## CITY OF PORT ST. LUCIE MUNICIPAL POLICE OFFICERS' RETIREMENT TRUST FUND

ACTUARIAL VALUATION AS OF OCTOBER 1, 2015

CONTRIBUTIONS APPLICABLE TO THE PLAN/ FISCAL YEAR ENDING SEPTEMBER 30, 2017 December 14, 2015

Board of Trustees c/o Ms. Sandy Steele, Plan Administrator City of Port St. Lucie Police Officers' Retirement Trust Fund 121 SW Port St. Lucie Blvd. Port St. Lucie, FL 34984

Re:

City of Port St. Lucie

Municipal Police Officers' Retirement Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Port St. Lucie Municipal Police Officers' Retirement Trust Fund. 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 185, 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 City of Port St. Lucie and 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 Port St. Lucie, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Port St. Lucie Municipal Police Officers' Retirement Trust Fund. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

By:

Douglas H. Lozen, EA, MAAA

Enrolled Actuary #14-7778

DHL/lke

Enclosures

## TABLE OF CONTENTS

Section	Title	Page
I	Introduction	č.
	a. Summary of Report	5
	b. Changes Since Prior Valuation	7
	c. Requirements of Chapter 112, Part VII, Florida Statutes	8
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	13
	b. Detailed Actuarial (Gain)/Loss Analysis	15
	c. Actuarial Assumptions and Methods	16
	d. Valuation Notes	18
	e. History of Premium Tax Refunds	19
	f. Excess State Monies Reserve	20
III	Trust Fund	21
IV	Member Statistics	
	a. Statistical Data	27
	b. Age and Service Distribution	28
	c. Valuation Participant Reconciliation	29
V	Summary of Plan Provisions	30
VI	Governmental Accounting Standards Board Disclosure Information	33

#### SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Port St. Lucie Municipal Police Officers' Retirement Trust Fund, performed as of October 1, 2015, 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, 2017.

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

Valuation Date Applicable Plan Year End	10/1/2014 9/30/2016	10/1/2015 9/30/2017
Total Required Contribution	\$6,098,651	\$6,442,386
Member Contributions (Est.)	1,600,440	1,643,367
City and State Required Contribution	4,498,211	4,799,019
State Contribution (Est.) <sup>1</sup>	717,100	717,100
Balance from City <sup>1</sup>	\$3,781,111	\$4,081,919

<sup>1</sup> Under the traditional interpretation of Chapter 99-1, <u>Florida Statutes</u>, the City may use up to \$717,100 in State Contributions for determining its minimum funding requirements. Additionally, there is a City shortfall contribution of \$528.50 for the fiscal year ended September 30, 2015. As you are probably aware, Governor Scott signed into law Chapter 2015-39, amending the use of future State Monies under Chapter 185. Since the Members are represented by collective bargaining agreements, the default methodology will be implemented and effective upon entering into a collective bargaining agreement on or after July 1, 2015. Please note, however, that this default can be superseded as long as there is mutual consent of the members' collective bargaining agreements and the City on how the State Monies should be allocated.

Experience since the prior valuation was more favorable than expected, relative to the Plan's actuarial assumptions. The primary source of favorable experience is attributable to average increases in pensionable earnings that were less than the assumed rates and the effect of a 9.3% investment return assumption (Actuarial Asset Basis) that exceeded the 8.0% assumption. These gains were partially offset

by the effects of fewer terminations than assumed.

The contribution requirements have increased since the prior year primarily due to the effect of lowering the investment return assumption from 8.00% to 7.75% net of investment related expenses.

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 regarding its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

Ву:

Dougla**s H. Lozen, EA, MA**AA

By:

Christine M. O'Neal, ASA, EA, MAAA

### CHANGES SINCE PRIOR VALUATION

## Plan Changes

There were no benefit changes since the prior valuation.

## Actuarial Assumption/Method Changes

Since the prior valuation the Board adopted a change in the investment return assumption from 8.00% to 7.75% net of investment related expenses. Additionally the payroll growth assumption was lowered from 5.00% to 4.97% per year to comply with <u>Florida Statutes</u>.

## COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Assump 10/1/2015	Old Assump <u>10/1/2015</u>	10/1/2014
A. Participant Data			
Number Included			
Actives	206	206	205
Service Retirees	36	36	33
DROP Retirees	15	15	13
Beneficiaries	5	5	4
Disability Retirees	6	6	6
Terminated Vested	<u>24</u>	<u>24</u>	<u>21</u>
Total	292	292	282
Total Annual Payroll	\$16,490,116	\$16,490,116	\$16,183,677
Payroll Under Assumed Ret. Age	16,490,116	16,490,116	16,040,080
Annual Rate of Payments to:			
Service Retirees	1,801,590	1,801,590	1,603,063
DROP Retirees	944,139	944,139	856,873
Beneficiaries	99,304	99,304	41,182
Disability Retirees	126,517	126,517	126,517
Terminated Vested	365,205	365,205	219,718
B. Assets			4
Actuarial Value <sup>1</sup>	73,268,376	73,268,376	64,094,475
Market Value <sup>1</sup>	70,456,290	70,456,290	67,693,833
C. Liabilities			
Present Value of Benefits			
Actives			
Retirement Benefits	69,535,657	66,455,186	63,976,151
Disability Benefits	1,225,632	1,179,532	1,163,241
Death Benefits	738,940	716,132	699,809
Vested Benefits	8,792,481	8,357,458	8,288,432
Refund of Contributions	391,623	390,394	319,153
Service Retirees	19,431,137	19,034,597	16,992,277
DROP Retirees <sup>1</sup>	12,584,144	12,354,214	11,288,462
Beneficiaries	681,921	667,644	364,221
Disability Retirees Terminated Vested	770,600	760,902	789,869
Excess State Monies Reserve	2,865,251	2,779,831	2,783,094
Total	1,508.953 118,526,339	1.508.953 114,204,843	1.144.016 107.808,725
1 Otal	110,320,339	1 14,204,843	107,808,723

C. Liabilities - (Continued)	New Assump 10/1/2015	Old Assump <u>10/1/2015</u>	10/1/2014
Present Value of Future Salaries	145,617,599	143,612,760	142,476,375
Present Value of Future			
Member Contributions	13,105,584	12,925,148	1 2,822,874
Normal Cost (Retirement)	2,274,107	2,150,120	2,144,379
Normal Cost (Disability)	70,280	67,794	69,441
Normal Cost (Death)	31,360	30,184	30,291
Normal Cost (Vesting)	648,534	611,804	609,700
Normal Cost (Refunds)	104.118	103.920	78,664
Total Normal Cost	3,128,399	2,963,822	2,932,475
Present Value of Future			
Normal Costs	25,137,128	23,459,057	23,810,810
Accrued Liability (Retirement)	50,025,143	48,272,639	45,510,142
Accrued Liability (Disability)	631,699	614,621	573,890
Accrued Liability (Death)	475,063	465,816	443,605
Accrued Liability (Vesting)	4,315,199	4,186,367	4,033,766
Accrued Liability (Refunds)	100,101	100,202	74,573
Accrued Liability (Inactives) <sup>1</sup>	36,333,053	35,597,188	32,217,923
Excess State Monies Reserve	1.508.953	1.508.953	<u>1.144.016</u>
Total Actuarial Accrued Liability	93,389,211	90,745,786	83,997,915
Unfunded Actuarial Accrued			
Liability (UAAL)	20,120,835	17,477,410	19,903,440
Funded Ratio (AVA / AL)	78.5%	80.7%	76.3%
D. Actuarial Present Value of Accrued Benefits			
Vested Accrued Benefits			
Inactives <sup>1</sup>	36,333,053	35,597,188	32,217,923
Actives	18,413,063	17,236,580	15,816,308
Member Contributions	14.147.938	14.147.938	14.321,918
Total	68,894,054	66,981,706	62,356,149
Non-vested Accrued Benefits	1.695.887	1.606,383	1,377,232
Total Present Value Accrued Benefits	70,589,941	68,588,089	63,733,381
Funded Ratio (MVA / PVAB)	99.8%	102.7%	106.2%
Increase (Decrease) in Present Value of			
Accrued Benefits Attributable to:			
Plan Amendments	0	0	
Assumption Changes	2,001,852	0	
New Accrued Benefits	0	2,431,305	
Benefits Paid	0	(2,572,373)	
Interest	0	4,995,776	
Other	<u>0</u>	<u>0</u>	
Total	2,001,852	4,854,708	

	New Assump	Old Assump	
Valuation Date	10/1/2015	10/1/2015	10/1/2014
Applicable to Fiscal Year Ending	9/30/2017	9/30/2017	9/30/2016
E. Pension Cost			
Normal Cost (with interest) <sup>2</sup>	\$3,464,100	\$3,285,812	\$3,251,059
Administrative Expenses (with interest) <sup>2</sup>	180,735	180,952	175,062
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 27 years	58		
(as of $10/1/2015$ , with interest) <sup>2</sup>	2,797,551	2,636,698	2,672,530
Total Required Contribution	6,442,386	6,103,462	6,098,651
Expected Member Contributions <sup>2</sup>	164336700.0%	1,645,344	1,600,440
Expected City & State Contribution	4,799,019	4,458,118	4,498,211
F. Past Contributions			
Plan Years Ending:	4227700.0%		
City and State Requirement	4,007,828		
Actual Contributions Made:			
Members (excluding buyback)	1,406,225		
City State	3,290,728 717,100 <sup>2</sup>		
Total	717,100 <sup>2</sup> 5,414,053		
1 Otal	2,414,033		
G. Net Actuarial (Gain)/Loss	(1,646,669)		

<sup>&</sup>lt;sup>1</sup> The asset values and liabilities for DROP Members include accumulated DROP Balances as of 9/30/2015 and 9/30/2014.

<sup>&</sup>lt;sup>2</sup> Reflects traditional interpretation of Chapter 99-1, Florida Statutes.

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

	Projected Unfunded
<u>Year</u>	Accrued Liability
2015	20,120,835
2016	18,957,954
2017	17,569,659
2022	12,399,022
2029	4,513,522
2036	(11,136)
2042	0

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

		<u>Actual</u>	Assumed
Year Ended	9/30/2015	4.0%	6.7%
Year Ended	9/30/2014	7.0%	6.7%
Year Ended	9/30/2013	3.9%	6.7%

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

10		Actual	Assumed
Year Ended	9/30/2015	9.3%	8.0%
Year Ended	9/30/2014	8.2%	8.0%
Year Ended	9/30/2013	8.4%	8.0%

## (iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2015	\$16,490,116
	10/1/2005	10,157,051
(b) Total Increase		62.35%
(c) Number of Years		10.00
(d) Average Annual Rate		4.97%

#### 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 #14-7778

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

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			\$19,903,440	
(2)	Sponsor Normal Cost developed as of October 1, 2014				1,488,868
(3)	Expected administr	ative expenses for	the year ended Septen	nber 30, 2015	157,907
(4)	Expected interest o	n (1), (2) and (3)			1,717,701
(5)	Sponsor contribution	ons to the System	during the year ended S	September 30, 2015	4,007,828
(6)	Expected interest o	n (5)			136,009
(7)	(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2015 (1)+(2)+(3)+(4)-(5)-(6)				19,124,079
(8)	(8) Change to UAAL due to Assumption Change			2,643,425	
(9)	(9) Change to UAAL due to Actuarial (Gain)/Loss				(1,646,669)
(10) Unfunded Accrued Liability as of October 1, 2015				20,120,835	
	Type of <u>Base</u>	Date Established	Years <u>Remaining</u>	10/1/2015 <u>Amount</u>	Amortization <u>Amount</u>
		10/1/1998 10/1/2000 10/1/2001	1300.0% 1500.0% 1600.0%	\$428,183 (769,841) 1,302,188	\$38,346 (61,236) 98,298
	method change	10/1/2002	17	1,863,190	133,989
	prior losses	10/1/2002	13	1,713,342	153,440
	actuarial loss	10/1/2003	13	281,168	25,180

Type of	Date	Years	10/1/2015	Amortization
<u>Base</u>	Established	Remaining	<u>Amount</u>	Amount
actuarial loss	10/1/2012	7	6,162	951
benefit change	10/1/2012	27	(13,960)	(711)
actuarial gain	10/1/2013	8	(705,535)	(96,468)
actuarial loss	10/1/2014	9	2,620,152	322,481
actuarial gain	10/1/2015	10	(1,646,669)	(184,700)
assumption	10/1/2015	20	2.643.425	167,517
			20,120,835	2,526,445

## DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) • 2	Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2014	\$19,903,440
(2)	Expected UAAL as of October 1, 2015	19,124,079
(3)	Summary of Actuarial (Gain)/Loss, by component:	
	Investment Return (Actuarial Asset Basis)	(860,339)
	Salary Increases	(1,459,049)
	Active Decrements	810,966
	Inactive Mortality	114,720
	Other	(252.967)
	Increase in UAAL due to (Gain)/Loss	(1,646,669)
	Assumption Changes	2.643.425
(4)	Actual UAAL as of October 1, 2015	\$20,120,835

#### ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

RP-2000 Table with no projection. (Disabled lives set forward 5 years). Based upon other studies of municipal Police Officers, we feel that this assumption sufficiently accommodates expected future mortality improvements.

Interest Rate

7.75% per year compounded annually, net of investment related expenses (8.00% assumed in 10/1/2014 valuation).

Retirement Age

Number of Years after	
First Eligibility for	Probability of
Normal Retirement	Retirement
0-4	40%
5 or more	100%

Commencing with a Member's eligibility for Early Retirement (Age 50 with 10 years of Service); Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption was adopted and developed as a result of our August 9, 2011 experience study.

0		T
Sa	larv	Increases

Years of	Increase in
<u>Service</u>	Compensation
Less than 5	8.0%
5-10	7.0%
10-15	6.5%
15-20	6.0%
More than 20	5.5%

This assumption was adopted and developed as a result of our August 9, 2011 experience study.

#### Final Salary Load

Credited Service on 10/1/2012	Load Assumption
10 or more years	20%
Between 5 and 10 years	15%
Less than 5 years	0%

### Administrative Expenses

\$163,220 per year, based on the prior year's actual expenses.

Pavroll Increases	4.97% per year (5.0% used in 10/1/2014 valuation).

Funding Method

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

Interest – A half year, based on the current 7.75% assumption.

Salary – A full year, based on the current average assumption of 6.6%.

Asset Valuation

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>Disability Rate</u>

See table below for sample rates. It is assumed that 75% of disablements and active member deaths are service related.

See table below for sample rates. This assumption was adopted and developed as a result of our August 9, 2011 experience study.

Age	% Terminating <a href="During the Year">During the Year</a>	% Becoming Disabled <u>During the Year</u>
20	12.0%	0.03%
30	10.0	0.04
40	5.2	0.07
50	1.6	0.18

Termination Rate

#### VALUATION NOTES

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

Normal (Current Year's) Cost is determined for each participant as the present value of future benefits, determined as of the member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.

Individual Entry Age Normal Actuarial Cost Method (Level Percent of Compensation) is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost (described above) and the Unfunded Accrued (Past Service) Liability. The actuarial accrued liability for active participants is the difference between the present value of future benefits and the present value of future Normal Costs. The actuarial accrued liability for inactive participants is the present value of future benefits.

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

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

## PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During <u>Fiscal Year</u>	Amount	Increase from Previous Year
1993	144,295.24	%
1994	165,629.24	14.8%
1995	180,404.21	8.9%
1996	213,323.68	18.2%
1997	242,037.26	13.5%
1998	243,784.05	0.7%
1999	258,008.88	5.8%
2000	230,043.07	-10.8%
2001	255,787.78	11.2%
2002	327,026.97	27.9%
2003	336,706.39	3.0%
2004	526,916.73	56.5%
2005	611,975.48	16.1%
2006	664,463.95	8.6%
2007	703,788.87	5.9%
2008	708,340.49	0.6%
2009	851,595.18	20.2%
2010	885,562.51	4.0%
2011	826,266.94	-6.7%
2012	883,808.82	7.0%
2013	972,481.25	10.0%
2014	1,026,901.59	5.6%
2015	1,082,037.20	5.4%

## EXCESS STATE MONIES RESERVE

	Actual State Contribution	Applicable "Frozen" Amount	Excess State  Monies Reserve
1999	\$258,008.88	\$258,009.05	\$0.00
2000	230,043.07	258,009.05	0.00
2001	255,787.78	258,009.05	0.00
2002	327,026.97	260,392.05	66,634.92
2003	336,706.39	260,392.05	76,314.34
2004	526,916.73	260,392.05	266,524.68
2005	611,975.48	717,100.05	0.00
2006	664,463.95	717,100.05	0.00
2007	703,788.87	717,100.05	0.00
2008	708,340.49	717,100.05	0.00
2009	851,595.18	717,100.05	134,495.13
2010	885,562.51	717,100.05	168,462.46
2011	826,266.94	717,100.05	109,166.89
2012	883,808.82	717,100.05	166,708.77
2013	972,481.25	717,100.05	255,381.20
2014	1,026,901.59	717,100.05	309,801.54
2015	1,082,037.20	717,100.05	<u>364.937.15</u>
	Total Excess State Mo	onies	1,918,427.08
	Less Excess Used in F	unding	
	Ordinance No. 05-16	(3.09% B.R.)	(409,473.94)
	Equals Current State 1	Monies Reserve	\$1,508,953.14

## STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2015

ASSETS	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Short Term Investments	3,073,970.43	3,073,970.43
Total Cash and Equivalents	3,073,970.43	3,073,970.43
Receivables:		
Additional City Contributions	528.50	528.50
Investment Income	194,662.72	194,662.72
Total Receivable	195,191.22	195,191.22
Investments:		
U. S. Bonds and Bills	2,982,461.70	2,967,340.97
Federal Agency Guaranteed Securities	461,023.54	486,860.57
Corporate Bonds	11,270,031.79	11,194,129.55
Municipal Obligations	879,298.33	940,728.32
Stocks	15,142,605.83	16,430,273.16
Mutual Funds:		
Fixed Income	3,000,000.00	2,653,154.36
Equity	26,067,415.94	26,881,661.60
Pooled/Common/Commingled Funds:		
Real Estate	5,230,517.77	5,665,040.92
Total Investments	65,033,354.90	67,219,189.45
Total Assets	68,302,516.55	70,488,351.10
LIABILITIES		
Payables:	·	
Administrative Expenses	32,061.00	32,061.00
Total Liabilities	32,061.00	32,061.00
NET POSITION RESTRICTED FOR PENSIONS	68,270,455.55	70,456,290.10

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

ADDITIONS Contributions: Member Buy-Back City State		1,406,224.54 20,069.00 3,290,727.95 1,082,037.20	
Total Contributions			5,799,058.69
Investment Income: Net Realized Gain (Loss) Unrealized Gain (Loss) Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	728,871.84 (3,330,118.20)	(2,601,246.36) 2,503,719.69 (203,482.72)	
Net Investment Income			(301,009.39)
Total Additions			5,498,049.30
DEDUCTIONS Distributions to Members: Benefit Payments Lump Sum DROP Distributions Refunds of Member Contributions		1,896,503.45 644,663.05 31,206.38	
Total Distributions			2,572,372.88
Administrative Expense			163,219.61
Total Deductions			2,735,592.49
Net Increase in Net Position			2,762,456.81
NET POSITION RESTRICTED FOR PENSION Beginning of the Year	NS		67,693,833.29
End of the Year			70,456,290.10

<sup>&</sup>lt;sup>1</sup>Investment 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	16.19%		
09/30/2013	13.99%		
09/30/2014	8.27%		
09/30/2015	-0.44%		
Annualized Rate of Return for prior four (4) year	rs:	9.31%	
(A) 10/01/2014 Actuarial Assets:			\$64,094,474.79
(I) Net Investment Income:			
<ol> <li>Interest and Dividends</li> <li>Realized Gains (Losses)</li> <li>Change in Actuarial Value</li> <li>Investment Related Expense</li> </ol>		2,503,719.69 728,871.84 3,081,326.52 (203,482.72)	
,	Γotal		6,110,435.33
(B) 10/01/2015 Actuarial Assets	:		\$73,268,376.32
Actuarial Asset Rate of Return = 2I/(A+B-I):			9.31%
10/01/2015 Limited Actuarial	Assets:		\$73,268,376.32
10/01/2015 Market Value of A	Assets:		\$70,456,290.10
Actuarial Gain/(Loss) due to Investment Return	(Actuarial Asset Basis)		\$860,338.70

<sup>\*</sup>Market Value Basis, net of investment related expenses.

# CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS SEPTEMBER 30, 2015 Actuarial Asset Basis

## REVENUES

Contributions: Member Buy-Back City State	1,406,224.54 20,069.00 3,290,727.95 1,082,037.20	
Total Contributions		5,799,058.69
Earnings from Investments: Interest & Dividends Net Realized Gain (Loss) Change in Actuarial Value	2,503,719.69 728,871.84 3,081,326.52	
Total Earnings and Investment Gains		6,313,918.05
Distribution to Manhouse	EXPENDITURES	
Distributions to Members: Benefit Payments Lump Sum DROP Distributions Refunds of Member Contributions	1,896,503.45 644,663.05 31,206.38	
Total Distributions		2,572,372.88
Expenses: Investment related <sup>1</sup> Administrative	203,482.72 163,219.61	
Total Expenses		366,702.33
Change in Net Assets for the Year		9,173,901.53
Net Assets Beginning of the Year		64,094,474.79
Net Assets End of the Year <sup>2</sup>		73,268,376.32

<sup>&</sup>lt;sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

<sup>&</sup>lt;sup>2</sup>Net Assets may be limited for actuarial consideration.

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

(1)	Required City Contribution for Fiscal 2015	3,290,727.95
(2)	Less 2014 Prepaid Contribution	0.00
(3)	Less Actual City Contributions	(3,290,199.45)
(4)	Equals City's Shortfall/(Prepaid) Contribution as of	\$528.50

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

Beginning of the Year Balance	1,579,924.10
Plus Additions	888,992.46
Investment Return Earned	88,259.22
Less Distributions	(644,663.05)
End of the Year Balance	1,912,512.73

### Notes:

Normal Form assumed for two new DROP members
Investment Return for two new DROP members is not included and will be reported with 2016 Activity

## STATISTICAL DATA

	10/1/2012	10/1/2013	10/1/2014	10/1/2015
Actives				
Number Average Current Age Average Age at Employment Average Past Service Average Annual Salary	182 40.5 29.1 11.4 \$74,645	194 40.7 29.3 11.4 \$75,143	205 41.2 29.3 11.9 \$78,945	206 39.8 28.8 11.0 \$80,049
Service Retirees				
Number Average Current Age Average Annual Benefit			33 N/A \$48,578	36 62.6 \$50,044
DROP Retirees				
Number Average Current Age Average Annual Benefit	, k		13 N/A \$65,913	15 58.1 \$62,943
<u>Beneficiaries</u>		9		
Number Average Current Age Average Annual Benefit			4 N/A \$10,296	5 50.8 \$19,861
Disability Retirees				
Number Average Current Age Average Annual Benefit			6 N/A \$21,086	6 70.7 \$21,086
Terminated Vested				
Number <sup>2</sup> Average Current Age Average Annual Benefit			9 N/A \$24,413	11 47.5 \$33,200

<sup>&</sup>lt;sup>1</sup> Prior to 10/1/2015, averages were salary weighted.
<sup>2</sup> Excludes non-vested Members 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	5	4	0	1	0	0	0	0	0	0	0	10
25 - 29	3	2	3	10	0	1	0	0	0	0	0	19
30 - 34	4	3	2	7	0	8	6	0	0	0	0	30
35 - 39	0	2	2	1	0	16	11	4	0	0	0	36
40 - 44	1	1	1	2	0	11	13	12	1	0	0	42
45 - 49	0	0	0	1	0	10	14	13	7	2	0	47
50 - 54	0	0	0	0	0	2	6	6	2	2	0	18
55 - 59	0	0	0	0	0	1	1	1	1	0	0	4
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	13	12	8	22	0	49	51	36	11	4	0	206

## VALUATION PARTICIPANT RECONCILIATION

## 1. Active lives

a. Number in prior valuation 10/1/2014	205
b. Terminations	
i. Vested (partial or full) with deferred benefits	(6)
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>(4)</u>
g. Continuing participants	193
h. New entrants	<u>13</u>
i. Total active life participants in valuation	206

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

	Service					
	Retirees,					
	Vested		Receiving	Receiving		
	Receiving	DROP	Death	Disability	Vested	
	<b>Benefits</b>	<u>Benefits</u>	<b>Benefits</b>	<b>Benefits</b>	<u>Deferred</u>	· <u>Total</u>
a. Number prior valuation	33	13	4	6	21	7 <b>7</b>
a. I valider prior variation	55	15	·	Ü	-1	
Retired	4	(2)	0	0	(2)	0
DROP	0	4	0	0	0	4
Vested Deferred	0	0	0	0	6	6
Death, With Survivor	(1)	0	1	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	(1)	(1)
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	36	15	5	6	24	86

## SUMMARY OF PLAN (THROUGH ORDINANCE 13-49)

Eligibility Full-time employees who are classified as full-time

sworn police officers shall participate in the System as a

condition of employment.

<u>Credited Service</u> Total years and fractional parts of years of employment

with the City as a Police Officer.

Salary Total W-2 compensation including tax deferred and

exempt income. Effective May 1, 2013, overtime included in Salary is limited to 275 hours per calendar year. Additionally, no hours of unused sick and vacation leave earned after May 1, 2013 shall be includible for

Salary purposes.

Average Final Compensation Average Salary for the best 5 years during the 10 years

immediately preceding retirement or termination.

Contributions

Member 9.0% of Salary.

State 0.85% tax on premiums for casualty insurance.

City 10.5% of total pay contributed for each Member plus

any remaining amount necessary for payment of Normal (current year's) Cost. Once vested, Members are entitled

to amounts contributed for them by the City.

Normal Retirement

Date Earlier of Age 55 and 10 years of Credited Service, or

age 52 and 25 years of Credited Service.

Benefit 3.09% of Average Final Compensation times

Credited Service

Form of Benefit Ten Year Certain and Life Annuity (options available).

Early Retirement

Eligibility Age 50 and 10 Years of Credited Service.

Benefit Accrued benefit, reduced 3% per year.

### Vesting (Termination)

Less than 5 years of Credited Service

Refund of Member Contributions.

5 years or more

Accrued benefit payable at Normal Retirement Age or earlier, reduced as for Early Retirement if to commence

prior to Normal Retirement Date.

or

Refund of Member Contributions (including amounts contributed for Member at the rate of 6% of salary by the City effective 10/1/91, and 10.5% effective May 5,

2005).

## **Disability**

Eligibility

Service Incurred

Covered from Date of Employment.

Non-Service Incurred

10 years of Credited Service.

Exclusions

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

Benefit

Benefit accrued to date of disability but not less than 42% of Average Final Compensation (Service Incurred), or 25% of Average Final Compensation (Non-Service

Incurred).

Duration

Payable for life, with 120 months certain, or until recovery (as determined by the Board). Options are

available.

## Death Benefits

Pre-Retirement

Vested

Monthly accrued benefit payable to designated

beneficiary for 10 years beginning at Member's Normal

Retirement Date.

Non-Vested

Refund of accumulated contributions.

Post-Retirement

Benefits payable to beneficiary in accordance

with option selected at retirement.

Board of Trustees

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

Deferred Retirement Option Plan

Eligibility

Participation

Rate of Return

Satisfaction of Normal Retirement requirements.

Not to exceed 60 months.

At member's election, either:

- a) 6.5% effective annual interest, compounded monthly, or
- b) Net investment return of the fund credited each fiscal quarter.

Members may change election one time during DROP participation.

# STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2015

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents: Short Term Investments	2 072 070
Short Term Investments	3,073,970
Total Cash and Equivalents	3,073,970
Receivables:	
Additional City Contributions	529
Investment Income	194,663
Total Receivable	195,192
Investments:	
U. S. Bonds and Bills	2,967,341
Federal Agency Guaranteed Securities	486,860 11,194,130
Corporate Bonds Municipal Obligations	940,728
Stocks	16,430,273
Mutual Funds:	10,130,273
Fixed Income	2,653,154
Equity	26,881,662
Pooled/Common/Commingled Funds:	
Real Estate	5,665,041
Total Investments	67,219,189
Total Assets	70,488,351
LIABILITIES	
Payables:	
Administrative Expenses	32,061
Total Liabilities	32,061
NET POSITION RESTRICTED FOR PENSIONS	70,456,290

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

ADDITIONS Contributions:	5 (4		
Member		1,406,225	77.
Buy-Back		20,069	
City		3,290,728	
State	a 8 8	1,082,037	
State		1,002,007	
Total Contributions	ř.		5,799,059
Investment Income:			
Net Increase in Fair Value of Investments		(2,601,247)	
Interest & Dividends		2,503,720	
Less Investment Expense		(203,483)	
1		,	
Net Investment Income			 (301,010)
Total Additions			5,498,049
DEDUCTIONS			
Distributions to Members:			
		1 906 503	
Benefit Payments		1,896,503	
Lump Sum DROP Distributions Refunds of Member Contributions		644,663	
Refunds of Member Contributions		31,206	
Total Distributions			2,572,372
Total Distributions			2,372,372
Administrative Expense			163,220
Administrative Expense			103,220
Total Deductions			2,735,592
Total Deductions			2,733,372
Net Increase in Net Position			2,762,457
Net moreuse in Net i Osition			2,702,137
NET POSITION RESTRICTED FOR PENSIC	ONS		
Beginning of the Year	5110		67,693,833
Dogimming of the Tear			07,075,055
End of the Year			70,456,290
Did of the real			10,100,200

<sup>&</sup>lt;sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

### 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 a 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 other four and appointed by Council.

Plan Membership as of October 1, 2014:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	56
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	21
Active Plan Members	205_
	282

#### Bene fits Provided

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

#### Normal Retirement:

Date: Earlier of Age 55 and 10 years of Credited Service, or age 52 and 25 years of Credited Service.

Benefit: 3.09% of Average Final Compensation times Credited Service.

#### Early Retirement:

Eligibility: Age 50 and 10 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% per year.

## Vesting (Termination):

Less than 5 years of Credited Service: Refund of Member Contributions.

5 years or more: Accrued benefit payable at Normal Retirement Age or earlier, reduced as for Early Retirement if to commence prior to Normal Retirement Date or Refund of Member Contributions (including amounts contributed for Member at the rate of 6% of salary by the City effective 10/1/91, and 10.5% effective May 5, 2005).

### Disability:

Eligibility: Service Incurred: Covered from Date of Employment. Non-Service Incurred: 10 years of Credited Service. Benefit: Benefit accrued to date of disability but not less than 42% of Average Final Compensation (Service Incurred), or 25% of Average Final Compensation (Non-Service Incurred).

#### Pre-Retirement Death Benefits:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years beginning at Member's Normal Retirement Date.

Non-Vested: Refund of accumulated contributions.

### Contributions

Member: 9.0% of Salary.

State: 0.85% tax on premiums for casualty insurance.

City: 10.5% of total pay contributed for each Member plus any remaining amount necessary for payment of Normal

(current year's) Cost. Once vested, Members are entitled to amounts contributed for them by the City.

#### Investments

#### Investment Policy:

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

Asset Class		Target Allocation
All Cap Value Equity		25%
Broad Growth Equity		25%
International Equity		15%
Investment Grade Bonds		15%
Global Fixed Income	×	5%
Real Estate		10%
TIPS		5%
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, 2015, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was -0.44 percent.

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

### Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement requirements.

Participation: Not to exceed 60 months.

Rate of Return: At member's election, either:

- a) 6.5% effective annual interest, compounded monthly, or
- b) Net investment return of the fund credited each fiscal quarter.

Member may change election one time during DROP participation.

The DROP balance as September 30, 2015 is \$1,912,513.

# 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	\$ 90,805,548
Plan Fiduciary Net Position	\$ (70,456,290)
Sponsor's Net Pension Liability	\$ 20,349,258
Plan Fiduciary Net Position as a percentage of Total Pension Liability	77.59%

#### 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	5.50% - 8.00%
Discount Rate	7.75%
Investment Rate of Return	7.75%

Mortality Rate: RP-2000 Table with no projection. Disabled lives are set forward 5 years. Based upon other studies of municipal Police Officers, we feel this assumption sufficiently accommodates future mortality improvements.

The actuarial assumptions used in the October 1, 2014 valuation were based on the results of an actuarial experience study for the period 1997-2010.

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:

	Long Term Expected Real Rate of
Asset Class	Return
All Cap Value Equity	7.5%
Broad Growth Equity	7.5%
International Equity	8.5%
Investment Grade Bonds	2.5%
Global Fixed Income	3.5%
Real Estate	4.5%
TIPS	2.5%

#### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.75 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	Discount Rate	1% Increase
	6.75%	7.75%	8.75%
Sponsor's Net Pension Liability	\$ 31,698,100	\$ 20,349,258	\$ 10,752,656

# 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	3,098,598	2,960,477	2,741,182
Interest	6,561,818	5,704,171	5,237,834
Change in Excess State Money	364,937	309,802	: <del>**</del>
Changes of benefit terms	-	(*)	:( <del>#</del> 1
Differences between Expected and Actual Experience	(572,414)	(#C	*
Changes of assumptions	2,550,583	2	2
Contributions - Buy Back	20,069	4,436,554	-
Benefit Payments, including Refunds of Employee Contributions	(2,572,372)	(2,465,108)	(2,273,086)
Net Change in Total Pension Liability	9,451,219	10,945,896	5,705,930
Total Pension Liability - Beginning	81,354,329	70,408,433	64,702,503
Total Pension Liability - Ending (a)	\$ 90,805,548	\$ 81,354,329	\$ 70,408,433
Plan Fiduciary Net Position			
Contributions - Employer	3,290,728	3,227,068	3,085,280
Contributions - State	1,082,037	1,026,902	972,481
Contributions - Employee	1,406,225	1,408,036	1,238,897
Contributions - Buy Back	20,069	4,436,554	: <del>=</del> :
Net Investment Income	(301,010)	4,814,924	6,621,223
Benefit Payments, including Refunds of Employee Contributions	(2,572,372)	(2,465,108)	(2,273,086)
Administrative Expense	(163,220)	(157,907)	(93,764)
Net Change in Plan Fiduciary Net Position	2,762,457	12,290,469	9,551,030
Plan Fiduciary Net Position - Beginning	67,693,833	55,403,364	45,852,334
Plan Fiduciary Net Position - Ending (b)	\$ 70,456,290	\$ 67,693,833	\$ 55,403,364
Net Pension Liability - Ending (a) - (b)	\$ 20,349,258	\$ 13,660,496	\$ 15,005,069
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	77.59%	83.21%	78.69%
Covered Employee Payroll* Net Pension Liability as a percentage of Covered Employee Payroll	\$ 16,788,921 121.21%	\$ 15,644,848 87.32%	\$ 13,765,522 109.00%
20			

# Notes to Schedule:

Changes of assumptions:

For Fiscal year 2015, amounts reported as changes of assumptions were resulted from lowering the investment rate of return from 8.00% to 7.75%.

<sup>\*</sup> The reported Covered Employee Payroll figures for Fiscal year 2013 and 2014 were based on Pensionable Salary.

### SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	(	09/30/2015	(	09/30/2014	(	09/30/2013
Actuarially Determined Contribution		4,007,828		3,944,168		3,802,380
Contributions in relation to the Actuarially						
Determined Contributions	_	4,007,828		3,944,168		3,802,380
Contribution Deficiency (Excess)	_\$	*	\$		\$	39
Covered Employee Payroli*	\$	16,788,921	\$	15,644,848	\$	13,765,522
Contributions as a percentage of Covered						
Employee Payroll		23.87%		25.21%		27.62%

<sup>\*</sup> The reported Covered Employee Payroll figures for Fiscal year 2013 and 2014 were based on Pensionable Salarv.

#### 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.

The following loads are applied for determination of the Sponsor funding requirement:

Interest - A half year, based on the current 8.0% assumption.

Salary - A full year, based on the current average assumption of 6.7%.

Amortization Method:

Level Percentage of Pay, Closed.

Remaining Amortization Period:

29 Years (as of 10/01/2013).

Mortality:

RP-2000 Table with no projection. Based on a study of over 650 public safety funds, this table reflects a 10% margin for future mortality improvements. (Disabled lives

set forward 5 years.)

Inflation:

3.0% per year.

Interest Rate: Retirement Age: 8% per year compounded annually, net of investment related expenses.

Number of Years after First Eligibility for Normal

Retirement	Probability of Retirement		
0-4	40%		
5 or more	100%		

Commencing with a Member's eligibility for Early Retirement (Age 50 with 10 years of Service); Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year.

Salary Increases:

Years of Service	Increase in Compensation
Less than 5	8.0%
5-10	7.0%
10-15	6.5%
15-20	6.0%
More than 20	5.5%

Final Salary Load:

Credited Service on 10/01/2012	Load Assumption
10 or more years	20.0%
Between 5 and 10 years	15.0%
Less than 5 years	0.0%

A flat 20% load was used for valuations prior to October 1, 2013.

Payroll Increases:

Asset Valuation:

Disability Rates:

Termination Rates:

Termination and Disability Rate Table:

5.0% per year.

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. See table below for sample rates. It is assumed that 75% of disablements and active member deaths are service related.

See table below for sample rates.

		% Terminating	% Becoming
		During the	Disabled During
5.7	Age	Year	the Year
	20	12.00%	0.03%
	30	10.00%	0.04%
	40	5.20%	0.07%
	50	1.60%	0.18%

# SCHEDULE OF INVESTMENT RETURNS Last 10 Fiscal Years

	09/30/2015	09/30/2014	09/30/2013
Annual Money-Weighted Rate of Return			
Net of Investment Expense	-0.44%	8.27%	14.40%

#### 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 a 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 other four and appointed by Council.

Full-time employees who are classified as full-time sworn police officers shall participate in the System as a condition of employment.

Plan Membership as of October 1, 2014:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	56
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	21
Active Plan Members	205
	282

### Benefits Provided

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

### Normal Retirement:

Date: Earlier of Age 55 and 10 years of Credited Service, or age 52 and 25 years of Credited Service.

Benefit: 3.09% of Average Final Compensation times Credited Service.

#### Early Retirement:

Eligibility: Age 50 and 10 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% per year.

### Vesting (Termination):

Less than 5 years of Credited Service: Refund of Member Contributions.

5 years or more: Accrued benefit payable at Normal Retirement Age or earlier, reduced as for Early Retirement if to commence prior to Normal Retirement Date or Refund of Member Contributions (including amounts contributed for Member at the rate of 6% of salary by the City effective 10/1/91, and 10.5% effective May 5, 2005).

### Disability:

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

Benefit: Benefit accrued to date of disability but not less than 42% of Average Final Compensation (Service Incurred), or 25% of Average Final Compensation (Non-Service Incurred).

### Pre-Retirement Death Benefits:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years beginning at Member's Normal Retirement Date. Non-Vested: Refund of accumulated contributions.

#### Contributions

Member: 9.0% of Salary.

State: 0.85% tax on premiums for casualty insurance.

City: 10.5% of total pay contributed for each Member plus any remaining amount necessary for payment of Normal (current year's)

Cost. Once vested, Members are entitled to amounts contributed for them by the City.

### 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	5.50% - 8.00%
Discount Rate	7.75%
Investment Rate of Return	7.75%

Mortality Rate: RP-2000 Table with no projection. Disabled lives are set forward 5 years. Based upon other studies of municipal Police Officers, we feel this assumption sufficiently accommodates future mortality improvements.

The actuarial assumptions used in the October 1, 2014 valuation were based on the results of an actuarial experience study for the period 1997-2010.

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:

		Long Term Expected
Asset Class	Target Allocation	Real Rate of Return
All Cap Value Equity	25%	7.50%
Broad Growth Equity	25%	7.50%
International Equity	15%	8.50%
Investment Grade Bonds	15%	2.50%
Global Fixed Income	5%	3.50%
Real Estate	10%	4.50%
TIPS	5%	2.50%
Total	100%	

#### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.75 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)
Balances at September 30, 2014	\$	81,354,329	\$	67,693,833	5	13,660,496
Changes for a Year:						
Service Cost		3,098,598		2		3,098,598
Interest		6,561,818		(8)		6,561,818
Change in Excess State Money		364,937		·		364,937
Differences between Expected and Actual Experience		(572,414)		9#33		(572,414)
Changes of assumptions		2,550,583		**		2,550,583
Changes of benefit terms		~		145		**
Contributions - Employer		-		3,290,728		(3,290,728)
Contributions - State		9		1,082,037		(1,082,037)
Contributions - Employee				1,406,225		(1,406,225)
Contributions - Buy Back		20,069		20,069		9.50
Net Investment Income		980		(301,010)		301,010
Benefit Payments, including Refunds of Employee Contributions		(2,572,372)		(2,572,372)		-
Administrative Expense		340		(163,220)		163,220
Net Changes		9,451,219		2,762,457		6,688,762
Balances at September 30, 2015	\$	90,805,548	\$	70,456,290	\$	20,349,258

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

		Current Discount				
	1% Decrease Rate 1% Inc			% Increase		
#		6.75%		7.75%		8.75%
Sponsor's Net Pension Liability	\$	31,698,100	\$	20,349,258	\$	10,752,656

Pension Plan Fiduciary Net Position.

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

# 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 \$3,595,946. 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	-	490,640
Changes of assumptions	2,186,214	2
Net difference between Projected and Actual Earnings on Pension Plan investments	4,621,063	2
Employers contributions subsequent to the measurement date		
Total	\$ 6.807,277	\$ 490,640

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer 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	\$	1,433,679
2018	\$	1,433,679
2019	\$	1,433,680
2020	\$	1,450,407
2021	\$	282,596
Thereafter	\$	282,596

# Payable to the Pension Plan

On September 30, 2015, the Sponsor reported a payable of \$529 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2015.

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

58	09/30/2015	09/30/2014	09/30/2013
Total Pension Liability			
Service Cost	3,098,598	2,960,477	2,741,182
Interest	6,561,818	5,704,171	5,237,834
Change in Excess State Money	364,937	309,802	-
Changes of benefit terms	·	-	-
Differences between Expected and Actual Experience	(572,414)	말	4
Changes of assumptions	2,550,583	*	2
Contributions - Buy Back	20,069	4,436,554	3
Benefit Payments, including Refunds of Employee Contributions	(2,572,372)	(2,465,108)	(2,273,086)
Net Change in Total Pension Liability	9,451,219	10,945,896	5,705,930
Total Pension Liability - Beginning	81,354,329	70,408,433	64,702,503
Total Pension Liability - Ending (a)	\$ 90,805,548	\$ 81,354,329	\$ 70,408,433
Plan Fiduciary Net Position Contributions - Employer Contributions - State Contributions - Employee Contributions - Buy Back Net Investment Income Benefit Payments, including Refunds of Employee Contributions Administrative Expense Net Change in Plan Fiduciary Net Position Plan Fiduciary Net Position - Beginning Plan Fiduciary Net Position - Ending (b)	3,290,728 1,082,037 1,406,225 20,069 (301,010) (2,572,372) (163,220) 2,762,457 67,693,833 \$ 70,456,290	3,227,068 1,026,902 1,408,036 4,436,554 4,814,924 (2,465,108) (157,907) 12,290,469 55,403,364 \$ 67,693,833	3,085,280 972,481 1,238,897 - 6,621,223 (2,273,086) (93,764) 9,551,030 45,852,334 \$ 55,403,364
Net Pension Liability - Ending (a) - (b)	\$ 20,349,258	\$ 13,660,496	\$ 15,005,069
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	77.59%	83.21%	78.69%
Covered Employee Payroll*  Net Pension Liability as a percentage of Covered Employee Payroll	\$ 16,788,921 121.21%	\$ 15,644,848 87.32%	\$ 13,765,522 109.00%

# Notes to Schedule:

Changes of assumptions:

For Fiscal year 2015, amounts reported as changes of assumptions were resulted from lowering the investment rate of return from 8.00% to 7.75%.

<sup>\*</sup> The reported Covered Employee Payroll figures for Fiscal year 2013 and 2014 were based on Pensionable Salary.

# SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	(	09/30/2015	(	09/30/2014	(	09/30/2013
Actuarially Determined Contribution		4,007,828		3,944,168		3,802,380
Contributions in relation to the				33		
Actuarially Determined Contributions		4,007,828		3,944,168		3,802,380
Contribution Deficiency (Excess)	\$	2	\$	(±):	\$	2♣3
Covered Employee Payroll*	\$	16,788,921	\$	15,644,848	\$	13,765,522
Contributions as a percentage of						
Covered Employee Payroll		23.87%		25.21%		27.62%

<sup>\*</sup> The reported Covered Employee Payroll figures for Fiscal year 2013 and 2014 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.

The following loads are applied for determination of the Sponsor funding requirement:

Interest - A half year, based on the current 8.0% assumption.

Salary - A full year, based on the current average assumption of 6.7%.

Amortization Method:

Level Percentage of Pay, Closed.

Remaining Amortization Period:

29 Years (as of 10/01/2013).

Mortality:

RP-2000 Table with no projection. Based on a study of over 650 public safety funds, this table reflects a 10% margin for future mortality improvements. (Disabled lives set

forward 5 years.)

Inflation:

3.0% per year.

Interest Rate:

8% per year compounded annually, net of investment related expenses.

Retirement Age:

Number of Years after First

Eligibility for Normal	Probability of Retirement
0-4	40%
5 or more	100%

Commencing with a Member's eligibility for Early Retirement (Age 50 with 10 years of Service): Members are assumed to retire with an immediate subsidized benefit at

the rate of 5% per year.

Salary Increases:

Years of Service	Increase in Compensation
Less than 5	8.00%
5-10	7.00%
10-15	6.50%
15-20	6.00%
More than 20	5.50%
Credited Service on 10/01/2012	Load Assumption

Final Salary Load:

Credited Service on 10/01/2012	Load Assumption	
10 or more years	20.00%	
Between 5 and 10 years	15.00%	
Less than 5 years	0.00%	

A flat 20% load was used for valuations prior to October 1, 2013.

Payroll Increases:

5.0% per year.

Asset Valuation:

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.

See table below for sample rates. It is assumed that 75% of disablements and active

member deaths are service related.

Termination Rates:

Disability Rates:

See table below for sample rates.

Termination and Disability Rate Table

e:		% Terminating During the	% Becoming Disabled During
	Age	Year	the Year
0	20	12.00%	0.03%
	30	10.00%	0.04%
	40	5.20%	0.07%
	50	1.60%	0.18%

# FINAL COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2015

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 15,005,069		\$ 3,227,068	\$ -
Employer Contributions made after September 30, 2014	標介	( <del>7</del> 77)	3,290,728	¥.
Total Pension Liability Factors:				
Service Cost	2,960,477	<b>*</b>	3 <del>=</del> -	2,960,477
Interest	5,704,171	326	7 <del>4</del>	5,704,171
Change in Excess State Money	309,802	-	/ <del>=</del>	309,802
Changes in benefit terms	-		· · ·	72
Contributions - Buy Back	4,436,554	( <b></b> )	-	4,436,554
Differences between Expected and Actual Experience				
with regard to economic or demographic assumptions	-	3 <b>4</b> 2	-	*
Current year amortization of experience difference	( <b>)</b>	9 <b>2</b> 1	¥	£
Change in assumptions about future economic or				
demographic factors or other inputs	*	: <u>€</u>	ģ	<u> </u>
Current year amortization of change in assumptions	-	175	-	
Benefit Payments	(2,465,108)		-	(2,465,108)
Net change	10,945,896	-	3,290,728	10,945,896
Plan Fiduciary Net Position:				
Contributions - Employer	3,227,068	¥	(3,227,068)	427
Contributions - State	1,026,902	ž.		(1,026,902)
Contributions - Employee	1,408,036		2 <b></b> 22	(1,408,036)
Contributions - Buy Back	4,436,554		(#H	(4,436,554)
Net Investment Income	4,731,291	-	-	(4,731,291)
Difference between projected and actual earnings on				
Pension Plan investments	83,633	83,633	4	alan alan alan alan alan alan alan alan
Current year amortization		(16,726)	i <del>e</del> i	(16,726)
Benefit Payments	(2,465,108)			2,465,108
Administrative Expenses	(157,907)	( <del>+</del> ):	3€	157,907
Net change	12,290,469	66,907	(3,227,068)	(8,996.494)
Ending Dalange	\$ 13,660,496	\$ 66,907	\$ 3,290,728	\$ 1,949,402
Ending Balance	φ 13,000, <del>1</del> 90	φ 00,907	Φ 3,270,720	1,242,402

# PRELIMINARY COMPONENTS OF PENSION EXPENSE FISCAL YEAR SEPTEMBER 30, 2016

ia de la companya de	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 13,660,496	\$ 66,907	\$ 3,290,728	\$
Employer Contributions made after September 30, 2015	-	-	TBD*	( <del>=</del> )
Total Pension Liability Factors:	X <sub>2</sub>			
Service Cost	3,098,598	\$		3,098,598
Interest	6,561,818	-	標	6,561,818
Change in Excess State Money	364,937		( <del>2</del> 74	364,937
Changes in benefit terms	*	360	(#)	ş <del>+</del> 6
Contributions - Buy Back	20,069	**	: <u>+</u> 3	20,069
Differences between Expected and Actual Experience	,			,
with regard to economic or demographic assumptions	(572,414)	572,414	*	(2 <u>0</u> 2
Current year amortization of experience difference		(81,774)		(81,774)
Change in assumptions about future economic or		( , , ,		` , ,
demographic factors or other inputs	2,550,583	1 <del>#</del> .1	2,550,583	:-
Current year amortization of change in assumptions	**	546	(364,369)	364,369
Benefit Payments	(2,572,372)	:¥5		(2,572,372)
Net change	9,451,219	490,640	2,186,214	7,755,645
Plan Fiduciary Net Position:				
Contributions - Employer	3,290,728	-	(3,290,728)	_
Contributions - State	1,082,037	12	(5,270,720)	(1,082,037)
Contributions - Employee	1,406,225	N <sub>E</sub> r	2	(1,406,225)
Contributions - Buy Back	20,069	-	2	(20,069)
Net Investment Income	5,538,045	-	-	(5,538,045)
Difference between projected and actual earnings on	2,220,012			(=,===,==)
Pension Plan investments	(5,839,055)	2	5,839,055	( <del>=</del> ):
Current year amortization	(0,000,000)	(16,726)		1,151,085
Benefit Payments	(2,572,372)	(10,720)	(1,10,,011)	2,572,372
Administrative Expenses	(163,220)		-	163,220
Net change	2,762,457	(16,726)	1,380,516	(4,159,699)
	£ 20.340.050		TDD	0.2505046
Ending Balance	\$ 20,349,258	\$ 540,821	TBD	\$ 3,595,946

<sup>\*</sup> Employer Contributions subsequent to the measurement date made after September 30, 2015 but made on or before September 30, 2016 needs to be added.