

CITY OF EDGEWATER
FIREFIGHTERS' PENSION FUND

ACTUARIAL VALUATION
AS OF 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 8, 2019

Board of Trustees
City of Edgewater
Firefighters' Pension Board
P. O. Box 100
Edgewater, FL 32132-0100

Re: City of Edgewater Firefighters' Pension Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Edgewater Firefighters' Pension 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 City of Edgewater, 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 my knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Edgewater, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighters' Pension Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.


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

Respectfully submitted,

Foster & Foster, Inc.

By: 

Douglas H. Lozen, EA, MAAA

By: 

Tyler Koftan

TABLE OF CONTENTS

Section	Title	Page
I	Introduction	
	a. Summary of Report	5
	b. Changes Since Prior Valuation	7
	c. Contribution Impact of Annual Changes	8
	d. Comparative Summary of Principal Valuation Results	9
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	15
	b. Detailed Actuarial (Gain)/Loss Analysis	17
	c. Actuarial Assumptions and Methods	18
	d. Glossary	21
	e. Partial History of Premium Tax Refunds	23
	f. Supplemental Chapter 175 Share Plan Activity	24
III	Trust Fund	25
IV	Member Statistics	
	a. Statistical Data	29
	b. Age and Service Distribution	30
	c. Valuation Participant Reconciliation	31
V	Summary of Current Plan	32
VI	Governmental Accounting Standards Board Statements No. 67 and No. 68 Disclosure Information	35

SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Edgewater Firefighters' Pension 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 October 1, 2017 actuarial valuation report, 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 % of Projected Annual Payroll	33.1%	30.1%
Member Contributions (Est.) % of Projected Annual Payroll	6.0%	6.0%
City And State Required Contribution % of Projected Annual Payroll	27.1%	24.1%
State Contribution (Est.) ¹ % of Projected Annual Payroll	\$55,292 3.6%	\$55,292 3.6%
City Required Contribution ² % of Projected Annual Payroll	23.5%	20.5%

¹ The City may use up to \$55,292 (plus any Supplemental Distribution up to \$11,654) in State Contributions under the traditional interpretation of Chapter 99-1, Laws of Florida (as affirmed with the latest Collective Bargaining Agreement) for determining its minimum funding requirements; excess amounts are allocated to the Share Plan.

² The required contribution from the combination of City and State sources for the year ending September 30, 2020, is 27.1% of the actual payroll realized in that year. As a budgeting tool, the City may contribute 23.5% of each Member's Salary and then make a one-time adjustment to account for the actual State Monies received.

As disclosed on the prior page, the Minimum Required Contribution shows a net increase when compared to the results determined in the October 1, 2017 actuarial valuation report. The increase is primarily attributable to a reduction in the valuation payroll, thereby increasing the required contribution for payment of the Unfunded Actuarial Accrued Liability (when expressed as a percentage of payroll). On a dollar basis, the funding requirements have remained fairly stable since the prior valuation.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. Sources of favorable experience included an average salary increase of 2.74% which fell short of the 5.97% assumption, fewer retirements than expected, and an investment return of 8.24% (Actuarial Asset Basis) which exceeded the 7.50% assumption

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

For compliance with Part VII of Chapter 112, Florida Statutes, the payroll growth assumption was lowered from 1.90% to 0.00%.

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2017	20.8%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	-0.3%
Change in Normal Cost Rate	0.1%
Change in Administrative Expense Percentage	0.6%
Payroll Change Effect on UAAL Amortization	1.1%
Investment Return (Actuarial Asset Basis)	-0.8%
Salary Increases	-1.6%
Active Decrements	-1.2%
Inactive Mortality	0.0%
UAAL Gain Base Fully Recognized	3.1%
Other	<u>1.7%</u>
Total Change in Contribution	2.7%
(3) Contribution Determined as of October 1, 2018	23.5%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2018</u>	<u>10/1/2017</u>
A. Participant Data		
Actives	30	30
Service Retirees	10	9
Beneficiaries	0	0
Disability Retirees	1	1
Terminated Vested	<u>2</u>	<u>1</u>
 Total	 43	 41
 Total Annual Payroll	 \$1,767,470	 \$1,820,199
Payroll Under Assumed Ret. Age	1,541,668	1,676,723
 Annual Rate of Payments to:		
Service Retirees	393,917	336,857
Beneficiaries	0	0
Disability Retirees	11,532	11,532
Terminated Vested	16,302	0
 B. Assets		
Actuarial Value (AVA) ¹	13,330,180	12,303,744
Market Value (MVA) ¹	14,681,238	13,051,251
 C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	8,274,465	8,499,074
Disability Benefits	118,581	128,571
Death Benefits	33,257	37,442
Vested Benefits	632,253	664,494
Refund of Contributions	10,414	11,974
Service Retirees	4,979,923	4,304,366
Beneficiaries	0	0
Disability Retirees	153,368	153,760
Terminated Vested	37,956	881
Share Plan Balances ¹	<u>1,044,005</u>	<u>946,898</u>
 Total	 15,284,222	 14,747,460

C. Liabilities - (Continued)	<u>10/1/2018</u>	<u>10/1/2017</u>
Present Value of Future Salaries	11,981,705	12,574,574
Present Value of Future Member Contributions	718,902	754,474
Normal Cost (Retirement)	258,798	279,065
Normal Cost (Disability)	11,218	11,685
Normal Cost (Death)	1,856	2,005
Normal Cost (Vesting)	46,032	50,529
Normal Cost (Refunds)	<u>3,264</u>	<u>3,510</u>
Total Normal Cost	321,168	346,794
Present Value of Future Normal Costs	2,365,794	2,466,887
Accrued Liability (Retirement)	6,307,381	6,447,923
Accrued Liability (Disability)	44,572	50,775
Accrued Liability (Death)	19,969	23,198
Accrued Liability (Vesting)	328,754	350,195
Accrued Liability (Refunds)	2,500	2,577
Accrued Liability (Inactives)	5,171,247	4,459,007
Share Plan Balances ¹	<u>1,044,005</u>	<u>946,898</u>
Total Actuarial Accrued Liability (EAN AL)	12,918,428	12,280,573
Unfunded Actuarial Accrued Liability (UAAL)	(411,752)	(23,171)
Funded Ratio (AVA / EAN AL)	103.2%	100.2%

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	6,215,252	5,405,905
Actives	3,443,083	3,393,115
Member Contributions	<u>1,073,712</u>	<u>1,062,756</u>
Total	10,732,047	9,861,776
Non-vested Accrued Benefits	<u>673,816</u>	<u>585,340</u>
Total Present Value		
Accrued Benefits (PVAB)	11,405,863	10,447,116
Funded Ratio (MVA / PVAB)	128.7%	124.9%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	763,167	
Benefits Paid	(566,702)	
Interest	762,282	
Other	<u>0</u>	
Total	958,747	

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 (with interest) % of Total Annual Payroll ²	21.6	21.5
Administrative Expenses (with interest) % of Total Annual Payroll ²	3.3	2.7
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 25 years (as of 10/1/2018, with interest) % of Total Annual Payroll ²	8.2	5.9
Minimum Required Contribution % of Total Annual Payroll ²	33.1	30.1
Expected Member Contributions % of Total Annual Payroll ²	6.0	6.0
Expected City and State Contribution % of Total Annual Payroll ²	27.1	24.1

F. Past Contributions

Plan Years Ending:	<u>9/30/2018</u>
City and State Requirement	413,695
Actual Contributions Made:	
Members (excluding buyback)	100,493
City	358,424
State	<u>55,292</u>
Total	514,209

G. Net Actuarial (Gain)/Loss (269,505)

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 are expressed as a percentage of total annual payroll at 10/1/2018 of \$1,541,668.

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	(411,752) ¹

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2018	2.74%	5.97%
Year Ended 9/30/2017	0.93%	5.91%
Year Ended 9/30/2016	11.91%	5.84%
Year Ended 9/30/2015	5.31%	5.88%
Year Ended 9/30/2014	-0.64%	5.90%

(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	12.44%	8.24%	7.50%
Year Ended 9/30/2017	15.51%	8.52%	7.50%
Year Ended 9/30/2016	11.64%	7.26%	7.50%
Year Ended 9/30/2015	-5.33%	9.24%	7.50%
Year Ended 9/30/2014	13.59%	10.12%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2018	\$1,541,668
	10/1/2008	1,556,068
(b) Total Increase		-0.93%
(c) Number of Years		10.00
(d) Average Annual Rate		-0.09%

¹ Based on current State law and the existing UAAL bases, the UAAL will never be positive.

STATEMENT BY ENROLLED ACTUARY

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



Douglas H. Lozen, EA, MAAA
Enrolled Actuary #17-7778

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

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

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

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1) Unfunded Actuarial Accrued Liability as of October 1, 2017	(\$23,171)
(2) Sponsor Normal Cost developed as of October 1, 2017	246,191
(3) Expected administrative expenses for the year ended September 30, 2018	44,046
(4) Expected interest on (1), (2) and (3)	18,378
(5) Sponsor contributions to the System during the year ended September 30, 2018	413,716
(6) Expected interest on (5)	13,975
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	(142,247)
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	(269,505)
(10) Unfunded Actuarial Accrued Liability as of October 1, 2018	(411,752)

<u>Type of Base</u>	<u>Date Established</u>	<u>Years Remaining</u>	<u>10/1/2018 Amount</u>	<u>Amortization Amount</u>
Method Change	10/1/2004	16	370,201	37,671
Experience Loss	10/1/2004	10	302,797	41,036
Experience Loss	10/1/2005	10	8,070	1,094
Experience Gain	10/1/2006	10	(126,602)	(17,157)
Experience Loss	10/1/2007	10	34,292	4,647
Method Change	10/1/2008	10	(146,886)	(19,906)
Experience Loss	10/1/2009	1	118,847	118,847
Experience Loss	10/1/2010	2	175,640	90,994
Assumption	10/1/2010	12	89,600	10,775
Experience Loss	10/1/2011	3	301,678	107,913
Experience Gain	10/1/2012	4	(39,975)	(11,103)
Assumption	10/1/2012	14	(505,632)	(55,407)
Experience Gain	10/1/2013	5	(255,334)	(58,707)
Benefit Change	10/1/2013	25	(15,755)	(1,315)
Experience Gain	10/1/2014	6	(446,283)	(88,445)
Reconciliation Base	10/1/2015	17	(77,722)	(7,664)
Experience Gain	10/1/2015	7	(288,631)	(50,692)
Reconciliation Base	10/1/2016	18	(149,017)	(14,282)
Assumption	10/1/2016	18	217,676	20,862

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2018 <u>Amount</u>	Amortization <u>Amount</u>
Experience Loss	10/1/2016	8	530,000	84,172
Experience Gain	10/1/2017	9	(239,211)	(34,884)
Experience Gain	10/1/2018	10	<u>(269,505)</u>	<u>(36,524)</u>
			(411,752)	121,925

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2017	(\$23,171)
(2) Expected UAAL as of October 1, 2018	(142,247)
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(91,107)
Salary Increases	(185,208)
Active Decrements	(136,938)
Inactive Mortality	4,668
Other	<u>139,080</u>
Increase in UAAL due to (Gain)/Loss	(269,505)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2018	(\$411,752)

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>Credited Service</u>	<u>Assumption</u>
Less than 10 Years	6.5%
10-15 Years	6.0%
15 Years and Greater	5.0%

This assumption is based on the results of an experience study for the period 1999 – 2012.

Payroll Growth

0.00% (prior year 1.90%) 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

\$49,647 annually, based on actual expenses incurred in the prior fiscal year.

Final Salary Load

<u>Years of Credited Service as of October 1, 2012</u>	<u>Assumption</u>
0	No Load
Less than 10 years	10%
10 or more years	20%

Normal Retirement

<u>Years Eligible for Normal Retirement</u>	<u>Retirement Probability</u>
0	60%
1	0%
2	0%
3	0%
4	0%
5	100%

In addition to the table, 100% Retirement is assumed upon the attainment of age 55 with 5 years of Credited Service. This assumption is based on the results of an experience study for the period 1999 – 2012.

Disability Rates

See table below for sample rates. 75% of Disability Retirements are assumed to be service-incurred.

<u>Age</u>	<u>% Becoming Disabled During the Year</u>
20	0.06
30	0.08
40	0.14
50	0.36

This assumption is based on the results of an experience study examining Disability Retirements from plan inception through 2012.

Funding Method

Entry Age Normal Actuarial Cost Method.

Asset Smoothing Methodology

The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a negligible bias that is above or below the Market Value of Assets.

Termination Rates

<u>Credited Service</u>	<u>Assumption</u>
Less than 5 years	7.5%
5 or more years	4.0%

This assumption is based on the results of an experience study for the period 1999 – 2012.

Early Retirement

Commencing at eligibility for Early Retirement, Members are assumed to retire with an immediate benefit at the rate of 5% per year. We feel this is reasonable based on Plan provisions.

GLOSSARY

Total Annual Payroll is the projected annual rate of pay for the fiscal year beginning as of 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.

Normal (Current Year's) Cost 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.

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.

Unfunded Actuarial Accrued Liability (UAAL) is a liability which arises when a pension plan is initially established or improved and such establishment or improvement is applicable to all years of past service. Under the Entry Age Normal Actuarial Cost Method, there is also a new UAAL created each year equal to the actuarial gain or loss for that year.

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.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1996	23,899.69	_____%
1997	25,299.42	5.9%
1998	47,642.95	88.3%
1999	41,330.46	-13.2%
2000	13,141.01	-68.2%
2001	99,059.22	653.8%
2002	59,783.17	-39.6%
2003	62,787.48	5.0%
2004	74,704.18	19.0%
2005	76,405.86	2.3%
2006	89,820.32	17.6%
2007	98,797.85	10.0%
2008	126,392.81	27.9%
2009	149,161.09	18.0%
2010	125,314.59	-16.0%
2011	163,191.25	30.2%
2012	164,655.18	0.9%
2013	129,102.65	-21.6%
2014	155,381.68	20.4%
2015	150,763.30	-3.0%
2016	139,526.94	-7.5%
2017	147,551.12	5.8%
2018	151,679.78	2.8%

SUPPLEMENTAL CHAPTER 175 SHARE PLAN ACTIVITY
October 1, 2017 through September 30, 2018

9/30/2017 Balance	946,898
Prior Year Adjustment	60,498
Plus Additions	96,388
Investment Return Earned (est.)	125,320
Administrative Fees (est.)	-
Less Distributions	(185,099)
9/30/2018 Balance (est.)	1,044,005

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	375,847.65	375,847.65
Total Cash and Equivalents	375,847.65	375,847.65
Receivables:		
Investment Income	31,190.71	31,190.71
Total Receivable	31,190.71	31,190.71
Investments:		
U. S. Bonds and Bills	233,139.70	235,844.12
Corporate Bonds	3,098,482.58	3,091,975.12
Municipal Obligations	125,025.00	144,700.90
Stocks	6,956,920.41	10,825,909.75
Total Investments	10,413,567.69	14,298,429.89
Total Assets	10,820,606.05	14,705,468.25
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	21,580.39	21,580.39
Administrative Expenses	2,650.34	2,650.34
Total Liabilities	24,230.73	24,230.73
NET POSITION RESTRICTED FOR PENSIONS	10,796,375.32	14,681,237.52

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

ADDITIONS

Contributions:			
Member		100,492.61	
Buy-Back		17,702.59	
City		358,424.20	
State		151,679.78	
Total Contributions			628,299.18
Investment Income:			
Net Realized Gain (Loss)	351,624.37		
Unrealized Gain (Loss)	1,113,929.66		
Net Increase in Fair Value of Investments		1,465,554.03	
Interest & Dividends		250,799.06	
Less Investment Expense ¹		(98,316.57)	
Net Investment Income			1,618,036.52
Total Additions			2,246,335.70

DEDUCTIONS

Distributions to Members:			
Benefit Payments		381,602.97	
Lump Sum DROP Distributions		0.00	
Lump Sum Share Distributions		185,099.45	
Refunds of Member Contributions		0.00	
Total Distributions			566,702.42
Administrative Expense			49,647.22
Total Deductions			616,349.64
Net Increase in Net Position			1,629,986.06
NET POSITION RESTRICTED FOR PENSIONS			
Beginning of the Year			13,051,251.46
End of the Year			14,681,237.52

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	-5.33%	
09/30/2016	11.64%	
09/30/2017	15.51%	
09/30/2018	12.44%	
Annualized Rate of Return for prior four (4) years:		8.24%
(A) 10/01/2017 Actuarial Assets:		\$12,303,744.28
(I) Net Investment Income:		
1. Interest and Dividends	250,799.06	
2. Realized Gains (Losses)	351,624.37	
3. Change in Actuarial Value	510,378.83	
4. Investment Related Expenses	(98,316.57)	
Total		1,014,485.69
(B) 10/01/2018 Actuarial Assets:		\$13,330,179.51
Actuarial Asset Rate of Return = 2I/(A+B-I):		8.24%
10/01/2018 Limited Actuarial Assets:		\$13,330,179.51
10/01/2018 Market Value of Assets:		\$14,681,237.52
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		\$91,106.72

¹Market Value Basis, net of investment related expenses.

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

REVENUES

Contributions:		
Member	100,492.61	
Buy-Back	17,702.59	
City	358,424.20	
State	151,679.78	
 Total Contributions		 628,299.18
Earnings from Investments:		
Interest & Dividends	250,799.06	
Net Realized Gain (Loss)	351,624.37	
Change in Actuarial Value	510,378.83	
 Total Earnings and Investment Gains		 1,112,802.26

EXPENDITURES

Distributions to Members:		
Benefit Payments	381,602.97	
Lump Sum DROP Distributions	0.00	
Lump Sum Share Distributions	185,099.45	
Refunds of Member Contributions	0.00	
 Total Distributions		 566,702.42
Expenses:		
Investment related ¹	98,316.57	
Administrative	49,647.22	
 Total Expenses		 147,963.79
 Change in Net Assets for the Year		 1,026,435.23
 Net Assets Beginning of the Year		 12,303,744.28
 Net Assets End of the Year ²		 13,330,179.51

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	30	32	30	30
Average Current Age	40.5	39.7	38.8	39.3
Average Age at Employment	28.8	28.6	27.7	28.1
Average Past Service	11.7	11.1	11.1	11.2
Average Annual Salary	\$57,348	\$61,166	\$60,673	\$58,916
<u>Service Retirees</u>				
Number	5	6	9	10
Average Current Age	50.5	51.6	52.7	53.1
Average Annual Benefit	\$39,704	\$41,601	\$37,429	\$39,392
<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	38.3	39.3	40.3	41.3
Average Annual Benefit	\$11,532	\$11,532	\$11,532	\$11,532
<u>Terminated Vested</u>				
Number	0	0	1	2
Average Current Age ¹	N/A	N/A	N/A	31.9
Average Annual Benefit ¹	N/A	N/A	N/A	\$16,302

¹ The Average Current Age and 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	1	0	1	0	1	0	0	0	0	0	0	3
25 - 29	0	1	1	1	0	2	0	0	0	0	0	5
30 - 34	0	0	0	0	0	0	1	0	0	0	0	1
35 - 39	0	0	0	0	1	1	1	2	0	0	0	5
40 - 44	1	0	0	0	0	1	2	3	0	0	0	7
45 - 49	0	0	0	0	0	0	1	1	1	0	0	3
50 - 54	0	0	0	0	0	0	0	2	0	2	0	4
55 - 59	0	0	0	1	0	0	1	0	0	0	0	2
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	2	1	2	2	2	4	6	8	1	2	0	30

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2017	30
b. Terminations	
i. Vested (partial or full) with deferred benefits	(1)
ii. Non-vested or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. Continuing participants	28
g. New entrants	<u>2</u>
h. Total active life participants in valuation	30

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	9	0	1	1	11
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	10	0	1	2	13

SUMMARY OF CURRENT PLAN
(Through Ordinance 2017-O-20)

<u>Eligibility</u>	Full-time firefighters shall participate in the system as a condition of employment (Fire Chief may opt out).
<u>Salary</u>	Prior to October 1, 2012 – Total Compensation. On and after October 1, 2012 – Fixed monthly remuneration, including overtime up to 300 hours per year. Accruals of sick and vacation time on and after October 1, 2012 are not pensionable.
<u>Average Final Compensation (AFC)</u>	Average Salary for the highest 5 years during the 10 years immediately preceding retirement or termination.
<u>Credited Service</u>	Total years and fractional parts of years of service with the City as a Firefighter.
<u>Member Contributions</u>	6.0% of Salary.
<u>City and State Contributions</u>	Remaining amount necessary to pay current costs and amortize past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112.
<u>Normal Retirement</u>	
Date	The earlier of: 1) age 55 and the completion of 5 years of Credited Service, or 2) the completion of 20 years of Credited Service, regardless of age.
Benefit	3.0% of Average Final Compensation times Credited Service.
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Date	Age 50 and 10 years of Credited Service.
Benefit	Determined as for Normal Retirement and reduced 3.0% for each year that Early Retirement precedes Normal Retirement.

Disability Benefit

Eligibility

Service Incurred Covered from Date of Employment.

Non-Service Incurred 5 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. Minimum benefit for Service Incurred is 42% of AFC, for Non-Service Incurred is 25% of AFC. For Disability purposes only, the greater of AFC or Compensation at the time of Disability is used.

Duration Payable for life (with 120 monthly payments guaranteed), or until recovery (as determined by the Board).

Death Benefits

Pre-Retirement

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

Not Vested Refund of accumulated contributions without interest.

Post-Retirement According to optional form of benefit selected.

Termination of Employment

Benefit

Less than 5 years Refund of accumulated contributions without interest.

5 or more Refund of Contributions or Accrued benefit payable at retirement age.

Board of Trustees

- a. Two Council appointees,
- b. Two Members of the Department elected by the Membership, and
- c. Fifth Member elected by the other 4 and appointed by Council.

Deferred Retirement Option Plan

Eligibility	Eligibility for Normal Retirement.
Participation	Not to exceed 60 months.
Rate of Return	Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter.
Form of Distribution	Cash lump sum at termination of employment.

Chapter 175 Share Accounts

Allocation	Each year, commencing October 1, 2008, premium tax monies received pursuant to Chapter 175, Florida Statutes in excess of the 1998 Base Amount plus improvements will be allocated to individual Member Share accounts based on full years of credited service with the City.
Investment Earnings	Net rate of investment return, based on days worked.
Distribution	Lump sum payment at retirement, termination, disability, or death.
Vesting Schedule	Same as for other benefits (see above).

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	375,847
Total Cash and Equivalents	375,847
Receivables:	
Investment Income	31,191
Total Receivable	31,191
Investments:	
U. S. Bonds and Bills	235,844
Corporate Bonds	3,091,975
Municipal Obligations	144,701
Stocks	10,825,910
Total Investments	14,298,430
Total Assets	14,705,468
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	21,580
Administrative Expenses	2,650
Total Liabilities	24,230
NET POSITION RESTRICTED FOR PENSIONS	14,681,238

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

ADDITIONS

Contributions:

Member	91,166	
Buy-Back	17,703	
City	358,424	
State	151,680	
Total Contributions		618,973
 Investment Income:		
Net Increase in Fair Value of Investments	1,465,554	
Interest & Dividends	250,799	
Less Investment Expense ¹	(98,317)	
Net Investment Income		1,618,036
Total Additions		2,237,009

DEDUCTIONS

Distributions to Members:

Benefit Payments	381,603	
Lump Sum DROP Distributions	0	
Lump Sum Share Distributions	185,099	
Refunds of Member Contributions	0	
Total Distributions		566,702
 Administrative Expense		 49,647
Total Deductions		616,349
Net Increase in Net Position		1,620,660
 NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		13,060,578
 End of the Year		 14,681,238

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 Council appointees,
- b. Two Members of the Department elected by the Membership, and
- c. Fifth Member elected by the other 4 and appointed by Council.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	10
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	1
Active Plan Members	30
	41
	41

Benefits Provided

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

Normal Retirement:

The earlier of: 1) age 55 and the completion of 5 years of Credited Service, or 2) the completion of 20 years of Credited Service, regardless of age.

Benefit: 3.0% of Average Final Compensation times Credited Service.

Early Retirement:

Date: Age 50 and 10 years of Credited Service.

Benefit: Determined as for Normal Retirement and reduced 3.0% for each year that Early Retirement precedes Normal Retirement.

Disability Benefit:

Eligibility: Service Incurred Covered from Date of Employment.

Non-Service Incurred 5 years of Credited Service.

Benefit: Benefit accrued to date of disability. Minimum benefit for Service Incurred is 42% of AFC, for Non-Service Incurred is 25% of AFC. For Disability purposes only, the greater of AFC or Compensation at the time of Disability is used.

Pre-Retirement Death Benefits:

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

Not Vested: Refund of accumulated contributions without interest.

Termination of Employment:

Less than 5 years: Refund of accumulated contributions without interest.

5 or more: Refund of Contributions or Accrued benefit payable at retirement age.

Chapter 175 Share Accounts:

Allocation: Each year, commencing October 1, 2008, premium tax monies received pursuant to Chapter 175, Florida Statutes in excess of the 1998 Base Amount plus improvements will be allocated to individual Member Share accounts based on full years of credited service with the City.

Investment Earnings: Net rate of investment return, based on days worked.

Distribution: Lump sum payment at retirement, termination, disability, or death.

Vesting Schedule: Same as for other benefits (see above).

Contributions

Member: 6.0% of Salary.

City and State Contribution: Remaining amount necessary to pay current costs and amortize past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112.

GASB 67

Investments

Investment Policy:

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

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	50.0%
International Equity	15.0%
Domestic Fixed Income	35.0%
<u>Total</u>	<u>100.0%</u>

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 12.44 percent.

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

Deferred Retirement Option Program

Eligibility: for Normal Retirement.

Participation: Not to exceed 60 months.

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

The DROP balance as September 30, 2018 is \$0.

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	\$ 12,959,553
Plan Fiduciary Net Position	\$ (14,681,238)
Sponsor's Net Pension Liability	<u>\$ (1,721,685)</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	113.29%

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	5.00% - 6.50%
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 June 11, 2013.

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:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return</u>
Domestic Equity	7.50%
International Equity	8.50%
Domestic Fixed Income	2.50%

GASB 67

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 Discount Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ (150,011)	\$ (1,721,685)	\$ (3,016,676)

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	354,548	358,456	322,776
Interest	922,206	825,460	752,753
Share Plan Allocation	96,388	92,260	84,235
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(89,479)	473,491	(45,934)
Changes of assumptions	-	-	147,249
Contributions - Buy Back	17,703	8,544	9,721
Benefit Payments, including Refunds of Employee Contributions	(566,702)	(362,003)	(312,107)
Net Change in Total Pension Liability	734,664	1,396,208	958,693
Total Pension Liability - Beginning	12,224,888	10,828,680	9,869,987
Total Pension Liability - Ending (a)	<u>\$ 12,959,552</u>	<u>\$ 12,224,888</u>	<u>\$ 10,828,680</u>
Plan Fiduciary Net Position			
Contributions - Employer	358,424	317,000	358,086
Contributions - State	151,680	147,551	139,527
Contributions - Employee	91,166	117,483	107,966
Contributions - Buy Back	17,703	8,544	9,721
Net Investment Income	1,618,036	1,734,571	1,143,088
Benefit Payments, including Refunds of Employee Contributions	(566,702)	(362,003)	(312,107)
Administrative Expense	(49,647)	(44,046)	(58,960)
Net Change in Plan Fiduciary Net Position	1,620,660	1,919,100	1,387,321
Plan Fiduciary Net Position - Beginning	13,060,578	11,141,478	9,754,157
Plan Fiduciary Net Position - Ending (b)	<u>\$ 14,681,238</u>	<u>\$ 13,060,578</u>	<u>\$ 11,141,478</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (1,721,686)</u>	<u>\$ (835,690)</u>	<u>\$ (312,798)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	113.29%	106.84%	102.89%
Covered Payroll ¹	\$ 1,674,877	\$ 1,802,605	\$ 1,799,429
Net Pension Liability as a percentage of Covered Payroll	-102.79%	-46.36%	-17.38%

Notes to Schedule:

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

Changes of assumptions:

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	317,342	323,511	300,940
Interest	715,242	652,070	601,821
Share Plan Allocation	90,777	88,962	-
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(367,566)	-	-
Changes of assumptions	-	-	-
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(210,052)	(222,096)	(288,611)
Net Change in Total Pension Liability	545,743	842,447	614,150
Total Pension Liability - Beginning	9,324,244	8,481,797	7,867,647
Total Pension Liability - Ending (a)	<u>\$ 9,869,987</u>	<u>\$ 9,324,244</u>	<u>\$ 8,481,797</u>
Plan Fiduciary Net Position			
Contributions - Employer	354,899	392,863	469,302
Contributions - State	150,763	155,382	129,103
Contributions - Employee	93,950	88,869	87,309
Contributions - Buy Back	-	-	-
Net Investment Income	(536,507)	1,160,776	766,338
Benefit Payments, including Refunds of Employee Contributions	(210,052)	(222,096)	(288,611)
Administrative Expense	(48,746)	(44,645)	(18,869)
Net Change in Plan Fiduciary Net Position	(195,693)	1,531,149	1,144,572
Plan Fiduciary Net Position - Beginning	9,949,850	8,418,701	7,274,129
Plan Fiduciary Net Position - Ending (b)	<u>\$ 9,754,157</u>	<u>\$ 9,949,850</u>	<u>\$ 8,418,701</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 115,830</u>	<u>\$ (625,606)</u>	<u>\$ 63,096</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	98.83%	106.71%	99.26%
Covered Payroll ¹	\$ 1,579,650	\$ 1,467,330	\$ 1,455,154
Net Pension Liability as a percentage of Covered Payroll	7.33%	-42.64%	4.34%

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	\$ 413,695	\$ 413,716	\$ (21)	\$ 1,674,877	24.70%
09/30/2017	\$ 389,363	\$ 372,292	\$ 17,071	\$ 1,802,605	20.65%
09/30/2016	\$ 430,063	\$ 413,378	\$ 16,685	\$ 1,799,429	22.97%
09/30/2015	\$ 407,550	\$ 414,885	\$ (7,335)	\$ 1,579,650	26.26%
09/30/2014	\$ 432,862	\$ 459,283	\$ (26,421)	\$ 1,467,330	31.30%
09/30/2013	\$ 534,041	\$ 534,041	\$ -	\$ 1,455,154	36.70%

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 Rate:

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 7.5% per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.

Interest Rate:

Normal Retirement:

Years Eligible for Normal Retirement	Retirement Probability
0	60%
1	0%
2	0%
3	0%
4	0%
5	100%

In addition to the above table, 100% Retirement is assumed upon the attainment of age 55 with 5 years of Credited Service. This assumption is based on the results of an experience study for the period 1999 – 2012.

GASB 67

Disability Rates: See table below for sample rates. 75% of Disability Retirements are assumed to be service-incurred.

<u>Age</u>	<u>% Becoming Disabled During the Year</u>
20	0.06%
30	0.08%
40	0.14%
50	0.36%

This assumption is based on the results of an experience study examining Disability Retirements from plan inception through 2012.

Payroll Growth: 1.9% per year.
 Funding Method: Entry Age Normal Actuarial Cost Method.
 Amortization Method: Level Percentage of Pay, Closed.
 Remaining Amortization Period: 28 Years (as of 10/01/2016 valuation).
 Asset Smoothing Methodology: The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a negligible bias that is above or below the Market Value of Assets.

<u>Credited Service</u>	<u>Assumption</u>
Less than 10 Years	6.5%
10-15 Years	6.0%
15 Years and Greater	5.0%

This assumption is based on the results of an experience study for the period 1999 – 2012.

<u>Years of Credited Service as of October 1, 2012</u>	<u>Assumption</u>
0	No Load
Less than 10 years	10%
10 or more years	20%

<u>Credited Service</u>	<u>Assumption</u>
Less than 6 years	7.5%
5 or more years	4.0%

This assumption is based on the results of an experience study for the period 1999 – 2012.

Early Retirement: Commencing at eligibility for Early Retirement, Members are assumed to retire with an immediate benefit at the rate of 5% per year. We feel this is reasonable based on Plan provisions.

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2018	12.44%
09/30/2017	15.51%
09/30/2016	11.64%
09/30/2015	-5.33%
09/30/2014	13.59%
09/30/2013	10.25%

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 Council appointees,
- b. Two Members of the Department elected by the Membership, and
- c. Fifth Member elected by the other 4 and appointed by Council.

Full-time firefighters shall participate in the system as a condition of employment (Fire Chief may opt out).

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	10
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	1
Active Plan Members	30
	41
	41

Benefits Provided

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

Normal Retirement:

The earlier of: 1) age 55 and the completion of 5 years of Credited Service, or 2) the completion of 20 years of Credited Service, regardless of age.

Benefit: 3.0% of Average Final Compensation times Credited Service.

Early Retirement:

Date: Age 50 and 10 years of Credited Service.

Benefit: Determined as for Normal Retirement and reduced 3.0% for each year that Early Retirement precedes Normal Retirement.

Disability Benefit:

Eligibility: Service Incurred Covered from Date of Employment.

Non-Service Incurred 5 years of Credited Service.

Benefit: Benefit accrued to date of disability. Minimum benefit for Service Incurred is 42% of AFC, for Non-Service Incurred is 25% of AFC. For Disability purposes only, the greater of AFC or Compensation at the time of Disability is used.

Pre-Retirement Death Benefits:

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

Not Vested: Refund of accumulated contributions without interest.

Termination of Employment:

Less than 5 years: Refund of accumulated contributions without interest.

5 or more: Refund of Contributions or Accrued benefit payable at retirement age.

Chapter 175 Share Accounts:

Allocation: Each year, commencing October 1, 2008, premium tax monies received pursuant to Chapter 175, Florida Statutes in excess of the 1998 Base Amount plus improvements will be allocated to individual Member Share accounts based on full years of credited service with the City.

Investment Earnings: Net rate of investment return, based on days worked.

Distribution: Lump sum payment at retirement, termination, disability, or death.

Vesting Schedule: Same as for other benefits (see above).

Contributions

Member: 6.0% of Salary.

City and State Contribution: Remaining amount necessary to pay current costs and amortize past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112.

GASB 68

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	5.00% - 6.50%
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 June 11, 2013.

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	50.0%	7.50%
International Equity	15.0%	8.50%
Domestic Fixed Income	35.0%	2.50%
Total	<u>100.0%</u>	

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	\$ 12,224,888	\$ 13,060,578	\$ (835,690)
Changes for a Year:			
Service Cost	354,548	-	354,548
Interest	922,206	-	922,206
Share Plan Allocation	96,388	-	96,388
Differences between Expected and Actual Experience	(89,479)	-	(89,479)
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	358,424	(358,424)
Contributions - State	-	151,680	(151,680)
Contributions - Employee	-	91,166	(91,166)
Contributions - Buy Back	17,703	17,703	-
Net Investment Income	-	1,618,036	(1,618,036)
Benefit Payments, including Refunds of Employee Contributions	(566,702)	(566,702)	-
Administrative Expense	-	(49,647)	49,647
Net Changes	734,664	1,620,660	(885,996)
Reporting Period Ending September 30, 2019	\$ 12,959,552	\$ 14,681,238	\$ (1,721,686)

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	\$ (150,011)	\$ (1,721,686)	\$ (3,016,676)

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 \$248,030.

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	405,852	240,660
Changes of assumptions	98,167	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	539,938
Employer and State contributions subsequent to the measurement date	510,104	-
Total	\$ 1,014,123	\$ 780,598

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:		Amount
2019		\$ (70,855)
2020		\$ 32,243
2021		\$ (226,862)
2022		\$ (146,389)
2023		\$ 67,642
Thereafter		\$ 67,642

Payable to the Pension Plan

On September 30, 2017, the Sponsor reported a payable of \$9,078 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 \$138,534.

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	338,210	255,060
Changes of assumptions	73,626	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	947,781
Employer and State contributions subsequent to the measurement date	TBD	-
Total	TBD	\$ 1,202,841

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	\$ (110,349)
2021	\$ (369,454)
2022	\$ (288,981)
2023	\$ (74,950)
2024	\$ 52,729
Thereafter	\$ -

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	354,548	358,456	322,776
Interest	922,206	825,460	752,753
Share Plan Allocation	96,388	92,260	84,235
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(89,479)	473,491	(45,934)
Changes of assumptions	-	-	147,249
Contributions - Buy Back	17,703	8,544	9,721
Benefit Payments, including Refunds of Employee Contributions	(566,702)	(362,003)	(312,107)
Net Change in Total Pension Liability	734,664	1,396,208	958,693
Total Pension Liability - Beginning	12,224,888	10,828,680	9,869,987
Total Pension Liability - Ending (a)	\$ 12,959,552	\$ 12,224,888	\$ 10,828,680
Plan Fiduciary Net Position			
Contributions - Employer	358,424	317,000	358,086
Contributions - State	151,680	147,551	139,527
Contributions - Employee	91,166	117,483	107,966
Contributions - Buy Back	17,703	8,544	9,721
Net Investment Income	1,618,036	1,734,571	1,143,088
Benefit Payments, including Refunds of Employee Contributions	(566,702)	(362,003)	(312,107)
Administrative Expense	(49,647)	(44,046)	(58,960)
Net Change in Plan Fiduciary Net Position	1,620,660	1,919,100	1,387,321
Plan Fiduciary Net Position - Beginning	13,060,578	11,141,478	9,754,157
Plan Fiduciary Net Position - Ending (b)	\$ 14,681,238	\$ 13,060,578	\$ 11,141,478
Net Pension Liability - Ending (a) - (b)	\$ (1,721,686)	\$ (835,690)	\$ (312,798)
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	113.29%	106.84%	102.89%
Covered Payroll ¹	\$ 1,674,877	\$ 1,802,605	\$ 1,799,429
Net Pension Liability as a percentage of Covered Payroll	-102.79%	-46.36%	-17.38%

Notes to Schedule:

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

Changes of assumptions:

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

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	317,342	323,511	300,940
Interest	715,242	652,070	601,821
Share Plan Allocation	90,777	88,962	-
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(367,566)	-	-
Changes of assumptions	-	-	-
Contributions - Buy Back	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(210,052)	(222,096)	(288,611)
Net Change in Total Pension Liability	545,743	842,447	614,150
Total Pension Liability - Beginning	9,324,244	8,481,797	7,867,647
Total Pension Liability - Ending (a)	<u>\$ 9,869,987</u>	<u>\$ 9,324,244</u>	<u>\$ 8,481,797</u>
Plan Fiduciary Net Position			
Contributions - Employer	354,899	392,863	469,302
Contributions - State	150,763	155,382	129,103
Contributions - Employee	93,950	88,869	87,309
Contributions - Buy Back	-	-	-
Net Investment Income	(536,507)	1,160,776	766,338
Benefit Payments, including Refunds of Employee Contributions	(210,052)	(222,096)	(288,611)
Administrative Expense	(48,746)	(44,645)	(18,869)
Net Change in Plan Fiduciary Net Position	(195,693)	1,531,149	1,144,572
Plan Fiduciary Net Position - Beginning	9,949,850	8,418,701	7,274,129
Plan Fiduciary Net Position - Ending (b)	<u>\$ 9,754,157</u>	<u>\$ 9,949,850</u>	<u>\$ 8,418,701</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 115,830</u>	<u>\$ (625,606)</u>	<u>\$ 63,096</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	98.83%	106.71%	99.26%
Covered Payroll ¹	\$ 1,579,650	\$ 1,467,330	\$ 1,455,154
Net Pension Liability as a percentage of Covered Payroll	7.33%	-42.64%	4.34%

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	\$ 413,695	\$ 413,716	\$ (21)	\$ 1,674,877	24.70%
09/30/2017	\$ 389,363	\$ 372,292	\$ 17,071	\$ 1,802,605	20.65%
09/30/2016	\$ 430,063	\$ 413,378	\$ 16,685	\$ 1,799,429	22.97%
09/30/2015	\$ 407,550	\$ 414,885	\$ (7,335)	\$ 1,579,650	26.26%
09/30/2014	\$ 432,862	\$ 459,283	\$ (26,421)	\$ 1,467,330	31.30%
09/30/2013	\$ 534,041	\$ 534,041	\$ -	\$ 1,455,154	36.70%

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 Rate:

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:

7.5% per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.

Normal Retirement:

Years Eligible for Normal Retirement	Retirement Probability
0	60%
1	0%
2	0%
3	0%
4	0%
5	100%

In addition to the above table, 100% Retirement is assumed upon the attainment of age 55 with 5 years of Credited Service. This assumption is based on the results of an experience study for the period 1999 – 2012.

GASB 68

Disability Rates: See table below for sample rates. 75% of Disability Retirements are assumed to be service-incurred.

Age	% Becoming Disabled During the Year
20	0.06%
30	0.08%
40	0.14%
50	0.36%

This assumption is based on the results of an experience study examining Disability Retirements from plan inception through 2012.

Payroll Growth: 1.9% per year.
 Funding Method: Entry Age Normal Actuarial Cost Method.
 Amortization Method: Level Percentage of Pay, Closed.
 Remaining Amortization Period: 28 Years (as of 10/01/2016 valuation).
 Asset Smoothing Methodology: The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a negligible bias that is above or below the Market Value of Assets.

Credited Service	Assumption
Less than 10 Years	6.5%
10-15 Years	6.0%
15 Years and Greater	5.0%

This assumption is based on the results of an experience study for the period 1999 – 2012.

Years of Credited Service as of October 1, 2012	Assumption
0	No Load
Less than 10 years	10%
10 or more years	20%

Credited Service	Assumption
Less than 6 years	7.5%
5 or more years	4.0%

This assumption is based on the results of an experience study for the period 1999 – 2012.

Early Retirement: Commencing at eligibility for Early Retirement, Members are assumed to retire with an immediate benefit at the rate of 5% per year. We feel this is reasonable based on Plan provisions.

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	\$ (312,798)	\$ 870,231	\$ 1,364,574	\$ -
Employer and State contributions made after 09/30/2017	-	-	510,104	-
Total Pension Liability Factors:				
Service Cost	358,456	-	-	358,456
Interest	825,460	-	-	825,460
Share Plan Allocation	92,260	-	-	92,260
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	8,544	-	-	8,544
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	473,491	-	473,491	-
Current year amortization of experience difference	-	(60,165)	(67,639)	7,474
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(24,541)	24,541
Benefit Payments, including Refunds of Employee Contributions	(362,003)	-	-	-
Net change	<u>1,396,208</u>	<u>(60,165)</u>	<u>891,415</u>	<u>1,316,735</u>
Plan Fiduciary Net Position:				
Contributions - Employer	317,000	-	(317,000)	-
Contributions - State	147,551	-	(147,551)	-
Contributions - Employee	117,483	-	-	(117,483)
Contributions - Buy Back	8,544	-	-	(8,544)
Projected Net Investment Income	842,531	-	-	(842,531)
Difference between projected and actual earnings on Pension Plan investments	892,040	892,040	-	-
Current year amortization	-	(403,298)	(259,105)	(144,193)
Benefit Payments, including Refunds of Employee Contributions	(362,003)	-	-	-
Administrative Expenses	(44,046)	-	-	44,046
Net change	<u>1,919,100</u>	<u>488,742</u>	<u>(723,656)</u>	<u>(1,068,705)</u>
Ending Balance	<u>\$ (835,690)</u>	<u>\$ 1,298,808</u>	<u>\$ 1,532,333</u>	<u>\$ 248,030</u>

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (835,690)	\$ 1,298,808	\$ 1,532,333	\$ -
Employer and State Contributions made after 09/30/2018	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	354,548	-	-	354,548
Interest	922,206	-	-	922,206
Share Plan Allocation	96,388	-	-	96,388
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	17,703	-	-	17,703
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(89,479)	89,479	-	-
Current year amortization of experience difference	-	(75,079)	(67,642)	(7,437)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(24,541)	24,541
Benefit Payments, including Refunds of Employee Contributions	(566,702)	-	-	-
Net change	<u>734,664</u>	<u>14,400</u>	<u>(92,183)</u>	<u>1,407,949</u>
Plan Fiduciary Net Position:				
Contributions - Employer	358,424	-	(358,424)	-
Contributions - State	151,680	-	(151,680)	-
Contributions - Employee	91,166	-	-	(91,166)
Contributions - Buy Back	17,703	-	-	(17,703)
Projected Net Investment Income	979,642	-	-	(979,642)
Difference between projected and actual earnings on Pension Plan investments	638,394	638,394	-	-
Current year amortization	-	(489,656)	(259,105)	(230,551)
Benefit Payments, including Refunds of Employee Contributions	(566,702)	-	-	-
Administrative Expenses	(49,647)	-	-	49,647
Net change	<u>1,620,660</u>	<u>148,738</u>	<u>(769,209)</u>	<u>(1,269,415)</u>
Ending Balance	<u>\$ (1,721,686)</u>	<u>\$ 1,461,946</u>	<u>TBD</u>	<u>\$ 138,534</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 Actual Earnings on Pension Plan Investments

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2013	\$ (206,596)	5	\$ (41,319)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2014	\$ (515,484)	5	\$ (103,097)	\$ (103,097)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 1,295,526	5	\$ 259,105	\$ 259,105	\$ 259,105	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (402,367)	5	\$ (80,474)	\$ (80,473)	\$ (80,473)	\$ (80,473)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (892,040)	5	\$ (178,408)	\$ (178,408)	\$ (178,408)	\$ (178,408)	\$ (178,408)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (638,394)	5	\$ -	\$ (127,678)	\$ (127,679)	\$ (127,679)	\$ (127,679)	\$ (127,679)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (144,193)	\$ (230,551)	\$ (127,455)	\$ (386,560)	\$ (306,087)	\$ (127,679)	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2016	\$ 147,249	6	\$ 24,541	\$ 24,541	\$ 24,542	\$ 24,542	\$ 24,542	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 24,541	\$ 24,541	\$ 24,542	\$ 24,542	\$ 24,542	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2015	\$ (367,566)	7	\$ (52,510)	\$ (52,509)	\$ (52,509)	\$ (52,509)	\$ (52,509)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (45,934)	6	\$ (7,655)	\$ (7,656)	\$ (7,656)	\$ (7,656)	\$ (7,656)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 473,491	7	\$ 67,639	\$ 67,642	\$ 67,642	\$ 67,642	\$ 67,642	\$ 67,642	\$ 67,642	\$ -	\$ -	\$ -	\$ -
2018	\$ (89,479)	6	\$ -	\$ (14,914)	\$ (14,913)	\$ (14,913)	\$ (14,913)	\$ (14,913)	\$ (14,913)	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 7,474	\$ (7,437)	\$ (7,436)	\$ (7,436)	\$ (7,436)	\$ 52,729	\$ 52,729	\$ -	\$ -	\$ -	\$ -