

OKALOOSA ISLAND FIRE DISTRICT
FIREFIGHTERS' RETIREMENT TRUST FUND

ACTUARIAL VALUATION
AS OCTOBER 1, 2018

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2020

GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2018



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS



March 4, 2019

Board of Trustees
Okaloosa Island Fire District
Firefighters' Retirement Trust
Fund 105 Santa Rosa Blvd.
Ft. Walton Beach, FL 32548

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. 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 valuation, 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, 2017. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2018 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.

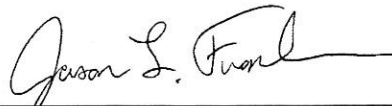
The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the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

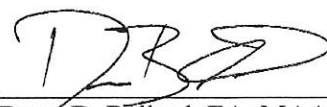
To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the Okaloosa Island Fire District, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighters' Retirement 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 me at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By: 
Jason L. Franken, FSA, EA, MAAA
Enrolled Actuary #17-6888

By: 
Drew D. Ballard, EA, MAAA
Enrolled Actuary #17-8193

Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Okaloosa Island Fire District Firefighters' Retirement Trust Fund, performed as of October 1, 2018, 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, 2020.

The contribution requirements, compared with those set forth in the May 31, 2018 Actuarial Impact Statement, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2018 <u>9/30/2020</u>	10/1/2017 <u>9/30/2019</u>
Minimum Required Contribution	\$1,057,973	\$955,850
Member Contributions (Est.)	111,276	99,106
District And State Required Contribution	946,697	856,744
State Contribution (Est.) ¹	37,865	37,865
District Required Contribution	\$908,832	\$818,879

¹ Represents the amount received in calendar 2018. 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.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of unfavorable experience included an investment return of 5.61% (Actuarial Asset Basis) which fell short of the 7.50% assumption and less inactive mortality than expected. These losses were offset in part by a gain associated with more turnover than expected.

CHANGES SINCE PRIOR VALUATION

Plan Changes

Since the prior valuation, Resolution No. 01-18 implemented benefit changes described below.

Implementation of a maximum benefit cap on the annual accrued benefit of \$100,000 per year. The maximum annual accrued benefit is based on the normal form of annuity payment (For Retiree's Lifetime with 120 Payments Guaranteed) and may be exceeded after the application of cost-of-living adjustments (COLAs). Any optional forms of benefit, as well as early retirement benefits, will be calculated after application of the maximum benefit amount on the normal form of payment. Also, the supplemental benefit will remain unchanged and will still be payable even if the resulting total benefit is in excess of the \$100,000 accrued benefit cap.

Actuarial Assumption/Method Changes

There have been no changes of actuarial assumptions or methods since the prior valuation.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2018</u>	<u>10/1/2017</u>
A. Participant Data		
Actives	20	19
Service Retirees	13	12
Beneficiaries	0	0
Disability Retirees	1	1
Terminated Vested	<u>1</u>	<u>0</u>
Total	35	32
Total Annual Payroll	\$1,263,000	\$1,227,852
Payroll Under Assumed Ret. Age	1,263,000	1,126,456
Annual Rate of Payments to:		
Service Retirees	830,909	724,030
Beneficiaries	0	0
Disability Retirees	12,939	12,939
Terminated Vested	0	0
B. Assets		
Actuarial Value (AVA) ¹	8,509,052	7,891,318
Market Value (MVA) ¹	8,824,533	8,054,744
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	6,775,092	7,490,315
Disability Benefits	90,175	84,175
Death Benefits	48,713	45,546
Vested Benefits	605,659	580,246
Refund of Contributions	42,711	37,685
Service Retirees	12,105,171	10,536,367
Beneficiaries	0	0
Disability Retirees	143,061	145,013
Terminated Vested	36,996	0
Share Plan Balances ¹	<u>0</u>	<u>0</u>
Total	19,847,578	18,919,347

C. Liabilities - (Continued)	<u>10/1/2018</u>	<u>10/1/2017</u>
Present Value of Future Salaries	13,615,321	12,497,384
Present Value of Future Member Contributions	1,089,226	999,791
Normal Cost (Retirement)	268,511	239,075
Normal Cost (Disability)	5,678	5,152
Normal Cost (Death)	2,360	2,135
Normal Cost (Vesting)	28,438	26,589
Normal Cost (Refunds)	<u>9,659</u>	<u>8,267</u>
Total Normal Cost	314,646	281,218
Present Value of Future Normal Costs	3,078,366	2,873,942
Accrued Liability (Retirement)	4,124,255	5,019,477
Accrued Liability (Disability)	36,238	33,422
Accrued Liability (Death)	25,608	23,744
Accrued Liability (Vesting)	292,575	280,175
Accrued Liability (Refunds)	5,308	7,207
Accrued Liability (Inactives)	12,285,228	10,681,380
Share Plan Balances ¹	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability (EAN AL)	16,769,212	16,045,405
Unfunded Actuarial Accrued Liability (UAAL)	8,260,160	8,154,087
Funded Ratio (AVA / EAN AL)	50.7%	49.2%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2018</u>	<u>10/1/2017</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances ¹	12,285,228	10,681,380
Actives	1,357,654	2,452,960
Member Contributions	<u>720,127</u>	<u>767,507</u>
Total	14,363,009	13,901,847
Non-vested Accrued Benefits	<u>835,501</u>	<u>704,384</u>
Total Present Value		
Accrued Benefits (PVAB)	15,198,510	14,606,231
Funded Ratio (MVA / PVAB)	58.1%	55.1%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	304,496	
Benefits Paid	(778,491)	
Interest	1,066,274	
Other	<u>0</u>	
Total	592,279	

Valuation Date	10/1/2018	10/1/2017
Applicable to Fiscal Year Ending	<u>9/30/2020</u>	<u>9/30/2019</u>

E. Pension Cost

Normal Cost ²	\$346,522	\$309,269
Administrative Expenses ²	52,785	18,878
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 10/1/2018) ²	658,666	627,703
Minimum Required Contribution	1,057,973	955,850
Expected Member Contributions ²	111,276	99,106
Expected District and State Contribution	946,697	856,744

F. Past Contributions

Plan Years Ending:	<u>9/30/2018</u>
District and State Requirement	899,851
Actual Contributions Made:	
Members (excluding buyback)	96,888
District	861,986
State	<u>37,865</u>
Total	996,739

G. Net Actuarial (Gain)/Loss	203,447
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¹ The asset values and liabilities include accumulated Share Plan Balances as of 9/30/2018 and 9/30/2017.

² Contributions developed as of 10/1/2018 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>
2018	8,260,160
2019	8,236,739
2020	8,189,060
2025	7,487,340
2029	6,155,667
2034	3,018,899
2038	0

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

	<u>Actual</u>	<u>Assumed</u>
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%
Year Ended 9/30/2015	-0.38%	7.00%
Year Ended 9/30/2014	2.41%	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 9/30/2018	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%
Year Ended 9/30/2015	-1.79%	8.74%	7.75%
Year Ended 9/30/2014	10.46%	9.16%	7.75%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2018	\$1,263,000
	10/1/2008	871,576
(b) Total Increase		44.91%
(c) Number of Years		10.00
(d) Average Annual Rate		3.78%

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 #17-8193

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, 2017	\$8,154,087
(2)	Sponsor Normal Cost developed as of October 1, 2017	191,102
(3)	Expected administrative expenses for the year ended September 30, 2018	17,166
(4)	Expected interest on (1), (2) and (3)	626,533
(5)	Sponsor contributions to the System during the year ended September 30, 2018	899,851
(6)	Expected interest on (5)	32,324
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	8,056,713
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	203,447
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2018	8,260,160

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2018 <u>Amount</u>	Amortization <u>Amount</u>
UAAL Fresh Start	10/1/2017	19	8,434,715	611,228
Assum. Change	10/1/2017	19	309,855	22,454
Benefit Change	10/1/2017	19	(687,857)	(49,846)
Actuarial Loss	10/1/2018	20	<u>203,447</u>	<u>14,241</u>
			8,260,160	598,077

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2017	\$8,154,087
(2) Expected UAAL as of October 1, 2018	8,056,713
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	150,733
Salary Increases	48,203
Active Decrements	(13,291)
Inactive Mortality	56,929
Other	<u>(39,127)</u>
Increase in UAAL due to (Gain)/Loss	203,447
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2018	\$8,260,160

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB

Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB

Disabled Lives:

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

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale

The above 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, 2018 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate

7.50% 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+	5.00

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

Payroll Growth 3.50%. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Administrative Expenses \$47,929 annually, based on actual expenses incurred in the prior fiscal year.

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 75% 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 7.50% assumption
 Salary – A full year, based on the current 6.15% average assumption

Actuarial Asset Method

Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value return (net of fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value of Assets.

GLOSSARY

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

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries, Disability Retirees and Vested Terminations.

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.

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.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During Fiscal Year	<u>Amount</u>	Increase from <u>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	37,865.44	3.3%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	273,450.64	273,450.64
Total Cash and Equivalents	273,450.64	273,450.64
Receivables:		
Member Contributions in Transit	3,608.88	3,608.88
District Contributions in Transit	210,871.24	210,871.24
State Contributions	37,865.44	37,865.44
Investment Income	13,086.71	13,086.71
Total Receivable	265,432.27	265,432.27
Investments:		
U. S. Bonds and Bills	428,971.06	420,117.80
Federal Agency Guaranteed Securities	240,714.24	232,498.16
Corporate Bonds	847,128.75	814,403.55
Stocks	1,705,489.91	2,168,710.23
Mutual Funds:		
Fixed Income	661,884.01	604,358.34
Equity	2,798,466.11	3,339,349.99
Pooled/Common/Commingled Funds:		
Real Estate	680,360.21	706,212.12
Total Investments	7,363,014.29	8,285,650.19
Total Assets	7,901,897.20	8,824,533.10
<u>LIABILITIES</u>		
Total Liabilities	0.00	0.00
NET POSITION RESTRICTED FOR PENSIONS	7,901,897.20	8,824,533.10

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2018
Market Value Basis

ADDITIONS

Contributions:

Member	96,888.40
District	861,985.58
State	37,865.44

Total Contributions	996,739.42
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Investment Income:

Net Realized Gain (Loss)	183,032.60	
Unrealized Gain (Loss)	213,423.70	
Net Increase in Fair Value of Investments		396,456.30
Interest & Dividends		252,673.74
Less Investment Expense ¹		(49,660.48)

Net Investment Income	599,469.56
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Total Additions	1,596,208.98
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DEDUCTIONS

Distributions to Members:

Benefit Payments	776,911.32
Refunds of Member Contributions	1,579.35

Total Distributions	778,490.67
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Administrative Expense	47,929.33
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Total Deductions	826,420.00
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Net Increase in Net Position	769,788.98
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	8,054,744.12
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End of the Year	8,824,533.10
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2018

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

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return ¹	
09/30/2015	-1.79%	
09/30/2016	4.60%	
09/30/2017	12.54%	
09/30/2018	7.60%	
Annualized Rate of Return for prior four (4) years:		5.61%
(A) 10/01/2017 Actuarial Assets:		\$7,891,318.02
(I) Net Investment Income:		
1. Interest and Dividends	252,673.74	
2. Realized Gains (Losses)	183,032.60	
3. Change in Actuarial Value	61,368.63	
4. Investment Related Expenses	(49,660.48)	
Total		447,414.49
(B) 10/01/2018 Actuarial Assets:		\$8,509,051.93
Actuarial Asset Rate of Return = $2I/(A+B-I)$:		5.61%
10/01/2018 Limited Actuarial Assets:		\$8,509,051.93
10/01/2018 Market Value of Assets:		\$8,824,533.10
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		(\$150,733.22)

¹Market Value Basis, net of investment related expenses.

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
SEPTEMBER 30, 2018
Actuarial Asset Basis

REVENUES

Contributions:		
Member	96,888.40	
District	861,985.58	
State	37,865.44	
Total Contributions		996,739.42
Earnings from Investments:		
Interest & Dividends	252,673.74	
Net Realized Gain (Loss)	183,032.60	
Change in Actuarial Value	61,368.63	
Total Earnings and Investment Gains		497,074.97

EXPENDITURES

Distributions to Members:		
Benefit Payments	776,911.32	
Refunds of Member Contributions	1,579.35	
Total Distributions		778,490.67
Expenses:		
Investment related ¹	49,660.48	
Administrative	47,929.33	
Total Expenses		97,589.81
Change in Net Assets for the Year		617,733.91
Net Assets Beginning of the Year		7,891,318.02
Net Assets End of the Year ²		8,509,051.93

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

²Net Assets may be limited for actuarial consideration.

STATISTICAL DATA

	<u>10/1/2015</u>	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>
<u>Actives</u>				
Number	18	18	19	20
Average Current Age	37.8	38.8	37.5	36.4
Average Age at Employment	27.7	27.7	27.3	27.7
Average Past Service	10.1	11.1	10.2	8.7
Average Annual Salary	\$63,834	\$65,631	\$64,624	\$63,150
<u>Service Retirees</u>				
Number	11	11	12	13
Average Current Age	60.0	61.0	61.3	61.6
Average Annual Benefit	\$57,584	\$58,474	\$60,336	\$63,916
<u>Beneficiaries</u>				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
<u>Disability Retirees</u>				
Number	1	1	1	1
Average Current Age	66.0	67.0	68.0	69.0
Average Annual Benefit	\$12,939	\$12,939	\$12,939	\$12,939
<u>Terminated Vested</u>				
Number	1	1	0	1
Average Current Age ¹	33.6	34.6	N/A	N/A
Average Annual Benefit ²	N/A	N/A	N/A	N/A

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	0	0	0	0	0	0	0	0	0	0	0
20 - 24	3	0	0	0	0	0	0	0	0	0	0	3
25 - 29	0	1	0	0	0	0	0	0	0	0	0	1
30 - 34	0	0	0	1	0	2	1	0	0	0	0	4
35 - 39	0	0	0	0	1	3	3	0	0	0	0	7
40 - 44	1	0	0	0	0	0	0	0	0	0	0	1
45 - 49	0	0	0	0	0	0	1	1	0	0	0	2
50 - 54	0	0	0	0	0	0	0	0	1	0	0	1
55 - 59	0	0	0	0	1	0	0	0	0	0	0	1
60 - 64	0	0	0	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	4	1	0	1	2	5	5	1	1	0	0	20

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2017	19
b. Terminations	
i. Vested (partial or full) with deferred benefits	(1)
ii. Non-vested or full lump sum distribution received	(1)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. Continuing participants	16
g. New entrants	<u>4</u>
h. Total active life participants in valuation	20

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 <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	12	0	1	0	13
Retired	1	0	0	0	1
Vested Deferred	0	0	0	1	1
Death, With Survivor	0	0	0	0	0
Death, No Survivor	0	0	0	0	0
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	0	0
Rehires	0	0	0	0	0
Expired Annuities	0	0	0	0	0
Data Corrections	0	0	0	0	0
b. Number current valuation	13	0	1	1	15

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, 2018

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	273,451
Total Cash and Equivalents	273,451
Receivables:	
Member Contributions in Transit	3,609
District Contributions in Transit	210,871
State Contributions	37,865
Investment Income	13,087
Total Receivable	265,432
Investments:	
U. S. Bonds and Bills	420,118
Federal Agency Guaranteed Securities	232,498
Corporate Bonds	814,404
Stocks	2,168,710
Mutual Funds:	
Fixed Income	604,358
Equity	3,339,350
Real Estate	706,212
Total Investments	8,285,650
Total Assets	8,824,533
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	8,824,533

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2018
Market Value Basis

ADDITIONS

Contributions:

Member	96,888
District	861,986
State	37,865

Total Contributions	996,739
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Investment Income:

Net Increase in Fair Value of Investments	396,456
Interest & Dividends	252,674
Less Investment Expense ¹	(49,660)

Net Investment Income	599,470
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Total Additions	1,596,209
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DEDUCTIONS

Distributions to Members:

Benefit Payments	776,911
Refunds of Member Contributions	1,580

Total Distributions	778,491
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Administrative Expense	47,929
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Total Deductions	826,420
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Net Increase in Net Position	769,789
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	8,054,744
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End of the Year	8,824,533
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2018)

Plan Description

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, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	13
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	19
	32

Benefits Provided

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

Normal Retirement:

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 times Credited Service, maximum \$100,000 annually.

Early Retirement:

Eligibility: Age 50 and 10 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% for each year prior to Normal Retirement.

Supplemental Monthly Benefit:

Normal and Early service retirees receive \$250 (reduced for Early) for life.

Cost-of-Living Increase:

Normal or Early Retirees who retire after 03/18/2009 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 Retirement:

Eligibility Service Incurred: Covered from Date of Employment

Non-Service Incurred: 10 years of Credited Service.

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

Death Benefits Pre-Retirement:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years.

Non-Vested: Refund of accumulated contributions without interest.

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.

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.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2018:

Asset Class	Target Allocation
Domestic Equity	50.0%
International Equity	15.0%
Broad Market Fixed Income	20.0%
Global Fixed Income	5.0%
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, 2018, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 7.60 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, 2018 were as follows:

Total Pension Liability	\$ 16,657,039
Plan Fiduciary Net Position	\$ (8,824,533)
Sponsor's Net Pension Liability	<u>\$ 7,832,506</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	52.98%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2017 updated to September 30, 2018 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.50%
Investment Rate of Return	7.50%

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Mortality Rate Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

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

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 2018 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 geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2018 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	7.50%
International Equity	8.50%
Broad Market Fixed Income	2.50%
Global Fixed Income	3.50%
Real Estate	4.50%

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.50 percent.

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

	1% Decrease	Current	1% Increase
	6.50%	Discount Rate	8.50%
	7.50%		
Sponsor's Net Pension Liability	\$ 10,247,838	\$ 7,832,506	\$ 5,876,145

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	09/30/2018	09/30/2017	09/30/2016
Total Pension Liability			
Service Cost	281,575	331,319	312,345
Interest	1,183,662	1,192,561	1,102,924
Changes of benefit terms	(695,908)	-	-
Differences between Expected and Actual Experience	80,459	34,366	(291,603)
Changes of assumptions	-	295,819	658,466
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(778,491)	(649,774)	(639,223)
Net Change in Total Pension Liability	71,297	1,204,291	1,142,909
Total Pension Liability - Beginning	16,585,741	15,381,450	14,238,541
Total Pension Liability - Ending (a)	<u>\$ 16,657,038</u>	<u>\$ 16,585,741</u>	<u>\$ 15,381,450</u>
Plan Fiduciary Net Position			
Contributions - Employer	861,986	782,613	775,574
Contributions - State	37,865	36,660	45,330
Contributions - Employee	96,888	95,126	91,087
Contributions - Buy Back	-	-	-
Net Investment Income	599,470	836,918	288,447
Benefit Payments, including Refunds of Employee Contributions	(778,491)	(649,774)	(639,223)
Administrative Expense	(47,929)	(17,166)	(23,642)
Net Change in Plan Fiduciary Net Position	769,789	1,084,377	537,573
Plan Fiduciary Net Position - Beginning	8,054,744	6,970,367	6,432,794
Plan Fiduciary Net Position - Ending (b)	<u>\$ 8,824,533</u>	<u>\$ 8,054,744</u>	<u>\$ 6,970,367</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 7,832,505</u>	<u>\$ 8,530,997</u>	<u>\$ 8,411,083</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	52.98%	48.56%	45.32%
Covered Payroll ¹	\$ 1,211,105	\$ 1,189,075	\$ 1,146,514
Net Pension Liability as a percentage of Covered Payroll	646.72%	717.45%	733.62%

Notes to Schedule:

¹ The Covered Payroll numbers shown are in compliance with GASB 82.

Changes of benefit terms:

For measurement date 09/30/2018, Resolution No. 01-18 implemented benefit changes as following:

Implementation of a maximum benefit cap on the annual accrued benefit of \$100,000 per year.

The maximum annual accrued benefit is based on the normal form of annuity payment (For Retiree's Lifetime with 120 Payments Guaranteed) and may be exceeded after the application of cost-of-living adjustments (COLAs).

Any optional forms of benefit, as well as early retirement benefits, will be calculated after application of the maximum benefit amount on the normal form of payment. Also, the supplemental benefit will remain unchanged and will still be payable even if the resulting total benefit is in excess of the \$100,000 accrued benefit cap.

Changes of assumptions:

For measurement date 09/30/2017, as a result of an actuarial experience study dated August 23, 2017, the following changes have been made:

- The assumed rate of investment return was lowered from 7.75% to 7.50% per year, net of investment related expenses.
- The assumed rates of salary increases were amended from a flat rate of 7.00% per year to a service-based table.
- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the rates used by the Florida Retirement System actuary in the July 1, 2015 actuarial valuation to the rates used in the July 1, 2016 actuarial valuation for special risk lives.
- The assumed rates of retirement were amended to remove the assumption that members eligible for normal retirement on the valuation date will continue employment for one additional year.
- The assumed rates of withdrawal were amended from an age-based table to a service-based table.

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
Last 10 Fiscal Years

	09/30/2015	09/30/2014	09/30/2013
Total Pension Liability			
Service Cost	292,647	290,356	269,472
Interest	1,067,883	1,017,277	968,929
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(290,489)	-	-
Changes of assumptions	-	-	-
Contributions - Buy Back	8,928	-	-
Benefit Payments, including Refunds of Employee Contributions	(653,839)	(660,031)	(610,868)
Net Change in Total Pension Liability	425,130	647,602	627,533
Total Pension Liability - Beginning	13,813,411	13,165,809	12,538,276
Total Pension Liability - Ending (a)	<u>\$ 14,238,541</u>	<u>\$ 13,813,411</u>	<u>\$ 13,165,809</u>
Plan Fiduciary Net Position			
Contributions - Employer	708,789	673,090	723,752
Contributions - State	43,485	56,846	54,472
Contributions - Employee	85,999	79,884	83,456
Contributions - Buy Back	8,928	-	-
Net Investment Income	(112,066)	579,975	525,540
Benefit Payments, including Refunds of Employee Contributions	(653,839)	(660,031)	(610,868)
Administrative Expense	(19,947)	(24,204)	(24,161)
Net Change in Plan Fiduciary Net Position	61,349	705,560	752,191
Plan Fiduciary Net Position - Beginning	6,371,445	5,665,885	4,913,694
Plan Fiduciary Net Position - Ending (b)	<u>\$ 6,432,794</u>	<u>\$ 6,371,445</u>	<u>\$ 5,665,885</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 7,805,747</u>	<u>\$ 7,441,966</u>	<u>\$ 7,499,924</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	45.18%	46.13%	43.03%
Covered Payroll ¹	\$ 1,119,731	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	697.11%	N/A	N/A

Notes to Schedule:

¹ The Covered Payroll numbers shown are in compliance with GASB 82.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll ¹	Contributions as a percentage of Covered Payroll
09/30/2018	\$ 899,851	\$ 899,851	\$ -	\$ 1,211,105	74.30%
09/30/2017	\$ 819,273	\$ 819,273	\$ -	\$ 1,189,075	68.90%
09/30/2016	\$ 820,904	\$ 820,904	\$ -	\$ 1,146,514	71.60%
09/30/2015	\$ 752,274	\$ 752,274	\$ -	\$ 1,119,731	67.18%
09/30/2014	\$ 729,936	\$ 729,936	\$ -	N/A	N/A
09/30/2013	\$ 778,224	\$ 778,224	\$ -	N/A	N/A

¹ The Covered Payroll numbers shown are in compliance with GASB 82.

Notes to Schedule

Valuation Date: 10/01/2016

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:

Mortality:

Healthy Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

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

The assumed rates of mortality 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 the July 1, 2015 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate:

7.75% 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.

Retirement Age:

Age 55 and 10 years of Credited Service, or age 52 and 25 years of Credited Service. Also, any Member who has reached Normal Retirement is assumed to continue employment for one additional year. We feel this is reasonable based on plan provisions.

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. We feel this is reasonable based on plan provisions.

Disability Rates:

See table on following page (1201). It is assumed that 75% of Disability Retirees are service related. This assumption is consistent with those used by other plans containing Florida municipal Firefighters.

Termination Rates:	See table on following page (1304A). This assumption is consistent with those used by other plans containing Florida municipal Firefighters.
Salary Increases:	7.00% per year until the assumed retirement age; see table below. We feel this assumption is reasonable based upon long-term expectations.
Payroll Increase:	3.50% per year. This is in compliance with Part VII of Chapter 112, Florida Statutes.
Funding Method:	Entry Age Normal Actuarial Cost Method.
Amortization Method:	Level Percentage of Pay, Closed.
Remaining Amortization Period:	30 Years (as of 10/01/2016).
Asset Valuation Method:	Each year, the prior Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value of Assets.

Termination and Disability Rate Table:

Age	% Becoming Disabled During the Year	% Terminating During the Year
20	0.03%	9.3%
30	0.04%	7.9%
40	0.07%	4.3%
50	0.18%	1.1%

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2018	7.60%
09/30/2017	12.54%
09/30/2016	4.60%
09/30/2015	-1.79%
09/30/2014	10.46%
09/30/2013	10.45%

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2019)

General Information about the Pension Plan

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, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	13
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	19
	<u>32</u>

Benefits Provided

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

Normal Retirement:

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 times Credited Service, maximum \$100,000 annually.

Early Retirement:

Eligibility: Age 50 and 10 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% for each year prior to Normal Retirement.

Supplemental Monthly Benefit:

Normal and Early service retirees receive \$250 (reduced for Early) for life.

Cost-of-Living Increase:

Normal or Early Retirees who retire after 03/18/2009 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 Retirement:

Eligibility Service Incurred: Covered from Date of Employment

Non-Service Incurred: 10 years of Credited Service.

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

Death Benefits Pre-Retirement:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years.

Non-Vested: Refund of accumulated contributions without interest.

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.

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, 2018.

The measurement period for the pension expense was October 1, 2017 to September 30, 2018.

The reporting period is October 1, 2018 through September 30, 2019.

The Sponsor's Net Pension Liability was measured as of September 30, 2018.

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, 2017 updated to September 30, 2018 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.50%
Investment Rate of Return	7.50%

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

Male: RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

Mortality Rate Healthy Inactive Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

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

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 2018 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 geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2018 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	50.00%	7.50%
International Equity	15.00%	8.50%
Broad Market Fixed Income	20.00%	2.50%
Global Fixed Income	5.00%	3.50%
Real Estate	10.00%	4.50%
Total	100.00%	

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.50 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, 2018	\$ 16,585,741	\$ 8,054,744	\$ 8,530,997
Changes for a Year:			
Service Cost	281,575	-	281,575
Interest	1,183,662	-	1,183,662
Differences between Expected and Actual Experience	80,459	-	80,459
Changes of assumptions	-	-	-
Changes of benefit terms	(695,908)	-	(695,908)
Contributions - Employer	-	861,986	(861,986)
Contributions - State	-	37,865	(37,865)
Contributions - Employee	-	96,888	(96,888)
Net Investment Income	-	599,470	(599,470)
Benefit Payments, including Refunds of Employee Contributions	(778,491)	(778,491)	-
Administrative Expense	-	(47,929)	47,929
Net Changes	71,297	769,789	(698,492)
Reporting Period Ending September 30, 2019	\$ 16,657,038	\$ 8,824,533	\$ 7,832,505

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ 10,247,838	\$ 7,832,505	\$ 5,876,145

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, 2018**

For the year ended September 30, 2018, the Sponsor has recognized a Pension Expense of \$1,037,867.

On September 30, 2018, 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	29,454	339,648
Changes of assumptions	692,536	-
Net difference between Projected and Actual Earnings on Pension Plan investments	119,980	-
Employer and State contributions subsequent to the measurement date	899,851	-
Total	<u>\$ 1,741,821</u>	<u>\$ 339,648</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, 2018.

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:

2019	\$ 141,738
2020	\$ 168,937
2021	\$ 46,422
2022	\$ 50,887
2023	\$ 47,169
Thereafter	\$ 47,169

Payable to the Pension Plan:

On September 30, 2017, the Sponsor reported a payable of \$519,173 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2017.

**PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2019**

For the year ended September 30, 2019, the Sponsor will recognize a Pension Expense of \$263,878.

On September 30, 2019, 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	94,944	242,633
Changes of assumptions	540,532	-
Net difference between Projected and Actual Earnings on Pension Plan investments	46,960	-
Employer and State contributions subsequent to the measurement date	TBD	-
Total	<u>TBD</u>	<u>\$ 242,633</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, 2019.

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:	
2020	\$ 181,199
2021	\$ 58,684
2022	\$ 63,149
2023	\$ 59,431
2024	\$ 57,226
Thereafter	\$ 20,114

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2019 09/30/2018	09/30/2018 09/30/2017	09/30/2017 09/30/2016
Total Pension Liability			
Service Cost	281,575	331,319	312,345
Interest	1,183,662	1,192,561	1,102,924
Changes of benefit terms	(695,908)	-	-
Differences between Expected and Actual Experience	80,459	34,366	(291,603)
Changes of assumptions	-	295,819	658,466
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(778,491)	(649,774)	(639,223)
Net Change in Total Pension Liability	71,297	1,204,291	1,142,909
Total Pension Liability - Beginning	16,585,741	15,381,450	14,238,541
Total Pension Liability - Ending (a)	<u>\$ 16,657,038</u>	<u>\$ 16,585,741</u>	<u>\$ 15,381,450</u>
Plan Fiduciary Net Position			
Contributions - Employer	861,986	782,613	775,574
Contributions - State	37,865	36,660	45,330
Contributions - Employee	96,888	95,126	91,087
Contributions - Buy Back	-	-	-
Net Investment Income	599,470	836,918	288,447
Benefit Payments, including Refunds of Employee Contributions	(778,491)	(649,774)	(639,223)
Administrative Expense	(47,929)	(17,166)	(23,642)
Net Change in Plan Fiduciary Net Position	769,789	1,084,377	537,573
Plan Fiduciary Net Position - Beginning	8,054,744	6,970,367	6,432,794
Plan Fiduciary Net Position - Ending (b)	<u>\$ 8,824,533</u>	<u>\$ 8,054,744</u>	<u>\$ 6,970,367</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 7,832,505</u>	<u>\$ 8,530,997</u>	<u>\$ 8,411,083</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	52.98%	48.56%	45.32%
Covered Payroll ¹	\$ 1,211,105	\$ 1,189,075	\$ 1,146,514
Net Pension Liability as a percentage of Covered Payroll	646.72%	717.45%	733.62%

Notes to Schedule:

¹ The Covered Payroll numbers shown are in compliance with GASB 82.

Changes of benefit terms:

For measurement date 09/30/2018, Resolution No. 01-18 implemented benefit changes as following:

Implementation of a maximum benefit cap on the annual accrued benefit of \$100,000 per year.

The maximum annual accrued benefit is based on the normal form of annuity payment (For Retiree's Lifetime with 120 Payments Guaranteed) and may be exceeded after the application of cost-of-living adjustments (COLAs).

Any optional forms of benefit, as well as early retirement benefits, will be calculated after application of the maximum benefit amount on the normal form of payment. Also, the supplemental benefit will remain unchanged and will still be payable even if the resulting total benefit is in excess of the \$100,000 accrued benefit cap.

Changes of assumptions:

For measurement date 09/30/2017, as a result of an actuarial experience study dated August 23, 2017, the following changes have been made:

- The assumed rate of investment return was lowered from 7.75% to 7.50% per year, net of investment related expenses.
- The assumed rates of salary increases were amended from a flat rate of 7.00% per year to a service-based table.
- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the rates used by the Florida Retirement System actuary in the July 1, 2015 actuarial valuation to the rates used in the July 1, 2016 actuarial valuation for special risk lives.
- The assumed rates of retirement were amended to remove the assumption that members eligible for normal retirement on the valuation date will continue employment for one additional year.
- The assumed rates of withdrawal were amended from an age-based table to a service-based table.

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2016 09/30/2015	09/30/2015 09/30/2014	09/30/2014 09/30/2013
Total Pension Liability			
Service Cost	292,647	290,356	269,472
Interest	1,067,883	1,017,277	968,929
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(290,489)	-	-
Changes of assumptions	-	-	-
Contributions - Buy Back	8,928	-	-
Benefit Payments, including Refunds of Employee Contributions	(653,839)	(660,031)	(610,868)
Net Change in Total Pension Liability	425,130	647,602	627,533
Total Pension Liability - Beginning	13,813,411	13,165,809	12,538,276
Total Pension Liability - Ending (a)	<u>\$ 14,238,541</u>	<u>\$ 13,813,411</u>	<u>\$ 13,165,809</u>
Plan Fiduciary Net Position			
Contributions - Employer	708,789	673,090	723,752
Contributions - State	43,485	56,846	54,472
Contributions - Employee	85,999	79,884	83,456
Contributions - Buy Back	8,928	-	-
Net Investment Income	(112,066)	579,975	525,540
Benefit Payments, including Refunds of Employee Contributions	(653,839)	(660,031)	(610,868)
Administrative Expense	(19,947)	(24,204)	(24,161)
Net Change in Plan Fiduciary Net Position	61,349	705,560	752,191
Plan Fiduciary Net Position - Beginning	6,371,445	5,665,885	4,913,694
Plan Fiduciary Net Position - Ending (b)	<u>\$ 6,432,794</u>	<u>\$ 6,371,445</u>	<u>\$ 5,665,885</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 7,805,747</u>	<u>\$ 7,441,966</u>	<u>\$ 7,499,924</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	45.18%	46.13%	43.03%
Covered Payroll ¹	\$ 1,119,731	N/A	N/A
Net Pension Liability as a percentage of Covered Payroll	697.11%	N/A	N/A

Notes to Schedule:

¹ The Covered Payroll numbers shown are in compliance with GASB 82.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll ¹	Contributions as a percentage of Covered Payroll
09/30/2018	\$ 899,851	899,851	\$ -	\$ 1,211,105	74.30%
09/30/2017	\$ 819,273	\$ 819,273	\$ -	\$ 1,189,075	68.90%
09/30/2016	\$ 820,904	\$ 820,904	\$ -	\$ 1,146,514	71.60%
09/30/2015	\$ 752,274	\$ 752,274	\$ -	\$ 1,119,731	67.18%
09/30/2014	\$ 729,936	\$ 729,936	\$ -	N/A	N/A
09/30/2013	\$ 778,224	\$ 778,224	\$ -	N/A	N/A

¹ The Covered Payroll numbers shown are in compliance with GASB 82.

Notes to Schedule

Valuation Date: 10/01/2016

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:

Mortality:

Healthy Lives:

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB

Disabled Lives:

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

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

The assumed rates of mortality 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 the July 1, 2015 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate:

7.75% 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.

Retirement Age:

Age 55 and 10 years of Credited Service, or age 52 and 25 years of Credited Service. Also, any Member who has reached Normal Retirement is assumed to continue employment for one additional year. We feel this is reasonable based on plan provisions.

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. We feel this is reasonable based on plan provisions.

Disability Rates:

See table on following page (1201). It is assumed that 75% of Disability Retirees are service related. This assumption is consistent with those used by other plans containing Florida municipal Firefighters.

Termination Rates:

Salary Increases:

Payroll Increase:

Funding Method:

Asset Valuation Method:

See table on following page (1304A). This assumption is consistent with those used by other plans containing Florida municipal Firefighters.

7.00% per year until the assumed retirement age; see table below. We feel this assumption is reasonable based upon long-term expectations.

3.50% per year. This is in compliance with Part VII of Chapter 112, Florida Statutes.

Entry Age Normal Actuarial Cost Method.

Each year, the prior Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value of Assets.

Termination and Disability Rate Table:

Age	% Becoming Disabled During the Year	% Terminating During the Year
20	0.03%	9.30%
30	0.04%	7.90%
40	0.07%	4.30%
50	0.18%	1.10%

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, 2018

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 8,411,083	\$ 491,063	\$ 1,911,338	\$ -
Employer and State Contributions made after 09/30/2017	-	-	899,851	-
Total Pension Liability Factors:				
Service Cost	331,319	-	-	331,319
Interest	1,192,561	-	-	1,192,561
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	34,366	-	34,366	-
Current year amortization of experience difference	-	(97,015)	(4,912)	(92,103)
Change in assumptions about future economic or demographic factors or other inputs	295,819	-	295,819	-
Current year amortization of change in assumptions	-	-	(152,004)	152,004
Benefit Payments, including Refunds of Employee Contributions	(649,774)	-	-	-
Net change	<u>1,204,291</u>	<u>(97,015)</u>	<u>1,073,120</u>	<u>1,583,781</u>
Plan Fiduciary Net Position:				
Contributions - Employer	782,613	-	(782,613)	-
Contributions - State	36,660	-	(36,660)	-
Contributions - Employee	95,126	-	-	(95,126)
Projected Net Investment Income	549,792	-	-	(549,792)
Difference between projected and actual earnings on Pension Plan investments	287,126	287,126	-	-
Current year amortization	-	(84,626)	(166,464)	81,838
Benefit Payments, including Refunds of Employee Contributions	(649,774)	-	-	-
Administrative Expenses	(17,166)	-	-	17,166
Net change	<u>1,084,377</u>	<u>202,500</u>	<u>(985,737)</u>	<u>(545,914)</u>
Ending Balance	<u>\$ 8,530,997</u>	<u>\$ 596,548</u>	<u>\$ 1,998,721</u>	<u>\$ 1,037,867</u>

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 8,530,997	\$ 596,548	\$ 1,998,721	\$ -
Employer and State Contributions made after 09/30/2018	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	281,575	-	-	281,575
Interest	1,183,662	-	-	1,183,662
Changes in benefit terms	(695,908)	-	-	(695,908)
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	80,459	-	80,459	-
Current year amortization of experience difference	-	(97,015)	(14,969)	(82,046)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(152,004)	152,004
Benefit Payments, including Refunds of Employee Contributions	(778,491)	-	-	-
Net change	<u>71,297</u>	<u>(97,015)</u>	<u>(86,514)</u>	<u>839,287</u>
Plan Fiduciary Net Position:				
Contributions - Employer	861,986	-	(861,986)	-
Contributions - State	37,865	-	(37,865)	-
Contributions - Employee	96,888	-	-	(96,888)
Contributions - Buy Back	-	-	-	-
Projected Net Investment Income	610,493	-	-	(610,493)
Difference between projected and actual earnings on Pension Plan investments	(11,023)	-	11,023	-
Current year amortization	-	(84,625)	(168,668)	84,043
Benefit Payments, including Refunds of Employee Contributions	(778,491)	-	-	-
Administrative Expenses	(47,929)	-	-	47,929
Net change	<u>769,789</u>	<u>(84,625)</u>	<u>(1,057,496)</u>	<u>(575,409)</u>
Ending Balance	<u>\$ 7,832,505</u>	<u>\$ 414,908</u>	<u>TBD</u>	<u>\$ 263,878</u>

* Employer and State Contributions subsequent to the measurement date made after September 30, 2018 but made on or before September 30, 2019 need to be added.

AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the of Differences Between Projected and

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025
2014	\$ (136,002)	5	\$ (27,200)	\$ (27,200)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 612,573	5	\$ 122,515	\$ 122,515	\$ 122,515	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 219,748	5	\$ 43,949	\$ 43,950	\$ 43,950	\$ 43,950	\$ -	\$ -	\$ -	\$ -
2017	\$ (287,126)	5	\$ (57,426)	\$ (57,425)	\$ (57,425)	\$ (57,425)	\$ (57,425)	\$ -	\$ -	\$ -
2018	\$ 11,023	5	\$ -	\$ 2,203	\$ 2,205	\$ 2,205	\$ 2,205	\$ 2,205	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 81,838	\$ 84,043	\$ 111,245	\$ (11,270)	\$ (55,220)	\$ 2,205	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

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

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025
2016	\$ 658,466	6	\$ 109,745	\$ 109,744	\$ 109,744	\$ 109,744	\$ 109,744	\$ -	\$ -	\$ -
2017	\$ 295,819	7	\$ 42,259	\$ 42,260	\$ 42,260	\$ 42,260	\$ 42,260	\$ 42,260	\$ 42,260	\$ -
Net Increase (Decrease) in Pension Expense			\$ 152,004	\$ 152,004	\$ 152,004	\$ 152,004	\$ 152,004	\$ 42,260	\$ 42,260	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025
2015	\$ (290,489)	6.0	\$ (48,415)	\$ (48,415)	\$ (48,415)	\$ (48,415)	\$ -	\$ -	\$ -	\$ -
2016	\$ (291,603)	6.0	\$ (48,600)	\$ (48,600)	\$ (48,601)	\$ (48,601)	\$ (48,601)	\$ -	\$ -	\$ -
2017	\$ 34,366	7.0	\$ 4,912	\$ 4,909	\$ 4,909	\$ 4,909	\$ 4,909	\$ 4,909	\$ 4,909	\$ -
2018	\$ 80,459	8.0	\$ -	\$ 10,060	\$ 10,057	\$ 10,057	\$ 10,057	\$ 10,057	\$ 10,057	\$ 10,057
Net Increase (Decrease) in Pension Expense			\$ (92,103)	\$ (82,046)	\$ (82,050)	\$ (82,050)	\$ (33,635)	\$ 14,966	\$ 14,966	\$ 10,057



March 4, 2019

Board of Trustees
Okaloosa Island Fire District
Firefighters' Retirement Trust
Fund 105 Santa Rosa Blvd.
Ft. Walton Beach, FL 32548

Re: *Special Actuarial Analysis*

Dear Board:

As requested, we have performed a special actuarial analysis to determine the impact on the Plan's liabilities and funding requirements associated with reducing the valuation assumption for investment return from 7.50% to 7.25% or 7.00% annually, net of investment-related expenses.

The impact on the District's funding requirements, determined as of October 1, 2018 (as applicable for the funding year beginning October 1, 2019), is illustrated below. For illustrative purposes, we have also included the impact the on the Plan's Unfunded Actuarial Accrued Liability (UAAL) and Funded Ratio.

<u>Investment Rate</u>	<u>Unfunded Actuarial Accrued Liability (UAAL)</u>	<u>Increase / (Decrease) in UAAL</u>	<u>District and State Required Contribution</u>	<u>Increase / (Decrease)</u>	<u>Funded Ratio</u>
7.50% (Current)	8,260,160		\$946,697		50.7%
7.25%	8,819,889	559,729	997,861	51,164	49.1%
7.00%	9,410,287	1,150,127	1,051,276	104,579	47.5%

The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the section of this report and the October 1, 2018 actuarial valuation are considered an integral part of the actuarial opinions.

If you have any questions, please let me know.

Sincerely,

Jason L. Franken, FSA, EA, MAAA

Drew D. Ballard, EA, MAAA