

OKALOOSA ISLAND FIRE DISTRICT
FIREFIGHTERS' RETIREMENT TRUST FUND

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2020

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2022

GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2020



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

December 2, 2020

Board of Trustees
Okaloosa Island Fire District
Firefighters' Pension Board

Re: Okaloosa Island Fire District Firefighters' Retirement Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Okaloosa Island Fire District Firefighters' Retirement Trust Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. The calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflect laws and regulations issued to date pursuant to the provisions of Chapters 112 and 175, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuations, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuations, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Okaloosa Island Fire District, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot

verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2019. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2020 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

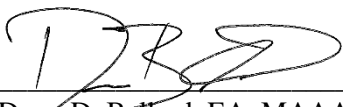
The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.


To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Okaloosa Island Fire District, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighters' Retirement Trust Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

By: 
Drew D. Ballard, EA, MAAA
Enrolled Actuary #20-8193

By: 
Tyler A. Koftan, EA, MAAA
Enrolled Actuary #20-8685

Enclosures

TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	5
	b. Changes Since Prior Valuation	6
	c. Comparative Summary of Principal Valuation Results	7
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	13
	b. Detailed Actuarial (Gain)/Loss Analysis	14
	c. History of Funding Progress	15
	d. Actuarial Assumptions and Methods	16
	e. Glossary	19
	f. Discussion of Risk	21
	g. Partial History of Premium Tax Refunds	24
III	Trust Fund	25
IV	Member Statistics	
	a. Statistical Data	31
	b. Age and Service Distribution	32
	c. Valuation Participant Reconciliation	33
V	Summary of Current Plan	34
VI	Governmental Accounting Standards Board Statements No. 67 and No. 68 Disclosure Information	36

SUMMARY OF REPORT

The regular annual actuarial valuation of the Okaloosa Island Fire District Firefighters' Retirement Trust Fund, performed as of October 1, 2020, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2022.

The contribution requirements, compared with those set forth in the October 1, 2019 actuarial valuation report, are as follows:

Valuation Date	10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2021</u>
Minimum Required Contribution	\$1,136,962	\$1,128,821
Member Contributions (Est.)	114,468	112,727
District And State Required Contribution	1,022,494	1,016,094
State Contribution (Est.) ¹	38,360	38,360
District Required Contribution ²	\$984,134	\$977,734

¹ Represents the amount received in calendar 2020. As per a Mutual Consent Agreement between the Membership and the District, all State Monies received each year will be available to offset the District's required contribution.

² Please note that the District has access to a prepaid contribution of \$404,758.74 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2021.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial gain included more turnover than expected and an investment return of 8.41% (Actuarial Asset Basis) which exceeded the 7.40% assumption. These gains were offset in part by losses associated with an average salary increase of 7.25% which exceeded the 6.12% assumption and inactive mortality experience.

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, the investment return assumption was lowered from 7.40% to 7.30% per year, net of investment-related expenses.

There have been no method changes since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
A. Participant Data			
Actives	19	19	20
Service Retirees	13	13	13
Beneficiaries	1	1	0
Disability Retirees	2	2	3
Terminated Vested	<u>1</u>	<u>1</u>	<u>0</u>
Total	36	36	36
Total Annual Payroll	\$1,300,242	\$1,300,242	\$1,278,766
Payroll Under Assumed Ret. Age	1,300,242	1,300,242	1,278,766
Annual Rate of Payments to:			
Service Retirees	856,408	856,408	843,470
Beneficiaries	12,939	12,939	0
Disability Retirees	64,368	64,368	77,307
Terminated Vested	21,354	21,354	0
B. Assets			
Actuarial Value (AVA) ¹	10,011,642	10,011,642	9,125,502
Market Value (MVA) ¹	10,393,282	10,393,282	9,125,502
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	6,932,511	6,960,729	6,683,929
Disability Benefits	99,595	93,376	92,321
Death Benefits	36,837	49,669	47,946
Vested Benefits	631,508	619,981	624,045
Refund of Contributions	50,690	50,530	47,692
Service Retirees	12,207,850	12,457,895	12,351,623
Beneficiaries	131,861	131,734	0
Disability Retirees	741,737	708,199	855,350
Terminated Vested	74,657	73,333	0
Share Plan Balances ¹	<u>0</u>	<u>0</u>	<u>0</u>
Total	20,907,246	21,145,446	20,702,906

C. Liabilities - (Continued)	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Present Value of Future Salaries	13,653,136	13,546,160	13,919,860
Present Value of Future Member Contributions	1,092,251	1,083,693	1,113,589
Normal Cost (Retirement)	261,635	261,620	270,331
Normal Cost (Disability)	6,726	6,335	6,225
Normal Cost (Death)	1,801	2,414	2,379
Normal Cost (Vesting)	29,808	29,257	28,678
Normal Cost (Refunds)	<u>7,250</u>	<u>7,239</u>	<u>7,450</u>
Total Normal Cost	307,220	306,865	315,063
Present Value of Future Normal Costs	2,957,803	2,927,959	3,138,822
Accrued Liability (Retirement)	4,417,385	4,468,301	3,992,068
Accrued Liability (Disability)	39,436	37,538	33,915
Accrued Liability (Death)	19,399	26,505	24,031
Accrued Liability (Vesting)	307,128	303,992	299,815
Accrued Liability (Refunds)	9,990	9,990	7,282
Accrued Liability (Inactives)	13,156,105	13,371,161	13,206,973
Share Plan Balances ¹	<u>0</u>	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability (EAN AL)	17,949,443	18,217,487	17,564,084
Unfunded Actuarial Accrued Liability (UAAL)	7,937,801	8,205,845	8,438,582
Funded Ratio (AVA / EAN AL)	55.8%	55.0%	52.0%

D. Actuarial Present Value of Accrued Benefits	New Assump <u>10/1/2020</u>	Old Assump <u>10/1/2020</u>	<u>10/1/2019</u>
Vested Accrued Benefits			
Inactives + Share Plan Balances ¹	13,156,105	13,371,161	13,206,973
Actives	1,972,166	1,981,195	1,598,032
Member Contributions	<u>747,428</u>	<u>747,428</u>	<u>699,587</u>
Total	15,875,699	16,099,784	15,504,592
Non-vested Accrued Benefits	<u>669,121</u>	<u>688,045</u>	<u>669,012</u>
Total Present Value			
Accrued Benefits (PVAB)	16,544,820	16,787,829	16,173,604
Funded Ratio (MVA / PVAB)	62.8%	61.9%	56.4%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	(243,009)	0	
Plan Experience	0	380,221	
Benefits Paid	0	(928,489)	
Interest	0	1,162,493	
Other	<u>0</u>	<u>0</u>	
Total	(243,009)	614,225	

	New Assump	Old Assump	
Valuation Date	10/1/2020	10/1/2020	10/1/2019
Applicable to Fiscal Year Ending	<u>9/30/2022</u>	<u>9/30/2022</u>	<u>9/30/2021</u>

E. Pension Cost

Normal Cost ²	\$338,081	\$337,853	\$347,173
Administrative Expenses ²	46,995	47,017	60,027
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 10/1/2020) ²	751,886	729,940	721,621
Minimum Required Contribution	1,136,962	1,114,810	1,128,821
Expected Member Contributions ²	114,468	114,524	112,727
Expected District and State Contribution	1,022,494	1,000,286	1,016,094

F. Past Contributions

Plan Years Ending:	<u>9/30/2020</u>
District and State Requirement	947,052
Actual Contributions Made:	
District	872,214
State	<u>74,838</u>
Total	947,052

G. Net Actuarial (Gain)/Loss (157,483)

¹ The asset values and liabilities include accumulated Share Plan Balances as of 9/30/2020 and 9/30/2019.

² Contributions developed as of 10/1/2020 displayed above have been adjusted to account for assumed salary increase and interest components.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2020	7,937,801
2021	7,784,131
2022	7,604,945
2027	6,245,437
2031	4,431,503
2036	864,001
2040	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2020	7.25%	6.12%
Year Ended 9/30/2019	4.91%	6.19%
Year Ended 9/30/2018	5.99%	6.06%
Year Ended 9/30/2017	5.13%	7.00%
Year Ended 9/30/2016	2.81%	7.00%

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

	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended 9/30/2020	12.46%	8.41%	7.40%
Year Ended 9/30/2019	3.53%	7.01%	7.50%
Year Ended 9/30/2018	7.60%	5.61%	7.50%
Year Ended 9/30/2017	12.54%	6.30%	7.75%
Year Ended 9/30/2016	4.60%	5.81%	7.75%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2020	\$1,300,242
	10/1/2010	1,072,093
(b) Total Increase		21.28%
(c) Number of Years		10.00
(d) Average Annual Rate		1.95%

STATEMENT BY ENROLLED ACTUARY

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



Drew D. Ballard, EA, MAAA
Enrolled Actuary #20-8193

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

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

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

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

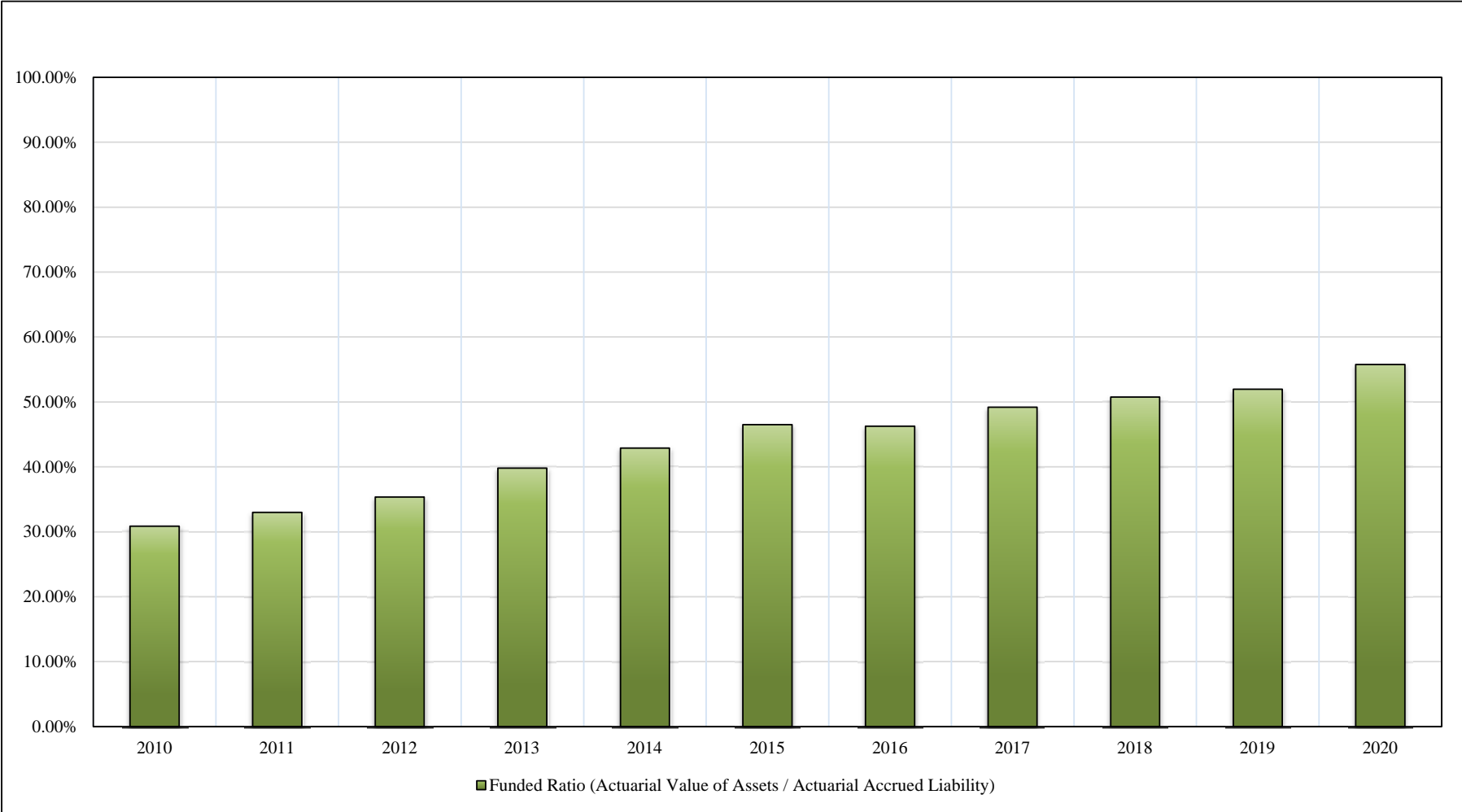
(1) Unfunded Actuarial Accrued Liability as of October 1, 2019	\$8,438,582
(2) Sponsor Normal Cost developed as of October 1, 2019	212,762
(3) Expected administrative expenses for the year ended September 30, 2020	54,475
(4) Expected interest on (1), (2) and (3)	642,215
(5) Sponsor contributions to the System during the year ended September 30, 2020	947,052
(6) Expected interest on (5)	37,654
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2020 (1)+(2)+(3)+(4)-(5)-(6)	8,363,328
(8) Change to UAAL due to Assumption Change	(268,044)
(9) Change to UAAL due to Actuarial (Gain)/Loss	(157,483)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2020	7,937,801

<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2020 Amount</u>	<u>Amortization Amount</u>
UAAL Fresh Start	10/1/2017	17	8,367,884	718,321
Assum. Change	10/1/2017	17	307,399	26,388
Benefit Change	10/1/2017	17	(682,406)	(58,580)
Actuarial Loss	10/1/2018	18	202,969	16,818
Benefits Change	10/1/2018	18	(770)	(64)
Actuarial Gain	10/1/2019	19	(21,671)	(1,738)
Asmp/Mthd Change	10/1/2019	19	189,923	15,234
Actuarial Gain	10/1/2020	20	(157,483)	(12,260)
Assump Change	10/1/2020	20	(268,044)	(20,867)
			7,937,801	683,252

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2019	\$8,438,582
(2) Expected UAAL as of October 1, 2020	8,363,328
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(95,410)
Salary Increases	71,242
Active Decrements	(120,275)
Inactive Mortality	65,292
Other	<u>(78,332)</u>
Increase in UAAL due to (Gain)/Loss	(157,483)
Assumption Changes	<u>(268,044)</u>
(4) Actual UAAL as of October 1, 2020	\$7,937,801

HISTORY OF FUNDING PROGRESS



ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: PubS.H-2010 (Below Median) for Employees, set forward one year. Prior year assumption: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: PubS.H-2010 (Below Median) for Employees, set forward one year. Prior year assumption: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Healthy Retiree Lives:

Female: PubS.H-2010 for Healthy Retirees, set forward one year. Prior year assumption: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: PubS.H-2010 (Below Median) for Healthy Retirees, set forward one year. Prior year assumption: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Beneficiary Lives:

Female: PubG.H-2010 (Below Median) for Healthy Retirees. Prior year assumption: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: PubG.H-2010 (Below Median) for Healthy Retirees, set back one year. Prior year assumption: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Disabled Lives:

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

Prior year assumption (Female): 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale

Prior year assumption (Male): 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

All rates are projected generationally with Mortality Improvement Scale MP-2018.

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2019 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate

7.30% (prior year 7.40%) per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Salary Increases

<u>Service</u>	<u>Increase</u>
<3	7.00%
3-6	6.50
7-9	6.00
10-14	6.00
15+	5.50

The assumed rates were approved in conjunction with an actuarial experience study dated August 2017.

Payroll Growth

1.95% (prior year 2.94%) for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Administrative Expenses

\$42,705 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

New UAAL amortization bases are amortized over 20 years.

Retirement Age

Age 55 and 10 years of Credited Service, or age 52 and 25 years of Credited Service. The assumed rates were approved in conjunction with an actuarial experience study dated August 2017.

Early Retirement

Commencing with the earliest Early Retirement Age (50), Members are assumed to retire with an immediate subsidized benefit at the rate of 2% per year. The assumed rates were approved in conjunction with an actuarial experience study dated August 2017.

Disability Rate

Sample rates below (1201). It is assumed that 90% of Disability Retirees are service related. This assumption is consistent with those used by other plans containing Florida municipal Firefighters.

<u>Age</u>	<u>Rate</u>
20	0.03%
30	0.04
40	0.07
50	0.18

Termination Rate

<u>Service</u>	<u>Rate</u>
0	9.0%
1	8.0
2	7.0
3	6.0
4	5.0
5-9	4.0
10+	2.0

The assumed rates were approved in conjunction with an actuarial experience study dated August 2017.

Funding Method

Entry Age Normal Actuarial Cost Method. The following loads are applied for determination of the dollar contribution requirement:

Interest – A half year, based on the 7.30% assumption
Salary – A full year, based on the current 6.17% average assumption

Asset Valuation Method

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

GLOSSARY

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

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

(a) The normal cost accrual rate equals:

(i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by

(ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

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

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded. Under the Entry Age Normal cost method, it is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.

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

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

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

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

DISCUSSION OF RISK

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

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

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

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

Impact of Plan Maturity on Risk

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

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

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 190.0% on October 1, 2010 to 111.8% on October 1, 2020, indicating that the plan has been maturing during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 73.3%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 30.9% on October 1, 2010 to 55.8% on October 1, 2020 during the period.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from 15.7% on October 1, 2010 to 0.9% on October 1, 2020. The current Net Cash Flow Ratio of 0.9% indicates that contributions are generally covering the plan's benefit payments and administrative expenses.

It is important to note that the actuary has identified the risks in this section as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2010</u>	<u>10/1/2015</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
<u>Support Ratio</u>				
Total Actives	19	18	20	19
Total Inactives ¹	10	12	16	17
Actives / Inactives ¹	190.0%	150.0%	125.0%	111.8%
 <u>Asset Volatility Ratio</u>				
Market Value of Assets (MVA)	3,543,478	6,432,159	9,125,502	10,393,282
Total Annual Payroll	1,072,093	1,149,018	1,278,766	1,300,242
MVA / Total Annual Payroll	330.5%	559.8%	713.6%	799.3%
 <u>Accrued Liability (AL) Ratio</u>				
Inactive Accrued Liability	6,107,089	8,756,492	13,206,973	13,156,105
Total Accrued Liability (EAN)	11,641,640	14,075,964	17,564,084	17,949,443
Inactive AL / Total AL	52.5%	62.2%	75.2%	73.3%
 <u>Funded Ratio</u>				
Actuarial Value of Assets (AVA)	3,592,929	6,546,079	9,125,502	10,011,642
Total Accrued Liability (EAN)	11,641,640	14,075,964	17,564,084	17,949,443
AVA / Total Accrued Liability (EAN)	30.9%	46.5%	52.0%	55.8%
 <u>Net Cash Flow Ratio</u>				
Net Cash Flow ²	557,794	172,781	(11,030)	94,139
Market Value of Assets (MVA)	3,543,478	6,432,159	9,125,502	10,393,282
Ratio	15.7%	2.7%	-0.1%	0.9%

¹ Excludes terminated participants awaiting a refund of member contributions.

² Determined as total contributions minus benefit payments and administrative expenses.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	4,098.53	_____%
1999	20,782.77	407.1%
2000	8,815.32	-57.6%
2001	11,419.94	29.5%
2002	14,476.74	26.8%
2003	18,698.15	29.2%
2004	16,018.82	-14.3%
2005	19,156.56	19.6%
2006	28,570.91	49.1%
2007	43,058.82	50.7%
2008	54,556.78	26.7%
2009	38,584.60	-29.3%
2010	53,131.49	37.7%
2011	52,025.28	-2.1%
2012	51,623.31	-0.8%
2013	54,472.08	5.5%
2014	56,846.21	4.4%
2015	43,485.34	-23.5%
2016	45,330.27	4.2%
2017	36,659.56	-19.1%
2018	37,865.00	3.3%
2019	36,478.11	-3.7%
2020	38,359.90	5.2%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2020

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	177,862.70	177,862.70
Total Cash and Equivalents	177,862.70	177,862.70
Receivables:		
Member Contributions in Transit	4,310.91	4,310.91
State Contributions	38,359.90	38,359.90
Total Receivable	42,670.81	42,670.81
Investments:		
Mutual Funds:		
Fixed Income	2,260,686.49	2,293,071.10
Equity	5,850,817.89	7,354,465.88
Pooled/Common/Commingled Funds:		
Real Estate	925,854.71	930,279.96
Total Investments	9,037,359.09	10,577,816.94
Total Assets	9,257,892.60	10,798,350.45
 <u>LIABILITIES</u>		
Payables:		
Administrative Expenses	309.40	309.40
Prepaid District Contribution	404,758.74	404,758.74
Total Liabilities	405,068.14	405,068.14
NET POSITION RESTRICTED FOR PENSIONS	8,852,824.46	10,393,282.31

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2020
Market Value Basis

ADDITIONS

Contributions:			
Member		99,965.00	
District		872,213.99	
State		74,838.01	
Total Contributions			1,047,017.00
Investment Income:			
Net Realized Gain (Loss)	87,035.10		
Unrealized Gain (Loss)	869,983.27		
Net Increase in Fair Value of Investments		957,018.37	
Interest & Dividends		252,212.54	
Less Investment Expense ¹		(35,589.09)	
Net Investment Income			1,173,641.82
Total Additions			2,220,658.82
<u>DEDUCTIONS</u>			
Distributions to Members:			
Benefit Payments		920,776.32	
Refunds of Member Contributions		7,713.01	
Total Distributions			928,489.33
Administrative Expense			24,388.96
Total Deductions			952,878.29
Net Increase in Net Position			1,267,780.53
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			9,125,501.78
End of the Year			10,393,282.31

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

ACTUARIAL ASSET VALUATION
September 30, 2020

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Gain/(Loss)	<u>Gains/Losses Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2020	2021	2022	2023	2024
09/30/2020	477,050	381,640	286,230	190,820	95,410	0
Total		381,640	286,230	190,820	95,410	0

<u>Development of Investment Gain/Loss</u>	
Market Value of Assets, including Prepaid Contributions, 09/30/2019	9,202,402
Contributions Less Benefit Payments & Admin Expenses	421,998
Expected Investment Earnings*	696,592
Actual Net Investment Earnings	1,173,642
2020 Actuarial Investment Gain/(Loss)	<u>477,050</u>

*Expected Investment Earnings = $0.074 * (9,202,402 + 0.5 * 421,998)$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2020	10,393,282
(2) Gains/(Losses) Not Yet Recognized	381,640
(3) Actuarial Value of Assets, 09/30/2020, (1) - (2)	<u>10,011,642</u>
(A) 09/30/2019 Actuarial Assets, including Prepaid Contributions:	9,202,402
(I) Net Investment Income:	
1. Interest and Dividends	252,213
2. Realized Gain (Loss)	87,035
3. Unrealized Gain (Loss)	869,983
4. Change in Actuarial Value	(381,640)
5. Investment Expenses	(35,589)
Total	<u>792,002</u>
(B) 09/30/2020 Actuarial Assets:, including Prepaid Contributions:	10,416,401
Actuarial Assets Rate of Return = $2I/(A+B-I)$:	8.41%
Market Value of Assets Rate of Return:	12.46%
10/01/2020 Limited Actuarial Assets (not including Prepaid):	10,011,642
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	95,410

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
 SEPTEMBER 30, 2020
 Actuarial Asset Basis

REVENUES

Contributions:		
Member	99,965.00	
District	872,213.99	
State	74,838.01	
Total Contributions		1,047,017.00
Earnings from Investments:		
Interest & Dividends	252,212.54	
Net Realized Gain (Loss)	87,035.10	
Unrealized Gain (Loss)	869,983.27	
Change in Actuarial Value	(381,640.00)	
Total Earnings and Investment Gains		827,590.91
	EXPENDITURES	
Distributions to Members:		
Benefit Payments	920,776.32	
Refunds of Member Contributions	7,713.01	
Total Distributions		928,489.33
Expenses:		
Investment related ¹	35,589.09	
Administrative	24,388.96	
Total Expenses		59,978.05
Change in Net Assets for the Year		886,140.53
Net Assets Beginning of the Year		9,125,501.78
Net Assets End of the Year ²		10,011,642.31

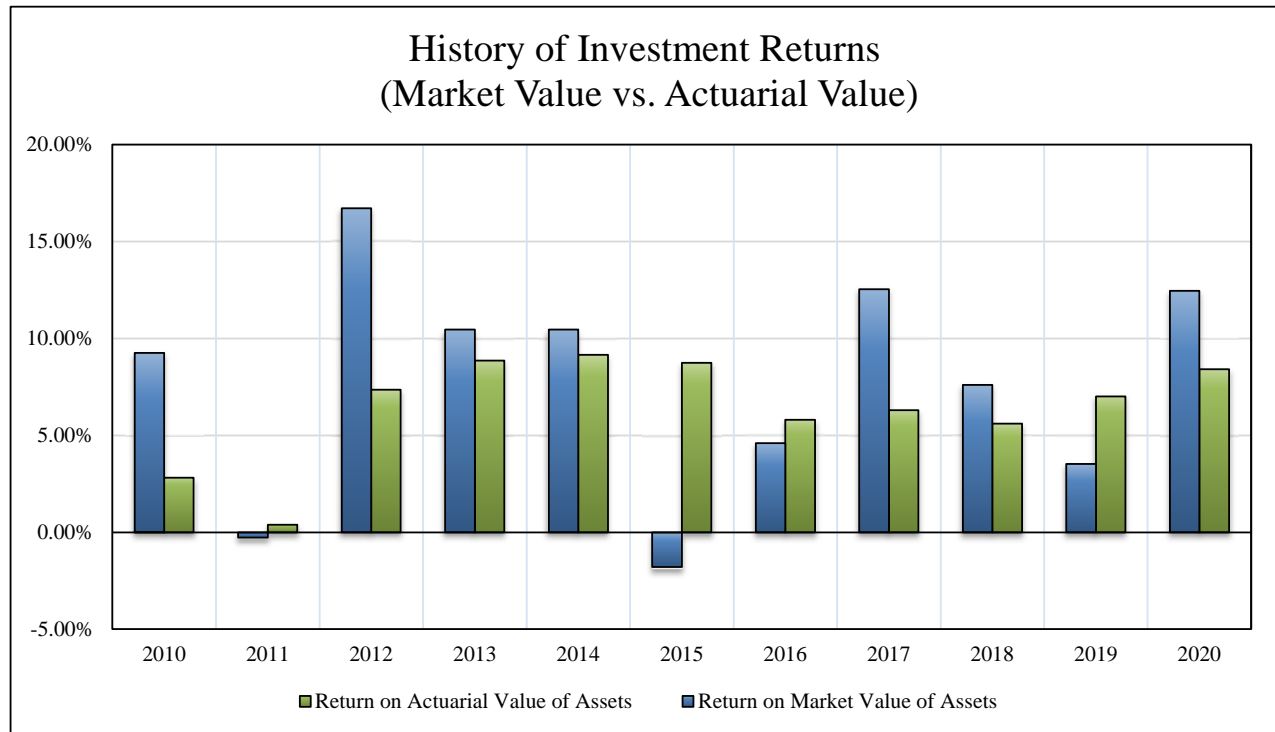
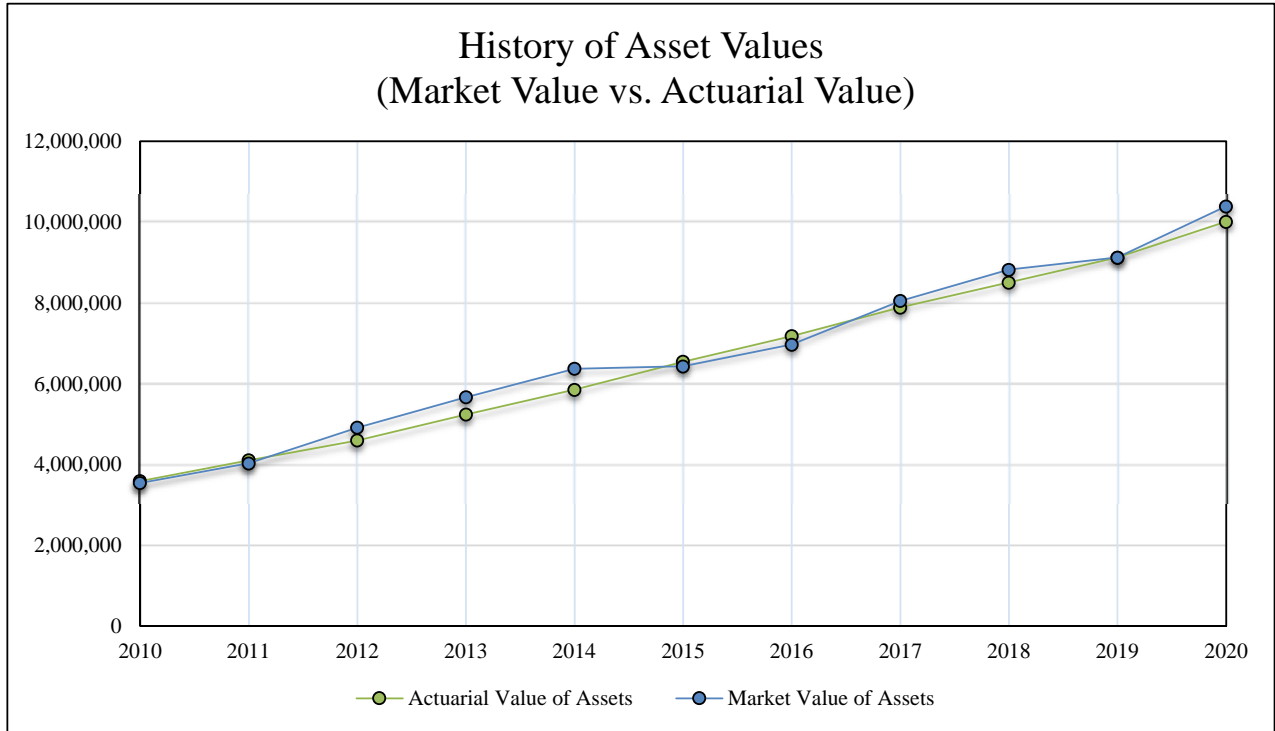
¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

²Net Assets may be limited for actuarial consideration.

RECONCILIATION OF DISTRICT'S SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2020

(1) Required District and State Contributions	\$947,052.00
(2) Less Allowable State Contribution	<u>(74,838.01)</u>
(3) Required District Contribution for Fiscal 2020	872,213.99
(4) Less 2019 Prepaid Contribution	(76,899.76)
(5) Less Actual District Contributions	<u>(1,200,072.97)</u>
(6) Equals District's Shortfall/(Prepaid) Contribution as of September 30, 2020	(\$404,758.74)

HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



STATISTICAL DATA

	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>	<u>10/1/2020</u>
<u>Actives</u>				
Number	19	20	20	19
Average Current Age	37.5	36.4	36.2	36.6
Average Age at Employment	27.3	27.7	27.9	27.6
Average Past Service	10.2	8.7	8.3	9.0
Average Annual Salary	\$64,624	\$63,150	\$63,938	\$68,434
<u>Service Retirees</u>				
Number	12	13	13	13
Average Current Age	61.3	61.6	62.6	63.6
Average Annual Benefit	\$60,336	\$63,916	\$64,882	\$65,878
<u>Beneficiaries</u>				
Number	0	0	0	1
Average Current Age	N/A	N/A	N/A	68.0
Average Annual Benefit	N/A	N/A	N/A	\$12,939
<u>Disability Retirees</u>				
Number	1	1	3	2
Average Current Age	68.0	69.0	52.2	44.3
Average Annual Benefit	\$12,939	\$12,939	\$25,769	\$32,184
<u>Terminated Vested</u>				
Number	0	1	0	1
Average Current Age ¹	N/A	N/A	N/A	35.2
Average Annual Benefit ²	N/A	N/A	N/A	\$21,354

¹ Effective 10/1/2018, the Average Current Age excludes participants awaiting a refund of contributions.

² The Average Annual Benefit excludes participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

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

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2019	20
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
ii. Vested in refund of member contributions only	0
iii. Refund of member contributions or full lump sum distribution	(1)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. Continuing participants	18
g. New entrants	<u>1</u>
h. Total active life participants in valuation	19

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	Vested (Due Refund)	<u>Total</u>
a. Number prior valuation	13	0	3	0	0	16
Retired	0	0	0	0	0	0
Vested (Deferred Annuity)	0	0	0	1	0	1
Vested (Due Refund)	0	0	0	0	0	0
Hired/Terminated in Same Year	0	0	0	0	0	0
Death, With Survivor	0	1	(1)	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	13	1	2	1	0	17

SUMMARY OF CURRENT PLAN
(Through Resolution No. 01-18)

<u>Eligibility</u>	Full-time employees who are classified as full-time certified firefighters shall participate in the System as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the District as a Firefighter.
<u>Salary</u>	W-2 compensation (excluding lump sum payments of unused sick and vacation pay) plus tax exempt, tax sheltered, and tax deferred items of income.
<u>Average Final Compensation</u>	Average Salary for the best 3 years during the 5 years immediately preceding retirement or termination.
<u>Member Contributions</u>	8.0% of Salary.
<u>District and State Contributions</u>	Remaining amount required in order to pay current costs and amortize any unfunded past service cost as provided in Part VII of Chapter 112, F.S.
<u>Normal Retirement</u>	
Date	Earlier of: 1) Age 55 and 10 years of Credited Service, or 2) Age 52 and 25 years of Credited Service.
Benefit	3.5% of Average Final Compensation <u>times</u> Credited Service, maximum \$100,000 annually.
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 10 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% for each year prior to Normal Retirement.
<u>Supplemental Monthly Benefit</u>	Normal and Early service retirees receive \$250 (reduced for Early) for life.
<u>Cost-of-Living Increase</u>	Normal or Early Retirees who retire after 3/18/2009 and their Beneficiaries or Joint Annuitants receive annual 3% benefit increases beginning the first 10/1 following 5 years of retirement.

Vesting

Schedule	100% after 10 years of Credited Service.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Disability

Eligibility

Service Incurred	Covered from Date of Employment.
Non-Service Incurred	10 years of Credited Service.

Exclusions Disability resulting from use of drugs, illegal participation in riots, service in military, etc.

Benefit Benefit accrued to date of disability but not less than 42% of Average Final Compensation (if Service Incurred).

Duration Payable for life and ten years certain or until recovery (as determined by the Board). Options available.

Death Benefits

Pre-Retirement

Vested	Monthly accrued benefit payable to designated beneficiary for 10 years.
Non-Vested	Refund of accumulated contributions without interest.

Post-Retirement Benefits payable to beneficiary in accordance with option selected at retirement.

Board of Trustees

Two District appointees, two Members of the Department elected by the membership, and a fifth Member elected by other 4 and appointed by the District.

Chapter 175 Share Account

Pursuant to Chapter 2015-39, Laws of Florida, a supplemental benefit component for special benefits exists but is currently not funded as no premium tax allocations have been made to the share accounts.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2020

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	177,863
Total Cash and Equivalents	177,863
Receivables:	
Member Contributions in Transit	4,311
State Contributions	38,360
Total Receivable	42,671
Investments:	
Mutual Funds:	
Fixed Income	2,293,071
Equity	7,354,466
Pooled/Common/Commingled Funds:	
Real Estate	930,280
Total Investments	10,577,817
Total Assets	10,798,351
<u>LIABILITIES</u>	
Payables:	
Administrative Expenses	310
Total Liabilities	310
NET POSITION RESTRICTED FOR PENSIONS	10,798,041

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2020
Market Value Basis

ADDITIONS

Contributions:

Member	99,965	
District	1,200,073	
State	74,838	
 Total Contributions		 1,374,876
 Investment Income:		
Net Increase in Fair Value of Investments	957,018	
Interest & Dividends	252,213	
Less Investment Expense ¹	(35,589)	
 Net Investment Income		 1,173,642
 Total Additions		 2,548,518

DEDUCTIONS

Distributions to Members:

Benefit Payments	920,777	
Refunds of Member Contributions	7,713	
 Total Distributions		 928,490
 Administrative Expense		 24,389
 Total Deductions		 952,879
 Net Increase in Net Position		 1,595,639
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		9,202,402
 End of the Year		 10,798,041

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

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2020)

Plan Administration

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

- a. Two District appointees,
- b. Two Members of the Department elected by the membership,
- c. Fifth Member elected by other four and appointed by District.

Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	16
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	20
	36

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the Okaloosa Island Fire District Firefighters' Retirement Trust Fund prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: 8.0% of Salary.

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

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2020:

Asset Class	Target Allocation
Domestic Equity	50.0%
International Equity	15.0%
Broad Market Fixed Income	20.0%
Fixed Income (Non-Core)	2.5%
Global Fixed Income	2.5%
Real Estate	10.0%
Total	100.0%

Concentrations:

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

Rate of Return:

For the year ended September 30, 2020, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 12.46 percent.

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

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2020 were as follows:

Total Pension Liability	\$ 17,894,608
Plan Fiduciary Net Position	\$ (10,798,041)
Sponsor's Net Pension Liability	<u>\$ 7,096,567</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	60.34%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2019 updated to September 30, 2020 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.30%
Investment Rate of Return	7.30%

Mortality Rate Healthy Active Lives:

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

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

Mortality Rate Healthy Retiree Lives:

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

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

Mortality Rate Beneficiary Lives:

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

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

Mortality Rate Disabled Lives:

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

All rates are projected generationally with Mortality Improvement Scale MP-2018.

The above described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2019 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated August 23, 2017.

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

For 2020 the inflation rate assumption of the investment advisor was 2.50%.

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

GASB 67

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2020 are summarized in the following table:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return¹</u>
Domestic Equity	7.50%
International Equity	8.50%
Broad Market Fixed Income	2.50%
Fixed Income (Non-Core)	2.50%
Global Fixed Income	3.50%
Real Estate	4.5%

¹ Source: AndCo Consulting

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.30 percent.

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

	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
	6.30%	7.30%	8.30%
Sponsor's Net Pension Liability	\$ 9,562,456	\$ 7,096,567	\$ 5,080,473

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

	<u>09/30/2020</u>	<u>09/30/2019</u>
Total Pension Liability		
Service Cost	317,405	315,021
Interest	1,289,042	1,239,028
Changes of benefit terms	-	(682)
Differences between Expected and Actual Experience	(84,455)	30,720
Changes of assumptions	(265,217)	227,197
Benefit Payments, including Refunds of Employee Contributions	<u>(928,490)</u>	<u>(901,999)</u>
Net Change in Total Pension Liability	328,285	909,285
Total Pension Liability - Beginning	<u>17,566,323</u>	<u>16,657,038</u>
Total Pension Liability - Ending (a)	<u>\$ 17,894,608</u>	<u>\$ 17,566,323</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,200,073	933,644
Contributions - State	74,838	-
Contributions - Employee	99,965	95,246
Net Investment Income	1,173,642	311,998
Benefit Payments, including Refunds of Employee Contributions	(928,490)	(901,999)
Administrative Expense	<u>(24,389)</u>	<u>(61,020)</u>
Net Change in Plan Fiduciary Net Position	1,595,639	377,869
Plan Fiduciary Net Position - Beginning	<u>9,202,402</u>	<u>8,824,533</u>
Plan Fiduciary Net Position - Ending (b)	<u>\$ 10,798,041</u>	<u>\$ 9,202,402</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 7,096,567</u>	<u>\$ 8,363,921</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.34%	52.39%
Covered Payroll	\$ 1,249,565	\$ 1,190,577
Net Pension Liability as a percentage of Covered Payroll	567.92%	702.51%

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

Changes of benefit terms:

For measurement date 09/30/2019, amounts reported as changes of benefit terms resulted from the provisions of Chapter 112.1816, Florida Statutes. The Statutes state that, effective July 1, 2019, a death or disability (under the Plan's definition of total and permanent disability) for a Firefighter due to the diagnosis of cancer or circumstances that arise out of the treatment of cancer will be treated as duty-related.

Changes of assumptions:

For measurement date 09/30/2020, as mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, the investment return assumption was lowered from 7.40% to 7.30% per year, net of investment-related expenses.

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from lowering the investment return from 7.50% to 7.40% per year net of investment related expenses.

SCHEDULE OF CONTRIBUTIONS
Last 2 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2020	\$ 947,052	\$ 1,274,911	\$ (327,859)	\$ 1,249,565	102.03%
09/30/2019	\$ 856,744	\$ 933,644	\$ (76,900)	\$ 1,190,577	78.42%

Notes to Schedule

Valuation Date: 10/01/2018 (AIS 11/21/2019)

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2018 Actuarial Valuation for the Okaloosa Island Fire District Firefighters' Retirement Trust Fund prepared by Foster & Foster Actuaries and Consultants.

SCHEDULE OF INVESTMENT RETURNS
Last 2 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2020	12.46%
09/30/2019	3.53%

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2021)

Plan Description

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

- a. Two District appointees,
- b. Two Members of the Department elected by the membership,
- c. Fifth Member elected by other four and appointed by District.

Full-time employees who are classified as full-time certified firefighters shall participate in the System as a condition of employment.

Plan Membership as of October 1, 2019:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	16
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	20
	36
	36

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2019 Actuarial Valuation Report for the Okaloosa Island Fire District Firefighters' Retirement Trust Fund prepared by Foster & Foster Actuaries and Consultants.

Contributions

Member Contributions: 8.0% of Salary.

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

Net Pension Liability

The measurement date is September 30, 2020.

The measurement period for the pension expense was October 1, 2019 to September 30, 2020.

The reporting period is October 1, 2020 through September 30, 2021.

The Sponsor's Net Pension Liability was measured as of September 30, 2020.

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

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2019 updated to September 30, 2020 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.30%
Investment Rate of Return	7.30%

Mortality Rate Healthy Active Lives:

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

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

Mortality Rate Healthy Retiree Lives:

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

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

Mortality Rate Beneficiary Lives:

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

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

Mortality Rate Disabled Lives:

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

All rates are projected generationally with Mortality Improvement Scale MP-2018.

The above described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman’s July 1, 2019 FRS valuation report for special risk employees, with appropriate risk and collar adjustments made based on plan demographics. We feel this assumption sufficiently accommodates future mortality improvements.

The most recent actuarial experience study used to review the other significant assumptions was dated August 23, 2017.

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

For 2020 the inflation rate assumption of the investment advisor was 2.50%.

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

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2020 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return ¹
Domestic Equity	50.0%	7.50%
International Equity	15.0%	8.50%
Broad Market Fixed Income	20.0%	2.50%
Fixed Income (Non-Core)	2.5%	2.50%
Global Fixed Income	2.5%	3.50%
Real Estate	10.0%	4.50%
Total	100.0%	

¹ Source: AndCo Consulting

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.30 percent.

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

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Reporting Period Ending September 30, 2020	\$ 17,566,323	\$ 9,202,402	\$ 8,363,921
Changes for a Year:			
Service Cost	317,405	-	317,405
Interest	1,289,042	-	1,289,042
Differences between Expected and Actual Experience	(84,455)	-	(84,455)
Changes of assumptions	(265,217)	-	(265,217)
Changes of benefit terms	-	-	-
Contributions - Employer	-	1,200,073	(1,200,073)
Contributions - State	-	74,838	(74,838)
Contributions - Employee	-	99,965	(99,965)
Net Investment Income	-	1,173,642	(1,173,642)
Benefit Payments, including Refunds of Employee Contributions	(928,490)	(928,490)	-
Administrative Expense	-	(24,389)	24,389
Net Changes	328,285	1,595,639	(1,267,354)
Reporting Period Ending September 30, 2021	\$ 17,894,608	\$ 10,798,041	\$ 7,096,567

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.30%	7.30%	8.30%
Sponsor's Net Pension Liability	\$ 9,562,456	\$ 7,096,567	\$ 5,080,473

Pension Plan Fiduciary Net Position.

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

FINAL PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2020

For the year ended September 30, 2020, the Sponsor has recognized a Pension Expense of \$1,138,731.

On September 30, 2020, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between Expected and Actual Experience	106,858	145,617
Changes of assumptions	587,328	-
Net difference between Projected and Actual Earnings on Pension Plan investments	217,563	-
Employer and State contributions subsequent to the measurement date	1,274,911	-
Total	<u>\$ 2,186,660</u>	<u>\$ 145,617</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date has been recognized as a reduction of the Net Pension Liability in the year ended September 30, 2020.

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

Year ended September 30:	
2021	\$ 161,386
2022	\$ 165,851
2023	\$ 162,133
2024	\$ 159,928
2025	\$ 42,297
Thereafter	\$ 74,537

**PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2021**

For the year ended September 30, 2021, the Sponsor will recognize a Pension Expense of \$850,301.

On September 30, 2021, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between Expected and Actual Experience	88,052	120,991
Changes of assumptions	406,924	227,328
Net difference between Projected and Actual Earnings on Pension Plan investments	-	223,269
Employer and State contributions subsequent to the measurement date	TBD	-
Total	<u>TBD</u>	<u>\$ 571,588</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2021.

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

Year ended September 30:	
2022	\$ 20,488
2023	\$ 16,770
2024	\$ 14,565
2025	\$ (103,066)
2026	\$ (7,656)
Thereafter	\$ (17,713)

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

Reporting Period Ending	09/30/2021	09/30/2020
Measurement Date	<u>09/30/2020</u>	<u>09/30/2019</u>
Total Pension Liability		
Service Cost	317,405	315,021
Interest	1,289,042	1,239,028
Changes of benefit terms	-	(682)
Differences between Expected and Actual Experience	(84,455)	30,720
Changes of assumptions	(265,217)	227,197
Benefit Payments, including Refunds of Employee Contributions	<u>(928,490)</u>	<u>(901,999)</u>
Net Change in Total Pension Liability	328,285	909,285
Total Pension Liability - Beginning	<u>17,566,323</u>	<u>16,657,038</u>
Total Pension Liability - Ending (a)	<u><u>\$ 17,894,608</u></u>	<u><u>\$ 17,566,323</u></u>
Plan Fiduciary Net Position		
Contributions - Employer	1,200,073	933,644
Contributions - State	74,838	-
Contributions - Employee	99,965	95,246
Net Investment Income	1,173,642	311,998
Benefit Payments, including Refunds of Employee Contributions	(928,490)	(901,999)
Administrative Expense	<u>(24,389)</u>	<u>(61,020)</u>
Net Change in Plan Fiduciary Net Position	1,595,639	377,869
Plan Fiduciary Net Position - Beginning	<u>9,202,402</u>	<u>8,824,533</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$ 10,798,041</u></u>	<u><u>\$ 9,202,402</u></u>
Net Pension Liability - Ending (a) - (b)	<u><u>\$ 7,096,567</u></u>	<u><u>\$ 8,363,921</u></u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.34%	52.39%
Covered Payroll	\$ 1,249,565	\$ 1,190,577
Net Pension Liability as a percentage of Covered Payroll	567.92%	702.51%

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

Changes of benefit terms:

For measurement date 09/30/2019, amounts reported as changes of benefit terms resulted from the provisions of Chapter 112.1816, Florida Statutes. The Statutes state that, effective July 1, 2019, a death or disability (under the Plan's definition of total and permanent disability) for a Firefighter due to the diagnosis of cancer or circumstances that arise out of the treatment of cancer will be treated as duty-related.

Changes of assumptions:

For measurement date 09/30/2020, as mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the rates used in the July 1, 2019 actuarial valuation for special risk lives, with appropriate risk and collar adjustments made based on plan demographics.

Additionally, the investment return assumption was lowered from 7.40% to 7.30% per year, net of investment-related expenses.

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from lowering the investment return from 7.50% to 7.40% per year net of investment related expenses.

SCHEDULE OF CONTRIBUTIONS
Last 2 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a percentage of Covered Payroll
09/30/2020	\$ 947,052	\$ 1,274,911	\$ (327,859)	\$ 1,249,565	102.03%
09/30/2019	\$ 856,744	\$ 933,644	\$ (76,900)	\$ 1,190,577	78.42%

Notes to Schedule

Valuation Date: 10/01/2018 (AIS 11/21/2019)

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

Methods and assumptions used to determine contribution rates can be found in the October 1, 2018 Actuarial Valuation for the Okaloosa Island Fire District Firefighters' Retirement Trust Fund prepared by Foster & Foster Actuaries and Consultants.

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

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

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2020

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 7,832,505	\$ 414,908	\$ 1,788,355	\$ -
Employer and State Contributions made after 09/30/2019	-	-	1,274,911	-
Total Pension Liability Factors:				
Service Cost	315,021	-	-	315,021
Interest	1,239,028	-	-	1,239,028
Changes in benefit terms	(682)	-	-	(682)
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	30,720	-	30,720	-
Current year amortization of experience difference	-	(97,016)	(18,806)	(78,210)
Change in assumptions about future economic or demographic factors or other inputs	227,197	-	227,197	-
Current year amortization of change in assumptions	-	-	(180,401)	180,401
Benefit Payments, including Refunds of Employee Contributions	(901,999)	-	-	-
Net change	<u>909,285</u>	<u>(97,016)</u>	<u>1,333,621</u>	<u>1,655,558</u>
Plan Fiduciary Net Position:				
Contributions - Employer	933,644	-	(933,644)	-
Contributions - State	-	-	-	-
Contributions - Employee	95,246	-	-	(95,246)
Projected Net Investment Income	664,310	-	-	(664,310)
Difference between projected and actual earnings on Pension Plan investments	(352,312)	-	352,312	-
Current year amortization	-	(57,425)	(239,134)	181,709
Benefit Payments, including Refunds of Employee Contributions	(901,999)	-	-	-
Administrative Expenses	(61,020)	-	-	61,020
Net change	<u>377,869</u>	<u>(57,425)</u>	<u>(820,466)</u>	<u>(516,827)</u>
Ending Balance	<u>\$ 8,363,921</u>	<u>\$ 260,467</u>	<u>\$ 2,301,510</u>	<u>\$ 1,138,731</u>

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2021

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 8,363,921	\$ 260,467	\$ 2,301,510	\$ -
Employer and State Contributions made after 09/30/2020	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	317,405	-	-	317,405
Interest	1,289,042	-	-	1,289,042
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(84,455)	84,455	-	-
Current year amortization of experience difference	-	(109,081)	(18,806)	(90,275)
Change in assumptions about future economic or demographic factors or other inputs	(265,217)	265,217	-	-
Current year amortization of change in assumptions	-	(37,889)	(180,404)	142,515
Benefit Payments, including Refunds of Employee Contributions	(928,490)	-	-	-
Net change	<u>328,285</u>	<u>202,702</u>	<u>(199,210)</u>	<u>1,658,687</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,200,073	-	(1,200,073)	-
Contributions - State	74,838	-	(74,838)	-
Contributions - Employee	99,965	-	-	(99,965)
Projected Net Investment Income	696,592	-	-	(696,592)
Difference between projected and actual earnings on Pension Plan investments	477,050	477,050	-	-
Current year amortization	-	(152,835)	(116,617)	(36,218)
Benefit Payments, including Refunds of Employee Contributions	(928,490)	-	-	-
Administrative Expenses	(24,389)	-	-	24,389
Net change	<u>1,595,639</u>	<u>324,215</u>	<u>(1,391,528)</u>	<u>(808,386)</u>
Ending Balance	<u>\$ 7,096,567</u>	<u>\$ 787,384</u>	<u>TBD</u>	<u>\$ 850,301</u>

* Employer and State Contributions subsequent to the measurement date made after September 30, 2020 but made on or before September 30, 2021 need to be added.

AMORTIZATION SCHEDULE - INVESTMENTS

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

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020	\$ (477,050)	5	\$ -	\$ (95,410)	\$ (95,410)	\$ (95,410)	\$ (95,410)	\$ (95,410)	\$ -	\$ -	\$ -	\$ -	\$ -
2019	\$ 352,312	5	\$ 70,464	\$ 70,462	\$ 70,462	\$ 70,462	\$ 70,462	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 11,023	5	\$ 2,205	\$ 2,205	\$ 2,205	\$ 2,205	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (287,126)	5	\$ (57,425)	\$ (57,425)	\$ (57,425)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 219,748	5	\$ 43,950	\$ 43,950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 612,573	5	\$ 122,515	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 181,709	\$ (36,218)	\$ (80,168)	\$ (22,743)	\$ (24,948)	\$ (95,410)	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

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

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020	\$ (265,217)	7	\$ -	\$ (37,889)	\$ (37,888)	\$ (37,888)	\$ (37,888)	\$ (37,888)	\$ (37,888)	\$ (37,888)	\$ -	\$ -	\$ -
2019	\$ 227,197	8	\$ 28,397	\$ 28,400	\$ 28,400	\$ 28,400	\$ 28,400	\$ 28,400	\$ 28,400	\$ 28,400	\$ -	\$ -	\$ -
2017	\$ 295,819	7	\$ 42,260	\$ 42,260	\$ 42,260	\$ 42,260	\$ 42,260	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 658,466	6	\$ 109,744	\$ 109,744	\$ 109,744	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 180,401	\$ 142,515	\$ 142,516	\$ 32,772	\$ 32,772	\$ (9,488)	\$ (9,488)	\$ (9,488)	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

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

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020	\$ (84,455)	7	\$ -	\$ (12,065)	\$ (12,065)	\$ (12,065)	\$ (12,065)	\$ (12,065)	\$ (12,065)	\$ (12,065)	\$ -	\$ -	\$ -
2019	\$ 30,720	8	\$ 3,840	\$ 3,840	\$ 3,840	\$ 3,840	\$ 3,840	\$ 3,840	\$ 3,840	\$ 3,840	\$ -	\$ -	\$ -
2018	\$ 80,459	8	\$ 10,057	\$ 10,057	\$ 10,057	\$ 10,057	\$ 10,057	\$ 10,057	\$ 10,057	\$ -	\$ -	\$ -	\$ -
2017	\$ 34,366	7	\$ 4,909	\$ 4,909	\$ 4,909	\$ 4,909	\$ 4,909	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (291,603)	6	\$ (48,601)	\$ (48,601)	\$ (48,601)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ (290,489)	6	\$ (48,415)	\$ (48,415)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (78,210)	\$ (90,275)	\$ (41,860)	\$ 6,741	\$ 6,741	\$ 1,832	\$ 1,832	\$ (8,225)	\$ -	\$ -	\$ -