CITY OF OCALA
GENERAL EMPLOYEES' PENSION PLAN

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2023

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

FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

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February 1, 2024

Board of Trustees
City of Ocala
General Employees' Pension Board

Re: City of Ocala General Employees' Pension Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Ocala General Employees' Pension 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 Chapter 112, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the City of Ocala, 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 Ocala, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the General Employees' Pension 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

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

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Ocala General Employees' Pension Plan, performed as of October 1, 2023, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2025.

The contribution requirements, compared with those set forth in the April 10, 2023 actuarial impact statement, are as follows:

Valuation Date	10/1/2023	10/1/2022
Applicable to Fiscal Year Ending	9/30/2025	9/30/2024
Minimum Required Contribution	$9,616,838	$8,497,360
Member Contributions (Est.)	428,967	450,431
City Required Contribution [1]	$9,187,871	$8,046,929

[1] Please note that the City has access to a prepaid contribution of $1,701,271.33 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2024.

As you can see, the Minimum Required Contribution shows an increase when compared to the results set forth in the April 10, 2023 actuarial impact statement. The increase is attributable to a reduction in the investment return from 6.80% to 6.70% and unfavorable actuarial experience as described in the next paragraph.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. The primary source of actuarial loss was an investment return of 3.56% (Actuarial Asset Basis) which fell short of the 6.80% assumption. This loss was offset in part by gains associated with inactive mortality experience and fewer retirements than expected.

CHANGES SINCE PRIOR VALUATION

Plan Changes

Since the prior valuation, Ordinance 2023-45 was adopted on May 17, 2023 that provided for the following change:

Effective October 1, 2023, an increase in the benefit accrual rate from 1.00% to 1.30% for all years of Credited Service after October 1, 2013. The increase is applicable to all current and future retirees, including DROP participants and Vested Terminated members with any portion of their benefit based on the variable multiplier.

The impact of this change can be found in our April 10, 2023 actuarial impact statement.

Actuarial Assumption/Method Changes

In conjunction with this valuation of the plan, the investment return assumption is lowered from 6.80% to 6.70%.

There has been no method changes since prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump 10/1/2023	Old Assump 10/1/2023	10/1/2022
A. Participant Data			
Actives	105	105	119
Service Retirees	695	695	688
DROP Retirees	12	12	17
Beneficiaries	99	99	103
Disability Retirees	3	3	3
Terminated Vested	238	238	249
Total	1,152	1,152	1,179
Projected Annual Payroll	8,254,134	8,254,134	8,666,299
Annual Rate of Payments to:			
Service Retirees	14,027,091	14,027,091	13,498,079
DROP Retirees	448,876	448,876	596,509
Beneficiaries	1,024,097	1,024,097	1,063,842
Disability Retirees	26,571	26,571	25,910
Terminated Vested	1,812,818	1,812,818	1,902,225
B. Assets			
Actuarial Value (AVA) [1]	186,366,234	186,366,234	187,336,004
Market Value (MVA) [1]	173,435,410	173,435,410	164,488,736
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	28,872,466	28,447,259	29,572,878
Disability Benefits	727,220	719,375	849,157
Death Benefits	102,302	101,672	122,826
Vested Benefits	1,584,750	1,551,482	1,898,528
Refund of Contributions	0	0	0
Service Retirees	180,550,795	178,804,823	174,359,032
DROP Retirees [1]	9,255,936	9,167,129	12,438,002
Beneficiaries	9,821,504	9,745,774	9,819,183
Disability Retirees	434,203	429,148	430,819
Terminated Vested	18,066,756	17,770,288	18,453,919
Total	249,415,932	246,736,950	247,944,344

C. Liabilities - (Continued)	New Assump 10/1/2023	Old Assump 10/1/2023	10/1/2022
Present Value of Future Salaries	43,175,901	43,023,194	48,022,196
Present Value of Future Member Contributions	2,158,795	2,151,160	2,401,110
Normal Cost (Retirement)	381,269	370,703	403,961
Normal Cost (Disability)	28,403	27,925	31,596
Normal Cost (Death)	4,898	4,821	5,466
Normal Cost (Vesting)	120,596	116,991	147,481
Normal Cost (Refunds)	0	0	0
Total Normal Cost	535,166	520,440	588,504
Present Value of Future Normal Costs	2,430,825	2,355,636	2,790,957
Accrued Liability (Retirement)	27,094,179	26,724,669	27,575,048
Accrued Liability (Disability)	592,614	587,535	690,438
Accrued Liability (Death)	82,344	82,075	98,882
Accrued Liability (Vesting)	1,086,776	1,069,873	1,288,064
Accrued Liability (Refunds)	0	0	0
Accrued Liability (Inactives) [1]	218,129,194	215,917,162	215,500,955
Total Actuarial Accrued Liability (EAN AL)	246,985,107	244,381,314	245,153,387
Unfunded Actuarial Accrued Liability (UAAL)	60,618,873	58,015,080	57,817,383
Funded Ratio (AVA / EAN AL)	75.5%	76.3%	76.4%

D. Actuarial Present Value of Accrued Benefits

	New Assump 10/1/2023	Old Assump 10/1/2023	10/1/2022
Vested Accrued Benefits			
Inactives [1]	218,129,194	215,917,162	215,500,955
Actives	26,648,012	26,192,867	27,490,462
Member Contributions	4,835,318	4,835,318	4,981,792
Total	249,612,524	246,945,347	247,973,209
Non-vested Accrued Benefits	0	0	0
Total Present Value Accrued Benefits (PVAB)	249,612,524	246,945,347	247,973,209
Funded Ratio (MVA / PVAB)	69.5%	70.2%	66.3%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	2,667,177	0	
Plan Experience	0	(1,658,423)	
Benefits Paid	0	(15,697,889)	
Interest	0	16,328,450	
Other	0	0	
Total	2,667,177	(1,027,862)	

	New Assump	Old Assump	
Valuation Date	10/1/2023	10/1/2023	10/1/2022
Applicable to Fiscal Year Ending	9/30/2025	9/30/2025	9/30/2024
E. Pension Cost			
Normal Cost [2]	$556,252	$540,945	$611,750
Administrative Expenses [2]	199,784	199,784	204,171
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 14 years (as of 10/1/2023) [2]	8,860,802	8,533,914	7,681,439
Minimum Required Contribution	9,616,838	9,274,643	8,497,360
Expected Member Contributions [2]	428,967	428,967	450,431
Expected City Contribution	9,187,871	8,845,676	8,046,929
F. Past Contributions			
Plan Years Ending:	9/30/2023		
City Requirement	7,874,648		
Actual Contributions Made:			
City	7,874,648		
G. Net Actuarial (Gain)/Loss	4,307,406		

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

[2] Contributions developed as of 10/1/2023 displayed above have been adjusted to account for assumed salary increase components.

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

Year	Projected Unfunded Actuarial Accrued Liability
2023	60,618,873
2024	55,584,249
2025	49,624,391
2028	31,272,840
2031	16,480,201
2034	4,505,512
2037	0

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

		Actual	Assumed
Year Ended	9/30/2023	6.77%	3.95%
Year Ended	9/30/2022	8.94%	3.95%
Year Ended	9/30/2021	4.15%	3.97%
Year Ended	9/30/2020	4.71%	3.99%
Year Ended	9/30/2019	5.02%	4.00%

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

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2023	9.93%	3.56%	6.80%
Year Ended	9/30/2022	-14.20%	3.96%	6.90%
Year Ended	9/30/2021	17.61%	8.61%	7.00%
Year Ended	9/30/2020	8.03%	6.58%	7.00%
Year Ended	9/30/2019	2.59%	5.07%	7.00%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2023	$8,254,134
	10/1/2013	16,369,544
(b) Total Increase		-49.58%
(c) Number of Years		10.00
(d) Average Annual Rate		-6.62%

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.

Doug Lozen

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

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

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

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2022	$57,817,383
(2)	Sponsor Normal Cost developed as of October 1, 2022	155,189
(3)	Expected administrative expenses for the year ended September 30, 2023	196,413
(4)	Expected interest on (1), (2) and (3)	3,948,813
(5)	Sponsor contributions to the System during the year ended September 30, 2023	7,874,648
(6)	Expected interest on (5)	535,476
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2023 (1)+(2)+(3)+(4)-(5)-(6)	53,707,674
(8)	Change to UAAL due to Assumption Change	2,603,793
(9)	Change to UAAL due to Actuarial (Gain)/Loss	4,307,406
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2023	60,618,873

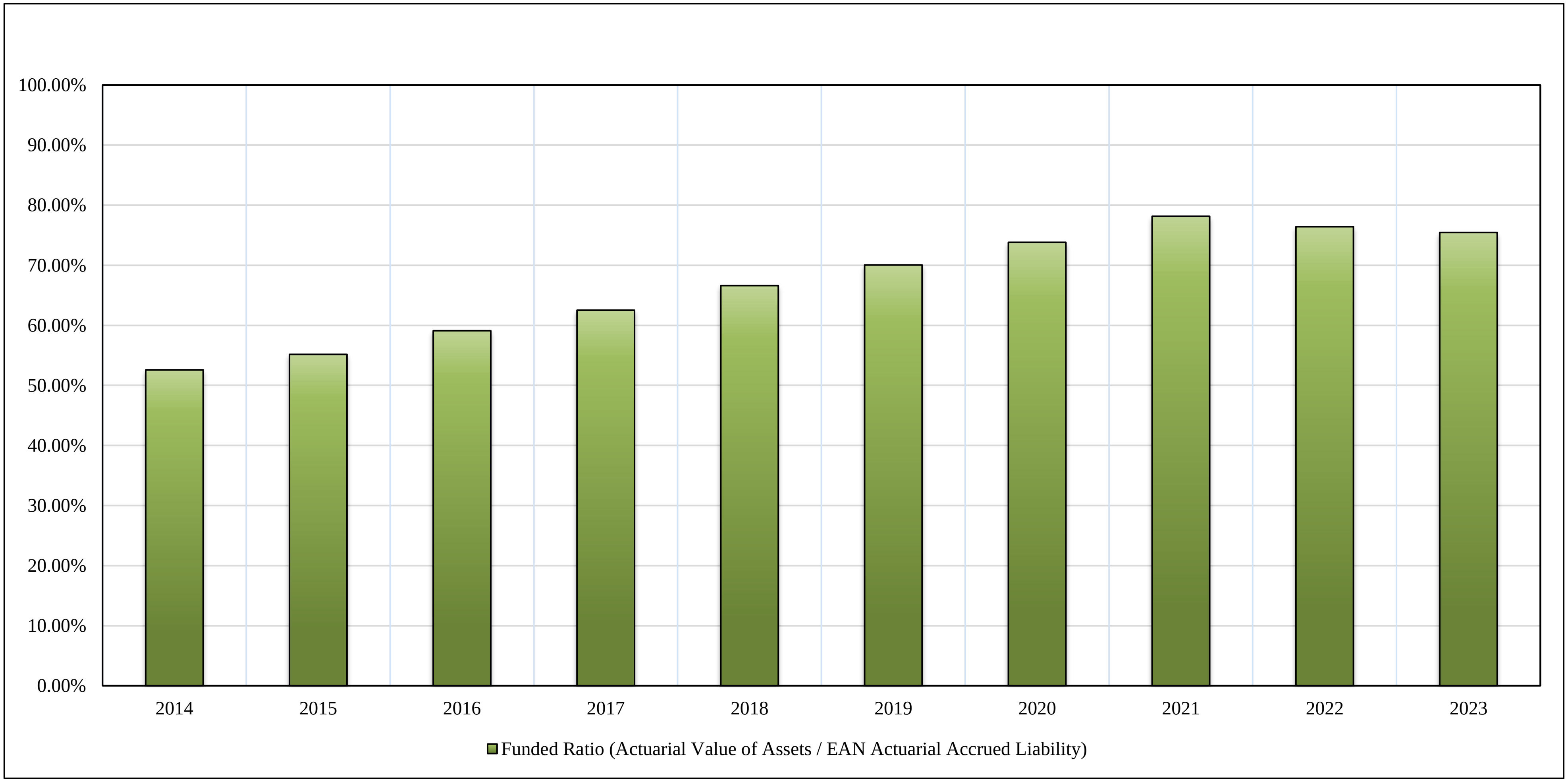
Type of Base	Date Established	Years Remaining	10/1/2023 Amount	Amortization Amount
	10/1/1996	3	528,430	187,682
	10/1/1998	5	76,986	17,456
	10/1/1999	6	3,200,354	623,444
	10/1/2000	7	(679,647)	(116,959)
Benefit Change	10/1/2004	11	8,050,012	991,134
Method Change	10/1/2004	11	4,160,084	512,198
Prior Losses	10/1/2004	5	2,532,105	574,137
Actuarial Loss	10/1/2005	5	1,422,441	322,529
Actuarial Gain	10/1/2006	5	(70,941)	(16,085)
Actuarial Gain	10/1/2007	5	(104,004)	(23,582)
Assum. Change	10/1/2007	14	(510,659)	(53,744)
Benefit Changes	10/1/2007	14	15,715,363	1,653,964
Method Change	10/1/2008	5	365,839	82,951
Assum. Change	10/1/2011	8	1,922,476	298,238
Assum. Change	10/1/2012	9	2,126,863	302,053
Assum/Method Change	10/1/2012	9	17,433,573	2,475,886
Benefit Change	10/1/2012	9	(14,854,975)	(2,109,678)
Actuarial Gain	10/1/2014	1	(550,997)	(550,997)
Actuarial Loss	10/1/2015	2	505,239	260,808
Benefit Change	10/1/2015	2	(375,950)	(194,068)
Assum Change	10/1/2016	3	1,703,415	604,999
Actuarial Gain	10/1/2016	3	(454,505)	(161,426)
Actuarial Loss	10/1/2017	4	665,998	183,028
Assum Change	10/1/2017	4	739,774	203,303
Actuarial Loss	10/1/2018	5	699,123	158,521

Type of Base	Date Established	Years Remaining	10/1/2023 Amount	Amortization Amount
Actuarial Loss	10/1/2019	6	1,572,256	306,283
Actuarial Loss	10/1/2020	7	799,941	137,660
Assump Change	10/1/2020	7	(354,429)	(60,993)
Actuarial Gain	10/1/2021	8	(5,901,606)	(915,529)
Assump Change	10/1/2021	8	2,058,434	319,329
Assump Change	10/1/2022	9	2,371,930	336,857
Actuarial Loss	10/1/2022	9	5,818,429	826,323
Benefits Change	10/1/2022	9	3,096,322	439,734
Actuarial Loss	10/1/2023	10	4,307,406	566,824
Assump Change	10/1/2023	10	2,603,793	342,640
			60,618,873	8,524,920

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1)	Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2022	$57,817,383
(2)	Expected UAAL as of October 1, 2023	53,707,674
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	6,000,158
	Salary Increases	86,136
	Active Decrements	(639,893)
	Inactive Mortality	(1,292,457)
	Vested Terminated Participants Retired	152,949
	Other	513
	Increase in UAAL due to (Gain)/Loss	4,307,406
	Assumption Changes	2,603,793
(4)	Actual UAAL as of October 1, 2023	$60,618,873

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

<u>Mortality Rate</u>

Healthy Active Lives:

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

Healthy Retiree Lives:

Female: PubG.H-2010 for Healthy Retirees.
Male: PubG.H-2010 for Healthy Retirees, set back one year.

Beneficiary Lives:

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

Disabled Lives:

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

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

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

<u>Interest Rate</u>

6.70% (prior year 6.80%) per year compounded annually, net of investment related expenses. This assumption is mandated by City Ordinances.

<u>Payroll Growth</u>

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.

Salary Increases

Salary Scale	
Service	Rate
0	14.00%
1-2	6.50%
3-4	5.50%
5-14	4.50%
15-24	3.50%
25+	4.50%

This assumption was adopted based on the May 5, 2017 actuarial experience study.

Administrative Expenses

$192,211 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.

Disability Rates

Age	% Becoming Disabled During the Year
20	0.051%
30	0.058
40	0.121
50	0.429
60	1.611

Termination Rates

Service	Termination Rate
0	20.00%
1-4	15.00
5-9	7.50
10-19	4.00
20+	6.50

These rates were adopted based on the May 5, 2017 actuarial experience study.

Normal Retirement

Age	Probability of Retirement
65	50%
66	33%
67	33%
68	100%

Members with at least 30 years of Credited Service are assumed to retire immediately. This assumption was adopted based on the May 5, 2017 actuarial valuation report.

Early Retirement

25 or more Years of Credited Service

Credited Service	Assumption
25	10.50%
26	5.50%
27	11.50%
28	7.50%
29	4.00%

Less than 25 Years of Credited Service

Age	Assumption
55-60	5.75%
61	6.50%
62	12.00%
63	5.00%
64	3.00%

This assumption was adopted based on the May 5, 2017 actuarial experience study.

Funding Method

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

Interest - None, based on a beginning of year funding methodology.

Salary - A full year, based on current 3.94% assumption.

Asset Smoothing Methodology	The Actuarial Value of Assets is based upon 5- year straight line recognition of the difference between expected earnings on the net market value of assets and actual earnings on the net market value of assets. The net market value of assets shall be the total fiduciary net position as defined by GASB 67/68, excluding any reserves held which are not designated for currently adopted plan benefits valued as part of the plan liabilities. The resulting value shall be adjusted if it does not fall between 120% and 80% of the market value of assets. This change shall be made assuming that this 5-year recognition method applies to differences between the expected and actual investment returns for the years ending September 30, 2009 and later. This method is mandated by Ordinance 2013-48.
Low-Default-Risk Obligation Measure	Based on the Entry Age Normal Actuarial Cost Method and an interest rate of 4.87% per year compounded annually, net of investment related expenses. This rate is consistent with the Yield to Maturity of the S&P Municipal Bond 20-Year High Grade Rate Index as of September 30, 2023. All other assumptions for the Low-Default-Risk Obligation Measure are consistent with the assumptions shown in this section unless otherwise noted.

GLOSSARY

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

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

(a) The normal cost accrual rate equals:

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

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

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

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

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

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

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

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

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

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

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

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

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

DISCUSSION OF RISK

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

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

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

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

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

- <u>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 35.5% on October 1, 2013 to 10.1% on October 1, 2023, indicating that the plan has been maturing during the period.

- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 88.3%. 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 48.1% on October 1, 2013 to 75.5% on October 1, 2023.

- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from 1.1% on October 1, 2013 to -4.4% on October 1, 2023. The current Net Cash Flow Ratio of -4.4% 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 9 in terms of member data, plan provisions, and assumptions/methods, under the Entry Age Normal Cost Method, except that the interest rate is tied to low-default-risk fixed income securities. The S&P Municipal Bond 20 Year High Grade Rate Index (daily rate closest to, but not later than, the measurement date) was selected to represent a current market rate of low risk but longer-term investments that could be included in a low-risk asset portfolio. The interest rate used in this valuation was 4.87%, resulting in an LDROM of $304,468,367. The LDROM should not be considered the "correct" liability measurement; it simply shows a possible outcome if the Board elected to hold a very low risk asset portfolio. The Board actually invests the pension plan's contributions in a diversified portfolio of stocks and bonds and other investments with the objective of maximizing investment returns at a reasonable level of risk. Consequently, the difference between the plan's Actuarial Accrued Liability disclosed earlier in this section and the LDROM can be thought of as representing the expected taxpayer savings from investing in the plan's diversified portfolio compared to investing only in high quality bonds.

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

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

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	10/1/2023	10/1/2022	10/1/2018	10/1/2013
Support Ratio				
Total Actives	105	119	194	347
Total Inactives [1]	1,040	1,050	1,044	978
Actives / Inactives [1]	10.1%	11.3%	18.6%	35.5%
Asset Volatility Ratio				
Market Value of Assets (MVA)	173,435,410	164,488,736	153,450,912	107,914,119
Total Annual Payroll	8,516,990	8,893,848	11,616,553	16,480,277
MVA / Total Annual Payroll	2,036.3%	1,849.5%	1,321.0%	654.8%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability	218,129,194	215,500,955	196,518,276	149,015,033
Total Accrued Liability (EAN)	246,985,107	245,153,387	232,850,745	204,067,795
Inactive AL / Total AL	88.3%	87.9%	84.4%	73.0%
Funded Ratio				
Actuarial Value of Assets (AVA)	186,366,234	187,336,004	155,107,092	98,090,021
Total Accrued Liability (EAN)	246,985,107	245,153,387	232,850,745	204,067,795
AVA / Total Accrued Liability (EAN)	75.5%	76.4%	66.6%	48.1%
Net Cash Flow Ratio				
Net Cash Flow [2]	(7,567,718)	(5,444,845)	3,292,637	1,133,886
Market Value of Assets (MVA)	173,435,410	164,488,736	153,450,912	107,914,119
Ratio	-4.4%	-3.3%	2.1%	1.1%

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

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

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2023

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Checking Account	889,091.73	889,091.73
Money Market	1,396,266.00	1,396,266.00
Total Cash and Equivalents	2,285,357.73	2,285,357.73
Receivables:		
Member Contributions in Transit	271.28	271.28
City Contributions in Transit	1,519.19	1,519.19
From Broker for Investments Sold	5,702.69	5,702.69
Investment Income	27,274.03	27,274.03
Total Receivable	34,767.19	34,767.19
Investments:		
Stocks	21,957,301.66	24,597,452.60
Mutual Funds:		
Fixed Income	18,867,779.10	14,967,157.12
Equity	37,277,599.13	47,133,859.76
Pooled/Common/Commingled Funds:		
Hedge	21,225,475.93	32,442,796.86
Equity	19,031,175.06	23,695,854.59
Real Estate	26,259,056.36	30,061,221.53
Total Investments	144,618,387.24	172,898,342.46
Total Assets	146,938,512.16	175,218,467.38
LIABILITIES		
Payables:		
DROP Distributions	19,929.19	19,929.19
Benefit Payments	3,415.66	3,415.66
Investment Expenses	33,848.13	33,848.13
Administrative Expenses	1,710.00	1,710.00
To City for Deposit Correction	1,000.00	1,000.00
To Broker for Investments Purchased	21,883.21	21,883.21
Prepaid City Contribution	1,701,271.33	1,701,271.33
Total Liabilities	1,783,057.52	1,783,057.52
NET POSITION RESTRICTED FOR PENSIONS	145,155,454.64	173,435,409.86

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

ADDITIONS			
Contributions:			
Member		434,331.99	
City		7,874,648.00	
Total Contributions			8,308,979.99
Investment Income:			
Net Realized Gain (Loss)	5,693,075.78		
Unrealized Gain (Loss)	9,384,246.71		
Net Increase in Fair Value of Investments		15,077,322.49	
Interest & Dividends		2,284,269.45	
Less Investment Expense[1]		(847,200.24)	
Net Investment Income			16,514,391.70
Total Additions			24,823,371.69
DEDUCTIONS			
Distributions to Members:			
Benefit Payments		14,348,185.48	
Lump Sum DROP Distributions		1,018,453.22	
Lump Sum PLOP Distributions		329,038.82	
Refunds of Member Contributions		2,211.27	
Total Distributions			15,697,888.79
Administrative Expense			178,809.05
Total Deductions			15,876,697.84
Net Increase in Net Position			8,946,673.85
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			164,488,736.01
End of the Year			173,435,409.86

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

ACTUARIAL ASSET VALUATION
September 30, 2023

Actuarial Assets for funding purposes are developed by 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.

Gains/Losses Not Yet Recognized

Plan Year Ending	Gain/(Loss)	Amounts Not Yet Recognized by Valuation Year 2023	2024	2025	2026	2027
09/30/2019	(6,655,407)	0	0	0	0	0
09/30/2020	2,159,588	431,916	0	0	0	0
09/30/2021	19,072,952	7,629,182	3,814,592	0	0	0
09/30/2022	(42,279,739)	(25,367,843)	(16,911,895)	(8,455,947)	0	0
09/30/2023	5,469,901	4,375,921	3,281,941	2,187,961	1,093,981	0
Total		(12,930,824)	(9,815,362)	(6,267,986)	1,093,981	0

Development of Investment Gain/Loss

Market Value of Assets, including Prepaid Contributions, 09/30/2022	166,215,687
Contributions Less Benefit Payments & Admin Expenses	(7,593,397)
Expected Investment Earnings*	11,044,491
Actual Net Investment Earnings	16,514,392
2023 Actuarial Investment Gain/(Loss)	5,469,901

*Expected Investment Earnings = 0.068 * (166,215,687 - 0.5 * 7,593,397)

Development of Actuarial Value of Assets

(1) Market Value of Assets, 09/30/2023	173,435,410
(2) Gains/(Losses) Not Yet Recognized	(12,930,824)
(3) Actuarial Value of Assets, 09/30/2023, (1) - (2)	186,366,234
(4) Limited Actuarial Value of Assets, 09/30/2023	186,366,234
(A) 09/30/2022 Actuarial Assets, including Prepaid Contributions:	189,062,955
(I) Net Investment Income:	
1. Interest and Dividends	2,285,269
2. Realized Gain (Loss)	5,693,076
3. Unrealized Gain (Loss)	9,384,247
4. Change in Actuarial Value	(9,917,444)
5. Investment Expenses	(847,200)
Total	6,597,948
(B) 09/30/2023 Actuarial Assets, including Prepaid Contributions:	188,067,505
Actuarial Assets Rate of Return = 2I/(A+B-I):	3.56%
Market Value of Assets Rate of Return:	9.93%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(6,000,158)

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

REVENUES

Contributions:		
Member	434,331.99	
City	7,874,648.00	
Total Contributions		8,308,979.99
Earnings from Investments:		
Interest & Dividends	2,284,269.45	
Miscellaneous Income	1,000.00	
Net Realized Gain (Loss)	5,693,075.78	
Unrealized Gain (Loss)	9,384,246.71	
Change in Actuarial Value	(9,917,444.00)	
Total Earnings and Investment Gains		7,445,147.94

EXPENDITURES

Distributions to Members:		
Benefit Payments	14,348,185.48	
Lump Sum DROP Distributions	1,018,453.22	
Lump Sum PLOP Distributions	329,038.82	
Refunds of Member Contributions	2,211.27	
Total Distributions		15,697,888.79
Expenses:		
Investment related[1]	847,200.24	
Administrative	178,809.05	
Total Expenses		1,026,009.29
Change in Net Assets for the Year		(969,770.15)
Net Assets Beginning of the Year		187,336,004.01
Net Assets End of the Year[2]		186,366,233.86

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

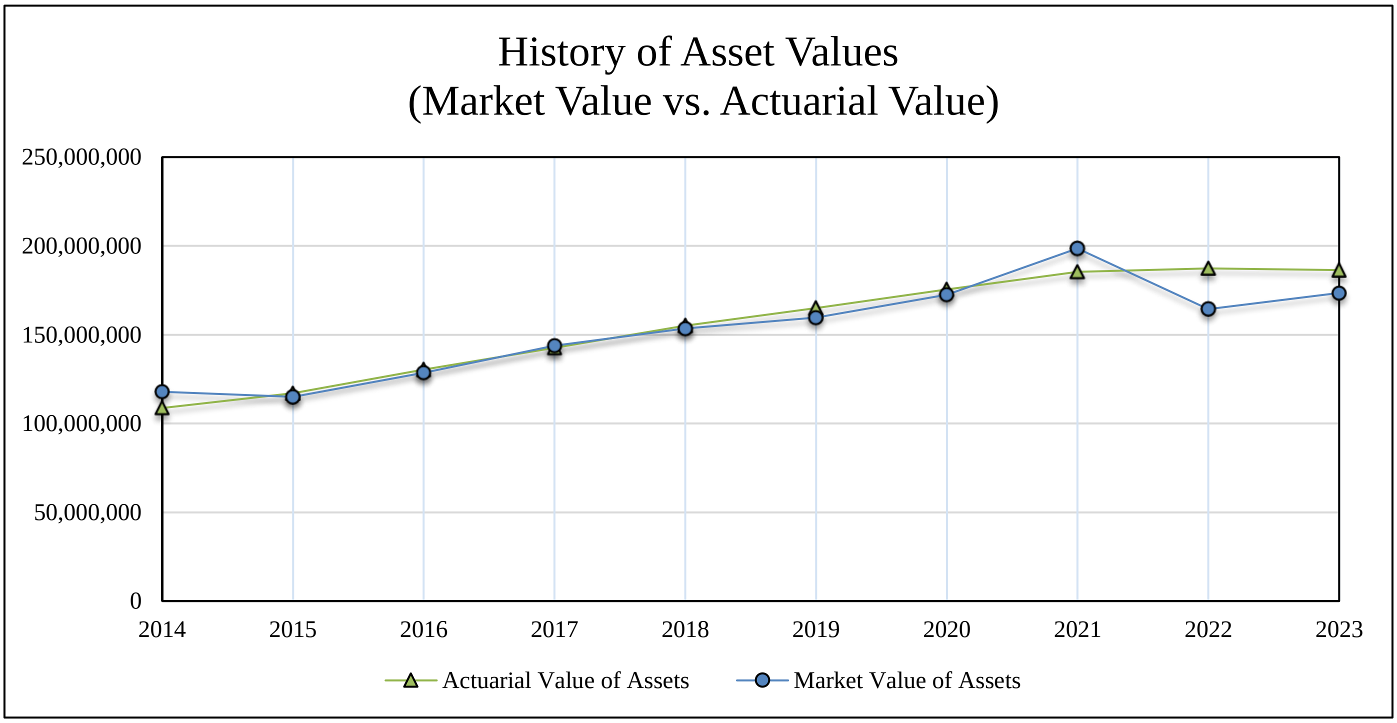
DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2022 to September 30, 2023

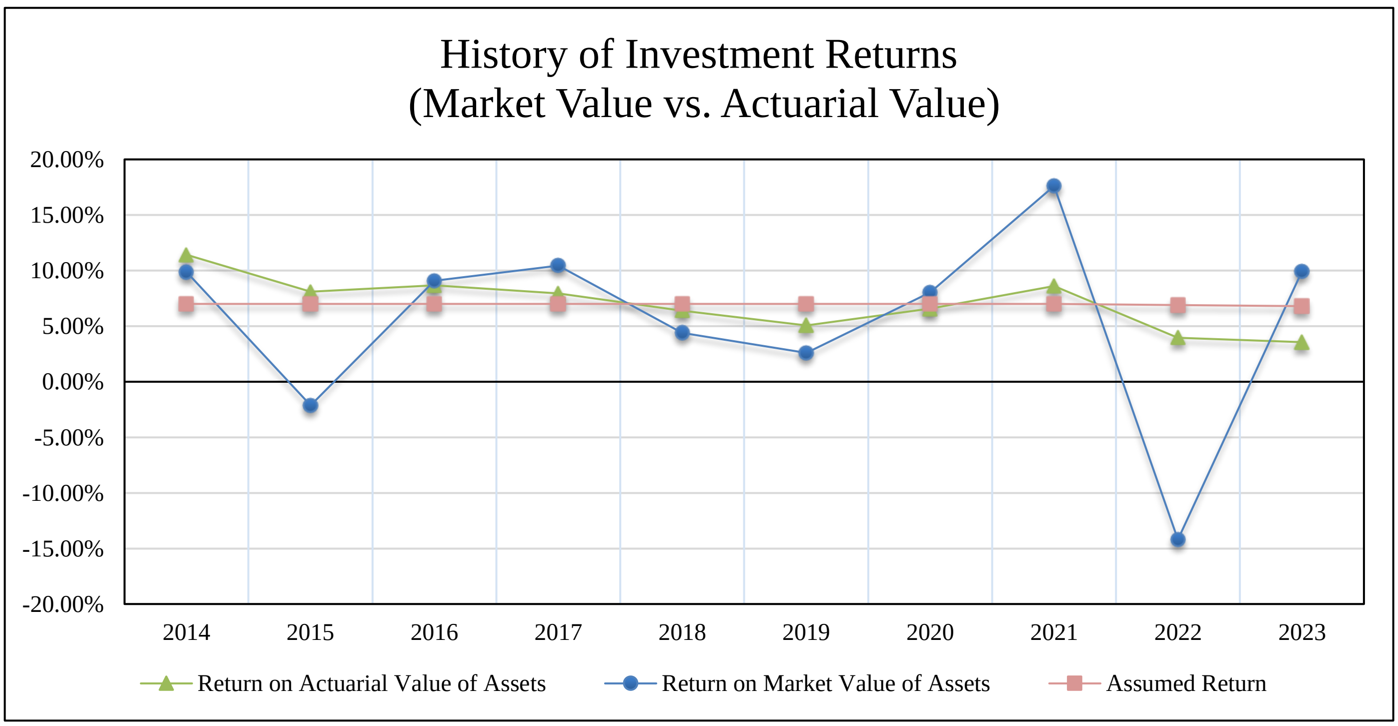
Beginning of the Year Balance	2,336,861.84
Plus Additions	424,450.48
Investment Return Earned	0.00
Less Distributions	(1,018,453.22)
End of the Year Balance	1,742,859.10

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

(1)	Required City Contributions	$7,874,648.00
(2)	Less 2022 Prepaid Contribution	(1,726,950.61)
(3)	Less Actual City Contributions	(7,848,968.72)
(4)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2023	($1,701,271.33)

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





STATISTICAL DATA

	10/1/2023	10/1/2022	10/1/2021	10/1/2020
Actives				
Number	105	119	135	157
Average Current Age	53.0	52.3	51.6	50.9
Average Age at Employment	32.0	32.0	32.6	32.9
Average Past Service	21.0	20.3	19.0	18.0
Average Annual Salary	$81,114	$74,738	$68,333	$65,428
Service Retirees				
Number	695	688	679	679
Average Current Age	69.4	68.9	68.6	68.5
Average Annual Benefit	$20,183	$19,619	$19,141	$19,340
DROP Retirees				
Number	12	17	19	22
Average Current Age	60.3	61.1	61.6	61.0
Average Annual Benefit	$37,406	$35,089	$37,760	$41,421
Beneficiaries				
Number	99	103	103	95
Average Current Age	73.4	72.6	72.4	72.9
Average Annual Benefit	$10,344	$10,329	$10,445	$10,001
Disability Retirees				
Number	3	3	3	4
Average Current Age	63.9	62.9	61.9	68.4
Average Annual Benefit	$8,857	$8,637	$8,422	$7,387

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												0
30 - 34							1					1
35 - 39							4	3				7
40 - 44							3	7	4			14
45 - 49							1	6	7	2		16
50 - 54							1	4	2	7	1	15
55 - 59							3	4	7	5		19
60 - 64							2	5	3	15		25
65+							2	2	2	2		8
Total	0	0	0	0	0	0	17	31	25	31	1	105

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2022	119
b. Terminations	
i. Vested (partial or full) with deferred annuity	(4)
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	(8)
f. DROP	(2)
g. Continuing participants	105
h. New entrants / Rehires	0
i. Total active life participants in valuation	105

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)	Total
a. Number prior valuation	688	17	103	3	239	10	1,060
Retired	27	(7)			(12)		8
DROP		2					2
Vested (Deferred Annuity)					4		4
Vested (Due Refund)							0
Hired/Terminated in Same Year							0
Death, With Survivor	(4)		4				0
Death, No Survivor	(16)		(6)				(22)
Disabled							0
Refund of Contributions						(3)	(3)
Rehires							0
Expired Annuities	(2)		(2)				(4)
Data Corrections	2						2
b. Number current valuation	695	12	99	3	231	7	1,047

SUMMARY OF CURRENT PLAN
(Through Ordinance 2024-12)

Variable Benefit and Contribution Program

All Members who are employed and not participating in the DROP on September 30, 2013 and do not fall in the Grandfathered group (see below) shall earn benefits for credited service on and after October 1, 2013 in accordance with the variable benefit and contribution program.

Average Final Compensation	Average final salary of the 8 highest years of the last 10 years prior to termination.
Salary	Effective October 1, 2013 salary means base wages and overtime payments up to 300 hours per calendar year, including all tax deferred, tax sheltered or tax-exempt items of income derived from elective employee payroll deductions or salary reductions, but excluding management deferred compensation and all other compensation.
Normal Form	Life Annuity
Member Contribution Rate	Minimum: 3% Maximum 5% **Current: 5%**
Multiplier	Minimum: 1.3% Maximum 2.55% **Current: 1.3%**
Normal Retirement Date	Same as old plan.
Early Retirement Date	Same as old plan.
Vesting	5 Year Cliff.
Cost of Living Adjustment	None for benefits earned on and after October 1, 2013.

The Member Contribution Rate and Multiplier will be adjusted as necessary so that the Target Total Employer Contribution Percentage is within the mandated corridors.

Provisions in Effect for Grandfathered Members within 5 years of Retirement as of September 30, 2013. All other Members have benefits frozen as of that date.

Credited Service	Years and fractional parts of years of continuous uninterrupted service with the City as a General Employee.
Salary	Total compensation reported on the W-2, but excluding accumulated sick leave and vacation pay and special bonuses, plus all tax deferred, tax sheltered, or tax exempt items of income.
Average Final Compensation	Average of Salary paid during the highest three (3) years of the last five (5).
Normal Retirement	
Date	First of the month following the earlier of: 1) age 65 and the completion of 5 years of Credited Service, or 2) 30 years of Credited Service, regardless of age.
Benefit	2.55% of Average Final Compensation (AFC) times Credited Service plus $100 supplement.
Form of Benefit	10 Year Certain and Life Annuity (options available).
Early Retirement	
Date	Earlier of: 1) age 55 and the completion of 5 years of Credited Service, or 2) the completion of 25 years of Credited Service, regardless of age.
Benefit	Same as for Normal Retirement but reduced 3% for each year that Early Retirement precedes Normal Retirement.
Vesting (Termination of Employment)	
Less than 5 years	Refund of Member Contributions without interest.
5 years of more	Vested accrued benefit (determined as for Normal Retirement) paid beginning at the otherwise Normal Retirement Date, or a refund of Member Contributions without interest.

Disability	
Eligibility	After completion of 5 years of Credited Service, or from date of hire if service incurred.
Benefit	$50, plus 1% of AFC times Credited Service. Minimum benefit is $100 per month.
Form of Benefit	Paid until earlier of death or recovery (with 120 payments guaranteed).
Cost-of-Living Adjustment	All Retirees, including Normal, Early, Disability, DROP, and Vested Terminated participants, and their joint pensioners and Beneficiaries (but excluding pre-retirement death Beneficiaries) shall receive a 3% automatic lifetime COLA, beginning the first October 1 after one year of benefit payments.
Pre-Retirement Death Benefits	
Non-vested	Refund of Member Contributions without interest.
Vested or Eligible to Retire	Accrued benefit payable to beneficiary for 10 years.
Supplemental Benefit	$100.00 per month, payable for life, to all retirees (including disability retirees).
Contributions	
Members	8.18% of Salary, beginning October 1, 2008.
City	Remaining amount necessary to pay the Normal Cost and fund the accrued, past service liability as provided in Part VII of Chapter 112, Florida Statutes.

<u>Deferred Retirement Option Plan</u>

Eligibility	Satisfaction of Normal Retirement requirements (earlier of (1) Age 65 and 5 years of Credited Service, or (2) 30 years of Credited Service, regardless of age).
Participation	Not to exceed 96 months.
Rate of Return	6.5% or actual net rate of investment return (total return net of brokerage commissions and transaction costs) credited each fiscal quarter.
Form of Distribution	Cash lump sum (options available) at termination of employment.