

April 21, 2023

Via Electronic Transmission

Florida Division of Retirement

To whom it may concern:

Re: 2022 Disclosure under F.S. 112.664

An attachment provides information under F.S. 112.664(1) for the City of Sunrise Firefighters' Retirement Plan (the Plan) as of October 1, 2022 in the format described in F.A.C. Rule 60T-1.0035. We have uploaded the semi-colon delimited file described by the rule.

The disclosure requirements for F.S. 112.664(2)(b)2. are found on page 24 of our attached October 1, 2022 actuarial valuation of the Plan. The GASB 67 and GASB 68 Supplements as of September 30, 2022 have also been attached.

Please let us know if you have any questions or need additional information.

Sincerely,

Paula C. Freiman, ASA, EA Partner, Consulting Actuary

Danja C Freiman

With respect to the reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were 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, meet the requirements of Section 112.664(1), F.S., and Section 60T-1.0035. F.A.C.

(a)	City/District	•
		City of Sunrise Firefighters' Retirement
(b)		Plan
(c)	Plan Type	Defined Benefit
(d)	Valuation Date	10/01/2022
(e)	Interest Rate:	
(e)(1)	Discount Rate, net of investment fees	7.50% 7.50%
(e)(2) (f)	Long-Term Expected Rate of Return, net of investment fees	e chan
	Signature	
(f)(2)	Actuary's Name	Paula C. Freimar
(f)(3)	Enrollment Number	23-579
(f)(4)	Signature Date	
(f)(5)	Cover letter attached (pdf)?	`
	112.664(1)(a), F.S. Total pension liability	
	ng mortality as used in FRS actuarial valuation	
(g) (g)(1)	Total pension liability: Service cost	\$4,877,722
(g)(2)	Interest	
(g)(3)	Benefit changes	
(g)(4)	Difference between expected and actual experience	
(g)(5)	Changes in assumptions	0
(g)(6)	Benefit payments	
(g)(7)	Contribution refunds	. \
(g)(8)	Net change in total pension liability	
(g)(9) (a)(10)	Total pension liability – beginning of year	
(g)(10) (h)	Total pension liability – ending of year	\$223,356,466
(II) (h)(1)	Contributions – Employer	\$6,051,494
(h)(2)	Contributions – State	1,025,399
(h)(3)	Contributions – Member	1,614,557
(h)(4)	Net investment income	(24,882,245
(h)(5)	Benefit payments	• • •
(h)(6)	Contributions refunds	• •
(h)(7) (h)(8)	Administrative expense	, ,
(ii)(8) (h)(9)	Net change in plan fiduciary net position	_
	Plan fiduciary net position – beginning of year	
	Plan fiduciary net position – ending of year	
(i)	Net pension liability/(asset) [(g)(10) minus (h)(11)]	
(j) (j)(1)	Total pension liability: Service cost	
(j)(2)	Interest	
(j)(3) (j)(4)	Benefit changes Difference between expected and actual experience	·
(j)(5)	Changes in assumptions	
(j)(6)	Benefit payments	(12,278,523
(j)(7)	Contribution refunds	(84,163
(j)(8)	Net change in total pension liability	
(j)(9)	Total pension liability – beginning of year	-
	Total pension liability – ending of year	\$288,845,685
(k) (k)(1)	Plan fiduciary net position: Contributions – Employer	\$6,051,494
(k)(2)	Contributions – State	
(k)(3)	Contributions – Member	
(k)(4)	Net investment income	(24,882,245
(k)(5)	Benefit payments	• • •
(k)(6)	Contributions refunds	, ,
(k)(7) (k)(8)	Administrative expense	• •
(k)(9)	Net change in plan fiduciary net position	-
	Plan fiduciary net position – beginning of year	
	Plan fiduciary net position – ending of year	-
(I)	Net pension liability/(asset) [(j)(10) minus (k)(11)]	
Section (m)	112.664(1)(c), F.S. (on last valuation basis) Number of Years, and fractional parts of Years, for which the Market Value of Assets are adequate to sustain	
•	expected retirement benefits	15.0
Section	112.664(1)(c), F.S. (on Section 112.664(1)(a), F.S. basis)	
(n)	Number of Years, and fractional parts of Years, for which the Market Value of Assets are adequate to sustain expected retirement benefits	15.07
Section	112.664(1)(c), F.S. (on Section 112.664(1)(b), F.S. basis)	
(o)	Number of Years, and fractional parts of Years, for which the Market Value of Assets are adequate to sustain	
-	expected retirement benefits	12.85
Section	112.664(1)(d), F.S. (on last valuation basis)	
(p)	Recommended Plan contributions in Annual Dollar Value	\$9,945,653
(q)	Recommended Plan contributions as a Percentage of Valuation Payroll	
Section	112.664(1)(d), F.S. (on Section 112.664(1)(a), F.S. basis)	
(r)	Recommended Plan contributions in Annual Dollar Value	\$9,945,653
(s)	Recommended Plan contributions as a Percentage of Valuation Payroll	64.23%
	112.664(1)(d), F.S. (on Section 112.664(1)(b), F.S. basis)	
(t)	Recommended Plan contributions in Annual Dollar Value	\$16,149,924
()	Pacammandad Plan contributions as a Parcentage of Valuation Payroll	

Recommended Plan contributions as a Percentage of Valuation Payroll.....

104.30%

(u)



City of Sunrise

Firefighters' Retirement Plan

Actuarial Valuation as of October 1, 2022



February 13, 2023



February 13, 2023

Board of Trustees City of Sunrise Firefighters' Retirement Plan Sunrise, Florida

RE: Actuarial Valuation as of October 1, 2022

Dear Board Members:

We are pleased to present the actuarial valuation as of October 1, 2022 for the City of Sunrise Firefighters' Retirement Plan (the Plan). This report provides a review of the current funded status of the Plan, establishes the minimum funding requirements for the fiscal year ending September 30, 2024 and provides an analysis of experience since the last valuation. In addition to providing the summary and derivation of actuarial findings, this report describes the data, assumptions, and methods used to create these results.

In producing our work product, we rely on various models, internal and external, which were used for their intended purposes. Underlying data, assumptions, methodologies, model inputs and resulting outputs have been reviewed. The 7.5% assumed net return is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it is set by the Board. While we find all other inputs and outputs to be reasonable, the prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement as discussed in ASOP 27. We continue to recommend lowering the net assumed return.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

Statement by Enrolled Actuary:

"This actuarial valuation and/or cost determination 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."

RE: Actuarial Valuation as of October 1, 2022

February 13, 2023

Page 2

We look forward to the presentation of these results to you in person and we are always available to answer any questions you may have.

Sincerely,

Chad M. Little, ASA, EA Partner, Consulting Actuary Enrollment Number 20-6619

Mulfin

Paula C. Freiman, ASA, EA Partner, Consulting Actuary Enrollment Number 20-5796

Table of Contents

Board Summary	1
Summary of Principal Valuation Results	1
Summary of Significant Events	2
Results Derivation	8
Financial Information	8
Present Value of Benefits	13
Accrued Liability – Entry Age Normal	14
Normal Cost – Entry Age Normal	15
Unfunded Accrued Liability	16
Minimum Funding Requirements	19
Reconciliation of Unfunded Accrued Liability	20
Reconciliation of City Minimum Required Contribution	20
Accounting Information	21
Information Required by GASB 67/68	21
Statement of Accumulated Plan Benefits (FASB 35)	22
Other Disclosures Required by the State of Florida	22
Required Disclosure Under F.S. 112.664(1)	23
Required Disclosure Under F.S. 112.664(2)(b)2	24
Supplementary Information	25
Summary of Participant Data	25
Outline of Plan Provisions	29
Description of Assumptions and Methods	40
Glossary of Actuarial Terms	42

1 Board Summary

This report presents the results of the October 1, 2022 actuarial valuation of the City of Sunrise Firefighters' Retirement Plan (the Plan).

Summary of Principal Valuation Results

A summary of the key valuation findings as of October 1, 2022 are compared with the results of the prior year below.

Minimum Funding Requirements Fiscal Year Ending September 30,	2023	2024
As a Dollar Amount		
Estimated Minimum Required City Contribution*	\$6,933,656	\$7,286,558
Estimated State Contribution	<u>934,286</u>	<u>1,025,399</u>
Total Minimum Funding Requirement (City plus State)	\$7,867,942	\$8,311,957
As a Percentage of Payroll		
Estimated Minimum Required City Contribution	45.00%	47.06%
Estimated State Contribution	<u>6.06%</u>	6.62%
Total Minimum Funding Requirement (City plus State)	51.06%	53.68%
Estimated Minimum Required City Contribution		
As a Percent of Payroll Including DROP	38.99%	38.30%
Funded Status		
Valuation Date as of October 1,	2021	2022
Accrued Liability (AL)	\$214,003,143	\$223,356,466
Actuarial Value of Assets	<u>169,988,026</u>	175,382,039
Unfunded Accrued Liability (UAL)	\$44,015,117	\$47,974,427
Funded Percentage	79.43%	78.52%
Key Assumptions		
Valuation Date as of October 1,	2021	2022
Assumed Rate of Investment Return	7.50%	7.50%
Salary Increase Assumption	13.00%	13.00%
	to 4.50%	to 4.50%
Total Payroll Increase Assumption	3.00%	3.00%
Funding Method	Entry Age	Entry Age

^{*}The total minimum funding requirement has been determined assuming the estimated minimum required City contribution is deposited on the first day of the fiscal year.



Summary of Significant Events

Determination of the funded status of the Plan and minimum funding requirements are based on participant data, asset information, Plan provisions, actuarial methods and assumptions, as well as contributions made to the Plan by the State of Florida. Any significant events associated with these items are discussed in the following.

In preparing our report we relied, without audit, on information (some oral and some written) supplied by the Plan Administrator and the City. This information includes, but is not limited to, statutory provisions, employee census, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

Participant Data

The number of active members decreased from 138 to 134 along with a 1.8% increase in total valuation salary in comparison to the 3.0% payroll growth expected. The following provides a summary of the valuation payroll increases over the last 28 years along with the actual to the expected average pay increases for continuing active members for the 12-month periods ending on the date specified. While the actual pay increase was 17.0% including retroactive pay received in fiscal 2022, it was 10.9% excluding the retroactive pay.

			Average Individual Salary	
Valuation	Total Valuation	Percent _	Increase for Continuing Actives	
as of 10/1	Salary	Change	Actual	Expected
2022	\$15,369,130	1.8 %	17.0 %	7.4 %
2021	15,091,440	8.7 %	5.5 %	7.4 %
2020	13,882,964	6.1 %	2.6 %	6.5 %
2019	13,090,808	5.0 %	3.9 %	6.9 %
2018	12,463,721	(0.6)%	6.9 %	7.8 %
2017	12,541,903	2.7 %	8.3 %	7.7 %
2016	12,217,142	6.6 %	10.1 %	7.8 %
2015	11,458,711	3.5 %	4.7 %	7.7 %
2014	11,075,775	0.8 %	3.3 %	7.0 %
2013	10,991,092	2.1 %	8.7 %	7.1 %
2012	10,762,274	(2.2)%	5.9 %	7.5 %
2011	11,009,676	0.8 %	6.5 %	8.1 %
2010	10,926,750	2.6 %	8.7 %	8.4 %
2009	10,646,316	6.8 %	9.6 %	6.5 %
2008	9,972,947	2.2 %	8.1 %	6.4 %
2007	9,758,384	(3.3)%	9.4 %	6.0 %
2006	10,095,003	12.6 %	19.0 %	6.0 %
2005	8,964,808	22.2 %	15.5 %	6.0 %
2004	7,339,091	(2.2)%	6.5 %	6.0 %
2003	7,501,014	7.7 %	6.6 %	6.0 %
2002	6,963,566	(10.7)%	1.1 %	6.2 %
2001	7,800,496	2.8 %	3.3 %	5.9 %
2000	7,587,427	18.6 %	18.0 %	6.0 %
1999	6,398,928	2.1 %	4.8 %	6.2 %
1998	6,264,836	2.7 %	3.0 %	6.3 %
1997	6,100,002	5.1 %	7.5 %	6.4 %
1996	5,804,779	2.0 %	4.6 %	8.6 %
1995	5,688,338	6.1 % 3.8 %	6.5 %	8.6 %
	28 Year Geometric Average		7.6 %	6.9 %
10 Year Geometric Average		3.6 %	7.0 %	7.3 %



In general, there was a demographic loss for the year primarily due to pay increases more than expected and DROP experience offset by gains associated with termination and death experience.

Assets

While the return on the Market Value of Assets was (13.50)%, the return on the Actuarial Value of Assets used for funding purposes was 5.46%. An actuarial loss resulted due to the return on the Actuarial Value of Assets being less than the 7.50% net assumed rate of return expected for the year ending September 30, 2022.

Note only a portion of actual investment gains or losses are recognized in the current year's Actuarial Value of Assets with the remainder recognized over the next four years. Even if all assumptions are realized in the next several years, the Plan will experience changes in the required contribution rate until prior gains and losses are fully recognized.

The following provides a summary of the actual return on investments for the 12-month periods ending on the date specified.

Year Ending	Market	Market	Actuarial	Actuarial
9/30	Value	Return	Value	Return
2022	\$154,973,848	(13.5)%	\$175,382,039	5.5 %
2021	183,776,715	21.6 %	169,988,026	10.2 %
2020	151,816,631	5.8 %	155,203,516	8.1 %
2019	146,249,304	4.1 %	146,366,705	7.5 %
2018	146,237,269	10.1 %	141,684,463	8.5 %
2017	135,548,638	11.6 %	133,325,268	9.0 %
2016	120,391,017	10.1 %	121,256,853	9.9 %
2015	108,526,799	0.2 %	109,591,534	9.5 %
2014	109,371,318	10.5 %	100,869,650	11.7 %
2013	99,036,104	15.7 %	90,378,144	10.1 %
2012	87,062,354	19.7 %	83,654,894	4.1 %
2011	72,682,594	1.4 %	80,234,911	2.7 %
2010	69,936,309	9.1 %	76,423,148	3.4 %
2009	64,716,039	2.5 %	74,485,927	4.9 %
2008	61,800,073	(11.9)%	69,907,712	4.7 %
2007	67,155,119	14.6 %	63,807,522	11.1 %
2006	58,480,418	7.8 %	57,335,947	7.1 %
2005	53,563,473	11.7 %	52,871,432	4.5 %
2004	47,189,418	9.9 %	49,829,592	5.8 %
2003	42,863,996	16.6 %	47,000,335	6.2 %
2002		(7.6)%	44,143,681	3.8 %
2001		(8.1)%	42,283,875	6.2 %
2000		14.3 %	39,660,141	14.9 %
1999		14.7 %	34,474,748	13.4 %
1998		5.2 %	29,427,605	8.3 %
1997		24.6 %	26,242,175	20.6 %
1996		11.9 %	20,823,116	12.1 %
27 Year Geometric Average		7.4 %		8.2 %
10 Year Geometric Average		7.2 %		9.0 %

Investment returns less than the assumed rate of return result in increased annual minimum required contributions.



Plan Provisions

Under Ordinance No. 124-X-17-B adopted September 12, 2017 the Section 415(b) limit is adjusted annually for Members who retired on or after September 29, 2016 as the Internal Revenue Service releases new calendar year limits under Section 415(d). For both the October 1, 2021 and 2022 actuarial valuations one Member is assumed to have benefits limited by Section 415(b). The Section 415(b) limit increased from \$245,000 for calendar 2022 to \$265,000 for calendar 2023.

The impact of any Plan changes may be found in the reconciliation of the funded status and minimum funding requirements found near the end of Section 2 of this report. See "Reconciliation of Unfunded Accrued Liability" and "Reconciliation of City Minimum Required Contribution" in the table of contents.

Assumptions and Methods

In fiscal 2022 Members received retroactive pay. Historical pay has not been revised in any way for this valuation. The actual fiscal 2022 compensation including the retroactive pay was used for fiscal 2022. Projected compensation for fiscal 2023 and future years is based on the fiscal 2022 compensation after deducting retroactive pay.

The net assumed rate of investment return is 7.50% in both this October 1, 2022 valuation and for that as of October 1, 2021. The 7.50% net assumed return is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it is set by the Board. The prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement as discussed in ASOP 27. As discussed with the Board we recommend lowering the net assumed return.

The impact of any changes in assumptions and methods may be found in the reconciliation of the funded status and minimum funding requirements found near the end of Section 2 of this report. See "Reconciliation of Unfunded Accrued Liability" and "Reconciliation of City Minimum Required Contribution" in the table of contents.

State Contributions

The Estimated Minimum Required City Contribution shown on page 1 assumes that the premium tax money received from the State will be in the same amount received in the prior year. Should the amount received in from the State be less than expected, the City will need to contribute any potential shortfall to the Plan.



Assessment and Disclosure of Risk

As described in Actuarial Standard of Practice No. 51 (ASOP 51), this section is meant to address the assessment and disclosure of risk in a pension funding valuation. This is not meant to be a comprehensive summary but should provide information regarding risks related to this plan. Additional historical information provided in this report also contain relevant information regarding asset size, asset mix, pay increases, benefits and contributions. This information can be used to understand the changes over time to identify trends.

Note that ASOP 51 defines risk as "The potential of actual future measurements deviating from expected future measurements resulting from actual future experience deviating from actuarially assumed experience...." The following provides examples of potential risk.

Investment Risk: As noted previously, investment returns less than the assumed rate of return result in increased annual minimum required contributions payable in a subsequent year.

Interest Rate Risk: Interest rates are used to discount the value of benefits. If the long-term expectation of returns is higher or lower than the assumed net investment return, the assumed net investment return should be adjusted. When the assumed net investment return is increased the estimated liability is decreased. When the assumed net investment return is decreased the estimated liability is increased. The chart below shows what the funded status of the plan is on a market value of assets basis after changing the net assumed return by 1% or 2%.

Funded	Status on	Market	Value of	ASSAtS	Rasis

As of	2%	1%	Valuation Net Assumed	1%	2%	Valuation Net Assumed Return
<u>10/1</u>	<u>Decrease</u>	<u>Decrease</u>	<u>Return</u>	<u>Increase</u>	<u>Increase</u>	<u>Assumption</u>
2022	53.65%	61.36%	69.38%	77.66%	86.14%	7.50%
2021	66.59%	76.05%	85.88%	95.99%	106.34%	7.50%
2020	58.71%	67.01%	75.62%	84.49%	93.57%	7.70%
2019	56.62%	64.85%	73.41%	82.20%	91.19%	7.80%
2018	57.88%	66.20%	74.80%	83.61%	92.56%	7.80%
2017	56.00%	64.05%	72.37%	80.87%	89.50%	7.80%
2016	53.22%	60.91%	68.86%	77.01%	85.30%	7.85%

Longevity and Other Demographic Risks: The estimated liability of the Plan is based on assumptions related to mortality, retirement, disability and termination. To the extent that Plan experience is different than these assumptions the gains and losses affect future required contributions and estimated liability.

Contribution Risk: The possibility that the plan sponsor does not make contributions to the plan according to the funding policy.

Intergenerational equity risk: Intergenerational equity is the concept that resources do not belong to a specific generation and they must be preserved for future generations. One way to alleviate this risk is to pay for benefits over the average future service of the group receiving benefits. Members may feel there are inequities when one is paying more than others, receiving less than others, or paying more than others in relation to what they are receiving.



Plan maturity measures may help understand the risks associated with the plan. As the Plan matures, the ratio of the Market Value of Assets to the Covered Payroll increases. As this ratio gets larger, the impact of asset volatility has a larger effect on the volatility of the Minimum Required Contribution as a percentage of pay.

Year Ending <u>9/30</u>	Market Value of <u>Assets</u>	Covered Valuation <u>Payroll</u>	Asset Volatility <u>Ratio</u>
2022	\$154,973,848	\$15,369,130	10.1
2021	183,776,715	15,091,440	12.2
2020	151,816,631	13,882,964	10.9
2019	146,249,304	13,090,808	11.2
2018	146,237,269	12,463,721	11.7
2017	135,548,638	12,541,903	10.8
2016	120,391,017	12,217,142	9.9
2015	108,526,799	11,458,711	9.5
2014	109,371,318	11,075,775	9.9
2013	99,036,104	10,991,092	9.0
2012	87,062,354	10,762,274	8.1
2011	72,682,594	11,009,676	6.6
2010	69,936,309	10,926,750	6.4
2009	64,716,039	10,646,316	6.1
2008	61,800,073	9,972,947	6.2
2007	67,155,119	9,758,384	6.9
2006	58,480,418	10,095,003	5.8
2005	53,563,473	8,964,808	6.0
2004	47,189,418	7,339,091	6.4
2003	42,863,996	7,501,014	5.7



Another measure of a pension plan's maturity is the Ratio of Benefit Payments to Contributions. Over the life of a pension plan, it is expected that the majority of the benefits will be paid for by returns rather than contributions. For this to happen, as a plan matures, the plan will eventually pay out more in benefits than it receives in contributions. It is important to understand the magnitude of this difference so that steps can be taken, if necessary, to manage cash flows going forward. The table below provides the Ratio of Benefit Payments to Contributions. Note that there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

Year Ending	Benefit		Ratio of Benefit Payments to
<u>9/30</u>	<u>Payments</u>	<u>Contributions</u>	<u>Contributions</u>
2022	\$12,362,686	\$8,691,450	1.42
2021	9,927,380	8,895,096	1.12
2020	11,463,643	8,564,355	1.34
2019	14,169,964	8,441,926	1.68
2018	10,960,320	8,036,028	1.36
2017	6,463,144	7,538,727	0.86
2016	6,501,439	7,327,250	0.89
2015	8,093,516	7,235,540	1.12
2014	7,121,213	6,976,695	1.02

When looking at Net Cash Flows, it is useful to understand the relative size of the cash flows in comparison to the Market Value of Assets. The following table provides the ratio of the Net Cash Flows divided by the Market Value of Assets. As mentioned previously, there are other cash flows to be considered such as interest and dividends earned or expenses paid by a pension plan.

Year Ending				Net Cash Flow Divided by
<u>9/30</u>	Contributions	<u>Disbursements</u>	<u>Assets</u>	<u>Assets</u>
2022	\$8,691,450	\$12,612,072	\$154,973,848	(0.03)
2021	8,895,096	10,121,256	183,776,715	(0.01)
2020	8,564,355	11,614,992	151,816,631	(0.02)
2019	8,441,926	14,369,744	146,249,304	(0.04)
2018	8,036,028	11,157,789	146,237,269	(0.02)
2017	7,538,727	6,683,436	135,548,638	0.01
2016	7,327,250	6,712,260	120,391,017	0.01
2015	7,235,540	8,256,331	108,526,799	(0.01)
2014	6,976,695	7,281,255	109,371,318	(0.00)



2 Results Derivation

In this section, the assets and liabilities of the Plan are shown in detail. Assets and liabilities are then compared to determine the funded status and minimum funding requirements. Finally, analysis is performed to explain movement in results from the prior valuation.

While asset information is based on the fair market value of assets, along with any techniques used to smooth out market fluctuations, liabilities are determined through a combination of the benefit provisions, participant census data which contains information for the members who will receive those benefits, and the methods and assumptions used with regard to how benefits will be paid to members. A summary of participant data, an outline of the benefit provisions, and a description of the methods and assumptions used in this valuation are described in Section 4.

Financial Information

Over the life of the Plan, the majority of assets are typically generated from investment return. In this section, we describe how the assets of the Plan are invested, show how the actuarial value of assets is derived, and review the investment results since the prior valuation.

Valuation Date	October 1, 2021		October 1, 2022	
Money market funds	\$3,063,534	2%	\$2,662,916	2%
U.S. government securities	11,676,808	6%	11,100,263	7%
Corporate bonds	4,096,496	2%	6,673,597	4%
Common stock	50,527,882	28%	36,414,563	24%
International equity funds	11,400,469	6%	8,141,479	5%
Collective investment funds	78,742,596	43%	60,536,208	39%
Commingled real estate funds	24,452,182	13%	29,488,363	19%
Net receivables	<u>(183,252)</u>	0%	<u>(43,541)</u>	0%
Fair Market Value	\$183,776,715	100%	\$154,973,848	100%



Reconciliation of Market Value of Assets

Yea	ır Er	nding September 30,	2021	2022
1.	Ма	rket Value of Assets Beginning of Year	\$151,816,631	\$183,776,715
2.	Со	ntributions		
	a.	City	\$6,391,190	\$6,051,494
	b.	State	934,286	1,025,399
	c.	Plan Members	<u>1,569,620</u>	<u>1,614,557</u>
	d.	Total Contributions	\$8,895,096	\$8,691,450
3.	Inv	restment earnings		
	a.	Unrealized gain or (loss)	\$21,977,091	\$(35,092,925)
	b.	Realized gain or (loss)	10,053,448	7,548,486
	c.	Interest and dividends	1,909,726	3,404,018
	d.	Other income	1,016	7,225
	e.	Investment expense	<u>(755,037)</u>	(749,049)
	f.	Net investment income	\$33,186,244	\$(24,882,245)
4.	De	ductions		
	a.	Pension benefits	\$(9,922,633)	\$(12,278,523)
	b.	Contribution refunds	(4,747)	(84,163)
	C.	Administrative expenses	<u>(193,876)</u>	(249,386)
	d.	Total Deductions	\$(10,121,256)	\$(12,612,072)
5.	Ne	t Increase	\$31,960,084	\$(28,802,867)
6.	Ма	rket Value of Assets End of Year	\$183,776,715	\$154,973,848
7.	Re	turn on Market Value of Assets	21.56 %	(13.50)%



Development of Actuarial Value of Assets

1. Market Value of Assets as of 9/30/2022	\$	154.973.848
---	----	-------------

2. Phase-In Gains (Losses) Over Five Year Period

				Original Gain (Loss)	Percent Unrecognized		Unrecognized Gain (Loss)
	a. b. c. d.	Year Ending 9/30/2022 Year Ending 9/30/2021 Year Ending 9/30/2020 Year Ending 9/30/2019	\$	(38,706,954) 21,333,480 (2,882,627) (5,448,325)	80% 60% 40% 20%	\$	(30,965,563) 12,800,088 (1,153,051) (1,089,665)
	e.	Total				\$	(20,408,191)
3. Preliminary Actuarial Value of Assets as of 9/30/2022						\$	175,382,039
4.	Co	rridor Around Market Value	Э				
	a.	Minimum = 80% of Marke	et Va	lue of Assets		\$	123,979,078
	b.	Maximum = 120% of Mar	ket \	/alue of Assets		\$	185,968,618
c. Corridor Adjustment to Preliminary Actuarial Value							0
5.	Ac	tuarial Value of Assets as	of 9/3	30/2022 (3. + 4.c	·.)	\$	175,382,039



Development of Historical Market Gains and Losses for Asset Smoothing

		2022	2021
1.	Market Value of Assets - Beginning of Year	\$ 183,776,715	\$ 151,816,631
2.	Contributions	8,691,450	8,895,096
3.	Benefit Payments + Administrative Expenses	(12,612,072)	(10,121,256)
4.	Expected Return on Assets	13,824,709	11,852,764
5.	Expected Value of Assets at End of Year	\$ 193,680,802	\$ 162,443,235
6.	Market Value of Assets - End of Year	\$ 154,973,848	\$ 183,776,715
7.	Gain (Loss) for Plan Year = (6) - (5)	\$ (38,706,954)	\$ 21,333,480
		2020	2019
1.	Market Value of Assets - Beginning of Year	\$ 146,249,304	\$ 146,237,269
2.	Contributions	8,564,355	8,441,926
3.	Benefit Payments + Administrative Expenses	(11,614,992)	(14,369,744)
4.	Expected Return on Assets	11,500,591	<u>11,388,178</u>
5.	Expected Value of Assets at End of Year	\$ 154,699,258	\$ 151,697,629
6.	Market Value of Assets - End of Year	\$ 151,816,631	\$ 146,249,304
7.	Gain (Loss) for Plan Year = (6) - (5)	\$ (2,882,627)	\$ (5,448,325)



State Contributions

Year Ending September 30	State Contributions	Recurring Cost Benefit Improvements	Base Plus Benefit Improvements	One-time Use Benefit Improvements	Recognized State Funding	Cumulative Balance Available Upon Benefit Improvement
2022	\$1,025,399	\$0	\$2,055,127	\$0	\$1,025,399	\$0
2021	934,286	0	2,055,127	0	934,286	0
2020	861,888	0	2,055,127	0	861,888	0
2019	821,826	0	2,055,127	0	821,826	0
2018	763,749	0	2,055,127	0	763,749	0
2017	766,995	0	2,055,127	0	766,995	0
2016	803,419	0	2,055,127	0	803,419	0
2015	853,244	0	2,055,127	0	853,244	0
2014	879,470	0	2,055,127	0	879,470	0
2013	864,612	0	2,055,127	0	864,612	0
2012	771,973	0	2,055,127	0	771,973	0
2011	769,600	0	2,055,127	0	769,600	0
2010	819,768	0	2,055,127	0	819,768	0
2009	859,647	0	2,055,127	0	859,647	0
2008	941,067	0	2,055,127	0	941,067	0
2007	814,996	0	2,055,127	0	814,996	0
2006	575,948	781,763	2,055,127	0	575,948	0
2005	521,744	979,283	1,273,364	352,586	874,330	0
2004	485,452	0	294,081	0	294,081	352,586
2003	415,465	0	294,081	0	294,081	161,215
2002	330,685	0	294,081	0	294,081	39,831
2001	267,885	0	294,081	0	267,885	3,227
2000	266,742	0	294,081	0	266,742	3,227
1999	297,308	0	294,081	0	294,081	3,227
1998	294,081	0	294,081	0	294,081	0

Note: As provided for in Ordinance No. 124-X-16-C adopted effective July 12, 2016, Chapter 175 contributions received each fiscal year in excess of \$2,055,127 may be used to provide Share Plan benefits.



Present Value of Benefits

Val	Valuation as of October 1,		2021	2022
1.	Act	ive Members		
	a.	Retirement Benefits	\$107,666,844	\$107,891,158
	b.	Deferred Benefits	303,204	298,783
	C.	Survivor Benefits	835,562	878,509
	d.	Disability Retirement	<u>5,738,838</u>	6,043,208
	e.	Total for Active Members	\$114,544,448	\$115,111,658
2.	Ina	ctive Members		
	a.	Retirement Including DROP	\$142,793,182	\$151,387,568
	b.	Terminated Vested	0	764,740
	C.	Beneficiaries	2,048,942	3,742,165
	d.	Disability Retirement	<u>3,389,645</u>	<u>2,695,289</u>
	e.	Total in Payment Status	\$148,231,769	\$158,589,762
3.	Pre	sent Value of Benefits (PVB)	\$262,776,217	\$273,701,420



Accrued Liability – Entry Age Normal

Val	luation as of October 1,	2021	2022				
1.	1. Active Members						
	a. Retirement Benefits	\$64,224,015	\$63,055,423				
	b. Deferred Benefits	(685,920)	(699,569)				
	c. Survivor Benefits	401,064	428,427				
	d. Disability Retirement	<u>1,832,215</u>	1,982,423				
	e. Total for Active Members	\$65,771,374	\$64,766,704				
2.	Members in Payment Status						
	a. Retirement Including DROP	\$142,793,182	\$151,387,568				
	b. Terminated Vested	0	764,740				
	c. Beneficiaries	2,048,942	3,742,165				
	d. Disability Retirement	<u>3,389,645</u>	2,695,289				
	e. Total in Payment Status	\$148,231,769	\$158,589,762				
3.	Accrued Liability (AL)	\$214,003,143	\$223,356,466				



Normal Cost – Entry Age Normal

Valı	uation	as of October 1,	2021	2022
1.	Preli	minary Normal Cost		
	a.	Retirement Benefits	\$4,330,944	\$4,284,242
	b.	Deferred Benefits	99,582	96,515
	C.	Survivor Benefits	43,307	43,341
	d.	Disability Retirement	403,889	394,983
	e.	Total Preliminary Normal Cost	\$4,877,722	\$4,819,081
	f.	Preliminary NC as a Percent of Payroll	32.60%	32.06%
2.	Tota	l Normal Cost		
	a.	Preliminary Normal Cost	\$4,877,722	\$4,819,081
	b.	Estimated Administrative Expense	<u>193,876</u>	<u>249,386</u>
	C.	Total Normal Cost	\$5,071,598	\$5,068,467
	d.	Total Normal Cost as a% of Pay	33.90%	33.71%
3.	Actu	al Employer Normal Cost		
	a.	Preliminary Normal Cost	\$4,877,722	
	b.	Actual Expenses	249,386	
	c.	Actual Employee Contributions	(1,614,557)	
	d.	Actual Employer Normal Cost	\$3,512,551	
4.	Payr	oll	\$14,960,381	\$15,033,437



5.46 %

Unfunded	Accrued	Liability

9. Actual % Return

Year Beginning October 1, 20							
Unfunded Accrued Liability (UAL)	Unfunded Accrued Liability (UAL)						
 Accrued Liability Actuarial Value of Assets Unfunded Accrued Liability 	\$223,356,466 <u>175,382,039</u> \$47,974,427						
Determination of Expected Unfunded Accrued Liability							
 Unfunded Accrued Liability as of Prior Year Employer Normal Cost Interest on UAL and NC Contributions 	\$44,015,117 3,512,551 3,564,575						
a. Cityb. State of Floridac. Total	\$(6,051,494) (1,025,399) \$(7,076,893)						
 Interest on Contribution for Time on Deposit Change in Plan, Methods or Assumptions Expected UAL as of Current Year 	(453,862) <u>192,020</u> \$43,753,508						
Calculation of (Gain) or Loss							
 Actual Unfunded Accrued Liability Expected UAL Total (Gain) or Loss Breakdown of (Gain) or Loss Investment (Gain) or Loss Demographic Experience (Gain) or Loss Total (Gain) or Loss 	\$47,974,427 <u>43,753,508</u> \$4,220,919 \$3,475,922 <u>744,997</u> \$4,220,919						
Calculation of Actuarial Asset (Gain) or Loss							
 Actuarial Value of Assets - Beginning of Year Contributions Benefit Payments + Administrative Expenses Expected Return on Assets Expected Actuarial Value at End of Year Actuarial Value of Assets - End of Year Gain (Loss) for Plan Year = (6) - (5) 	\$169,988,026 8,691,450 (12,612,072) 12,790,557 \$178,857,961 \$175,382,039 \$(3,475,922)						
8. Actual Investment Income	\$9,314,635						



Amortization of Unfunded Liability

The Unfunded Actuarial Accrued Liability is being amortized as a level percentage of payroll based on the net assumed return on investments and a 3.0% payroll growth assumption. Note that a fresh start was implemented effective October 1, 2013 over 24.9945 years. New bases are amortized over a 25-year period.

Amortization Bases

	Date 10/1	Source	Original Balance	Remaining Balance	Remaining Adjusted Balance	Years Remain	Amortization Payment
1.	2013	Fresh Start	\$55,204,509	\$51,110,522	\$51,318,911	15.9945	\$4,336,515
2.	2014	Actuarial Gain	(4,786,283)	(4,490,960)	(4,509,271)	17.0000	(365,375)
3.	2014	Assumption Chg	172,854	162,187	162,848	17.0000	13,195
4.	2015	Actuarial Gain	(2,267,545)	(2,163,304)	(2,172,124)	18.0000	(169,368)
5.	2015	Assumption Chg	1,643,838	1,568,271	1,574,665	18.0000	122,782
6.	2016	Actuarial Gain	(641,300)	(619,506)	(622,032)	19.0000	(46,812)
7.	2016	Assumption Chg	4,703,070	4,543,253	4,561,777	19.0000	343,301
8.	2017	Actuarial Gain	(1,244,698)	(1,206,678)	(1,211,598)	20.0000	(88,233)
9.	2017	Assumption Chg	1,196,786	1,160,229	1,164,959	20.0000	84,837
10.	2018	Actuarial Loss	78,564	76,531	76,843	21.0000	5,428
11.	2019	Actuarial Gain	(229,094)	(225,246)	(226,164)	22.0000	(15,529)
12.	2020	Actuarial Gain	(3,285,073)	(3,252,124)	(3,265,384)	23.0000	(218,352)
13.	2020	Assumption Chg	(3,207,909)	(3,175,735)	(3,188,683)	23.0000	(213,223)
14.	2021	Actuarial Gain	(3,936,649)	(3,962,126)	(3,978,280)	24.0000	(259,532)
15.	2021	Plan Change	1,069,286	1,076,206	1,080,594	24.0000	70,495
16.	2021	Assumption Chg	2,765,185	2,783,080	2,794,427	24.0000	182,301
17.	2022	Plan Change	192,020	192,020	192,020	25.0000	12,241
18.	2022	Actuarial Loss	4,220,919	4,220,919	4,220,919	25.0000	<u>269,071</u>
				\$47,797,539	\$47,974,427		\$4,063,742



Projected Unfunded Accrued Liability and Amortization Payments

Year		
Beginning October 1,	Outstanding Bases	Amortization Payment
2022	\$47,974,427	\$4,063,742
2023	47,203,986	4,185,654
2024	46,244,707	4,311,221
2025	45,078,498	4,440,558
2026	43,685,785	4,573,774
2027	42,045,412	4,710,989
2028	40,134,505	4,852,317
2029	37,928,352	4,997,889
2030	35,400,248	5,147,824
2031	32,521,355	5,302,260
2032	29,260,528	5,461,326
2033	25,584,142	5,625,168
2034	21,455,897	5,793,922
2035	16,836,623	5,967,739
2036	11,684,050	6,146,773
2037	5,952,573	6,294,800
2038	(367,895)	(437,723)
2039	75,065	131,245
2040	(60,393)	214,493
2041	(295,503)	(298,968)
2042	3,725	(301,804)
2043	328,444	(320,956)
2044	698,104	(300,828)
2045	1,073,853	541,899
2046	571,850	571,850
2047	0	0

Actions Taken to Reduce Unfunded Actuarial Accrued Liability

The required contributions calculated each year include a payment for the amortization of the unfunded accrued liability. This payment is designed to reduce the unfunded actuarial accrued liability in an orderly fashion.



Total Payroll Inflation

b.

Mini	mum Funding Requirements		
	nation as of October 1, ding for Fiscal Year Ending September 30,	2021 2023	2022 2024
1.	Normal Cost	\$5,071,598	\$5,068,467
2.	Amortization of UAL	3,657,348	4,063,742
3.	Minimum Required Contribution at Valuation Date	\$8,728,946	\$9,132,209
4.	Interest Adjustment	<u>776,993</u>	<u>813,444</u>
5.	Total Minimum Required Contribution With City Portion Payable on First Day of Funding Year	\$9,505,939	\$9,945,653
6.	Expected Employee Contributions	\$1,637,997	\$1,633,696
7.	Expected State Contribution	934,286	1,025,399
8.	Estimated City Contribution	6,933,656	<u>7,286,558</u>
9.	Total Minimum Required Contribution With City Portion Payable on First Day of Funding Year	\$9,505,939	\$9,945,653
10.	Expected Employee Contributions	10.63%	10.55%
11.	Expected State Contribution	6.06%	6.62%
12.	Estimated City Contribution	<u>45.00%</u>	<u>47.06%</u>
13.	Total Minimum Required Contribution Payable on First Day of Funding Year	61.69%	64.23%
14.	Payroll for Active Members on Valuation Date		
	a. In Year After Valuation Date	\$14,960,381	\$15,033,437
	b. Expected in Funding Year	15,409,192	15,484,440
15.	Key Assumptions		
	a. Net Annual Rate of Return	7.50%	7.50%

Note: The Estimated City Contribution shown in item 8. must be deposited on the first day of the fiscal year.

3.00%

3.00%



Reconciliation of Unfunded Accrued Liability

	Unfunded Accrued Liability	Funded %	Change in Unfunded Accrued Liability	Change in Funded %
As of Prior Valuation Report	\$44,015,117	79.43 %		
Changes in Funded Status Due to:				
Normal Operation of Plan Investment Experience Demographic Experience Section 415(b) Increase Total Changes	43,561,488 47,037,410 47,782,407 47,974,427	80.41 % 78.85 % 78.59 % 78.52 %	\$(453,629) 3,475,922 744,997 <u>192,020</u> \$3,959,310	0.98 % (1.56)% (0.26)% (0.07)% (0.91)%
As of Current Valuation	\$47,974,427	78.52 %	ψο,σσσ,στο	(0.01)70

Reconciliation of City Minimum Required Contribution

	Dollar Amount	Percent of Pay
As of Prior Valuation Report	\$6,933,656	45.00 %
Changes in Contribution due to:		
Normal Operation of Plan	\$234,082	0.16 %
Change in Expense	59,673	0.38 %
Change in State \$	(84,756)	(0.54)%
Investment Experience	238,199	1.50 %
Demographic Experience	(107,455)	0.47 %
Section 415(b) Increase	<u>13,159</u>	<u>0.09 %</u>
Total Changes	\$352,902	2.06 %
As of Current Valuation	\$7,286,558	47.06 %



3 Accounting Information

Information Required by GASB 67/68

Supplemental reports provide information under the Governmental Accounting Standards Board No. 67/68.



Statement of Accumulated Plan Benefits (FASB 35)

The following table is based on prior accounting standards and is required by the State. The present value of accrued benefits is an estimate of the liability for all benefits accrued to date.

Yea	r Be	ginning October 1,	2021	2022
1.	Act	uarial present value of accumulated plan benefits		
	a.	Participants currently receiving benefits	\$148,231,769	\$157,825,022
	b.	Other participants	43,327,537	40,935,858
	C.	Total vested plan benefits	\$191,559,306	\$198,760,880
	d.	Total non-vested plan benefits	<u>5,651,643</u>	<u>5,441,412</u>
	e.	Total accumulated plan benefits	\$197,210,949	\$204,202,292
2.	Cha	ange in present value of accumulated plan benefits		
	a.	Accumulated plan benefits		
		beginning of year		\$197,210,949
	b.	Increase (decrease) during year due to:		
		i. Plan amendment		\$192,020
		ii. Change in assumptions or methods		0
		iii. Benefits paid		(12,362,686)
		iv. Other		<u>19,162,009</u>
		v. Net increase (decrease)		\$6,991,343
	C.	Accumulated plan benefits		
		end of year		\$204,202,292

Other Disclosures Required by the State of Florida

This additional disclosure information is provided, where applicable.

Year Beginning October 1,	2021	2022	
Present value of active member: Future salaries (attained age) Future contributions (attained age)	\$150,668,856 \$16,016,099	\$158,363,416 \$16,642,219	
Balance of Active Member Employee Contributions	\$12,798,973	\$12,563,588	



Required Disclosure Under F.S. 112.664(1)

As required under F.S. Section 112.664(1) we have produced the following information:

- (a) Total pension liability calculated based on mortality used in one of the last two Florida Retirement System (FRS) valuations. This actuarial valuation assumes mortality as used in the July 1, 2019, 2020 and 2021 actuarial valuation for special risk members of FRS.
- (b) Total pension liability calculated using an assumed interest rate that is 200 basis points lower than that assumed in the valuation of the Plan.
- (c) Determination of the number of months or years for which the current market value of assets is adequate to sustain the payment of expected retirement benefits.
- (d) Recommended contribution to the Plan using the most recent valuation and the contributions necessary prepared pursuant to (a) and (b) stated as a dollar amount and % of payroll.

		Current							
	2% Decrease	Discount Rate	2% Increase						
	(5.50%)	(7.50%)	(9.50%)						
	_								
Total pension liability	\$288,845,685	\$223,356,466	\$179,908,692						
Plan fiduciary net position	(154,973,848)	(154,973,848)	(154,973,848)						
Net pension liability	\$133,871,837	\$68,382,618	\$24,934,844						
Plan fiduciary net position as a percentage of									
the total pension liability	53.65%	69.38%	86.14%						
Years of benefit payments:									
Expected for current members:	100	100	100						
Paid for with current assets:	12.85	15.07	18.81						
City Plus State Contribution Requirement. Plus E	City Plus State Contribution Requirement, Plus Expected Employee Contributions								
Dollar Amount	\$16,149,924	\$9,945,653	\$5,199,871						
Percent of Payroll	104.30%	64.23%	33.58%						



Required Disclosure Under F.S. 112.664(2)(b)2.

F.S. Section 112.664(2)(b)2. - For the previous five years, beginning with 2013, a side-by-side comparison of the plan's assumed rate of return compared to the actual rate of return, as well as the percentages of cash, equity, bond and alternative investments in the plan portfolio.

Year Ending September 30,	2022	2021	2020	2019	2018
Assumed rate of return	7.50%	7.70%	7.80%	7.80%	7.80%
Actual rate of return	(13.50%)	21.56%	5.84%	4.07%	10.11%
Percentages of assets in:					
Cash	2%	2%	2%	3%	4%
Equity	68%	77%	76%	72%	74%
Bond	11%	8%	8%	10%	8%
Alternative	19%	13%	14%	15%	14%
Total	100%	100%	100%	100%	100%



Section Supplementary 4 Information

Summary of Participant Data

Member Statistics

Year Beginning October 1,	2021	2022	
Active Participants			
Number	138	134	
Average Age	37.1	36.8	
Average Credited Service	10.1	10.0	
Percent Male	86.2	87.3	
Average Salary	\$ 102,450	\$ 107,361	
Annualized Payroll for Prior 12 Month Period	\$ 14,138,095	\$ 14,386,398	
Total Valuation Salary	\$ 15,091,440	\$ 15,369,130	
Payroll Covered in Valuation	\$ 14,960,381	\$ 15,033,437	
Terminated With Rights to Deferred Benefits			
Number	0	1	
Average Age	0.0	45.0	
Percent Male	0.0	100.0	
Average Monthly Benefit	\$ 0	\$ 5,937	
DROP			
Number	23	25	
Average Age	56.2	55.7	
Percent Male	87.0	84.0	
Average Monthly Benefit	\$ 6,967	\$ 7,366	
DROP Account Balance	\$ 9,208,450	\$ 9,241,174	



Member Statistics (continued)

Year Beginning October 1,	2021	2022	
Service Retirements			
Number	96	97	
Average Age	63.7	63.9	
Percent Male	96.9	95.9	
Average Monthly Benefit	\$ 6,534	\$ 6,783	
DROP Account Balance	\$ 757,126	\$ 8,552	
<u>Beneficiaries</u>			
Number	4	6	
Average Age	66.9	64.9	
Percent Male	0.0	0.0	
Average Monthly Benefit	\$ 3,741	\$ 3,997	
Disability Retirements			
Number	8	7	
Average Age	63.8	66.1	
Percent Male	100.0	100.0	
Average Monthly Benefit	\$ 3,724	\$ 3,474	
Total In Payment Status			
Number	108	110	
Average Age	63.8	64.1	
Percent Male	93.5	90.9	
Average Monthly Benefit	\$ 6,223	\$ 6,420	

Note: Average Monthly Benefits exclude any Supplemental Benefits payable.



Number of Active Members by Age and Service as of October 1, 2022

Service								
Age	< 1	< 5	< 10	< 15	< 20	< 25	<30	Total
< 25	3	4						7
< 30	3	14	3					20
< 35	1	13	9	4				27
< 40	1	3	11	9	12			36
< 45			3	5	11	3		22
< 50		1	1	5	6	4	1	18
< 55				1	2			3
< 60					1			1
Total	8	35	27	24	32	7	1	134

Active Valuation Pay by Age and Service as of October 1, 2022

Service								
Age	< 1	< 5	< 10	< 15	< 20	< 25	<30	Total
< 25	50,229	75,082						64,431
< 30	50,229	76,197	89,095					74,237
< 35	50,229	76,305	96,740	107,848				86,824
< 40	50,229	76,781	100,673	124,397	145,771			118,245
< 45			112,891	136,166	133,698	150,403		133,700
< 50		65,828	90,480	128,390	133,762	153,638	166,136	132,307
< 55				99,686	124,300			116,095
< 60					178,397			178,397
Total	50,229	75,864	99,056	123,893	139,047	152,251	166,136	107,361



Reconciliation of Plan Participants

	Active	Vested	DROP	Retiree	Disability	Beneficiary	Total
As of October 1, 2021	138	0	23	96	8	4	269
Nonvested Termination	(3)						(3)
Vested Termination	(1)	1					0
Retired			(6)	6			0
DROP	(8)		8				0
Deceased				(5)	(1)	2	(4)
New Hires	8						8
As of October 1, 2022	134	1	25	97	7	6	270



Outline of Plan Provisions

Plan Type: Single-employer Defined Benefit Pension Plan

Plan Administrator: The Board of Trustees

<u>Board Composition:</u> The trustees consist of five members which may include participants who have at least 18 months remaining in the DROP at the time they take office, none who are elected City officials, and who are selected as follows: (a) two members who are elected current Members of the plan, (b) two members who are legal residents of the City and current or former City employees who are vested in the Plan appointed by City commission, and (c) one member chosen by a majority of the previous four members duly appointed by the City commission as a ministerial act. The term of office for each Board member is two years.

Legal Authority: The Plan is established and amended by local ordinance.

<u>Funding Requirements:</u> Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended by ordinance.

<u>Effective Dates:</u> The Plan was most recently amended by Ordinance No. 124-X-21-B adopted November 19, 2021. This amendment describes benefits payable to Members hired on or after November 19, 2021. In general, benefits which had been defined as payable to Members who were hired prior to September 25, 2012 became payable to those hired prior to November 19, 2021. The following changes were included:

- For Members hired or rehired after November 19, 2021 overtime is excluded in the definition of Salary. Prior to this change overtime was included in the definition of Salary but limited to 300 hours per year effective October 1, 2012.
- Employee Contributions for Members hired or rehired on or after November 19, 2021 is defined as 8.0% of Salary. For Members hired prior to November 19, 2021, 10.63% of Salary.
- Average Final Compensation for those hired or rehired on or after November 19, 2021 is the
 average of Salary for the five highest years out of the last 10 years of Credited Service. For
 those hired prior to November 19, 2021, the average of Salary for the three highest consecutive
 years, or the five highest years out of the last 10 years of Credited Service, whichever is greater.
- Normal Retirement Age for those hired or rehired on or after November 19, 2021 is defined as
 the earlier of (i) age 55 and completion of 10 years of Credited Service or (ii) age 52 and
 completion of 25 years of Credited Service. For those hired prior to November 19, 2021, the
 earliest of (i) age 45 and completion of 25 years of Credited Service, (ii) age 48 and completion
 of 21 years of Credited Service (which may be accelerated one year to age 47 and completion
 of 20 years of Credited Service), or (iii) age 50 and completion of 10 years of Credited Service.
- The Normal Retirement Benefit for Members hired or rehired on and after November 19, 2021 is a maximum of 70% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 20 Years Credited Service plus 2.0% x Average Final Compensation x Credited Service from 20 to 25 Years. Provided, however, in no event will the Accrued Benefit be less than 2.75% x Average Final Compensation x Credited Service. For Members hired before November 19, 2021, any Member who was actively employed on October 1, 2001 and retired or entered the DROP after January 1, 2004 is due a benefit based on the greater of the following two benefit formulas. Members who were not employed on October 1, 2001 and hired before November 19, 2021 receive a benefit only under formula (1) in effect January 1, 2004.
 - (1) For Members hired prior to November 19, 2021 who retire or terminate employment on or after January 1, 2004 the benefit formula is a maximum of 80% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 15 Years Credited Service plus 3.5% x Average Final Compensation x Credited Service from 15 to 25 Years.



- Provided, however, in no event will the Accrued Benefit be less than 2.0% x Average Final Compensation x Credited Service.
- (2) For Members who retired or terminated prior to January 1, 2004, Members who reached Normal Retirement Age were entitled to a retirement benefit of 4.0% x Average Final Compensation x up to 10 Years Credited Service plus 2.0% x Average Final Compensation for Credited Service over 10 Years.
- Early Retirement Age for those hired or rehired on or after November 19, 2021 is age 50 and completion of at least 10 years of Credited Service. For Members hired prior to November 19, 2021, age 47 and completion of 10 years of Credited Service.
- The Early Retirement Benefit for those hired or rehired on or after November 19, 2021 is the accrued Normal Retirement Benefit reduced 3% per year by which the commencement of benefits precedes age 55. For Members hired before November 19, 2021, the accrued Normal Retirement Benefit reduced actuarially from Normal Retirement Age. However, in no event will the reduction for Early Retirement exceed 3% per year by which the commencement of benefits precedes the Normal Retirement Age.
- Service Incurred Disability Retirement benefits are 75% (70% for Members hired or rehired on or after November 19, 2021) of the Member's Salary in effect on the date of disability, subject to offsets not more than would reduce the service incurred disability benefit below the greater of the Member's Accrued Benefit or 42% x Average Final Compensation. The ordinance further describes adjustments that should be performed annually.
- Nonservice Incurred Disability Retirement benefits are the accrued Normal Retirement Benefit
 no less than 25% of Average Final Compensation for those with 10 years of Credited Service.
 For Members hired or rehired on or after November 19, 2021 the maximum payable is 50% of
 Average Final Compensation.
- Pre-Retirement Death benefits were revised to set forth service connected and non-service connected benefits payable to Members hired or rehired on or after November 19, 2021. The service-connected pre-retirement death benefit is the lesser of the accrued Normal Retirement Benefit and 75% of Average Final Compensation actuarially adjusted for the beneficiary's age and payable immediately for the lifetime of the Member's beneficiary for those with 10 years of Credited Service. If there is no beneficiary, the benefit is payable to the Member's estate for 10 years. The non-service connected pre-retirement death benefit is the accrued Normal Retirement Benefit actuarially adjusted for the beneficiary's age commencing on the date the Member would have attained their Early or Normal Retirement Age for those with 10 years of Credited Service. Pre-Retirement Death Benefits defined payable prior to Ordinance No. 124-X-21-B continue to be payable for those hired prior to November 19, 2021.
- Under Ordinance No. 124-X-21-B adopted November 19, 2021, Members hired or rehired on or after November 19, 2021 may participate in the DROP for a maximum of 4 years if they make the election within 6 months of reaching their Normal Retirement Age. DROP account earnings are 0% if the GASB 68 "fiduciary net position" is less than 100%. If 100% or more, then DROP account earnings are credited using the actual return of the Plan with a minimum of 0% and a maximum of 4%. Although not explicitly stated in the Ordinance, we understand from City correspondence received while preparing the impact statement that Members hired or rehired on or after November 19, 2021 are eligible for BAC-DROP. DROP provisions in effect prior to Ordinance No. 124-X-21-B continue to be applicable for Members hired prior to November 19, 2021.
- Under Ordinance No. 124-X-21-B, Members hired or rehired on or after November 19, 2021 are
 not entitled to a COLA. However, Members rehired on or after November 19, 2021 may be due
 a COLA on the benefit payable for service prior to November 19, 2021. COLA provisions prior
 to Ordinance No. 124-X-21-B continue to be applicable for Members hired prior to November
 19, 2021.
- Under Ordinance No. 124-X-21-B, Members hired or rehired on or after November 19, 2021 are
 not entitled to receive the Supplemental Benefit. However, Members rehired on or after
 November 19, 2021 may be due a Supplemental Benefit payable for service prior to November
 19, 2021. See the provisions of the Supplemental Benefit described below as in effect prior to
 Ordinance No. 124-X-21-B.



- A 13th check is payable to retired Members hired or rehired on or after November 19, 2021 if the GASB 68 "fiduciary net position" is 100% or greater. The 13th check is prorated based on the "excess investment earnings" available but not more than the monthly retirement benefit payable. "Excess investment earnings" are defined as the market rate of investment earnings on assets net of expenses that exceed the assumed rate of return.
- Under Ordinance No. 124-X-21-B adopted November 19, 2021, Members participating in the DROP on or after November 19, 2021 and who receive a benefit calculation estimate by the Plan actuary that the benefit may exceed the Section 415 limit while the Member is participating in the DROP may elect to exit the DROP and continue City employment where they must terminate City employment no later than the date the Member would have completed their DROP participation. Upon DROP exit the monthly benefit is no longer credited to the DROP balance and is paid directly to the Member. The DROP balance is not paid at DROP exit, but rather accumulates with interest until termination of employment at which time it is paid to the Member. After DROP exit the Member rejoins the Plan as a new contributing Member subject to a new 10-year vesting period but is not eligible for death or disability retirement benefits. The ordinance states,"...If the Member separates from City employment before attaining ten (10) years of creditable service after exiting the DROP, the member shall receive a refund of 100% of the member contributions made during their post-DROP employment, without interest."

The following provides a history of other recent ordinance amendments.

- Ordinance No. 124-X-17-B was adopted September 12, 2017. This ordinance amended the Plan to (1) remove the value of the Plan's cost-of-living adjustment from the initial determination of Section 415(b) limits effective September 29, 2016 and (2) requires that Members receive estimated calculations before retirement or DROP entry to let them know if they are expected to have benefits in excess of Section 415(b) limitations. For Members who retired from employment on and after September 29, 2016 the Section 415(b) limit is adjusted annually after retirement as the Internal Revenue Service releases new calendar year limits under Section 415(d).
- Ordinance No. 124-X-16-C became effective July 12, 2016. This ordinance amended the Plan to (1) allow for a purchase of up to four years active service in the U.S. Armed Forces as noted below under the definition of Credited Service, (2) indicate salary for members of the firefighters' Plan excludes all payment for accrued unused sick and annual leave (although the plan already indicated lump sum payouts of accrued benefits upon termination of employment are not included in salary), (3) state the Normal and Early Retirement dates, Normal and Early Retirement benefits, and Member contributions for rehires on or after September 25, 2012 are the same as for regular hires on or after September 25, 2012, and (4) define Chapter 175 contributions received each fiscal year in excess of \$2,055,127 may be used to provide Share Plan benefits.
- Ordinance No. 124-X-13-B was adopted effective August 13, 2013 to increase the annual COLA
 effective October 1, 2013 to 2.5% commencing at the end of the seventh year following initial
 receipt of retirement benefits for firefighters who terminate employment and begin receiving
 Normal Retirement benefits or enter the DROP on or after October 1, 2010, and the beneficiaries
 of such members.
- Ordinance No. 124-X-C-12 effective December 28, 2012 related to Board composition.
- Ordinance No. 124-X-B-12 effective November 13, 2012 defined employee contributions as 10.63% of Salary.
- Ordinance No. 124-X-A-12 effective September 25, 2012 (1) allowed for service purchases of prior firefighter service, (2) defined eligibility and benefits for hires on and after September 25, 2012, (3) set employee contributions to 9.96% for those hired prior to September 25, 2012 and 9.0% for hires on and after September 25, 2012, (4) extend the DROP to 84 months with 6.0% annual interest accumulation, and (5) allow BAC-DROP for up to 24 months.
- Ordinance No. 124-X-10-A effective April 27, 2010 was to comply with Florida Statutes 2009 The ordinance revised the definition of actuarial equivalence, amended the investment policy, revised optional forms of benefit to allow the joint pensioner to be changed up to two



times without approval of board, revised language regarding designated beneficiaries, and added language related to Plan termination such as accrued benefits are nonforfeitable.

- Ordinance No. 124-X-09-A adopted October 13, 2009 amended Plan provisions to provide for a Supplemental Benefit for firefighters.
- Ordinance No. 124-X-08-C adopted October 14, 2008 extended the DROP from 60 months to 72 months. Employee contributions are no longer subject to increase when City contributions are more than 19.2% of pay under this ordinance.

Plan Year: The 12-month period from October 1st to the following September 30th.

Member: Full-time firefighters become Members immediately upon hire.

<u>Actuarial Equivalence:</u> Effective April 27, 2010 under Ordinance No. 124-X-10-A, Actuarial Equivalence is based on an 8.0% interest rate, RP-2000 static mortality table (unisex 50/50) projected to 2010 using scale AA. The disabled mortality table is used for disability retirees.

<u>Credited Service:</u> Service with the City as a full-time salaried firefighter where Member contributions are made. Completed months of partial years of service are included in the determination of Credited Service.

Members with at least ten years of service who enter the DROP or retire on or after September 25, 2012 may purchase up to four years of active service in the U.S. Armed Forces or service worked as a full-time firefighter as defined under Florida Statutes section 175.032(8)(a) with another governmental entity prior to employment with the City provided the Member has not received and will not receive a benefit from another retirement plan based on such service. The total combined purchase of prior governmental and military service may not exceed four years. Payment for the purchase must be made in a cash lump sum or a direct transfer of funds from a member's account in the City's 457 plan.

Vesting: 100% upon earning ten years of Credited Service.

<u>Salary:</u> Total actual fixed cash compensation paid yearly for services rendered to the City as a firefighter including regular pay, holiday and other payroll cash incentives and general monthly expense allowances. Overtime was included in the definition of Salary but limited to 300 hours per year effective October 1, 2012. For Members hired or rehired after November 19, 2021 overtime is excluded. In addition, the following are not included in Salary: Lump sum payments of accrued benefits upon termination of employment, auto allowances, uniform allowances, mileage and travel reimbursements, income from private details, and (effective July 12, 2016) all payments for accrued unused sick and annual leave.

<u>Employee Contributions:</u> Ordinance No. 124-X-21-B adopted November 19, 2021 revised Employee Contributions. For Members hired or rehired on or after November 19, 2021, 8.0% of Salary. For Members hired prior to November 19, 2021, 10.63% of Salary.

Prior to Ordinance No. 124-X-21-B adopted November 19, 2021 members hired or rehired on or after September 25, 2012, 10.63% of Salary (prior to November 13, 2012 9.0% of Salary), and the below were defined for those hired before September 25, 2012.

<u>Effective</u>	% of Salary	
11/13/2012	10.63%	
09/25/2012	9.95%	
01/01/2004	10.63%	,

^{*}Any cost sharing provisions in place prior to October 1, 2008 where employees share in contribution increases in excess of 19.2% of budgeted payroll are no longer applicable. Prior to October 1, 2008, Employee Contributions were 10.63% plus 50% of the excess of City contributions over 19.2%.



A Member who terminates non-vested is entitled to refund of accumulated Employee Contributions without interest.

Vested Members who terminate employment prior to being eligible to receive an annuity may leave their accumulated contributions in the fund, and upon Early or Normal Retirement Age begin receipt of pension payments.

<u>Average Final Compensation:</u> Ordinance No. 124-X-21-B adopted November 19, 2021 revised Average Final Compensation. For those hired or rehired on or after November 19, 2021, average of Salary for the five highest years out of the last 10 years of Credited Service. For those hired prior to November 19, 2021, the average of Salary for the three highest consecutive years, or the five highest years out of the last 10 years of Credited Service, whichever is greater.

Prior to Ordinance No. 124-X-21-B, the following was in effect. Prior to October 1, 2004, average of Salary for the five highest years. Effective October 1, 2004, average of Salary for the three highest consecutive years, or the five highest years out of the last 10 years of Credited Service, whichever is greater.

Normal Retirement Age: Ordinance No. 124-X-21-B adopted November 19, 2021 set the Normal Retirement Age for those hired or rehired on or after November 19, 2021 as the earlier of (i) age 55 and completion of 10 years of Credited Service or (ii) age 52 and completion of 25 years of Credited Service. For those hired prior to November 19, 2021, the earliest of (i) age 45 and completion of 25 years of Credited Service, (ii) age 48 and completion of 21 years of Credited Service (which may be accelerated one year to age 47 and completion of 20 years of Credited Service), or (iii) age 50 and completion of 10 years of Credited Service.

Prior to Ordinance No. 124-X-21-B, Normal Retirement Age was as described above except the November 19, 2021 date was September 25, 2012. Prior to January 1, 2004, age 50 and completion of at least 10 years of Credited Service.

Normal Retirement Benefit: The Accrued Benefit.

Accrued Benefit: Ordinance No. 124-X-21-B adopted November 19, 2021 revised the Normal Retirement Benefit. For Members hired or rehired on and after November 19, 2021, a maximum of 70% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 20 Years Credited Service plus 2.0% x Average Final Compensation x Credited Service from 20 to 25 Years. Provided, however, in no event will the Accrued Benefit be less than 2.75% x Average Final Compensation x Credited Service. For Members hired before November 19, 2021, any Member who was actively employed on October 1, 2001 and retired or entered the DROP after January 1, 2004 is due a benefit based on the greater of the following two benefit formulas. Members who were not employed on October 1, 2001 and hired before November 19, 2021 receive a benefit only under formula (1) in effect January 1, 2004.

- (1) For Members hired prior to November 19, 2021 who retire or terminate employment on or after January 1, 2004 the benefit formula is a maximum of 80% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 15 Years Credited Service plus 3.5% x Average Final Compensation x Credited Service from 15 to 25 Years. Provided, however, in no event will the Accrued Benefit be less than 2.0% x Average Final Compensation x Credited Service.
- (2) For Members who retired or terminated prior to January 1, 2004, Members who reached Normal Retirement Age were entitled to a retirement benefit of 4.0% x Average Final Compensation x up to 10 Years Credited Service plus 2.0% x Average Final Compensation for Credited Service over 10 Years.

Prior to Ordinance No. 124-X-21-B, for Members hired or rehired on and after September 25, 2012, the benefit formula was a maximum of 80% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 25 years Credited Service plus 1.0% x Average Final Compensation x



Credited Service from 25 to 30 Years. The benefit payable to Members hired before September 25, 2012 was as described above for those hired before November 19, 2021.

Effective October 1, 2004, the Accrued Benefit is payable as a 10-year certain and continuous annuity. Prior to October 1, 2004 the Accrued Benefit was defined payable as a single life annuity.

Early Retirement Age: Ordinance No. 124-X-21-B adopted November 19, 2021 set the Early Retirement Age for those hired or rehired on or after November 19, 2021 as age 50 and completion of at least 10 years of Credited Service. For Members hired prior to November 19, 2021, age 47 and completion of 10 years of Credited Service.

Prior to Ordinance No. 124-X-21-B, Early Retirement Age was as described above except the November 19, 2021 date was September 25, 2012.

<u>Early Retirement Benefit</u>: Ordinance No. 124-X-21-B adopted November 19, 2021 revised the Early Retirement Benefit. For those hired or rehired on or after November 19, 2021, the accrued Normal Retirement Benefit reduced 3% per year by which the commencement of benefits precedes age 55. For Members hired before November 19, 2021, the accrued Normal Retirement Benefit reduced actuarially from Normal Retirement Age. However, in no event will the reduction for Early Retirement exceed 3% per year by which the commencement of benefits precedes the Normal Retirement Age.

Prior to Ordinance No. 124-X-21-B, the Early Retirement Benefit was as described above except the November 19, 2021 date was September 25, 2012.

<u>Service Incurred Disability Retirement:</u> Members who become totally and permanently disabled as a direct result from the performance of service-related duties to the City are a due a benefit commencing on the earlier of (i) the first day of the month coincident with or next following the date of disability, or (ii) the 90th day following the day the Member submitted a completed application for disability. Any Plan Member receiving Service Incurred Disability Retirement may elect to convert to Normal or Early Retirement upon meeting all eligibility criteria. Plan Members receiving disability retirement benefits may elect to continue making regular contributions to the Plan, and based on such contributions earn additional service credit toward Normal or Early Retirement benefits.

Ordinance No. 124-X-21-B adopted November 19, 2021 revised the service incurred disability benefit to 70% of the Members Salary for those hired or rehired on or after November 19, 2021 as noted in the following.

The amount of the service incurred disability benefit is 75% (70% for Members hired or rehired on or after November 19, 2021) of the Member's Salary in effect on the date of disability, subject to offsets not more than would reduce the service incurred disability benefit below the greater of the Member's Accrued Benefit or 42% x Average Final Compensation. The applicable offset to the service incurred disability benefit includes any disability benefits paid by workers' compensation (excluding any COLA on these benefits) to the extent permitted by law and to the extent that the total of these benefits exceeds the Member's average periodic wage, subject to annual benefit adjustments. Special rules apply in the case of a lump sum settlement paid by workers' compensation.

The monthly service incurred disability benefit is adjusted annually for persons who first qualify for Service Incurred Disability on or after January 11, 2005, based on the sum of the following components calculated for the previous calendar year:

- (a) The service incurred disability retirement benefit paid from the Plan;
- (b) Worker's compensation disability benefits (excluding medical reimbursements) minus any COLA adjustments since the benefit first went into effect, to the extent permitted by law;
- (c) Any Salary (excluding any sick and vacation pay received from the City pursuant to the disability) received by a Member from the date of disability; and
- (d) Net earnings from self-employment income.



The Service Incurred Disability Retirement benefit is reduced if the Member's pre-disability Salary is less than the sum of the above components. The monthly reduction in the Service Incurred Disability Retirement benefit is 1/12 of (50% of the first \$10,000 in excess plus 100% of the excess which exceeds \$10,000).

If the sum of the four components is less than the Service Incurred Disability Retirement benefit computed prior to any applicable offsets, then the benefit will be increased. The monthly increase in the Service Incurred Disability Retirement benefit is 1/12 of the amount of the Service Incurred Disability Retirement benefit prior to offsets minus the sum of the four components.

<u>Nonservice Incurred Disability Retirement:</u> Members who become totally and permanently disabled not in the line of duty are entitled to Nonservice Incurred Disability Retirement upon earning at least 10 years of Credited Service.

The benefit payable to any Member who becomes totally and permanently disabled not in the line of duty is the Accrued Benefit, not less than 25% of Average Final Compensation. This benefit is payable until the Member recovers, begins receipt of disability benefits from Social Security, dies or reaches his Normal or Early Retirement Age, at which time the Member elects to receive Normal or Early Retirement Benefits in lieu of disability benefits.

Prior to October 1, 2004, there was a maximum Nonservice Incurred Disability Retirement benefit which was 50% of Average Final Compensation. Ordinance No. 124-X-21-B adopted November 19, 2021 set the maximum Nonservice Incurred Disability Retirement benefit to 50% of Average Final Compensation for Members hired or rehired on or after November 19, 2021.

<u>Pre-Retirement Death Benefits:</u> Ordinance No. 124-X-21-B adopted November 19, 2021 revised Pre-Retirement Death Benefits for those hired or rehired on or after November 19, 2021 to the following:

- The designated beneficiary of a nonvested Member is due a refund of the Employee Contributions without interest.
- The service-connected pre-retirement death benefit is the lesser of the accrued Normal Retirement Benefit and 75% of Average Final Compensation actuarially adjusted for the beneficiary's age and payable immediately for the lifetime of the Member's beneficiary for those with 10 years of Credited Service. If there is no beneficiary, the benefit is payable to the Member's estate for 10 years.
- The non-service connected pre-retirement death benefit is the accrued Normal Retirement Benefit actuarially adjusted for the beneficiary's age commencing on the date the Member would have attained their Early or Normal Retirement Age for those with 10 years of Credited Service.

Pre-Retirement Death Benefits defined payable prior to Ordinance No. 124-X-21-B continue to be payable for those hired prior to November 19, 2021, as follows.

- The designated beneficiary of a nonvested Member is due a refund of the Employee Contributions without interest.
- The designated beneficiary of a vested Member who dies prior to retirement is entitled to receive either the refund of Employee Contributions without interest, or an amount equal to the benefit that would have been payable as if the Member terminated on the date of death, survived to the earliest retirement age, retired under the optional form of benefit selected by the Member, and died the next day. If no optional form of benefit was selected then the benefit is payable for a period of 10 years. However, any Member who has attained a vested interest in the Plan and who becomes eligible for retirement and continues to be employed shall be construed to have selected the option which affords the surviving spouse or joint pensioner the greatest amount of benefits.

Optional Forms of Benefit: Effective October 1, 2004, the Accrued Benefit described above is payable in the form of a 10-year certain and continuous annuity. Prior to October 1, 2004, the Accrued Benefit was payable in the form of a single life annuity. Members may optionally choose an actuarially equivalent



joint and survivor annuity (with 50%, 66 2/3, 75% or 100% continuance). The joint and survivor option may include an actuarially equivalent "pop-up" feature such that if the Member's joint pensioner predeceases the Member, the survivorship benefit is deemed cancelled and the Member's annuity is recalculated as an actuarially equivalent life annuity effective on the first day of the month following the death of the Member's joint pensioner.

1999 Retirement Incentive Program: Members who, by November 30, 1999, had earned at least 20 years of Credited Service and had reached Normal Retirement Age (then age 50 with 10 years of Credited Service) were eligible to participate in a Retirement Incentive Program by making an election during a window period of 30 days commencing November 1, 1999. Members who elected to participate were required to terminate employment no later than November 30, 1999 unless they elected to participate in the DROP (where they were required to terminate employment no later than November 30, 2000). The monthly retirement benefit was based on the years of Credited Service and Average Final Compensation on their date of termination or DROP using the benefit formula in effect at that time. Eligible employees who elected this Retirement Incentive Program received, in addition to any other benefits, 18 months of retirement benefits payable at retirement. However, for those who entered the DROP as a part of this Retirement Incentive Program, 18 months of retirement benefit payments were paid into the employee's DROP account at the beginning of the DROP period. Interest was earned in the DROP account at the assumed rate of investment return used for valuation purposes. Under this Retirement Incentive Program, a 2% COLA commenced one year after termination of employment.

2002 Retirement Incentive Program: Members who, by April 15, 2002, were (i) at least age 46 and had completed at least 26 years of Credited Service, or (ii) at least age 50 and had completed at least 10 years of Credited Service, were eligible to participate in the Retirement Incentive Program by making an election during a window period of 30 calendar days commencing February 27, 2002. Members who elected to participate were required to terminate employment no later than April 15, 2002 unless they elected to participate in the DROP (36 months total) or BAC-DROP (up to 18 months reducing the future time in the DROP so no more than 36 months total in BAC-DROP plus the DROP) where they were required to terminate employment no later than April 15, 2005. Members who elected to participate were entitled to unreduced retirement benefits based on the years of Credited Service and Average Final Compensation on their date of retirement using the benefit formula in effect at that time, plus an additional 3% was added to the benefit multiplier. Under the BAC-DROP option, a Member receives a lump sum distribution of up to 18 months of retirement benefits upon entry into the DROP, and the Member's monthly pension is then actuarially reduced to reflect the cost to the Plan for this lump sum distribution. These Members were also eligible to elect an optional COLA.

Note: Any firefighter who retired on or after October 1, 2001 but who is still employed with the City and in the DROP on the date the April 15, 2002 Retirement Incentive Program was adopted may elect by March 28, 2002 to have benefits refigured under the 2002 Retirement Incentive Program.

<u>Deferred Retirement Option Plan (DROP):</u> Effective September 30, 2001, Members are eligible to enter the DROP upon attaining their Normal Retirement Age. DROP participants are not eligible for death or disability benefits. The Accrued Benefit is frozen and no further Employee Contributions are payable at DROP entry.

Under Ordinance No. 124-X-21-B adopted November 19, 2021, Members hired or rehired on or after November 19, 2021 may participate in the DROP for a maximum of 4 years if they make the election within 6 months of reaching their Normal Retirement Age. DROP account earnings are 0% if the GASB 68 "fiduciary net position" is less than 100%. If 100% or more, then DROP account earnings are credited using the actual return of the Plan with a minimum of 0% and a maximum of 4%. Although not explicitly stated in the Ordinance, we understand from City correspondence received while preparing the impact statement that Members hired or rehired on or after November 19, 2021 are eligible for BAC-DROP.

DROP provisions prior to Ordinance No. 124-X-21-B are as follows. These are the provisions applicable for Members hired prior to November 19, 2021. Effective September 25, 2012, the maximum DROP participation duration is 84 months. Members who commenced participation in the DROP on or after



October 1, 2010 and who were participating in the DROP on September 25, 2012 (11 such Members) were allowed to extend their DROP participation from 72 to 84 months if the Member agreed all DROP account earnings are recomputed retroactively to the date of DROP using an annual interest rate of 6.0%. New DROP entrants effective September 25, 2012 receive interest crediting based on an annual interest rate of 6.0%.

For DROP entrants prior to September 25, 2012, the Accrued Benefit was accumulated with interest at the same rate as the investment earnings assumption for the funding valuation of the Plan.

Effective June 10, 2008, the maximum DROP participation duration was 72 months where Members participating in the DROP were allowed to extend their DROP participation from 60 to 72 months. Effective January 1, 2004, the maximum DROP participation duration was 60 months where Members participating in the DROP were allowed to extend their DROP participation from 36 to 60 months. Prior to January 1, 2004 the maximum DROP participation was 36 months.

Effective January 1, 2004, Members were allowed to elect to "BAC-DROP" for up to 18 months, which reduced the maximum 60 month (72 month effective June 10, 2008) DROP period by the same amount of time elected under the BAC-DROP. Effective September 25, 2012 Members may elect to "BAC-DROP" for up to 24 months, which reduces the 84 month DROP period by the same amount of time elected under the BAC-DROP. Under the BAC-DROP option, a Member receives a lump sum distribution of up to 18 months (24 effective September 25, 2012) of retirement benefits upon entry into the DROP, and the Member's monthly pension is then actuarially reduced to reflect the cost to the Plan for this lump sum distribution.

Effective January 1, 2004 and prior to May 17, 2005, for every year (or portion thereof) of deferred entry into the DROP after the 12 month period following their "earliest" Normal Retirement Age, the maximum DROP period is reduced by one year. On and after May 17, 2005, Members who elect to participate in the DROP within the first five years following their "earliest" Normal Retirement Age incur no reduction to the maximum 60 month DROP period (72 month effective June 10, 2008 and 84 month effective September 25, 2012) for DROP entry deferral. However, the maximum DROP period is reduced for Members who elect to participate in the DROP beyond five years following their "earliest" Normal Retirement Age. For members hired prior to September 25, 2012, the Normal Retirement Age is the earliest of age 45 with 20 years of service, age 48 with 21 years of service, and age 50 with 10 years of service where age 48 with 21 years of service may be accelerated to age 47 with 20 years of service. Note that age 47 with 20 years of service is not taken into account for the "earliest" Normal Retirement Age for purposes of determination of DROP period reduction.

Cost of Living Adjustment (COLA): Under Ordinance No. 124-X-21-B, Members hired or rehired on or after November 19, 2021 are not entitled to a COLA. However, Members rehired on or after November 19, 2021 may be due a COLA on the benefit payable for service prior to November 19, 2021.

COLA provisions prior to Ordinance No. 124-X-21-B are as follows. These are the provisions applicable for Members hired prior to November 19, 2021. Ordinance No. 124-X-13-B adopted effective August 13, 2013 revised the annual COLA effective October 1, 2013 to a 1% annual COLA for five years commencing 12 months after initial retirement, then a 2.0% COLA, then a 2.5% annual COLA (commencing at the end of the seventh year following initial receipt of retirement benefits) for firefighters who terminate employment and begin receiving Normal Retirement benefits or enter the DROP on or after October 1, 2010, and the beneficiaries of such members. Note that for DROP members the "initial receipt of retirement benefits" has historically been interpreted to mean the date of DROP.

COLA provisions prior to Ordinance No. 124-X-13-B are as follows.

Effective September 30, 2001, an annual 2% COLA commences at the end of the 4th year following initial receipt of retirement benefits for all Members who reach Early or Normal Retirement Age and begin receipt of benefits (either directly or through the DROP) after September 30, 2001, and the beneficiaries of such Members. Effective January 1, 2004, COLA payments under this provision are deferred 12



months after separation from employment for Members who participate in the DROP for more than 3 years.

Members who retire or terminate employment on or after January 1, 2004 may elect, in lieu of the 2% COLA described above, a 1% annual COLA commencing 12 months after initial receipt of retirement benefits, which would increase to a 2% annual COLA at the end of the 6th year following initial receipt of retirement benefits.

COLAs were also payable as part of the Retirement Incentive Programs. See the description of the Retirement Incentive Programs for a description of the associated COLAs.

<u>Supplemental Benefit:</u> Under Ordinance No. 124-X-21-B, Members hired or rehired on or after November 19, 2021 are not entitled to receive the Supplemental Benefit. However, Members rehired on or after November 19, 2021 may be due a Supplemental Benefit payable for service prior to November 19, 2021.

Ordinance No. 124-X-09-A adopted October 13, 2009 amended Plan provisions to provide for a Supplemental Benefit for firefighters. Effective October 1, 2009, firefighters who terminate employment and begin receiving Normal or Early Retirement benefits on or after October 1, 2007 receive a Supplemental Benefit payable monthly which is:

- The lesser of [(i) \$25 x Credited Service and (ii) \$500] payable until age 65
- The lesser of [(i) \$15 x Credited Service and (ii) \$300] payable from age 65 for life

This supplemental benefit is not increased for any COLAs defined under the Plan and is only payable after DROP exit (to members who entered the DROP on or after October 1, 2007). Members who terminate employment on or after October 1, 2007 due a deferred vested benefit receive the supplement upon retirement. Members who retire under disability retirement provisions are not eligible to receive the supplement.

<u>13th Check:</u> Ordinance No. 124-X-21-B adopted effective November 19, 2021 defines a 13th check payable to retired Members hired or rehired on or after November 19, 2021 if the GASB 68 "fiduciary net position" is 100% or greater. The 13th check is prorated based on the "excess investment earnings" available but not more than the monthly retirement benefit payable. "Excess investment earnings" are defined as the market rate of investment earnings on assets net of expenses that exceed the assumed rate of return.

<u>Share Plan:</u> Ordinance No. 124-X-16-C adopted July 12, 2016 amended Plan provisions to indicate that Chapter 175 contributions received each fiscal year in excess of \$2,055,127 may be used to provide Share Plan benefits.

Internal Revenue Service Section 415(b) Limitations: Ordinance No. 124-X-17-B adopted September 12, 2017 amended the Plan to (1) remove the value of the Plan's cost-of-living adjustment from the initial determination of Section 415(b) limits effective September 29, 2016 and (2) requires that Members receive estimated calculations before retirement or DROP entry to let them know if they are expected to have benefits in excess of Section 415(b) limitations. For Members who retired from employment on or after September 29, 2016 the Section 415(b) limit is adjusted annually after retirement as the Internal Revenue Service releases new calendar year limits under Section 415(d).

Under Ordinance No. 124-X-21-B adopted November 19, 2021, Members participating in the DROP on or after November 19, 2021 and who receive a benefit calculation estimate by the Plan actuary that the benefit may exceed the Section 415 limit while the Member is participating in the DROP may elect to exit the DROP and continue City employment where they must terminate City employment no later than the date the Member would have completed their DROP participation. Upon DROP exit the monthly benefit is no longer credited to the DROP balance and is paid directly to the Member. The DROP balance is not



paid at DROP exit, but rather accumulates with interest until termination of employment at which time it is paid to the Member. After DROP exit the Member rejoins the Plan as a new contributing Member subject to a new 10-year vesting period but is not eligible for death or disability retirement benefits. The ordinance states,"...If the Member separates from City employment before attaining ten (10) years of creditable service after exiting the DROP, the member shall receive a refund of 100% of the member contributions made during their post-DROP employment, without interest."



Description of Assumptions and Methods

Assumed Rate of Investment Return: 7.5% per year net of investment expenses

Salary Increase - Total Payroll: 3.0% per year

Salary Increase - Individual: As follows:

<u>Service</u>	<u>Increase</u>
0-4	13.00%
5-9	6.50%
10-14	5.00%
15+	4.50%

Mortality: The mortality table is that used for special risk employees in the valuation of the Florida Retirement System (FRS) as of July 1, 2019, 2020 and 2021, as required by state statue.

The following sex distinct tables are used with fully generational mortality improvements using sex distinct Scale MP-2018.

Active: Male: PubS.H-2010(B) male employee set forward 1 year

Female: PubS.H-2010 female employee set forward 1 year

Healthy Retiree: Male: PubS.H-2010(B) male healthy retiree set forward 1 year

Female: PubS.H-2010 female healthy retiree set forward 1 year

The following sex distinct tables are used with no mortality improvement projection.

Disabled Retiree: Male: 80% PubG.H-2010 male disabled retiree

+ 20% PubS.H-2010 male disabled retiree

Female: 80% PubG.H-2010 female disabled retiree

+ 20% PubS.H-2010 female disabled retiree

Juvenile rates are used for ages 15-17.

The active tables reference the healthy retiree rates, above, at ages 80+.

The healthy retiree tables reference the active mortality rates, above, before age 44.

Retirement: Unisex rates, as follows:

Rates	for	Tior	4	Con	ioo	Erom
Rates	TOL	Her	1 -	Serv	ıce	⊢rom.

		rtato	0 101 1101 1	001110011	0111	
<u>Age</u>	10-13	<u>14-19</u>	20-23	<u>24</u>	<u>25-29</u>	<u>30+</u>
<=44	0%	0%	0%	0%	0%	0%
45-46	0%	0%	0%	0%	60%	100%
47-49	0%	0%	20%	60%	60%	100%
50-54	10%	10%	20%	20%	20%	100%
55-59	20%	100%	100%	100%	100%	100%
60+	100%	100%	100%	100%	100%	100%



Rates for Tier 2 - Service From

<u>Age</u>	<u>10</u>	<u>11-24</u>	<u>25-29</u>	<u>30+</u>
<=49	0%	0%	0%	0%
50	10%	10%	10%	100%
51	10%	0%	0%	100%
52	10%	0%	100%	100%
53	10%	0%	100%	100%
54	10%	0%	100%	100%
55+	100%	100%	100%	100%

<u>Disability:</u> Unisex rates, as follows:

<u>Age</u>	Probability	<u>Age</u>	Probability	<u>Age</u>	Probability	<u>Age</u>	Probability
15-20	0.140%	30	0.180%	40	0.300%	50	1.000%
21	0.142%	31	0.190%	41	0.342%	51	1.110%
22	0.144%	32	0.200%	42	0.384%	52	1.220%
23	0.146%	33	0.210%	43	0.426%	53	1.330%
24	0.148%	34	0.220%	44	0.468%	54	1.440%
25	0.150%	35	0.230%	45	0.510%	55	1.550%
26	0.156%	36	0.244%	46	0.608%	56	1.660%
27	0.162%	37	0.258%	47	0.706%	57	1.770%
28	0.168%	38	0.272%	48	0.804%	58	1.880%
29	0.174%	39	0.286%	49	0.902%	59	1.990%
						60+	0.000%

75% of disabilities are assumed to be service connected.

<u>Termination:</u> Unisex rates, as follows:

<u>Service</u>	<u>Rate</u>
0-1	14.00%
2-3	8.00%
4	7.00%
5	5.00%
6-9	1.25%
10+	0.00%

<u>Plan Expenses:</u> The prior year administrative expense is added to the normal cost.

<u>Marital Assumption:</u> 80% of males are assumed married and 50% of females are assumed married. Husbands are assumed to be four years older than wives.

Funding Method: Entry Age (level percent of salary)

A description of the funding method is found on the next page entitled "Glossary of Actuarial Terms."



Glossary of Actuarial Terms

<u>Present Value of Benefits (PVB):</u> The present value, as of the valuation date, of all benefits that will become payable by the Plan for the current group of members in the census.

Normal Cost (NC): Under the Individual Entry Age Normal Cost Method, the annual normal cost for each individual active member is determined as the amount, from the date of employment to the date of retirement, sufficient to accumulate the value of the member's benefit at the time of retirement. The annual normal cost is a constant percentage of the member's projected covered pay.

Accrued Liability (AL): This is the portion of the PVB attributable to the past at the valuation date. For active members, AL is the annual NC accumulated from date of entry to the valuation date for each member. For retired and terminated members, the PVB and the AL are equal. The AL is the estimated liability owed by the pension fund at the valuation date.

<u>Unfunded Accrued Liability (UAL):</u> Any excess of the Accrued Liability over the fund assets. A negative UAL indicates fund assets are greater than the Accrued Liability, otherwise known as a surplus. Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

<u>Actuarial Value of Assets:</u> The value of assets used in the actuarial valuation of the Plan which is compared to the AL to determine the UAL and minimum funding requirements. A method may be used to smooth out short term volatility in the fair market value of assets. In this valuation, the Actuarial Value of Assets has been calculated to smooth out unexpected fluctuations in the fair market value of assets over a 5-year period, less any reserve of State contributions.





Phone: (321) 453-6542 Fax: (321) 453-6998

City of Sunrise

Firefighters' Retirement Plan

GASB 67 Supplement As of September 30, 2022





February 13, 2023

Board of Trustees City of Sunrise Firefighters' Retirement Plan Sunrise, Florida

RE: GASB 67 Supplement as of September 30, 2022

Dear Board Members:

We are pleased to present the Governmental Accounting Standards Board Statements No. 67 (GASB 67) Supplement as of September 30, 2022 for the City of Sunrise (the City) Firefighters' Retirement Plan (the Plan). This report is a supplement to the actuarial valuation report as of October 1, 2021. Please see the actuarial valuation report as of October 1, 2021 for the assessment and disclosure of risk in a pension funding valuation as described in Actuarial Standard of Practice No. 51 (ASOP 51) and other required disclosures.

In producing our work product, we rely on various models, internal and external, which were used for their intended purposes. Underlying data, assumptions, methodologies, model inputs and resulting outputs have been reviewed. The 7.5% assumed net return is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it is set by the Board. While we find all other inputs and outputs to be reasonable, the prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement as discussed in ASOP 27. We continue to recommend lowering the net assumed return.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report provides information required to be disclosed under GASB 67 as described in the statement and the implementation guide. The relevant dates are as follows:

GASB 67

Valuation Date 10/01/2021 Measurement Date 09/30/2022 Reporting Date 09/30/2022 RE: GASB 67 Supplement as of September 30, 2022

February 13, 2023

Page 2

Please let us know if you have any questions or need additional information.

Sincerely,

Chad M. Little, ASA, EA Partner, Consulting Actuary Enrollment Number 20-6619

Mul fin

Paula C. Freiman, ASA, EA Partner, Consulting Actuary Enrollment Number 20-5796

Table of Contents

Statement of Fiduciary Net Position	1
Statement of Changes in Fiduciary Net Position	2
Net Pension Liability	3
Schedule of Changes in Net Pension Liability and Related Ratios	5
Schedule of Contributions	6
Schedule of Investment Returns	7
Plan Membership Statistics	8
Plan Description	9
Actuarial Assumptions and Methods	20

Statement of Fiduciary	Net Position
------------------------	--------------

As of September 30,	2022	2021
Assets		
Receivables and prepaid expenses:		
Interest and dividends	\$238,548	\$160,766
Employee contributions	72,842	138,272
Pending trades receivable	<u>0</u>	<u>355,416</u>
Total receivables	<u>311,390</u>	<u>654,454</u>
Investments, at fair value:		
Money market funds	2,662,916	3,063,534
U.S. government bonds and notes	4,653,482	9,157,502
U.S. government agency securities	1,354,828	0
Mortgage-backed securities	5,091,953	2,519,306
Corporate obligations	6,673,597	4,096,496
Common stock	36,414,563	50,527,882
International equity mutual funds	8,141,479	11,400,469
Collective investment funds	60,536,208	78,742,596
Commingled real estate funds	<u>29,488,363</u>	24,452,182
Total investments	<u>155,017,389</u>	<u>183,959,967</u>
Total assets	155,328,779	184,614,421
Liabilities		
Accounts payable	152,836	172,064
Pending trades payable	202,095	<u>665,642</u>
Total liabilities	<u>354,931</u>	<u>837,706</u>
rotal habilities	<u>557,551</u>	<u>001,700</u>
Net position restricted for pensions	<u>\$154,973,848</u>	<u>\$183,776,715</u>



Statement of Changes in Fiduciary Net Position	1	
As of September 30,	2022	2021
Additions		
Contributions:		
Employer	\$6,051,494	\$6,391,190
State of Florida	1,025,399	934,286
Employees	<u>1,614,557</u>	<u>1,569,620</u>
Total contributions	<u>8,691,450</u>	<u>8,895,096</u>
Investment income (loss):		
Net (depreciation) appreciation in fair value of investments	(27,544,439)	32,030,539
Interest and dividends	3,404,018	1,909,726
Other income	7,225	1,016
Total investment income	(24,133,196)	33,941,281
Total investment income	(24,133,190)	33,941,201
Less investment expenses:		
Investment expense	<u>749,049</u>	<u>755,037</u>
Net investment income	(24,882,245)	33,186,244
Total additions	(16,190,795)	42,081,340
Deductions		
Participant benefit payments	12,278,523	9,922,633
Refunds of participant contributions	84,163	4,747
Administrative expenses	249,386	<u>193,876</u>
Total deductions	12,612,072	10,121,256
Net increase in net position	(28,802,867)	31,960,084
Net position restricted for pensions		
Beginning of year	183,776,715	151,816,631
End of year	<u>\$154,973,848</u>	<u>\$183,776,715</u>



Net Pension Liability

The total pension liability under GASB 67 is based on the October 1, 2021 actuarial valuation updated to the September 30, 2022 measurement date. The following actuarial assumptions are applied to all periods included in the measurement.

Inflation: 2.2%

(as reported by investment monitor)

Salary increases: 13.0% to 4.5%, including inflation

Investment return: 7.5% net of investment expense, including inflation

Mortality: From July 1, 2019, 2020 and 2021 FRS special risk actuarial

valuations.

Assumptions are based on the results of a 6-year experience review for census data from October 1, 2014 through October 1, 2020. See the paragraph entitled "Assumptions and Methods" on page 6 of the October 1, 2021 actuarial valuation report for details.

The long-term expected net rate of return on investments for the October 1, 2021 actuarial valuation was determined using a building-block method. Best-estimate ranges of expected future real rates of return (expected returns net of investment expense and inflation) are developed for each major asset class. The long-term expected net rate of return on investments is the best-estimate ranges weighted by the asset allocation plus expected inflation. Best estimates of arithmetic real rates of return for each major asset class as provided by the investment monitor are shown in the following table:

Investment Category	Target Allocation	Long Term Real Mean Return*
Large Cap	32%	8.3%
Mid Cap	8%	9.8%
Small Cap	10%	9.3%
Int'l Developed	12%	5.6%
Emerging Markets	3%	11.3%
Real Estate	15%	6.5%
Fixed Income	<u>20%</u>	2.0%
	100%	
Weighted Average Long Term Real Ann	ualized Return =	6.8%

^{*}For illustrative purposes, historical long term (20 year) arithmetic average returns have been used as a reasonable expectation of returns.

The expected rate of inflation is 2.2%.

Note, however, that long-term expected net rates of return for actuarial valuations should be compared to geometric returns.

The discount rate used to measure the total pension liability was 7.5%. This is the single rate that reflects the long-term expected rate of return on pension plan investments expected to be used to finance the payment of benefits. A projection of cash flows used to determine the discount rate assumed that plan member contributions are made at the current contribution rate and that City contributions will be made equal to the difference between the actuarially determined contribution and the member contributions. Based on those assumptions, the pension plan's fiduciary net position is projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected



Measurement Date September 30.

Net pension liability

2022

\$44,014,753

rate of return on pension plan investments is applied to all periods of projected benefit payments to determine the total pension liability. For purposes of this determination we understand pension plan assets are expected to be invested using a strategy to achieve the discount rate.

Note: See "Actuarial Assumptions and Methods" for a full description of the assumptions used in the determination of the total pension liability.

For GASB 67 the net pension liability is required to be measured as of the plan's fiscal year end. The net pension liability was measured as of September 30, 2022 under GASB 67 for the plan's fiscal year ending September 30, 2022. The total pension liability used to calculate the net pension liability as of September 30, 2022 was rolled forward from the actuarial valuation as of October 1, 2021.

The components of the net pension liability at September 30, 2022 were as follows.

meded of the Date Copies.			
Total pension liability			\$222,419,449
Plan fiduciary net position			(154,973,848)
Net pension liability			\$67,445,601
Plan fiduciary net position as	a % of the total pensio	n liability	69.68%
Sensitivity of the net pension liab	pility to changes in the di	scount rate follows.	
		Current	
	1% Decrease	Discount Rate	1% Increase
	(6.5%)	(7.5%)	(8.5%)

\$96,176,025

\$67,445,601



CITY OF SUNRISE FIREFIGHTERS' RETIREMENT PLAN PAGE 5

Schedule of Changes in Net Pension Liability and Related Ratios

Veer Ending Contember 20	2022	2021	2020	2019	2018	2017	2016	2015	2014
Year Ending September 30,	2022	2021	2020	2019	2010	2017	2016	2015	2014
Total pension liability									
Service cost	\$4,877,722	\$4,041,366	\$3,766,990	\$3,618,905	\$3,649,483	\$3,389,400	\$3,217,784	\$3,090,913	\$3,007,593
Interest	15,821,074	15,334,513	15,338,231	14,934,297	14,426,543	13,694,521	12,568,229	12,023,905	11,602,371
Changes of benefit terms	1,149,479	0	0	0	0	432,669	0	0	0
Differences between expected	(00.500)	(0.007.070)	(050,000)	4 070 000	004.070	4 450 740	(700 500)		(4, 400, 000)
and actual experience	(39,533)	(2,907,373)	(652,093)	1,076,608	231,072	1,152,743	(728,503)	0	(1,492,632)
Changes of assumptions	2,765,185	(3,207,909)	0	0	1,196,786	4,703,070	1,643,838	0	172,854
Benefit payments	(12,278,523)	(9,922,633)	(11,463,643)	(14,163,770)	(10,960,320)	(6,456,401)	(6,437,587)	(8,093,516)	(7,121,213)
Contribution refunds	(84,163)	<u>(4,747)</u>	<u>0</u>	<u>(6,194)</u>	<u>0</u>	(6,743)	<u>(63,852)</u>	<u>0</u>	<u>0</u>
Net change in total pension liability	12,211,241	3,333,217	6,989,485	5,459,846	8,543,564	16,909,259	10,199,909	7,021,302	6,168,973
Total pension liability - beginning	210,208,208	206,874,991	<u>199,885,506</u>	194,425,660	185,882,096	168,972,837	158,772,928	<u>151,751,626</u>	145,582,653
Total pension liability - ending (a)	\$222,419,449	\$210,208,208	\$206,874,991	\$199,885,506	\$194,425,660	\$185,882,096	\$168,972,837	\$158,772,928	\$151,751,626
Plan fiduciary net position									
Contributions - employer	\$6,051,494	\$6,391,190	\$6,300,844	\$6,279,661	\$6,027,609	\$5,483,453	\$5,185,357	\$5,225,550	\$4,972,033
Contributions - State of Florida	1,025,399	934,286	861,888	821,826	763,749	766,995	803,419	853,244	879,470
Contributions - employee	1,614,557	1,569,620	1,401,623	1,341,475	1,244,670	1,288,279	1,338,474	1,156,746	1,125,192
Net investment income	(24,882,245)	33,186,244	8,616,928	5,939,853	13,810,392	14,302,330	11,249,228	176,272	10,639,774
Benefit payments	(12,278,523)	(9,922,633)	(11,463,643)	(14,163,770)	(10,960,320)	(6,456,401)	(6,437,587)	(8,093,516)	(7,121,213)
Contribution refunds	(84,163)	(4,747)	0	(6,194)	0	(6,743)	(63,852)	0	0
Administrative expense	(249,386)	(193,876)	(151,349)	(199,780)	(197,469)	(220,292)	(210,821)	(162,815)	(160,042)
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net change in plan fiduciary net position	(28,802,867)	31,960,084	5,566,291	13,071	10,688,631	15,157,621	11,864,218	(844,519)	10,335,214
Plan fiduciary net position - beginning	<u>183,776,715</u>	<u>151,816,631</u>	146,250,340	146,237,269	135,548,638	120,391,017	108,526,799	109,371,318	99,036,104
Plan fiduciary net position - ending (b)	\$154,973,848	\$183,776,715	\$151,816,631	\$146,250,340	\$146,237,269	\$135,548,638	\$120,391,017	\$108,526,799	\$109,371,318
Net pension liability - ending (a) - (b)	\$67,445,601	\$26,431,493	\$55,058,360	\$53,635,166	\$48,188,391	\$50,333,458	\$48,581,820	\$50,246,129	\$42,380,308
Plan fiduciary net position as a percentage									
of the total pension liability	69.68 %	87.43 %	73.39 %	73.17 %	75.22 %	72.92 %	71.25 %	68.35 %	72.07 %
Expected covered employee payroll	\$15,857,199	\$14,003,420	\$13,099,674	\$12,564,427	\$11,728,068	\$12,036,803	\$11,680,780	\$10,816,447	\$10,555,759
Net pension liability as a percentage									
of covered employee payroll	425.33 %	188.75 %	420.30 %	426.88 %	410.88 %	418.16 %	415.91 %	464.53 %	401.49 %



Schedule of Contrib	utions									
Year Ending September 30,	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined contribution	\$7,076,893	\$7,325,476	\$7,162,732	\$7,101,487	\$6,791,358	\$6,250,448	\$5,988,776	\$6,078,794	\$5,851,503	\$5,064,882
Contributions in relation to the actuarially determined contribution	<u>7,076,893</u>	<u>7,325,476</u>	<u>7,162,732</u>	<u>7,101,487</u>	<u>6,791,358</u>	6,250,448	<u>5,988,776</u>	<u>6,078,794</u>	<u>5,851,503</u>	<u>5,064,882</u>
Contribution deficiency (excess)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Covered-employee payroll	\$15,857,199	\$14,003,420	\$13,099,674	\$12,564,427	\$11,728,068	\$12,036,803	\$11,680,780	\$10,816,447	\$10,555,759	\$10,414,292
Contributions as a percentage of covered-employee payroll	44.63 %	52.31 %	54.68 %	56.52 %	57.91 %	51.93 %	51.27 %	56.20 %	55.43 %	48.63 %

Notes to Schedule

Actuarially determined contributions are calculated based on the valuation as of the beginning of the year prior to the fiscal year in which contributions are due.

Methods and assumptions used to determine contributions for the year ending September 30, 2022:

Actuarial cost method Entry age

Amortization method Level percent of pay, closed Remaining amortization period 25 years
Asset valuation method 5-year smoothed market

Inflation 2.5 %

Salary increases 12% to 5%, including inflation

Investment rate of return 7.7%, net of investment expenses, including inflation

Retirement age See "Description of Assumptions and Methods" for the assumed retirement age assumption

Mortality Mortality rates as used in the actuarial valuation of the Florida Retirement System for special risk, as required by state statute.



Schedule of Investment Returns

Year Ending September 30,	Annual money-weighted rate of return net of investment expense
2022	(13.6)%
2021	21.5 %
2020	6.3 %
2019	4.5 %
2018	10.3 %
2017	11.8 %
2016	10.4 %
2015	0.5 %
2014	10.5 %
2013	16.0 %

Plan Membership Statistics

Year Beginning October 1,	2021	2020
Inactive members or beneficiaries currently receiving benefits	131	131
Inactive members entitled to but not yet receiving benefits	0	0
Active members	<u>138</u>	<u>132</u>
Total number of members	<u> 269</u>	<u> 263</u>

Plan Description

This is a description of the Plan provisions used to create the October 1, 2021 actuarial valuation of the Plan.

<u>Plan Type:</u> Single-employer Defined Benefit Pension Plan

<u>Plan Administrator:</u> The Board of Trustees

<u>Board Composition:</u> The trustees consist of five members which may include participants who have at least 18 months remaining in the DROP at the time they take office, none who are elected City officials, and who are selected as follows: (a) two members who are elected current Members of the plan, (b) two members who are legal residents of the City and current or former City employees who are vested in the Plan appointed by City commission, and (c) one member chosen by a majority of the previous four members duly appointed by the City commission as a ministerial act. The term of office for each Board member is two years.

Legal Authority: The Plan is established and amended by local ordinance.

<u>Funding Requirements:</u> Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended by ordinance.

<u>Effective Dates:</u> The Plan was most recently amended by Ordinance No. 124-X-21-B adopted November 19, 2021. This amendment describes benefits payable to Members hired on or after November 19, 2021. In general, benefits which had been defined as payable to Members who were hired prior to September 25, 2012 became payable to those hired prior to November 19, 2021. The following changes were included:

- For Members hired or rehired after November 19, 2021 overtime is excluded in the definition of Salary. Prior to this change overtime was included in the definition of Salary but limited to 300 hours per year effective October 1, 2012.
- Employee Contributions for Members hired or rehired on or after November 19, 2021 is defined as 8.0% of Salary. For Members hired prior to November 19, 2021, 10.63% of Salary.
- Average Final Compensation for those hired or rehired on or after November 19, 2021 is the
 average of Salary for the five highest years out of the last 10 years of Credited Service. For
 those hired prior to November 19, 2021, the average of Salary for the three highest consecutive
 years, or the five highest years out of the last 10 years of Credited Service, whichever is greater.
- Normal Retirement Age for those hired or rehired on or after November 19, 2021 is defined as the earlier of (i) age 55 and completion of 10 years of Credited Service or (ii) age 52 and completion of 25 years of Credited Service. For those hired prior to November 19, 2021, the earliest of (i) age 45 and completion of 25 years of Credited Service, (ii) age 48 and completion of 21 years of Credited Service (which may be accelerated one year to age 47 and completion of 20 years of Credited Service), or (iii) age 50 and completion of 10 years of Credited Service.
- The Normal Retirement Benefit for Members hired or rehired on and after November 19, 2021 is a maximum of 70% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 20 Years Credited Service plus 2.0% x Average Final Compensation x Credited Service from 20 to 25 Years. Provided, however, in no event will the Accrued Benefit be less than 2.75% x Average Final Compensation x Credited Service. For Members hired before November 19, 2021, any Member who was actively employed on October 1, 2001 and retired or entered the DROP after January 1, 2004 is due a benefit based on the greater of the following two benefit formulas. Members who were not employed on October 1, 2001 and hired before November 19, 2021 receive a benefit only under formula (1) in effect January 1, 2004.



- (1) For Members hired prior to November 19, 2021 who retire or terminate employment on or after January 1, 2004 the benefit formula is a maximum of 80% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 15 Years Credited Service plus 3.5% x Average Final Compensation x Credited Service from 15 to 25 Years. Provided, however, in no event will the Accrued Benefit be less than 2.0% x Average Final Compensation x Credited Service.
- (2) For Members who retired or terminated prior to January 1, 2004, Members who reached Normal Retirement Age were entitled to a retirement benefit of 4.0% x Average Final Compensation x up to 10 Years Credited Service plus 2.0% x Average Final Compensation for Credited Service over 10 Years.
- Early Retirement Age for those hired or rehired on or after November 19, 2021 is age 50 and completion of at least 10 years of Credited Service. For Members hired prior to November 19, 2021, age 47 and completion of 10 years of Credited Service.
- The Early Retirement Benefit for those hired or rehired on or after November 19, 2021 is the
 accrued Normal Retirement Benefit reduced 3% per year by which the commencement of
 benefits precedes age 55. For Members hired before November 19, 2021, the accrued Normal
 Retirement Benefit reduced actuarially from Normal Retirement Age. However, in no event will
 the reduction for Early Retirement exceed 3% per year by which the commencement of benefits
 precedes the Normal Retirement Age.
- Service Incurred Disability Retirement benefits are 75% (70% for Members hired or rehired on or after November 19, 2021) of the Member's Salary in effect on the date of disability, subject to offsets not more than would reduce the service incurred disability benefit below the greater of the Member's Accrued Benefit or 42% x Average Final Compensation. The ordinance further describes adjustments that should be performed annually.
- Nonservice Incurred Disability Retirement benefits are the accrued Normal Retirement Benefit
 no less than 25% of Average Final Compensation for those with 10 years of Credited Service.
 For Members hired or rehired on or after November 19, 2021 the maximum payable is 50% of
 Average Final Compensation.
- Pre-Retirement Death benefits were revised to set forth service connected and non-service connected benefits payable to Members hired or rehired on or after November 19, 2021. The service-connected pre-retirement death benefit is the lesser of the accrued Normal Retirement Benefit and 75% of Average Final Compensation actuarially adjusted for the beneficiary's age and payable immediately for the lifetime of the Member's beneficiary for those with 10 years of Credited Service. If there is no beneficiary, the benefit is payable to the Member's estate for 10 years. The non-service connected pre-retirement death benefit is the accrued Normal Retirement Benefit actuarially adjusted for the beneficiary's age commencing on the date the Member would have attained their Early or Normal Retirement Age for those with 10 years of Credited Service. Pre-Retirement Death Benefits defined payable prior to Ordinance No. 124-X-21-B continue to be payable for those hired prior to November 19, 2021.
- Under Ordinance No. 124-X-21-B adopted November 19, 2021, Members hired or rehired on or after November 19, 2021 may participate in the DROP for a maximum of 4 years if they make the election within 6 months of reaching their Normal Retirement Age. DROP account earnings are 0% if the GASB 68 "fiduciary net position" is less than 100%. If 100% or more, then DROP account earnings are credited using the actual return of the Plan with a minimum of 0% and a maximum of 4%. Although not explicitly stated in the Ordinance, we understand from City correspondence received while preparing the impact statement that Members hired or rehired on or after November 19, 2021 are eligible for BAC-DROP. DROP provisions in effect prior to Ordinance No. 124-X-21-B continue to be applicable for Members hired prior to November 19, 2021.
- Under Ordinance No. 124-X-21-B, Members hired or rehired on or after November 19, 2021 are
 not entitled to a COLA. However, Members rehired on or after November 19, 2021 may be due
 a COLA on the benefit payable for service prior to November 19, 2021. COLA provisions prior
 to Ordinance No. 124-X-21-B continue to be applicable for Members hired prior to November
 19, 2021.



- Under Ordinance No. 124-X-21-B, Members hired or rehired on or after November 19, 2021 are
 not entitled to receive the Supplemental Benefit. However, Members rehired on or after
 November 19, 2021 may be due a Supplemental Benefit payable for service prior to November
 19, 2021. See the provisions of the Supplemental Benefit described below as in effect prior to
 Ordinance No. 124-X-21-B.
- A 13th check is payable to retired Members hired or rehired on or after November 19, 2021 if the GASB 68 "fiduciary net position" is 100% or greater. The 13th check is prorated based on the "excess investment earnings" available but not more than the monthly retirement benefit payable. "Excess investment earnings" are defined as the market rate of investment earnings on assets net of expenses that exceed the assumed rate of return.
- Under Ordinance No. 124-X-21-B adopted November 19, 2021, Members participating in the DROP on or after November 19, 2021 and who receive a benefit calculation estimate by the Plan actuary that the benefit may exceed the Section 415 limit while the Member is participating in the DROP may elect to exit the DROP and continue City employment where they must terminate City employment no later than the date the Member would have completed their DROP participation. Upon DROP exit the monthly benefit is no longer credited to the DROP balance and is paid directly to the Member. The DROP balance is not paid at DROP exit, but rather accumulates with interest until termination of employment at which time it is paid to the Member. After DROP exit the Member rejoins the Plan as a new contributing Member subject to a new 10-year vesting period but is not eligible for death or disability retirement benefits. The ordinance states,"...If the Member separates from City employment before attaining ten (10) years of creditable service after exiting the DROP, the member shall receive a refund of 100% of the member contributions made during their post-DROP employment, without interest."

The following provides a history of other recent ordinance amendments.

- Ordinance No. 124-X-17-B was adopted September 12, 2017. This ordinance amended the Plan to (1) remove the value of the Plan's cost-of-living adjustment from the initial determination of Section 415(b) limits effective September 29, 2016 and (2) requires that Members receive estimated calculations before retirement or DROP entry to let them know if they are expected to have benefits in excess of Section 415(b) limitations. For Members who retired from employment on and after September 29, 2016 the Section 415(b) limit is adjusted annually after retirement as the Internal Revenue Service releases new calendar year limits under Section 415(d).
- Ordinance No. 124-X-16-C became effective July 12, 2016. This ordinance amended the Plan to (1) allow for a purchase of up to four years active service in the U.S. Armed Forces as noted below under the definition of Credited Service, (2) indicate salary for members of the firefighters' Plan excludes all payment for accrued unused sick and annual leave (although the plan already indicated lump sum payouts of accrued benefits upon termination of employment are not included in salary), (3) state the Normal and Early Retirement dates, Normal and Early Retirement benefits, and Member contributions for rehires on or after September 25, 2012 are the same as for regular hires on or after September 25, 2012, and (4) define Chapter 175 contributions received each fiscal year in excess of \$2,055,127 may be used to provide Share Plan benefits.
- Ordinance No. 124-X-13-B was adopted effective August 13, 2013 to increase the annual COLA
 effective October 1, 2013 to 2.5% commencing at the end of the seventh year following initial
 receipt of retirement benefits for firefighters who terminate employment and begin receiving
 Normal Retirement benefits or enter the DROP on or after October 1, 2010, and the beneficiaries
 of such members.
- Ordinance No. 124-X-C-12 effective December 28, 2012 related to Board composition.
- Ordinance No. 124-X-B-12 effective November 13, 2012 defined employee contributions as 10.63% of Salary.
- Ordinance No. 124-X-A-12 effective September 25, 2012 (1) allowed for service purchases of prior firefighter service, (2) defined eligibility and benefits for hires on and after September 25, 2012, (3) set employee contributions to 9.96% for those hired prior to September 25, 2012 and



9.0% for hires on and after September 25, 2012, (4) extend the DROP to 84 months with 6.0% annual interest accumulation, and (5) allow BAC-DROP for up to 24 months.

- Ordinance No. 124-X-10-A effective April 27, 2010 was to comply with Florida Statutes 2009-97. The ordinance revised the definition of actuarial equivalence, amended the investment policy, revised optional forms of benefit to allow the joint pensioner to be changed up to two times without approval of board, revised language regarding designated beneficiaries, and added language related to Plan termination such as accrued benefits are nonforfeitable.
- Ordinance No. 124-X-09-A adopted October 13, 2009 amended Plan provisions to provide for a Supplemental Benefit for firefighters.
- Ordinance No. 124-X-08-C adopted October 14, 2008 extended the DROP from 60 months to 72 months. Employee contributions are no longer subject to increase when City contributions are more than 19.2% of pay under this ordinance.

<u>Plan Year:</u> The 12-month period from October 1st to the following September 30th.

Member: Full-time firefighters become Members immediately upon hire.

<u>Actuarial Equivalence:</u> Effective April 27, 2010 under Ordinance No. 124-X-10-A, Actuarial Equivalence is based on an 8.0% interest rate, RP-2000 static mortality table (unisex 50/50) projected to 2010 using scale AA. The disabled mortality table is used for disability retirees.

<u>Credited Service:</u> Service with the City as a full-time salaried firefighter where Member contributions are made. Completed months of partial years of service are included in the determination of Credited Service.

Members with at least ten years of service who enter the DROP or retire on or after September 25, 2012 may purchase up to four years of active service in the U.S. Armed Forces or service worked as a full-time firefighter as defined under Florida Statutes section 175.032(8)(a) with another governmental entity prior to employment with the City provided the Member has not received and will not receive a benefit from another retirement plan based on such service. The total combined purchase of prior governmental and military service may not exceed four years. Payment for the purchase must be made in a cash lump sum or a direct transfer of funds from a member's account in the City's 457 plan.

Vesting: 100% upon earning ten years of Credited Service.

<u>Salary:</u> Total actual fixed cash compensation paid yearly for services rendered to the City as a firefighter including regular pay, holiday and other payroll cash incentives and general monthly expense allowances. Overtime was included in the definition of Salary but limited to 300 hours per year effective October 1, 2012. For Members hired or rehired after November 19, 2021 overtime is excluded. In addition, the following are not included in Salary: Lump sum payments of accrued benefits upon termination of employment, auto allowances, uniform allowances, mileage and travel reimbursements, income from private details, and (effective July 12, 2016) all payments for accrued unused sick and annual leave.

<u>Employee Contributions:</u> Ordinance No. 124-X-21-B adopted November 19, 2021 revised Employee Contributions. For Members hired or rehired on or after November 19, 2021, 8.0% of Salary. For Members hired prior to November 19, 2021, 10.63% of Salary.

Prior to Ordinance No. 124-X-21-B adopted November 19, 2021 members hired or rehired on or after September 25, 2012, 10.63% of Salary (prior to November 13, 2012 9.0% of Salary), and the below were defined for those hired before September 25, 2012.

<u>Effective</u>	% of Salary	
11/13/2012	10.63%	
09/25/2012	9.95%	
01/01/2004	10.63%	*



*Any cost sharing provisions in place prior to October 1, 2008 where employees share in contribution increases in excess of 19.2% of budgeted payroll are no longer applicable. Prior to October 1, 2008, Employee Contributions were 10.63% plus 50% of the excess of City contributions over 19.2%.

A Member who terminates non-vested is entitled to refund of accumulated Employee Contributions without interest.

Vested Members who terminate employment prior to being eligible to receive an annuity may leave their accumulated contributions in the fund, and upon Early or Normal Retirement Age begin receipt of pension payments.

<u>Average Final Compensation:</u> Ordinance No. 124-X-21-B adopted November 19, 2021 revised Average Final Compensation. For those hired or rehired on or after November 19, 2021, average of Salary for the five highest years out of the last 10 years of Credited Service. For those hired prior to November 19, 2021, the average of Salary for the three highest consecutive years, or the five highest years out of the last 10 years of Credited Service, whichever is greater.

Prior to Ordinance No. 124-X-21-B, the following was in effect. Prior to October 1, 2004, average of Salary for the five highest years. Effective October 1, 2004, average of Salary for the three highest consecutive years, or the five highest years out of the last 10 years of Credited Service, whichever is greater.

Normal Retirement Age: Ordinance No. 124-X-21-B adopted November 19, 2021 set the Normal Retirement Age for those hired or rehired on or after November 19, 2021 as the earlier of (i) age 55 and completion of 10 years of Credited Service or (ii) age 52 and completion of 25 years of Credited Service. For those hired prior to November 19, 2021, the earliest of (i) age 45 and completion of 25 years of Credited Service, (ii) age 48 and completion of 21 years of Credited Service (which may be accelerated one year to age 47 and completion of 20 years of Credited Service), or (iii) age 50 and completion of 10 years of Credited Service.

Prior to Ordinance No. 124-X-21-B, Normal Retirement Age was as described above except the November 19, 2021 date was September 25, 2012. Prior to January 1, 2004, age 50 and completion of at least 10 years of Credited Service.

Normal Retirement Benefit: The Accrued Benefit.

Accrued Benefit: Ordinance No. 124-X-21-B adopted November 19, 2021 revised the Normal Retirement Benefit. For Members hired or rehired on and after November 19, 2021, a maximum of 70% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 20 Years Credited Service plus 2.0% x Average Final Compensation x Credited Service from 20 to 25 Years. Provided, however, in no event will the Accrued Benefit be less than 2.75% x Average Final Compensation x Credited Service. For Members hired before November 19, 2021, any Member who was actively employed on October 1, 2001 and retired or entered the DROP after January 1, 2004 is due a benefit based on the greater of the following two benefit formulas. Members who were not employed on October 1, 2001 and hired before November 19, 2021 receive a benefit only under formula (1) in effect January 1, 2004.

- (1) For Members hired prior to November 19, 2021 who retire or terminate employment on or after January 1, 2004 the benefit formula is a maximum of 80% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 15 Years Credited Service plus 3.5% x Average Final Compensation x Credited Service from 15 to 25 Years. Provided, however, in no event will the Accrued Benefit be less than 2.0% x Average Final Compensation x Credited Service.
- (2) For Members who retired or terminated prior to January 1, 2004, Members who reached Normal Retirement Age were entitled to a retirement benefit of 4.0% x Average Final Compensation x up to 10 Years Credited Service plus 2.0% x Average Final Compensation for Credited Service over 10 Years.



Prior to Ordinance No. 124-X-21-B, for Members hired or rehired on and after September 25, 2012, the benefit formula was a maximum of 80% of Average Final Compensation calculated as 3.0% x Average Final Compensation x up to 25 years Credited Service plus 1.0% x Average Final Compensation x Credited Service from 25 to 30 Years. The benefit payable to Members hired before September 25, 2012 was as described above for those hired before November 19, 2021.

Effective October 1, 2004, the Accrued Benefit is payable as a 10-year certain and continuous annuity. Prior to October 1, 2004 the Accrued Benefit was defined payable as a single life annuity.

<u>Early Retirement Age:</u> Ordinance No. 124-X-21-B adopted November 19, 2021 set the Early Retirement Age for those hired or rehired on or after November 19, 2021 as age 50 and completion of at least 10 years of Credited Service. For Members hired prior to November 19, 2021, age 47 and completion of 10 years of Credited Service.

Prior to Ordinance No. 124-X-21-B, Early Retirement Age was as described above except the November 19, 2021 date was September 25, 2012.

<u>Early Retirement Benefit</u>: Ordinance No. 124-X-21-B adopted November 19, 2021 revised the Early Retirement Benefit. For those hired or rehired on or after November 19, 2021, the accrued Normal Retirement Benefit reduced 3% per year by which the commencement of benefits precedes age 55. For Members hired before November 19, 2021, the accrued Normal Retirement Benefit reduced actuarially from Normal Retirement Age. However, in no event will the reduction for Early Retirement exceed 3% per year by which the commencement of benefits precedes the Normal Retirement Age.

Prior to Ordinance No. 124-X-21-B, the Early Retirement Benefit was as described above except the November 19, 2021 date was September 25, 2012.

<u>Service Incurred Disability Retirement:</u> Members who become totally and permanently disabled as a direct result from the performance of service-related duties to the City are a due a benefit commencing on the earlier of (i) the first day of the month coincident with or next following the date of disability, or (ii) the 90th day following the day the Member submitted a completed application for disability. Any Plan Member receiving Service Incurred Disability Retirement may elect to convert to Normal or Early Retirement upon meeting all eligibility criteria. Plan Members receiving disability retirement benefits may elect to continue making regular contributions to the Plan, and based on such contributions earn additional service credit toward Normal or Early Retirement benefits.

Ordinance No. 124-X-21-B adopted November 19, 2021 revised the service incurred disability benefit to 70% of the Members Salary for those hired or rehired on or after November 19, 2021 as noted in the following.

The amount of the service incurred disability benefit is 75% (70% for Members hired or rehired on or after November 19, 2021) of the Member's Salary in effect on the date of disability, subject to offsets not more than would reduce the service incurred disability benefit below the greater of the Member's Accrued Benefit or 42% x Average Final Compensation. The applicable offset to the service incurred disability benefit includes any disability benefits paid by workers' compensation (excluding any COLA on these benefits) to the extent permitted by law and to the extent that the total of these benefits exceeds the Member's average periodic wage, subject to annual benefit adjustments. Special rules apply in the case of a lump sum settlement paid by workers' compensation.

The monthly service incurred disability benefit is adjusted annually for persons who first qualify for Service Incurred Disability on or after January 11, 2005, based on the sum of the following components calculated for the previous calendar year:

(a) The service incurred disability retirement benefit paid from the Plan;



- (b) Worker's compensation disability benefits (excluding medical reimbursements) minus any COLA adjustments since the benefit first went into effect, to the extent permitted by law;
- (c) Any Salary (excluding any sick and vacation pay received from the City pursuant to the disability) received by a Member from the date of disability; and
- (d) Net earnings from self-employment income.

The Service Incurred Disability Retirement benefit is reduced if the Member's pre-disability Salary is less than the sum of the above components. The monthly reduction in the Service Incurred Disability Retirement benefit is 1/12 of (50% of the first \$10,000 in excess plus 100% of the excess which exceeds \$10,000).

If the sum of the four components is less than the Service Incurred Disability Retirement benefit computed prior to any applicable offsets, then the benefit will be increased. The monthly increase in the Service Incurred Disability Retirement benefit is 1/12 of the amount of the Service Incurred Disability Retirement benefit prior to offsets minus the sum of the four components.

<u>Nonservice Incurred Disability Retirement:</u> Members who become totally and permanently disabled not in the line of duty are entitled to Nonservice Incurred Disability Retirement upon earning at least 10 years of Credited Service.

The benefit payable to any Member who becomes totally and permanently disabled not in the line of duty is the Accrued Benefit, not less than 25% of Average Final Compensation. This benefit is payable until the Member recovers, begins receipt of disability benefits from Social Security, dies or reaches his Normal or Early Retirement Age, at which time the Member elects to receive Normal or Early Retirement Benefits in lieu of disability benefits.

Prior to October 1, 2004, there was a maximum Nonservice Incurred Disability Retirement benefit which was 50% of Average Final Compensation. Ordinance No. 124-X-21-B adopted November 19, 2021 set the maximum Nonservice Incurred Disability Retirement benefit to 50% of Average Final Compensation for Members hired or rehired on or after November 19, 2021.

<u>Pre-Retirement Death Benefits:</u> Ordinance No. 124-X-21-B adopted November 19, 2021 revised Pre-Retirement Death Benefits for those hired or rehired on or after November 19, 2021 to the following:

- The designated beneficiary of a nonvested Member is due a refund of the Employee Contributions without interest.
- The service-connected pre-retirement death benefit is the lesser of the accrued Normal Retirement Benefit and 75% of Average Final Compensation actuarially adjusted for the beneficiary's age and payable immediately for the lifetime of the Member's beneficiary for those with 10 years of Credited Service. If there is no beneficiary, the benefit is payable to the Member's estate for 10 years.
- The non-service connected pre-retirement death benefit is the accrued Normal Retirement Benefit actuarially adjusted for the beneficiary's age commencing on the date the Member would have attained their Early or Normal Retirement Age for those with 10 years of Credited Service.

Pre-Retirement Death Benefits defined payable prior to Ordinance No. 124-X-21-B continue to be payable for those hired prior to November 19, 2021, as follows.

- The designated beneficiary of a nonvested Member is due a refund of the Employee Contributions without interest.
- The designated beneficiary of a vested Member who dies prior to retirement is entitled to receive either the refund of Employee Contributions without interest, or an amount equal to the benefit that would have been payable as if the Member terminated on the date of death, survived to the earliest retirement age, retired under the optional form of benefit selected by the Member, and died the next day. If no optional form of benefit was selected then the benefit is payable for a period of 10 years. However, any Member who has attained a vested interest in the Plan and who becomes eligible for retirement and continues to be employed shall be construed to have



selected the option which affords the surviving spouse or joint pensioner the greatest amount of benefits.

Optional Forms of Benefit: Effective October 1, 2004, the Accrued Benefit described above is payable in the form of a 10-year certain and continuous annuity. Prior to October 1, 2004, the Accrued Benefit was payable in the form of a single life annuity. Members may optionally choose an actuarially equivalent joint and survivor annuity (with 50%, 66 2/3, 75% or 100% continuance). The joint and survivor option may include an actuarially equivalent "pop-up" feature such that if the Member's joint pensioner predeceases the Member, the survivorship benefit is deemed cancelled and the Member's annuity is recalculated as an actuarially equivalent life annuity effective on the first day of the month following the death of the Member's joint pensioner.

1999 Retirement Incentive Program: Members who, by November 30, 1999, had earned at least 20 years of Credited Service and had reached Normal Retirement Age (then age 50 with 10 years of Credited Service) were eligible to participate in a Retirement Incentive Program by making an election during a window period of 30 days commencing November 1, 1999. Members who elected to participate were required to terminate employment no later than November 30, 1999 unless they elected to participate in the DROP (where they were required to terminate employment no later than November 30, 2000). The monthly retirement benefit was based on the years of Credited Service and Average Final Compensation on their date of termination or DROP using the benefit formula in effect at that time. Eligible employees who elected this Retirement Incentive Program received, in addition to any other benefits, 18 months of retirement benefits payable at retirement. However, for those who entered the DROP as a part of this Retirement Incentive Program, 18 months of retirement benefit payments were paid into the employee's DROP account at the beginning of the DROP period. Interest was earned in the DROP account at the assumed rate of investment return used for valuation purposes. Under this Retirement Incentive Program, a 2% COLA commenced one year after termination of employment.

2002 Retirement Incentive Program: Members who, by April 15, 2002, were (i) at least age 46 and had completed at least 26 years of Credited Service, or (ii) at least age 50 and had completed at least 10 years of Credited Service, were eligible to participate in the Retirement Incentive Program by making an election during a window period of 30 calendar days commencing February 27, 2002. Members who elected to participate were required to terminate employment no later than April 15, 2002 unless they elected to participate in the DROP (36 months total) or BAC-DROP (up to 18 months reducing the future time in the DROP so no more than 36 months total in BAC-DROP plus the DROP) where they were required to terminate employment no later than April 15, 2005. Members who elected to participate were entitled to unreduced retirement benefits based on the years of Credited Service and Average Final Compensation on their date of retirement using the benefit formula in effect at that time, plus an additional 3% was added to the benefit multiplier. Under the BAC-DROP option, a Member receives a lump sum distribution of up to 18 months of retirement benefits upon entry into the DROP, and the Member's monthly pension is then actuarially reduced to reflect the cost to the Plan for this lump sum distribution. These Members were also eligible to elect an optional COLA.

Note: Any firefighter who retired on or after October 1, 2001 but who is still employed with the City and in the DROP on the date the April 15, 2002 Retirement Incentive Program was adopted may elect by March 28, 2002 to have benefits refigured under the 2002 Retirement Incentive Program.

<u>Deferred Retirement Option Plan (DROP):</u> Effective September 30, 2001, Members are eligible to enter the DROP upon attaining their Normal Retirement Age. DROP participants are not eligible for death or disability benefits. The Accrued Benefit is frozen and no further Employee Contributions are payable at DROP entry.

Under Ordinance No. 124-X-21-B adopted November 19, 2021, Members hired or rehired on or after November 19, 2021 may participate in the DROP for a maximum of 4 years if they make the election within 6 months of reaching their Normal Retirement Age. DROP account earnings are 0% if the GASB 68 "fiduciary net position" is less than 100%. If 100% or more, then DROP account earnings are credited using the actual return of the Plan with a minimum of 0% and a maximum of 4%. Although not explicitly



stated in the Ordinance, we understand from City correspondence received while preparing the impact statement that Members hired or rehired on or after November 19, 2021 are eligible for BAC-DROP.

DROP provisions prior to Ordinance No. 124-X-21-B are as follows. These are the provisions applicable for Members hired prior to November 19, 2021. Effective September 25, 2012, the maximum DROP participation duration is 84 months. Members who commenced participation in the DROP on or after October 1, 2010 and who were participating in the DROP on September 25, 2012 (11 such Members) were allowed to extend their DROP participation from 72 to 84 months if the Member agreed all DROP account earnings are recomputed retroactively to the date of DROP using an annual interest rate of 6.0%. New DROP entrants effective September 25, 2012 receive interest crediting based on an annual interest rate of 6.0%.

For DROP entrants prior to September 25, 2012, the Accrued Benefit was accumulated with interest at the same rate as the investment earnings assumption for the funding valuation of the Plan.

Effective June 10, 2008, the maximum DROP participation duration was 72 months where Members participating in the DROP were allowed to extend their DROP participation from 60 to 72 months. Effective January 1, 2004, the maximum DROP participation duration was 60 months where Members participating in the DROP were allowed to extend their DROP participation from 36 to 60 months. Prior to January 1, 2004 the maximum DROP participation was 36 months.

Effective January 1, 2004, Members were allowed to elect to "BAC-DROP" for up to 18 months, which reduced the maximum 60 month (72 month effective June 10, 2008) DROP period by the same amount of time elected under the BAC-DROP. Effective September 25, 2012 Members may elect to "BAC-DROP" for up to 24 months, which reduces the 84 month DROP period by the same amount of time elected under the BAC-DROP. Under the BAC-DROP option, a Member receives a lump sum distribution of up to 18 months (24 effective September 25, 2012) of retirement benefits upon entry into the DROP, and the Member's monthly pension is then actuarially reduced to reflect the cost to the Plan for this lump sum distribution.

Effective January 1, 2004 and prior to May 17, 2005, for every year (or portion thereof) of deferred entry into the DROP after the 12 month period following their "earliest" Normal Retirement Age, the maximum DROP period is reduced by one year. On and after May 17, 2005, Members who elect to participate in the DROP within the first five years following their "earliest" Normal Retirement Age incur no reduction to the maximum 60 month DROP period (72 month effective June 10, 2008 and 84 month effective September 25, 2012) for DROP entry deferral. However, the maximum DROP period is reduced for Members who elect to participate in the DROP beyond five years following their "earliest" Normal Retirement Age. For members hired prior to September 25, 2012, the Normal Retirement Age is the earliest of age 45 with 20 years of service, age 48 with 21 years of service, and age 50 with 10 years of service where age 48 with 21 years of service may be accelerated to age 47 with 20 years of service. Note that age 47 with 20 years of service is not taken into account for the "earliest" Normal Retirement Age for purposes of determination of DROP period reduction.

Cost of Living Adjustment (COLA): Under Ordinance No. 124-X-21-B, Members hired or rehired on or after November 19, 2021 are not entitled to a COLA. However, Members rehired on or after November 19, 2021 may be due a COLA on the benefit payable for service prior to November 19, 2021.

COLA provisions prior to Ordinance No. 124-X-21-B are as follows. These are the provisions applicable for Members hired prior to November 19, 2021. Ordinance No. 124-X-13-B adopted effective August 13, 2013 revised the annual COLA effective October 1, 2013 to a 1% annual COLA for five years commencing 12 months after initial retirement, then a 2.0% COLA, then a 2.5% annual COLA (commencing at the end of the seventh year following initial receipt of retirement benefits) for firefighters who terminate employment and begin receiving Normal Retirement benefits or enter the DROP on or after October 1, 2010, and the beneficiaries of such members. Note that for DROP members the "initial receipt of retirement benefits" has historically been interpreted to mean the date of DROP.



COLA provisions prior to Ordinance No. 124-X-13-B are as follows.

Effective September 30, 2001, an annual 2% COLA commences at the end of the 4th year following initial receipt of retirement benefits for all Members who reach Early or Normal Retirement Age and begin receipt of benefits (either directly or through the DROP) after September 30, 2001, and the beneficiaries of such Members. Effective January 1, 2004, COLA payments under this provision are deferred 12 months after separation from employment for Members who participate in the DROP for more than 3 years.

Members who retire or terminate employment on or after January 1, 2004 may elect, in lieu of the 2% COLA described above, a 1% annual COLA commencing 12 months after initial receipt of retirement benefits, which would increase to a 2% annual COLA at the end of the 6th year following initial receipt of retirement benefits.

COLAs were also payable as part of the Retirement Incentive Programs. See the description of the Retirement Incentive Programs for a description of the associated COLAs.

<u>Supplemental Benefit:</u> Under Ordinance No. 124-X-21-B, Members hired or rehired on or after November 19, 2021 are not entitled to receive the Supplemental Benefit. However, Members rehired on or after November 19, 2021 may be due a Supplemental Benefit payable for service prior to November 19, 2021.

Ordinance No. 124-X-09-A adopted October 13, 2009 amended Plan provisions to provide for a Supplemental Benefit for firefighters. Effective October 1, 2009, firefighters who terminate employment and begin receiving Normal or Early Retirement benefits on or after October 1, 2007 receive a Supplemental Benefit payable monthly which is:

- The lesser of [(i) \$25 x Credited Service and (ii) \$500] payable until age 65
- The lesser of [(i) \$15 x Credited Service and (ii) \$300] payable from age 65 for life

This supplemental benefit is not increased for any COLAs defined under the Plan and is only payable after DROP exit (to members who entered the DROP on or after October 1, 2007). Members who terminate employment on or after October 1, 2007 due a deferred vested benefit receive the supplement upon retirement. Members who retire under disability retirement provisions are not eligible to receive the supplement.

13th Check: Ordinance No. 124-X-21-B adopted effective November 19, 2021 defines a 13th check payable to retired Members hired or rehired on or after November 19, 2021 if the GASB 68 "fiduciary net position" is 100% or greater. The 13th check is prorated based on the "excess investment earnings" available but not more than the monthly retirement benefit payable. "Excess investment earnings" are defined as the market rate of investment earnings on assets net of expenses that exceed the assumed rate of return.

<u>Share Plan:</u> Ordinance No. 124-X-16-C adopted July 12, 2016 amended Plan provisions to indicate that Chapter 175 contributions received each fiscal year in excess of \$2,055,127 may be used to provide Share Plan benefits.

Internal Revenue Service Section 415(b) Limitations: Ordinance No. 124-X-17-B adopted September 12, 2017 amended the Plan to (1) remove the value of the Plan's cost-of-living adjustment from the initial determination of Section 415(b) limits effective September 29, 2016 and (2) requires that Members receive estimated calculations before retirement or DROP entry to let them know if they are expected to have benefits in excess of Section 415(b) limitations. For Members who retired from employment on or after September 29, 2016 the Section 415(b) limit is adjusted annually after retirement as the Internal Revenue Service releases new calendar year limits under Section 415(d).



Under Ordinance No. 124-X-21-B adopted November 19, 2021, Members participating in the DROP on or after November 19, 2021 and who receive a benefit calculation estimate by the Plan actuary that the benefit may exceed the Section 415 limit while the Member is participating in the DROP may elect to exit the DROP and continue City employment where they must terminate City employment no later than the date the Member would have completed their DROP participation. Upon DROP exit the monthly benefit is no longer credited to the DROP balance and is paid directly to the Member. The DROP balance is not paid at DROP exit, but rather accumulates with interest until termination of employment at which time it is paid to the Member. After DROP exit the Member rejoins the Plan as a new contributing Member subject to a new 10-year vesting period but is not eligible for death or disability retirement benefits. The ordinance states,"...If the Member separates from City employment before attaining ten (10) years of creditable service after exiting the DROP, the member shall receive a refund of 100% of the member contributions made during their post-DROP employment, without interest."



Actuarial Assumptions and Methods

This is a description of the Actuarial Assumptions and Methods used to create the October 1, 2021 actuarial valuation of the Plan.

Assumed Rate of Investment Return: 7.5% per year net of investment expenses (changed from 7.7% used in the prior valuation).

Salary Increase - Total Payroll: 3.0% per year

Salary Increase - Individual: Changed for this October 1, 2021 actuarial valuation, as follows:

<u>Service</u>	Prior Valuation	As of October 1, 2021
0-4	12.00%	13.00%
5-9	6.00%	6.50%
10-14	5.50%	5.00%
15-19	5.25%	4.50%
>=20	5.00%	4.50%

Mortality: The mortality table is that used for special risk employees in the valuation of the Florida Retirement System (FRS) as of July 1, 2019 and 2020, as required by state statue.

The following sex distinct tables are used with fully generational mortality improvements using sex distinct Scale MP-2018.

Active: Male: PubS.H-2010(B) male employee set forward 1 year

Female: PubS.H-2010 female employee set forward 1 year

Healthy Retiree: Male: PubS.H-2010(B) male healthy retiree set forward 1 year

Female: PubS.H-2010 female healthy retiree set forward 1 year

The following sex distinct tables are used with no mortality improvement projection.

Disabled Retiree: Male: 80% PubG.H-2010 male disabled retiree

+ 20% PubS.H-2010 male disabled retiree

Female: 80% PubG.H-2010 female disabled retiree

+ 20% PubS.H-2010 female disabled retiree

Juvenile rates are used for ages 15-17.

The active tables reference the healthy retiree rates, above, at ages 80+.

The healthy retiree tables reference the active mortality rates, above, before age 44.

Retirement: In the prior valuation, retirement rates were defined for Members hired prior to September 25, 2012, and those hired on or after September 25, 2021. The following unisex rates were applied for Members hired before September 25, 2012 in the October 1, 2020 actuarial valuation. The retirement rates previously assumed for Members who were hired before September 25, 2012 in the October 1, 2020 actuarial valuation are used for Members hired before November 19, 2021 for this October 1, 2021 actuarial valuation in conjunction with the adoption of Ordinance No. 124-X-21-B.

	Service From					
<u>Age</u>	<u>10-13</u>	<u>14-19</u>	20-23	<u>24</u>	<u>25-29</u>	<u>30+</u>
<=44	0%	0%	0%	0%	0%	0%
45-46	0%	0%	0%	0%	60%	100%
47-49	0%	0%	20%	60%	60%	100%
50-54	10%	10%	20%	20%	20%	100%
55-59	20%	100%	100%	100%	100%	100%
60+	100%	100%	100%	100%	100%	100%



In the prior valuation, the following unisex rates were applied for Members hired on or after September 25, 2012. These rates are not used in this October 1, 2021 actuarial valuation.

	Service From				
<u>Age</u>	<u>10</u>	<u>11-24</u>	<u>25</u>	<u> 26-29</u>	<u>30+</u>
<=49	0%	0%	0%	0%	0%
50	10%	10%	10%	10%	100%
51	10%	0%	0%	0%	100%
52	10%	0%	100%	100%	100%
53	10%	0%	100%	100%	100%
54	10%	0%	100%	100%	100%
55+	100%	100%	100%	100%	100%

Disability: Unisex rates, as follows:

<u>Age</u>	Probability	<u>Age</u>	Probability	<u>Age</u>	Probability	<u>Age</u>	Probability
15-20	0.140%	30	0.180%	40	0.300%	50	1.000%
21	0.142%	31	0.190%	41	0.342%	51	1.110%
22	0.144%	32	0.200%	42	0.384%	52	1.220%
23	0.146%	33	0.210%	43	0.426%	53	1.330%
24	0.148%	34	0.220%	44	0.468%	54	1.440%
25	0.150%	35	0.230%	45	0.510%	55	1.550%
26	0.156%	36	0.244%	46	0.608%	56	1.660%
27	0.162%	37	0.258%	47	0.706%	57	1.770%
28	0.168%	38	0.272%	48	0.804%	58	1.880%
29	0.174%	39	0.286%	49	0.902%	59	1.990%
						60+	0.000%

75% of disabilities are assumed to be service connected.

<u>Termination:</u> Changed for this October 1, 2021 actuarial valuation, as follows:

Termination	Probability
i cirriii iatiori	1 1 ODGDIIILY

<u>Service</u>	Prior Valuation	As of October 1, 2021
0-1	18.00%	14.00%
2	8.00%	8.00%
3	8.00%	8.00%
4	8.00%	7.00%
5	8.00%	5.00%
6-9	2.25%	1.25%
10-19	1.75%	0.00%
20+	0.00%	0.00%

<u>Plan Expenses:</u> The prior year administrative expense is added to the normal cost.

<u>Marital Assumption:</u> 80% of males are assumed married and 50% of females are assumed married. Husbands are assumed to be four years older than wives.

Funding Method: Entry Age (level percent of salary)

A description of the funding method is found in the October 1, 2021 actuarial valuation report on the page entitled "Glossary of Actuarial Terms."





Phone: (321) 453-6542 Fax: (321) 453-6998

City of Sunrise

Firefighters' Retirement Plan

GASB 68 Supplement as of September 30, 2022





August 19, 2022

Board of Trustees City of Sunrise Firefighters' Retirement Plan Sunrise, Florida

RE: GASB 68 Supplement as of September 30, 2022

Dear Board Members:

We are pleased to present the Governmental Accounting Standards Board Statements No. 68 (GASB 68) Supplement as of September 30, 2022 for the City of Sunrise (the City) Firefighters' Retirement Plan (the Plan). This report is a supplement to the actuarial valuation report as of October 1, 2020. Please see the actuarial valuation report as of October 1, 2020 for the assessment and disclosure of risk in a pension funding valuation as described in Actuarial Standard of Practice No. 51 (ASOP 51) and other required disclosures.

In producing our work product, we rely on various models, internal and external, which were used for their intended purposes. Underlying data, assumptions, methodologies, model inputs and resulting outputs have been reviewed. The 7.7% assumed net return is a prescribed assumption as defined by Actuarial Standard of Practice No. 27 (ASOP 27), as it is set by the Board. While we find all other inputs and outputs to be reasonable, the prescribed assumption significantly conflicts with our judgment regarding what would constitute a reasonable assumption for the purpose of the measurement as discussed in ASOP 27. We continue to recommend lowering the net assumed return.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report provides information required to be disclosed under GASB 68 as described in the statement and the implementation guide. The relevant dates are as follows:

GASB 68

Valuation Date 10/01/2020 Measurement Date 09/30/2021 Reporting Date 09/30/2022 RE: GASB 68 Supplement as of September 30, 2022

August 19, 2022

Page 2

Please let us know if you have any questions or need additional information.

Sincerely,

Chad M. Little, ASA, EA Partner, Consulting Actuary Enrollment Number 20-6619

Mul for

Paula C. Freiman, ASA, EA Partner, Consulting Actuary Enrollment Number 20-5796

Table of Contents

Statement of Fiduciary Net Position	1
Statement of Changes in Fiduciary Net Position	2
Net Pension Liability	3
Schedule of Changes in Net Pension Liability and Related Ratios	5
Statement of Changes in Net Pension Liability	6
Pension Expense and Deferred Outflows and Inflows of Resources	7
Recognition of Deferred Outflows and Inflows of Resources	8
Schedule of Contributions	9
Schedule of Investment Returns	10
Plan Membership Statistics	11
Plan Description	12
Actuarial Assumptions and Methods	19

Statement of Fiduciary Net Position

As of September 30,	2021	2020
Assets		
Receivables and prepaid expenses:		
Interest and dividends	\$160,766	\$176,525
Employee contributions	138,272	57,216
Pending trades receivable	<u>355,416</u>	<u>97,138</u>
Total receivables	<u>654,454</u>	330,879
Investments, at fair value:		
Money market funds	3,063,534	3,090,846
U.S. government bonds and notes	9,157,502	1,073,099
Taxable municipal bonds	0	642,635
Mortgage-backed securities	2,519,306	5,900,834
Corporate obligations	4,096,496	5,160,619
Common stock	50,527,882	57,091,181
International equity mutual funds	11,400,469	9,945,568
Collective investment funds	78,742,596	47,328,557
Commingled real estate funds	24,452,182	21,687,051
Total investments	183,959,967	151,920,390
Total assets	184,614,421	152,251,269
Liabilities		
Accounts payable	172,064	152,507
Pending trades payable	<u>665,642</u>	<u>282,131</u>
Total liabilities	<u>837,706</u>	434,638
Net position restricted for pensions	<u>\$183,776,715</u>	<u>\$151,816,631</u>



Statement of Changes in Fiduciary Net Position

As of September 30,	2021	2020
Additions		
Contributions:		
Employer	\$6,391,190	\$6,300,844
State of Florida	934,286	861,888
Employees	<u>1,569,620</u>	<u>1,401,623</u>
Total contributions	<u>8,895,096</u>	<u>8,564,355</u>
Investment income (loss):		
Net (depreciation) appreciation in fair value of investments	32,030,539	6,682,462
Interest and dividends	1,909,726	2,618,753
Other income	1,016	<u>5,680</u>
Total investment income	<u>33,941,281</u>	9,306,895
Total invocation income	00,011,201	0,000,000
Less investment expenses:		
Investment expense	<u>755,037</u>	<u>689,967</u>
Net investment income	<u>33,186,244</u>	<u>8,616,928</u>
Total additions	42,081,340	17,181,283
Deductions		
Participant benefit payments	9,922,633	11,463,643
Refunds of participant contributions	4,747	0
Administrative expenses	<u>193,876</u>	<u>151,349</u>
Total deductions	<u>10,121,256</u>	11,614,992
Net increase in net position	31,960,084	5,566,291
Net position restricted for pensions		
Beginning of year	<u>151,816,631</u>	146,250,340
End of year	<u>\$183,776,715</u>	<u>\$151,816,631</u>



Net Pension Liability

The total pension liability under GASB 68 is based on the October 1, 2020 actuarial valuation updated to the September 30, 2021 measurement date. The following actuarial assumptions are applied to all periods included in the measurement.

Inflation: 2.2%

(as reported by investment monitor)

Salary increases: 12.0% to 5.0%, including inflation

Investment return: 7.7% net of investment expense, including inflation

Mortality: From July 1, 2019 and 2020 FRS special risk actuarial valuations.

Assumptions are based on the results of a 5-year actuarial experience study as of October 1, 2014. See the paragraph entitled "Assumptions" on page 4 of the October 1, 2017 actuarial valuation report for details.

The long-term expected net rate of return on investments for the October 1, 2020 actuarial valuation was determined using a building-block method. Best-estimate ranges of expected future real rates of return (expected returns net of investment expense and inflation) are developed for each major asset class. The long-term expected net rate of return on investments is the best-estimate ranges weighted by the asset allocation plus expected inflation. Best estimates of arithmetic real rates of return for each major asset class as provided by the investment monitor are shown in the following table:

Investment Category	Target Allocation	Long Term Real Annualized Return*
Large Cap	32%	5.5%
Mid Cap	8%	6.6%
Small Cap	10%	5.8%
Int'l Developed	12%	2.9%
Emerging Markets	3%	8.7%
Real Estate	15%	6.2%
Fixed Income	<u>20%</u>	2.7%
	100%	
Weighted Average Long Term Real A	nnualized Return =	4.9%

^{*}For illustrative purposes, historical long term (20 year) arithmetic average returns have been used as a reasonable expectation of returns.

The expected rate of inflation is 2.2%.

Note, however, that long-term expected net rates of return for actuarial valuations should be compared to geometric returns. Based on the above information provided by the investment monitor as of September 30, 2020, the 7.7% discount rate used to measure the total pension liability is <u>not</u> achievable.

The discount rate used to measure the total pension liability was 7.7%. This is the single rate that reflects the long-term expected rate of return on pension plan investments expected to be used to finance the payment of benefits. A projection of cash flows used to determine the discount rate assumed that plan member contributions are made at the current contribution rate and that City contributions will be made



equal to the difference between the actuarially determined contribution and the member contributions. Based on those assumptions, the pension plan's fiduciary net position is 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 is applied to all periods of projected benefit payments to determine the total pension liability. For purposes of this determination we understand pension plan assets are expected to be invested using a strategy to achieve the discount rate.

Note: See "Actuarial Assumptions and Methods" for a full description of the assumptions used in the determination of the total pension liability.

For GASB 68 the net pension liability is required to be measured as of a date no earlier than the end of the employer's prior fiscal year (the measurement date), consistently applied from period to period. The net pension liability was measured as of September 30, 2021 under GASB 68 for the employer's fiscal year ending September 30, 2022.

The components of the net pension liability at September 30, 2021 were as follows.

Measurement Date September 30,	2021
Total pension liability	\$210,208,208
Plan fiduciary net position	<u>(183,776,715)</u>
Net pension liability	<u>\$26,431,493</u>
Plan fiduciary net position as a % of the total pension liability	87.43%

Sensitivity of the net pension liability to changes in the discount rate follows.

Measurement Date September 30, 2021

	Current			
	1% Decrease	1% Increase		
	(6.7%)	(7.7%)	(8.7%)	
Net pension liability	\$53,152,760	\$26,431,493	\$4,614,852	



CITY OF SUNRISE FIREFIGHTERS' RETIREMENT PLAN PAGE 5

Schedule of Changes in Net Pension Liability and Related Ratios

This schedule will be updated each year until a 10-year history is accumulated.

Year Ending September 30,	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability								
Service cost	\$4,041,366	\$3,766,990	\$3,618,905	\$3,649,483	\$3,389,400	\$3,217,784	\$3,090,913	\$3,007,593
Interest	15,334,513	15,338,231	14,934,297	14,426,543	13,694,521	12,568,229	12,023,905	11,602,371
Changes of benefit terms	0	0	0	0	432,669	0	0	0
Differences between expected								
and actual experience	(2,907,373)	(652,093)	1,076,608	231,072	1,152,743	(728,503)	0	(1,492,632)
Changes of assumptions	(3,207,909)	0	0	1,196,786	4,703,070	1,643,838	0	172,854
Benefit payments	(9,922,633)	(11,463,643)	(14,163,770)	(10,960,320)	(6,456,401)	(6,437,587)	(8,093,516)	(7,121,213)
Contribution refunds	(4,747)	<u>0</u>	<u>(6,194)</u>	<u>0</u>	(6,743)	(63,852)	<u>0</u>	<u>0</u>
Net change in total pension liability	3,333,217	6,989,485	5,459,846	8,543,564	16,909,259	10,199,909	7,021,302	6,168,973
Total pension liability - beginning	206,874,991	199,885,506	194,425,660	185,882,096	168,972,837	158,772,928	151,751,626	145,582,653
Total pension liability - ending (a)	\$210,208,208	\$206,874,991	\$199,885,506	\$194,425,660	\$185,882,096	\$168,972,837	\$158,772,928	\$151,751,626
Plan fiduciary net position								
Contributions - employer	\$6,391,190	\$6,300,844	\$6,279,661	\$6,027,609	\$5,483,453	\$5,185,357	\$5,225,550	\$4,972,033
Contributions - State of Florida	934,286	861,888	821,826	763,749	766,995	803,419	853,244	879,470
Contributions - employee	1,569,620	1,401,623	1,341,475	1,244,670	1,288,279	1,338,474	1,156,746	1,125,192
Net investment income	33,186,244	8,616,928	5,939,853	13,810,392	14,302,330	11,249,228	176,272	10,639,774
Benefit payments	(9,922,633)	(11,463,643)	(14,163,770)	(10,960,320)	(6,456,401)	(6,437,587)	(8,093,516)	(7,121,213)
Contribution refunds	(4,747)	0	(6,194)	0	(6,743)	(63,852)	0	0
Administrative expense	(193,876)	(151,349)	(199,780)	(197,469)	(220,292)	(210,821)	(162,815)	(160,042)
Other	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net change in plan fiduciary net position	31,960,084	5,566,291	13,071	10,688,631	15,157,621	11,864,218	(844,519)	10,335,214
Plan fiduciary net position - beginning	151,816,631	146,250,340	146,237,269	135,548,638	120,391,017	108,526,799	109,371,318	99,036,104
Plan fiduciary net position - ending (b)	\$183,776,715	\$151,816,631	\$146,250,340	\$146,237,269	\$135,548,638	\$120,391,017	\$108,526,799	\$109,371,318
Net pension liability - ending (a) - (b)	\$26,431,493	\$55,058,360	\$53,635,166	\$48,188,391	\$50,333,458	\$48,581,820	\$50,246,129	\$42,380,308
Plan fiduciary net position as a percentage	87.43 %	72 20 0/	73.17 %	75 22 0/	72.92 %	74.25.0/	60 3E 0/	72.07 %
of the total pension liability		73.39 %		75.22 %		71.25 %	68.35 %	
Expected covered employee payroll	\$14,003,420	\$13,099,674	\$12,564,427	\$11,728,068	\$12,036,803	\$11,680,780	\$10,816,447	\$10,555,759
Net pension liability as a percentage of covered employee payroll	188.75 %	420.30 %	426.88 %	410.88 %	418.16 %	415.91 %	464.53 %	401.49 %

Notes to Schedule: The total pension liability as of September 30, 2014 and as of September 30, 2015 are based on an actuarial valuation as of October 1, 2014. The total pension liability as of September 30, 2016, 2017, 2018, 2019, 2020 and 2021 are based on an actuarial valuation as of October 1, 2015, 2016, 2017, 2018, 2019 and 2020 respectively. See the section entitled "Assumptions and Methods" for a description of changed assumptions.



Statement of Changes in Net Pension Liability

	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 9/30/2020	\$206,874,991	\$151,816,631	\$55,058,360
Changes for the year:			
Service cost	4,041,366		4,041,366
Interest	15,334,513		15,334,513
Changes of benefit terms	0		0
Differences between expected			
and actual experience '	(2,907,373)		(2,907,373)
Changes of assumptions	(3,207,909)		(3,207,909)
Contributions—employer		6,391,190	(6,391,190)
Contributions—State of Florida		934,286	(934,286)
Contributions—employee		1,569,620	(1,569,620)
Net investment income Benefit payments, including refunds of employee		33,186,244	(33,186,244)
contributions	(9,927,380)	(9,927,380)	0
Administrative expense	,	(193,876)	193,876
Other changes			0
Net changes	3,333,217	31,960,084	(28,626,867)
Balances at 9/30/2021	\$210,208,208	\$183,776,715	\$26,431,493



Pension Expense and Deferred Outflows and Inflows of Resources

Pension expense for the year ended September 30, 2022 is as shown below using a measurement date of September 30, 2021.

Description	Amount
Service cost	\$4,041,366
Interest on the total pension liability	15,334,513
Changes of benefit terms	0
Differences between expected and actual experience	(194,470)
Changes of assumptions	641,495
Employee contributions	(1,569,620)
Projected earnings on pension plan investments	(11,852,764)
Differences between projected and actual earnings on plan investments	(4,157,697)
Pension plan administrative expense	193,876
Other changes in fiduciary net position	0
Total pension expense	\$2,436,699

At the September 30, 2021 measurement date there are deferred outflows and inflows of resources from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$499,461	\$2,780,047
Changes of assumptions	331,573	2,624,653
Net difference between projected and actual earnings Employer contributions subsequent to NPL	0	13,788,070
measurement	7,076,893	0
Total	\$7,907,927	\$19,192,770

Employer contributions subsequent to NPL measurement shown above assumes the City contributed the actuarially determined contribution for the fiscal year ending September 30, 2022 as shown in the October 1, 2020 actuarial valuation of the Plan. We were not provided with the actual contributions made.

Amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended September 30):
2022	\$(3,852,669)
2023	(3,622,250)
2024	(4,927,237)
2025	(5,403,643)
2026	(555.937)



CITY OF SUNRISE FIREFIGHTERS' RETIREMENT PLAN PAGE 8

Recognition of Deferred Outflows and Inflows of Resources

			Recognition Year					
<u>Year</u>	Original <u>Amount</u>	Recognition Period	<u>2021</u>	2022	2023	2024	<u>2025</u>	2026
		Diffe	rences between	Expected and Ad	ctual Experience			
2016	(728,503)	5.2	(28,018)	0	0	0	0	0
2017	1,152,743	5.1	226,028	22,603	0	0	0	0
2018	231,072	5.0	46,214	46,216	0	0	0	0
2019	1,076,608	5.0	215,322	215,322	215,320	0	0	0
2020	(652,093)	5.2	(125,403)	(125,403)	(125,403)	(125,403)	(25,078)	0
2021	(2,907,373)	5.5	(528,613)	(528,613)	(528,613)	(528,613)	(528,613)	(264,308)
			Chang	es in Assumptior	าร			
2016	1,643,838	5.2	63,223	0	0	0	0	0
2017	4,703,070	5.1	922,171	92,215	0	0	0	0
2018	1,196,786	5.0	239,357	239,358	0	0	0	0
2021	(3,207,909)	5.5	(583,256)	(583,256)	(583,256)	(583,256)	(583,256)	(291,629)
	D	ifferences Betwe	en Projected and	I Actual Earnings	on Pension Plar	n Investments		
2017	(4,632,944)	5.0	(926,588)	0	0	0	0	0
2018	(3,154,057)	5.0	(630,811)	(630,813)	0	0	0	0
2019	5,448,325	5.0	1,089,665	1,089,665	1,089,665	0	0	0
2020	2,883,663	5.0	576,733	576,733	576,733	576,731	0	0
2021	(21,333,480)	5.0	(4,266,696)	(4,266,696)	(4,266,696)	(4,266,696)	(4,266,696)	0



Schedule of Contributions

Year Ending September 30,	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined contribution	\$7,076,893	\$7,325,476	\$7,162,732	\$7,101,487	\$6,791,358	\$6,250,448	\$5,988,776	\$6,078,794	\$5,851,503	\$5,064,882
Contributions in relation to the actuarially determined contribution	7,076,893	<u>7,325,476</u>	<u>7,162,732</u>	7,101,487	<u>6,791,358</u>	6,250,448	<u>5,988,776</u>	6,078,794	<u>5,851,503</u>	<u>5,064,882</u>
Contribution deficiency (excess)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Covered-employee payroll	\$14,299,453	\$14,003,420	\$13,099,674	\$12,564,427	\$11,728,068	\$12,036,803	\$11,680,780	\$10,816,447	\$10,555,759	\$10,414,292
Contributions as a percentage of covered-employee payroll	49.49 %	52.31 %	54.68 %	56.52 %	57.91 %	51.93 %	51.27 %	56.20 %	55.43 %	48.63 %

Notes to Schedule

Contributions in relation to the actuarially determined contribution shown above assumes that the City contributed the actuarially determined contribution for the fiscal year ending September 30, 2022 as shown in the October 1, 2020 actuarial valuation of the Plan. Covered-employee payroll for the fiscal year ending September 30, 2022 equals that estimated in the October 1, 2020 actuarial valuation.

Actuarially determined contributions are calculated based on the valuation as of the beginning of the year prior to the fiscal year in which contributions are due.

Methods and assumptions used to determine contributions for the year ending September 30, 2022:

Actuarial cost method Entry age

Amortization method Level percent of pay, closed

Remaining amortization period 25 years

Asset valuation method 5-year smoothed market

Inflation 2.5 %

Salary increases 12% to 5%, including inflation

Investment rate of return 7.7%, net of investment expenses, including inflation

Retirement age See "Description of Assumptions and Methods" for the assumed retirement age assumption

Mortality Mortality rates as used in the actuarial valuation of the Florida Retirement System for special risk, as required by state statute.



Schedule of Investment Returns

Year Ending September 30,	Annual money-weighted rate of return net of investment expense
2021	21.5 %
2020	6.3 %
2019	4.5 %
2018	10.3 %
2017	11.8 %
2016	10.4 %
2015	0.5 %
2014	10.5 %
2013	16.0 %

19.4 %

2012

Plan Membership Statistics

Year Beginning October 1,	2020	2019
Inactive members or beneficiaries currently receiving benefits	131	132
Inactive members entitled to but not yet receiving benefits	0	0
Active members	<u>132</u>	<u>122</u>
Total number of members	<u> 263</u>	<u>254</u>



Plan Description

This is a description of the Plan provisions used to create the October 1, 2020 actuarial valuation of the Plan.

Plan Type: Single-employer Defined Benefit Pension Plan

Plan Administrator: The Board of Trustees

<u>Board Composition:</u> The trustees consist of five members which may include participants who have at least 18 months remaining in the DROP at the time they take office, none who are elected city officials, and who are selected as follows:

- (a) Two members who are elected current members of the plan,
- (b) Two members who are legal residents of the city and current or former city employees who are vested in the Plan, and
- (c) One member chosen by a majority of the previous four members.

Legal Authority: The Plan was established and is amended by local ordinance.

<u>Funding Requirements:</u> Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended by ordinance.

Effective Dates: The Plan was most recently amended by Ordinance No. 124-X-17-B adopted September 12, 2017. This ordinance amended the Plan to (1) remove the value of the Plan's cost-of-living adjustment from the initial determination of Section 415(b) limits effective September 29, 2016 and (2) requires that members receive estimated calculations before retirement or DROP entry to let them know if they are expected to have benefits in excess of Section 415(b) limitations. For members who retired from employment on and after September 29, 2016 the Section 415(b) limit is adjusted annually after retirement as the Internal Revenue Service releases new calendar year limits under Section 415(d).

Prior to this the last amendment to the Plan was Ordinance No. 124-X-16-C effective July 12, 2016.

Plan Year: The 12-month period from October 1st to the following September 30th.

<u>Member:</u> Full-time firefighters become Members immediately upon hire.

<u>Actuarial Equivalence</u>: Effective April 27, 2010 under Ordinance No. 124-X-10-A, Actuarial Equivalence is based on an 8.0% interest rate, RP-2000 static mortality table (unisex 50/50) projected to 2010 using scale AA. The disabled mortality table is used for disability retirees.

<u>Credited Service:</u> Service with the City as a full-time salaried firefighter where Member contributions are made. Completed months of partial years of service are included in the determination of Credited Service.

Members with at least ten years of service who enter the DROP or retire on or after September 25, 2012 may purchase up to four years of active service in the U.S. Armed Forces or service worked as a full-time firefighter as defined under Florida Statutes section 175.032(8)(a) with another governmental entity prior to employment with the City provided the Member has not received and will not receive a benefit from another retirement plan based on such service. The total combined purchase of prior governmental



and military service may not exceed four years. Payment for the purchase must be made in a cash lump sum or a direct transfer of funds from a member's account in the city's 457 plan.

<u>Vesting:</u> 100% upon earning ten years of Credited Service.

<u>Salary</u>: Total actual fixed cash compensation paid yearly for services rendered to the City as a firefighter including regular pay, overtime (limited to 300 hours per year effective October 1, 2012), holiday and other payroll cash incentives and general monthly expense allowances. Lump sum payments of accrued benefits upon termination of employment are not included in Salary. Auto allowances, uniform allowances, mileage and travel reimbursements, and income from private details are not includable in Salary.

<u>Employee Contributions:</u> Employee contribution rates are as follows for members hired before September 25, 2012.

<u>Effective</u>	% of Salary	
11/13/2012	10.63%	
09/25/2012	9.95%	
01/01/2004	10.63%	*

*Any cost sharing provisions in place prior to October 1, 2008 where employees share in contribution increases in excess of 19.2% of budgeted payroll are no longer applicable. Prior to October 1, 2008, Employee Contributions were 10.63% plus 50% of the excess of City contributions over 19.2%.

For Members hired or rehired on or after September 25, 2012, 10.63% of Salary (prior to November 13, 2012 9.0% of Salary).

A Member who terminates non-vested is entitled to refund of accumulated Employee Contributions without interest.

Vested Members who terminate employment prior to being eligible to receive an annuity may leave their accumulated contributions in the fund, and upon Early or Normal Retirement Age begin receipt of pension payments.

<u>Average Final Compensation:</u> Prior to October 1, 2004, average of Salary for the five highest years. Effective October 1, 2004, average of Salary for the three highest consecutive years, or the five highest years out of the last 10 years of Credited Service, whichever is greater.

Normal Retirement Age: For Members hired before September 25, 2012, prior to January 1, 2004, age 50 and completion of at least 10 years of Credited Service. On and after January 1, 2004, the earliest of (i) age 45 and completion of 25 years of Credited Service, (ii) age 48 and completion of 21 years of Credited Service (which may be accelerated one year to age 47 and completion of 20 years of Credited Service), or (iii) age 50 and completion of 10 years of Credited Service.

For Members hired or rehired on or after September 25, 2012, the earlier of (i) age 55 and completion of 10 years of Credited Service or (ii) age 52 and completion of 25 years Credited Service.

Normal Retirement Benefit: The Accrued Benefit.

<u>Accrued Benefit:</u> For Members hired prior to September 25, 2012, prior to January 1, 2004, Members who reached Normal Retirement Age were entitled to a retirement benefit calculated as follows:

4.0% x Average Final Compensation x up to 10 Years Credited Service



Plus

2.0% x Average Final Compensation x for Credited Service over 10 Years

For Members hired prior to September 25, 2012 who retire or terminate employment on or after January 1, 2004 the benefit formula is revised to a maximum of 80% of Average Final Compensation under the following:

3.0% x Average Final Compensation x up to 15 Years Credited Service

Plus

3.5% x Average Final Compensation x for Credited Service from 15 to 25 Years

Any Member who was actively employed on October 1, 2001 and retires or enters the DROP after January 1, 2004 is due a benefit based on the greater of these two benefit formulas. Members who were not employed on October 1, 2001 and hired prior to September 25, 2012 receive a benefit only under the formula in effect January 1, 2004.

For Members hired or rehired on and after September 25, 2012, the Accrued Benefit is defined under the following where no more than 80% of Average Final Compensation is payable:

3.0% x Average Final Compensation x up to 25 Years Credited Service

Plus

1.0% x Average Final Compensation x for Credited Service from 25 to 30 Years

In no event will the Accrued Benefit be less than 2.0% x Average Final Compensation x Credited Service.

Effective October 1, 2004, the Accrued Benefit is payable as a 10 year certain and continuous annuity. Prior to October 1, 2004 the Accrued Benefit was defined payable as a single life annuity.

<u>Early Retirement Age:</u> For Members hired before September 25, 2012, age 47 and completion of at least 10 years of Credited Service. For Members hired or rehired on or after September 25, 2012, age 50 and completion of at least 10 years of Credited Service.

<u>Early Retirement Benefit:</u> For Members hired before September 25, 2012, the Accrued Benefit reduced actuarially from Normal Retirement Age. However, in no event will the reduction for Early Retirement exceed 3% per year by which the commencement of benefits precedes the Normal Retirement Age. For Members hired on or after September 25, 2012, the Accrued Benefit reduced 3% per year by which the commencement of benefits precedes age 55.

<u>Service Incurred Disability Retirement:</u> Members who become totally and permanently disabled as a direct result from the performance of service-related duties to the City are a due a benefit commencing on the earlier of (i) the first day of the month coincident with or next following the date of disability, or (ii) the 90th day following the day the Member submitted a completed application for disability. Any Plan Member receiving Service Incurred Disability Retirement may elect to convert to Normal or Early Retirement upon meeting all eligibility criteria. Plan Members receiving disability retirement benefits may elect to continue making regular contributions to the Plan, and based on such contributions earn additional service credit toward Normal or Early Retirement benefits.

The amount of the service incurred disability benefit is 75% of the Member's Salary in effect on the date of disability, subject to offsets not more than would reduce the service incurred disability benefit below the greater of the Member's Accrued Benefit or 42% x Average Final Compensation. The applicable offset to the service incurred disability benefit includes any disability benefits paid by workers'



compensation (excluding any COLA on these benefits) to the extent permitted by law and to the extent that the total of these benefits exceeds the Member's average periodic wage, subject to annual benefit adjustments. Special rules apply in the case of a lump sum settlement paid by workers' compensation.

The monthly service incurred disability benefit is adjusted annually for persons who first qualify for Service Incurred Disability on or after January 11, 2005, based on the sum of the following components calculated for the previous calendar year:

- (a) The service incurred disability retirement benefit paid from the Plan;
- (b) Worker's compensation disability benefits (excluding medical reimbursements) minus any COLA adjustments since the benefit first went into effect, to the extent permitted by law;
- (c) Any Salary (excluding any sick and vacation pay received from the City pursuant to the disability) received by a Member from the date of disability; and
- (d) Net earnings from self-employment income.

The Service Incurred Disability Retirement benefit is reduced if the Member's pre-disability Salary is less than the sum of the above components. The monthly reduction in the Service Incurred Disability Retirement benefit is 1/12 of (50% of the first \$10,000 in excess plus 100% of the excess which exceeds \$10,000).

If the sum of the four components is less than the Service Incurred Disability Retirement benefit computed prior to any applicable offsets, then the benefit will be increased. The monthly increase in the Service Incurred Disability Retirement benefit is 1/12 of the amount of the Service Incurred Disability Retirement benefit prior to offsets minus the sum of the four components.

<u>Nonservice Incurred Disability Retirement:</u> Members who become totally and permanently disabled not in the line of duty are entitled to Nonservice Incurred Disability Retirement upon earning at least 10 years of Credited Service.

The benefit payable to any Member who becomes totally and permanently disabled not in the line of duty is the Accrued Benefit, not less than 25% of Average Final Compensation. This benefit is payable until the Member recovers, begins receipt of disability benefits from Social Security, dies or reaches his Normal or Early Retirement Age, at which time the Member elects to receive Normal or Early Retirement Benefits in lieu of disability benefits.

Prior to October 1, 2004, there was a maximum Nonservice Incurred Disability Retirement benefit which was 50% of Average Final Compensation.

<u>Death Benefits:</u> The designated beneficiary of a nonvested Member is due a refund of the Employee Contributions without interest. The designated beneficiary of a vested Member who dies prior to retirement is entitled to receive either the refund of Employee Contributions without interest, or an amount equal to the benefit that would have been payable as if the Member terminated on the date of death, survived to the earliest retirement age, retired under the optional form of benefit selected by the Member, and died the next day. If no optional form of benefit was selected then the Death Benefit is payable for a period of 10 years. However, any Member who has attained a vested interest in the Plan and who becomes eligible for retirement and continues to be employed shall be construed to have selected the option which affords the surviving spouse or joint pensioner the greatest amount of benefits.

Optional Forms of Benefit: Effective October 1, 2004, the Accrued Benefit described above is payable in the form of a 10 year certain and continuous annuity. Prior to October 1, 2004, the Accrued Benefit was payable in the form of a single life annuity. Members may optionally choose an actuarially equivalent joint and survivor annuity (with 50%, 66 2/3, 75% or 100% continuance). The joint and survivor option may include an actuarially equivalent "pop-up" feature such that if the Member's joint pensioner predeceases the Member, the survivorship benefit is deemed cancelled and the Member's annuity is recalculated as an actuarially equivalent life annuity effective on the first day of the month following the death of the Member's joint pensioner.



1999 Retirement Incentive Program: Members who, by November 30, 1999, had earned at least 20 years of Credited Service and had reached Normal Retirement Age (then age 50 with 10 years of Credited Service) were eligible to participate in a Retirement Incentive Program by making an election during a window period of 30 days commencing November 1, 1999. Members who elected to participate were required to terminate employment no later than November 30, 1999 unless they elected to participate in the DROP (where they were required to terminate employment no later than November 30, 2000). The monthly retirement benefit was based on the years of Credited Service and Average Final Compensation on their date of termination or DROP using the benefit formula in effect at that time. Eligible employees who elected this Retirement Incentive Program received, in addition to any other benefits, 18 months of retirement benefits payable at retirement. However, for those who entered the DROP as a part of this Retirement Incentive Program, 18 months of retirement benefit payments were paid into the employee's DROP account at the beginning of the DROP period. Interest was earned in the DROP account at the assumed rate of investment return used for valuation purposes. Under this Retirement Incentive Program, a 2% COLA commenced one year after termination of employment.

2002 Retirement Incentive Program: Members who, by April 15, 2002, were (i) at least age 46 and had completed at least 26 years of Credited Service, or (ii) at least age 50 and had completed at least 10 years of Credited Service, were eligible to participate in the Retirement Incentive Program by making an election during a window period of 30 calendar days commencing February 27, 2002. Members who elected to participate were required to terminate employment no later than April 15, 2002 unless they elected to participate in the DROP (36 months total) or BAC-DROP (up to 18 months reducing the future time in the DROP so no more than 36 months total in BAC-DROP plus the DROP) where they were required to terminate employment no later than April 15, 2005. Members who elected to participate were entitled to unreduced retirement benefits based on the years of Credited Service and Average Final Compensation on their date of retirement using the benefit formula in effect at that time, plus an additional 3% was added to the benefit multiplier. Under the BAC-DROP option, a Member receives a lump sum distribution of up to 18 months of retirement benefits upon entry into the DROP, and the Member's monthly pension is then actuarially reduced to reflect the cost to the Plan for this lump sum distribution. These Members were also eligible to elect an optional COLA.

Note: Any firefighter who retired on or after October 1, 2001 but who is still employed with the City and in the DROP on the date the April 15, 2002 Retirement Incentive Program was adopted may elect by March 28, 2002 to have benefits refigured under the 2002 Retirement Incentive Program.

<u>Deferred Retirement Option Plan (DROP):</u> Effective September 30, 2001, Members are eligible to enter the DROP upon attaining their Normal Retirement Age.

Effective September 25, 2012, the maximum DROP participation duration is 84 months. Members who commenced participation in the DROP on or after October 1, 2010 and who were participating in the DROP on September 25, 2012 were allowed to extend their DROP participation from 72 to 84 months if the Member agreed all DROP account earnings are recomputed retroactively to the date of DROP using an annual interest rate of 6.0%.

Effective June 10, 2008, the maximum DROP participation duration was 72 months where Members participating in the DROP were allowed to extend their DROP participation from 60 to 72 months. Effective January 1, 2004, the maximum DROP participation duration was 60 months where Members participating in the DROP were allowed to extend their DROP participation from 36 to 60 months. Prior to January 1, 2004 the maximum DROP participation was 36 months.

Effective January 1, 2004, Members were allowed to elect to "BAC-DROP" for up to 18 months, which reduced the maximum 60 month (72 month effective June 10, 2008) DROP period by the same amount of time elected under the BAC-DROP. Effective September 25, 2012 Members may elect to "BAC-DROP" for up to 24 months, which reduces the 84 month DROP period by the same amount of time elected under the BAC-DROP. Under the BAC-DROP option, a Member receives a lump sum distribution of up to 18 months (24 effective September 25, 2012) of retirement benefits upon entry into



the DROP, and the Member's monthly pension is then actuarially reduced to reflect the cost to the Plan for this lump sum distribution.

Effective January 1, 2004 and prior to May 17, 2005, for every year (or portion thereof) of deferred entry into the DROP after the 12 month period following their "earliest" Normal Retirement Age, the maximum DROP period is reduced by one year. On and after May 17, 2005, Members who elect to participate in the DROP within the first five years following their "earliest" Normal Retirement Age incur no reduction to the maximum 60 month DROP period (72 month effective June 10, 2008 and 84 month effective September 25, 2012) for DROP entry deferral. However, the maximum DROP period is reduced for Members who elect to participate in the DROP beyond five years following their "earliest" Normal Retirement Age. For members hired prior to September 25, 2012, the Normal Retirement Age is the earliest of age 45 with 20 years of service, age 48 with 21 years of service, and age 50 with 10 years of service where age 48 with 21 years of service may be accelerated to age 47 with 20 years of service. Note that age 47 with 20 years of service is not taken into account for the "earliest" Normal Retirement Age for purposes of determination of DROP period reduction.

DROP participants are not eligible for death or disability benefits. The Accrued Benefit is frozen and no further Employee Contributions are payable at DROP entry. For DROP entrants prior to September 25, 2012, the Accrued Benefit is accumulated with interest at the same rate as the investment earnings assumption for the funding valuation of the Plan. Effective September 25, 2012, for Members who commenced participation in the DROP on or after October 1, 2010 and elected to extend DROP participation to 84 months (11 such Members) and for new DROP entrants effective September 25, 2012, interest crediting is based on an annual interest rate of 6.0%. No interest is credited after the end of the DROP period.

Cost of Living Adjustment (COLA): Effective September 30, 2001, an annual 2% COLA commences at the end of the 4th year following initial receipt of retirement benefits for all Members who reach Early or Normal Retirement Age and begin receipt of benefits (either directly or through the DROP) after September 30, 2001, and the beneficiaries of such Members. Effective January 1, 2004, COLA payments under this provision are deferred 12 months after separation from employment for Members who participate in the DROP for more than 3 years.

Members who retire or terminate employment on or after January 1, 2004 may elect, in lieu of the 2% COLA described above, a 1% annual COLA commencing 12 months after initial receipt of retirement benefits, which would increase to a 2% annual COLA at the end of the 6th year following initial receipt of retirement benefits.

COLAs were also payable as part of the Retirement Incentive Programs. See the description of the Retirement Incentive Programs for a description of the associated COLAs.

Ordinance No. 124-X-13-B adopted effective August 13, 2013 increased the annual COLA effective October 1, 2013 to 2.5% commencing at the end of the seventh year following initial receipt of retirement benefits for firefighters who terminate employment and begin receiving normal retirement benefits or enter the DROP on or after October 1, 2010, and the beneficiaries of such members. Note that for DROP members the "initial receipt of retirement benefits" has historically been interpreted to mean the date of DROP.

<u>Supplemental Benefit:</u> Ordinance No. 124-X-09-A adopted October 13, 2009 amended Plan provisions to provide for a Supplemental Benefit for firefighters. Effective October 1, 2009, firefighters who terminate employment and begin receiving normal or early retirement benefits on or after October 1, 2007 receive a Supplemental Benefit payable monthly which is:

- The lesser of [(i) \$25 x Credited Service and (ii) \$500] payable until age 65
- The lesser of [(i) \$15 x Credited Service and (ii) \$300] payable from age 65 for life



This supplemental benefit is not increased for any COLAs defined under the Plan and is only payable after DROP exit (to members who entered the DROP on or after October 1, 2007). Members who terminate employment on or after October 1, 2007 due a deferred vested benefit receive the supplement upon retirement. Members who retire under disability retirement provisions are not eligible to receive the supplement.

Each retiree's supplemental benefit is determined on an annual basis, and the amount of the supplemental benefit may vary from year to year or the supplemental benefit may be discontinued entirely depending on required benefit increases from the State and available funding.

<u>Share Plan:</u> Ordinance No. 124-X-16-C adopted July 12, 2016 amended Plan provisions to indicate that Chapter 175 contributions received each fiscal year in excess of \$2,055,127 may be used to provide Share Plan benefits.



Actuarial Assumptions and Methods

This is a description of the Actuarial Assumptions and Methods used to create the October 1, 2020 actuarial valuation of the Plan.

<u>Assumed Rate of Investment Return:</u> 7.7% per year net of investment expenses (changed from 7.8% used in the prior valuation).

Salary Increase - Total Payroll: 3.0% per year

<u>Salary Increase – Individual:</u> The following salary rate increases are assumed:

<u>Service</u>	<u>Rate</u>
0-4	12.00%
5-9	6.00%
10-14	5.50%
15-19	5.25%
>=20	5.00%

<u>Mortality:</u> The mortality table has been changed from the prior valuation. As of October 1, 2020, the mortality table is that used for special risk employees in the valuation of the Florida Retirement System (FRS) as of July 1, 2019 and 2020, as required by state statue.

The following sex distinct tables are used with fully generational mortality improvements using sex distinct Scale MP-2018.

Active: Male: PubS.H-2010(B) male employee set forward 1 year

Female: PubS.H-2010 female employee set forward 1 year

Healthy Retiree: Male: PubS.H-2010(B) male healthy retiree set forward 1 year

Female: PubS.H-2010 female healthy retiree set forward 1 year

The following sex distinct tables are used with no mortality improvement projection.

Disabled Retiree: Male: 80% PubG.H-2010 male disabled retiree

+ 20% PubS.H-2010 male disabled retiree

Female: 80% PubG.H-2010 female disabled retiree

+ 20% PubS.H-2010 female disabled retiree

Juvenile rates are used for ages 15-17.

The active tables reference the healthy retiree rates, above, at ages 80+.

The healthy retiree tables reference the active mortality rates, above, before age 44.

In the prior valuation the mortality table was that used for special risk employees in the valuation of the Florida Retirement System (FRS) as of July 1, 2016, 2017 and 2018, as required by state statute.

Healthy mortality (Pre-retirement):

Males: 10% RP-00 Combined Healthy White Collar +

90% RP-00 Combined Healthy Blue Collar

Females: 100% RP-00 Combined Healthy White Collar

Both male and female rates fully generational using Scale BB



Healthy mortality (Post-retirement):

Males: 10% RP-00 Annuitant White Collar +

90% RP-00 Annuitant Blue Collar

Females: 100% RP-00 Annuitant White Collar

Both male and female rates fully generational using Scale BB

Disabled mortality: Males: 60% RP-00 Disabled Retiree Set Back 4 Years +

40% RP-00 Annuitant White Collar

Females: 60% RP-00 Disabled Retiree Set Forward 2 Yrs +

40% RP-00 Annuitant White Collar

No mortality improvement is assumed for disabled lives.

Retirement: For Members hired prior to September 25, 2012, unisex rates, as follows:

	Service From							
<u>Age</u>	<u>10-13</u>	<u>14-19</u>	20-23	<u>24</u>	<u>25-29</u>	<u>30+</u>		
<=44	0%	0%	0%	0%	0%	0%		
45-46	0%	0%	0%	0%	60%	100%		
47-49	0%	0%	20%	60%	60%	100%		
50-54	10%	10%	20%	20%	20%	100%		
55-59	20%	100%	100%	100%	100%	100%		
60+	100%	100%	100%	100%	100%	100%		

For Members hired on or after September 25, 2012, unisex rates, as follows:

	Service From						
<u>Age</u>	<u>10</u>	<u>11-24</u>	<u>25</u>	<u> 26-29</u>	<u>30+</u>		
<=49	0%	0%	0%	0%	0%		
50	10%	10%	10%	10%	100%		
51	10%	0%	0%	0%	100%		
52	10%	0%	100%	100%	100%		
53	10%	0%	100%	100%	100%		
54	10%	0%	100%	100%	100%		
55+	100%	100%	100%	100%	100%		

Disability: Unisex rates, as follows:

<u>Age</u>	Probability	<u>Age</u>	Probability	<u>Age</u>	Probability	<u>Age</u>	<u>Probability</u>
15-20	0.140%	30	0.180%	40	0.300%	50	1.000%
21	0.142%	31	0.190%	41	0.342%	51	1.110%
22	0.144%	32	0.200%	42	0.384%	52	1.220%
23	0.146%	33	0.210%	43	0.426%	53	1.330%
24	0.148%	34	0.220%	44	0.468%	54	1.440%
25	0.150%	35	0.230%	45	0.510%	55	1.550%
26	0.156%	36	0.244%	46	0.608%	56	1.660%
27	0.162%	37	0.258%	47	0.706%	57	1.770%
28	0.168%	38	0.272%	48	0.804%	58	1.880%
29	0.174%	39	0.286%	49	0.902%	59	1.990%
						60+	0.000%

75% of disabilities are assumed to be service connected.



Termination: As follows:

<u>Service</u>	<u>Rate</u>		
0-1	18.00%		
2-5	8.00%		
6-9	2.25%		
10-19	1.75%		
20+	0.00%		

<u>Plan Expenses:</u> The prior year administrative expense is added to the normal cost.

<u>Marital Assumption:</u> 80% of males are assumed married and 50% of females are assumed married. Husbands are assumed to be four years older than wives.

<u>Funding Method:</u> Entry Age (level percent of salary)

A description of the funding method is found in the October 1, 2020 actuarial valuation report on the page entitled "Glossary of Actuarial Terms."