CITY OF DEERFIELD BEACH
MUNICIPAL POLICE OFFICERS' RETIREMENT 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 18, 2024

Board of Trustees
City of Deerfield Beach
Police Officers' Pension Board

Re: City of Deerfield Beach Municipal Police Officers' Retirement Trust Fund

Dear Board:

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

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapters 112 and 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 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 City of Deerfield Beach, 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 City of Deerfield Beach, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Municipal Police Officers' Retirement Trust Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

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

By: ______________________________
Paul Baugher, FSA, EA, MAAA
Enrolled Actuary #23-6586

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Deerfield Beach Municipal Police Officers' Retirement 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 October 1, 2023 actuarial valuation report, are as follows:

Valuation Date	10/1/2024	10/1/2023
Applicable to Fiscal Year Ending	9/30/2025	9/30/2024
Minimum Required Contribution	$2,560,372	$2,534,501
City And State Required Contribution	2,560,372	2,534,501
State Contribution (Est.) [1]	205,451	205,451
City Required Contribution	$2,354,921	$2,329,050

[1] Amount disclosed above complies with Chapter 2015-39, Laws of Florida, based on guidance from the Division of Retirement. The City may use up to $205,451 in annual Premium Tax Revenue to assist with Plan funding. Annual monies in excess of this amount are allocated equally to the Plan's inactive participants.

Net Plan experience for mortality and investment return was less favorable than expected, due to the 5.51% investment return (Actuarial Asset Basis, net of fees), falling short of the 6.50% assumption. For this reason, we have determined that the Ad Hoc COLA is 0.65% (compared to the 1.40% assumption).

CHANGES SINCE PRIOR VALUATION

Plan Changes

In conjunction with this valuation of the Plan, monthly benefits have been increased by 0.65%, based on the Plan’s net favorable experience for the fiscal year ended September 30, 2024.

As approved by the Board of Trustees at the May 30, 2014 Board Meeting, Ad Hoc COLAs will be granted in conjunction with the annual actuarial valuation, provided there is net favorable experience for the prior fiscal year. The increase in liabilities associated with the COLA will be equal to the net favorable experience for the prior fiscal year, but in no event will the COLA increase exceed 4%.

Actuarial Assumption/Method Changes

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

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Benefits 10/1/2024	Old Benefits 10/1/2024	10/1/2023
A. Participant Data			
Actives	0	0	0
Service Retirees	58	58	58
Beneficiaries	6	6	7
Disability Retirees	3	3	3
Terminated Vested	0	0	0
Total	67	67	68
Projected Annual Payroll	0	0	0
Annual Rate of Payments to:			
Service Retirees	4,254,759	4,227,281	4,229,205
Beneficiaries	309,997	307,995	357,541
Disability Retirees	101,449	100,794	100,794
Terminated Vested	0	0	0
B. Assets			
Actuarial Value (AVA)	45,130,305	45,130,305	45,001,038
Market Value (MVA)	50,092,220	50,092,220	42,989,619
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	0	0	0
Disability Benefits	0	0	0
Death Benefits	0	0	0
Vested Benefits	0	0	0
Refund of Contributions	0	0	0
Service Retirees	56,493,977	56,129,137	57,242,129
Beneficiaries	3,958,382	3,932,817	4,421,253
Disability Retirees	1,218,883	1,211,012	1,234,726
Terminated Vested	0	0	0
Total	61,671,242	61,272,966	62,898,108

C. Liabilities - (Continued)	New Benefits 10/1/2024	Old Benefits 10/1/2024	10/1/2023
Present Value of Future Salaries	0	0	0
Total Normal Cost	0	0	0
Present Value of Future Normal Costs	0	0	0
Total Actuarial Accrued Liability (EAN AL)	61,671,242	61,272,966	62,898,108
Unfunded Actuarial Accrued Liability (UAAL)	16,540,937	16,142,661	17,897,070
Funded Ratio (AVA / EAN AL)	73.2%	73.7%	71.5%

D. Actuarial Present Value of Accrued Benefits	New Benefits 10/1/2024	Old Benefits 10/1/2024	10/1/2023
Vested Accrued Benefits			
Inactives	61,671,242	61,272,966	62,898,108
Actives	0	0	0
Member Contributions	0	0	0
Total	61,671,242	61,272,966	62,898,108
Non-vested Accrued Benefits	0	0	0
Total Present Value Accrued Benefits (PVAB)	61,671,242	61,272,966	62,898,108
Funded Ratio (MVA / PVAB)	81.2%	81.8%	68.3%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Ad Hoc COLA	398,276	0	
Benefit Changes	0	0	
Plan Experience	0	(886,686)	
Benefits Paid [1]	0	(4,674,899)	
Interest	0	3,936,443	
Other	0	0	
Total	398,276	(1,625,142)	

[1] Excludes Share Lump Sum Distribution (since not included in prior year liabilities).

	New Benefits	Old Benefits	
Valuation Date	10/1/2024	10/1/2024	10/1/2023
Applicable to Fiscal Year Ending	9/30/2025	9/30/2025	9/30/2024
E. Pension Cost			
Normal Cost [1]	$0	$0	$0
Administrative Expenses [1]	118,817	118,817	92,845
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 18 years (as of 10/1/2024) [1]	2,441,555	2,404,543	2,441,656
Minimum Required Contribution	2,560,372	2,523,360	2,534,501
Expected Member Contributions [1]	0	0	0
Expected City and State Contribution	2,560,372	2,523,360	2,534,501
F. Past Contributions			
Plan Years Ending:	9/30/2024		
City and State Requirement	2,534,501		
Actual Contributions Made:			
City	2,329,050		
State	205,451		
Total	2,534,501		
G. Net Actuarial (Gain)/Loss	(398,946)		

[1] Contributions developed above include a half-year interest adjustment, based on the investment return assumption.

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

Year	Projected Unfunded Actuarial Accrued Liability
2024	16,540,937
2025	15,097,691
2026	13,560,631
2030	7,094,703
2034	3,462,892
2038	239,741
2042	0

I. Ten-Year Comparison of Investment Return on Market Value and Actuarial Value

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2024	22.23%	5.51%	6.50%
Year Ended	9/30/2023	10.31%	6.44%	6.50%
Year Ended	9/30/2022	-12.48%	5.63%	6.50%
Year Ended	9/30/2021	27.04%	10.11%	6.50%
Year Ended	9/30/2020	3.65%	4.65%	6.50%
Year Ended	9/30/2019	1.08%	7.88%	6.50%
Year Ended	9/30/2018	9.75%	10.89%	6.50%
Year Ended	9/30/2017	12.55%	8.09%	6.50%
Year Ended	9/30/2016	9.34%	6.61%	6.50%
Year Ended	9/30/2015	2.50%	8.33%	6.75%

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	$17,897,070
(2)	Sponsor Normal Cost developed as of October 1, 2023	0
(3)	Expected administrative expenses for the year ended September 30, 2024	89,923
(4)	Expected interest on (1), (2) and (3)	1,166,232
(5)	Sponsor contributions to the System during the year ended September 30, 2024	2,534,501
(6)	Expected interest on (5)	77,117
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2024 (1)+(2)+(3)+(4)-(5)-(6)	16,541,607
(8)	Change to UAAL due to Ad Hoc COLA	398,276
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(398,946)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2024	16,540,937

Type of Base	Date Established	Years Remaining	10/1/2024 Amount	Amortization Amount
Actuarial Loss	10/1/2004	5	956,503	216,120
Assumption Change	10/1/2004	5	377,000	85,182
Actuarial Loss	10/1/2005	5	502,968	113,645
Assumption/Method	10/1/2005	5	235,121	53,125
Actuarial Loss	10/1/2006	5	121,087	27,359
Assumption Change	10/1/2007	5	194,500	43,947
Actuarial Loss	10/1/2008	5	350,851	79,274
Actuarial Loss	10/1/2009	5	372,396	84,142
Actuarial Loss	10/1/2010	6	681,442	132,173
Assumption Change	10/1/2010	6	439,018	85,152
Method Change	10/1/2010	6	201,055	38,997
Actuarial Loss	10/1/2011	7	689,399	118,027
Actuarial Loss	10/1/2012	8	1,693,275	261,126
Assumption Change	10/1/2012	8	136,314	21,021
Actuarial Gain	10/1/2013	9	(595,946)	(84,069)
Ad Hoc COLA	10/1/2013	11	656,607 [1]	80,183
Actuarial Gain	10/1/2014	10	(1,879,753)	(245,523)
Ad Hoc COLA	10/1/2014	12	1,438,162 [1]	165,514
Actuarial Gain	10/1/2015	11	(233,294)	(28,489)
Ad Hoc COLA	10/1/2015	12	240,974 [1]	27,733
Assumption Change	10/1/2015	11	859,076	104,908

Type of Base	Date Established	Years Remaining	10/1/2024 Amount	Amortization Amount
Actuarial Loss	10/1/2016	12	165,597	19,058
Assumption Change	10/1/2016	12	1,770,323	203,742
Ad Hoc COLA	10/1/2017	13	695,369 [1]	75,924
Assumption Change	10/1/2017	13	5,181,243	565,717
Actuarial Gain	10/1/2017	13	(696,651)	(76,064)
Ad Hoc COLA	10/1/2018	14	1,965,292 [1]	204,723
Assumption Change	10/1/2018	14	548,387	57,125
Actuarial Gain	10/1/2018	14	(2,149,960)	(223,960)
Ad Hoc COLA	10/1/2019	15	967,894 [1]	96,656
Actuarial Gain	10/1/2019	15	(971,325)	(96,998)
Assumption Change	10/1/2019	15	570,603	56,981
Ad Hoc COLA	10/1/2020	16	504,658 [1]	48,512
Actuarial Gain	10/1/2020	16	(505,701)	(48,613)
Assumption Change	10/1/2020	16	1,239,034	119,107
Actuarial Gain	10/1/2021	17	(2,454,567)	(227,955)
Ad Hoc COLA	10/1/2021	17	2,279,234 [1]	211,672
Actuarial Gain	10/1/2022	18	(1,542,527)	(138,834)
Ad Hoc COLA	10/1/2022	18	1,542,405 [1]	138,823
Actuarial Gain	10/1/2023	18	(1,888,356) [1]	(169,960)
Ad Hoc COLA	10/1/2023	18	1,883,900 [1]	169,559
Actuarial Gain	10/1/2024	18	(398,946) [1]	(35,907)
Ad Hoc COLA	10/1/2024	18	398,276 [1]	35,847
			16,540,937 [1]	2,364,702

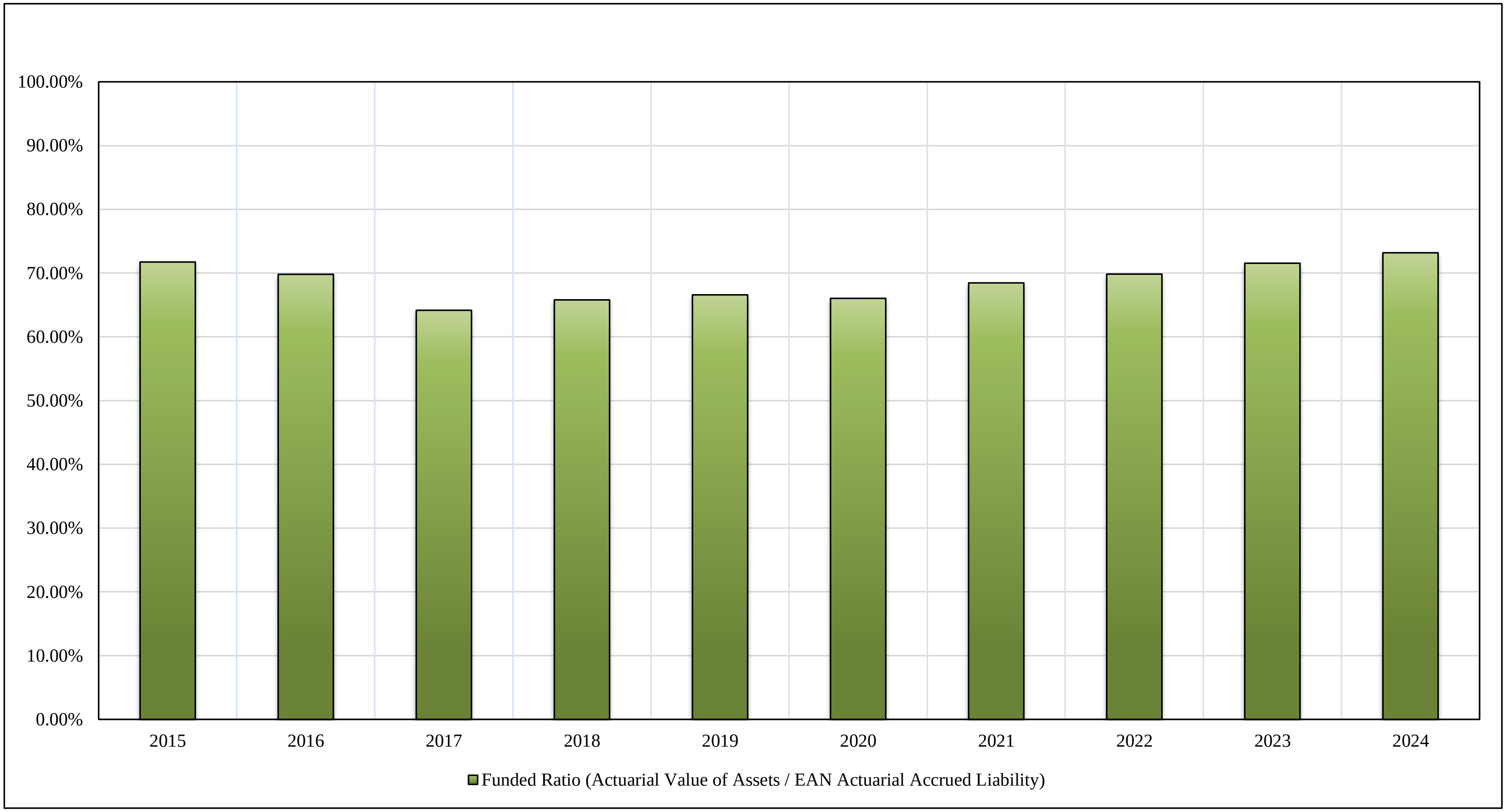
[1] Initial amortization period equal to the lesser of 20 years or the expected future lifetime of average inactive participants.

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1)	Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2023	$17,897,070
(2)	Expected UAAL as of October 1, 2024	16,541,607
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	435,690
	COLA Liability Adjustment [1]	(857,814)
	Inactive Mortality	(33,888)
	Other	57,066
	Increase in UAAL due to (Gain)/Loss	(398,946)
	Benefit Changes	398,276
(4)	Actual UAAL as of October 1, 2024	$16,540,937

[1] Removes the 1.4% assumed COLA for 2024 so that the gain or loss for COLA eligibility can be measured.

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 for Employees, set forward one year. *Healthy Retiree Lives:* **Female:** PubS.H-2010 (Above Median) for Healthy Retirees, set forward one year. **Male:** PubS.H-2010 (Above Median) for Healthy Retirees, set forward one year. *Beneficiary Lives:* **Female:** PubG.H-2010 (Above Median) for Healthy Retirees. **Male:** PubG.H-2010 (Above 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.
Cost-of-Living Adjustment	1.4% applied to all inactive benefit payments, compounded annually.
Interest Rate	6.50% 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.

Administrative Expenses	$115,077 annually, based on the average of actual expenses incurred in the prior two fiscal years.
Amortization Method	New UAAL amortization bases are amortized over the lesser of 20 years and the average future lifetime of the inactive participants. Bases established prior to the valuation date are adjusted proportionally to match the Expected Unfunded Actuarial Accrued Liability as of the valuation date, in order to align prior year bases with the portion of the current year UAAL associated with prior year sources.
Funding Method	Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution: Interest - A half year, based on current 6.50% assumption.
Actuarial Assets	Restricted to 80% - 120% of market value, obtained by smoothing three years' past differences between actual investment earnings and assumed investment return, then adding this number onto the current market value.
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.

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.

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

Individual Entry Age Normal Actuarial Cost Method (Level Dollar Amortization) is the method used to determine required contributions under the Plan. The actuarial accrued liability for inactive participants is the present value of future benefits.

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.

Minimum Required Contribution is equal to an amount sufficient to amortize the Unfunded Accrued Liability over no more than 20 years. The required amount is adjusted for interest according to the timing of contributions during the year.

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.

- 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 100.0%. 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 71.5% on October 1, 2014 to 73.2% 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, increased from -6.0% on October 1, 2014 to -2.7% on October 1, 2024. The current Net Cash Flow Ratio of -2.7% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

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

Low Default-Risk Obligation Measure

ASOP No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, was revised as of December 2021 to include a “low-default-risk obligation measure” (LDROM). This liability measure is consistent with the determination of the actuarial accrued liability shown on page 8 in terms of member data, plan provisions, and assumptions/methods, under the Entry Age Normal Cost Method, except that the interest rate is tied to low-default-risk fixed income securities. The S&P Municipal Bond 20 Year High Grade Rate Index (daily rate closest to, but not later than, the measurement date) was selected to represent a current market rate of low risk but longer-term investments that could be included in a low-risk asset portfolio. The interest rate used in this valuation was 4.06%, resulting in an LDROM of $80,094,187. 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
Funded Ratio				
Actuarial Value of Assets (AVA)	45,130,305	45,001,038	42,463,495	37,759,496
Total Accrued Liability (EAN)	61,671,242	62,898,108	63,775,436	52,811,640
AVA / Total Accrued Liability (EAN)	73.2%	71.5%	66.6%	71.5%
Net Cash Flow Ratio				
Net Cash Flow [1]	(1,370,781)	(1,433,631)	(2,249,498)	(2,333,802)
Market Value of Assets (MVA)	50,092,220	42,989,619	41,388,895	39,056,881
Ratio	-2.7%	-3.3%	-5.4%	-6.0%

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

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2024

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	3,719,409.66	3,719,409.66
Prepaid Expenses	5,368.15	5,368.15
Cash	25,299.34	25,299.34
Total Cash and Equivalents	3,750,077.15	3,750,077.15
Receivables:		
Investment Income	9,933.04	9,933.04
Total Receivable	9,933.04	9,933.04
Investments:		
Mutual Funds:		
Fixed Income	7,588,108.86	7,342,317.35
Equity	23,502,803.51	29,373,317.41
Pooled/Common/Commingled Funds:		
Equity	2,472,417.79	4,492,817.17
Real Estate	3,034,727.00	5,165,993.90
Total Investments	36,598,057.16	46,374,445.83
Total Assets	40,358,067.35	50,134,456.02
LIABILITIES		
Payables:		
Investment Expenses	26,623.12	26,623.12
Administrative Expenses	15,613.00	15,613.00
Total Liabilities	42,236.12	42,236.12
NET POSITION RESTRICTED FOR PENSIONS	40,315,831.23	50,092,219.90

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

ADDITIONS			
Contributions:			
City		2,329,050.00	
State		1,120,492.13	
Total Contributions			3,449,542.13
Investment Income:			
Net Realized Gain (Loss)	(128,740.83)		
Unrealized Gain (Loss)	7,925,602.80		
Net Increase in Fair Value of Investments		7,796,861.97	
Interest & Dividends		1,697,972.48	
Less Investment Expense[1]		(106,412.06)	
Net Investment Income			9,388,422.39
Total Additions			12,837,964.52
DEDUCTIONS			
Distributions to Members:			
Benefit Payments		4,674,898.83	
Lump Sum Share Distributions		915,041.16	
Total Distributions			5,589,939.99
Administrative Expense			145,423.81
Total Deductions			5,735,363.80
Net Increase in Net Position			7,102,600.72
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			42,989,619.18
End of the Year			50,092,219.90

[1]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 three year period. In the first year, 1/3 of the gain or loss is recognized. In the second year 2/3, and in the third 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.

Gains/(Losses) Not Yet Recognized

Plan Year Ending	Gain/(Loss)	Amounts Not Yet Recognized by Valuation Year 2024	2025	2026
09/30/2022	(9,132,198)	0	0	0
09/30/2023	1,548,971	516,324	0	0
09/30/2024	6,668,386	4,445,591	2,222,795	0
Total		4,961,915	2,222,795	0

Development of Investment Gain/(Loss)

Market Value of Assets, 09/30/2023	42,989,619
Contributions Less Benefit Payments & Admin Expenses	(2,285,822)
Expected Investment Earnings*	2,720,036
Actual Net Investment Earnings	9,388,422
2024 Actuarial Investment Gain/(Loss)	6,668,386

*Expected Investment Earnings = 0.065 * [42,989,619 + 0.5 * (2,285,822)]

Development of Actuarial Value of Assets

(1) Market Value of Assets, 09/30/2024	50,092,220
(2) Gains/(Losses) Not Yet Recognized	4,961,915
(3) Actuarial Value of Assets, 09/30/2024, (1) - (2)	45,130,305
(4) Limited Actuarial Value of Assets, 09/30/2024	45,130,305
(A) 09/30/2023 Actuarial Assets:	45,001,038
(I) Net Investment Income:	
1. Interest and Dividends	1,697,972
2. Realized Gain (Loss)	(128,741)
3. Unrealized Gain (Loss)	7,925,603
4. Change in Actuarial Value	(6,973,334)
5. Investment Expenses	(106,412)
Total	2,415,088
(B) 09/30/2024 Actuarial Assets:	45,130,305
Actuarial Asset Rate of Return = 2I/(A+B-I):	5.51%
Market Value of Assets Rate of Return:	22.23%
10/01/2024 Limited Actuarial Assets:	45,130,305
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	-435,689.89

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

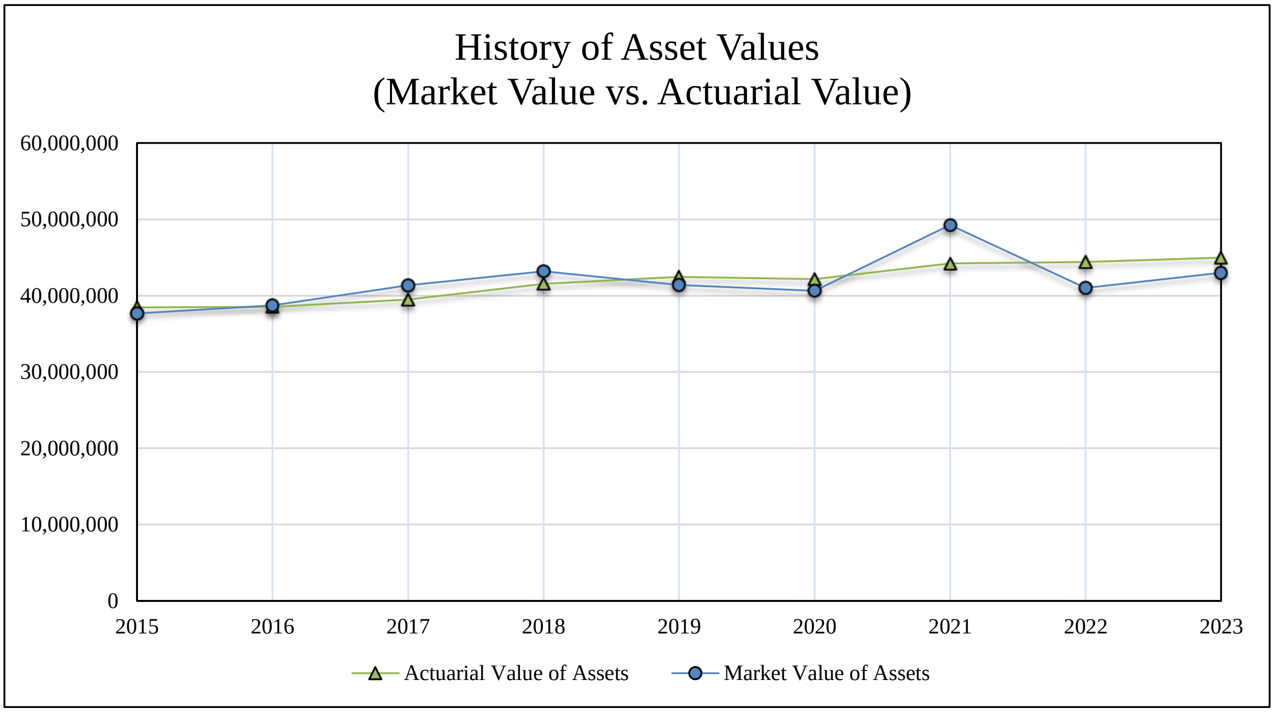
REVENUES		
Contributions:		
City	2,329,050.00	
State	1,120,492.13	
Total Contributions		3,449,542.13
Earnings from Investments:		
Interest & Dividends	1,697,972.48	
Net Realized Gain (Loss)	(128,740.83)	
Unrealized Gain (Loss)	7,925,602.80	
Change in Actuarial Value	(6,973,334.00)	
Total Earnings and Investment Gains		2,521,500.45
EXPENDITURES		
Distributions to Members:		
Benefit Payments	4,674,898.83	
Lump Sum Share Distributions	915,041.16	
Total Distributions		5,589,939.99
Expenses:		
Investment related[1]	106,412.06	
Administrative	145,423.81	
Total Expenses		251,835.87
Change in Net Assets for the Year		129,266.72
Net Assets Beginning of the Year		45,001,038.18
Net Assets End of the Year[2]		45,130,304.90

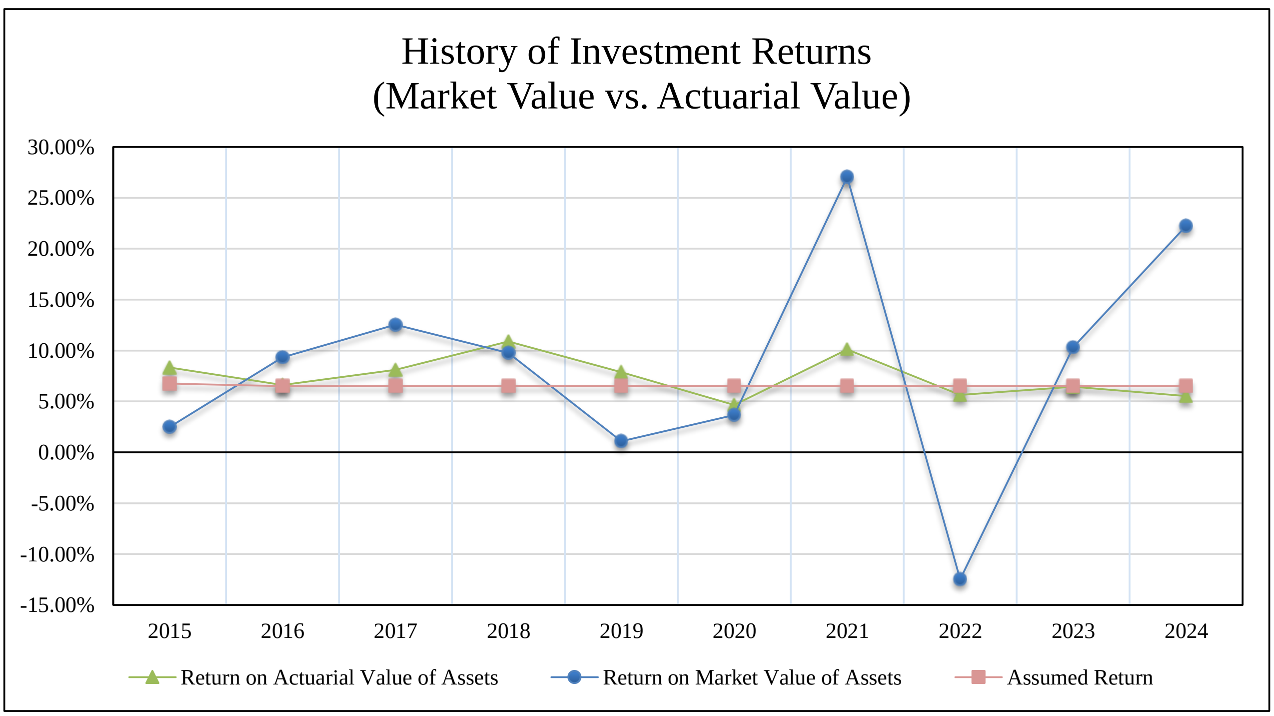
[1]Investment related expenses include investment advisory, custodial and performance monitoring fees.
[2]Net Assets may be limited for actuarial consideration.

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

(1)	Required City and State Contributions	$2,534,501.00
(2)	Less Allowable State Contribution	(205,451.00)
(3)	Required City Contribution for Fiscal 2024	2,329,050.00
(4)	Less 2023 Prepaid Contribution	0.00
(5)	Less Actual City Contributions	(2,329,050.00)
(6)	City Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2024	$0.00

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





STATISTICAL DATA

	10/1/2024	10/1/2023	10/1/2022	10/1/2021
Service Retirees				
Number	58	58	60	63
Average Current Age	68.6	67.6	67.0	66.6
Average Annual Benefit	$73,358	$72,917	$70,535	$68,978
Beneficiaries				
Number	6	7	7	6
Average Current Age	68.5	69.0	67.2	67.3
Average Annual Benefit	$51,666	$51,077	$49,381	$46,780
Disability Retirees				
Number	3	3	3	3
Average Current Age	71.4	70.4	69.4	68.4
Average Annual Benefit	$33,816	$33,598	$32,563	$31,728
Terminated Vested				
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

VALUATION PARTICIPANT RECONCILIATION

	Service Retirees, Vested Receiving Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due Refund)	Total
a. Number prior valuation	58	7	3	0	0	68
Retired	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	0	0
Vested (Due Refund)	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	(1)	0	0	0	(1)
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	58	6	3	0	0	67

SUMMARY OF CURRENT PLAN
(Ordinance No. 2011/037)

Effective Date	The initial plan became effective on November 8, 1976, with the most recent Ordinance adopted in March 2004.
Eligibility	Full-time employees hired prior to January 13, 1990, who chose to maintain involvement after becoming employed by Broward Sheriff's Office (BSO).
Benefit Enhancements	Benefits will be increased by the Consumer Price Index, if some criteria are met. This is paid for by the investment return profits and actuarial experience (reviewed each year) above the actuarially assumed amounts, but is limited to 4.0% per year.
Share Accounts	Excess Ch. 185 contributions will be dispersed evenly each year between all members through individual share accounts. Retired members shall receive their payments directly.