

CITY OF PALATKA
FIREFIGHTERS' RETIREMENT PLAN

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2015

CONTRIBUTIONS APPLICABLE TO THE PLAN/
FISCAL YEAR ENDED SEPTEMBER 30, 2017

March 13, 2016

Ms. Ruby Williams, Administrator
City of Palatka
Firefighters' Retirement Plan
201 North 2nd Street
Palatka, FL 32177

Re: Firefighters' Retirement Plan

Dear Ruby:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Palatka Firefighters' Retirement Plan. The 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. Please note that this valuation may not be applicable for any other purposes.

The valuation has 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 valuation, 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 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 Palatka, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Palatka Firefighters' Retirement Plan. 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: _____

Patrick T. Donlan, M.A.A.A., A.S.A.
Enrolled Actuary #14-06595

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Enclosures

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SUMMARY OF REPORT

The actuarial valuation of the City of Palatka Firefighters' Retirement Plan, performed as of October 1, 2015, has been completed, and the results are presented in this Report. The results of this valuation are applicable to the plan/fiscal year ended September 30, 2017.

The contribution requirements, compared with those developed in the October 1, 2014 actuarial valuation report, are as follows:

Valuation Date Applicable Plan/Fiscal Year End	10/1/2014 <u>9/30/2016</u>	10/1/2015 <u>9/30/2017</u>
Total Required Contribution % of Total Non-DROP Payroll	49.2%	50.7%
Member Contributions (Est.) % of Total Non-DROP Payroll	6.0%	6.0%
City and State Required Contribution % of Total Non-DROP Payroll	43.2%	44.7%
Estimated State Contribution % of Total Non-DROP Payroll	95,653 11.9%	95,653 11.9%
Balance from City * % of Total Non-DROP Payroll	31.3%	32.8%

* For budgeting purposes, the required Sponsor Contribution (City and State) is 44.7% of Pensionable Earnings for the fiscal year ending September 30, 2017. The precise City requirement for the year is this amount, less actual State Contributions.

Please also note there is a City prepaid contribution of \$33,083.62 (see page 26) that is available to help offset the above stated requirements for fiscal 2016.

As can be seen, the Total Required Contribution has increased when expressed as a percentage of Total Non-DROP Payroll. This increase is the result of a 2.6% reduction in Total Annual Payroll. This reduction in payroll had two effects. The first effect is that when payroll decreases, then the fixed dollar costs in the Plan look like a larger percentage of payroll. Additionally, the payroll growth utilized in amortizing the Unfunded Actuarial Accrued Liability is limited to the historical 10-year average increase

in payroll. Last year, 0.92% was used and this year it is 0.0%. This reduction in the payroll growth assumption increased the funding requirements by 1.3% of payroll. In spite of the increase in the funding requirements as a percentage of payroll, there was net favorable actuarial experience over the past year, on the basis of the actuarial assumptions. The primary components of favorable experience included an 8.70% investment return (Actuarial Asset Basis) that exceeded the 8.00% assumption and larger than expected turnover. These gains were partially offset by a loss resulting from no inactive mortality. For a more detailed analysis of the sources of gain and loss, please see page 15.

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 answer any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

By: 
Patrick T. Donlan, ASA, EA, MAAA

By: 
Drew Ballard, EA

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2014	33.4%
(2) Summary of Contribution Impact by component:	
Change in Available State Money	-1.9%
Investment Return (Actuarial Asset Basis)	-0.6%
Salary Increases	0.0%
Payroll Change	0.6%
Payroll Growth Assumption	1.3%
Reduction in Normal Cost Rate	-0.2%
Active Decrements	-1.3%
Inactive Mortality	0.3%
Increase in Administrative Expenses	1.0%
Assumption Change	0.0%
Other	<u>0.2%</u>
Total Change in Contribution	-0.6%
(3) Contribution Determined as of October 1, 2015	32.8%

CHANGES SINCE PRIOR VALUATION

Plan Changes

The City's Code of Ordinances requires the annual determination of the Chapter 175 percent of Average Final Compensation that can be actuarially funded by the State Monies. The analysis was performed with this valuation and resulted in no change in the benefit multiplier of 3.29% of Average Final Compensation for each year of Credited Service.

Actuarial Assumption/Method Changes

The assumed payroll growth for the purposes of amortizing the Unfunded Actuarial Accrued Liabilities is limited to the actual historical 10-year average. In last year's valuation this amount was 0.92%. In this valuation, 0.00% was used.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2015</u>	<u>10/1/2014</u>
A. Participant Data		
Number Included		
Actives	19	20
Service Retirees	11	10
DROP Retirees	2	2
Beneficiaries	1	1
Disability Retirees	0	0
Terminated Vested	<u>1</u>	<u>1</u>
Total	34	34
Total Annual Payroll		
	\$801,679	\$823,207
Payroll Under Assumed Ret. Age		
	801,679	823,207
Annual Rate of Payments to:		
Service Retirees	455,967	447,055
DROP Retirees	147,243	147,243
Beneficiaries	16,431	16,431
Disability Retirees	0	0
Terminated Vested	10,566	9,521
B. Assets		
Actuarial Value ¹	7,513,601	7,026,801
Market Value ¹	6,972,137	7,377,373
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	2,608,114	2,581,741
Disability Benefits	85,192	89,454
Death Benefits	14,193	14,743
Vested Benefits	352,487	356,295
Refund of Contributions	11,499	13,148
Service Retirees	5,075,521	5,021,271
DROP Retirees ¹	2,548,093	2,377,814
Beneficiaries	58,607	61,284
Disability Retirees	0	0
Terminated Vested	69,644	100,532
Excess State Monies Reserve	<u>0</u>	<u>0</u>
Total	10,823,350	10,616,282

C. Liabilities - (Continued)	<u>10/1/2015</u>	<u>10/1/2014</u>
Present Value of Future Salaries	7,459,654	7,839,407
Present Value of Future Member Contributions	447,579	470,364
Normal Cost (Retirement)	142,186	146,568
Normal Cost (Disability)	6,683	6,988
Normal Cost (Death)	951	995
Normal Cost (Vesting)	19,524	19,964
Normal Cost (Refunds)	<u>2,784</u>	<u>3,451</u>
Total Normal Cost	172,128	177,966
Present Value of Future Normal Costs	1,529,435	1,618,349
Accrued Liability (Retirement)	1,347,526	1,245,315
Accrued Liability (Disability)	25,246	25,421
Accrued Liability (Death)	5,976	5,863
Accrued Liability (Vesting)	160,274	156,326
Accrued Liability (Refunds)	3,028	4,107
Accrued Liability (Inactives) ¹	7,751,865	7,560,901
Excess State Monies Reserve	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability	9,293,915	8,997,933
Unfunded Actuarial Accrued Liability (UAAL)	1,780,314	1,971,132
Funded Ratio (AVA / AL)	80.8%	78.1%
 D. Actuarial Present Value of Accrued Benefits		
Vested Accrued Benefits		
Inactives ¹	7,751,865	7,560,901
Actives	327,083	255,667
Member Contributions	<u>291,588</u>	<u>284,471</u>
Total	8,370,536	8,101,039
Non-vested Accrued Benefits	<u>158,799</u>	<u>169,129</u>
Total Present Value Accrued Benefits	8,529,335	8,270,168
Funded Ratio (MVA / PVAB)	81.7%	89.2%
 Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	107,669	
Benefits Paid	(490,496)	
Interest	641,994	
Other	<u>0</u>	
Total	259,167	

Valuation Date	10/1/2015	10/1/2014
Applicable to Fiscal Year Ending	<u>9/30/2017</u>	<u>9/30/2016</u>

E. Pension Cost

Normal Cost (with interest) % of Total Annual Payroll ²	22.3	22.5
Administrative Expenses (with interest) % of Total Annual Payroll ²	3.0	1.9
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 27 years (as of 10/1/2015, with interest) % of Total Annual Payroll ²	25.4	24.8
Total Required Contribution % of Total Annual Payroll ²	50.7	49.2
Expected Member Contributions % of Total Annual Payroll ²	6.0	6.0
Expected City and State Contribution % of Total Annual Payroll ²	44.7	43.2

F. Past Contributions

Plan Years Ending:	<u>9/30/2015</u>
Total Required Contribution	393,627
City and State Requirement	345,915
Actual Contributions Made:	
Members (excluding buyback)	47,712
City	250,262
State	<u>95,653</u> ³
Total	393,627

G. Net Actuarial (Gain)/Loss (146,113)

¹ The asset values and liabilities for DROP Members include accumulated DROP Balances as of 9/30/2015 and 9/30/2014.

² Contributions developed as of 10/1/2015 are expressed as a percentage of total annual payroll at 10/1/2015 of \$801,679.

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

<u>Year</u>	<u>Projected Unfunded Accrued Liability</u>
2015	1,780,314
2016	1,711,614
2017	1,637,419
2023	1,049,600
2030	108,473
2036	11,306
2042	0

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2015	4.18%	5.00%
Year Ended	9/30/2014	5.78%	5.00%
Year Ended	9/30/2013	0.10%	5.00%

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2015	8.70%	8.00%
Year Ended	9/30/2014	9.52%	8.00%
Year Ended	9/30/2013	9.35%	8.00%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2015	\$801,679
	10/1/2005	803,536
(b) Total Increase		-0.23%
(c) Number of Years		10.00
(d) Average Annual Rate		-0.02%

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.



Patrick T. Donlan, EA, ASA, MAAA
Enrolled Actuary #14-6595

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

Ms. Sarah Carr
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, 2014	\$1,971,132
(2)	Sponsor Normal Cost developed as of October 1, 2014	128,574
(3)	Expected administrative expenses for the year ended September 30, 2015	14,901
(4)	Expected interest on (1), (2) and (3)	168,573
(5)	Sponsor contributions to the System during the year ended September 30, 2015	345,915
(6)	Expected interest on (5)	10,838
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2015 (1)+(2)+(3)+(4)-(5)-(6)	1,926,427
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(146,113)
(10)	Unfunded Accrued Liability as of October 1, 2015	1,780,314

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2015 <u>Amount</u>	Amortization <u>Amount</u>
Method Change	10/1/2004	19	\$447,353	\$43,131
Actuarial Loss	10/1/2004	13	400,311	46,896
Actuarial Loss	10/1/2005	13	157,738	18,479
Actuarial Loss	10/1/2006	13	166,676	19,526
Actuarial Gain	10/1/2007	13	(190,819)	(22,354)
Multiplier Increase	10/1/2007	22	116,754	10,598
Actuarial Loss	10/1/2008	13	172,303	20,185
Method Change	10/1/2008	13	(111,363)	(13,046)
Multiplier Decrease	10/1/2008	23	(235,769)	(21,049)
Assumption Change	10/1/2009	14	27,916	3,135
Actuarial Loss	10/1/2009	14	276,529	31,057
Actuarial Loss	10/1/2010	15	58,664	6,346
Actuarial Loss	10/1/2011	16	769,846	80,532
Assumption Change	10/1/2011	16	(73,775)	(7,717)
Actuarial Loss	10/1/2012	17	137,956	14,004
Multiplier Increase	10/1/2012	27	97,612	8,265
Actuarial Gain	10/1/2013	18	(259,302)	(25,619)
Actuarial Gain	10/1/2014	19	(32,203)	(3,105)
Actuarial Gain	10/1/2015	20	<u>(146,113)</u>	<u>(13,780)</u>
			1,780,314	195,484

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2014	\$1,971,132
(2) Expected UAAL as of October 1, 2015	1,926,427
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(49,070)
Salary Increases	(3,391)
Active Decrements	(106,756)
Inactive Mortality	21,181
Other	<u>(8,077)</u>
Increase in UAAL due to (Gain)/Loss	(146,113)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2015	\$1,780,314

ACTUARIAL ASSUMPTIONS AND METHODS

<u>Mortality Rates</u>	RP-2000 Combined Healthy Mortality Table - Sex Distinct. Disableds set forward 5 years. We feel this assumption accommodates expected mortality improvements.
<u>Termination Rates</u>	See Table on following page (1302). We believe this assumption is in line with the experience incurred by other plans containing Florida municipal Firefighters.
<u>Disability Rates</u>	See Table on following page (1207). It is assumed that 75% of disablements and active Member deaths are service related. We believe this assumption is in line with the experience incurred by other plans containing Florida municipal Firefighters.
<u>Retirement Age</u>	Earlier of: 1) age 50 with 7 years of credited service, 2) age 55 with 10 years of credited service, or 3) 25 years of service, regardless of age. Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year. We feel these rates are reasonable based upon long-term expectations and based upon plan provisions.
<u>Interest Rate</u>	8.00% per year, compounded annually, net of investment-related expenses. This assumption is supported by the target asset class allocation of the trust and the expected long-term return by asset class.
<u>Salary Increases</u>	5.00% per year until the assumed retirement age; see table on following page. We believe this assumption is in line with the experience incurred by other plans containing Florida municipal Firefighters.
<u>Payroll Growth</u>	None (0.92% previously).
<u>Administrative Expenses</u>	\$22,760 annually, based on prior year's actual expenses.
<u>Marital Status</u>	75% of the active population is assumed to be married at time of benefit commencement. Additionally, males are assumed to be 3 years older than females.
<u>Funding Method</u>	Entry Age Normal Actuarial Cost Method.
<u>Actuarial Asset Method</u>	Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return. It is possible that over time this technique will produce an insignificant bias above or below Market Value.

<u>Age</u>	<u>% Terminating During the Year</u>	<u>% Becoming Disabled During the Year</u>	<u>Current Salary as % of Salary at age 50</u>
20	6.00%	0.07%	23.14%
30	5.00	0.11	37.69
40	2.60	0.19	61.39
50	0.80	0.51	100.00

VALUATION NOTES

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

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

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

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

(a) The normal cost accrual rate equals:

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

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

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

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

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

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	41,216.79	N/A
1999	42,193.89	2.4%
2000	45,527.73	7.9%
2001	46,755.55	2.7%
2002	51,314.01	9.7%
2003	48,810.92	-4.9%
2004	57,047.58	16.9%
2005	58,983.26	3.4%
2006	64,623.68	9.6%
2007	72,110.38	11.6%
2008	61,090.61	-15.3%
2009	71,775.97	17.5%
2010	80,404.88	12.0%
2011	89,277.09	11.0%
2012	60,507.30	-32.2%
2013	78,503.98	29.7%
2014	80,280.37	2.3%
2015	95,653.08	19.1%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2015

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Money Market	453,811.63	453,811.63
Cash	150.00	150.00
Total Cash and Equivalents	453,961.63	453,961.63
Receivables:		
Member Contributions in Transit	3,618.95	3,618.95
City Contributions in Transit	20,344.06	20,344.06
State Contributions	198.50	198.50
Total Receivable	24,161.51	24,161.51
Investments:		
U. S. Bonds and Bills	344,334.45	348,671.15
Federal Agency Guaranteed Securities	232,018.40	242,241.40
Corporate Bonds	1,028,935.80	1,023,616.70
Mutual Funds:		
Fixed Income	757,856.84	795,532.30
Equity	3,622,562.00	4,119,228.06
Total Investments	5,985,707.49	6,529,289.61
Total Assets	6,463,830.63	7,007,412.75
<u>LIABILITIES</u>		
Payables:		
Administrative Expenses	2,191.67	2,191.67
Prepaid City Contribution	33,083.62	33,083.62
Total Liabilities	35,275.29	35,275.29
NET POSITION RESTRICTED FOR PENSIONS	6,428,555.34	6,972,137.46

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2015
Market Value Basis

ADDITIONS

Contributions:

Member	47,712.39
City	250,261.75
State	95,653.08

Total Contributions 393,627.22

Investment Income:

Net Realized Gain (Loss)	160,739.97
Unrealized Gain (Loss)	(704,241.05)
Net Increase in Fair Value of Investments	(543,501.08)
Interest & Dividends	302,659.69
Less Investment Expense ¹	(44,765.46)

Net Investment Income (285,606.85)

Total Additions 108,020.37

DEDUCTIONS

Distributions to Members:

Benefit Payments	466,037.72
Lump Sum DROP Distributions	0.00
Refunds of Member Contributions	24,457.86

Total Distributions 490,495.58

Administrative Expense 22,760.07

Total Deductions 513,255.65

Net Increase in Net Position (405,235.28)

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year 7,377,372.74

End of the Year 6,972,137.46

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

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2015

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*	
09/30/2012	17.77%	
09/30/2013	12.50%	
09/30/2014	9.69%	
09/30/2015	-3.92%	
Annualized Rate of Return for prior four (4) years:		8.70%
(A) 10/01/2014 Actuarial Assets:		\$7,026,800.59
(I) Net Investment Income:		
1. Interest and Dividends	302,659.69	
2. Realized Gains (Losses)	160,739.97	
3. Change in Actuarial Value	187,794.65	
4. Investment Related Expenses	(44,765.46)	
Total		606,428.85
(B) 10/01/2015 Actuarial Assets:		\$7,513,601.01
Actuarial Asset Rate of Return = $2I/(A+B-I)$:		8.70%
10/01/2015 Limited Actuarial Assets:		\$7,513,601.01
10/01/2015 Market Value of Assets:		\$6,972,137.46
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		\$49,069.94

*Market Value Basis, net of investment related expenses.

DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2014 to September 30, 2015

Beginning of the Year Balance	619,869.30
Plus Additions	147,242.76
Investment Return Earned	34,951.57
Less Distributions	0.00
End of the Year Balance	802,063.63

RECONCILIATION OF CITY'S SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2015

(1) Total Required Contribution Rate	49.5%
(2) Pensionable Payroll Derived from Member Contributions	\$795,206.50
(3) Total Required Contribution (1) x (2)	393,627.22
(4) Less Actual Member Contributions	(\$47,712.39)
(5) Less Allowable State Contribution	<u>(95,653.08)</u>
(6) Equals Required City Contribution for Fiscal 2015	250,261.75
(7) Less 2014 Prepaid Contribution	(17,548.85)
(8) Less Actual City Contributions	<u>(265,796.52)</u>
(9) Equals City's Shortfall/(Prepaid) Contribution as of September 30, 2015	(\$33,083.62)

STATISTICAL DATA ¹

	<u>10/1/2012</u>	<u>10/1/2013</u>	<u>10/1/2014</u>	<u>10/1/2015</u>
<u>Actives</u>				
Number	20	20	20	19
Average Current Age	32.0	32.8	33.8	34.0
Average Age at Employment	27.1	27.9	27.5	27.4
Average Past Service	4.9	4.9	6.3	6.6
Average Annual Salary	\$37,850	\$38,913	\$41,160	\$42,194
<u>Service Retirees</u>				
Number			10	11
Average Current Age			60.6	60.6
Average Annual Benefit			\$44,706	\$41,452
<u>DROP Retirees</u>				
Number			2	2
Average Current Age			56.0	57.0
Average Annual Benefit			\$73,622	\$73,622
<u>Beneficiaries</u>				
Number			1	1
Average Current Age			90.6	91.6
Average Annual Benefit			\$16,431	\$16,431
<u>Disability Retirees</u>				
Number			0	0
Average Current Age			N/A	N/A
Average Annual Benefit			N/A	N/A
<u>Terminated Vested</u>				
Number			1	1
Average Current Age			49.4	42.7
Average Annual Benefit			\$9,521	\$10,566

¹ Prior to 10/1/2013, averages were salary weighted.

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	0	1	0	0	0	0	0	0	0	0	1
25 - 29	1	0	0	0	2	1	0	0	0	0	0	4
30 - 34	1	0	1	0	0	2	1	0	0	0	0	5
35 - 39	0	0	0	0	0	2	3	0	0	0	0	5
40 - 44	0	0	0	0	1	1	0	0	0	0	0	2
45 - 49	0	0	0	0	0	2	0	0	0	0	0	2
50 - 54	0	0	0	0	0	0	0	0	0	0	0	0
55 - 59	0	0	0	0	0	0	0	0	0	0	0	0
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	0	2	0	3	8	4	0	0	0	0	19

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2014	20
b. Terminations	
i. Vested (partial or full) with deferred benefits	(1)
ii. Non-vested or full lump sum distribution received	(2)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>0</u>
g. Continuing participants	17
h. New entrants	<u>2</u>
i. Total active life participants in valuation	19

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	10	2	1	0	1	14
Retired	0	0	0	0	(1)	(1)
DROP	0	0	0	0	0	0
Vested Deferred	1	0	0	0	1	2
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	11	2	1	0	1	15

SUMMARY OF PLAN PROVISIONS

<u>Credited Service</u>	Total years and completed months of service as a Firefighter with the City.
<u>Compensation</u>	Fixed monthly remuneration for services rendered to the City as a Firefighter, including salary and wages, longevity pay, overtime pay, shift differentials, pay for absence from work for vacation, holiday, and sickness, and deferred compensation pay. Compensation does not include assignment pay, allowances for clothing, equipment, cleaning, meals and travel, reimbursement for expenses, vehicle allowances, bonuses, termination pay, severance pay, unused sick and vacation pay and the value of any fringe benefits.
<u>Final Average Compensation</u>	Average Compensation paid during the three (3) highest consecutive years of the last five (5).
<u>Normal Retirement</u>	
Eligibility	Earlier of: <ul style="list-style-type: none"> 1) age 50 and 7 years of Credited Service, 2) age 55 and 10 years of Credited Service, or 3) 25 years of Credited Service, regardless of age.
Benefit Amount	2.50% of Final Average Compensation times Credited Service, plus a supplement funded with Chapter 175, F.S. Premium Tax Monies equal to 0.79% of Final Average Compensation times Credited Service.
Form of Benefit	Life annuity, with 120 payments guaranteed; provided, however, the surviving spouse receives 75% of the retiree's benefit for life.
<u>Vesting (Termination)</u>	
Less than 7 years	Refund of Member Contributions.
7 years or more	Accrued benefit payable at the otherwise Normal Retirement Date if Member Contributions left in Fund or a refund of Member Contributions.

Disability

- Eligibility
- a) 10 years of contributing service for non-service related; coverage from date of hire for service incurred.
 - b) Total and permanent disability prior to Normal Retirement Date.

Benefit Amount

- Non-Service Incurred Accrued benefit
- Service Incurred Accrued Benefit, but not less than 45% of average salary paid during the last 5 years.

Death Benefits

- Pre-Retirement Covered for service incurred from date of hire, after 7 years for non-service incurred (as determined by the Board). Benefit for line of duty death is 75% of accrued benefit paid to spouse (minimum benefit is 35% of Final Average Compensation). For not in line of duty death, 75% of accrued benefit is paid to spouse at the Member's Normal Retirement Date.
- Post-Retirement 75% of pension paid to spouse for married members, balance of 120 monthly payments for unmarried members unless other optional form was selected at the time of retirement.

Contributions

- Employee 6.00% of Compensation.
- Premium Tax 1.85% tax on applicable insurance policies.
- City Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over 30 years.

Board of Trustees

- a) Two City Commission appointees,
- b) Two Members of the Plan elected by a majority of the other covered Firefighters, and
- c) A Fifth Member elected by other 4 and appointed by the City Commission.

Deferred Retirement Option Plan

Eligibility	Satisfaction of Normal Retirement requirements.
Participation	Not more than 5 years or beyond attaining 34 years of Credited Service.
Rate of Return	Greater of: 1) net rate of investment return, or 2) 5.00%. Earnings are credited each fiscal year.
Form of Distribution	At member's election: 1) lump sum payment, 2) installments, or 3) annuity purchase.

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STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2015

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Money Market	453,812
Cash	150
Total Cash and Equivalents	453,962
Receivables:	
Member Contributions in Transit	3,619
City Contributions in Transit	20,344
State Contributions	199
Total Receivable	24,162
Investments:	
U. S. Bonds and Bills	348,671
Federal Agency Guaranteed Securities	242,241
Corporate Bonds	1,023,617
Fixed Income	795,532
Equity	4,119,228
Total Investments	6,529,289
Total Assets	7,007,413
<u>LIABILITIES</u>	
Payables:	
Administrative Expenses	2,192
Total Liabilities	2,192
NET POSITION RESTRICTED FOR PENSIONS	7,005,221

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STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2015
Market Value Basis

ADDITIONS

Contributions:

Member	47,712
City	283,346
State	95,653

Total Contributions	426,711
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Investment Income:

Net Increase in Fair Value of Investments	(543,501)
Interest & Dividends	302,660
Less Investment Expense ¹	(44,766)

Net Investment Income	(285,607)
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Total Additions	141,104
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DEDUCTIONS

Distributions to Members:

Benefit Payments	466,038
Lump Sum DROP Distributions	0
Refunds of Member Contributions	24,458

Total Distributions	490,496
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Administrative Expense	22,760
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Total Deductions	513,256
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Net Increase in Net Position	(372,152)
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	7,377,373
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End of the Year	7,005,221
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

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NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2015)

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 City Commission appointees,
- b. Two Members of the Plan elected by a majority of the other covered Firefighters, and
- c. A Fifth Member elected by other 4 and appointed by the City Commission.

Plan Membership as of October 1, 2014:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	13
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	1
Active Plan Members	20
	34
	34

Benefits Provided

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

Normal Retirement:

Eligibility: Earlier of: 1) age 50 and 7 years of Credited Service, 2) age 55 and 10 years of Credited Service, or 3) 25 years of Credited Service, regardless of age.

Benefit Amount: 2.50% of Final Average Compensation times Credited Service, plus a supplement funded with Chapter 175, F.S. Premium Tax Monies equal to 0.79% of Final Average Compensation times Credited Service.

Form of Benefit: Life annuity, with 120 payments guaranteed; provided, however, the surviving spouse receives 75% of the retiree's benefit for life.

Vesting (Termination):

Less than 7 years: Refund of Member Contributions.

7 years or more: Accrued benefit payable at the otherwise Normal Retirement Date if Member Contributions left in Fund or a refund of Member Contributions.

Disability:

Eligibility: a) 10 years of contributing service for non-service related; coverage from date of hire for service-incurred.

b) Total and permanent disability prior to Normal Retirement Date.

Benefit Amount: Non-Service Incurred Accrued benefit.

Service Incurred Accrued Benefit, but not less than 45% of average salary paid during the last 5 years.

Pre-Retirement Death Benefits:

Pre-Retirement: Covered for service incurred from date of hire, after 7 years for non-service incurred (as determined by the Board). Benefit for line of duty death is 75% of accrued benefit paid to spouse (minimum benefit is 35% of Final Average Compensation). For not in line of duty death, 75% of accrued benefit is paid to spouse at the Member's Normal Retirement Date.

Post-Retirement: 75% of pension paid to spouse for married members, balance of 120 monthly payments for unmarried members unless other optional form was selected at the time of retirement.

Contributions

Employee: 6.00% of Compensation.

Premium Tax: 1.85% tax on applicable insurance policies.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over 30 years.

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Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2015:

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	32%
International Equity	15%
Bonds	25%
High Yield Bonds	5%
Convertibles	8%
REITS	5%
MLPs	5%
Cash	5%
<u>Total</u>	<u>100%</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, 2015, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was -3.92 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: Satisfaction of Normal Retirement requirements.

Participation: Not more than 5 years or beyond attaining 34 years of Credited Service.

Rate of Return: Greater of:

- 1) net rate of investment return, or
- 2) 5.00%. Earnings are credited each fiscal year.

The DROP balance as September 30, 2015 is \$802,064.

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NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2015 were as follows:

Total Pension Liability	\$ 9,374,873
Plan Fiduciary Net Position	<u>\$ (7,005,221)</u>
Sponsor's Net Pension Liability	<u>\$ 2,369,652</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	74.72%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2014 updated to September 30, 2015 using the following actuarial assumptions:

Inflation	3.00%
Salary Increases	5.00%
Discount Rate	8.00%
Investment Rate of Return	8.00%

Mortality Rate: RP-2000 Combined Healthy Mortality Table - Sex Distinct. Disableds set forward 5 years. We feel this assumption accommodates expected mortality improvements.

The date of the most recent experience study for which significant assumptions are based upon is not available.

The Long-Term Expected Rate of Return on Pension Plan investments was 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.

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

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2015 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	8.0%
International Equity	3.0%
Bonds	4.4%
High Yield Bonds	6.0%
Convertibles	6.4%
REITS	7.0%
MLPs	10.4%
Cash	1.1%

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 8.00 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 7.00%	Current Discount Rate 8.00%	1% Increase 9.00%
Sponsor's Net Pension Liability	\$ 3,350,261	\$ 2,369,652	\$ 1,550,532

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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	177,733	168,142	155,687
Interest	707,171	676,786	648,419
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	73,309	-	-
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(490,496)	(458,910)	(465,041)
Net Change in Total Pension Liability	467,717	386,018	339,065
Total Pension Liability - Beginning	8,907,156	8,521,138	8,182,073
Total Pension Liability - Ending (a)	<u>\$ 9,374,873</u>	<u>\$ 8,907,156</u>	<u>\$ 8,521,138</u>
Plan Fiduciary Net Position			
Contributions - Employer	283,346	310,161	256,829
Contributions - State	95,653	80,280	78,504
Contributions - Employee	47,712	47,041	44,711
Net Investment Income	(285,607)	649,062	757,641
Benefit Payments, including Refunds of Employee Contributions	(490,496)	(458,910)	(465,041)
Administrative Expense	(22,760)	(14,901)	(15,407)
Net Change in Plan Fiduciary Net Position	(372,152)	612,733	657,237
Plan Fiduciary Net Position - Beginning	7,377,373	6,764,640	6,107,403
Plan Fiduciary Net Position - Ending (b)	<u>\$ 7,005,221</u>	<u>\$ 7,377,373</u>	<u>\$ 6,764,640</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,369,652</u>	<u>\$ 1,529,783</u>	<u>\$ 1,756,498</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	74.72%	82.83%	79.39%
Covered Employee Payroll*	\$ 934,724	\$ 784,020	\$ 745,184
Net Pension Liability as a percentage of Covered Employee Payroll	253.51%	195.12%	235.71%

Notes to Schedule:

*For Fiscal years 2013 and 2014, the Covered Employee Payroll figures were based on Pensionable Salary.

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SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

	09/30/2015	09/30/2014	09/30/2013
Actuarially Determined Contribution	345,915	390,441	335,333
Contributions in relation to the Actuarially Determined Contributions	378,999	390,441	335,333
Contribution Deficiency (Excess)	\$ (33,084)	\$ -	\$ -
Covered Employee Payroll*	\$ 934,724	\$ 784,020	\$ 745,184
Contributions as a percentage of Covered Employee Payroll	40.55%	49.80%	45.00%

*For Fiscal years 2013 and 2014, the Covered Employee Payroll figures were based on Pensionable Salary.

Notes to Schedule

Valuation Date: 10/01/2013

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: 29 Years (as of 10/01/2014).
Mortality: RP-2000 Combined Healthy Mortality Table - Sex Distinct. Disableds set forward 5 years. Based on a study of over 650 public safety funds, this table reflects a 10% margin for future mortality improvements.
Termination Rates: See table below (1302).
Disability Rates: See table below. It is assumed that 75% of disablements and active Member deaths are service related.
Retirement Age: Earlier of: 1) age 50 with 7 years of credited service, 2) age 55 with 10 years of credited service, or 3) 25 years of service, regardless of age. Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year.
Inflation: 3.0% per year.
Interest Rate: 8% per year, compounded annually, net of investment-related expenses.
Salary Increases: 5.0% per year until the assumed retirement age.
Payroll Growth: Up to 3.0% annually (2.1% used for the 10/1/2013 valuation).
Marital Status: 75% of the active population is assumed to be married at time of benefit commencement. Additionally, males are assumed to be 3 years older than females.
Actuarial Asset Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return. It is possible that over time this technique will produce an insignificant bias above or below Market Value.

Termination and Disability Rate Table:	<u>% Terminating</u>	<u>% Becoming</u>
	<u>During the</u>	<u>Disabled During</u>
<u>Age</u>	<u>Year</u>	<u>the Year</u>
20	6.0%	0.07%
30	5.0%	0.11%
40	2.6%	0.19%
50	0.8%	0.51%

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SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

	<u>09/30/2015</u>	<u>09/30/2014</u>	<u>09/30/2013</u>
Annual Money-Weighted Rate of Return Net of Investment Expense	-3.92%	9.69%	12.50%

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NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2016)

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 City Commission appointees,
- b. Two Members of the Plan elected by a majority of the other covered Firefighters, and
- c. A Fifth Member elected by other 4 and appointed by the City Commission.

An individual who is employed full-time by the city's fire department who is a state certified firefighter as a condition of employment and whose duty is to extinguish fires, to protect life or to protect property, in a position normally requiring 2,080 or more hours of work in a year shall be a member of retirement plan unless employed in an excluded position.

Plan Membership as of October 1, 2014:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	13
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	1
Active Plan Members	20
	34

Benefits Provided

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

Normal Retirement:

Eligibility: Earlier of: 1) age 50 and 7 years of Credited Service, 2) age 55 and 10 years of Credited Service, or 3) 25 years of Credited Service, regardless of age.

Benefit Amount: 2.50% of Final Average Compensation times Credited Service, plus a supplement funded with Chapter 175, F.S. Premium Tax Monies equal to 0.79% of Final Average Compensation times Credited Service.

Form of Benefit: Life annuity, with 120 payments guaranteed; provided, however, the surviving spouse receives 75% of the retiree's benefit for life.

Vesting (Termination):

Less than 7 years: Refund of Member Contributions.

7 years or more: Accrued benefit payable at the otherwise Normal Retirement Date if Member Contributions left in Fund or a refund of Member Contributions.

Disability:

Eligibility: a) 10 years of contributing service for non-service related; coverage from date of hire for service-incurred.

Benefit Amount: Non-Service Incurred Accrued benefit.

Pre-Retirement Death Benefits:

Pre-Retirement: Covered for service incurred from date of hire, after 7 years for non-service incurred (as determined by the Board).

Benefit for line of duty death is 75% of accrued benefit paid to spouse (minimum benefit is 35% of Final Average Compensation).

For not in line of duty death, 75% of accrued benefit is paid to spouse at the Member's Normal Retirement Date.

Post-Retirement: 75% of pension paid to spouse for married members, balance of 120 monthly payments for unmarried members unless other optional form was selected at the time of retirement.

Contributions

Employee: 6.00% of Compensation.

Premium Tax: 1.85% tax on applicable insurance policies.

City: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability over 30 years.

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Net Pension Liability

The measurement date is September 30, 2015.

The measurement period for the pension expense was October 1, 2014 to September 30, 2015.

The reporting period is October 1, 2015 through September 30, 2016.

The Sponsor's Net Pension Liability was measured as of September 30, 2015.

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, 2014 updated to September 30, 2015 using the following actuarial assumptions:

Inflation	3.00%
Salary Increases	5.00%
Discount Rate	8.00%
Investment Rate of Return	8.00%

Mortality Rate: RP-2000 Combined Healthy Mortality Table - Sex Distinct. Disableds set forward 5 years. We feel this assumption accommodates expected mortality improvements.

The date of the most recent experience study for which significant assumptions are based upon is not available.

The Long-Term Expected Rate of Return on Pension Plan investments was 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.

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

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2015 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
Domestic Equity	32%	8.0%
International Equity	15%	3.0%
Bonds	25%	4.4%
High Yield Bonds	5%	6.0%
Convertibles	8%	6.4%
REITS	5%	7.0%
MLPs	5%	10.4%
Cash	5%	1.1%
<u>Total</u>	<u>100%</u>	

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 8.00 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.

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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, 2015	\$ 8,907,156	\$ 7,377,373	\$ 1,529,783
Changes for a Year:			
Service Cost	177,733	-	177,733
Interest	707,171	-	707,171
Differences between Expected and Actual Experience	73,309	-	73,309
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	283,346	(283,346)
Contributions - State	-	95,653	(95,653)
Contributions - Employee	-	47,712	(47,712)
Contributions - Buy Back	-	-	-
Net Investment Income	-	(285,607)	285,607
Benefit Payments, including Refunds of Employee Contributions	(490,496)	(490,496)	-
Administrative Expense	-	(22,760)	22,760
Net Changes	467,717	(372,152)	839,869
Reporting Period Ending September 30, 2016	\$ 9,374,873	\$ 7,005,221	\$ 2,369,652

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	7.00%	8.00%	9.00%
Sponsor's Net Pension Liability	\$ 3,350,261	\$ 2,369,652	\$ 1,550,532

Pension Plan Fiduciary Net Position.

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

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**PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED
INFLOWS OF RESOURCES RELATED TO PENSIONS**

For the year ended September 30, 2016, the Sponsor will recognize a Pension Expense of \$436,293.

On September 30, 2016, 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	62,837	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	632,262	-
Employer and State contributions subsequent to the measurement date	TBD	-
Total	<u>\$ 695,099</u>	<u>\$ -</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2016.

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:	
2017	\$ 163,071
2018	\$ 163,071
2019	\$ 163,071
2020	\$ 184,940
2021	\$ 10,473
Thereafter	\$ 10,473

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

Reporting Period Ending Measurement Date	09/30/2016 <u>09/30/2015</u>	09/30/2015 <u>09/30/2014</u>	09/30/2014 <u>09/30/2013</u>
Total Pension Liability			
Service Cost	177,733	168,142	155,687
Interest	707,171	676,786	648,419
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	73,309	-	-
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	<u>(490,496)</u>	<u>(458,910)</u>	<u>(465,041)</u>
Net Change in Total Pension Liability	467,717	386,018	339,065
Total Pension Liability - Beginning	8,907,156	8,521,138	8,182,073
Total Pension Liability - Ending (a)	<u>\$ 9,374,873</u>	<u>\$ 8,907,156</u>	<u>\$ 8,521,138</u>
 Plan Fiduciary Net Position			
Contributions - Employer	283,346	310,161	256,829
Contributions - State	95,653	80,280	78,504
Contributions - Employee	47,712	47,041	44,711
Net Investment Income	(285,607)	649,062	757,641
Benefit Payments, including Refunds of Employee Contributions	(490,496)	(458,910)	(465,041)
Administrative Expense	<u>(22,760)</u>	<u>(14,901)</u>	<u>(15,407)</u>
Net Change in Plan Fiduciary Net Position	(372,152)	612,733	657,237
Plan Fiduciary Net Position - Beginning	7,377,373	6,764,640	6,107,403
Plan Fiduciary Net Position - Ending (b)	<u>\$ 7,005,221</u>	<u>\$ 7,377,373</u>	<u>\$ 6,764,640</u>
 Net Pension Liability - Ending (a) - (b)	<u>\$ 2,369,652</u>	<u>\$ 1,529,783</u>	<u>\$ 1,756,498</u>
 Plan Fiduciary Net Position as a percentage of the Total Pension Liability	74.72%	82.83%	79.39%
 Covered Employee Payroll*	\$ 934,724	\$ 784,020	\$ 745,184
Net Pension Liability as a percentage of Covered Employee Payroll	253.51%	195.12%	235.71%

Notes to Schedule:

**For Reporting Period Ending years 2014 and 2015, the Covered Employee Payroll figures were based on Pensionable Salary.*

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SCHEDULE OF CONTRIBUTIONS
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
Actuarially Determined Contribution	345,915	390,441	335,333
Contributions in relation to the Actuarially Determined Contributions	378,999	390,441	335,333
Contribution Deficiency (Excess)	\$ (33,084)	\$ -	\$ -
Covered Employee Payroll*	\$ 934,724	\$ 784,020	\$ 745,184
Contributions as a percentage of Covered Employee Payroll	40.55%	49.80%	45.00%

*For Reporting Period Ending years 2014 and 2015, the Covered Employee Payroll figures were based on Pensionable Salary.

Notes to Schedule

Valuation Date: 10/01/2013

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: 29 Years (as of 10/01/2014).
Mortality: RP-2000 Combined Healthy Mortality Table - Sex Distinct. Disableds set forward 5 years. Based on a study of over 650 public safety funds, this table reflects a 10% margin for future mortality improvements.

Termination Rates: See table below (1302).
Disability Rates: See table below. It is assumed that 75% of disablements and active Member deaths are service related.

Retirement Age: Earlier of: 1) age 50 with 7 years of credited service, 2) age 55 with 10 years of credited service, or 3) 25 years of service, regardless of age. Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year.

Inflation: 3.0% per year.
Interest Rate: 8% per year, compounded annually, net of investment-related expenses.
Salary Increases: 5.0% per year until the assumed retirement age.
Payroll Growth: Up to 3.0% annually (2.1% used for the 10/1/2013 valuation).
Marital Status: 75% of the active population is assumed to be married at time of benefit commencement. Additionally, males are assumed to be 3 years older than females.

Actuarial Asset Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return. It is possible that over time this technique will produce an insignificant bias above or below Market Value.

Termination and Disability Rate Table:	% Terminating		% Becoming	
	Age	During the Year	Disabled During	the Year
	20	6.00%	0.07%	
	30	5.00%	0.11%	
	40	2.60%	0.19%	
	50	0.80%	0.51%	

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FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2015

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning Balance	\$ 1,756,498	\$ -	\$ 390,441	\$ -
Employer and State contributions made after 09/30/2014	-	-	378,999	-
Total Pension Liability Factors:				
Service Cost	168,142	-	-	168,142
Interest	676,786	-	-	676,786
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	-	-	-	-
Current year amortization of experience difference	-	-	-	-
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	-	-
Benefit Payments	(458,910)	-	-	(458,910)
Net change	<u>386,018</u>	<u>-</u>	<u>378,999</u>	<u>386,018</u>
Plan Fiduciary Net Position:				
Contributions - Employer	310,161	-	(310,161)	-
Contributions - State	80,280	-	(80,280)	-
Contributions - Employee	47,041	-	-	(47,041)
Net Investment Income	539,718	-	-	(539,718)
Difference between projected and actual earnings on Pension Plan investments	109,344	109,344	-	-
Current year amortization	-	(21,869)	-	(21,869)
Benefit Payments	(458,910)	-	-	458,910
Administrative Expenses	(14,901)	-	-	14,901
Other	-	-	-	-
Net change	<u>612,733</u>	<u>87,475</u>	<u>(390,441)</u>	<u>(134,817)</u>
Ending Balance	<u>\$ 1,529,783</u>	<u>\$ 87,475</u>	<u>\$ 378,999</u>	<u>\$ 251,201</u>

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PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2016

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 1,529,783	\$ 87,475	\$ 378,999	\$ -
Employer and State Contributions made after 09/30/2015	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	177,733	-	-	177,733
Interest	707,171	-	-	707,171
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	73,309	-	73,309	-
Current year amortization of experience difference	-	-	(10,472)	10,472
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	-	-
Benefit Payments	(490,496)	-	-	(490,496)
Net change	<u>467,717</u>	<u>-</u>	<u>62,837</u>	<u>404,880</u>
Plan Fiduciary Net Position:				
Contributions - Employer	283,346	-	(283,346)	-
Contributions - State	95,653	-	(95,653)	-
Contributions - Employee	47,712	-	-	(47,712)
Net Investment Income	586,728	-	-	(586,728)
Difference between projected and actual earnings on Pension Plan investments	(872,335)	-	872,335	-
Current year amortization	-	(21,869)	(174,466)	152,597
Benefit Payments	(490,496)	-	-	490,496
Administrative Expenses	(22,760)	-	-	22,760
Net change	<u>(372,152)</u>	<u>(21,869)</u>	<u>318,870</u>	<u>31,413</u>
Ending Balance	<u>\$ 2,369,652</u>	<u>\$ 65,606</u>	<u>TBD</u>	<u>\$ 436,293</u>

* Employer and State Contributions subsequent to the measurement date made after September 30, 2015 but made on or before September 30, 2016 needs to be added.