## CITY OF NORTH PORT POLICE OFFICERS' PENSION - LOCAL OPTION TRUST FUND

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





December 6, 2022

Board of Trustees City of North Port Police Officers' Pension Board

Re: City of North Port Police Officers' Pension - Local Option Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of North Port Police Officers' Pension - Local Option Trust Fund. 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 Chapters 112 and 185, 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 North Port, 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 North Port, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Officers' Pension - Local Option Trust Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

By:

Douglas H. Lozen, EA, MAAA Enrolled Actuary #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 North Port Police Officers' Pension - Local Option Trust Fund, 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	\$2,441,809	\$2,182,087
Member Contributions (Est.)	485,584	461,396
City And State Required Contribution	1,956,225	1,720,691
State Contribution (Est.) <sup>1</sup>	280,000	280,000
City Required Contribution <sup>2</sup>	\$1,676,225	\$1,440,691

<sup>&</sup>lt;sup>1</sup> As per a Mutual Consent Agreement between the Membership and City, the City may use up to \$280,000 annually for Plan funding. Excess Chapter 185 monies are allocated to the Memberhip Share Plan.

As you can see, the Minimum Required Contribution shows an increase when compared to the results determined in the October 1, 2021 actuarial valuation. The increase is attributable to netunfavorable 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 average salary increase of 11.73% which exceeded the 5.02% assumption and an investment return of 4.35% (Actuarial Asset Basis) which fell short of the 7.00% assumption. These losses were offset in part by gains associated with favorable turnover experience, inactive mortality experience, and interest crediting on the Membership Share Balances.

<sup>&</sup>lt;sup>2</sup> Please note that the City has access to a prepaid contribution of \$629,677.39 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2023.

#### 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

	10/1/2022	10/1/2021
A. Participant Data		
Actives	55	58
Service Retirees	34	34
DROP Retirees	1	1
Beneficiaries	6	5
Disability Retirees	11	11
Terminated Vested	<u>23</u>	<u>21</u>
Total	130	130
Payroll Under Assumed Ret. Age	5,584,210	5,295,969
Annual Rate of Payments to:		
Service Retirees	1,803,777	1,780,191
DROP Retirees	85,182	85,182
Beneficiaries	275,693	231,827
Disability Retirees	345,833	345,833
Terminated Vested	148,370	61,067
B. Assets		
Actuarial Value (AVA) <sup>1</sup>	58,527,642	56,114,576
Market Value (MVA) <sup>1</sup>	53,576,421	62,785,581
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	40,248,855	36,887,590
Disability Benefits	1,449,234	1,423,366
Death Benefits	243,215	242,682
Vested Benefits	586,332	665,785
Refund of Contributions	45,595	66,861
Service Retirees	21,556,169	21,445,147
DROP Retirees <sup>1</sup>	1,301,435	1,214,264
Beneficiaries	2,783,955	2,686,290
Disability Retirees	3,899,880	3,939,983
Terminated Vested	885,164	436,837
Share Plan Balances <sup>1</sup>		1,296,262
Total	74,404,708	70,305,067

C. Liabilities - (Continued)	10/1/2022	10/1/2021
Present Value of Future Salaries	37,142,830	37,362,245
Present Value of Future		
Member Contributions	2,971,426	2,988,980
Normal Cost (Retirement)	1,282,262	1,230,177
Normal Cost (Disability)	106,623	105,671
Normal Cost (Death)	23,488	23,253
Normal Cost (Vesting)	40,074	51,834
Normal Cost (Refunds)	19,835	23,342
Total Normal Cost	1,472,282	1,434,277
Present Value of Future		
Normal Costs	9,482,395	9,695,625
Accrued Liability (Retirement)	31,796,675	28,315,851
Accrued Liability (Disability)	776,992	717,570
Accrued Liability (Death)	90,295	82,609
Accrued Liability (Vesting)	418,000	463,662
Accrued Liability (Refunds)	8,874	10,967
Accrued Liability (Inactives) 1	30,426,603	29,722,521
Share Plan Balances <sup>1</sup>	1,404,874	1,296,262
Total Actuarial Accrued Liability (EAN AL)	64,922,313	60,609,442
Unfunded Actuarial Accrued		
Liability (UAAL)	6,394,671	4,494,866
Funded Ratio (AVA / EAN AL)	90.2%	92.6%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2022</u>	10/1/2021
Vested Accrued Benefits		
Inactives + Share Plan Balances <sup>1</sup>	31,831,477	31,018,783
Actives	17,998,226	15,840,498
Member Contributions	4,598,077	4,401,354
Total	54,427,780	51,260,635
Non-vested Accrued Benefits	2,156,010	2,253,437
Total Present Value		
Accrued Benefits (PVAB)	56,583,790	53,514,072
Funded Ratio (MVA / PVAB)	94.7%	117.3%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	1,960,266	
Benefits Paid	(2,547,375)	
Interest	3,656,827	
Other	0	
Total	3,069,718	

Valuation Date Applicable to Fiscal Year Ending	10/1/2022 <u>9/30/2024</u>	10/1/2021 <u>9/30/2023</u>
E. Pension Cost		
Normal Cost <sup>2</sup>	\$1,600,307	\$1,561,966
Administrative Expenses <sup>2</sup>	95,485	105,147
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years		
(as of 10/1/2022) <sup>2</sup>	746,017	514,974
Minimum Required Contribution	2,441,809	2,182,087
Expected Member Contributions <sup>2</sup>	485,584	461,396
Expected City and State Contribution	1,956,225	1,720,691
F. Past Contributions		
Plan Years Ending:	9/30/2022	
City and State Requirement	1,766,663	
Actual Contributions Made:		
City State Total	1,486,663 <u>280,000</u> 1,766,663	
G. Net Actuarial (Gain)/Loss	2,244,628	

<sup>&</sup>lt;sup>1</sup> The asset values and liabilities include accumulated DROP and Share Plan Balances as of 9/30/2022 and 9/30/2021.

<sup>&</sup>lt;sup>2</sup> Contributions developed as of 10/1/2022 displayed above have been adjusted to account for assumed salary increase and interest components.

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

	Projected Unfunded
<u>Year</u>	Actuarial Accrued Liability
2022	6,394,671
2023	6,107,920
2024	5,801,097
2027	4,745,639
2031	2,959,967
2034	1,265,134
2037	0

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

		<u>Actual</u>	Assumed
Year Ended	9/30/2022	11.73%	5.02%
Year Ended	9/30/2021	4.66%	6.52%
Year Ended	9/30/2020	2.57%	6.61%
Year Ended	9/30/2019	2.87%	7.59%
Year Ended	9/30/2018	11.59%	7.61%

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

		Market Value	Actuarial Value	<u>Assumed</u>
Year Ended	9/30/2022	-14.54%	4.35%	7.00%
Year Ended	9/30/2021	21.93%	10.92%	7.35%
Year Ended	9/30/2020	10.94%	8.77%	7.45%
Year Ended	9/30/2019	2.55%	7.89%	7.55%
Year Ended	9/30/2018	9.13%	7.05%	7.65%

#### (iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2022 10/1/2012	\$5,584,210 6,103,283
(b) Total Increase		-8.50%
(c) Number of Years		10.00
(d) Average Annual Rate		-0.88%

#### 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 copies of the report to the following offices to comply with Chapter 112, Florida Statutes:

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

Mr. Steve Bardin Municipal Police and Fire Pension Trust Funds Division of Retirement Post Office Box 3010 Tallahassee, FL 32315-3010

## RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

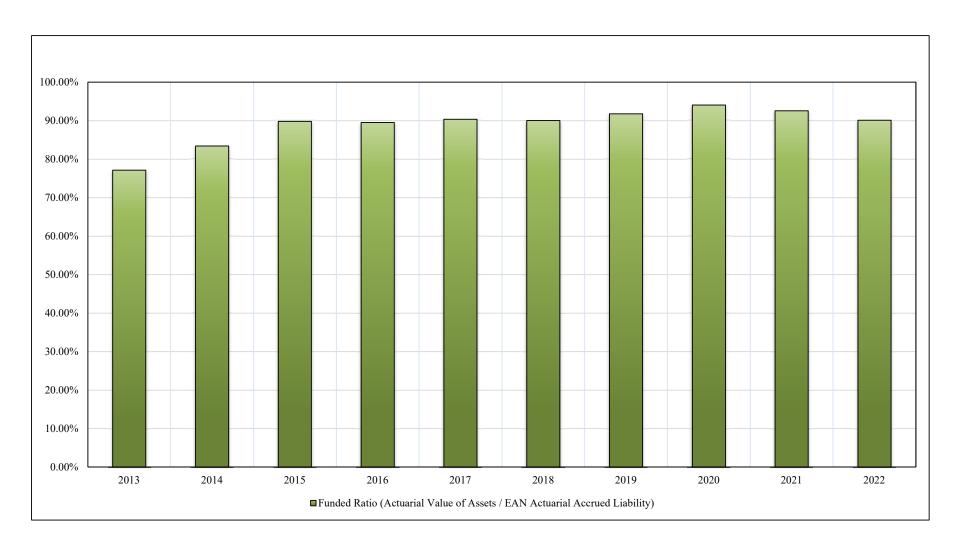
(1)	Unfunded Actuar	\$4,494,866			
(2)	Sponsor Normal	Cost developed as o	f October 1, 2021		1,010,599
(3)	Expected administrative expenses for the year ended September 30, 2022				96,551
(4)	Expected interest	t on (1), (2) and (3)			388,762
(5)	Sponsor contribu	tions to the System of	during the year ended Se	eptember 30, 2022	1,766,663
(6)	Expected interest on (5)			74,072	
(7)	Expected Unfund September 30, 20	4,150,043			
(8)	Change to UAAI	0			
(9)	Change to UAAL due to Actuarial (Gain)/Loss				2,244,628
(10)	10) Unfunded Actuarial Accrued Liability as of October 1, 2022			6,394,671	
		_		40/4/2022	
					Amortization <u>Amount</u>
(10)	Type of Base	Date <u>Established</u>	Years Remaining	10/1/2022 <u>Amount</u>	Amortiz

Type of	Date	Years	10/1/2022	Amortization
<u>Base</u>	<b>Established</b>	Remaining	<u>Amount</u>	<u>Amount</u>
Consolidation Base	10/1/2020	13	2,054,880	229,783
Assump Change	10/1/2020	13	469,559	52,508
Actuarial Gain	10/1/2021	14	(1,349,288)	(144,191)
Assump Change	10/1/2021	14	2,974,892	317,910
Actuarial Loss	10/1/2022	15	2,244,628	230,325
			6,394,671	686,335

## DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2021	\$4,494,866
(2) Expected UAAL as of October 1, 2022	4,150,043
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	1,501,532
Salary Increases	1,746,864
Active Decrements	(444,459)
Inactive Mortality	(264,926)
Interest Crediting on Share Plan Balances	(269,650)
Other	(24,733)
Increase in UAAL due to (Gain)/Loss	2,244,628
Assumption Changes	0
(4) Actual UAAL as of October 1, 2022	\$6,394,671

## HISTORY OF FUNDING PROGRESS



#### **ACTUARIAL ASSUMPTIONS AND METHODS**

#### Mortality Rate

Healthy Active Lives:

Female: PubS.H-2010 for Employees, set forward one

**Male:** PubS.H-2010 for Employees, set forward one year.

Healthy Retiree Lives:

**Female:** PubS.H-2010 for Healthy Retirees, set forward one year.

**Male:** PubS.H-2010 for Healthy Retirees, set forward one year.

Beneficiary Lives:

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

Disabled Lives:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

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

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

75% of active deaths are assumed to be service-incurred.

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.

Interest Rate

Salary Increases	Salary Scale
	Service New Rate
	<5 10.00%
	5-9 6.50% 10+ 4.50%
	10+ 4.30/6
	The above rates were adopted in conjunction with the September 9, 2021 Experience Study.
Final Year Salary Load	Projected salary at retirement is increased 20% to account for non-regular compensation (no load for Members hired after January 1, 2012).
Payroll Growth	0.00% for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.
Administrative Expenses	\$87,846 annually, based on the average of actual expenses incurred in the prior two fiscal years.
Amortization Method	New UAAL amortization bases are amortized over 15 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. The following loads are applied for determining the minimum required contribution:
	Interest - a half year, based on current 7.00% assumption.
	Salary - A full year, based on current 5.02% assumption.
Asset Smoothing Methodology	The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a negligible bias that is above or below the Market Value of Assets.
Normal Retirement	Immediately upon first eligibility. This is based on the September 9, 2021 Experience Study.

#### **Early Retirement**

Commencing with attainment of Early Retirement Status (age 45 with 10 years of service), Members are assumed to retire with an immediate subsidized benefit at the rate of 15% per year. This assumption is based on the September 9, 2021 Experience Study.

## **Marital Assumption**

80% are assumed Married with husbands three years older than their wives.

#### **Disability Rates**

Sample rates are shown in the table below. These rates were confirmed with the September 9, 2021 Experience Study.

% Becoming Disabled
During the Year

Age	Rate
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%
55	1.55%
59+	2.09%

75% of Disability Retirements are assumed to be service-incurred.

**Termination Rates** 

% Terminating
During the Year

Service	Rate
<1	24.0%
1	6.0%
2	6.0%
3	6.0%
4	6.0%
5-9	3.0%
10-14	3.0%
15-19	3.0%
20+	0.0%

The above rates were adopted in conjunction with the September 9, 2021 Experience Study.

#### **GLOSSARY**

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

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

- (a) The normal cost accrual rate equals:
  - (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
  - (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.
- (b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.
- (c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.
- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

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

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.

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

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

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

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

#### DISCUSSION OF RISK

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

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

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

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

#### Impact of Plan Maturity on Risk

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

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

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 391.3% on October 1, 2012 to 98.2% 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 46.9%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in lower volatility in contribution requirements when compared to a more 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 68.8% on October 1, 2012 to 90.2% 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 4.5% on October 1, 2012 to -0.1% on October 1, 2022. The current Net Cash Flow Ratio of -0.1% 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

	10/1/2022	10/1/2021	10/1/2017	10/1/2012
Support Ratio				
Total Actives Total Inactives <sup>1</sup> Actives / Inactives <sup>1</sup>	55 56 98.2%	58 53 109.4%	76 43 176.7%	90 23 391.3%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	53,576,421 5,920,058 905.0%	62,785,581 5,622,824 1,116.6%	40,416,303 6,217,446 650.0%	21,460,774 6,103,283 351.6%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	30,426,603 64,922,313 46.9%	29,722,521 60,609,442 49.0%	21,137,406 43,440,160 48.7%	11,489,696 30,107,281 38.2%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	58,527,642 64,922,313 90.2%	56,114,576 60,609,442 92.6%	39,251,020 43,440,160 90.4%	20,712,234 30,107,281 68.8%
Net Cash Flow Ratio				
Net Cash Flow <sup>2</sup> Market Value of Assets (MVA) Ratio	(51,713) 53,576,421 -0.1%	95,233 62,785,581 0.2%	895,011 40,416,303 2.2%	956,167 21,460,774 4.5%

<sup>&</sup>lt;sup>1</sup> Excludes terminated participants awaiting a refund of member contributions.

<sup>&</sup>lt;sup>2</sup> Determined as total contributions minus benefit payments and administrative expenses.

## PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During <u>Fiscal Year</u>	<u>Amount</u>	Increase from Previous Year
1998	48,260.66	%
1999	51,574.48	6.9%
2000	51,511.40	-0.1%
2001	56,480.66	9.6%
2002	76,778.55	35.9%
2003	88,977.27	15.9%
2004	132,825.30	49.3%
2005	163,669.80	23.2%
2006	191,599.50	17.1%
2007	232,905.15	21.6%
2008	221,662.73	-4.8%
2009	275,946.30	24.5%
2010	278,182.12	0.8%
2011	257,676.16	-7.4%
2012	282,742.64	9.7%
2013	297,989.02	5.4%
2014	306,641.87	2.9%
2015	341,431.51	11.3%
2016	378,332.56	10.8%
2017	405,720.10	7.2%
2018	453,917.98	11.9%
2019	495,381.00	9.1%
2020	523,055.05	5.6%
2021	540,760.15	3.4%
2022	615,040.26	13.7%

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2022

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Short Term Investments	651,274.29	651,274.29
Prepaid Expenses	3,551.00	3,551.00
Cash	2,026.42	2,026.42
Cush	2,020.12	2,020.12
Total Cash and Equivalents	656,851.71	656,851.71
Receivables:		
Member Contributions in Transit	19,813.38	19,813.38
City Contributions in Transit	371,665.75	371,665.75
State Contributions	615,040.26	615,040.26
Investment Income	61,076.27	61,076.27
	v - , v · _ ·	0-90.0
Total Receivable	1,067,595.66	1,067,595.66
Investments:		
Stocks	10,271,431.10	9,560,011.24
Mutual Funds:		, ,
Fixed Income	17,757,769.09	15,459,908.07
Equity	15,614,697.23	20,162,747.91
Pooled/Common/Commingled Funds:		, ,
Real Estate	5,500,000.00	7,505,436.93
Total Investments	49,143,897.42	52,688,104.15
Total Assets	50,868,344.79	54,412,551.52
LIABILITIES		
Payables:		
Benefit Payments	5,456.02	5,456.02
PLOP Distributions	153,518.26	153,518.26
Investment Expenses	24,238.82	24,238.82
Administrative Expenses	2,084.97	2,084.97
Share Distributions	21,155.09	21,155.09
Prepaid City Contribution	629,677.39	629,677.39
	,	,
Total Liabilities	836,130.55	836,130.55
NET POSITION RESTRICTED FOR PENSIONS	50,032,214.24	53,576,420.97

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

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Member	478,913.83
City	1,486,663.00
State	615,040.26

Total Contributions 2,580,617.09

Investment Income:

 Net Realized Gain (Loss)
 1,485,955.03

 Unrealized Gain (Loss)
 (12,267,578.61)

Net Increase in Fair Value of Investments (10,781,623.58)
Interest & Dividends 1,733,778.56
Less Investment Expense<sup>1</sup> (109,602.67)

Net Investment Income (9,157,447.69)

Total Additions (6,576,830.60)

#### **DEDUCTIONS**

Distributions to Members:

Benefit Payments	2,348,684.50
Lump Sum DROP Distributions	0.00
Lump Sum Share Distributions	45,172.44
Lump Sum PLOP Distributions	153,518.26
Refunds of Member Contributions	0.00

Total Distributions 2,547,375.20

Administrative Expense 84,954.72

Total Deductions 2,632,329.92

Net Increase in Net Position (9,209,160.52)

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 62,785,581.49

End of the Year 53,576,420.97

<sup>&</sup>lt;sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

## ACTUARIAL ASSET VALUATION SEPTEMBER 30, 2022

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return <sup>1</sup>	
09/30/2019	2.55%	
09/30/2020	10.94%	
09/30/2021	21.93%	
09/30/2022	-14.54%	
Annualized Rate of Return for prior four (4) years:	: 4.35%	
(A) 10/01/2021 Actuarial Assets, in	ncluding Prepaid Contributions:	\$56,744,253.03
(I) Net Investment Income:		
<ol> <li>Interest and Dividends</li> <li>Realized Gain (Loss)</li> <li>Unrealized Gain (Loss)</li> <li>Change in Actuarial Value</li> <li>Investment Related Expenses</li> </ol>	1,733,778.56 1,485,955.03 (12,267,578.61) 11,622,227.07 (109,602.67)	2,464,779.38
(B) 10/01/2022 Actuarial Assets, in	ncluding Prepaid Contributions:	\$59,157,319.58
Actuarial Asset Rate of Return = 2I/(A+B-I):		4.35%
10/01/2022 Limited Actuarial A	ssets	\$58,527,642.19

10/01/2022 Market Value of Assets

Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)

\$53,576,420.97

(\$1,501,532.27)

<sup>&</sup>lt;sup>1</sup>Market Value Basis, net of investment related expenses.

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

#### **REVENUES**

	RE VEIVEES	
Contributions:	470 012 02	
Member City	478,913.83 1,486,663.00	
State	615,040.26	
Total Contributions		2,580,617.09
F		
Earnings from Investments: Interest & Dividends	1,733,778.56	
Net Realized Gain (Loss)	1,485,955.03	
Unrealized Gain (Loss)	(12,267,578.61)	
Change in Actuarial Value	11,622,227.07	
enunge in recounting value	11,0,	
Total Earnings and Investment Gains		2,574,382.05
	EXPENDITURES	
Distributions to Members:		
Benefit Payments	2,348,684.50	
Lump Sum DROP Distributions	0.00	
Lump Sum Share Distributions	45,172.44	
Lump Sum PLOP Distributions	153,518.26	
Refunds of Member Contributions	0.00	
Total Distributions		2,547,375.20
		, ,
Expenses:		
Investment related <sup>1</sup>	109,602.67	
Administrative	84,954.72	
Total Expenses		194,557.39
Total Expenses		171,557.57
Change in Net Assets for the Year		2,413,066.55
Net Assets Beginning of the Year		56,114,575.64
Net Assets End of the Year <sup>2</sup>		58,527,642.19

<sup>&</sup>lt;sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees. <sup>2</sup>Net Assets may be limited for actuarial consideration.

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

Beginning of the Year Balance	141,532.02
Plus Additions	85,182.00
Investment Return Earned	12,169.85
Less Distributions	0.00
End of the Year Balance	238,883.87

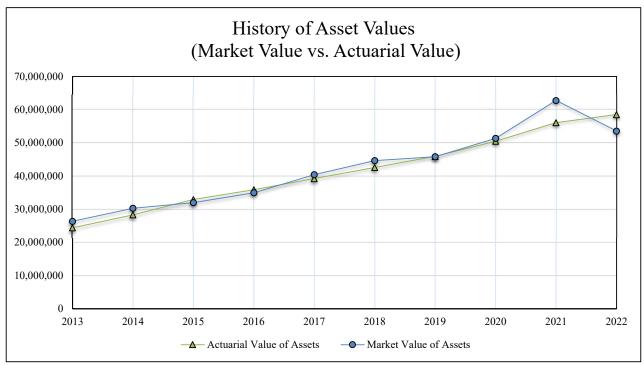
## SUPPLEMENTAL CHAPTER 185 SHARE PLAN ACTIVITY October 1, 2021 through September 30, 2022

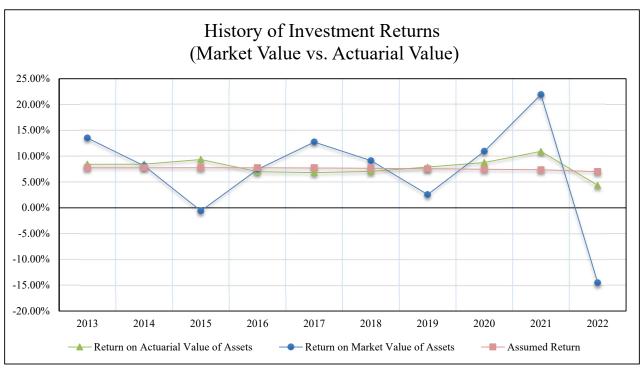
1,296,261.93	9/30/2021 Balance (Est.)
764.18	Prior Year Adjustment
335,040.26	Plus Additions
(182,020.00)	Investment Return Earned (Est.)
0.00	Administrative Fees (Est.)
(45,172.44)	Less Distributions
1,404,873.93	9/30/2022 Balance (Est.)

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

(1)	Required City and State Contributions	\$1,766,663.00
(2)	Less Allowable State Contribution	(280,000.00)
(3)	Required City Contribution for Fiscal 2022	1,486,663.00
(4)	Less 2021 Prepaid Contribution	(629,677.39)
(5)	Less Actual City Contributions	(1,486,663.00)
(6)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2022	(\$629,677.39)

### HISTORY OF ASSET VALUES AND INVESTMENT RETURNS





## STATISTICAL DATA

	10/1/2022	10/1/2021	10/1/2020	10/1/2019
Actives				
Number	55	58	58	61
Average Current Age	42.7	41.8	40.8	40.3
Average Age at Employment	28.1	28.1	28.1	28.2
Average Past Service	14.6	13.7	12.7	12.1
Average Annual Salary	\$107,637	\$96,945	\$93,832	\$92,787
Service Retirees				
Number	34	34	34	33
Average Current Age	59.3	58.2	57.9	58.3
Average Annual Benefit	\$53,052	\$52,359	\$52,889	\$51,305
DROP Retirees				
Number	1	1	1	0
Average Current Age	52.5	51.5	50.5	N/A
Average Annual Benefit	\$85,182	\$85,182	\$85,182	N/A
<u>Beneficiaries</u>				
Number	6	5	4	4
Average Current Age	57.9	58.1	57.7	56.7
Average Annual Benefit	\$45,949	\$46,365	\$46,753	\$46,753
Disability Retirees				
Number	11	11	11	11
Average Current Age	61.4	60.4	59.4	58.4
Average Annual Benefit	\$31,439	\$31,439	\$31,439	\$31,439
Terminated Vested				
Number	23	21	22	23
Average Current Age 1	40.6	40.2	40.9	39.9
Average Annual Benefit 1	\$37,093	\$30,534	\$29,286	\$29,286

<sup>&</sup>lt;sup>1</sup> The Average Current Age and Average Annual Benefit exclude participants awaiting a refund of contributions.

## AGE AND SERVICE DISTRIBUTION

#### PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19												0
20 - 24												0
25 - 29						1						1
30 - 34						7						7
35 - 39						2	7	3				12
40 - 44						2	3	5	2			12
45 - 49						1	3	9				13
50 - 54								5	2			7
55 - 59								1	2			3
60 - 64												0
65+												0
Total	0	0	0	0	0	13	13	23	6	0	0	55

#### VALUATION PARTICIPANT RECONCILIATION

#### 1. Active lives

a. Number in prior valuation 10/1/2021	58
b. Terminations	
i. Vested (partial or full) with deferred annuity	(2)
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. DROP	0
g. Continuing participants	55
h. New entrants / Rehires	0
i. Total active life participants in valuation	55

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

	Service Retirees, Vested Receiving Benefits	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested (Deferred Annuity)	Vested (Due <u>Refund)</u>	<u>Total</u>
a. Number prior valuation	34	1	5	11	2	19	72
Retired	1	0	0	0	0	0	1
DROP	0	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	0	2	0	2
Vested (Due Refund)	0	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0	0
Death, With Survivor	(1)	0	1	0	0	0	0
Death, No Survivor	0	0	0	0	0	0	0
Disabled	0	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0	0
Rehires	0	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0	0
b. Number current valuation	34	1	6	11	4	19	75

## SUMMARY OF CURRENT PLAN (Through Ordinance 2018-53)

Original Plan Effective Date December 14, 1979

<u>Latest Amendment</u> September 25, 2018

<u>Credited Service</u>

a.) Total aggregate period of service, including military leave if reemployed by City within 1

year of discharge under honorable conditions.

b.) Upon termination, prior Credited Service will be forfeited if refund of contributions elected, or

if not reemployed within (5) years, and not

vested at termination.

The Plan is closed to Police Officers hired after

December 31, 2015.

<u>Average Final Compensation</u> Average total W-2 earnings, plus tax deferred

and tax exempt income, during the best 5 years

of the last 10 years of service.

Normal Retirement

Eligibility The earlier of 1) age 55 and the completion of

10 Years of Service or 2) the completion of 25 Years of Service, regardless of age. For Members hired after May 27, 2014, there is an

age 52 requirement, in addition to the

completion of 25 years of Credited Service.

Benefit Amount 3.50% of Average Final Compensation for each

year of Credited Service. For Member hired after May 27, 2014, the benefit accrual rate is 3.15% for each year of Credited Service.

Form of Benefit Ten Year Certain and Life Annuity (options

available).

## Early Retirement

Eligibility

Benefit Amount

Age 45 and 10 Years of Service.

Accrued benefit, reduced by 3% per year for each year prior to the Normal Retirement Date if the Member has less than 15 years of service, 2% per year if the Member has at least 15 but less than 20 years of service or 1% per year of the Member has 20 or more years of service at the time of retirement. The Normal Retirement date is the earlier of 55 and 10 or when the Member would have reached 25 years of service.

For Members hired after May 27, 2014, the reduction is a flat 3% per year for each year prior to the Normal Retirement Date (determined as if employment had continued).

#### Disability

Service Connected

Eligibility

- a.) Years of Service: None
- b.) Total and permanent disability prior to Normal Retirement Date.

Benefit Amount

Greater of 1) 2% times Average Final Compensation times Credited Service, or 2) 60% of earnings in effect at time of disability (80% AFC minimum for intentional violence); 10 year certain and life annuity form of benefit (optional forms available).

Non-Service Connected

Eligibility

- a.) 10 Years of Service.
- b.) Total and permanent disability prior to Normal Retirement.

Benefit Amount

Same as Service Connected except minimum 50% of earnings.

Supplemental Benefit

\$165 per month for all service retirees, disability retirees, vested terminated Members, and beneficiaries. The supplemental benefit is not payable for Members hired after May 27, 2014.

## Pre-Retirement Death

Coverage from date of hire (service-incurred) or after 5 Years of Service (non-service). Benefit is 60% (Service incurred) or 50% (non-service) of compensation in effect at time of death payable to spouse for life (service incurred) or for life or until remarriage (non-service). If no spouse, children receive benefit in equal shares until age 18 (or age 23 if full-time student). Minimum benefit for vested Members is accrued benefit, less any benefits paid pursuant to other death benefit provisions.

## Vesting (Termination)

Less than 10 years of Service

10 years or more

Refund of Member Contributions Contributing without interest.

Accrued benefit payable at age 45 or later, on reduced basis if to commence prior to age 55, or Refund of Member Contributions.

## Contributions

Employee

Premium Tax

City

8.0% of total compensation.

0.85% tax on premiums for casualty insurance.

Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability as provided in Part VII of Chapter 112, Florida Statutes. In no event will City contributions be less than 18% of the Members' total pay.

#### Board of Trustees

- a.) Two City residents appointed by the City Commission,
- b.) Two Police Officers elected by a majority of Police Officers, and
- c.) Fifth Member elected by the Board and appointed (as a ministerial duty) by the City Commission.

## Deferred Retirement Option Plan

Eligibility Satisfaction of Normal Retirement requirements

(earlier of 1) Age 55 and 10 years of Credited Service, or 2) the completion of 25 years of

Credited Service, regardless of age).

Participation Not to exceed 36 months.

Rate of Return Actual net rate of investment return (total return

net of brokerage commissions, management fees, and transaction costs) credited each fiscal

quarter.

Form of Distribution Cash lump sum (options available) at

termination of employment.

Share Plan Chapter 185 State Monies received by the City

each year in excess of the \$280,000 applicable

frozen amount shall be allocated to each

Members share account.

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2022

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	651,274
Prepaid Expenses	3,551
Cash	2,027
Total Cash and Equivalents	656,852
Receivables:	
Member Contributions in Transit	19,813
City Contributions in Transit	371,666
State Contributions	615,040
Investment Income	61,076
Total Receivable	1,067,595
Investments:	
Stocks	9,560,011
Mutual Funds:	
Fixed Income	15,459,908
Equity	20,162,748
Pooled/Common/Commingled Funds:	
Real Estate	7,505,437
Total Investments	52,688,104
Total Assets	54,412,551
LIABILITIES	
Payables:	
Benefit Payments	5,456
PLOP Distributions	153,518
Investment Expenses	24,239
Administrative Expenses	2,085
Share Distributions	21,155
Total Liabilities	206,453
NET POSITION RESTRICTED FOR PENSIONS	54,206,098

# STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2022

#### Market Value Basis

ADDITIONS		
Contributions:		

 Member
 478,914

 City
 1,486,663

 State
 615,040

Total Contributions 2,580,617

**Investment Income:** 

ADDITIONS

Net Increase in Fair Value of Investments (10,781,624)
Interest & Dividends 1,733,779
Less Investment Expense<sup>1</sup> (109,603)

Net Investment Income (9,157,448)

Total Additions (6,576,831)

## **DEDUCTIONS**

Distributions to Members:

Benefit Payments2,348,685Lump Sum DROP Distributions0Lump Sum Share Distributions45,172Lump Sum PLOP Distributions153,518Refunds of Member Contributions0

Total Distributions 2,547,375

Administrative Expense 84,955

Total Deductions 2,632,330

Net Increase in Net Position (9,209,161)

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 63,415,259

End of the Year 54,206,098

<sup>&</sup>lt;sup>1</sup>Investment 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 City residents appointed by the City Commission,
- b. Two Police Officers elected by a majority of Police Officers, and
- c. Fifth Member elected by the Board and appointed (as a ministerial duty) by the City Commission.

Each person employed by the City Police Department as a full-time Police Officer before March 1, 2016 elected to continue to be a Member of the plan or to participate in the Florida Retirement System (FRS). All Police Officers hired on or after March 1, 2016 shall be compulsory members of the FRS and shall not be eligible for membership in this system. This system shall be closed to new members effective March 1, 2016. All remaining eligible Police Officers are therefore eligible for all plan benefits as provided for in the plan document and by applicable law.

## Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	51
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	21
Active Plan Members	58
	130

## Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

A summary of the benefit provisions can be found in the October 1, 2021 Actuarial Valuation Report for the City of North Port Police Officers' Pension - Local Option Trust Fund prepared by Foster & Foster Actuaries and Consultants.

#### **Contributions**

Employee: 8.0% of total compensation.

Premium Tax: 0.85% tax on premiums for casualty insurance.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability as provided in Part VII of Chapter 112, Florida Statutes. In no event will City contributions be less than 18% of the Members' total pay.

## Investment Policy:

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

Asset Class	Target Allocation
Domestic Equity	45.0%
International Equity	15.0%
Intermediate Fixed Income	20.0%
Global Bond	5.0%
Real Estate	10.0%
GTAA	5.00%
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 -14.54 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: Satisfaction of Normal Retirement requirements (earlier of (1) Age 55 and 10 years of Credited Service, or (2) the completion of 25 years of Credited Service, regardless of age).

Participation: Not to exceed 36 months.

Rate of Return: Actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs) credited each fiscal quarter.

The DROP balance as September 30, 2022 is \$238,884.

## 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 \$ 63,434,238
Plan Fiduciary Net Position \$ (54,206,098)
Sponsor's Net Pension Liability \$ 9,228,140
Plan Fiduciary Net Position as a percentage of Total Pension Liability 85.45%

## 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:

Inflation2.50%Salary IncreasesService basedDiscount Rate7.00%Investment Rate of Return7.00%

Mortality Rate Healthy Active Lives:

Female: PubS.H-2010 for Employees, set forward one year. Male: PubS.H-2010 for Employees, set forward one year.

Mortality Rate Healthy Retiree Lives:

Female: PubS.H-2010 for Healthy Retirees, set forward one year. Male: PubS.H-2010 for Healthy Retirees, set forward 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:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

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 special risk employees, with appropriate adjustments made based on plan demographics.

75% of active deaths are assumed to be service incurred.

The most recent actuarial experience study used to review the other significant assumptions was dated September 9, 2021.

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 arithmetic 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:

Long Term Expected Real Rate of
Return <sup>1</sup>
7.50%
8.50%
2.50%
3.50%
4.50%
3.50%

<sup>&</sup>lt;sup>1</sup> Source: AndCo Consulting

## 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.

	Current		
	1% Decrease	Discount Rate	1% Increase
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 16,926,410	\$ 9,228,140	\$ 2,842,940

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

	09/30/2022	09/30/2021
Total Pension Liability		
Service Cost	1,489,129	1,610,388
Interest	4,158,366	3,950,133
Share Plan Allocation	335,040	260,760
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	809,284	(367,528)
Changes of assumptions	-	2,796,088
Contributions - Buy Back	-	63,311
Benefit Payments, including Refunds of Employee Contributions	(2,547,375)	(2,512,541)
Net Change in Total Pension Liability	4,244,444	5,800,611
Total Pension Liability - Beginning	59,189,794	53,389,183
Total Pension Liability - Ending (a)	\$ 63,434,238	\$ 59,189,794
Plan Fiduciary Net Position		
Contributions - Employer	1,486,663	1,671,015
Contributions - State	615,040	540,760
Contributions - Employee	478,914	423,423
Contributions - Buy Back	-	63,311
Net Investment Income	(9,157,448)	11,316,980
Benefit Payments, including Refunds of Employee Contributions	(2,547,375)	(2,512,541)
Administrative Expense	(84,955)	(90,735)
Net Change in Plan Fiduciary Net Position	(9,209,161)	11,412,213
Plan Fiduciary Net Position - Beginning	63,415,259	52,003,046
Plan Fiduciary Net Position - Ending (b)	\$ 54,206,098	\$ 63,415,259
Net Pension Liability - Ending (a) - (b)	\$ 9,228,140	\$ (4,225,465)
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	85.45%	107.14%
Covered Payroll	\$ 5,986,423	\$ 5,292,794
Net Pension Liability as a percentage of Covered Payroll	154.15%	-79.83%

## **Notes to Schedule:**

Changes of assumptions:

For measurement date 09/30/2021, the following changes were made to the assumptions as a result of the experience study dated September 9, 2021:

- 1) Investment return assumption was reduced from 7.35% to 7.00%, net of investment related expenses.
- 2) The salary increase rates were decreased for members with 20 or less years of service and increased for members with more than 20 year of service.
- 3) Adjusted the normal and early retirement rates to first eligibility for Normal Retirement and increased the Early Retirement assumption from 10% to 15% for all years of eligibility.
- 4) Adjusted the assumed rates of withdrawal, resulting in generally more withdrawals for members with less than 15 years of service, followed by a 0% assumption for members with 15 or more years of service.

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

		Contributions in relation to			Contributions
	Actuarially	the Actuarially	Contribution		as a percentage
	Determined	Determined	Deficiency	Covered	of Covered
Fiscal Year Ended	Contribution	Contributions	(Excess)	Payroll	Payroll
09/30/2022	\$ 1,766,663	\$ 1,766,663	\$ -	\$ 5,986,423	29.51%
09/30/2021	\$ 1,951,015	\$ 1,951,015	\$ -	\$ 5,292,794	36.86%

## 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 North Port Police Officers' Pension - Local Option Trust Fund prepared by Foster & Foster Actuaries and Consultants.

## SCHEDULE OF INVESTMENT RETURNS

## Last 2 Fiscal Years

	Annual Money-Weighted Rate of Return
Fiscal Year Ended	Net of Investment Expense
09/30/2022	-14.54%
09/30/2021	21.93%

## 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 City residents appointed by the City Commission,
- b. Two Police Officers elected by a majority of Police Officers, and
- c. Fifth Member elected by the Board and appointed (as a ministerial duty) by the City Commission.

Each person employed by the City Police Department as a full-time Police Officer before March 1, 2016 elected to continue to be a Member of the plan or to participate in the Florida Retirement System (FRS). All Police Officers hired on or after March 1, 2016 shall be compulsory members of the FRS and shall not be eligible for membership in this system. This system shall be closed to new members effective March 1, 2016. All remaining eligible Police Officers are therefore eligible for all plan benefits as provided for in the plan document and by applicable law.

## Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	51
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	21
Active Plan Members	58
	130

#### Benefits Provided

The Plan provides retirement, termination, disability and death benefits.

A summary of the benefit provisions can be found in the October 1, 2021 Actuarial Valuation Report for the City of North Port Police Officers' Pension - Local Option Trust Fund prepared by Foster & Foster Actuaries and Consultants.

#### **Contributions**

Employee: 8.0% of total compensation.

Premium Tax: 0.85% tax on premiums for casualty insurance.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability as provided in Part VII of Chapter 112, Florida Statutes. In no event will City contributions be less than 18% of the Members' total pay.

## **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	2.50%
Salary Increases	Service based
Discount Rate	7.00%
Investment Rate of Return	7.00%

## **GASB 68**

Mortality Rate Healthy Active Lives:

Female: PubS.H-2010 for Employees, set forward one year. Male: PubS.H-2010 for Employees, set forward one year.

Mortality Rate Healthy Retiree Lives:

Female: PubS.H-2010 for Healthy Retirees, set forward one year. Male: PubS.H-2010 for Healthy Retirees, set forward 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:

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

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 special risk employees, with appropriate adjustments made based on plan demographics.

75% of active deaths are assumed to be service incurred.

The most recent actuarial experience study used to review the other significant assumptions was dated September 9, 2021.

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 arithmetic 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:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return <sup>1</sup>
Domestic Equity	45.0%	7.50%
International Equity	15.0%	8.50%
Intermediate Fixed Income	20.0%	2.50%
Global Bond	5.0%	3.50%
Real Estate	10.0%	4.50%
GTAA	5.0%	3.50%
Total	100.0%	

<sup>&</sup>lt;sup>1</sup> Source: AndCo Consulting

#### 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	Plan Fiduciary	Net Pension								
	Liability	Net Position	Liability								
	(a)	(b)	(a)-(b)								
Reporting Period Ending September 30, 2022	\$ 59,189,794	\$ 63,415,259	\$ (4,225,465)								
Changes for a Year:											
Service Cost	1,489,129	-	1,489,129								
Interest	4,158,366	-	4,158,366								
Share Plan Allocation	335,040	-	335,040								
Differences between Expected and Actual Experience	809,284	-	809,284								
Changes of assumptions	-	-	-								
Changes of benefit terms	-	-	-								
Contributions - Employer	-	1,486,663	(1,486,663)								
Contributions - State	-	615,040	(615,040)								
Contributions - Employee	-	478,914	(478,914)								
Net Investment Income	-	(9,157,448)	9,157,448								
Benefit Payments, including Refunds of Employee Contributions	(2,547,375)	(2,547,375)	-								
Administrative Expense		(84,955)	84,955								
Net Changes	4,244,444	(9,209,161)	13,453,605								
Reporting Period Ending September 30, 2023	\$ 63,434,238	\$ 54,206,098	\$ 9,228,140								

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	\$ 16,926,410	\$ 9,228,140	\$ 2,842,940					

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 \$657,190. On September 30, 2022, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred	Deferred
	Outflows of	Inflows of
	Resources	Resources
Differences between Expected and Actual Experience	274,255	695,942
Changes of assumptions	2,824,778	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	6,135,586
Employer and State contributions subsequent to the measurement date	2,101,703	
Total	\$ 5,200,736	\$ 6,831,528

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State 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	\$ (488,693)
2024	\$ (540,694)
2025	\$ (1,204,857)
2026	\$ (1,498,251)
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 \$3,583,888. 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	_	eferred flows of
	Resources	Re	esources
Differences between Expected and Actual Experience	704,737		335,663
Changes of assumptions	1,661,592		-
Net difference between Projected and Actual Earnings on Pension Plan investments	6,208,259		-
Employer and State contributions subsequent to the measurement date	TBD		-
Total	TBD	\$	335,663

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State 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	\$ 2,380,568
2025	\$ 1,716,405
2026	\$ 1,423,011
2027	\$ 2,718,941
2028	\$ -
Thereafter	\$ -

## 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	1,489,129	1,610,388
Interest	4,158,366	3,950,133
Share Plan Allocation	335,040	260,760
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	809,284	(367,528)
Changes of assumptions	-	2,796,088
Contributions - Buy Back	-	63,311
Benefit Payments, including Refunds of Employee Contributions	(2,547,375)	(2,512,541)
Net Change in Total Pension Liability	4,244,444	5,800,611
Total Pension Liability - Beginning	59,189,794	53,389,183
Total Pension Liability - Ending (a)	\$ 63,434,238	\$ 59,189,794
Plan Fiduciary Net Position		
Contributions - Employer	1,486,663	1,671,015
Contributions - State	615,040	540,760
Contributions - Employee	478,914	423,423
Contributions - Buy Back	470,714	63,311
Net Investment Income	(9,157,448)	11,316,980
Benefit Payments, including Refunds of Employee Contributions	(2,547,375)	(2,512,541)
Administrative Expense	(84,955)	(90,735)
Net Change in Plan Fiduciary Net Position	(9,209,161)	11,412,213
Plan Fiduciary Net Position - Beginning	63,415,259	52,003,046
Plan Fiduciary Net Position - Beginning Plan Fiduciary Net Position - Ending (b)	\$ 54,206,098	\$ 63,415,259
Fian Fiduciary Net Fosition - Ending (b)	3 34,200,096	\$ 03,413,239
Net Pension Liability - Ending (a) - (b)	\$ 9,228,140	\$ (4,225,465)
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	85.45%	107.14%
Covered Payroll	\$ 5,986,423	\$ 5,292,794
Net Pension Liability as a percentage of Covered Payroll	154.15%	-79.83%

## **Notes to Schedule:**

Changes of assumptions:

For measurement date 09/30/2021, the following changes were made to the assumptions as a result of the experience study dated September 9, 2021:

- 1) Investment return assumption was reduced from 7.35% to 7.00%, net of investment related expenses.
- 2) The salary increase rates were decreased for members with 20 or less years of service and increased for members with more than 20 year of service.
- 3) Adjusted the normal and early retirement rates to first eligibility for Normal Retirement and increased the Early Retirement assumption from 10% to 15% for all years of eligibility.
- 4) Adjusted the assumed rates of withdrawal, resulting in generally more withdrawals for members with less than 15 years of service, followed by a 0% assumption for members with 15 or more years of service.

## SCHEDULE OF CONTRIBUTIONS

Last 2 Fiscal Years

		Contributions					
		in relation to			Contributions		
	Actuarially	the Actuarially	Contribution		as a percentage		
	Determined	Determined	Deficiency	Covered	of Covered		
Fiscal Year Ended	Contribution	Contributions	(Excess)	Payroll	Payroll		
09/30/2022	\$ 1,766,663	\$ 1,766,663	\$ -	\$ 5,986,423	29.51%		
09/30/2021	\$ 1,951,015	\$ 1,951,015	\$ -	\$ 5,292,794	36.86%		

## 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 North Port Police Officers' Pension - Local Option Trust Fund prepared by Foster & Foster Actuaries and Consultants.

## EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The fo	llowing	g inf	format	ion :	is not	t required	l to	be d	iscl	osed	but	is	provi	ded	l fo	r i	inf	ormat	ional	l pur	poses	3.
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# FINAL COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2022

\$ 1,386,137 - 1,610,388 3,950,133 260,760 - 63,311 (367,528)	\$ 2,812,716 - - - - - -	\$ 5,349,013 2,101,703 - -	\$ - 1,610,388 3,950,133
3,950,133 260,760 - 63,311	- - - -	2,101,703 - - -	·
3,950,133 260,760 - 63,311	- - - -	- - -	·
3,950,133 260,760 - 63,311	- - - -	- - -	·
260,760 - 63,311	- - -	-	3,950,133
63,311	- - -	-	-,,-
·	-		260,760
·	_	-	-
(267 529)		-	63,311
(367 529)			
(307,348)	367,528	-	-
-	(661,565)	(176,481)	(485,084)
2,796,088	-	2,796,088	-
-	-	(1,293,592)	1,293,592
(2,512,541)	-	-	-
5,800,611	(294,037)	3,427,718	6,693,100
1,671,015	-	(1,671,015)	-
	_		_
•	-	-	(423,423)
63,311	-	-	(63,311)
3,825,724	-	_	(3,825,724)
			, , , ,
7,491,256	7,491,256	-	-
-		(454,740)	(1,814,187)
	, , , ,	, ,	, , , ,
(2,512,541)	-	-	-
(90,735)	-	-	90,735
11,412,213	5,222,329	(2,666,515)	(6,035,910)
	5,800,611 1,671,015 540,760 423,423 63,311 3,825,724 7,491,256 - (2,512,541) (90,735)	5,800,611     (294,037)       1,671,015     -       540,760     -       423,423     -       63,311     -       3,825,724     -       7,491,256     7,491,256       -     (2,268,927)       (2,512,541)     -       (90,735)     -	5,800,611     (294,037)     3,427,718       1,671,015     -     (1,671,015)       540,760     -     (540,760)       423,423     -     -       63,311     -     -       3,825,724     -     -       7,491,256     -     -       -     (2,268,927)     (454,740)       (2,512,541)     -     -       (90,735)     -     -

# PRELIMINARY COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2023

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (4,225,465)	\$ 7,741,008	\$ 6,110,216	\$ -
Employer and State Contributions made after 09/30/2022	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	1,489,129	-	-	1,489,129
Interest	4,158,366	-	-	4,158,366
Share Plan Allocation	335,040	-	-	335,040
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	809,284	-	809,284	-
Current year amortization of experience difference	-	(360,279)	(378,802)	18,523
Change in assumptions about future economic or				
demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(1,163,186)	1,163,186
Benefit Payments, including Refunds of Employee				
Contributions	(2,547,375)	-	-	-
Net change	4,244,444	(360,279)	(732,704)	7,164,244
Plan Fiduciary Net Position:				
Contributions - Employer	1,486,663	_	(1,486,663)	_
Contributions - State	615,040	_	(615,040)	_
Contributions - Employee	478,914	_	-	(478,914)
Projected Net Investment Income	4,437,258	_	_	(4,437,258)
Difference between projected and actual earnings on	, ,			( , - · , ,
Pension Plan investments	(13,594,706)	_	13,594,706	_
Current year amortization	-	(1,922,821)	(3,173,682)	1,250,861
Benefit Payments, including Refunds of Employee		, , , ,	, , , ,	, ,
Contributions	(2,547,375)	_	_	_
Administrative Expenses	(84,955)	_	-	84,955
Net change	(9,209,161)	(1,922,821)	8,319,321	(3,580,356)
Ending Balance	\$ 9,228,140	\$ 5,457,908	TBD	\$ 3,583,888
Ending Datance	Ψ 7,220,140	Ψ 3,731,700		Ψ 5,505,000

<sup>\*</sup> Employer and State 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	Projected	ces Between d and Actual arnings	Recognition Period (Years)		2022		2023		2024		2025		2026	2027	2028		,	2029		2030		2031	
2022	\$	13,594,706	5	\$	-	. §	5 2,718,942	\$	2,718,941	\$ 2	2,718,941	\$	2,718,941	\$ \$ 2,718,941	\$	_	\$		- :	\$	_	\$	_
2021	\$	(7,491,256)	5	\$(1	,498,252	() \$	5 (1,498,251)	\$(	(1,498,251)	\$(1	1,498,251)	\$(	(1,498,251)	\$ -	\$	-	\$		- :	\$	-	\$	-
2020	\$	(1,568,728)	5	\$	(313,746	() \$	(313,746)	\$	(313,746)	\$	(313,746)	\$	-	\$ -	\$	-	\$		- :	\$	-	\$	-
2019	\$	2,273,700	5	\$	454,740	\$	454,740	\$	454,740	\$	_	\$	-	\$ -	\$	-	\$		- :	\$	-	\$	-
2018	\$	(554,122)	5	\$	(110,824	) \$	(110,824)	\$	_	\$	-	\$	-	\$ -	\$	-	\$		- :	\$	_	\$	-
2017	\$	(1,730,524)	5	\$	(346,105	() \$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$		- :	\$	-	\$	-
Net Increas	e (Decreas	e) in Pension	Expense	\$(1	,814,187	') <b>\$</b>	5 1,250,861	\$	1,361,684	\$	906,944	\$	1,220,690	\$ 5 2,718,941	\$	_	\$		- ;	\$	_	\$ 	

## 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		202	27	2028		2029		2030		203	1
2021	\$	2,796,088	4	\$	699,022	\$ 699,022	\$ 699,022	\$ 699,022	\$	_	\$	_	\$		3	_	\$	_	\$	_
2020	\$	602,053	4	\$	150,513	\$ 150,513	\$ 150,513	\$ -	\$	-	\$	-	\$ -	- 5	3	-	\$	-	\$	-
2019	\$	565,173	5	\$	113,035	\$ 113,035	\$ 113,035	\$ -	\$	-	\$	-	\$ -	- 5	3	-	\$	-	\$	-
2018	\$	528,699	5	\$	105,740	\$ 105,740	\$ -	\$ -	\$	-	\$	-	\$ -	- 5	3	-	\$	-	\$	-
2017	\$	569,256	6	\$	94,876	\$ 94,876	\$ -	\$ -	\$	-	\$	-	\$ -	- 5	3	-	\$	-	\$	-
2016	\$	782,433	6	\$	130,406	\$ -	\$ -	\$ -	\$	-	\$	-	\$ -	- 5	3	-	\$	-	\$	-
Net Increase (Decrease) in Pension Expense					1,293,592	\$ 1,163,186	\$ 962,570	\$ 699,022	\$	-	\$		\$ -	. (	6	-	\$	-	\$	

## 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		ferences Between pected and Actual Experience	Recognition Period (Years)		2022	2023	2024	2025	2026	2027	2028		20	)29	2030		2	031	-
2022	\$	809,284	4	\$	-	\$ 202,321	\$ 202,321	\$ 202,321	\$ 202,321	\$ _	\$	_	\$	_	\$	_	\$	_	
2021	\$	(367,528)	4	\$	(91,882)	\$ (91,882)	\$ (91,882)	\$ (91,882)	\$ -	\$ _	\$	_	\$	_	\$	_	\$	_	
2020	\$	(607,594)	4	\$	(151,899)	\$ (151,899)	\$ (151,899)	\$ -	\$ -	\$ -	\$	-	\$	_	\$	-	\$	-	
2019	\$	488,870	5	\$	97,774	\$ 97,774	\$ 97,774	\$ -	\$ -	\$ -	\$	-	\$	_	\$	-	\$	-	
2018	\$	(582,492)	5	\$	(116,498)	\$ (116,498)	\$ -	\$ -	\$ -	\$ -	\$	-	\$	_	\$	-	\$	-	
2017	\$	472,241	6	\$	78,707	\$ 78,707	\$ -	\$ -	\$ -	\$ -	\$	-	\$	_	\$	-	\$	-	
2016	\$	(860,314)	6	\$	(143,386)	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	
2015	\$	(1,105,298)	7	\$	(157,900)	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$	-	\$	-	\$	-	
Net Increase (Decrease) in Pension Expense					(485,084)	\$ 18,523	\$ 56,314	\$ 110,439	\$ 202,321	\$ 	\$	-	\$	_	\$	-	\$		i