CITY OF EDGEWATER FIREFIGHTERS' PENSION FUND

ACTUARIAL VALUATION AS OF OCTOBER 1, 2017

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDED SEPTEMBER 30, 2019



March 16, 2018

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. Please note that these valuations may not be applicable for any other purposes.

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 reflects 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 this valuation, 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.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Board of Trustees, 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, 2016. The total pension liability was

rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2017 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 City of Edgewater, nor does anyone at Foster &

Foster, Inc. act as a member of the Board of Trustees of the City of Edgewater 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 me at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By:

Douglas H. Lozen, EA, MAAA

Enrolled Actuary #17-7778

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Edgewater Firefighters' Pension Fund, performed as of October 1, 2017, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ended September 30, 2019.

The contribution requirements, compared with those developed in the October 1, 2016 actuarial valuation, are as follows:

Valuation Date Applicable Plan Year End	10/1/2017 9/30/2019	10/1/2016 9/30/2018
Total Required Contribution % of Total Annual Payroll	30.1%	30.7%
Member Contributions (Est.) % of Total Annual Payroll	6.0%	6.0%
City and State Required Contribution % of Total Annual Payroll	24.1%	24.7%
State Contribution (est.) ¹ % of Total Annual Payroll	55,292 3.3%	55,292 3.3%
Balance from City ¹ % of Total Annual Payroll	20.8%	21.4%

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. For budgeting purposes, the required Sponsor Contribution (City and State) is 24.1% of Pensionable Earnings for the fiscal year ending September 30, 2019. The precise City requirement for the year is this amount, less applicable State Contributions described above.

Please note there is a City shortfall contribution of \$9,078 for the fiscal year ended September 30, 2017. An interest charge of \$57 is payable for each full month after September 30, 2017 until this shortfall contribution is deposited.

Experience during the last 12 months was more favorable than expected, relative to the Plan's actuarial assumptions. The primary sources of favorable experience included average increases in pensionable compensation that were less than the assumed rates, and an 8.52% investment return (Actuarial Asset Basis) exceeding the 7.5% assumption. These gains were partially offset by unfavorable turnover experience.

Additionally, this valuation of the Plan reflects a statutory change in the mortality assumption under Chapter 2015-39, Laws of Florida.

The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

By: // Douglas H. Lozen, EA, MAAA

vil and

Paul Baugher, FSA, EA

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2016	21.5%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	-0.1%
Change in Normal Cost Rate	0.3%
Change in Administrative Expense Percentage	-0.8%
Payroll Change Effect on UAAL Amortization	0.3%
Investment Return (Actuarial Asset Basis)	-0.9%
Salary Increases	-1.5%
Active Decrements	0.6%
Inactive Mortality	0.0%
Assumption Change	0.0%
Other ¹	<u>1.4%</u>
Total Change in Contribution	-0.7%
(3) Contribution Determined as of October 1, 2017	20.8%

CHANGES SINCE PRIOR VALUATION

Plan Changes

Ordinance 2017-O-20, adopted and effective June 5, 2017, amended the City's line-of-duty injury health benefit. As this benefit is not directly payable from the Firefighters' Trust Fund, a letter of No Actuarial Impact was submitted for the amendment.

Actuarial Assumption/Method Changes Since Prior Valuation

Since the prior valuation the mortality table has changed to comply with Chapter 2015-157, Laws of Florida to be the same rates as used in the July 1, 2016 Florida Retirement System (FRS) valuation for special risk lives. Previously the July 1, 2015 FRS rates for special risk lives were used.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	10/1/2017	10/1/2016
A. Participant Data		
Actives	30	32
Service Retirees	9	6
Beneficiaries	0	0
Disability Retirees	1	1
Terminated Vested	<u>1</u>	<u>0</u>
Total	41	39
Total Annual Payroll	\$1,820,199	\$1,957,327
Payroll Under Assumed Ret. Age	1,676,723	1,734,868
Annual Rate of Payments to:		
Service Retirees	336,857	249,604
Beneficiaries	0	0
Disability Retirees	11,532	11,532
Terminated Vested	0	0
B. Assets		
Actuarial Value (AVA) ¹	12,303,744	11,153,347
Market Value (MVA) ¹	13,051,251	11,124,407
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	8,499,074	8,758,289
Disability Benefits	128,571	135,378
Death Benefits	37,442	87,102
Vested Benefits	664,494	692,596
Refund of Contributions	11,974	11,337
Service Retirees	4,304,366	3,250,974
Beneficiaries	0	0
Disability Retirees	153,760	154,130
Terminated Vested	881	0
Share Plan Balances ¹	<u>946,898</u>	<u>851,842</u>
Total	14,747,460	13,941,648

C. Liabilities - (Continued)	<u>10/1/2017</u>	10/1/2016
Present Value of Future Salaries	12,574,574	13,117,413
Present Value of Future		
Member Contributions	754,474	787,045
Normal Cost (Retirement)	279,065	281,231
Normal Cost (Disability)	11,685	11,872
Normal Cost (Death)	2,005	4,581
Normal Cost (Vesting)	50,529	54,573
Normal Cost (Refunds)	<u>3,510</u>	<u>2,917</u>
Total Normal Cost	346,794	355,174
Present Value of Future		
Normal Costs	2,466,887	2,531,651
Accrued Liability (Retirement)	6,447,923	6,675,840
Accrued Liability (Disability)	50,775	53,296
Accrued Liability (Death)	23,198	53,204
Accrued Liability (Vesting)	350,195	368,690
Accrued Liability (Refunds)	2,577	2,021
Accrued Liability (Inactives)	4,459,007	3,405,104
Share Plan Balances ¹	<u>946,898</u>	<u>851,842</u>
Total Actuarial Accrued Liability (EAN AL)	12,280,573	11,409,997
Unfunded Actuarial Accrued		
Liability (UAAL)	(23,171)	256,650
Funded Ratio (AVA / EAN AL)	100.2%	97.8%

D. Actuarial Present Value of		
Accrued Benefits	10/1/2017	10/1/2016
Vested Accrued Benefits		
	5 405 005	1.056.046
Inactives + Share Plan Balances ¹	5,405,905	4,256,946
Actives	3,393,115	3,588,563
Member Contributions	<u>1,062,756</u>	<u>1,116,681</u>
Total	9,861,776	8,962,190
Non-vested Accrued Benefits	<u>585,340</u>	533,091
Total Present Value		
Accrued Benefits (PVAB)	10,447,116	9,495,281
Funded Ratio (MVA / PVAB)	124.9%	117.2%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	615,267	
Benefits Paid	(362,003)	
Interest	698,571	
Other		
	<u>0</u>	
Total	951,835	

Valuation Date	10/1/2017	10/1/2016
Applicable to Fiscal Year Ending	9/30/2019	9/30/2018
E. Pension Cost		
Normal Cost (with interest)		
% of Total Annual Payroll ²	21.5	21.2
Alteria de España de Maria de		
Administrative Expenses (with interest)	2.7	2.5
% of Total Annual Payroll ²	2.7	3.5
Payment Required to Amortize		
Unfunded Actuarial Accrued		
Liability over 26 years		
(as of 10/1/2017, with interest)		
% of Total Annual Payroll ²	5.9	6.0
Total Required Contribution		
% of Total Annual Payroll ²	30.1	30.7
70 Of Total Allitual Layron -	30.1	30.7
Expected Member Contributions		
% of Total Annual Payroll ²	6.0	6.0
F 10' 10' 10' 10'		
Expected City and State Contribution	24.1	24.7
% of Total Annual Payroll ²	24.1	24.7
F. Past Contributions		
Plan Years Ending:	9/30/2017	
-	 	
City and State Requirement	389,363	
Actual Contributions Made:		
Members (excluding buyback)	108,156	
City	334,071	
State	55,292	
Total	497,519	
G. Net Actuarial (Gain)/Loss	(227,350)	

 $^{^1\,}$ The asset values and liabilities include accumulated Share Plan Balances as of 9/30/2017 and 9/30/2016.

² Contributions developed as of 10/1/2017 are expressed as a percentage of total annual payroll at 10/1/2017 of \$1,676,723.

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

	Projected Unfunded
<u>Year</u>	Actuarial Accrued Liability 1
2017	(23,171)

I. (i) 3 Year Comparison of Actual and Assumed Salary Increases

		<u>Actual</u>	Assumed
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%

(ii) 3 Year Comparison of Investment Return on Actuarial Value

	<u>Actual</u>	Assumed
9/30/2017	8.52%	7.50%
9/30/2016	7.26%	7.50%
9/30/2015	9.24%	7.50%
	9/30/2016	9/30/2017 8.52% 9/30/2016 7.26%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2017	\$1,820,199
	10/1/2007	1,495,480
(1) T + 11		21.710/
(b) Total Increase		21.71%
(c) Number of Years		10.00
(d) Average Annual Rate		1.98%

¹ Based on current State law, no amortization credit will be available to offset the City's funding requirements.

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, 2016	\$256,650
(2)	Sponsor Normal Cost developed as of October 1, 2016	251,082
(3)	Expected administrative expenses for the year ended September 30, 2017	58,960
(4)	Expected interest on (1), (2) and (3)	40,291
(5)	Sponsor contributions to the System during the year ended September 30, 2017	389,363
(6)	Expected interest on (5)	13,441
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2017 (1)+(2)+(3)+(4)-(5)-(6)	204,179
(0)		·
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(227,350)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2017	(23,171)

Type of	Date	Years	10/1/2017	Amortization
<u>Base</u>	Established	Remaining	<u>Amount</u>	<u>Amount</u>
Method Change	10/1/2004	17	336,999	29,393
Experience Loss	10/1/2004	11	284,971	33,372
Experience Loss	10/1/2005	11	7,594	889
Experience Gain	10/1/2006	11	(119,148)	(13,953)
Experience Loss	10/1/2007	11	32,274	3,780
Experience Gain	10/1/2008	1	(46,742)	(46,742)
Method Change	10/1/2008	11	(138,239)	(16,189)
Experience Loss	10/1/2009	2	202,932	104,180
Experience Loss	10/1/2010	3	224,982	79,040
Assumption	10/1/2010	13	83,086	8,636
Experience Loss	10/1/2011	4	343,573	92,904
Experience Gain	10/1/2012	5	(42,691)	(9,475)
Assumption	10/1/2012	15	(463,937)	(43,799)
Experience Gain	10/1/2013	6	(261,838)	(49,677)
Benefit Change	10/1/2013	26	(14,066)	(975)
Experience Gain	10/1/2014	7	(445,045)	(74,221)
Reconciliation Base	10/1/2015	18	(70,522)	(5,942)
Experience Gain	10/1/2015	8	(282,022)	(42,194)
Reconciliation Base	10/1/2016	19	(134,826)	(11,006)

Type of	Date	Years	10/1/2017	Amortization
<u>Base</u>	Established	Remaining	<u>Amount</u>	<u>Amount</u>
Assumption	10/1/2016	19	196,949	16,078
Experience Loss	10/1/2016	9	509,895	69,509
Experience Gain	10/1/2017	10	(227,350)	(28,585)
			(23,171)	95,023

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2016	\$256,650
(2) Expected UAAL as of October 1, 2017	204,179
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(114,705)
Salary Increases	(193,522)
Active Decrements	74,773
Inactive Mortality	1,969
Other	<u>4,135</u>
Increase in UAAL due to (Gain)/Loss	(227,350)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2017	(\$23,171)

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy (previously annuitant) White Collar, Scale BB **Male:** RP2000 Generational, 10% Combined Healthy (previously annuitant) White Collar / 90% Combined Healthy (previously annuitant) 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, 2016 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

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

Salary Increases

<u>Credited Service</u>	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.

Final Salary Load

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

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 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>	% Becoming Disabled <u>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.

\$44,046 per year. This is equal to the non-investment-related expenses from the prior year.

1.9% per year, consistent with the Plan's actual ten-year payroll growth.

Entry Age Normal Actuarial Cost Method.

Administrative Expenses

Payroll Growth

Funding 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>	Assumption
Less than 5 years 5 or more years	7.5% 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.

VALUATION NOTES

<u>Total Annual Payroll</u> is the projected annual rate of pay as of the valuation date for all covered Members.

<u>Present Value of Benefits</u> 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.

<u>Total Required Contribution</u> 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.

<u>Entry Age Normal Cost Method</u> - 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 <u>Fiscal Year</u>	Amount	Increase from Previous Year
1995	21,636.86	%
1996	23,899.69	10.5%
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%

SUPPLEMENTAL CHAPTER 175 SHARE PLAN ACTIVITY October 1, 2016 through September 30, 2017

9/30/2016 Balance	851,842
Prior Year Adjustment	(44,913)
Plus Additions	92,260
Investment Return Earned (est.)	114,756
Administrative Fees	(1,500)
Less Distributions	(65,547)
9/30/2017 Balance (est.)	946,898

STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2017

ASSETS Cook and Cook Equivalents	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Short Term Investments	412,915.09	412,915.09
Cash	13,054.92	13,054.92
Cush	13,031.72	13,031.72
Total Cash and Equivalents	425,970.01	425,970.01
Receivables:		
Additional City Contributions	9,078.24	9,078.24
Investment Income	21,602.81	21,602.81
T (1D '11	20 601 05	20 (01 05
Total Receivable	30,681.05	30,681.05
Investments:		
U. S. Bonds and Bills	230,729.60	239,438.48
Corporate Bonds	2,592,113.17	2,623,958.67
Municipal Obligations	179,137.50	207,166.65
Stocks	6,834,906.29	9,539,665.40
Total Investments	9,836,886.56	12,610,229.20
Total Assets	10,293,537.62	13,066,880.26
LIABILITIES		
Payables:		
Benefit Payments	3,117.50	3,117.50
Investment Expenses	1,375.00	1,375.00
Administrative Expenses	1,809.85	1,809.85
Prepaid Member Contribution	9,326.45	9,326.45
Total Liabilities	15,628.80	15,628.80
NET POSITION RESTRICTED FOR PENSIONS	10,277,908.82	13,051,251.46

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2017 Market Value Basis

ADDITIONS
Contributions:

C 011411 C ##101151	
Member	108,156.28
Buy-Back	8,544.16
City	334,071.03
State	147,551.12

Total Contributions 598,322.59

Investment Income:

Net Realized Gain (Loss)

Unrealized Gain (Loss)

Net Increase in Fair Value of Investments
Interest & Dividends

Less Investment Expense¹

646,522.05

958,324.28

1,604,846.33

205,977.50

(76,252.91)

Net Investment Income 1,734,570.92

Total Additions 2,332,893.51

DEDUCTIONS

Distributions to Members:

Benefit Payments 296,455.63 Lump Sum Share Distributions 65,547.24 Refunds of Member Contributions 0.00

Total Distributions 362,002.87

Administrative Expense 44,046.35

Total Deductions 406,049.22

Net Increase in Net Position 1,926,844.29

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 11,124,407.17

End of the Year 13,051,251.46

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

ACTUARIAL ASSET VALUATION SEPTEMBER 30, 2017

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			
09/30/2014	13.59%			
09/30/2015	-5.33%			
09/30/2016	11.64%			
09/30/2017	15.51%			
Annualized Rate of Return for prior four (4) years	:	8.52%		
(A) 10/01/2016 Actuarial Assets:			\$11,153,346.96	
(I) Net Investment Income:				
 Interest and Dividends Realized Gains (Losses) Change in Actuarial Value Investment Related Expenses 		205,977.50 646,522.05 181,877.31 (76,252.91)	0.70.400.07	
To		958,123.95		
(B) 10/01/2017 Actuarial Assets:		\$12,303,744.28		
Actuarial Asset Rate of Return = 2I/(A+B-I):				
10/01/2017 Limited Actuarial Assets:			\$12,303,744.28	
10/01/2017 Market Value of As		\$13,051,251.46		
Actuarial Gain/(Loss) due to Investment Return (A	Actuarial Asset Basis)		\$114,704.98	

¹Market Value Basis, net of investment related expenses.

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS SEPTEMBER 30, 2017 Actuarial Asset Basis

REVENUES

KE V	EITEES	
Contributions:		
Member	108,156.28	
Buy-Back	8,544.16	
City	334,071.03	
State	147,551.12	
State	147,331.12	
Total Contributions		598,322.59
Earnings from Investments:		
Interest & Dividends	205,977.50	
Net Realized Gain (Loss)	646,522.05	
Change in Actuarial Value	181,877.31	
Change in Actuariar value	101,077.31	
Total Earnings and Investment Gains		1,034,376.86
EXPEN	IDITURES	
Distributions to Members:		
Benefit Payments	296,455.63	
Lump Sum Share Distributions	65,547.24	
Refunds of Member Contributions	0.00	
Retunds of Member Contributions	0.00	
Total Distributions		362,002.87
T.		
Expenses:		
Investment related ¹	76,252.91	
Administrative	44,046.35	
Total Expenses		120,299.26
Change in Not Accepts for the Year		1 150 207 22
Change in Net Assets for the Year		1,150,397.32
Net Assets Beginning of the Year		11,153,346.96
6 6 4 4 4 4		,,-
Net Assets End of the Year ²		12,303,744.28
		• •

¹Investment related expenses include investment advisory, custodial and performance monitoring fees. ²Net Assets may be limited for actuarial consideration.

RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2017

(1)	Total Required Contribution Rate	27.60%
(2)	Pensionable Payroll Derived from Member Contributions	\$1,802,604.67
(3)	Total Required Contribution (1) x (2)	497,518.89
(4)	Less Actual Member Contributions	(108,156.28)
(5)	Less Allowable State Contribution	(55,291.58)
(6)	Equals Required City Contribution for Fiscal 2017	334,071.03
(7)	Less 2016 Prepaid Contribution	(17,070.75)
(8)	Less Actual City Contributions	(307,922.04)
(9)	Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2017	\$9,078.24

STATISTICAL DATA ¹

	10/1/2014	<u>10/1/2015</u>	10/1/2016	10/1/2017
Actives				
Number	28	30	32	30
Average Current Age	40.3	40.5	39.7	38.8
Average Age at Employment	27.7	28.8	28.6	27.7
Average Past Service	12.6	11.7	11.1	11.1
Average Annual Salary	\$55,898	\$57,348	\$61,166	\$60,673
Service Retirees				
Number	5	5	6	9
Average Current Age	49.5	50.5	51.6	52.7
Average Annual Benefit	\$39,704	\$39,704	\$41,601	\$37,429
<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
Disability Retirees				
Number	1	1	1	1
Average Current Age	37.3	38.3	39.3	40.3
Average Annual Benefit	\$11,532	\$11,532	\$11,532	\$11,532
Terminated Vested				
Number	0	0	0	1
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit ²	N/A	N/A	N/A	N/A

¹ Prior to 10/1/2015, averages were salary weighted.

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

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2016	32
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	<u>(3)</u>
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	Receiving		
	Receiving	Death	Disability	Vested	
	<u>Benefits</u>	Benefits	<u>Benefits</u>	<u>Deferred</u>	<u>Total</u>
a. Number prior valuation	6	0	1	0	7
Retired	3	0	0	0	3
Vested Deferred	0	0	0	0	0
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	1	1
Rehires	0	0	0	0	0
Expired Annuities	0	0	0	0	0
Data Corrections	0	0	0	0	0
b. Number current valuation	9	0	1	1	11

SUMMARY OF PLAN PROVISIONS

(Through Ordinance 2017-O-20)

Eligibility 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.

Average Final Compensation (AFC) 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.

Member Contributions 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.

Normal Retirement

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).

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.

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.

<u>Board of Trustees</u> 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, 2017

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	412,915
Cash	13,055
Total Cash and Equivalents	425,970
Receivables:	
Additional City Contributions	9,078
Investment Income	21,603
Total Receivable	30,681
Investments:	
U. S. Bonds and Bills	239,438
Corporate Bonds	2,623,959
Municipal Obligations	207,167
Stocks	9,539,665
Total Investments	12,610,229
Total Assets	13,066,880
LIABILITIES	
Payables:	
Benefit Payments	3,117
Investment Expenses	1,375
Administrative Expenses	1,810
Total Liabilities	6,302
NET POSITION RESTRICTED FOR PENSIONS	13,060,578

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2017

Market Value Basis

Contributions:	
Member	117,483
Buy-Back	8,544
City	317,000
State	147,551

Total Contributions 590,578

Investment Income:

ADDITIONS

Net Increase in Fair Value of Investments1,604,846Interest & Dividends205,978Less Investment Expense¹(76,253)

Net Investment Income 1,734,571

Total Additions 2,325,149

DEDUCTIONS

Distributions to Members:

Benefit Payments296,456Lump Sum DROP Distributions0Lump Sum Share Distributions65,547Refunds of Member Contributions0

Total Distributions 362,003

Administrative Expense 44,046

Total Deductions 406,049

Net Increase in Net Position 1,919,100

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 11,141,478

End of the Year 13,060,578

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

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2017)

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, 2016:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	7
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	32
	39

Benefits Provided

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

Normal Retirement:

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.

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.

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.

Disability:

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.

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.

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2017:

Asset Class	Target Allocation
Domestic Equity	50%
International Equity	15%
Domestic Fixed Income	35%
Total	100%

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, 2017, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 15.51 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, 2017 is \$0.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2017 were as follows:

Total Pension Liability	\$ 12,224,888
Plan Fiduciary Net Position	\$ (13,060,578)
Sponsor's Net Pension Liability	\$ (835,690)
Plan Fiduciary Net Position as a percentage of Total Pension Liability	106.84%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2016 updated to September 30, 2017 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 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 2017 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, 2017 are summarized in the following table:

	Long Term Expected Real Rate of
Asset Class	Return
Domestic Equity	7.5%
International Equity	8.5%
Domestic Fixed Income	2.5%

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.

				Current		
	1%	Decrease	Dis	scount Rate	1	% Increase
		6.50%		7.50%		8.50%
Sponsor's Net Pension Liability	\$	660,461	\$	(835,690)	\$	(2,067,078)

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

	09/30/2017	09/30/2016	09/30/2015
Total Pension Liability			
Service Cost	358,456	322,776	317,342
Interest	825,460	752,753	715,242
Share Plan Allocation	92,260	84,235	90,777
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	473,491	(45,934)	(367,566)
Changes of assumptions	-	147,249	-
Contributions - Buy Back	8,544	9,721	-
Benefit Payments, including Refunds of Employee Contributions	(362,003)	(312,107)	(210,052)
Net Change in Total Pension Liability	1,396,208	958,693	545,743
Total Pension Liability - Beginning	10,828,680	9,869,987	9,324,244
Total Pension Liability - Ending (a)	\$ 12,224,888	\$ 10,828,680	\$ 9,869,987
Plan Fiduciary Net Position			
Contributions - Employer	317,000	358,086	354,899
Contributions - State	147,551	139,527	150,763
Contributions - Employee	117,483	107,966	93,950
Contributions - Buy Back	8,544	9,721	-
Net Investment Income	1,734,571	1,143,088	(536,507)
Benefit Payments, including Refunds of Employee Contributions	(362,003)	(312,107)	(210,052)
Administrative Expense	(44,046)	(58,960)	(48,746)
Net Change in Plan Fiduciary Net Position	1,919,100	1,387,321	(195,693)
Plan Fiduciary Net Position - Beginning	11,141,478	9,754,157	9,949,850
Plan Fiduciary Net Position - Ending (b)	\$ 13,060,578	\$ 11,141,478	\$ 9,754,157
Net Pension Liability - Ending (a) - (b)	\$ (835,690)	\$ (312,798)	\$ 115,830
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	106.84%	102.89%	98.83%
Covered Employee Payroll ¹	\$ 1,802,605	\$ 1,799,429	\$ 1,579,650
Net Pension Liability as a percentage of Covered Employee Payroll	-46.36%	-17.38%	7.33%

Notes to Schedule:

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.

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

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

	(09/30/2014	0	9/30/2013
Total Pension Liability				
Service Cost		323,511		300,940
Interest		652,070		601,821
Share Plan Allocation		88,962		-
Changes of benefit terms		-		-
Differences between Expected and Actual Experience		-		-
Changes of assumptions		-		-
Contributions - Buy Back		-		-
Benefit Payments, including Refunds of Employee Contributions		(222,096)		(288,611)
Net Change in Total Pension Liability		842,447		614,150
Total Pension Liability - Beginning		8,481,797		7,867,647
Total Pension Liability - Ending (a)	\$	9,324,244	\$	8,481,797
Plan Fiduciary Net Position				
Contributions - Employer		392,863		469,302
Contributions - Employer Contributions - State		155,382		129,103
Contributions - State Contributions - Employee		88,869		87,309
Contributions - Employee Contributions - Buy Back		00,009		87,309
Net Investment Income		1,160,776		766,338
				,
Benefit Payments, including Refunds of Employee Contributions		(222,096)		(288,611)
Administrative Expense		(44,645)		(18,869)
Net Change in Plan Fiduciary Net Position		1,531,149		1,144,572
Plan Fiduciary Net Position - Beginning		8,418,701	_	7,274,129
Plan Fiduciary Net Position - Ending (b)	\$	9,949,850	\$	8,418,701
Net Pension Liability - Ending (a) - (b)	\$	(625,606)	\$	63,096
Plan Fiduciary Net Position as a percentage of the Total Pension Liability		106.71%		99.26%
Covered Employee Payroll ¹	\$	1,467,330	\$	1,455,154
Net Pension Liability as a percentage of Covered Employee Payroll		-42.64%		4.34%

Notes to Schedule:

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

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	0	9/30/2017	0	9/30/2016	 9/30/2015	0	9/30/2014	0	9/30/2013
Actuarially Determined Contribution		389,363		430,063	407,550		432,862		534,041
Contributions in relation to the Actuarially									
Determined Contributions		372,292		413,378	414,885		459,283		534,041
Contribution Deficiency (Excess)	\$	17,071	\$	16,685	\$ (7,335)	\$	(26,421)	\$	-
Covered Employee Payroll ¹	\$	1,802,605	\$	1,799,429	\$ 1,579,650	\$	1,467,330	\$	1,455,154
Contributions as a percentage of Covered Employee Payroll		20.65%		22.97%	26.26%		31.30%		36.70%

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

Notes to Schedule

Valuation Date: 10/01/2015

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:

Funding Method: Entry Age Normal Actuarial Cost Method.

Amortization Method: Level Percentage of Pay, Closed.

Remaining Amortization Period: 28 Years (as of 10/01/2015 valuation).

Mortality: RP2000 Combined Healthy Mortality Table, Sex Distinct. Disabled lives are set

forward 5 years. We believe this sufficiently accounts for future mortality

improvements.

Interest Rate: 7.5% per year compounded annually, net of investmentrelated 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

C	
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.

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

Disability Rates:

	% Becoming
	<u>Disabled</u>
<u>Age</u>	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.

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 de minis bias that is above or below the Market Value of Assets.

Salary Increases:

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.

Final Salary Load:

Years of Credited Service as of

October 1, 2012	Assumption
0	No Load
Less than 10 years	10.0%
10 or more years	20.0%
Credited Service	Assumption
Less than 6 years	7.5%
5 or more years	4.0%

Termination Rates:

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.

SCHEDULE OF INVESTMENT RETURNS

Last 10 Fiscal Years

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

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2018)

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, 2016:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	7
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	-
Active Plan Members	32
	39

Benefits Provided

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

Normal Retirement:

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.

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.

<u>Termination of Employment:</u>

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

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

Disability:

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.

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.

Net Pension Liability

The measurement date is September 30, 2017.

The measurement period for the pension expense was October 1, 2016 to September 30, 2017.

The reporting period is October 1, 2017 through September 30, 2018.

The Sponsor's Net Pension Liability was measured as of September 30, 2017.

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, 2016 updated to September 30, 2017 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 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 2017 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, 2017 are summarized in the following table:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return
Domestic Equity	50%	7.5%
International Equity	15%	8.5%
Domestic Fixed Income	35%	2.5%
Total	100%	

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 Plan Fiduciary			Net Pension		
	Liability		Net Position			Liability
		(a)	(b)			(a)-(b)
Reporting Period Ending September 30, 2017	\$	10,828,680	\$	11,141,478	\$	(312,798)
Changes for a Year:						
Service Cost		358,456		-		358,456
Interest		825,460		_		825,460
Share Plan Allocation		92,260		-		92,260
Differences between Expected and Actual Experience	473,491		-			473,491
Changes of assumptions		-		_		-
Changes of benefit terms		-		-		-
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		-
Net Investment Income		-		1,734,571		(1,734,571)
Benefit Payments, including Refunds of Employee Contributions		(362,003)		(362,003)		-
Administrative Expense		-		(44,046)		44,046
Net Changes		1,396,208		1,919,100		(522,892)
Reporting Period Ending September 30, 2018	\$	12,224,888	\$	13,060,578	\$	(835,690)

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

	Current Discount					
	19	% Decrease		Rate	1	% Increase
		6.50%		7.50%		8.50%
Sponsor's Net Pension Liability	\$	660,461	\$	(835,690)	\$	(2,067,078)

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, 2017

For the year ended September 30, 2017, the Sponsor has recognized a Pension Expense of \$368,628. On September 30, 2017, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Ou	Deferred atflows of esources	In	Deferred nflows of esources
Differences between Expected and Actual Experience				300,825
Changes of assumptions		122,708		-
Net difference between Projected and Actual Earnings on Pension Plan investments		207,909		-
Employer and State contributions subsequent to the measurement date		464,551		
Total	\$	795,168	\$	300,825

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, 2017. 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:	
2018	\$ (1,409)
2019	\$ 39,911
2020	\$ 143,009
2021	\$ (116,096)
2022	\$ (35,623)
Thereafter	\$ -

PRELIMINARY 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 will recognize 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	In	Deferred aflows of esources
Differences between Expected and Actual Experience Changes of assumptions	405,852 98,167		240,660
Net difference between Projected and Actual Earnings on Pension Plan investments	-		539,938
Employer and State contributions subsequent to the measurement date	TBD		-
Total	TBD	\$	780,598

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, 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	\$ (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.

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

Reporting Period Ending	09/30/2018	09/30/2017	09/30/2016
Measurement Date	09/30/2017	09/30/2016	09/30/2015
Total Pension Liability			
Service Cost	358,456	322,776	317,342
Interest	825,460	752,753	715,242
Share Plan Allocation	92,260	84,235	90,777
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	473,491	(45,934)	(367,566)
Changes of assumptions	-	147,249	-
Contributions - Buy Back	8,544	9,721	-
Benefit Payments, including Refunds of Employee Contributions	(362,003)	(312,107)	(210,052)
Net Change in Total Pension Liability	1,396,208	958,693	545,743
Total Pension Liability - Beginning	10,828,680	9,869,987	9,324,244
Total Pension Liability - Ending (a)	\$ 12,224,888	\$ 10,828,680	\$ 9,869,987
Plan Fiduciary Net Position			
Contributions - Employer	317,000	358,086	354,899
Contributions - State	147,551	139,527	150,763
Contributions - Employee	117,483	107,966	93,950
Contributions - Buy Back	8,544	9,721	-
Net Investment Income	1,734,571	1,143,088	(536,507)
Benefit Payments, including Refunds of Employee Contributions	(362,003)	(312,107)	(210,052)
Administrative Expense	(44,046)	(58,960)	(48,746)
Net Change in Plan Fiduciary Net Position	1,919,100	1,387,321	(195,693)
Plan Fiduciary Net Position - Beginning	11,141,478	9,754,157	9,949,850
Plan Fiduciary Net Position - Ending (b)	\$ 13,060,578	\$ 11,141,478	\$ 9,754,157
Net Pension Liability - Ending (a) - (b)	\$ (835,690)	\$ (312,798)	\$ 115,830
•			
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	106.84%	102.89%	98.83%
· ·			
Covered Employee Payroll ¹	\$ 1,802,605	\$ 1,799,429	\$ 1,579,650
Net Pension Liability as a percentage of Covered Employee Payroll	-46.36%	-17.38%	7.33%

Notes to Schedule:

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.

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

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

Reporting Period Ending	(09/30/2015	0	9/30/2014
Measurement Date		09/30/2013		9/30/2014
Total Pension Liability		19/30/2014		19/30/2013
Service Cost		323,511		300,940
Interest		652,070		601,821
Share Plan Allocation		88,962		001,821
Changes of benefit terms		88,902		-
Differences between Expected and Actual Experience		-		_
Changes of assumptions		_		-
Contributions - Buy Back		-		_
Benefit Payments, including Refunds of Employee Contributions		(222,096)		(288,611)
Net Change in Total Pension Liability		842,447		614,150
Total Pension Liability - Beginning	Φ.	8,481,797	Ф	7,867,647
Total Pension Liability - Ending (a)	\$	9,324,244	\$	8,481,797
Plan Fiduciary Net Position				
Contributions - Employer		392,863		469,302
Contributions - State		155,382		129,103
Contributions - State Contributions - Employee		88,869		87,309
Contributions - Employee Contributions - Buy Back		88,809		67,309
Net Investment Income		1,160,776		766,338
Benefit Payments, including Refunds of Employee Contributions		(222,096)		(288,611)
Administrative Expense		(44,645)		(18,869)
		1,531,149		
Net Change in Plan Fiduciary Net Position				1,144,572
Plan Fiduciary Net Position - Beginning	Φ.	8,418,701	Φ.	7,274,129
Plan Fiduciary Net Position - Ending (b)	\$	9,949,850	\$	8,418,701
Net Pension Liability - Ending (a) - (b)	\$	(625,606)	\$	63,096
Not I clision Elability - Ending (a) - (b)	Ψ	(023,000)	ψ	05,090
Plan Fiduciary Net Position as a percentage of the Total Pension Liability		106.71%		99.26%
Covered Employee Payroll ¹	\$	1,467,330	\$	1,455,154
Net Pension Liability as a percentage of Covered Employee Payroll		-42.64%		4.34%

Notes to Schedule:

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

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	0	9/30/2017	0	9/30/2016	0	9/30/2015	0	9/30/2014	0	9/30/2013
Actuarially Determined Contribution		389,363		430,063		407,550		432,862		534,041
Contributions in relation to the										
Actuarially Determined Contributions		372,292		413,378		414,885		459,283		534,041
Contribution Deficiency (Excess)	\$	\$ 17,071 \$ 16,685		\$	(7,335)	\$	(26,421)	\$	-	
	Φ.	1.002.505		4.500.420		1.550.650	Φ.	1.457.000		
Covered Employee Payroll	\$	1,802,605	\$	1,799,429	\$	1,579,650	\$	1,467,330	\$	1,455,154
Contributions as a percentage of Covered Employee Payroll		20.65%		22.97%		26.26%		31.30%		36.70%

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

Notes to Schedule

Valuation Date: 10/01/2015

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:

Funding Method: Entry Age Normal Actuarial Cost Method.

Amortization Method: Level Percentage of Pay, Closed.
Remaining Amortization Period: 28 Years (as of 10/01/2015 valuation).

Mortality: RP2000 Combined Healthy Mortality Table, Sex Distinct. Disabled lives are set

forward 5 years. We believe this sufficiently accounts for future mortality

improvements.

Interest Rate: 7.5% per year compounded annually, net of investmentrelated 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.

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

% Becoming
Disabled During

	Disacion During
Age	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.

Termination Rates:

Payroll Growth: 1.9% per year.

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 de minis bias that is above or below the Market Value of Assets.

Salary Increases: Credited Service Assumption
Less than 10 Years 6.50%

10-15 Years 6.00% 15 Years and Greater 5.00%

This assumption is based on the results of an experience study for the period 1999-

2012.

Final Salary Load: Years of Credited Service as of

 October 1, 2012
 Assumption

 0
 No Load

 Less than 10 years
 10.00%

 10 or more years
 20.00%

 Credited Service
 Assumption

 Less than 6 years
 7.50%

 5 or more years
 4.00%

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.

FINAL COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2017

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning Balance	\$ 115,830 \$	706,985	\$ 1,534,033	\$ -
Employer and State contributions made after 09/30/2016	-	-	464,551	-
Total Pension Liability Factors:				
Service Cost	322,776	-	-	322,776
Interest	752,753	-	-	752,753
Share Plan Allocation	84,235	-	-	84,235
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	9,721	-	-	9,721
Differences between Expected and Actual Experience with				
regard to economic or demographic assumptions	(45,934)	45,934	-	-
Current year amortization of experience difference	-	(60,165)	-	(60,165)
Change in assumptions about future economic or				
demographic factors or other inputs	147,249	-	147,249	-
Current year amortization of change in assumptions	-	-	(24,541)	24,541
Benefit Payments, including Refunds of Employee				
Contributions	(312,107)	-	-	-
Net change	958,693	(14,231)	587,259	1,133,861
Plan Fiduciary Net Position:				
Contributions - Employer	358,086	_	(358,086)	_
Contributions - State	139,527	_	(139,527)	_
Contributions - Employee	107,966	_	(137,327)	(107,966)
Contributions - Buy Back	9,721	_	_	(9,721)
Projected Net Investment Income	740,721	_	_	(740,721)
Difference between projected and actual earnings on	710,721			(710,721)
Pension Plan investments	402,367	402,367	_	_
Current year amortization	-	(224,890)	(259,105)	34,215
Benefit Payments, including Refunds of Employee		(221,000)	(23),103)	31,213
Contributions	(312,107)	_	_	_
Administrative Expenses	(58,960)	_	_	58,960
Net change	1,387,321	177,477	(756,718)	(765,233)
				<u>, , , , , , , , , , , , , , , , , , , </u>
Ending Balance	\$ (312,798)	870,231	\$ 1,364,574	\$ 368,628
Litting Datanec	ψ (312,770) ψ	. 0,0,231	Ψ 1,501,57 F	÷ 500,020

PRELIMINARY 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	-	-	TBD*	-
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	1,396,208	(60,165)	381,311	1,316,735
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	1,919,100	488,742	(723,656)	(1,068,705)
E. F. D. L.	¢ (925 (00)	¢ 1.200.000	TBD	¢ 248,020
Ending Balance	\$ (835,690)	\$ 1,298,808	ומו	\$ 248,030

^{*} Employer and State Contributions subsequent to the measurement date made after September 30, 2017 but made on or before September 30, 2018 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

	Diff	erences Between																
Plan Year	Proje	ected and Actual	Recognition															
Ending		Earnings	Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024		2025	2026		2	2027	
2013	\$	(206,596)	5	\$ (41,319)	\$ (41,319)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		-	\$	-	\$		-
2014	\$	(515,484)	5	\$ (103,097)	\$ (103,097)	\$ (103,097)	\$ -	\$ -	\$ -	\$ -	\$ -		-	\$	-	\$		-
2015	\$	1,295,526	5	\$ 259,105	\$ 259,105	\$ 259,105	\$ 259,105	\$ -	\$ -	\$ -	\$ -		-	\$	-	\$		-
2016	\$	(402,367)	5	\$ (80,474)	\$ (80,474)	\$ (80,473)	\$ (80,473)	\$ (80,473)	\$ -	\$ -	\$ -		-	\$	-	\$		-
2017	\$	(892,040)	5	\$ -	\$ (178,408)	\$ (178,408)	\$ (178,408)	\$ (178,408)	\$ (178,408)	\$ -	\$ -	. 5	-	\$	-	\$		-
Net Increas	e (Dec	crease) in Pension	Expense	\$ 34,215	\$ (144,193)	\$ (102,873)	\$ 224	\$ (258,881)	\$ (178,408)	\$ -	\$ -		-	\$	-	\$		_

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)	2017	2018	2019	2020	2021	2022	2023		2024		2025		2026		2027	
2016	\$ 147,24	9 6	\$ 24,541	\$ 24,541	\$ 24,541	\$ 24,542	\$ 24,542	\$ 24,542	\$	- \$		- \$		- \$		- \$		-
Net Increase	(Decrease) in Pensi	on Expense	\$ 24,541	\$ 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		fferences Between pected and Actual Experience	Recognition Period (Years)		2017	2018	2019		2020		2021		2022		2023		2024		2025		2026		 2027	
2015	•	(367,566)	7	Φ	(52.510) \$	(52,510) \$	(52,509)	•	(52,509)	•	(52,509)	Q	(52,509)	•	_ :	P	_	•			\$		\$	
2015	\$	(45,934)	6	\$	(7,655) \$. , , , ;	. , ,		, , ,		(7,656)		(7,656)		- :	Ф \$	-	\$. 9			\$	_
2017	\$	473,491	7	\$	- \$	67,639 \$	67,642	\$	67,642	\$	67,642	\$	67,642	\$	67,642	\$	67,642	\$	-	. 5	\$	-	\$	-
Net Increas	e (D	ecrease) in Pension	Expense	\$	(60,165) \$	7,474 \$	7,477	\$	7,477	\$	7,477	\$	7,477	\$	67,642	\$	67,642	\$			\$	_	\$ 	