

CITY OF CORAL SPRINGS
POLICE OFFICERS' PENSION PLAN

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2022

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2024

GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2022



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

March 3, 2023

Board of Trustees
City of Coral Springs
Police Officers' Pension Board

Re: City of Coral Springs Police Officers' Pension Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Coral Springs Police Officers' Pension Plan. 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 Coral Springs, 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 Coral Springs, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Officers' Pension Plan. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

By: 
Bradley R. Heinrichs, FSA, EA, MAAA
Enrolled Actuary #20-6901

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 Coral Springs Police Officers' Pension Plan, 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.

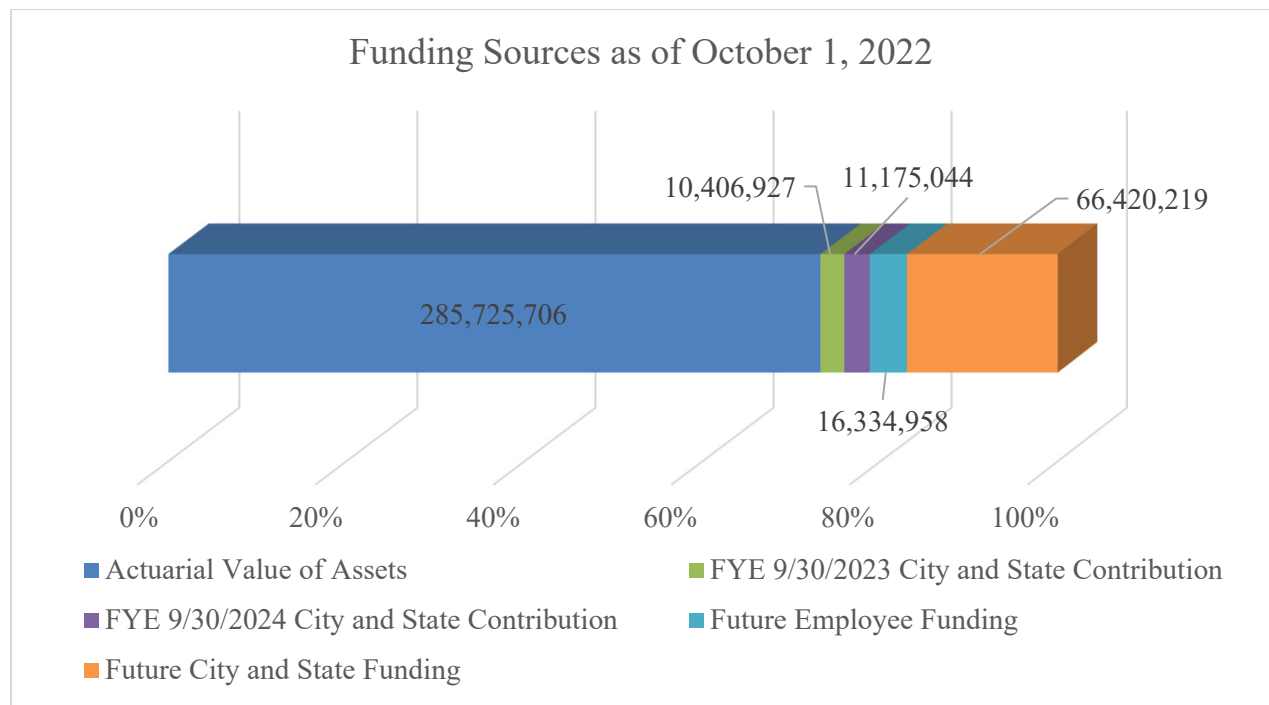
The contribution requirements, compared with those set forth in the October 1, 2021 actuarial valuation report (completed by Southern Actuarial Services), are as follows:

Valuation Date	10/1/2022	10/1/2021
Applicable to Fiscal Year Ending	<u>9/30/2024</u>	<u>9/30/2023</u>
Minimum Required Contribution	\$13,428,878	\$12,310,630
Member Contributions (Est.)	2,253,834	1,903,703
City And State Required Contribution	11,175,044	10,406,927
State Contribution (Est.) ¹	1,302,752	1,302,752
City Required Contribution ²	\$9,872,292	\$9,104,175

¹ Represents the amount received in calendar 2022. Per a Mutual Consent Agreement, all State Monies received each year will be available to offset the City's required contribution.

² Please note that the City has access to a prepaid contribution of \$444,811.84 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2023.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. The primary sources of actuarial loss were an average salary increase of 9.89% which exceeded the 4.75% assumption, an investment return of 6.47% (Actuarial Asset Basis) which fell short of the 7.00% assumption, and more retirements than expected. This actuarial loss was offset by a decrease in the Actuarial Accrued Liability due to transition of actuarial firms.



Also as requested, we have provided a five-year projection of the estimated City's contribution requirements:

Valuation Date	10/1/2022	10/1/2023	10/1/2024	10/1/2025	10/1/2026
Applicable to Fiscal Year Ending	<u>9/30/2024</u>	<u>9/30/2025</u>	<u>9/30/2026</u>	<u>9/30/2027</u>	<u>9/30/2028</u>
City Required Contribution (est.)	9,870,000	10,430,000	9,810,000	9,630,000	10,140,000

The Board utilizes a five-year smoothing technique for the Actuarial Value of Assets, under which all assets are valued at market value with an adjustment 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. As shown on page 31, the investment loss in fiscal year 2022 was larger than the accumulated gains and losses in fiscal years 2018-2021. Therefore, absent any future investment gains or losses, there will be a recognition of net deferred losses over the next four years. The increase in the contribution requirements due to recognizing these losses is offset in the 10/1/2024 and 10/1/2025 valuations due to full amortization of an Unfunded Actuarial Accrued Liability base established with the 1/1/1995 valuation date.

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

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

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2022</u>	<u>10/1/2021</u>
A. Participant Data		
Actives	180	169
Service Retirees	159	150
DROP Retirees	32	36
Beneficiaries	10	9
Disability Retirees	16	15
Terminated Vested	<u>19</u>	<u>19</u>
 Total	 416	 398
 Total Annual Payroll	 \$18,709,842	 \$16,715,037
Payroll Under Assumed Ret. Age	18,709,842	N/A
 Annual Rate of Payments to:		
Service Retirees	12,772,228	11,703,348
DROP Retirees	2,972,141	3,433,177
Beneficiaries	672,559	600,776
Disability Retirees	1,065,833	974,232
Terminated Vested	236,728	198,183
 B. Assets		
Actuarial Value (AVA) ¹	285,725,706	271,845,820
Market Value (MVA) ¹	258,203,044	301,474,192
 C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	115,147,935	101,939,867
Disability Benefits	5,576,300	4,008,793
Death Benefits	1,193,521	2,132,434
Vested Benefits	8,009,862	4,006,070
Refund of Contributions	115,148	179,698
Service Retirees	186,894,568	175,169,079
DROP Retirees ¹	48,692,702	58,407,600
Beneficiaries	7,727,045	8,966,336
Disability Retirees	13,511,851	11,638,329
Terminated Vested	<u>3,193,922</u>	<u>3,396,656</u>
 Total	 390,062,854	 369,844,862

C. Liabilities - (Continued)	<u>10/1/2022</u>	<u>10/1/2021</u>
Present Value of Future Salaries	142,043,116	116,489,858
Present Value of Future Member Contributions	16,334,958	13,267,218
Normal Cost (Retirement)	5,694,955	5,022,518
Normal Cost (Disability)	313,977	321,881
Normal Cost (Death)	117,072	148,678
Normal Cost (Vesting)	433,531	291,884
Normal Cost (Refunds)	23,275	36,122
Total Normal Cost	6,582,810	5,821,083
Present Value of Future Normal Costs	47,493,980	35,764,733
Accrued Liability (Retirement)	75,616,707	69,971,284
Accrued Liability (Disability)	2,507,024	2,482,750
Accrued Liability (Death)	307,840	1,344,046
Accrued Liability (Vesting)	4,089,092	2,609,005
Accrued Liability (Refunds)	28,123	95,044
Accrued Liability (Inactives) ¹	260,020,088	257,578,000
Total Actuarial Accrued Liability (EAN AL)	342,568,874	334,080,129
Unfunded Actuarial Accrued Liability (UAAL)	56,843,168	62,234,309
Funded Ratio (AVA / EAN AL)	83.4%	81.4%

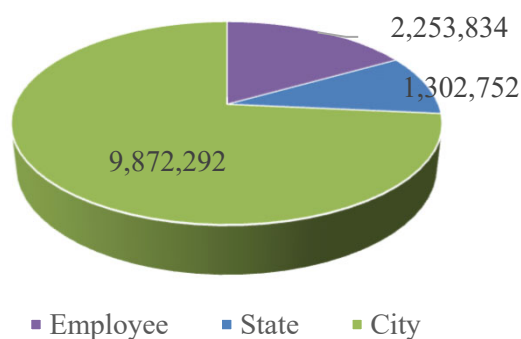
D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2022</u>	<u>10/1/2021</u>
Vested Accrued Benefits		
Inactives ¹	260,020,088	257,578,000
Actives	43,791,520	60,851,176
Member Contributions	<u>15,617,876</u>	<u>15,214,870</u>
Total	319,429,484	333,644,046
Non-vested Accrued Benefits	<u>4,736,761</u>	<u>5,710,858</u>
Total Present Value		
Accrued Benefits (PVAB)	324,166,245	339,354,904
Funded Ratio (MVA / PVAB)	79.7%	88.8%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	(21,363,741)	
Benefits Paid	(16,985,277)	
Interest	23,160,359	
Other	<u>0</u>	
Total	(15,188,659)	

Valuation Date	10/1/2022	10/1/2021
Applicable to Fiscal Year Ending	<u>9/30/2024</u>	<u>9/30/2023</u> ²

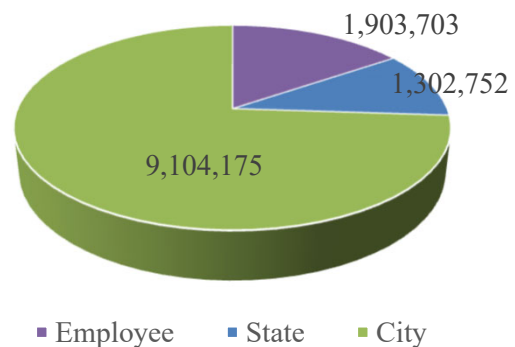
E. Pension Cost

Normal Cost ²	\$6,895,493	\$5,821,083
Administrative Expenses ²	279,438	208,938
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 10/1/2022) ²	6,253,947	6,263,726
Interest Adjustment	N/A	16,883
Minimum Required Contribution	13,428,878	12,310,630
Expected Member Contributions ²	2,253,834	1,903,703
Expected City and State Contribution	11,175,044	10,406,927

Contributions by Source for the
Fiscal Year Ending 9/30/2024



Contributions by Source for the
Fiscal Year Ending 9/30/2023



² Contributions developed as of 10/1/2022 displayed above have been adjusted to account for assumed salary increase components.

² Values shown are based on the information from the prior actuarial report developed by Southern Actuarial Services.

F. Past Contributions

Plan Years Ending: 9/30/2022

City and State Requirement 11,180,566

Actual Contributions Made:

City	9,877,814
State	<u>1,302,752</u>
Total	11,180,566

G. Net Actuarial (Gain)/Loss (2,259,806)

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	56,843,168
2023	54,433,908
2024	51,870,362
2031	34,274,360
2038	11,677,690
2040	3,277,534
2052	0

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

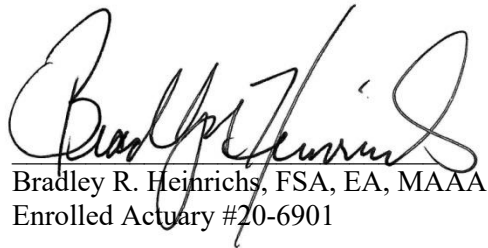
		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2022	9.89%	4.75%
Year Ended	9/30/2021	5.99%	4.75%
Year Ended	9/30/2020	5.84%	4.75%
Year Ended	9/30/2019	6.91%	4.75%
Year Ended	9/30/2018	4.72%	4.75%

(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	-13.06%	6.47%	7.00%
Year Ended	9/30/2021	20.74%	11.60%	7.00%
Year Ended	9/30/2020	7.32%	17.85%	7.50%
Year Ended	9/30/2019	5.32%	8.13%	7.50%
Year Ended	9/30/2018	10.72%	7.66%	7.50%

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.



Bradley R. Heinrichs, FSA, EA, MAAA
Enrolled Actuary #20-6901

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

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

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

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2021	\$62,234,309
(2)	Sponsor Normal Cost developed as of October 1, 2021	3,898,854
(3)	Expected administrative expenses for the year ended September 30, 2022	208,938
(4)	Expected interest on (1), (2) and (3)	4,636,634
(5)	Sponsor contributions to the System during the year ended September 30, 2022	11,180,566
(6)	Expected interest on (5)	695,195
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2022 (1)+(2)+(3)+(4)-(5)-(6)	59,102,974
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(2,259,806)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2022	56,843,168

Type of Base	Date Established	Years Remaining	10/1/2022 Amount	Amortization Amount
Early Ret. Program	1/1/1993	0.25	14,135	14,135
Plan Amendment	1/1/1994	1.25	(1,194)	(963)
Combined Base	1/1/1995	2.25	1,528,719	708,229
Assumption Change	1/1/1998	5.25	(93,167)	(20,387)
Method Change	1/1/1999	6.25	(26,403)	(5,009)
Plan Amendment	1/1/2000	7.25	(51,212)	(8,642)
Combined Base	1/1/2002	9.25	1,762,502	247,864
Plan Amendment	10/1/2004	12	6,082,470	715,696
Combined Base	10/1/2007	15	(302,230)	(31,012)
Method Change	10/1/2008	16	(6,746,092)	(667,407)
Assumption Changes	10/1/2009	17	9,975,855	954,934
Assumption Changes	10/1/2010	18	4,944,242	459,364
Method Change	10/1/2011	19	41,174,250	3,723,115
Combined Base	10/1/2012	20	(7,661,349)	(675,866)
Experience Gain	10/1/2013	21	(2,268,747)	(195,683)
Combined Base	10/1/2014	22	556,638	47,031
Experience Gain	10/1/2015	23	(3,539,551)	(293,465)
Plan Amendment	10/1/2015	23	1,758,061	145,761
Experience Loss	10/1/2016	24	7,222,180	588,500
Assumption Change	10/1/2016	24	8,018,831	653,415

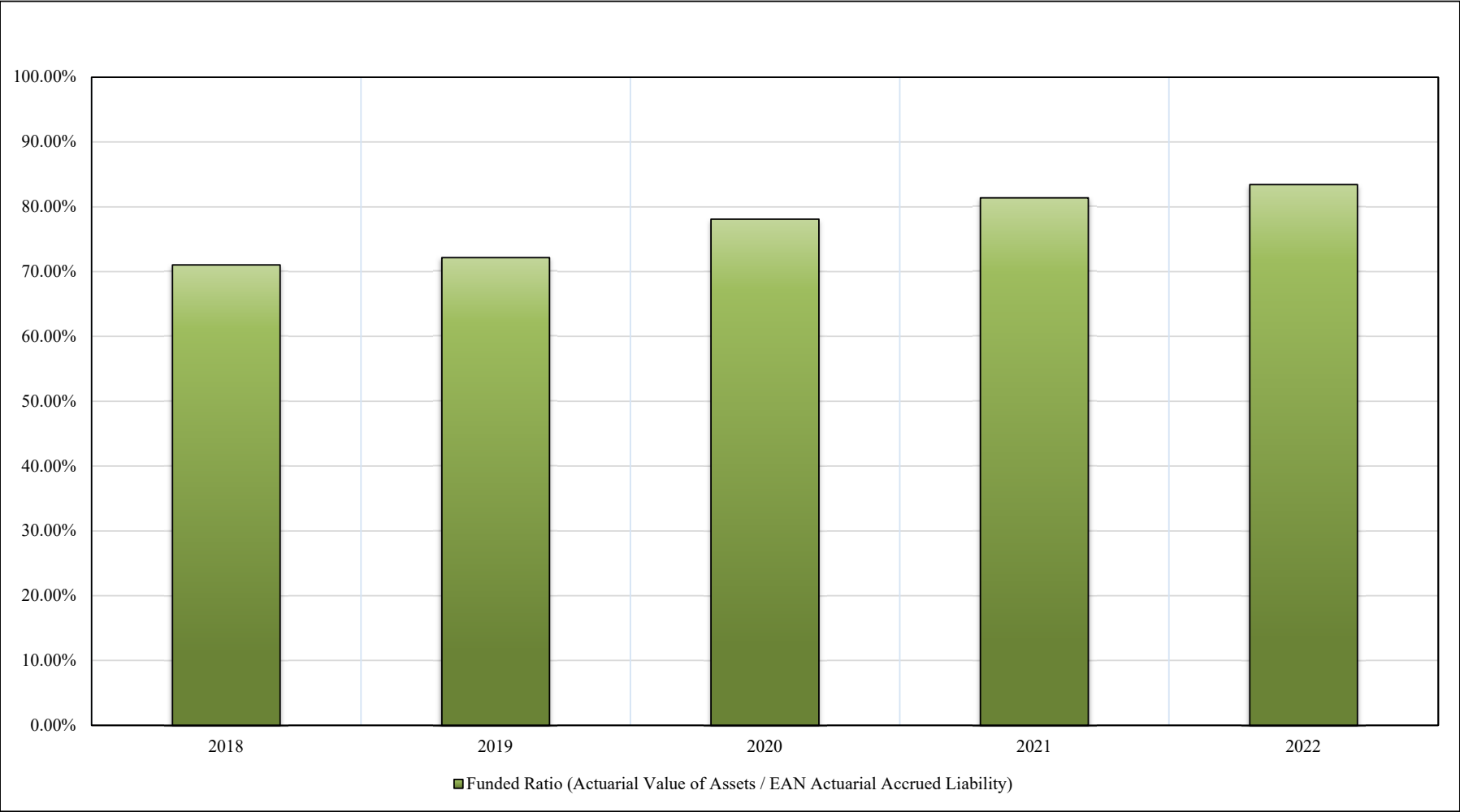
Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2022 <u>Amount</u>	Amortization <u>Amount</u>
Experience Loss	10/1/2017	25	7,221,801	579,165
Plan Amendment	10/1/2017	25	202,866	16,269
Experience Loss	10/1/2018	26	248,995	19,678
Plan Amendment	10/1/2019	27	1,166,968	90,986
Experience Loss	10/1/2019	27	1,866,668	145,540
Experience Gain	10/1/2020	28	(2,389,250)	(183,977)
Assumption Change	10/1/2020	28	10,334,802	795,798
Method Change	10/1/2020	28	(17,753,618)	(1,367,061)
Experience Gain	10/1/2021	29	(8,127,759)	(618,687)
Plan Amendment	10/1/2021	29	3,983,563	303,230
Actuarial Gain	10/1/2022	30	<u>(2,259,806)</u>	<u>(170,196)</u>
			56,843,168	5,970,355

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2021	\$62,234,309
(2) Expected UAAL as of October 1, 2022	59,102,974
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	1,430,533
Salary Increases	1,910,765
Active Decrements	1,545,126
Inactive Mortality	51,490
Other ¹	<u>(7,197,720)</u>
Increase in UAAL due to (Gain)/Loss	(2,259,806)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2022	\$56,843,168

¹ Includes amount due to transition of actuarial firms.

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

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

Male: PubS.H-2010 (Below Median) for Employees, set forward one year.

Healthy Retiree Lives:

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

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

Beneficiary Lives:

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

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

Disabled Lives:

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

All rates 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.

25% of active deaths are assumed to be service-incurred.

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.

<u>Salary Increases</u>	4.75% per annum.
<u>Payroll Growth</u>	0.00% for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.
<u>Administrative Expenses</u>	\$266,767 annually, based on the average of actual expenses incurred in the prior two fiscal years. Previously, the prior actuary disclosed that the administrative expenses were assumed to be 0.5% of covered payroll.
<u>Amortization Method</u>	New UAAL amortization bases are amortized over 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.
<u>Funding Method</u>	Entry Age Normal Actuarial Cost Method. The following loads are applied for determining the minimum required contribution: Interest - None, based on current 7.00% assumption. Salary - A full year, based on current 4.75% assumption.
<u>Actuarial Asset Method</u>	All assets are valued at market value with an adjustment 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.
<u>Marriage Assumption</u>	100% of participants are assumed to be married, with male spouses assumed to be three years older than female spouses; participants are not assumed to have any dependents other than a spouse at the time of their death.
<u>Retirement Age</u>	Participants are assumed to retire at their Normal Retirement age. Also, eligible participants are assumed to continue employment for one additional year.

Termination Rate

See sample rates below. No terminations are assumed to occur during the first year following the valuation date.

% Terminating During the Year	
Age	Rate
20	6.0%
30	5.0%
40	2.6%
50	0.0%

Disability Rate

See sample rates below. No disablements are assumed to occur during the first year following the valuation date.

% Becoming Disabled During the Year	
Age	Rate
20	0.14%
30	0.18%
40	0.30%
50	1.00%

Please note that unless otherwise stated, all of the assumptions utilized in this valuation rely on what was provided in the prior actuary's October 1, 2021 actuarial valuation report.

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 92.9% on October 1, 2019 to 80.4% 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 75.9%. 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 72.2% on October 1, 2019 to 83.4% 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 -0.1% on October 1, 2019 to -1.4% on October 1, 2022. The current Net Cash Flow Ratio of -1.4% 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>10/1/2020</u>	<u>10/1/2019</u>
<u>Support Ratio</u>				
Total Actives	180	169	178	183
Total Inactives ¹	224	217	206	197
Actives / Inactives ¹	80.4%	77.9%	86.4%	92.9%

Asset Volatility Ratio

Market Value of Assets (MVA)	258,203,044	301,474,192	252,393,599	236,923,386
Total Annual Payroll	18,709,842	16,715,037	17,481,543	17,006,487
MVA / Total Annual Payroll	1,380.0%	1,803.6%	1,443.8%	1,393.1%

Accrued Liability (AL) Ratio

Inactive Accrued Liability	260,020,088	257,578,000	236,119,137	217,321,739
Total Accrued Liability (EAN)	342,568,874	334,080,129	315,094,715	291,181,314
Inactive AL / Total AL	75.9%	77.1%	74.9%	74.6%

Funded Ratio

Actuarial Value of Assets (AVA)	285,725,706	271,845,820	246,048,412	210,141,516
Total Accrued Liability (EAN)	342,568,874	334,080,129	315,094,715	291,181,314
AVA / Total Accrued Liability (EAN)	83.4%	81.4%	78.1%	72.2%

Net Cash Flow Ratio

Net Cash Flow ²	(3,565,932)	(2,551,931)	(1,810,763)	(235,911)
Market Value of Assets (MVA)	258,203,044	301,474,192	252,393,599	236,923,386
Ratio	-1.4%	-0.8%	-0.7%	-0.1%

¹ Excludes terminated participants awaiting a refund of member contributions.

² 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 <u>Previous Year</u>
2003	642,141.00	12.3%
2004	818,079.00	27.4%
2005	855,381.00	4.6%
2006	870,163.00	1.7%
2007	892,472.00	2.6%
2008	939,864.00	5.3%
2009	918,650.00	-2.3%
2010	862,058.00	-6.2%
2011	801,794.00	-7.0%
2012	845,572.00	5.5%
2013	891,781.00	5.5%
2014	984,087.00	10.4%
2015	983,251.00	-0.1%
2016	1,085,407.00	10.4%
2017	1,102,068.00	1.5%
2018	1,161,760.00	5.4%
2019	1,263,471.00	8.8%
2020	1,270,664.00	0.6%
2021	1,245,118.00	-2.0%
2022	1,302,751.84	4.6%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2022

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Money Market	8,708,457.05	8,708,457.05
Total Cash and Equivalents	8,708,457.05	8,708,457.05
Receivables:		
From Broker for Investments Sold	1,130,807.41	1,130,807.41
Investment Income	206,844.05	206,844.05
Total Receivable	1,337,651.46	1,337,651.46
Investments:		
U. S. Bonds and Bills	8,862,782.68	8,337,187.73
Federal Agency Guaranteed Securities	7,902,209.18	6,955,427.69
Corporate Bonds	8,782,748.14	7,629,703.01
Stocks	92,246,962.12	84,654,161.86
Alternative	31,282,688.36	24,077,048.56
Mutual Funds:		
Fixed Income	15,799,670.91	13,483,731.38
Equity	54,023,782.75	53,876,251.13
Pooled/Common/Commingled Funds:		
Real Estate	35,126,769.44	50,540,256.04
Total Investments	254,027,613.58	249,553,767.40
Total Assets	264,073,722.09	259,599,875.91
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	297,640.23	297,640.23
Administrative Expenses	10,259.75	10,259.75
To Broker for Investments Purchased	644,119.73	644,119.73
Prepaid City Contribution	444,811.84	444,811.84
Total Liabilities	1,396,831.55	1,396,831.55
NET POSITION RESTRICTED FOR PENSIONS	262,676,890.54	258,203,044.36

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

ADDITIONS

Contributions:

Member	2,050,138.16
Buy-Back	451,516.89
City	9,877,814.16
State	1,302,751.84

Total Contributions	13,682,221.05
---------------------	---------------

Investment Income:

Miscellaneous Income	110,531.72
Net Realized Gain (Loss)	11,332,763.71
Unrealized Gain (Loss)	(58,063,853.95)
Net Increase in Fair Value of Investments	(46,620,558.52)
Interest & Dividends	8,479,011.82
Less Investment Expense ¹	(1,563,667.84)

Net Investment Income	(39,705,214.54)
-----------------------	-----------------

Total Additions	(26,022,993.49)
-----------------	-----------------

DEDUCTIONS

Distributions to Members:

Benefit Payments	13,601,775.45
Monthly DROP Additions to Self-Directed Accounts	3,322,387.48
Refunds of Member Contributions	61,114.50

Total Distributions	16,985,277.43
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Administrative Expense	262,876.43
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Total Deductions	17,248,153.86
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Net Increase in Net Position	(43,271,147.35)
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year ²	301,474,191.71
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End of the Year	258,203,044.36
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

²Beginning of the Year Market Value excludes Prepaid City and Member contributions totalling \$442,411.29.

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	9,001,113	0	0	0	0	0
09/30/2019	(2,406,915)	(481,383)	0	0	0	0
09/30/2020	2,083,328	833,330	416,664	0	0	0
09/30/2021	34,495,190	20,697,114	13,798,076	6,899,038	0	0
09/30/2022	(60,714,654)	(48,571,723)	(36,428,792)	(24,285,861)	(12,142,930)	0
Total		(27,522,662)	(22,214,052)	(17,386,823)	(12,142,930)	0

<u>Development of Investment Gain/Loss</u>	
Market Value of Assets, including Prepaid Contributions, 09/30/2021	301,916,603
Contributions Less Benefit Payments & Admin Expenses	(3,563,532)
Expected Investment Earnings*	21,009,439
Actual Net Investment Earnings	(39,705,215)
2022 Actuarial Investment Gain/(Loss)	(60,714,654)

*Expected Investment Earnings = 0.07 * (301,916,603 - 0.5 * 3,563,532)

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2022	258,203,044
(2) Gains/(Losses) Not Yet Recognized	(27,522,662)
(3) Actuarial Value of Assets, 09/30/2022, (1) - (2)	285,725,706
(A) 09/30/2021 Actuarial Assets, including Prepaid Contributions:	272,232,997
(I) Net Investment Income:	
1. Interest, Dividends, and Miscellaneous Income	8,589,544
2. Realized Gain (Loss)	11,332,764
3. Unrealized Gain (Loss)	(58,063,854)
4. Change in Actuarial Value	57,206,268
5. Investment Expenses	(1,563,668)
Total	17,501,053

(B) 09/30/2022 Actuarial Assets, including Prepaid Contributions: 286,170,518

Actuarial Assets Rate of Return = $2I/(A+B-I)$: 6.47%
Market Value of Assets Rate of Return: -13.06%

10/01/2022 Limited Actuarial Assets (not including Prepaid): 285,725,706
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis) (1,430,533)

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

REVENUES

Contributions:		
Member	2,050,138.16	
Buy-Back	451,516.89	
City	9,877,814.16	
State	1,302,751.84	
Total Contributions		13,682,221.05
Earnings from Investments:		
Interest & Dividends	8,479,011.82	
Miscellaneous Income	110,531.72	
Net Realized Gain (Loss)	11,332,763.71	
Unrealized Gain (Loss)	(58,063,853.95)	
Change in Actuarial Value	57,206,268.00	
Total Earnings and Investment Gains		19,064,721.30

EXPENDITURES

Distributions to Members:		
Benefit Payments	13,601,775.45	
Monthly DROP Additions to Self-Directed Accounts	3,322,387.48	
Refunds of Member Contributions	61,114.50	
Total Distributions		16,985,277.43
Expenses:		
Investment related ¹	1,563,667.84	
Administrative	262,876.43	
Total Expenses		1,826,544.27
Change in Net Assets for the Year		13,935,120.65
Net Assets Beginning of the Year ²		271,790,585.71
Net Assets End of the Year ³		285,725,706.36

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

²Net Assets Beginning of the Year adjusted for Prepaid Member Contribution.

³Net Assets may be limited for actuarial consideration.

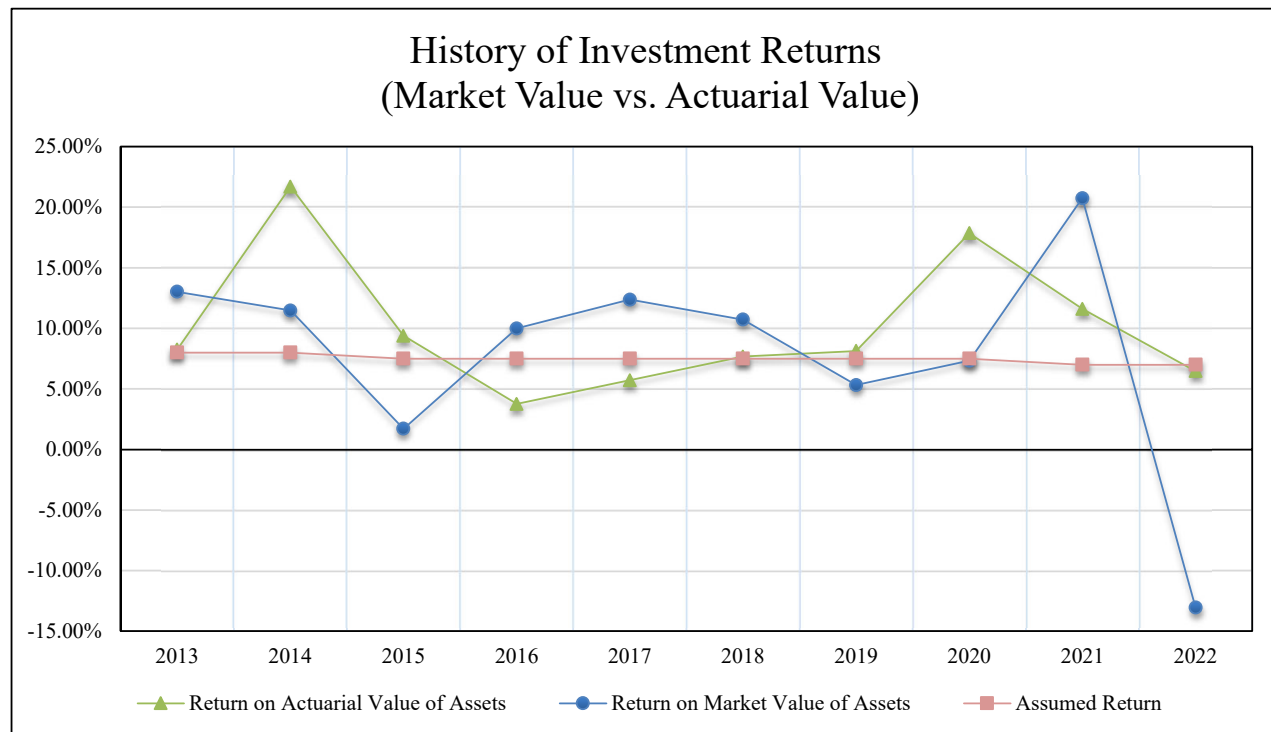
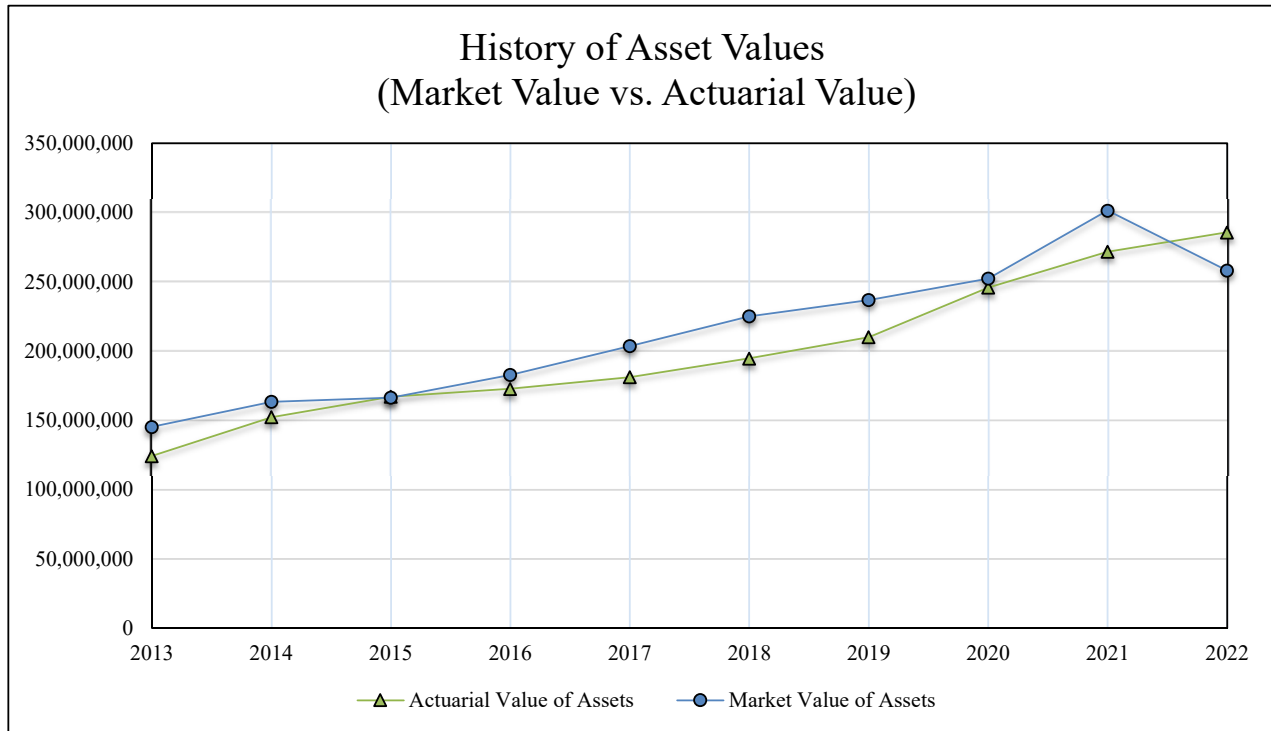
DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2021 to September 30, 2022

Beginning of the Year Balance	22,263,790.35
Plus Additions	3,293,590.96
Investment Return Earned	(3,708,307.89)
Less Distributions	(1,751,086.09)
End of the Year Balance	20,097,987.33

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

(1) Required City and State Contributions	\$11,180,566.00
(2) Less Allowable State Contribution	<u>(1,302,751.84)</u>
(3) Required City Contribution for Fiscal 2022	9,877,814.16
(4) Less 2021 Prepaid Contribution	(387,177.00)
(5) Less Actual City Contributions	<u>(9,935,449.00)</u>
(6) Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2022	(\$444,811.84)

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</u>				
Number	180	169	178	183
Average Current Age	38.0	38.2	38.0	37.4
Average Age at Employment	28.3	28.7	28.5	28.4
Average Past Service	9.7	9.5	9.5	9.0
Average Annual Salary	\$103,944	\$94,113	\$93,552	\$87,847
<u>Service Retirees</u>				
Number	159	150	141	137
Average Current Age	61.6	N/A	N/A	N/A
Average Annual Benefit	\$80,328	\$78,022	\$76,279	\$74,539
<u>DROP Retirees</u>				
Number	32	36	35	31
Average Current Age	52.3	N/A	N/A	N/A
Average Annual Benefit	\$92,879	\$95,366	\$90,553	\$90,657
<u>Beneficiaries</u>				
Number	10	9	8	8
Average Current Age	65.3	N/A	N/A	N/A
Average Annual Benefit	\$67,256	\$66,753	\$59,412	\$57,963
<u>Disability Retirees</u>				
Number	16	15	14	14
Average Current Age	62.1	N/A	N/A	N/A
Average Annual Benefit	\$66,615	\$64,949	\$63,090	\$61,572
<u>Terminated Vested</u>				
Number	19	19	17	18
Average Current Age ¹	44.2	N/A	N/A	N/A
Average Annual Benefit ¹	\$33,818	\$28,312	\$25,889	\$26,354

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	3											3
25 - 29	9	2	1	6	3	4						25
30 - 34	2	3	1	1	4	18	4					33
35 - 39	1	3		1	3	14	21	2				45
40 - 44			1			4	11	20				36
45 - 49		1				2	7	13	1			24
50 - 54	1					4	2	3	1			11
55 - 59							1	1	1			3
60 - 64												0
65+												0
Total	16	9	3	8	10	46	46	39	3	0	0	180

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2021	169
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
ii. Vested in refund of member contributions only	(1)
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	(1)
e. Retired	(1)
f. DROP	(5)
g. Continuing participants	160
h. New entrants / Rehires	20
i. Total active life participants in valuation	180

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)	Total
a. Number prior valuation	150	36	9	15	7	12	229
Retired	11	(9)	0	0	(1)	0	1
DROP	0	5	0	0	0	0	5
Vested (Deferred Annuity)	0	0	0	0	1	0	1
Vested (Due Refund)	0	0	0	0	0	1	1
Hired/Terminated in Same Year	0	0	0	0	0	2	2
Death, With Survivor	(1)	0	1	0	0	0	0
Death, No Survivor	(1)	0	0	0	0	0	(1)
Disabled	0	0	0	1	0	0	1
Refund of Contributions	0	0	0	0	0	(3)	(3)
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	159	32	10	16	7	12	236

SUMMARY OF CURRENT PLAN
(Through Ordinance 2022-100)

<u>Eligibility</u>	Full-time Police Officers participate as a condition of employment. The Police Chief may optionally participate in the plan.
<u>Earnings Plus</u>	All compensation excluding leave payouts at separation and off-duty details. For purposes of inclusion in earnings, overtime shall be limited to 300 hours per calendar year, or a prorated amount for a partial year. Compensation other than base salary shall be limited to 14.5% of base salary.
<u>Earnings</u>	Total cash remuneration excluding overtime, off-duty details, annual sick leave conversion payments, vacation payment incentives, and all end of career payouts (sick, vacation/annual, compensatory time). Total cash remuneration other than base salary shall be limited to 7.5% of base salary.
<u>Average Monthly Earnings Plus</u>	One twelfth of the average of the 3 highest consecutive years of earnings plus out of the last 10 years.
<u>Average Monthly Earnings</u>	One twelfth of the average of the 4 highest consecutive years of earnings out of the last 10 years.
<u>Continuous Service</u>	Years and completed months of service with the City as a Police Officer (with Member contributions when required).
<u>Member Contributions</u>	
Amount	11.50% of earnings.
Interest	3.00% per annum.
<u>Normal Retirement</u>	
Date	The earlier of: 1) Age 55 with at least 10 years of Credited Service, or 2) If hired before October 1, 2012: Completion of 20 years of Continuous Service, regardless of age. If hired on or after October 1, 2012: Completion of 23 years of Continuous Service, regardless of age.

Monthly Benefit	3.50% of Average Monthly Earnings Plus for each year of Credited Service earned before October 1, 2012 plus 3.50% of Average Monthly Earnings for each year of Continuous Service earned on and after October 1, 2012. The benefit is subject to a maximum of 87.5% of Average Monthly Earnings.
Form of Benefit	Life Annuity (options available).
<u>Early Retirement</u>	
Date	Age 50 and completion of 10 continuous years of Continuous Service.
Benefit	The normal retirement benefit reduced by 6 2/3% for each year by which the participant's early retirement date precedes his normal retirement date for an immediate retirement benefit. A deferred payment shall be equal to a normal retirement benefit and commence on the normal retirement date.
<u>Disability Benefit</u>	
Eligibility	Total and permanent as determined by the Board if service based (medical proof required). If non-service disability, participant must have at least 10 years of credited service.
Benefit	
Service Incurred	The greater of: 1) The monthly accrued benefit, 2) 70% of the greater of current base monthly salary or average monthly earnings, or 3) 42% of average monthly earnings.
Non-Service Incurred	The greater of: 1) The monthly accrued benefit, or 2) 25% off average monthly earnings.
Duration	Payable for life and 10 years certain, or until recovery (as determined by the Board; optional forms of income are available after normal retirement date).
<u>Death Benefit</u>	
Line of Duty	100% of the participant's base salary at the time of death payable to his surviving spouse for life. If no surviving spouse, the benefit is payable in equal shares to his eligible child dependent(s) until age 18 or 25 if full-time student(s).

Not in Line of Duty

Vested

The greater of:

- 1) An immediate 10-year certain annuity equal to the participant's vested benefit. Alternatively, the pre-retirement death benefit is payable in any other actuarially equivalent form subject to agreement between the beneficiary and the Board, or
- 2) 50% of the participant's average monthly earnings payable for life to the surviving spouse or until age 18 to any minor child in equal shares if no surviving spouse.

Non-Vested

Beneficiary receives the accumulated member contributions.

Termination of Employment

Vesting Schedule

<u>Years of Continuous Service</u>	<u>Vested Percentage</u>
Less than 5	0%
5	50%
6	60%
7	70%
8	80%
9	90%
10	100%

Benefit

Less than 5 years

Accumulated member contributions with interest.

5 or more

Accumulated member contributions with interest or Vested Accrued Benefit payable at normal retirement date.

Deferred Retirement Option Plan

Eligibility

Satisfaction of Normal Retirement requirements.

Participation

Not to exceed 84 months.

Contributions

Effective October 1, 2018, for members hired on and after October 1, 2012 who enter DROP between the 23rd and 25th year of service, Member Contributions will continue until the employment is terminated or the member has 25 years of service with the Coral Springs Police Department as a Police Officer or a supervisory officer or any combination thereof.

Rate of Return	At Member's election, his monthly retirement benefits are deposited into an account of his design for investment. Members may choose any of the investment options made available by the vender selected by the city. DROP balances will be adjusted for any COLA adjustments that a retiree would receive.
Form of Distribution	Cash lump sum (options available) at termination of employment, periodic payments, an annuity or a combination.
<u>Cost-of-Living Adjustment</u>	<p>Benefits are automatically increased 2.5% as of each January 1 for all Continuous Service earned before October 1, 2012. Benefits are automatically increased 1.0% as of each January 1 that occurs at least five years after retirement for all Continuous Service earned on or after October 1, 2012.</p> <p>For any member who attained 20 years of service as of October 1, 2012, the entire benefit is automatically increased 2.5% as of each January 1.</p>

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2022

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Money Market	8,708,457
Total Cash and Equivalents	8,708,457
Receivables:	
From Broker for Investments Sold	1,130,807
Investment Income	206,844
Total Receivables	1,337,651
Investments:	
Debt Securities	30,343,965
Equity Securities	151,206,754
Other Investments	88,101,036
Mutual Funds:	
Total Investments	269,651,755
Total Assets	279,697,863
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	297,640
Administrative Expenses	10,260
To Broker for Investments Purchased	644,119
Total Liabilities	952,019
NET POSITION RESTRICTED FOR PENSIONS	278,745,844

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

ADDITIONS

Contributions:

Member	1,994,904	
Buy-Back	451,517	
City	9,935,449	
Other	3,293,591	
State	1,302,752	
Total Contributions		16,978,213
Investment Income:		
Net Increase in Fair Value of Investments	(51,334,135)	
Interest & Dividends	9,493,784	
Less Investment Expense ¹	(1,573,172)	
Net Investment Income		(43,413,523)
Total Additions		(26,435,310)

DEDUCTIONS

Distributions to Members:

Benefit Payments	13,601,775	
DROP Payments and Other	5,073,474	
Refunds of Member Contributions	61,115	
Total Distributions		18,736,364
Administrative Expense		262,876
Total Deductions		18,999,240
Net Increase in Net Position		(45,434,550)
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		324,180,394
End of the Year		278,745,844

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 pension plan administered by the Plan's Board of Trustees. All full-time police officers employed by the City of Coral Springs, Florida who are covered by Fraternal Order of Police (FOP) I or II collective bargaining agreements are eligible to participate in the plan. All costs of administering the Police Plan are paid from plan assets.

Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	222
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	7
Active Plan Members	169
	398

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 Coral Springs Police Officers' Pension Plan prepared by the prior actuary, Southern Actuarial Services.

Contributions:

Member Contributions:

Effective January 1, 2022, employees must contribute 11.50% of pensionable earnings (previously 9.80% of pensionable earnings) and such contributions are accumulated with interest at the rate of 3.00% per annum.

City Contributions:

The City is required to make periodic contributions at least on a quarterly basis as determined under Chapter 112, Florida Statutes.

Investment Policy:

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

Asset Class	Target Allocation
Domestic Equity	50.0%
International Equity	15.0%
Broad Market Fixed Income	10.0%
Real Estate	15.0%
Infrastructure	5.0%
GTAA	5.0%
Total	100.0%

Concentrations:

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

Rate of Return:

For the year ended September 30, 2022, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was -13.25 percent.

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

GASB 67

Deferred Retirement Option Plan (DROP):

Eligibility: Satisfaction of Normal Retirement requirements.

Participation: Not to exceed 84 months.

DROP accounts are separately invested from the assets of the pension trust and are participant-directed.

The DROP balance as September 30, 2022 is \$20,097,987.

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	\$ 361,403,582
Plan Fiduciary Net Position	\$ (278,745,844)
Sponsor's Net Pension Liability	<u>\$ 82,657,738</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	77.13%

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	4.75%
Discount Rate	7.00%
Investment Rate of Return	7.00%

Pre-retirement mortality:

Sex-distinct rates set forth in the Pub-2010 Headcount-Weighted Employee Mortality Table for public safety employees, with full generational improvements in mortality using Scale MP-2018 and with ages set forward one year.

Post-retirement mortality:

For non-disabled retirees, sex-distinct rates set forth in the Pub-2010 Headcount Weighted Healthy Retiree Mortality Table for public safety employees, with full generational improvements in mortality using Scale MP-2018 and with ages set forward one year; for disabled retirees, sex-distinct rates set forth in the Pub-2010 Headcount-Weighted Disabled Retiree Mortality Table (80% general employee rates plus 20% public safety employee rates), with full generational improvements in mortality using Scale MP-

Disability:

Rates of disability increase with age up to age 50; a 0.14% probability of disability is assumed at age 20, a 0.18% probability of disability is assumed at age 30, a 0.30% probability of disability is assumed at age 40, and a 1.00% probability of disability is assumed at age 50, and the probabilities for intervening ages are roughly proportional to these probabilities; all future disabilities are assumed to be service-related.

Termination:

Employment termination rates decrease with age up to age 50; a 6.00% probability of termination is assumed at age 20, a 5.00% probability of termination is assumed at age 30, a 2.60% probability of termination is assumed at age 40, and a 0.00% probability of termination is assumed at age 50, and the probabilities for intervening ages are roughly proportional to these probabilities.

Retirement:

Eligible participants assumed to retire at their normal retirement age.

No decrements have been assumed to occur during the first year following the valuation date.

The most recent actuarial experience study used to review the other significant assumptions is unknown.

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:

Asset Class	Long Term Expected Real Rate of Return ¹
Domestic Equity	7.5%
International Equity	8.5%
Broad Market Fixed Income	2.5%
Real Estate	4.5%
Infrastructure	4.5%
GTAA	3.5%

¹ 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.

	1% Decrease 6.00%	Current Discount Rate 7.00%	1% Increase 8.00%
Sponsor's Net Pension Liability	\$ 127,038,012	\$ 82,657,738	\$ 46,350,513

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

Measurement Date	09/30/2022	09/30/2021
Total Pension Liability		
Service Cost	5,349,081	5,391,509
Interest	24,638,623	24,012,383
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(1,934,052)	2,826,277
Changes of assumptions	19,100,703	(7,167,314)
Contributions - Buy Back	451,517	-
Benefit Payments, including Refunds of Employee Contributions	(18,736,364)	(14,736,491)
Net Change in Total Pension Liability	28,869,508	10,326,364
Total Pension Liability - Beginning	332,534,074	304,164,253
Prior Period Adjustment ¹	-	18,043,457
Total Pension Liability - Ending (a)	<u>\$ 361,403,582</u>	<u>\$ 332,534,074</u>
Plan Fiduciary Net Position		
Contributions - Employer	9,935,449	10,490,455
Contributions - State	1,302,752	1,245,118
Contributions - Employee	1,994,904	1,757,326
Contributions - Buy Back	451,517	-
Contributions - Other	3,293,591	-
Net Investment Income	(43,413,523)	55,257,590
Benefit Payments, including Refunds of Employee Contributions	(18,736,364)	(14,736,491)
Administrative Expense	(262,876)	(270,657)
Net Change in Plan Fiduciary Net Position	(45,434,550)	53,743,341
Plan Fiduciary Net Position - Beginning	324,180,394	252,393,596
Prior Period Adjustment ¹	-	18,043,457
Plan Fiduciary Net Position - Ending (b)	<u>\$ 278,745,844</u>	<u>\$ 324,180,394</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 82,657,738</u>	<u>\$ 8,353,680</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	77.13%	97.49%
Covered Payroll	\$ 18,643,645	\$ 17,481,543
Net Pension Liability as a percentage of Covered Payroll	443.36%	47.79%

Notes to Schedule of Changes in Net Pension Liability and Related Ratios:

¹ Financial Statements were restated to implement GASB 84.

Changes of Assumptions:

For measurement date 09/30/2022, amounts reported as changes of assumptions resulted from lowering the investment rate of return from 7.50% to 7.00%.

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	\$ 11,180,566	\$ 11,238,201	\$ (57,635)	\$ 18,643,645	60.28%
09/30/2021	\$ 11,697,770	\$ 11,735,573	\$ (37,803)	\$ 17,481,543	67.13%

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 Coral Springs Firefighters' Retirement Plan prepared by prior actuary, Southern Actuarial Services.

SCHEDULE OF INVESTMENT RETURNS
Last 2 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2022	-13.25%
09/30/2021	N/A

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2023)

Plan Description

The Plan is a single-employer defined pension plan administered by the Plan's Board of Trustees. All full-time police officers employed by the City of Coral Springs, Florida who are covered by Fraternal Order of Police (FOP) I or II collective bargaining agreements are eligible to participate in the plan. All costs of administering the Police Plan are paid from plan assets.

Plan Membership as of October 1, 2021:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	222
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	7
Active Plan Members	169
	398

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 Coral Springs Police Officers' Pension Plan prepared by the prior actuary, Southern Actuarial Services.

Contributions:

Member Contributions:

Effective January 1, 2022, employees must contribute 11.50% of pensionable earnings (previously 9.80% of pensionable earnings) and such contributions are accumulated with interest at the rate of 3.00% per annum.

City Contributions:

The City is required to make periodic contributions at least on a quarterly basis as determined under Chapter 112, Florida Statutes.

Net Pension Liability

The measurement date is September 30, 2022.

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

The reporting period is October 1, 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	4.75%
Discount Rate	7.00%
Investment Rate of Return	7.00%

Pre-retirement mortality:

Sex-distinct rates set forth in the Pub-2010 Headcount-Weighted Employee Mortality Table for public safety employees, with full generational improvements in mortality using Scale MP-2018 and with ages set forward one year.

Post-retirement mortality:

For non-disabled retirees, sex-distinct rates set forth in the Pub-2010 Headcount Weighted Healthy Retiree Mortality Table for public safety employees, with full generational improvements in mortality using Scale MP-2018 and with ages set forward one year; for disabled retirees, sex-distinct rates set forth in the Pub-2010 Headcount-Weighted Disabled Retiree Mortality Table (80% general employee rates plus 20% public safety employee rates), with full generational improvements in mortality using Scale MP-

Disability:

Rates of disability increase with age up to age 50; a 0.14% probability of disability is assumed at age 20, a 0.18% probability of disability is assumed at age 30, a 0.30% probability of disability is assumed at age 40, and a 1.00% probability of disability is assumed at age 50, and the probabilities for intervening ages are roughly proportional to these probabilities; all future disabilities are assumed to be service-related.

Termination:

Employment termination rates decrease with age up to age 50; a 6.00% probability of termination is assumed at age 20, a 5.00% probability of termination is assumed at age 30, a 2.60% probability of termination is assumed at age 40, and a 0.00% probability of termination is assumed at age 50, and the probabilities for intervening ages are roughly proportional to these probabilities.

Retirement:

Eligible participants assumed to retire at their normal retirement age.

No decrements have been assumed to occur during the first year following the valuation date.

The most recent actuarial experience study used to review the other significant assumptions is unknown.

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:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return ¹
Domestic Equity	50.0%	7.50%
International Equity	15.0%	8.50%
Broad Market Fixed Income	10.0%	2.50%
Real Estate	15.0%	4.50%
Infrastructure	5.0%	4.50%
GTAA	5.0%	3.50%
Total	100.0%	

¹ 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 Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Reporting Period Ending September 30, 2022	\$ 332,534,074	\$ 324,180,394	\$ 8,353,680
Changes for a Year:			
Service Cost	5,349,081	-	5,349,081
Interest	24,638,623	-	24,638,623
Differences between Expected and Actual Experience	(1,934,052)	-	(1,934,052)
Changes of assumptions	19,100,703	-	19,100,703
Changes of benefit terms	-	-	-
Contributions - Employer	-	9,935,449	(9,935,449)
Contributions - State	-	1,302,752	(1,302,752)
Contributions - Employee	-	1,994,904	(1,994,904)
Contributions - Buy Back	451,517	451,517	-
Contributions - Other	-	3,293,591	(3,293,591)
Net Investment Income	-	(43,413,523)	43,413,523
Benefit Payments, including Refunds of Employee Contributions	(18,736,364)	(18,736,364)	-
Administrative Expense	-	(262,876)	262,876
Net Changes	28,869,508	(45,434,550)	74,304,058
Reporting Period Ending September 30, 2023	\$ 361,403,582	\$ 278,745,844	\$ 82,657,738

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.00%	7.00%	8.00%
Sponsor's Net Pension Liability	\$ 127,038,012	\$ 82,657,738	\$ 46,350,513

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 \$5,364,813.

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	5,647,690	469,515
Changes of assumptions	-	8,344,964
Net difference between Projected and Actual Earnings on Pension Plan investments		26,691,599
Employer and State Contributions subsequent to the measurement date	<u>\$ 11,238,201</u>	<u>-</u>
Total	<u><u>\$ 16,885,891</u></u>	<u><u>\$ 35,506,078</u></u>

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	\$ (7,693,203)
2024	\$ (8,151,043)
2025	\$ (7,008,029)
2026	\$ (7,006,113)
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 \$10,853,055.

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	922,807	1,728,415
Changes of assumptions	14,325,528	2,942,701
Net difference between Projected and Actual Earnings on Pension Plan investments	34,253,597	-
Employer and State Contributions subsequent to the measurement date	TBD	-
Total	<u>TBD</u>	<u>\$ 4,671,116</u>

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	\$ 9,670,873
2025	\$ 10,813,887
2026	\$ 10,815,803
2027	\$ 13,530,253
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	5,349,081	5,391,509
Interest	24,638,623	24,012,383
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(1,934,052)	2,826,277
Changes of assumptions	19,100,703	(7,167,314)
Contributions - Buy Back	451,517	-
Benefit Payments, including Refunds of Employee Contributions	(18,736,364)	(14,736,491)
Net Change in Total Pension Liability	28,869,508	10,326,364
Total Pension Liability - Beginning	332,534,074	304,164,253
Prior Period Adjustment ¹	-	18,043,457
Total Pension Liability - Ending (a)	\$361,403,582	\$332,534,074
Plan Fiduciary Net Position		
Contributions - Employer	9,935,449	10,490,455
Contributions - State	1,302,752	1,245,118
Contributions - Employee	1,994,904	1,757,326
Contributions - Buy Back	451,517	-
Contributions - Other	3,293,591	-
Net Investment Income	(43,413,523)	55,257,590
Benefit Payments, including Refunds of Employee Contributions	(18,736,364)	(14,736,491)
Administrative Expense	(262,876)	(270,657)
Net Change in Plan Fiduciary Net Position	(45,434,550)	53,743,341
Plan Fiduciary Net Position - Beginning	324,180,394	252,393,596
Prior Period Adjustment ¹	-	18,043,457
Plan Fiduciary Net Position - Ending (b)	\$278,745,844	\$324,180,394
Net Pension Liability - Ending (a) - (b)	\$ 82,657,738	\$ 8,353,680
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	77.13%	97.49%
Covered Payroll	\$ 18,643,645	\$ 17,481,543
Net Pension Liability as a percentage of Covered Payroll	443.36%	47.79%

Notes to Schedule of Changes in Net Pension Liability and Related Ratios:

¹ Financial Statements were restated to implement GASB 84.

Changes of Assumptions:

For measurement date 09/30/2022, amounts reported as changes of assumptions resulted from lowering the investment rate of return from 7.50% to 7.00%.

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	\$ 11,180,566	\$ 11,238,201	\$ (57,635)	\$ 18,643,645	60.28%
09/30/2021	\$ 11,697,770	\$ 11,735,573	\$ (37,803)	\$ 17,481,543	67.13%

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 Coral Springs Firefighters' Retirement Plan prepared by prior actuary, Southern Actuarial Services.

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	\$ 51,770,657	\$ 10,400,396	\$ 29,323,798	\$ -
Employer and State Contributions made after 09/30/2021	-	-	11,238,201	-
Total Pension Liability Factors:				
Service Cost	5,391,509	-	-	5,391,509
Interest	24,012,383	-	-	24,012,383
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	2,826,277	-	2,826,277	-
Current year amortization of experience difference	-	(191,639)	(6,396,323)	6,204,684
Change in assumptions about future economic or demographic factors or other inputs	(7,167,314)	7,167,314	-	-
Current year amortization of change in assumptions	-	(5,402,263)	(5,086,359)	(315,904)
Benefit Payments, including Refunds of Employee Contributions	(14,736,491)	-	-	-
Net change	10,326,364	1,573,412	2,581,796	35,292,672
Plan Fiduciary Net Position:				
Contributions - Employer	10,490,455	-	(10,490,455)	-
Contributions - State	1,245,118	-	(1,245,118)	-
Contributions - Employee	1,757,326	-	-	(1,757,326)
Projected Net Investment Income	20,227,021	-	-	(20,227,021)
Difference between projected and actual earnings on Pension Plan investments	35,030,569	35,030,569	-	-
Current year amortization	-	(9,280,771)	(1,066,602)	(8,214,169)
Benefit Payments, including Refunds of Employee Contributions	(14,736,491)	-	-	-
Administrative Expenses	(270,657)	-	-	270,657
Net change	53,743,341	25,749,798	(12,802,175)	(29,927,859)
Ending Balance	\$ 8,353,680	\$ 37,723,606	\$ 19,103,419	\$ 5,364,813

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2023

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 8,353,680	\$ 37,723,606	\$ 19,103,419	\$ -
Employer and State Contributions made after 09/30/2022	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	5,349,081	-	-	5,349,081
Interest	24,638,623	-	-	24,638,623
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	451,517	-	-	451,517
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(1,934,052)	1,934,052	-	-
Current year amortization of experience difference	-	(675,152)	(4,724,883)	4,049,731
Change in assumptions about future economic or demographic factors or other inputs	19,100,703	-	19,100,703	-
Current year amortization of change in assumptions	-	(5,402,263)	(4,775,175)	(627,088)
Benefit Payments, including Refunds of Employee Contributions	(18,736,364)	-	-	-
Net change	<u>28,869,508</u>	<u>(4,143,363)</u>	<u>9,600,645</u>	<u>33,861,864</u>
Plan Fiduciary Net Position:				
Contributions - Employer	9,935,449	-	(9,935,449)	-
Contributions - State	1,302,752	-	(1,302,752)	-
Contributions - Employee	1,994,904	-	-	(1,994,904)
Contributions - Buy Back	451,517	-	-	(451,517)
Contributions - Other	3,293,591	-	-	(3,293,591)
Projected Net Investment Income	24,237,741	-	-	(24,237,741)
Difference between projected and actual earnings on Pension Plan investments	(67,651,264)	-	67,651,264	-
Current year amortization	-	(7,890,786)	(14,596,854)	6,706,068
Benefit Payments, including Refunds of Employee Contributions	(18,736,364)	-	-	-
Administrative Expenses	(262,876)	-	-	262,876
Net change	<u>(45,434,550)</u>	<u>(7,890,786)</u>	<u>41,816,209</u>	<u>(23,008,809)</u>
Ending Balance	<u>\$ 82,657,738</u>	<u>\$ 25,689,457</u>	<u>TBD</u>	<u>\$ 10,853,055</u>

* 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	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2022	2023	2024	2025	2026	2027	2028	2029	2030
2022	\$ 67,651,264	5	\$ -	\$ 13,530,252	\$ 13,530,253	\$ 13,530,253	\$ 13,530,253	\$ 13,530,253	\$ -	\$ -	\$ -
2021	\$ (35,030,569)	5	\$ (7,006,114)	\$ (7,006,114)	\$ (7,006,114)	\$ (7,006,114)	\$ (7,006,113)	\$ -	\$ -	\$ -	\$ -
2020	\$ 421,602	5	\$ 84,320	\$ 84,320	\$ 84,320	\$ 84,322	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 4,911,412	5	\$ 982,282	\$ 982,282	\$ 982,284	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (4,423,360)	5	\$ (884,672)	\$ (884,672)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (6,949,933)	5	\$ (1,389,985)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (8,214,169)	\$ 6,706,068	\$ 7,590,743	\$ 6,608,461	\$ 6,524,140	\$ 13,530,253	\$ -	\$ -	\$ -

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
2022	\$ 19,100,703	4.00	\$ -	\$ 4,775,175	\$ 4,775,176	\$ 4,775,176	\$ 4,775,176	\$ -	\$ -	\$ -	\$ -
2021	\$ (7,167,314)	2.66	\$ (2,694,479)	\$ (2,694,479)	\$ (1,778,356)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 21,233,529	2.63	\$ 5,086,359	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ (22,826,617)	8.43	\$ (2,707,784)	\$ (2,707,784)	\$ (1,164,345)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (315,904)	\$ (627,088)	\$ 1,832,475	\$ 4,775,176	\$ 4,775,176	\$ -	\$ -	\$ -	\$ -

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	\$ (1,934,052)	4.00	\$ -	\$ (483,513)	\$ (483,513)	\$ (483,513)	\$ (483,513)	\$ -	\$ -	\$ -	\$ -
2021	\$ 2,826,277	2.66	\$ 1,062,510	\$ 1,062,510	\$ 701,257	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2020	\$ 10,883,337	2.81	\$ 3,873,074	\$ 3,137,189	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 3,882,200	2.63	\$ 929,956	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (1,619,349)	8.45	\$ (191,639)	\$ (191,639)	\$ (191,639)	\$ (86,237)	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 4,343,366	8.43	\$ 515,227	\$ 515,227	\$ 221,550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2014	\$ 134,405	8.64	\$ 15,556	\$ 9,957	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 6,204,684	\$ 4,049,731	\$ 247,655	\$ (569,750)	\$ (483,513)	\$ -	\$ -	\$ -	\$ -