

PALM BAY
POLICE AND FIREFIGHTERS' PENSION FUND (GENERAL EMPLOYEES)
ACTUARIAL VALUATION
AS OF OCTOBER 1, 2022
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2024
GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2022



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

March 29, 2023

Board of Trustees
City of Palm Bay
Police and Firefighters' Pension Board

Re: City of Palm Bay
Palm Bay Police and Firefighters' Pension Fund (General Employees)

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Palm Bay Police and Firefighters' Pension Fund (General Employees). Included are the related results for GASB Statements No. 67 and No. 68. The funding 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. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have 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 reflect 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 valuations, 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 valuations, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Palm Bay, 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 and accounting 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.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2021. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2022 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

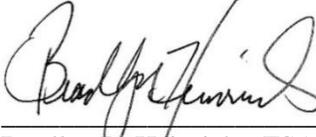
The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the 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 Palm Bay, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police and Firefighters' Pension Fund (General Employees). 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: 
Bradley R. Heinrichs, FSA, EA, MAAA
Enrolled Actuary #20-6901

By: 
Patrick T. Donlan, EA, ASA, MAAA
Enrolled Actuary #20-6595

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Enclosures

TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	6
	b. Changes Since Prior Valuation	7
	c. Comparative Summary of Principal Valuation Results	8
II	Valuation Information	
	a. History of Funding Progress	14
	b. Actuarial Assumptions and Methods	15
	c. Discussion of Risk	17
III	Trust Fund	20
IV	Member Statistics	
	a. Statistical Data	25
	b. Valuation Participant Reconciliation	26
V	Governmental Accounting Standards Board Statements No. 67 and No. 68 Disclosure Information	27

SUMMARY OF REPORT

The regular annual actuarial valuation of the Palm Bay Police and Firefighters' Pension Fund (General Employees), performed as of October 1, 2022, 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, 2024.

The contribution requirements, compared with those set forth in the October 1, 2021 actuarial valuation report, are as follows:

Valuation Date	10/1/2022	10/1/2021
Applicable to Fiscal Year Ending	<u>9/30/2024</u>	<u>9/30/2023</u>
Minimum Required Contribution	\$0	\$0
% of Projected Annual Payroll	0.0%	0.0%

The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund.

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

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

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2022</u>	<u>10/1/2021</u>
A. Participant Data		
Actives	0	0
Service Retirees	0	0
Beneficiaries	1	1
Disability Retirees	0	0
Terminated Vested	<u>0</u>	<u>0</u>
 Total	 1	 1
 Payroll Under Assumed Ret. Age	 0	 0
 Annual Rate of Payments to:		
Service Retirees	0	0
Beneficiaries	2,532	2,532
Disability Retirees	0	0
Terminated Vested	0	0
 B. Assets		
Actuarial Value (AVA)	233,927	227,664
Market Value (MVA)	205,212	248,694
 C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	0	0
Disability Benefits	0	0
Death Benefits	0	0
Vested Benefits	0	0
Refund of Contributions	0	0
Service Retirees	0	0
Beneficiaries	12,188	12,852
Disability Retirees	0	0
Terminated Vested	<u>0</u>	<u>0</u>
 Total	 12,188	 12,852

C. Liabilities - (Continued)	<u>10/1/2022</u>	<u>10/1/2021</u>
Present Value of Future Salaries	0	0
Present Value of Future Member Contributions	0	0
Total Normal Cost	0	0
Present Value of Future Normal Costs (EAN)	0	0
Accrued Liability (Retirement)	0	0
Accrued Liability (Disability)	0	0
Accrued Liability (Death)	0	0
Accrued Liability (Vesting)	0	0
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives)	<u>12,188</u>	<u>12,852</u>
Total Actuarial Accrued Liability (EAN AL)	12,188	12,852
Total Actuarial Accrued Liability (Aggregate)	233,927	227,664
Unfunded Actuarial Accrued Liability (UAAL)	0	0
Funded Ratio (AVA / EAN AL)	1919.3%	1771.4%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2022</u>	<u>10/1/2021</u>
Vested Accrued Benefits		
Inactives	12,188	12,852
Actives	0	0
Member Contributions	0	0
Total	<u>12,188</u>	<u>12,852</u>
Non-vested Accrued Benefits	<u>0</u>	<u>0</u>
Total Present Value		
Accrued Benefits (PVAB)	12,188	12,852
Funded Ratio (MVA / PVAB)	1683.7%	1935.1%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	982	
Benefits Paid	(2,532)	
Interest	886	
Other	0	
Total	<u>(664)</u>	

Valuation Date	10/1/2022	10/1/2021
Applicable to Fiscal Year Ending	<u>9/30/2024</u>	<u>9/30/2023</u>

E. Pension Cost

Normal Cost (with interest) % of Total Annual Payroll ¹	0.0	0.0
Administrative Expenses (with interest) % of Total Annual Payroll ¹	0.0	0.0
Payment Required to Amortize Unfunded Actuarial Accrued Liability (as of 10/1/2022, with interest) % of Total Annual Payroll ¹	0.0	0.0
Minimum Required Contribution % of Total Annual Payroll ¹	0.0	0.0
Expected Member Contributions % of Total Annual Payroll ¹	0.0	0.0
Expected City Contribution % of Total Annual Payroll ¹	0.0	0.0

F. Past Contributions

Plan Years Ending:	<u>9/30/2022</u>
Total Required Contribution	0
City Requirement	0
Actual Contributions Made:	
Members (excluding buyback)	0
City	<u>0</u>
Total	0

G. Net Actuarial (Gain)/Loss N/A

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
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N/A – Aggregate Actuarial Cost Method

I. 5 Year Comparison of Investment Return on Market Value and Actuarial Value

		<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended	9/30/2022	-15.61%	5.03%	7.65%
Year Ended	9/30/2021	19.52%	11.59%	7.65%
Year Ended	9/30/2020	11.19%	9.47%	7.75%
Year Ended	9/30/2019	5.39%	9.45%	7.75%
Year Ended	9/30/2018	10.06%	8.32%	7.75%

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.

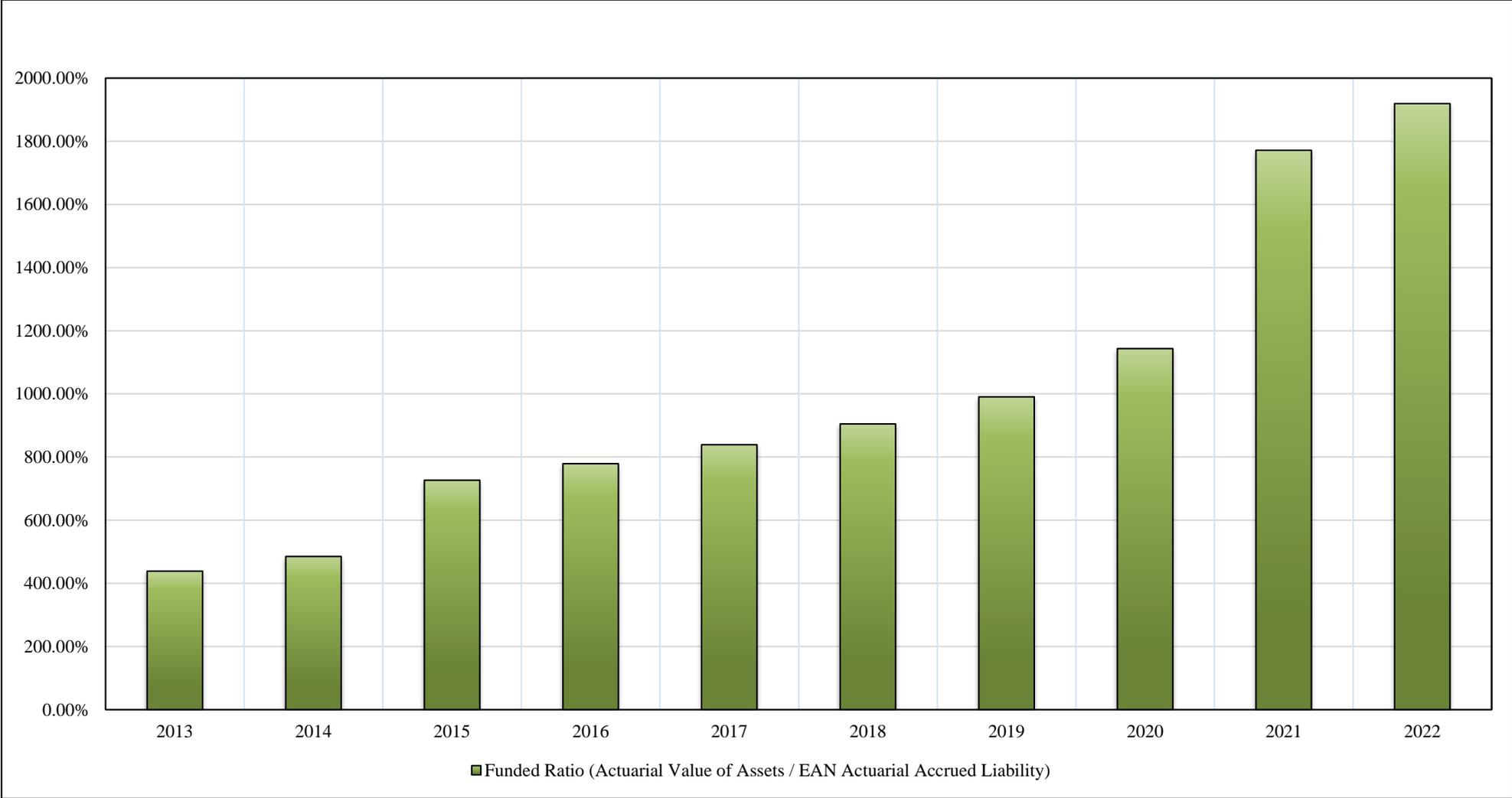


Patrick T. Donlan, EA, ASA, MAAA
Enrolled Actuary #20-6595

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

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

This actuarial valuation report has been prepared in accordance with generally accepted actuarial principles and practices. The major assumptions and methods used in this valuation are as follows:

Demographic Assumptions

Mortality Rate

Healthy Retiree Lives:

Female: PubG.H-2010 for Healthy Retirees.

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

Beneficiary Lives:

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

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

All rates 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.

Economic Assumptions

Interest Rate

7.65% 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

None.

Actuarial Methods

Funding Method

Aggregate Actuarial Cost Method.

Actuarial Value of Assets

The market value of assets is adjusted to recognize, over a four-year period, investment earnings greater than (or less than) the assumed investment return. The Actuarial Value of Assets shall not be more than 120% or less than 80% of the market value of assets. Details are shown in the Asset Information Section of the report.

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 330.6% on October 1, 2012 to 1919.3% on October 1, 2022.
- 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 -7.8% on October 1, 2012 to -2.5% on October 1, 2022. The current Net Cash Flow Ratio of -2.5% 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.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2022</u>	<u>10/1/2021</u>	<u>10/1/2017</u>	<u>10/1/2012</u>
<u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	12,188	12,852	22,081	46,575
Total Accrued Liability (EAN)	12,188	12,852	22,081	46,575
Inactive AL / Total AL	100.0%	100.0%	100.0%	100.0%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	233,927	227,664	185,244	153,955
Total Accrued Liability (EAN)	12,188	12,852	22,081	46,575
AVA / Total Accrued Liability (EAN)	1919.3%	1771.4%	838.9%	330.6%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow ²	(5,064)	(7,243)	(8,485)	(12,462)
Market Value of Assets (MVA)	205,212	248,694	189,302	160,172
Ratio	-2.5%	-2.9%	-4.5%	-7.8%

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, 2022

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	21,449.85
Deposits	8.25
Prepaid Expenses	57.75
Cash	38.02
 Total Cash and Equivalents	 21,553.87
Receivables:	
Accounts Receivable	1.37
 Total Receivable	 1.37
Investments:	
Mutual Funds:	
Fixed Income	53,468.70
Equity	131,092.78
 Total Investments	 184,561.48
 Total Assets	 206,116.72
 <u>LIABILITIES</u>	
Payables:	
Accounts Payable	51.13
To Firefighters' Trust Fund	573.09
To Police Officers' Trust Fund	280.02
 Total Liabilities	 904.24
 NET POSITION RESTRICTED FOR PENSIONS	 205,212.48

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
 FOR THE YEAR ENDED SEPTEMBER 30, 2022
 Market Value Basis

ADDITIONS

Total Contributions		0.00
Investment Income:		
Net Increase in Fair Value of Investments	(41,844.54)	
Interest & Dividends	3,634.36	
Less Investment Expense ¹	(206.94)	
Net Investment Income		(38,417.12)
Total Additions		(38,417.12)

DEDUCTIONS

Distributions to Members:		
Benefit Payments	2,531.76	
Total Distributions		2,531.76
Administrative Expense		2,532.27
Total Deductions		5,064.03
Net Increase in Net Position		(43,481.15)
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		248,693.63
End of the Year		205,212.48

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

ACTUARIAL ASSET VALUATION
September 30, 2022

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a four year period. In the first year, 25% of the gain or loss is recognized. In the second year 50%, in the third year 75%, and in the fourth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Gain/(Loss)	<u>Gains/(Losses) Not Yet Recognized</u>			
		Amounts Not Yet Recognized by Valuation Year			
		2022	2023	2024	2025
9/30/2019	(4,606)	0	0	0	0
9/30/2020	6,775	1,693	0	0	0
9/30/2021	25,058	12,528	6,263	0	0
9/30/2022	(57,248)	(42,936)	(28,624)	(14,312)	0
Total		(28,715)	(22,361)	(14,312)	0

<u>Development of Investment Gain/(Loss)</u>	
Market Value of Assets, 09/30/2021	248,694
Contributions Less Benefit Payments & Admin Expenses	(5,064)
Expected Investment Earnings ¹	18,831
Actual Net Investment Earnings	(38,417)
2022 Actuarial Investment Gain/(Loss)	<u>(57,248)</u>

¹ Expected Investment Earnings = 0.0765 * [248,694 + 0.5 * (5,064)]

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2022	205,212
(2) Gains/(Losses) Not Yet Recognized	(28,715)
(3) Actuarial Value of Assets, 09/30/2022, (1) - (2)	<u>233,927</u>
(A) 09/30/2021 Actuarial Assets:	227,664
(I) Net Investment Income:	
1. Interest and Dividends	3,634
2. Net Increase in Fair Value of Investments	(41,845)
3. Change in Actuarial Value	49,745
4. Investment Expenses	(207)
Total	<u>11,328</u>
(B) 09/30/2022 Actuarial Assets:	233,927
Actuarial Assets Rate of Return = 2I/(A+B-I):	5.03%
Market Value of Assets Rate of Return:	-15.61%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(5,895)
10/01/2022 Limited Actuarial Assets:	233,927

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 SEPTEMBER 30, 2022
 Actuarial Asset Basis

REVENUES

Contributions:

Total Contributions		0.00
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Earnings from Investments:

Interest & Dividends		3,634.36
Unrealized Gain (Loss)		(41,844.54)
Change in Actuarial Value		49,745.00

Total Earnings and Investment Gains		11,534.82
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EXPENDITURES

Distributions to Members:

Benefit Payments		2,531.76
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Total Distributions		2,531.76
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Expenses:

Investment related ¹		206.94
Administrative		2,532.27

Total Expenses		2,739.21
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Change in Net Assets for the Year		6,263.85
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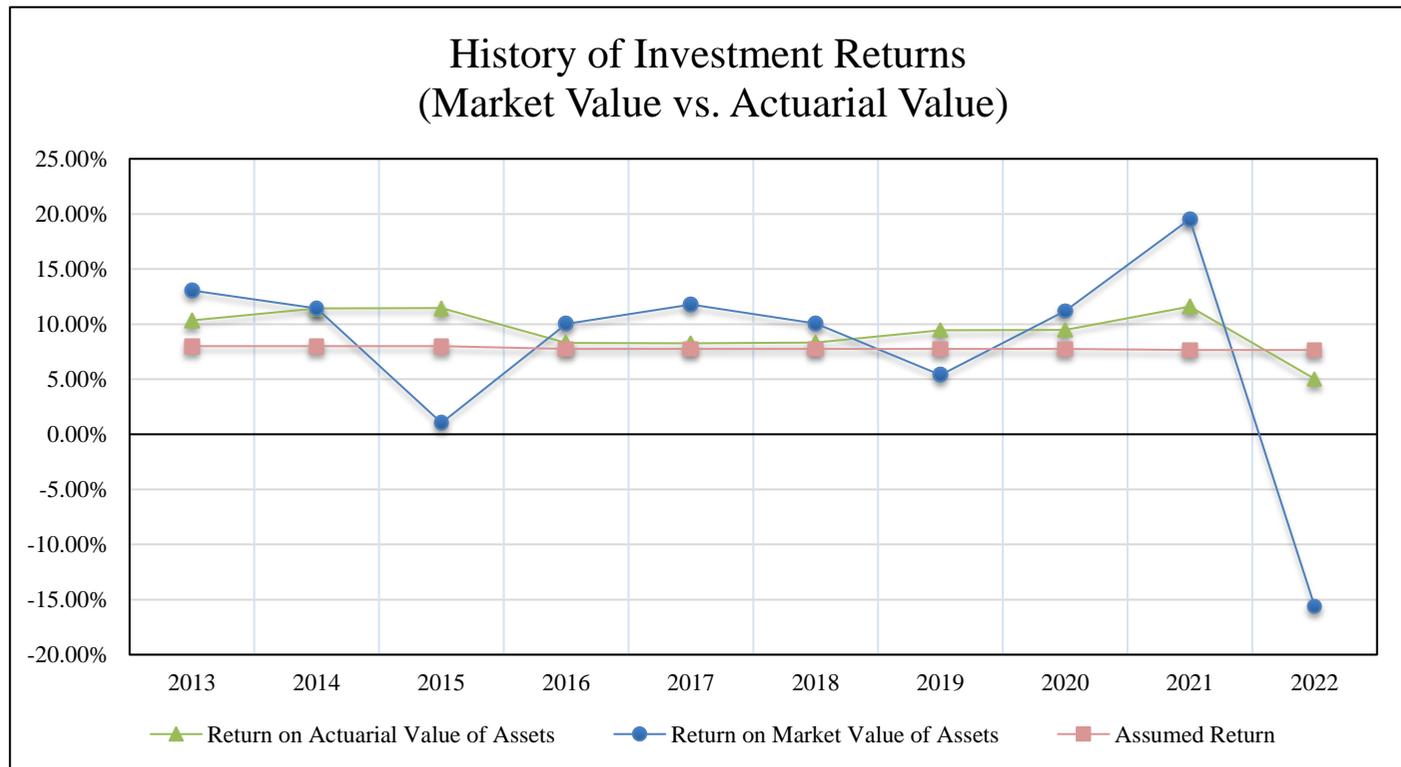
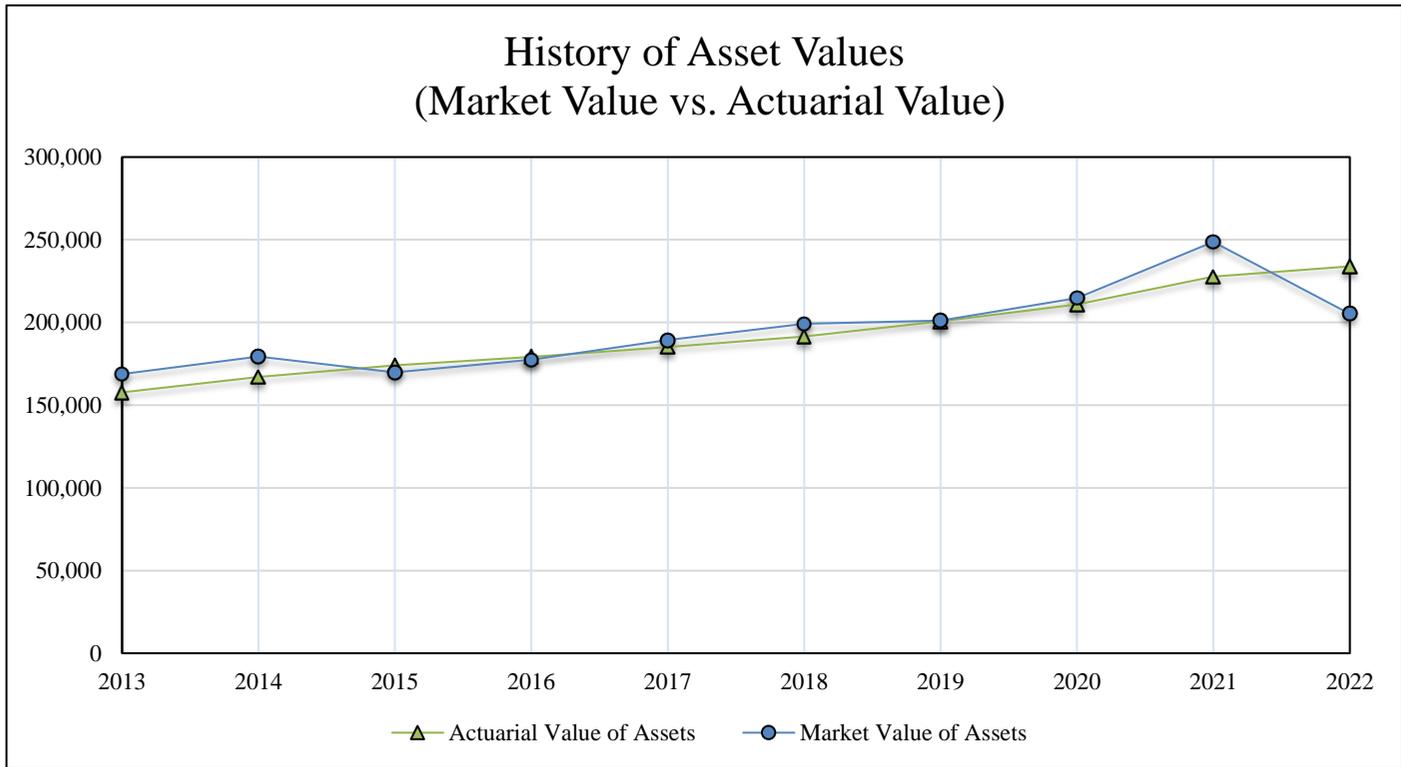
Net Assets Beginning of the Year		227,663.63
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Net Assets End of the Year ²		233,927.48
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

²Net Assets may be limited for actuarial consideration.

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



STATISTICAL DATA

	<u>10/1/2022</u>	<u>10/1/2021</u>	<u>10/1/2020</u>	<u>10/1/2019</u>
<u>Service Retirees</u>				
Number	0	0	1	1
Average Current Age	N/A	N/A	95.4	94.4
Average Annual Benefit	N/A	N/A	\$1,583	\$1,583
<u>Beneficiaries</u>				
Number	1	1	1	1
Average Current Age	88.3	87.3	86.3	85.3
Average Annual Benefit	\$2,532	\$2,532	\$2,532	\$2,532

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2021	0
b. Terminations	
i. Vested (partial or full) with deferred annuity	0
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. Continuing participants	0
g. New entrants / Rehires	<u>0</u>
h. Total active life participants in valuation	<u>0</u>

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity) <u> </u>	Vested (Due Refund) <u> </u>	<u>Total</u>
a. Number prior valuation	0	1	0	0	0	1
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	0	0	0	0	0
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	0	1	0	0	0	1

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2022

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	21,450
Deposits	8
Prepaid Expenses	58
Cash	38
 Total Cash and Equivalents	 21,554
Receivables:	
Accounts Receivable	1
 Total Receivable	 1
Investments:	
Mutual Funds:	
Fixed Income	53,468
Equity	131,093
 Total Investments	 184,561
 Total Assets	 206,116
 <u>LIABILITIES</u>	
Payables:	
Accounts Payable	51
To Firefighters' Trust Fund	573
To Police Officers' Trust Fund	280
 Total Liabilities	 904
 NET POSITION RESTRICTED FOR PENSIONS	 205,212

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2022
Market Value Basis

ADDITIONS

Total Contributions		0
Investment Income:		
Net Increase in Fair Value of Investments	(41,845)	
Interest & Dividends	3,634	
Less Investment Expense ¹	(207)	
Net Investment Income		(38,418)
Total Additions		(38,418)
<u>DEDUCTIONS</u>		
Distributions to Members:		
Benefit Payments	2,532	
Total Distributions		2,532
Administrative Expense		2,532
Total Deductions		5,064
Net Increase in Net Position		(43,482)
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		248,694
End of the Year		205,212

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

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2022)

Plan Administration

The Plan is a single-employer defined benefit pension plan. The Plan is closed to new general employees and that classification consists of retirees only.

Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	1
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	-
	1
	1

Contributions

Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2022:

Asset Class	Target Allocation
Domestic Equity	35.0%
International Equity	15.0%
Bonds	25.0%
Convertibles	10.0%
Private Real Estate	10.0%
Infrastructure	5.0%
Total	100.0%

Concentrations:

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

Rate of Return:

For the year ended September 30, 2022, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was -15.61 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2022 were as follows:

Total Pension Liability	\$ 11,206
Plan Fiduciary Net Position	\$ (205,212)
Sponsor's Net Pension Liability	<u>\$ (194,006)</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	1831.27%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2021 updated to September 30, 2022 using the following actuarial assumptions:

Inflation	2.70%
Salary Increases	N/A
Discount Rate	7.65%
Investment Rate of Return	7.65%

Mortality Healthy Retiree Lives:

Female: PubG.H-2010 for Healthy Retirees.

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

Mortality Rate Beneficiary Lives:

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

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

All rates 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.

Since this is a retiree-only plan, the assumptions for withdrawal, retirement, disability, payroll growth, and salary increases are not applicable. Accordingly, no formal actuarial experience study has been performed for these assumptions.

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2022 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

GASB 67

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2022 are summarized in the following table:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return¹</u>
Domestic Equity	7.1%
International Equity	3.1%
Bonds	2.0%
Convertibles	6.4%
Private Real Estate	6.4%
Infrastructure	5.6%

¹ Source: Burgess Chambers

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above “Long Term Expected Real Rate of Returns” by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.65 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	1% Decrease	Current Discount Rate	1% Increase
	<u>6.65%</u>	<u>7.65%</u>	<u>8.65%</u>
Sponsor's Net Pension Liability	\$ (193,591)	\$ (194,006)	\$ (194,392)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 2 Fiscal Years

	<u>09/30/2022</u>	<u>09/30/2021</u>
Total Pension Liability		
Service Cost	-	-
Interest	1,200	1,165
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(4,414)	1,957
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(2,532)	(2,796)
Net Change in Total Pension Liability	(5,746)	326
Total Pension Liability - Beginning	16,952	16,626
Total Pension Liability - Ending (a)	<u>\$ 11,206</u>	<u>\$ 16,952</u>
Plan Fiduciary Net Position		
Net Investment Income	(38,418)	41,208
Benefit Payments, including Refunds of Employee Contributions	(2,532)	(2,796)
Administrative Expense	(2,532)	(4,446)
Net Change in Plan Fiduciary Net Position	(43,482)	33,966
Plan Fiduciary Net Position - Beginning	248,694	214,728
Plan Fiduciary Net Position - Ending (b)	<u>\$ 205,212</u>	<u>\$ 248,694</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (194,006)</u>	<u>\$ (231,742)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	1831.27%	1467.05%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

SCHEDULE OF CONTRIBUTIONS
Last 2 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2022	\$ -	\$ -	\$ -	N/A	N/A
09/30/2021	\$ -	\$ -	\$ -	N/A	N/A

Notes to Schedule

Valuation Date: 10/01/2020

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates can be found in the October 1, 2020 Actuarial Valuation for the City of Palm Bay Police and Firefighters' Pension Fund (General Employees) prepared by Foster & Foster Actuaries and Consultants.

SCHEDULE OF INVESTMENT RETURNS
Last 2 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2022	-15.61%
09/30/2021	19.52%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2022)

Plan Description

The Plan is a single-employer defined benefit pension plan. The Plan is closed to new general employees and that classification consists of retirees only.

Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	1	
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-	
Active Plan Members	-	
	1	
	1	

Contributions

Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

Net Pension Liability

The measurement date is September 30, 2022.

The measurement period for the pension expense was October 1, 2021 to September 30, 2022.

The reporting period is October 1, 2021 through September 30, 2022.

The Sponsor's Net Pension Liability was measured as of September 30, 2022.

The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2021 updated to September 30, 2022 using the following actuarial assumptions:

Inflation	2.70%	
Salary Increases	N/A	
Discount Rate	7.65%	
Investment Rate of Return	7.65%	

Mortality Healthy Retiree Lives:

Female: PubG.H-2010 for Healthy Retirees.

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

Mortality Rate Beneficiary Lives:

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

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

All rates are projected generationally with Mortality Improvement Scale MP-2018. We feel this assumption sufficiently

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.

Since this is a retiree-only plan, the assumptions for withdrawal, retirement, disability, payroll growth, and salary increases are not applicable. Accordingly, no formal actuarial experience study has been performed for these assumptions.

GASB 68

The Long-Term Expected Rate of Return on Pension Plan investments can be determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

For 2022 the inflation rate assumption of the investment advisor was 2.50%.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2022 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return¹</u>
Domestic Equity	35.0%	7.1%
International Equity	15.0%	3.1%
Bonds	25.0%	2.0%
Convertibles	10.0%	6.4%
Private Real Estate	10.0%	6.4%
Infrastructure	5.0%	5.6%
<u>Total</u>	<u>100.0%</u>	

¹ Source: Burgess Chambers

Please note that long term expected return of the total portfolio is greater than simply multiplying each of the above “Long Term Expected Real Rate of Returns” by their target allocation % and adding them together. Not only is the time horizon longer for an actuarial valuation relative to the time horizon over which the above projected returns were generated, but also there is an additional correlation resulting from a diversified portfolio that will provide additional returns.

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.65 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Balances at September 30, 2021	\$ 16,952	\$ 248,694	\$ (231,742)
Changes for a Year:			
Service Cost	-	-	-
Interest	1,200	-	1,200
Differences between Expected and Actual Experience	(4,414)	-	(4,414)
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Net Investment Income	-	(38,418)	38,418
Benefit Payments, including Refunds of Employee Contributions	(2,532)	(2,532)	-
Administrative Expense	-	(2,532)	2,532
Net Changes	(5,746)	(43,482)	37,736
Balances at September 30, 2022	\$ 11,206	\$ 205,212	\$ (194,006)

Sensitivity of the Net Pension Liability to changes in the Discount Rate.

	Current		
	1% Decrease	Discount Rate	1% Increase
	6.65%	7.65%	8.65%
Sponsor's Net Pension Liability	\$ (193,591)	\$ (194,006)	\$ (194,392)

Pension Plan Fiduciary Net Position.

Detailed information about the pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

**PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS**

For the year ended September 30, 2022, the Sponsor will recognize a Pension Expense of \$(14,365).

On September 30, 2022, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	28,975	-
Total	\$ 28,975	\$ -

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended September 30:		
2023	\$	6,004
2024	\$	5,083
2025	\$	6,438
2026	\$	11,450
2027	\$	-
Thereafter	\$	-

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 2 Fiscal Years

	<u>09/30/2022</u>	<u>09/30/2021</u>
Total Pension Liability		
Service Cost	-	-
Interest	1,200	1,165
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(4,414)	1,957
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(2,532)</u>	<u>(2,796)</u>
Net Change in Total Pension Liability	(5,746)	326
Total Pension Liability - Beginning	16,952	16,626
Total Pension Liability - Ending (a)	<u>\$ 11,206</u>	<u>\$ 16,952</u>
Plan Fiduciary Net Position		
Net Investment Income	(38,418)	41,208
Benefit Payments, including Refunds of Employee Contributions	(2,532)	(2,796)
Administrative Expense	<u>(2,532)</u>	<u>(4,446)</u>
Net Change in Plan Fiduciary Net Position	(43,482)	33,966
Plan Fiduciary Net Position - Beginning	248,694	214,728
Plan Fiduciary Net Position - Ending (b)	<u>\$ 205,212</u>	<u>\$ 248,694</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (194,006)</u>	<u>\$ (231,742)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	1831.27%	1467.05%
Covered Payroll	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	N/A	N/A

SCHEDULE OF CONTRIBUTIONS
Last 2 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2022	\$ -	\$ -	\$ -	N/A	N/A
09/30/2021	\$ -	\$ -	\$ -	N/A	N/A

Notes to Schedule

Valuation Date: 10/01/2020

Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates can be found in the October 1, 2020 Actuarial Valuation for the City of Palm Bay Police and Firefighters' Pension Fund (General Employees) prepared by Foster & Foster Actuaries and Consultants.

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The following information is not required to be disclosed but is provided for informational purposes.

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2022

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (231,742)	\$ 24,968	\$ 1,842	\$ -
Total Pension Liability Factors:				
Service Cost	-	-	-	-
Interest	1,200	-	-	1,200
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(4,414)	4,414	-	-
Current year amortization of experience difference	-	(4,414)	-	(4,414)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(2,532)	-	-	-
Net change	<u>(5,746)</u>	<u>-</u>	<u>-</u>	<u>(3,214)</u>
Plan Fiduciary Net Position:				
Projected Net Investment Income	18,831	-	-	(18,831)
Difference between projected and actual earnings on Pension Plan investments	(57,249)	-	57,249	-
Current year amortization	-	(7,222)	(12,370)	5,148
Benefit Payments, including Refunds of Employee Contributions	(2,532)	-	-	-
Administrative Expenses	(2,532)	-	-	2,532
Net change	<u>(43,482)</u>	<u>(7,222)</u>	<u>44,879</u>	<u>(11,151)</u>
Ending Balance	<u>\$ (194,006)</u>	<u>\$ 17,746</u>	<u>\$ 46,721</u>	<u>\$ (14,365)</u>

AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and Actual Earnings on Pension Plan Investments

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
2022	\$ 57,249	5	\$ 11,449	\$ 11,450	\$ 11,450	\$ 11,450	\$ 11,450	\$ -	\$ -	\$ -	\$ -	\$ -
2021	\$ (25,058)	5	\$ (5,012)	\$ (5,012)	\$ (5,012)	\$ (5,012)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ (6,774)	5	\$ (1,355)	\$ (1,355)	\$ (1,355)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 4,607	5	\$ 921	\$ 921	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (4,274)	5	\$ (855)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 5,148	\$ 6,004	\$ 5,083	\$ 6,438	\$ 11,450	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
2022	\$ (4,414)	1	\$ (4,414)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (4,414)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -