

CITY OF NAPLES
GENERAL RETIREMENT SYSTEM
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

December 13, 2022

Board of Trustees
City of Naples
General Employees' Pension Board

Re: City of Naples General Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Naples General Retirement System. 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 City of Naples, 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 City of Naples, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the General Retirement System. 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 #20-7778

By: 

Sara E. Carlson, ASA, EA, MAAA
Enrolled Actuary #20-8546

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Naples General Retirement System, 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 Applicable to Fiscal Year Ending	10/1/2022 <u>9/30/2024</u>	10/1/2021 <u>9/30/2023</u>
Minimum Required Contribution % of Projected Annual Payroll	14.21%	15.19%
Member Contributions (Est.) % of Projected Annual Payroll	3.72%	3.83%
City Required Contribution % of Projected Annual Payroll	10.49%	11.36%

¹ Please note that a shortfall contribution of \$33,381.91 is due in addition to the above stated requirements for the fiscal year ending September 30, 2023.

As you can see, the Minimum Required Contribution shows a decrease when compared to the results set forth in the October 1, 2021 actuarial valuation report. The decrease is attributable to a significant increase in pensionable payroll, thereby reducing the amortization payment for the Unfunded Actuarial Accrued Liability, when expressed as a percentage of payroll. This decrease was offset in part by net unfavorable actuarial experience described in the next paragraph.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an investment return of 5.36% (Actuarial Asset Basis), falling short of the 7.00% assumption and an average salary increase of 8.99%, exceeding the 5.16% assumption. These losses were offset in part by gains associated with inactive mortality and turnover experience.

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

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

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2021	11.36%
(2) Summary of Contribution Impact by component:	
Change in Normal Cost Rate	-0.07%
Change in Administrative Expense Percentage	-0.04%
Payroll Change Effect on UAAL Amortization	-0.55%
Investment Return (Actuarial Asset Basis)	0.74%
Salary Increases	0.38%
Active Decrements	-0.48%
Inactive Mortality	-0.81%
UAAL Amortization Impact from Contribution Policy	-0.31%
Assumption Change	0.00%
Decrease in Expected Member Contributions	0.11%
Other	<u>0.16%</u>
Total Change in Contribution	-0.87%
(3) Contribution Determined as of October 1, 2022	10.49%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2022</u>	<u>10/1/2021</u>
A. Participant Data		
Actives	325	320
Service Retirees	232	233
DROP Retirees	1	1
Beneficiaries	23	20
Disability Retirees	1	1
Terminated Vested	<u>188</u>	<u>135</u>
Total	770	710
Payroll Under Assumed Ret. Age	19,416,642	17,621,383
Annual Rate of Payments to:		
Service Retirees	4,273,728	4,273,862
DROP Retirees	58,927	58,927
Beneficiaries	251,880	203,005
Disability Retirees	10,171	10,171
Terminated Vested	386,300	277,803
B. Assets		
Actuarial Value (AVA) ¹	68,438,716	66,978,467
Market Value (MVA) ¹	61,479,101	72,543,522
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	34,043,984	33,504,213
Disability Benefits	667,480	666,974
Death Benefits	289,343	285,780
Vested Benefits	2,295,649	2,286,526
Refund of Contributions	2,903,100	2,730,189
Service Retirees	42,263,794	42,680,709
DROP Retirees ¹	867,268	816,045
Beneficiaries	2,325,506	1,929,999
Disability Retirees	67,748	69,626
Terminated Vested	<u>2,798,257</u>	<u>2,208,389</u>
Total	88,522,129	87,178,450

C. Liabilities - (Continued)	<u>10/1/2022</u>	<u>10/1/2021</u>
Present Value of Future Salaries	143,464,629	133,010,446
Present Value of Future Member Contributions	5,336,884	5,094,300
Normal Cost (Retirement)	1,096,411	998,181
Normal Cost (Disability)	28,390	27,039
Normal Cost (Death)	16,786	16,066
Normal Cost (Vesting)	143,906	136,599
Normal Cost (Refunds)	<u>263,579</u>	<u>239,775</u>
Total Normal Cost	1,549,072	1,417,660
Present Value of Future Normal Costs	10,577,154	9,724,703
Accrued Liability (Retirement)	26,567,230	26,665,009
Accrued Liability (Disability)	475,170	486,326
Accrued Liability (Death)	175,853	175,212
Accrued Liability (Vesting)	1,270,182	1,304,871
Accrued Liability (Refunds)	1,133,967	1,117,561
Accrued Liability (Inactives) ¹	<u>48,322,573</u>	<u>47,704,768</u>
Total Actuarial Accrued Liability (EAN AL)	77,944,975	77,453,747
Unfunded Actuarial Accrued Liability (UAAL)	9,506,259	10,475,280
Funded Ratio (AVA / EAN AL)	87.8%	86.5%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2022</u>	<u>10/1/2021</u>
Vested Accrued Benefits		
Inactives ¹	48,322,573	47,704,768
Actives	12,685,748	12,810,521
Member Contributions	<u>9,148,948</u>	<u>9,307,726</u>
Total	70,157,269	69,823,015
Non-vested Accrued Benefits	<u>1,141,716</u>	<u>1,270,668</u>
Total Present Value Accrued Benefits (PVAB)	71,298,985	71,093,683
Funded Ratio (MVA / PVAB)	86.2%	102.0%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	510,155	
Benefits Paid	(5,102,812)	
Interest	4,797,959	
Other	<u>0</u>	
Total	205,302	

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 ²	7.98	8.05
Administrative Expenses (with interest) % of Total Annual Payroll ²	0.84	0.88
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 10/1/2022, with interest) % of Total Annual Payroll ²	5.39	6.26
Minimum Required Contribution % of Total Annual Payroll ²	14.21	15.19
Expected Member Contributions % of Total Annual Payroll ²	3.72	3.83
Expected City Contribution % of Total Annual Payroll ²	10.49	11.36

F. Past Contributions

Plan Years Ending:	<u>9/30/2022</u>
City Requirement	2,461,429
Actual Contributions Made:	
Members (excluding buyback)	731,881
City	<u>2,461,429</u>
Total	3,193,310

G. Net Actuarial (Gain)/Loss (25,727)

¹ The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2022 and 9/30/2021.

² Contributions developed as of 10/1/2022 are expressed as a percentage of total annual payroll at 10/1/2022 of \$19,416,642.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2022	9,506,259
2023	9,052,731
2024	8,567,460
2029	5,471,020
2033	1,200,570
2038	421,322
2042	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2022	8.99%	5.16%
Year Ended 9/30/2021	3.32%	5.18%
Year Ended 9/30/2020	3.95%	5.20%
Year Ended 9/30/2019	3.89%	5.24%
Year Ended 9/30/2018	3.82%	5.28%

(ii) 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	-12.37%	5.36%	7.00%
Year Ended 9/30/2021	21.69%	9.74%	7.00%
Year Ended 9/30/2020	4.00%	7.43%	7.30%
Year Ended 9/30/2019	3.66%	7.27%	7.40%
Year Ended 9/30/2018	10.34%	8.92%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2022	\$19,416,642
	10/1/2012	15,661,751
(b) Total Increase		23.97%
(c) Number of Years		10.00
(d) Average Annual Rate		2.17%

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.



Douglas H. Lozen, EA, MAAA
Enrolled Actuary #20-7778

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, 2021	\$10,475,280
(2) Sponsor Normal Cost developed as of October 1, 2021	742,761
(3) Expected administrative expenses for the year ended September 30, 2022	154,661
(4) Expected interest on (1), (2) and (3)	790,676
(5) Sponsor contributions to the System during the year ended September 30, 2022	2,461,429
(6) Expected interest on (5)	169,963
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2022 (1)+(2)+(3)+(4)-(5)-(6)	9,531,986
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	(25,727)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2022	9,506,259

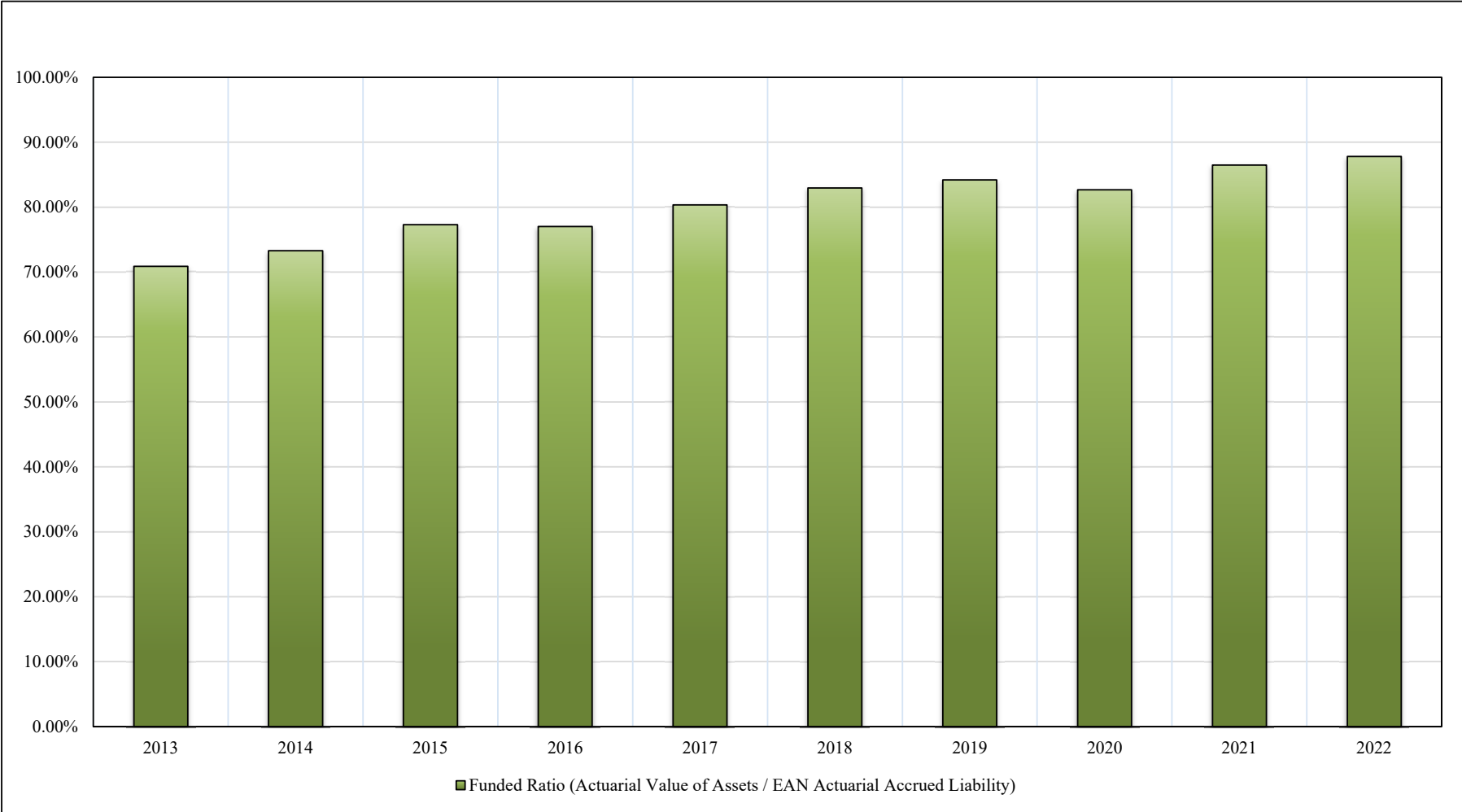
<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2022 Amount</u>	<u>Amortization Amount</u>
Experience Loss	10/1/2002	10	1,281,590	170,532
Experience Loss	10/1/2003	11	489,627	61,023
Experience Loss	10/1/2004	11	2,244,404	279,726
Amendment	10/1/2004	11	19,009	2,369
Experience Gain	10/1/2005	11	(1,481,103)	(184,594)
Experience Gain	10/1/2006	11	(145,020)	(18,074)
Amendment	10/1/2006	11	49,075	6,116
Experience Loss	10/1/2007	11	580,792	72,386
Method/Assump Change	10/1/2007	11	3,433,023	427,867
Experience Loss	10/1/2008	11	4,275,212	532,831
Assump Changes	10/1/2009	11	(24,270)	(3,025)
Experience Loss	10/1/2009	11	5,357,604	667,732
Experience Loss	10/1/2010	11	477,780	59,547
Benefit Change	10/1/2010	11	(6,812,047)	(849,003)
Experience Loss	10/1/2011	11	2,090,317	260,522
Benefit Change	10/1/2011	11	269,185	33,549
Experience Loss	10/1/2012	11	794,231	98,987
Experience Gain	10/1/2013	11	(252,299)	(31,445)
Experience Gain	10/1/2014	11	(810,778)	(101,049)

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2022 <u>Amount</u>	Amortization <u>Amount</u>
Assump Change	10/1/2014	11	114,254	14,240
Experience Gain	10/1/2015	11	(1,849,797)	(230,545)
Experience Gain	10/1/2016	11	(773,564)	(96,411)
Assump Change	10/1/2016	11	1,801,910	224,577
Experience Gain	10/1/2017	11	(1,654,770)	(206,238)
Experience Gain	10/1/2018	6	(526,238)	(103,180)
Assump Change	10/1/2018	16	(384,989)	(38,088)
Experience Gain	10/1/2019	7	(547,435)	(94,933)
Assump Change	10/1/2019	17	551,016	52,746
Experience Loss	10/1/2020	8	473,591	74,123
Assump Change	10/1/2020	18	2,050,643	190,523
Experience Gain	10/1/2021	9	(1,558,967)	(223,626)
Actuarial Gain	10/1/2022	10	<u>(25,727)</u>	<u>(3,423)</u>
			9,506,259	1,045,762

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2021	\$10,475,280
(2) Expected UAAL as of October 1, 2022	9,531,986
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	1,079,329
Salary Increases	551,749
Active Decrements	(696,864)
Inactive Mortality	(1,182,857)
Other	<u>222,916</u>
Increase in UAAL due to (Gain)/Loss	(25,727)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2022	\$9,506,259

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: PubG.H-2010 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 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 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.

Interest Rate

7.00% 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.

Payroll Growth

None.

Administrative Expenses

\$162,518 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Salary Increases

Salary Scale	
Service	Rate
1-2	6.00%
3-9	5.50%
10-19	5.00%
20+	4.00%

The above rates were incorporated with the October 1, 2014 valuation as the result of an experience study.

Normal Retirement Rates

For Members hired prior to October 1, 2011:

% Retiring During the Year	
Age	Rate
50-54	0%
55-58	17%
59-60	25%
61-62	17%
63-64	25%
65+	100%

This assumption was covered and changed as a result of our August 4, 2017 Actuarial Experience Study. For Members hired after September 30, 2011, 100% retirement is assumed at the earlier of 1) Age 65 with 8 years of Credited Service, and 2) the completion of 33 years of Credited Service, regardless of Age. This assumption is reasonable, based on Plan provisions and historical experience.

Early Retirement Rates

For Members hired prior to October 1, 2011:

% Retiring During the Year	
Age	Rate
55	4.5%
56-58	9.0%
59	13.0%

This assumption was covered and changed as a result of our August 4, 2017 Actuarial Experience Study.

For Members hired after September 3, 2011, they are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption was incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

Termination Rates

% Terminating During the Year	
Service	Rate
0-2	14.0%
3-4	9.0%
5-9	7.5%
10-19	6.0%
20+	2.5%

This assumption was covered and changed as a result of our August 4, 2017 Actuarial Experience Study.

Disability Rates

Sample rates below:

% Becoming Disabled During the Year	
Age	Rate
20	0.05%
25	0.05%
30	0.06%
35	0.09%
40	0.12%
45	0.28%
50	0.43%

Actuarial Asset Method

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

Amortization Method

New UAAL amortization bases are amortized over the following amortization periods:

Experience: 10 Years.

Assumption/Method Changes: 20 Years.

Benefit Changes: 30 Years.

Bases established prior to the valuation date are adjusted proportionally to match the Expected Unfunded Actuarial Accrued Liability as of the valuation date, in order to align prior year bases with the portion of the current year UAAL associated with prior year sources.

Funding Method

Entry Age Normal Actuarial Cost Method.

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.

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

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

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

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

DISCUSSION OF RISK

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

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

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

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

Impact of Plan Maturity on Risk

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

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

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 122.8% on October 1, 2012 to 114.4% on October 1, 2022, 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 62.0%. 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 69.4% on October 1, 2012 to 87.8% 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, decreased from -2.9% on October 1, 2012 to -3.4% on October 1, 2022. The current Net Cash Flow Ratio of -3.4% 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>Support Ratio</u>				
Total Actives	325	320	301	302
Total Inactives ¹	284	278	274	246
Actives / Inactives ¹	114.4%	115.1%	109.9%	122.8%

Asset Volatility Ratio

Market Value of Assets (MVA)	61,479,101	72,543,522	56,221,282	42,141,195
Total Annual Payroll	20,515,520	18,792,757	16,725,391	16,207,273
MVA / Total Annual Payroll	299.7%	386.0%	336.1%	260.0%

Accrued Liability (AL) Ratio

Inactive Accrued Liability	48,322,573	47,704,768	42,449,182	31,241,636
Total Accrued Liability (EAN)	77,944,975	77,453,747	68,455,807	58,017,689
Inactive AL / Total AL	62.0%	61.6%	62.0%	53.8%

Funded Ratio

Actuarial Value of Assets (AVA)	68,438,716	66,978,467	55,002,953	40,286,392
Total Accrued Liability (EAN)	77,944,975	77,453,747	68,455,807	58,017,689
AVA / Total Accrued Liability (EAN)	87.8%	86.5%	80.3%	69.4%

Net Cash Flow Ratio

Net Cash Flow ²	(2,075,123)	(1,613,123)	(1,944,101)	(1,206,275)
Market Value of Assets (MVA)	61,479,101	72,543,522	56,221,282	42,141,195
Ratio	-3.4%	-2.2%	-3.5%	-2.9%

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>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Checking Account	3,910.06	3,910.06
Money Market	1,740,182.00	1,740,182.00
Cash	(1,069.20)	(1,069.20)
Total Cash and Equivalents	1,743,022.86	1,743,022.86
Receivables:		
Member Contributions in Transit	29,312.48	29,312.48
Additional City Contributions	33,381.91	33,381.91
Refund Reversal	104,775.64	104,775.64
Total Receivable	167,470.03	167,470.03
Investments:		
Fixed Income	11,095,047.66	10,117,566.06
Equities	33,502,094.07	36,625,896.02
Mutual Funds:		
Equity	6,327,251.86	6,476,440.19
Pooled/Common/Commingled Funds:		
Real Estate	4,747,270.28	6,517,026.55
Total Investments	55,671,663.87	59,736,928.82
Total Assets	57,582,156.76	61,647,421.71
<u>LIABILITIES</u>		
Payables:		
Refunds of Member Contributions	168,241.45	168,241.45
Prepaid Member Contribution	78.87	78.87
Total Liabilities	168,320.32	168,320.32
NET POSITION RESTRICTED FOR PENSIONS	57,413,836.44	61,479,101.39

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

ADDITIONS

Contributions:

Member	731,880.81	
City		2,461,428.63

Total Contributions		3,193,309.44
---------------------	--	--------------

Investment Income:

Net Realized Gain (Loss)	2,560,848.56	
Unrealized Gain (Loss)	(12,682,563.80)	
Net Increase in Fair Value of Investments		(10,121,715.24)
Interest & Dividends		1,463,562.95
Less Investment Expense ¹		(331,145.77)

Net Investment Income		(8,989,298.06)
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Total Additions		(5,795,988.62)
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DEDUCTIONS

Distributions to Members:

Benefit Payments	4,434,316.19	
Lump Sum DROP Distributions		0.00
Refunds of Member Contributions		668,495.53

Total Distributions		5,102,811.72
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Administrative Expense		165,620.34
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Total Deductions		5,268,432.06
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Net Increase in Net Position		(11,064,420.68)
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year		72,543,522.07
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End of the Year		61,479,101.39
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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 five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Gain/(Loss)	<u>Gains/Losses Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2022	2023	2024	2025	2026
09/30/2018	1,671,960	0	0	0	0	0
09/30/2019	(2,164,113)	(432,821)	0	0	0	0
09/30/2020	(1,916,366)	(766,547)	(383,274)	0	0	0
09/30/2021	9,057,659	5,434,595	3,623,063	1,811,531	0	0
09/30/2022	(13,993,552)	(11,194,842)	(8,396,132)	(5,597,422)	(2,798,712)	0
Total		(6,959,615)	(5,156,343)	(3,785,891)	(2,798,712)	0

<u>Development of Investment Gain/(Loss)</u>	
Market Value of Assets, including Prepaid Contributions, 09/30/2021	72,543,601
Contributions Less Benefit Payments & Admin Expenses	(2,108,505)
Expected Investment Earnings*	5,004,254
Actual Net Investment Earnings	(8,989,298)
2022 Actuarial Investment Gain/(Loss)	<u>(13,993,552)</u>

*Expected Investment Earnings = 0.07 * [72,543,601 + 0.5 * (2,108,505)]

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2022	61,479,101
(2) Gain/(Loss) Not Yet Recognized	(6,959,615)
(3) Actuarial Value of Assets, 09/30/2022, (1) - (2)	<u>68,438,716</u>
 (A) 09/30/2021 Actuarial Assets, including Prepaid Contributions:	 66,978,546
(I) Net Investment Income:	
1. Interest and Dividends	1,463,563
2. Realized Gain (Loss)	2,560,849
3. Unrealized Gain (Loss)	(12,682,564)
4. Change in Actuarial Value	12,524,670
5. Investment Expenses	(331,146)
Total	<u>3,535,372</u>
 (B) 09/30/2022 Actuarial Assets, including Prepaid, excluding Shortfall, Contribution:	 68,405,413
Actuarial Assets Rate of Return = 2I/(A+B-I):	5.36%
Market Value of Assets Rate of Return:	-12.37%
Actuarial Gain/(Loss) due to Investment Return (actuarial Asset Basis)	(1,079,329)
10/01/2022 Limited Actuarial Assets (not including Prepaid):	68,438,716

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

REVENUES

Contributions:		
Member	731,880.81	
City	2,461,428.63	
Total Contributions		3,193,309.44
Earnings from Investments:		
Interest & Dividends	1,463,562.95	
Net Realized Gain (Loss)	2,560,848.56	
Unrealized Gain (Loss)	(12,682,563.80)	
Change in Actuarial Value	12,524,670.00	
Total Earnings and Investment Gains		3,866,517.71

EXPENDITURES

Distributions to Members:		
Benefit Payments	4,434,316.19	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	668,495.53	
Total Distributions		5,102,811.72
Expenses:		
Investment related ¹	331,145.77	
Administrative	165,620.34	
Total Expenses		496,766.11
Change in Net Assets for the Year		1,460,249.32
Net Assets Beginning of the Year		66,978,467.07
Net Assets End of the Year²		68,438,716.39

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

²Net Assets may be limited for actuarial consideration.

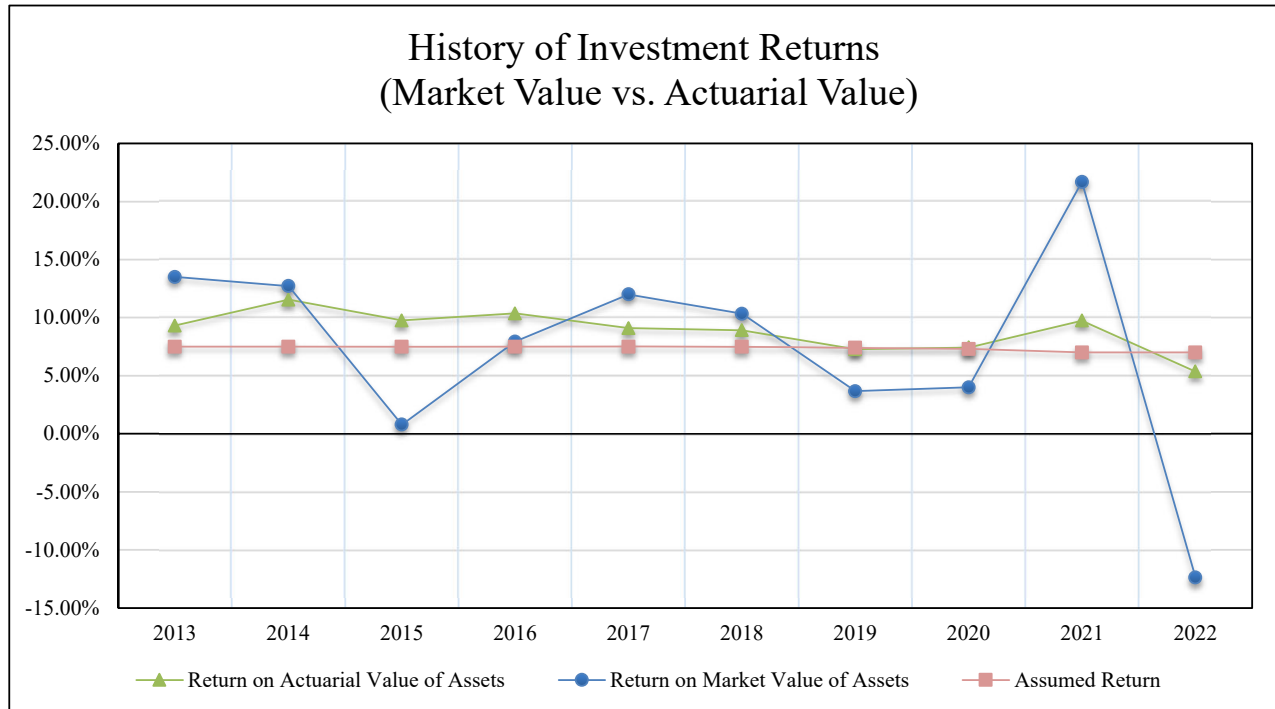
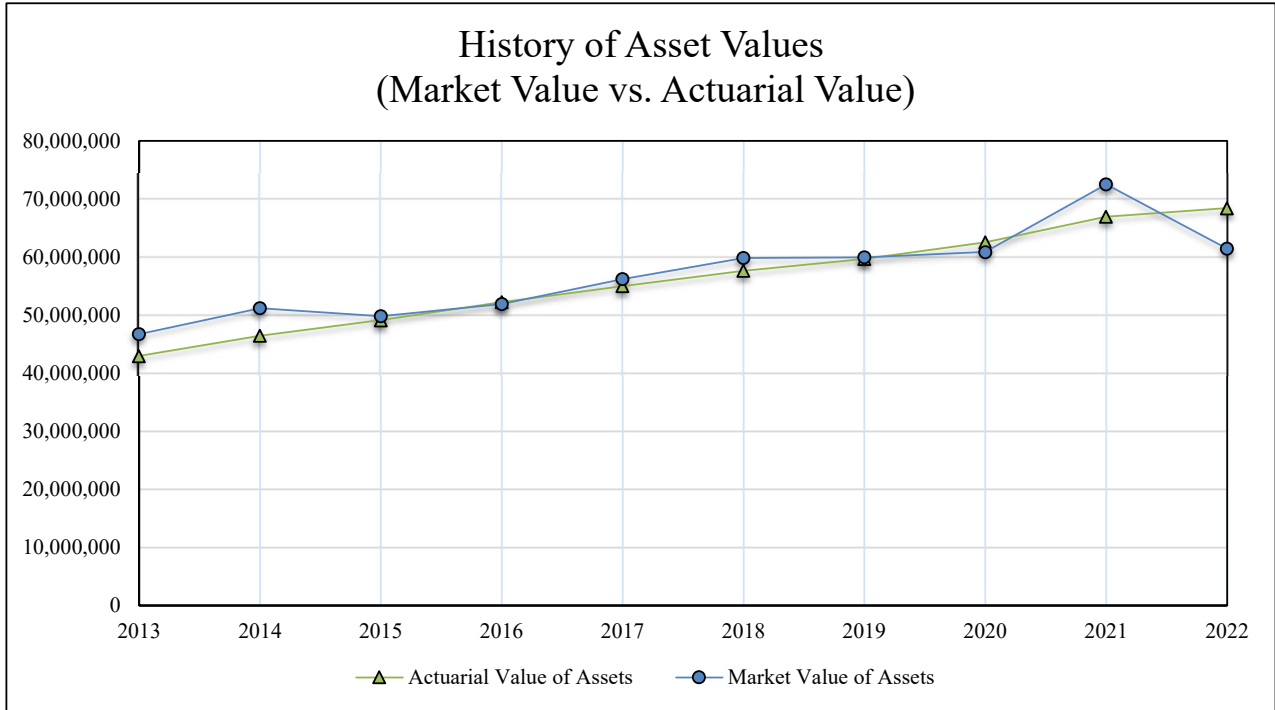
DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2021 to September 30, 2022

Beginning of the Year Balance	99,329.79
Plus Additions	58,926.96
Investment Return Earned	1,705.40
Less Distributions	0.00
End of the Year Balance	159,962.15

RECONCILIATION OF CITY SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2022

(1)	City Required Contribution Rate	12.75%
(2)	Pensionable Payroll	\$19,305,322.60
(3)	City Required Contribution (1) x (2)	2,461,428.63
(4)	Equals Required City Contribution for Fiscal 2022	2,461,428.63
(5)	Less 2021 Prepaid Contribution	0.00
(6)	Less Actual City Contributions	<u>(2,428,046.72)</u>
(7)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2022	\$33,381.91

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>Actives - Hired before October 1, 2011</u>				
Number	93	105	117	126
Average Current Age	55.8	55.2	54.6	53.9
Average Age at Employment	35.7	36.1	36.4	36.6
Average Past Service	20.1	19.1	18.2	17.3
Average Annual Salary	\$75,836	\$60,650	\$60,612	\$59,789
<u>Actives - Hired after September 30, 2011</u>				
Number	232	215	203	190
Average Current Age	45.2	44.5	43.7	42.6
Average Age at Employment	41.0	40.0	39.5	39.1
Average Past Service	4.2	4.5	4.2	3.5
Average Annual Salary	\$58,029	\$52,340	\$51,863	\$50,594
<u>Service Retirees</u>				
Number	232	233	226	224
Average Current Age	73.2	72.8	72.5	72.0
Average Annual Benefit	\$18,421	\$18,343	\$18,179	\$17,789
<u>DROP Retirees</u>				
Number	1	1	1	0
Average Current Age	65.9	64.9	63.9	N/A
Average Annual Benefit	\$58,927	\$58,927	\$58,927	N/A
<u>Beneficiaries</u>				
Number	23	20	20	22
Average Current Age	73.7	75.7	75.5	76.2
Average Annual Benefit	\$10,951	\$10,150	\$9,719	\$9,433
<u>Disability Retirees</u>				
Number	1	1	1	1
Average Current Age	73.2	72.2	71.2	70.2
Average Annual Benefit	\$10,171	\$10,171	\$10,171	\$10,171
<u>Terminated Vested</u>				
Number	188	135	113	96
Average Current Age ¹	48.9	51.3	51.4	50.3
Average Annual Benefit ¹	\$14,307	\$12,078	\$11,979	\$12,510

¹ The Average Current Age and Average Annual Benefit exclude participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24	5	3		1								9
25 - 29	13	2		1		1						17
30 - 34	9	2	4		3	12	2					32
35 - 39	5	3	2	2	5	8	4	1				30
40 - 44	8	4	2		3	7	6	5	1			36
45 - 49	3	2		4	4	13	6	2	3	1		38
50 - 54	6	2	1	5	1	11	5	5	2	1	1	40
55 - 59	11	3	2	1		10	11	9	3	7	1	58
60 - 64	6	2			1	9	5	9	5	3	3	43
65+	1	2	1	1		4	4	3	3	1	2	22
Total	67	25	12	15	17	75	43	34	17	13	7	325

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2021	320
b. Terminations	
i. Vested (partial or full) with deferred annuity	(8)
ii. Vested in refund of member contributions only	(31)
iii. Refund of member contributions or full lump sum distribution received	(14)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	
e. Retired	(9)
f. DROP	
g. Continuing participants	258
h. New entrants / Rehires	67
i. Total active life participants in valuation	325

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	233	1	20	1	23	112	390
Retired	12	0	0	0	(3)	0	9
DROP	0	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	8	0	8
Vested (Due Refund)	0	0	0	0	0	31	31
Hired/Terminated in Same Year	0	0	0	0	0	20	20
Death, With Survivor	(2)	0	3	0	0	(1)	0
Death, No Survivor	(11)	0	(1)	0	0	0	(12)
Disabled	0	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	(1)	(1)	(2)
Rehires	0	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0	0
Data Corrections	0	0	1	0	0	0	1
b. Number current valuation	232	1	23	1	27	161	445

SUMMARY OF CURRENT PLAN
(Through Ordinance 2020-14443)

<u>Eligibility</u>	Full-time General Employees hired prior to 3/1/95 enter the Plan on employment. Those hired after 2/28/95 enter following 6 months of service.
<u>Compensation</u>	Base pay, including holiday, vacation, longevity, and sick pay, but excluding overtime and all other pay.
<u>Final Average Compensation</u>	Average of Compensation paid during the eight (8) highest consecutive years of service. The average cannot be less than the three-year average determined as of September 30, 2011.
<u>Credited Service</u>	Years and completed months of service as a General Employee. Service for which the member received a refund of contributions shall not be counted.
<u>Normal Retirement</u>	
Date	Earlier of 1) the attainment of age 60 and the completion of 5 years of service, or 2) the date when age plus service equals 85 (Rule of 85). For Members hired after September 30, 2011, the Normal Retirement Date is the earlier of 1) Age 65 with 8 years of Credited Service, or 2) the completion of 33 years of Credited Service, regardless of Age.
Benefit	The sum of the following: a.) 2.5% of Final Average Compensation (using a three-year average, determined as of September 30, 2011) for each year of Credited Service as of September 30, 2011, plus b.) 1.6% of Final Average Compensation (using an eight-year average) for Credited Service after September 30, 2011.
Form of Benefit	Life annuity, ceasing upon death (options available).

Early Retirement

Date	The attainment of age 55 and the completion of 5 years of service. For Members hired after September 30, 2011, the Early Retirement Date is age 55 with 8 years of service.
Benefit	Determined as for Normal Retirement, reduced 3% per year for each year that the Early Retirement Date precedes age 60. The reduction is prorated monthly. For Members hired after September 30, 2011, the reduction is 5% per year, for each year that the Early Retirement Date precedes age 65. The reduction is prorated monthly.

Termination of Employment

Members hired before October 1, 2011	
Less Than 5 Years	Return of member contributions with interest.
5 to 10 Years, But Less Than Age 50	Return of member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the member contributed at the rate contributed by the City.
10 or More Years or Upon Attaining Age 50 and 5 Years	Accrued monthly benefit payable at Normal or Early (reduced basis) Retirement Date, or return of member contributions with interest.
Members hired after September 30, 2011	
Less Than 8 Years	Return of member contributions with interest.
8 or More Years	The accrued benefit, payable at the Normal (unreduced), or Early (reduced) Retirement Date.

Pre-Retirement Death

Less Than 5 Years and 6 Months	Return of member contributions with interest.
More than 5 Years and 6 Months	Return of member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the member contributed at the rate contributed by the City.

Deferred Retirement Option Plan

Eligibility	Non-union members who had 30 years of service in June, 2005.
Participation	Not to exceed 84 months.
Rate of Return	Actual net rate of investment return realized by the system from the short term investment fund or money market fund in which the DROP account is invested.
Form of Distribution	Cash lump sum at termination of employment.

Contributions

Members	5.0% of Compensation. The contribution rate is 3% for Members hired after September 30, 2011.
City	Remaining amount necessary to fund the Normal Cost and amortize the Unfunded Actuarial Accrued Liability over not more than 30 years.

Board of Trustees

Two Council appointees, three City Manager appointees, one retiree of the Plan elected by the membership, and a seventh Member elected by the other 6 who is a City resident.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2022

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Checking Account	3,910
Money Market	1,740,182
Cash	(1,069)
 Total Cash and Equivalents	 1,743,023
Receivables:	
Member Contributions in Transit	29,312
Additional City Contributions	33,382
Refund Reversal	104,776
 Total Receivable	 167,470
Investments:	
Fixed Income	10,117,566
Equities	36,625,896
Mutual Funds:	
Equity	6,476,440
Pooled/Common/Commingled Funds:	
Real Estate	6,517,026
 Total Investments	 59,736,928
 Total Assets	 61,647,421
 <u>LIABILITIES</u>	
Payables:	
Refunds of Member Contributions	168,241
 Total Liabilities	 168,241
 NET POSITION RESTRICTED FOR PENSIONS	 61,479,180

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

ADDITIONS

Contributions:

Member	731,881
City	2,461,428

Total Contributions	3,193,309
---------------------	-----------

Investment Income:

Net Increase in Fair Value of Investments	(10,121,715)
Interest & Dividends	1,463,563
Less Investment Expense ¹	(331,146)

Net Investment Income	(8,989,298)
-----------------------	-------------

Total Additions	(5,795,989)
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DEDUCTIONS

Distributions to Members:

Benefit Payments	4,434,316
Lump Sum DROP Distributions	0
Refunds of Member Contributions	668,496

Total Distributions	5,102,812
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Administrative Expense	165,620
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Total Deductions	5,268,432
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Net Increase in Net Position	(11,064,421)
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	72,543,601
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End of the Year	61,479,180
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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 administered by the Plan's Board of Trustees comprised of:

- a. Two Council appointees;
- b. Three City Manager appointees;
- c. One retiree of the Plan elected by the Membership, and a
- d. Seventh Member elected by the other six who is a City resident.

Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	255
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	135
Active Plan Members	320
	710
	710

Benefits Provided

The Plan provides retirement, termination, and death benefits.

A summary of the benefit provisions can be found in the October 1, 2021 Actuarial Valuation Report for the City of Naples General Retirement System prepared by Foster & Foster Actuaries and Consultants.

Contributions

Members: 5% of Compensation. The contribution rate is 3% for Members hired after September 30, 2011.

City: Remaining amount necessary to fund the Normal Cost and amortize the Unfunded Actuarial Accrued Liability over not more than 30 years.

Investment Policy:

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

Asset Class	Target Allocation
Domestic Equity	52.50%
International Equity	10.00%
Fixed Income	17.50%
Private Real Estate	10.00%
MLP/Energy Infrastructure	10.00%
Total	100.00%

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 -12.37 percent.

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

Deferred Retirement Option Program

Eligibility: Non-union members who had 30 years of service in June, 2005.

Participation: Not to exceed 84 months.

Rate of Return: Actual net rate of investment return realized by the system from the short term investment fund or money market fund in which the DROP account is invested.

The DROP balance as September 30, 2022 is \$159,962.

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	\$ 77,404,721
Plan Fiduciary Net Position	<u>\$ (61,479,180)</u>
Sponsor's Net Pension Liability	<u>\$ 15,925,541</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	79.43%

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	2.30%
Salary Increases	Service based
Discount Rate	7.00%
Investment Rate of Return	7.00%

Mortality Rate Healthy Active Lives:

Female: PubG.H-2010 for Employees.

Male: PubG.H-2010 for Employees, set back one year.

Mortality Rate Healthy Retiree Lives:

Female: PubG.H-2010 for Healthy Retirees.

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

Mortality Rate Beneficiary Lives:

Female: PubG.H-2010 for Healthy Retirees.

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

Mortality Rate Disabled Lives:

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

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

The 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.

The most recent actuarial experience study used to review the other significant assumptions was dated August 4, 2017.

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 2.26%.

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.

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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:

Asset Class	Long Term Expected Real Rate of Return ¹
Domestic Equity	5.59%
International Equity	4.44%
Fixed Income	1.26%
Private Real Estate	4.34%
MLP/Energy Infrastructure	4.48%

¹ Source: Morgan Stanley. Based on secular annualized return and volatility estimates are based on a 20-year-plus time horizon.

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 7.00 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
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 24,026,654	\$ 15,925,541	\$ 9,076,021

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	1,628,610	1,658,150
Interest	5,247,064	5,084,529
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(248,994)	493,832
Changes of assumptions	-	-
Contributions - Buy Back	-	19,159
Benefit Payments, including Refunds of Employee Contributions	(5,102,812)	(4,705,603)
Net Change in Total Pension Liability	<u>1,523,868</u>	<u>2,550,067</u>
Total Pension Liability - Beginning	75,880,853	73,330,786
Total Pension Liability - Ending (a)	<u>\$ 77,404,721</u>	<u>\$ 75,880,853</u>
Plan Fiduciary Net Position		
Contributions - Employer	2,461,428	2,535,318
Contributions - Employee	731,881	696,781
Contributions - Buy Back	-	19,159
Net Investment Income	(8,989,298)	13,263,731
Benefit Payments, including Refunds of Employee Contributions	(5,102,812)	(4,705,603)
Administrative Expense	(165,620)	(159,415)
Net Change in Plan Fiduciary Net Position	<u>(11,064,421)</u>	<u>11,649,971</u>
Plan Fiduciary Net Position - Beginning	72,543,601	60,893,630
Plan Fiduciary Net Position - Ending (b)	<u>\$ 61,479,180</u>	<u>\$ 72,543,601</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 15,925,541</u>	<u>\$ 3,337,252</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	79.43%	95.60%
Covered Payroll	\$ 19,305,323	\$ 18,053,742
Net Pension Liability as a percentage of Covered Payroll	82.49%	18.49%

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	\$ 2,461,428	\$ 2,461,428	\$ -	\$ 19,305,323	12.75%
09/30/2021	\$ 2,043,684	\$ 2,535,318	\$ (491,634)	\$ 18,053,742	14.04%

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 Naples General Retirement System 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	-12.37%
09/30/2021	21.69%

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2023)

Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees comprised of:

- a. Two Council appointees;
- b. Three City Manager appointees;
- c. One retiree of the Plan elected by the Membership, and a
- d. Seventh Member elected by the other six who is a City resident.

Full-time General Employees hired prior to 3/1/95 enter the Plan on employment. Those hired after 2/28/95 enter following 6 months of service.

Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	255
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	135
Active Plan Members	320
	<u>710</u>

Benefits Provided

The Plan provides retirement, termination, and death benefits.

A summary of the benefit provisions can be found in the October 1, 2021 Actuarial Valuation Report for the City of Naples General Retirement System prepared by Foster & Foster Actuaries and Consultants.

Contributions

Members: 5% of Compensation. The contribution rate is 3% for Members hired after September 30, 2011.

City: Remaining amount necessary to fund the Normal Cost and amortize the Unfunded Actuarial Accrued Liability over not more than 30 years.

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, 2022 through September 30, 2023.

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	2.30%
Salary Increases	Service based
Discount Rate	7.00%
Investment Rate of Return	7.00%

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Mortality Rate Healthy Active Lives:

Female: PubG.H-2010 for Employees.

Male: PubG.H-2010 for Employees, set back one year.

Mortality Rate Healthy Retiree Lives:

Female: PubG.H-2010 for Healthy Retirees.

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

Mortality Rate Beneficiary Lives:

Female: PubG.H-2010 for Healthy Retirees.

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

Mortality Rate Disabled Lives:

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

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

The 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.

The most recent actuarial experience study used to review the other significant assumptions was dated August 4, 2017.

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 2.26%.

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	52.50%	5.59%
International Equity	10.00%	4.44%
Fixed Income	17.50%	1.26%
Private Real Estate	10.00%	4.34%
MLP/Energy Infrastructure	10.00%	4.48%
Total	100.00%	

¹ Source: Morgan Stanley. Based on secular annualized return and volatility estimates are based on a 20-year-plus time horizon.

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.

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Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.00 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)
Reporting Period Ending September 30, 2022	\$ 75,880,853	\$ 72,543,601	\$ 3,337,252
Changes for a Year:			
Service Cost	1,628,610	-	1,628,610
Interest	5,247,064	-	5,247,064
Differences between Expected and Actual Experience	(248,994)	-	(248,994)
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	2,461,428	(2,461,428)
Contributions - Employee	-	731,881	(731,881)
Contributions - Buy Back	-	-	-
Net Investment Income	-	(8,989,298)	8,989,298
Benefit Payments, including Refunds of Employee Contributions	(5,102,812)	(5,102,812)	-
Administrative Expense	-	(165,620)	165,620
Net Changes	1,523,868	(11,064,421)	12,588,289
Reporting Period Ending September 30, 2023	\$ 77,404,721	\$ 61,479,180	\$ 15,925,541

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

	Current		
	1% Decrease	Discount Rate	1% Increase
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 24,026,654	\$ 15,925,541	\$ 9,076,021

Pension Plan Fiduciary Net Position.

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

**FINAL PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS**
FISCAL YEAR SEPTEMBER 30, 2022

For the year ended September 30, 2022, the Sponsor has recognized a Pension Expense of \$2,479.
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	370,374	621,488
Changes of assumptions	1,298,885	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	5,565,055
Employer contributions subsequent to the measurement date	2,461,428	-
Total	\$ 4,130,687	\$ 6,186,543

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer contributions subsequent to the measurement date has been recognized as a reduction of the Net Pension Liability in the year ended September 30, 2022. Other 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	\$ (812,597)
2024	\$ (588,354)
2025	\$ (1,304,801)
2026	\$ (1,811,532)
2027	\$ -
Thereafter	\$ -

**PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2023**

For the year ended September 30, 2023, the Sponsor will recognize a Pension Expense of \$3,228,091.

On September 30, 2023, 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	246,916	469,758
Changes of assumptions	566,635	-
Net difference between Projected and Actual Earnings on Pension Plan investments	6,960,549	-
Employer contributions subsequent to the measurement date	TBD	-
Total	TBD	\$ 469,758

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2023.

Other 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:		
2024		\$ 2,148,341
2025		\$ 1,431,894
2026		\$ 925,163
2027		\$ 2,798,944
2028		\$ -
Thereafter		\$ -

Payable to the Pension Plan

On September 30, 2022, the Sponsor reported a payable of \$33,382 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2022.

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

Reporting Period Ending	09/30/2023	09/30/2022
Measurement Date	09/30/2022	09/30/2021
Total Pension Liability		
Service Cost	1,628,610	1,658,150
Interest	5,247,064	5,084,529
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(248,994)	493,832
Changes of assumptions	-	-
Contributions - Buy Back	-	19,159
Benefit Payments, including Refunds of Employee Contributions	(5,102,812)	(4,705,603)
Net Change in Total Pension Liability	1,523,868	2,550,067
Total Pension Liability - Beginning	75,880,853	73,330,786
Total Pension Liability - Ending (a)	<u>\$ 77,404,721</u>	<u>\$ 75,880,853</u>
Plan Fiduciary Net Position		
Contributions - Employer	2,461,428	2,535,318
Contributions - Employee	731,881	696,781
Contributions - Buy Back	-	19,159
Net Investment Income	(8,989,298)	13,263,731
Benefit Payments, including Refunds of Employee Contributions	(5,102,812)	(4,705,603)
Administrative Expense	(165,620)	(159,415)
Net Change in Plan Fiduciary Net Position	(11,064,421)	11,649,971
Plan Fiduciary Net Position - Beginning	72,543,601	60,893,630
Plan Fiduciary Net Position - Ending (b)	<u>\$ 61,479,180</u>	<u>\$ 72,543,601</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 15,925,541</u>	<u>\$ 3,337,252</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	79.43%	95.60%
Covered Payroll	\$ 19,305,323	\$ 18,053,742
Net Pension Liability as a percentage of Covered Payroll	82.49%	18.49%

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	\$ 2,461,428	\$ 2,461,428	\$ -	\$ 19,305,323	12.75%
09/30/2021	\$ 2,043,684	\$ 2,535,318	\$ (491,634)	\$ 18,053,742	14.04%

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 Naples General Retirement System 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.

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2022

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 12,437,156	\$ 2,812,915	\$ 7,398,014	\$ -
Employer Contributions made after September 30, 2021	-	-	2,461,428	-
Total Pension Liability Factors:				
Service Cost	1,658,150	-	-	1,658,150
Interest	5,084,529	-	-	5,084,529
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	19,159	-	-	19,159
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	493,832	-	493,832	-
Current year amortization of experience difference	-	(776,667)	(123,458)	(653,209)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	(265,704)	(732,250)	466,546
Benefit Payments, including Refunds of Employee Contributions	(4,705,603)	-	-	-
Net change	<u>2,550,067</u>	<u>(1,042,371)</u>	<u>2,099,552</u>	<u>6,575,175</u>
Plan Fiduciary Net Position:				
Contributions - Employer	2,535,318	-	(2,535,318)	-
Contributions - Employee	696,781	-	-	(696,781)
Contributions - Buy Back	19,159	-	-	(19,159)
Projected Net Investment Income	4,206,073	-	-	(4,206,073)
Difference between projected and actual earnings on Pension Plan investments	9,057,658	9,057,658	-	-
Current year amortization	-	(2,626,194)	(816,096)	(1,810,098)
Benefit Payments, including Refunds of Employee Contributions	(4,705,603)	-	-	-
Administrative Expenses	(159,415)	-	-	159,415
Net change	<u>11,649,971</u>	<u>6,431,464</u>	<u>(3,351,414)</u>	<u>(6,572,696)</u>
Ending Balance	<u>\$ 3,337,252</u>	<u>\$ 8,202,008</u>	<u>\$ 6,146,152</u>	<u>\$ 2,479</u>

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2023

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 3,337,252	\$ 8,202,008	\$ 6,146,152	\$ -
Employer Contributions made after September 30, 2022	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	1,628,610	-	-	1,628,610
Interest	5,247,064	-	-	5,247,064
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(248,994)	248,994	-	-
Current year amortization of experience difference	-	(400,724)	(123,458)	(277,266)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(732,250)	732,250
Benefit Payments, including Refunds of Employee Contributions	(5,102,812)	-	-	-
Net change	<u>1,523,868</u>	<u>(151,730)</u>	<u>(855,708)</u>	<u>7,330,658</u>
Plan Fiduciary Net Position:				
Contributions - Employer	2,461,428	-	(2,461,428)	-
Contributions - Employee	731,881	-	-	(731,881)
Projected Net Investment Income	5,005,423	-	-	(5,005,423)
Difference between projected and actual earnings on Pension Plan investments	(13,994,721)	-	13,994,721	-
Current year amortization	-	(2,145,924)	(3,615,041)	1,469,117
Benefit Payments, including Refunds of Employee Contributions	(5,102,812)	-	-	-
Administrative Expenses	(165,620)	-	-	165,620
Net change	<u>(11,064,421)</u>	<u>(2,145,924)</u>	<u>7,918,252</u>	<u>(4,102,567)</u>
Ending Balance	<u>\$ 15,925,541</u>	<u>\$ 5,904,354</u>	<u>TBD</u>	<u>\$ 3,228,091</u>

* Employer Contributions subsequent to the measurement date made after September 30, 2022 but made on or before September 30, 2023 need to be added.

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
2022	\$ 13,994,721	5	\$ -	\$ 2,798,945	\$ 2,798,944	\$ 2,798,944	\$ 2,798,944	\$ 2,798,944	\$ -	\$ -	\$ -
2021	\$ (9,057,658)	5	\$ (1,811,530)	\$ (1,811,532)	\$ (1,811,532)	\$ (1,811,532)	\$ (1,811,532)	\$ -	\$ -	\$ -	\$ -
2020	\$ 1,916,366	5	\$ 383,273	\$ 383,273	\$ 383,273	\$ 383,273	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 2,164,113	5	\$ 432,823	\$ 432,823	\$ 432,823	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (1,671,959)	5	\$ (334,392)	\$ (334,392)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (2,401,361)	5	\$ (480,272)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (1,810,098)	\$ 1,469,117	\$ 1,803,508	\$ 1,370,685	\$ 987,412	\$ 2,798,944	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020	\$ 2,266,538	4	\$ 566,635	\$ 566,635	\$ 566,635	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 662,461	4	\$ 165,615	\$ 165,615	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (1,062,814)	4	\$ (265,704)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 466,546	\$ 732,250	\$ 566,635	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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
2022	\$ (248,994)	4	\$ -	\$ (62,247)	\$ (62,249)	\$ (62,249)	\$ (62,249)	\$ -	\$ -	\$ -	\$ -
2021	\$ 493,832	4	\$ 123,458	\$ 123,458	\$ 123,458	\$ 123,458	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ (1,132,043)	4	\$ (283,011)	\$ (283,011)	\$ (283,011)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ (221,863)	4	\$ (55,466)	\$ (55,466)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (1,752,760)	4	\$ (438,190)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (653,209)	\$ (277,266)	\$ (221,802)	\$ 61,209	\$ (62,249)	\$ -	\$ -	\$ -	\$ -