN ACTIVITY October 1, 2023 to September 30, 2024

Beginning of the Year Balance	122,180.36
Plus Additions	86,405.30
Investment Return Earned	32,157.94
Less Distributions	(10,777.80)
End of the Year Balance	229,965.80

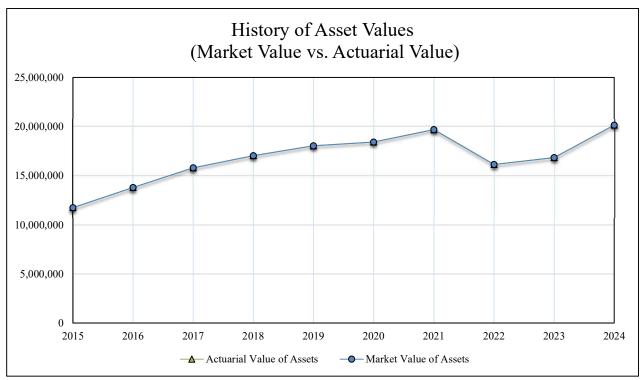
SUPPLEMENTAL CHAPTER 175/185 SHARE PLAN ACTIVITY October 1, 2023 through September 30, 2024

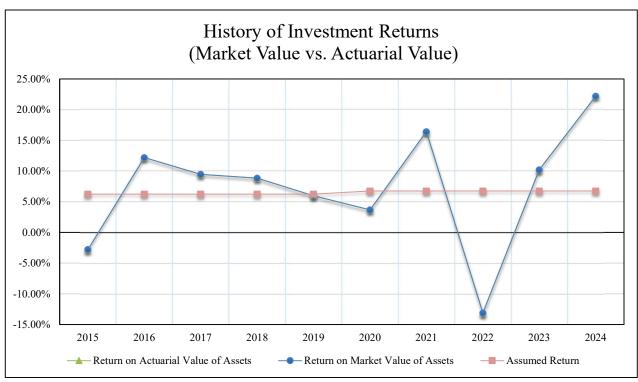
9/30/2023 Balance	1,815,357.03
Prior Year Adjustment	0.00
Plus Additions	354,804.19
Investment Return Earned (Est.)	387,515.00
Administrative Fees (Est.)	(2,142.00)
Less Distributions	(69,008.31)
9/30/2024 Balance (Est.)	2,486,525.91

RECONCILIATION OF TOWN SHORTFALL/(PREPAID) CONTRIBUTION FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2024

(1)	Total Required Contribution Rate	25.88%
(2)	Pensionable Payroll Derived from Member Contributions	\$1,680,197.65
(3)	Total Required Contribution (1) x (2)	434,835.15
(4)	Less Actual Member Contributions	(135,927.99)
(5)	Less Allowable State Contribution	0.00
(6)	Equals Required Town Contribution for Fiscal 2024	298,907.16
(7)	Less 2023 Prepaid Contribution	(2,342.90)
(8)	Less Actual Town Contributions	(298,907.28)
(9)	Equals Town's Shortfall/(Prepaid) Contribution as of September 30, 2024	(\$2,343.02)

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





STATISTICAL DATA

	10/1/2024	10/1/2023	10/1/2022	10/1/2021			
Actives - Hired before October 1, 2012							
Number	1	2	2	2			
Average Current Age	43.8	49.3	48.3	47.3			
Average Age at Employment	27.8	33.8	33.8	33.8			
Average Past Service	16.0	15.5	14.5	13.5			
Average Annual Salary	\$117,421	\$121,877	\$130,425	\$119,182			
Actives - Hired after October 1, 201	12						
Number	18	15	16	13			
Average Current Age	42.1	39.7	41.8	43.8			
Average Age at Employment	38.9	35.6	37.1	38.9			
Average Past Service	3.2	4.1	4.7	4.9			
Average Annual Salary	\$90,327	\$89,369	\$82,369	\$83,209			
Service Retirees							
Number	18	17	16	15			
Average Current Age	64.1	63.5	63.1	62.7			
Average Annual Benefit	\$53,794	\$56,184	\$54,484	\$53,381			
DROP Retirees							
Number	3	3	2	3			
Average Current Age	58.4	57.2	52.4	51.9			
Average Annual Benefit	\$39,824	\$26,585	\$67,763	\$68,850			
<u>Beneficiaries</u>							
Number	0	0	0	0			
Average Current Age	N/A	N/A	N/A	N/A			
Average Annual Benefit	N/A	N/A	N/A	N/A			
Disability Retirees							
Number	1	1	1	1			
Average Current Age	50.3	49.3	48.3	47.3			
Average Annual Benefit	\$37,339	\$37,339	\$37,339	\$37,339			
Terminated Vested							
Number	11	9	5	5			
Average Current Age ¹	40.9	42.4	47.6	38.8			
Average Annual Benefit ¹	\$17,905	\$18,554	\$27,053	\$27,053			
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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												0
25 - 29		1										1
30 - 34	1	1	1									3
35 - 39	1	2	1			1	2					7
40 - 44	1							1				2
45 - 49	1					1						2
50 - 54			1				1					2
55 - 59												0
60 - 64												0
65+	1					1						2
Total	5	4	3	0	0	3	3	1	0	0	0	19

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2023	17
b. Terminations	
i. Vested (partial or full) with deferred annuity	(2)
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distribution	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>(1)</u>
g. Continuing participants	14
h. New entrants / Rehires	5
i. Total active life participants in valuation	19

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

	Service Retirees, Vested Receiving Benefits	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	17	3	0	1	2	7	30
Retired	1	(1)					0
DROP		1					1
Vested (Deferred Annuity)					2		2
Vested (Due Refund)							0
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							0
b. Number current valuation	18	3	0	1	4	7	33

SUMMARY OF CURRENT PLAN TOWN OF INDIAN RIVER SHORES PUBLIC SAFETY OFFICERS AND FIREFIGHTERS' DEFINED BENEFIT PLAN (Through Ordinance 561)

<u>Date of Latest Amendment</u>

June 26, 2023

Eligibility Members are eligible to participate immediately

upon hire as a Public Safety Officer or

Firefighter.

<u>Credited Service</u> Total years and fractional parts of years of

service as a Participant.

Salary Total cash remuneration paid to a member for

services rendered including overtime.

Effective October 1, 2012, overtime pay is limited to 300 hours per year, per participant. Additionally, accruals of unused sick and vacation time earned after September 30, 2012 are not includible in the definition of Salary.

Average Final Compensation Average Compensation for the best five out of

the last ten years of Credited Service.

Member Contributions Members are required to contribute a variable

contribution rate that is based in part on the funding cost of the Plan. The base Member Contribution Rate is 5.0% of earnings, with an adjustment to reflect 31.25% of the total minimum required contribution below 14.50% of payroll or above 16.0% of payroll. The Member Contribution Rate cannot exceed 9.0%

of earnings.

Town and State Contributions Remaining amount required in order to pay

current costs and amortize unfunded past service cost, if any, over a period not exceeding 30

years.

Normal Retirement

Date Age 50 and completion of 7 years of Credited

Service.

Benefit Amount 2.75% (2.00% if hired after September 30, 2012)

of Average Final Compensation (AFC) <u>times</u> Credited Service, limited to 100% of AFC. Form of Benefit

Ten Year Certain and Life Annuity (options

available)

Early Retirement

Removed with Ordinance No. 527.

Late Retirement

Date

Any retirement after the Member's earliest eligible Normal Retirement Date.

Benefit Amount

Greater of:

- a) Accrued benefit on Late Retirement Date, or
- b) Accrued benefit at Normal Retirement Date multiplied by a Late Retirement factor (Table of factors provided in Ordinance 504).

Vesting

Schedule

A Member is 20% Vested upon reaching 3 years of Credited Service. An additional 20% is earned for each complete year of service until reaching 100% vesting after 7 years of Credited Service.

Benefit Amount

Member will receive the vested portion of his (her) accrued benefit payable at age 50.

Non-vested members receive a refund of member contributions.

Disability

Eligibility Total and permanent as determined by the Board

of Trustees. Members are covered from Date of Employment (Service Incurred), or after 10 years of Credited Service (Non-Service Incurred). In accordance with State Law, diagnosis or treatment for Cancer are presumed

to be service-incurred.

Benefit Amount Accrued benefit, but not less than 42% of

Average Final Compensation (Service Incurred), or 25% of Average Final Compensation (Non-

Service Incurred).

Duration Payable for life with 10 years certain or until

recovery (as determined by the Board).

Town of Indian River Shores Public Safety Officers and Firefighters' Defined Benefit Plan

Death Benefits

Pre-Retirement

Vested or Contributing Accrued benefit payable at Normal Retirement.

The benefit payable as a 10 Year Certain and

Life for the Beneficiary.

Non-Vested or Non-Contributing Refund of member contributions.

Post-Retirement Benefits payable to beneficiary in accordance

with option selected at retirement.

Deferred Retirement Option Plan

Eligibility Prospectively upon satisfaction of Normal

Retirement requirements.

Participation Up to 60 months, but not beyond 30 years of total

service with the Town.

Rate of Return Actual net returns realized by the Plan as a

whole.

Chapter 175/185 Share Accounts

Allocation The Excess State Monies in the Plan were

allocated evenly to all Participating Members upon the initial Share Plan allocation on October 1, 2006. For subsequent years all Excess State Monies as determined by the Board shall be distributed among all active participants on September 30th based on their Credited Service from the later of their Hire Date or October 1,

2006.

Investment Earnings Net rate of investment return realized by the

Plan for the preceding Plan Year.

Vesting Schedule 7 years of Credited Service.

Distribution Lump sum payment after retirement,

termination, disability, or death.

<u>Board of Trustees</u> The Board of Trustees shall be in compliance

with Florida State Statute Chapters 175 and 185.

Members shall serve for four-year terms.