

CITY OF HOLLY HILL
POLICE OFFICERS' RETIREMENT TRUST FUND

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2015

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

January 7, 2016

Board of Trustees
City of Holly Hill
Police Officers' Pension Board
1065 Ridgewood Avenue
Holly Hill, FL 32117

Re: Holly Hill Police Officers' Retirement Trust Fund

Dear Board:

We are pleased to present this report of the annual actuarial valuation of the City of Holly Hill 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 Holly Hill 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 Holly Hill, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Holly Hill 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.

A handwritten signature in dark ink, appearing to read "P.T. Donlan", is written above the printed name.

By: _____

Patrick T. Donlan, M.A.A.A., A.S.A.
Enrolled Actuary #14-6595

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Holly Hill 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 January 4, 2016 Actuarial Impact Statement (determined as of October 1, 2014), are as follows:

Valuation Date	10/1/2015	10/1/2014
Applicable Plan/Fiscal Year End	<u>9/30/2017</u>	<u>9/30/2016</u>
Total Required Contribution	597,483	640,061
Member Contributions (Est.)	74,398	71,007
Required City and State Cont.	523,085	569,054
Applicable State Contribution ¹	102,019	102,019
Balance from City ¹	421,066	467,035


¹ Reflects mutual consent to allow the City to utilize all of the State Monies that come in each year to help offset the City's bottom line funding requirements to the Plan. Amount shown represents the amount received during fiscal 2015, but the City will utilize more or less for the applicable fiscal year, depending on the amount actually received.

During the past 12 months, actuarial experience has been more favorable than expected on the basis of the actuarial assumptions. The primary components of favorable experience included a 8.21% investment return (Actuarial Asset basis) that was greater than the 7.50% assumption, higher than expected turnover, lower than expected retirement, and higher than expected inactive mortality.

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

Respectfully submitted,

FOSTER & FOSTER, INC.

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

By: 
Sara E. Baumer

CHANGES SINCE PRIOR VALUATION

Plan Changes

This valuation assumes that the Plan changes in the most recently proposed ordinance will be adopted.

These plan changes included:

- 1.) For Members hired after July 1, 2011 the Member Contribution rate is decreased from 8% of pay to 7% of pay effective October 1, 2015.
- 2.) Establishing a share plan.
- 3.) The bargaining parties mutually consent to allowing the use of all State Monies received to be utilized to offset the City's Required Contribution.

The impact of these changes is outlined in our Actuarial Impact Statement dated January 4, 2016.

Actuarial Assumption/Method Changes

The payroll growth assumption utilized in amortizing the Unfunded Actuarial Accrued Liability is limited to the historical 10-year average increase in pensionable payroll. Last year 1.32% was used and this year 0.38% was used.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2015</u>	<u>10/1/2014</u>
A. Participant Data		
Number Included		
Actives	23	23
Service Retirees	14	14
DROP Retirees	0	0
Beneficiaries	1	1
Disability Retirees	1	2
Terminated Vested	<u>8</u>	<u>7</u>
Total	47	47
Total Annual Payroll	\$1,116,990	\$1,090,976
Payroll Under Assumed Ret. Age	1,116,990	1,090,976
Annual Rate of Payments to:		
Service Retirees	598,505	591,030
DROP Retirees	0	0
Beneficiaries	14,283	14,283
Disability Retirees	8,374	20,698
Terminated Vested	84,940	62,860
B. Assets		
Actuarial Value ¹	9,065,143	8,362,160
Market Value ¹	8,566,354	8,756,934
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	3,717,220	3,673,581
Disability Benefits	37,188	32,620
Death Benefits	34,034	26,595
Vested Benefits	530,055	539,256
Refund of Contributions	87,816	78,322
Service Retirees	7,176,460	7,205,876
DROP Retirees ¹	0	0
Beneficiaries	126,058	129,257
Disability Retirees	59,240	151,829
Terminated Vested	611,480	392,916
Excess State Monies Reserve	<u>0</u>	<u>0</u>
Total	12,379,551	12,230,252

C. Liabilities - (Continued)	<u>10/1/2015</u>	<u>10/1/2014</u>
Present Value of Future Salaries	6,845,374	6,375,583
Present Value of Future Member Contributions	414,587	377,323
Normal Cost (Retirement)	155,721	152,200
Normal Cost (Disability)	4,236	3,665
Normal Cost (Death)	3,521	2,679
Normal Cost (Vesting)	38,557	35,929
Normal Cost (Refunds)	<u>14,045</u>	<u>13,071</u>
Total Normal Cost	216,080	207,544
Present Value of Future Normal Costs	1,338,803	1,223,346
Accrued Liability (Retirement)	2,732,762	2,779,377
Accrued Liability (Disability)	10,665	11,199
Accrued Liability (Death)	12,489	11,761
Accrued Liability (Vesting)	290,799	311,741
Accrued Liability (Refunds)	20,795	12,950
Accrued Liability (Inactives) ¹	7,973,238	7,879,878
Excess State Monies Reserve	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability	11,040,748	11,006,906
Unfunded Actuarial Accrued Liability (UAAL)	1,975,605	2,644,746
Funded Ratio (AVA / AL)	82.1%	76.0%
D. Actuarial Present Value of Accrued Benefits		
Vested Accrued Benefits		
Inactives ¹	7,973,238	7,879,878
Actives	1,568,601	1,570,788
Member Contributions	<u>436,476</u>	<u>434,396</u>
Total	9,978,315	9,885,062
Non-vested Accrued Benefits	<u>280,662</u>	<u>244,372</u>
Total Present Value Accrued Benefits	10,258,977	10,129,434
Funded Ratio (MVA / PVAB)	83.5%	86.5%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	49,432	
Benefits Paid	(655,033)	
Interest	735,144	
Other	<u>0</u>	
Total	129,543	

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) ²	\$237,634	\$228,247
Administrative Expenses (with interest) ²	26,747	24,146
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 29 years (as of 10/1/2015, with interest) ²	333,102	387,668
Total Required Contribution	597,483	640,061
Expected Member Contributions ²	74,398	71,007
Expected City & State Contribution	523,085	569,054
F. Past Contributions		
Plan Years Ending:	<u>9/30/2015</u>	
City and State Requirement	621,879	
Actual Contributions Made:		
Members (excluding buyback)	72,917	
City	519,860	
State	<u>102,019</u>	
Total	694,796	
G. Net Actuarial (Gain)/Loss	(402,142)	

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 displayed above have been adjusted to account for assumed salary increase and interest components.

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

<u>Year</u>	<u>Projected Unfunded Accrued Liability</u>
2015	1,975,605
2016	1,798,170
2017	1,606,190
2024	975,638
2031	197,275
2037	(21,648)
2044	0

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2015	7.92%	6.00%
Year Ended	9/30/2014	8.69%	6.00%
Year Ended	9/30/2013	4.18%	6.00%

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

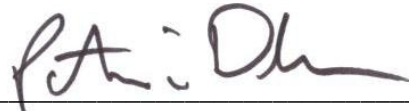
		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2015	8.21%	7.50%
Year Ended	9/30/2014	9.06%	7.50%
Year Ended	9/30/2013	9.39%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2015	\$1,116,990
	10/1/2005	1,075,136
(b) Total Increase		3.89%
(c) Number of Years		10.00
(d) Average Annual Rate		0.38%

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	\$2,644,746
(2) Sponsor Normal Cost developed as of October 1, 2014	142,977
(3) Expected administrative expenses for the year ended September 30, 2015	21,956
(4) Expected interest on (1), (2) and (3)	209,903
(5) Sponsor contributions to the System during the year ended September 30, 2015	621,879
(6) Expected interest on (5)	19,956
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2015 (1)+(2)+(3)+(4)-(5)-(6)	2,377,747
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	(402,142)
(10) Unfunded Accrued Liability as of October 1, 2015	1,975,605

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	10/1/2002	13	\$465,472	\$52,280
Loss Portion ¹	10/1/2002	13	465,475	52,280
Actuarial Gain	10/1/2003	13	(343,221)	(38,549)
Actuarial Loss	10/1/2004	13	1,181,922	132,749
Actuarial Gain	10/1/2005	13	(69,259)	(7,779)
Actuarial Loss	10/1/2006	13	50,688	5,693
Benefit Change	10/1/2006	21	35,099	3,047
Assumption Change	10/1/2007	22	840,830	71,530
Actuarial Loss	10/1/2007	13	4,575	514
Actuarial Loss	10/1/2008	3	296,864	105,808
Method Change	10/1/2008	13	209,749	23,558
Benefit Change	10/1/2008	23	(234,969)	(19,619)
Actuarial Loss	10/1/2009	4	105,829	29,236
Actuarial Loss	10/1/2010	5	122,165	27,891
Actuarial Loss	10/1/2011	6	189,595	37,249
Actuarial Gain	10/1/2012	7	(113,473)	(19,725)
Software Change	10/1/2013	18	(433,962)	(40,555)
Actuarial Gain	10/1/2013	8	(164,097)	(25,753)
Actuarial Gain	10/1/2014	9	(230,904)	(33,224)
Benefit Change	10/1/2014	29	(631)	(48)
Actuarial Gain	10/1/2015	10	<u>(402,142)</u>	<u>(53,694)</u>
			1,975,605	302,889

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2014	\$2,644,746
(2) Expected UAAL as of October 1, 2015	2,377,747
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	(59,799)
Salary Increases	(90,478)
Active Decrements	(219,817)
Inactive Mortality	(40,335)
Other	<u>8,287</u>
Increase in UAAL due to (Gain)/Loss	(402,142)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2015	\$1,975,605

ACTUARIAL ASSUMPTIONS AND METHODS

<u>Mortality Rate</u>	RP 2000 Combined Healthy – Sex Distinct. Disabled lives are set forward 5 years. Based upon other studies of municipal Police Officers, we feel this assumption sufficiently accommodates future mortality improvements.
<u>Interest Rate</u>	7.50% per year compounded annually, net of investment related expenses. This assumption was discussed and lowered as a result of our July 23, 2008 Experience Study.
<u>Retirement Age</u>	Earlier of age 55 and 6 years of service (10 years of service if hired after July 1, 2011), or the completion of 20 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 this assumption is reasonable given current Plan provisions.
<u>Early Retirement</u>	Commencing with eligibility for Early Retirement Age (age 50 with 6 years of Service (10 years of service if hired after July 1, 2011)), members are assumed to retire with an immediate subsidized benefit at the rate of 5.00% per year. We feel this assumption is reasonable given current Plan provisions.
<u>Disability Rate</u>	See table on following page (1201), 75% of disablements are assumed to be service related. We believe this assumption is in line with the experience incurred by other plans containing Florida municipal Police Officers.
<u>Termination Rate</u>	See table on following page (1305). This assumption was discussed and adjusted as a result of our July 23, 2008 Experience Study.
<u>Salary Increases</u>	6.00% per year until the assumed retirement age; see table below. Projected salary at retirement is increased 40% to account for non-regular compensation. We feel this assumption is reasonable as compared to long-term experience realized by the plan.
<u>Payroll Increase</u>	0.38% for 10/1/2015 valuation. 1.32% as of 10/1/2014.
<u>Administrative Expenses</u>	\$24,321 annually. This is equal to the actual non-investment-related expenses paid out of the trust during the year
<u>Funding Method</u>	Entry Age Normal Actuarial Cost Method.

Asset Valuation 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.

<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	17.2%	0.03%	17.4%
30	15.0	0.04	31.2
40	8.2	0.07	55.8
50	1.7	0.18	100.0

VALUATION NOTES

Total Annual Payroll is the projected annual rate of pay as of the valuation date for 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>
1992	40,235.97	_____ %
1993	42,044.77	4.5%
1994	43,894.29	4.4%
1995	48,205.39	9.8%
1996	47,682.87	-1.1%
1997	51,189.90	7.4%
1998	51,838.81	1.3%
1999	48,759.83	-5.9%
2000	45,177.19	-7.3%
2001	45,612.78	1.0%
2002	51,038.21	11.9%
2003	60,740.83	19.0%
2004	71,624.61	17.9%
2005	74,699.30	4.3%
2006	74,699.30	0.0%
2007	74,699.30	0.0%
2008	-	-100.0%
2009	150,819.27	N/A
2010	69,797.43	-53.7%
2011	64,309.42	-7.9%
2012	61,153.14	-4.9%
2013	59,865.22	-2.1%
2014	95,509.46	59.5%
2015	102,018.98	6.8%

EXCESS STATE MONIES RESERVE

	<u>Actual</u> <u>State Contribution</u>	<u>Applicable</u> <u>"Frozen" Amount</u>	<u>Excess State</u> <u>Monies Reserve</u>
1999	\$48,759.83	\$51,838.81	\$0.00
2000	45,177.19	107,245.81	0.00
2001	45,612.78	108,155.81	0.00
2002	51,038.21	108,155.81	0.00
2003	60,740.83	108,155.81	0.00
2004	71,624.61	108,155.81	0.00
2005	74,699.30	108,155.81	0.00
2006	74,699.30	250,591.81	0.00
2007	74,699.30	250,591.81	0.00
2008	0.00	250,591.81	0.00
2009	150,819.27	250,591.81	0.00
2010	69,797.43	224,192.81	0.00
2011	64,309.42	224,192.81	0.00
2012	61,153.14	224,192.81	0.00
2013	59,865.22	224,192.81	0.00
2014	95,509.46	224,192.81	0.00
2015	102,018.98	224,192.81	<u>0.00</u>
Total Excess State Monies			\$0.00

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2015

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Prepaid Benefits	51,228.89	51,228.89
Money Market	441,941.93	441,941.93
Cash	10,316.05	10,316.05
Total Cash and Equivalents	503,486.87	503,486.87
Receivables:		
From Broker for Investments Sold	3,136.71	3,136.71
Investment Income	22,178.41	22,178.41
Total Receivable	25,315.12	25,315.12
Investments:		
U. S. Bonds and Bills	1,016,949.51	1,035,922.32
Federal Agency Guaranteed Securities	417,895.21	412,754.68
Corporate Bonds	951,168.87	948,973.54
Equities	5,090,723.76	5,642,091.15
Total Investments	7,476,737.35	8,039,741.69
Total Assets	8,005,539.34	8,568,543.68
<u>LIABILITIES</u>		
Payables:		
To Broker for Investments Purchased	2,189.60	2,189.60
Total Liabilities	2,189.60	2,189.60
NET POSITION RESTRICTED FOR PENSIONS	8,003,349.74	8,566,354.08

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

ADDITIONS

Contributions:

Member	72,917.06
City	519,860.02
State	102,018.98

Total Contributions	694,796.06
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Investment Income:

Net Realized Gain (Loss)	210,193.03
Unrealized Gain (Loss)	(494,787.16)
Net Increase in Fair Value of Investments	(284,594.13)
Interest & Dividends	166,498.58
Less Investment Expense ¹	(87,927.55)

Net Investment Income	(206,023.10)
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Total Additions	488,772.96
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DEDUCTIONS

Distributions to Members:

Benefit Payments	622,229.50
Lump Sum DROP Distributions	0.00
Refunds of Member Contributions	32,803.10

Total Distributions	655,032.60
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Administrative Expense	24,320.64
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Total Deductions	679,353.24
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Net Increase in Net Position	(190,580.28)
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	8,756,934.36
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End of the Year	8,566,354.08
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¹Investment Related expenses include investment advisory, custodial and performance monitoring fees.

REVENUES

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	16.87%
09/30/2013	12.03%
09/30/2014	7.30%
09/30/2015	-2.39%

Annualized Rate of Return for prior four (4) years: 8.21%

(A) 10/01/2014 Actuarial Assets: \$8,362,160.43

(I) Net Investment Income:

1. Interest and Dividends	166,498.58	
2. Realized Gains (Losses)	210,193.03	
3. Change in Actuarial Value	398,775.75	
4. Investment Related Expenses	(87,927.55)	
Total		687,539.81

(B) 10/01/2015 Actuarial Assets: \$9,065,143.06

Actuarial Asset Rate of Return = $2I/(A+B-I)$: 8.21%

10/01/2015 Limited Actuarial Assets: \$9,065,143.06

10/01/2015 Market Value of Assets: \$8,566,354.08

Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis) \$59,798.67

*Market Value Basis, net of investment related expenses.

STATISTICAL DATA

	<u>10/1/2012</u>	<u>10/1/2013</u>	<u>10/1/2014</u>	<u>10/1/2015</u>
<u>Actives - Hired before 7/1/2011</u>				
Number	17	15	10	9
Average Current Age	38.9	39.6	41.4	42.6
Average Age at Employment	31.6	31.3	29.9	29.5
Average Past Service	7.3	8.3	11.5	13.1
Average Annual Salary	\$49,717	\$51,121	\$57,669	\$58,552
<u>Actives - Hired on or after 7/1/2011</u>				
Number	7	9	13	14
Average Current Age	32.6	35.1	32.9	32.9
Average Age at Employment	32.0	33.6	31.1	30.8
Average Past Service	0.6	1.4	1.8	2.1
Average Annual Salary	\$36,987	\$39,803	\$39,560	\$42,145
<u>Service Retirees</u>				
Number	12	13	14	14
Average Current Age	61.4	62.7	63.7	64.7
Average Annual Benefit	\$38,008	\$38,895	\$42,216	\$42,750
<u>DROP Retirees</u>				
Number	2	1	0	0
Average Current Age	57.2	53.2	N/A	N/A
Average Annual Benefit	\$57,574	\$72,128	N/A	N/A
<u>Beneficiaries</u>				
Number	2	2	1	1
Average Current Age	73.5	74.5	68.9	69.9
Average Annual Benefit	\$26,696	\$26,696	\$14,283	\$14,283
<u>Disability Retirees</u>				
Number	2	2	2	1
Average Current Age	66.0	67.0	68.0	68.7
Average Annual Benefit	\$10,349	\$10,349	\$10,349	\$8,374
<u>Terminated Vested ¹</u>				
Number	2	3	5	6
Average Current Age	44.4	45.7	44.0	44.3
Average Annual Benefit	\$12,596	\$14,429	\$12,572	\$14,157

¹ Excludes non-vested terminated Members awaiting a refund of Member contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	3	0	0	0	0	0	0	0	0	0	3
25 - 29	1	1	0	1	1	0	0	0	0	0	0	4
30 - 34	0	2	0	0	1	1	0	0	0	0	0	4
35 - 39	0	0	0	0	0	1	1	0	0	0	0	2
40 - 44	0	0	1	0	1	1	2	0	0	0	0	5
45 - 49	0	1	0	0	0	0	0	1	1	0	0	3
50 - 54	1	0	0	0	0	0	0	1	0	0	0	2
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	7	1	1	3	3	3	2	1	0	0	23

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2014	23
b. Terminations	
i. Vested (partial or full) with deferred benefits	(1)
ii. Non-vested or full lump sum distribution received	(1)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>0</u>
g. Continuing participants	21
h. New entrants	<u>2</u>
i. Total active life participants in valuation	23

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 Deferred	<u>Total</u>
a. Number prior valuation	14	0	1	2	7	24
Retired	0	0	0	0	0	0
DROP	0	0	0	0	0	0
Vested Deferred	0	0	0	0	1	1
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	0	0	(1)	0	(1)
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	14	0	1	1	8	24

SUMMARY OF CURRENT PLAN
(Through Proposed Ordinance)

<u>Latest Amendment Date</u>	November 12, 2013.
<u>Eligibility</u>	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 continuous employment with the City as a Police Officer.
<u>Earnings</u>	Total W-2 Earnings plus all tax deferred or tax exempt items of income. Additional 10.6% of Earnings included for calculating AFC if employed prior to 10/1/1999.
<u>Average Final Compensation (AFC)</u>	Average Earnings for the highest 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	5.00% of Earnings, 7.00% if hired on or after July 1, 2011.
<u>Member Contributions by City</u>	8.00% of Earnings prior to October 1, 2005; 0.00% thereafter. Members hired on or after 10/1/1999 vest in these contributions 16.66% for each complete year of Credited Service to 100% after 6 years of Credited Service. Members hired before 10/1/1999 are 100% vested in these contributions.
<u>City and State Contributions</u>	Remaining amount necessary to pay current costs and amortize past service cost if any, over 30 years.
<u>Normal Retirement</u>	
Date	Earlier of Age 55 and 6 years of Credited Service or 20 years of Credited Service. For Members hired on or after July 1, 2011, the Earlier of age 55 and 10 years of Credited Service or 20 years of credited service regardless of age.
Benefit	3.00% of Average Final Compensation times Credited Service. Members retiring after 10/1/1999 receive \$150 per month, payable for life.
Form of Benefit	Ten Year Certain and Life Annuity (options available).

Early Retirement

Eligibility Age 50 and 6 Years of Credited Service. For Members hired on or after July 1, 2011, age 55 and 10 Years of Credited Service.

Benefit Accrued benefit, reduced 3% per year.

Cost of Living Adjustment

Annual 2.00% increase commencing 5 years after retirement for those Members who retire on or after October 6, 2009 (including disability retirees and beneficiaries, but not including those who terminate prior to reaching their Early or Normal Retirement Date and later begin drawing benefits).

Vesting

Schedule 100% after 6 years of Credited Service. For Members hired on or after July 1, 2011, 100% after 10 years of Credited Service.

Benefit Amount Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Disability

Eligibility Service Incurred: Covered from date of employment.
Non-Service Incurred: 10 years of Credited Service.

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 guaranteed) 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.
Non-vested: Refund of accumulated contributions without interest.

Post-Retirement Benefits payable to beneficiary in accordance with option selected at retirement.

Board of Trustees

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

Deferred Retirement Option Plan

Eligibility

Eligibility for Normal Retirement.

Participation

Not to exceed 60 months.

Rate of Return

Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs).

Form of Distribution

Lump sum at termination of employment.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2015

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Prepaid Benefits	51,229
Money Market	441,942
Cash	10,316
Total Cash and Equivalents	503,487
Receivables:	
From Broker for Investments Sold	3,137
Investment Income	22,178
Total Receivable	25,315
Investments:	
U. S. Bonds and Bills	1,035,922
Federal Agency Guaranteed Securities	412,755
Corporate Bonds	948,974
Equities	5,642,091
Total Investments	8,039,742
Total Assets	8,568,544
<u>LIABILITIES</u>	
Payables:	
To Broker for Investments Purchased	2,190
Total Liabilities	2,190
NET POSITION RESTRICTED FOR PENSIONS	8,566,354

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

ADDITIONS

Contributions:

Member	72,917	
City	519,860	
State	102,019	
Total Contributions		694,796
Investment Income:		
Net Increase in Fair Value of Investments	(284,593)	
Interest & Dividends	166,499	
Less Investment Expense ¹	(87,928)	
Net Investment Income		(206,022)
Total Additions		488,774

DEDUCTIONS

Distributions to Members:

Benefit Payments	622,230	
Lump Sum DROP Distributions	0	
Refunds of Member Contributions	32,803	
Total Distributions		655,033
Administrative Expense		24,321
Total Deductions		679,354
Net Increase in Net Position		(190,580)
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		8,756,934
End of the Year		8,566,354

¹Investment 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 the Plan's Board of Trustees comprised of:

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

Plan Membership as of October 1, 2014:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	17
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	7
Active Plan Members	23
	47

Benefits Provided

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

Normal Retirement:

Date: Earlier of Age 55 and 6 years of Credited Service or 20 years of Credited Service. For Members hired on or after July 1, 2011 the Earlier of age 55 and 10 years of Credited Service or 20 years of credited service regardless of age.

Benefit: 3.0% of Average Final Compensation times Credited Service. Members retiring after October 1, 1999, receive \$150 per month, payable for life.

Early Retirement:

Eligibility: Age 50 and 6 Years of Credited Service. For Members hired on or after July 1, 2011 Age 55 and 10 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% per year.

Vesting:

Schedule: 100% after 6 years of Credited Service. For Members hired on or after July 1, 2011 100% after 10 years of Credited Service.

Benefit: Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Disability:

Eligibility: Service Incurred: Covered from date of employment. Non-Service Incurred: 10 years of Credited Service.

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. Non-vested: Refund of accumulated contributions without interest.

Cost of Living Adjustment:

Annual 2.0% increase commencing 5 years after retirement for those Members who retire on or after October 6, 2009 (including disability retirees and beneficiaries, but not including those who terminate prior to reaching their Early or Normal Retirement Date and later begin drawing benefits).

Contributions

Member Contributions: 5.00% of Earnings, 7.00% if hired on or after July 1, 2011.

Member Contributions by City: 8.00% of Earnings prior to October 1, 2005: 0.00% thereafter. Members hired on or after October 1, 1999, vest in these contributions 16.66% for each complete year of Credited Service to 100% after 6 years of Credited Service. Members hired before October 1, 1999, are 100% vested in these contributions.

City and State Contributions: Remaining amount necessary to pay current costs and amortize past service cost if any, over 30 years.

Investments

Investment Policy:

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

Asset Class	Target Allocation
Domestic Equity	60%
International Equity	10%
Fixed Income	30%
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 -2.39 percent.

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

Deferred Retirement Option Program

Eligibility for Normal Retirement.

Participation: Not to exceed 60 months.

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

The DROP balance as September 30, 2015 is \$0.

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	\$ 11,327,736
Plan Fiduciary Net Position	\$ (8,566,354)
Sponsor's Net Pension Liability	<u>\$ 2,761,382</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	75.62%

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	6.00%
Discount Rate	7.50%
Investment Rate of Return	7.50%

Mortality Rate: RP 2000 Combined Healthy – Sex Distinct. 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 performed on July 27th, 2008, for the period 1988-2007.

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	7.65%
International Equity	7.72%
Fixed Income	2.37%

Discount Rate:

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

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

	1% Decrease 6.50%	Current Discount Rate 7.50%	1% Increase 8.50%
Sponsor's Net Pension Liability	\$ 4,087,336	\$ 2,761,382	\$ 1,652,982

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

	09/30/2015	09/30/2014
Total Pension Liability		
Service Cost	222,322	249,756
Interest	823,857	810,040
Changes of benefit terms	(526)	-
Differences between Expected and Actual Experience	(153,367)	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(655,033)	(1,040,177)
Net Change in Total Pension Liability	237,253	19,619
Total Pension Liability - Beginning	11,090,483	11,070,864
Total Pension Liability - Ending (a)	<u>\$ 11,327,736</u>	<u>\$ 11,090,483</u>
Plan Fiduciary Net Position		
Contributions - Employer	519,860	636,738
Contributions - State	102,019	95,509
Contributions - Employee	72,917	67,173
Net Investment Income	(206,022)	600,411
Benefit Payments, including Refunds of Employee Contributions	(655,033)	(1,040,177)
Administrative Expense	(24,321)	(21,956)
Net Change in Plan Fiduciary Net Position	(190,580)	337,698
Plan Fiduciary Net Position - Beginning	8,756,934	8,419,236
Plan Fiduciary Net Position - Ending (b)	<u>\$ 8,566,354</u>	<u>\$ 8,756,934</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,761,382</u>	<u>\$ 2,333,549</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	75.62%	78.96%
Covered Employee Payroll*	\$ 1,130,458	\$ 1,135,179
Net Pension Liability as a percentage of Covered Employee Payroll	244.27%	205.57%

Notes to Schedule:*Changes of benefit terms:*

For the 2015 Fiscal year, amounts reported as changes of benefit terms were resulted from:

- 1.) For Members hired after July 1, 2011 the Member Contribution rate is decreased from 8% of pay to 7% of pay effective October 1, 2015.
- 2.) Establishing a share plan.
- 3.) The bargaining parties mutually consent to allowing the use of all State Monies received to be utilized to offset the City's Required Contribution.

* For the 2014 Fiscal year reported Covered Employee Payroll figure was based on Pensionable Salary.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	09/30/2015	09/30/2014
Actuarially Determined Contribution	621,879	732,247
Contributions in relation to the Actuarially Determined Contributions	621,879	732,247
Contribution Deficiency (Excess)	\$ -	\$ -
Covered Employee Payroll*	\$ 1,130,458	\$ 1,135,179
Contributions as a percentage of Covered Employee Payroll	55.01%	64.50%

* For the 2014 Fiscal year reported Covered Employee Payroll figure was 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:	25 Years (as of 10/01/2013).
Asset Valuation 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.
Inflation:	3.0% per year.
Salary Increases:	6.0% per year until the assumed retirement age. Projected salary at retirement is increased 40% to account for non-regular compensation.
Interest Rate:	7.5% per year compounded annually, net of investment related expenses.
Payroll Increase:	Up to 5.0% per year (2.32% for 10/01/13 Valuation).
Cost-of-Living Adjustments:	2.0% per year for all retirees who retired after September 30, 2006 commencing 5 years after retirement (including disability retirees & beneficiaries of retirees).
Retirement Age:	Earlier of age 55 and 6 years of service (10 years of service if hired after July 1, 2011), or the completion of 20 years of service, regardless of age. Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year.
Early Retirement:	Commencing with eligibility for Early Retirement Age (age 50 with 6 years of Service (10 years of service if hired after July 1, 2011)), Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year.
Termination Rates:	See table below.
Disability Rates:	See table below. 75% of disablements are assumed to be service related.
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).

Termination and Disability Rate Table:

Age	% Becoming Disabled During the Year	% Terminating During the Year
20	0.03%	17.2%
30	0.04%	15.0%
40	0.07%	8.2%
50	0.18%	1.7%

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

	<u>09/30/2015</u>	<u>09/30/2014</u>
Annual Money-Weighted Rate of Return		
Net of Investment Expense	-2.39%	7.30%

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

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	17
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	7
Active Plan Members	23
	<u>47</u>

Benefits Provided

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

Normal Retirement:

Date: Earlier of Age 55 and 6 years of Credited Service or 20 years of Credited Service. For Members hired on or after July 1, 2011 the Earlier of age 55 and 10 years of Credited Service or 20 years of credited service regardless of age.

Benefit: 3.0% of Average Final Compensation times Credited Service. Members retiring after October 1, 1999, receive \$150 per month, payable for life.

Early Retirement:

Eligibility: Age 50 and 6 Years of Credited Service. For Members hired on or after July 1, 2011 Age 55 and 10 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% per year.

Vesting:

Schedule: 100% after 6 years of Credited Service. For Members hired on or after July 1, 2011 100% after 10 years of Credited Service.

Benefit: Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Disability:

Eligibility: Service Incurred: Covered from date of employment. Non-Service Incurred: 10 years of Credited Service.

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. Non-vested: Refund of accumulated contributions without interest.

Cost of Living Adjustment:

Annual 2.0% increase commencing 5 years after retirement for those Members who retire on or after October 6, 2009 (including disability retirees and beneficiaries, but not including those who terminate prior to reaching their Early or Normal Retirement Date and later begin drawing benefits).

Contributions

Member Contributions: 5.00% of Earnings, 7.00% if hired on or after July 1, 2011.

Member Contributions by City: 8.00% of Earnings prior to October 1, 2005: 0.00% thereafter. Members hired on or after October 1, 1999, vest in these contributions 16.66% for each complete year of Credited Service to 100% after 6 years of Credited Service.

Members hired before October 1, 1999, are 100% vested in these contributions.

City and State Contributions: Remaining amount necessary to pay current costs and amortize past service cost if any, over 30 years.

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	6.00%
Discount Rate	7.50%
Investment Rate of Return	7.50%

Mortality Rate: RP 2000 Combined Healthy – Sex Distinct. 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 performed on July 27th, 2008, for the period 1988-2007.

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	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	60%	7.65%
International Equity	10%	7.72%
Fixed Income	30%	2.37%
Total	100%	

Discount Rate:

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

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

CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Reporting Period Ending September 30, 2015	\$ 11,090,483	\$ 8,756,934	\$ 2,333,549
Changes for a Year:			
Service Cost	222,322	-	222,322
Interest	823,857	-	823,857
Differences between Expected and Actual Experience	(153,367)	-	(153,367)
Changes of assumptions	-	-	-
Changes of benefit terms	(526)	-	(526)
Contributions - Employer	-	519,860	(519,860)
Contributions - State	-	102,019	(102,019)
Contributions - Employee	-	72,917	(72,917)
Net Investment Income	-	(206,022)	206,022
Benefit Payments, including Refunds of Employee Contributions	(655,033)	(655,033)	-
Administrative Expense	-	(24,321)	24,321
Net Changes	237,253	(190,580)	427,833
Reporting Period Ending September 30, 2016	\$ 11,327,736	\$ 8,566,354	\$ 2,761,382

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ 4,087,336	\$ 2,761,382	\$ 1,652,982

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 \$363,477.

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	-	102,244
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	703,404	-
Employers contributions subsequent to the measurement date	467,035	-
Total	<u>\$ 1,170,439</u>	<u>\$ 102,244</u>

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	\$ 125,788
2018	\$ 125,788
2019	\$ 176,910
2020	\$ 172,674
2021	\$ -
Thereafter	\$ -

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2016 09/30/2015	09/30/2015 09/30/2014
Total Pension Liability		
Service Cost	222,322	249,756
Interest	823,857	810,040
Changes of benefit terms	(526)	-
Differences between Expected and Actual Experience	(153,367)	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(655,033)	(1,040,177)
Net Change in Total Pension Liability	237,253	19,619
Total Pension Liability - Beginning	11,090,483	11,070,864
Total Pension Liability - Ending (a)	<u>\$ 11,327,736</u>	<u>\$ 11,090,483</u>
Plan Fiduciary Net Position		
Contributions - Employer	519,860	636,738
Contributions - State	102,019	95,509
Contributions - Employee	72,917	67,173
Net Investment Income	(206,022)	600,411
Benefit Payments, including Refunds of Employee Contributions	(655,033)	(1,040,177)
Administrative Expense	(24,321)	(21,956)
Net Change in Plan Fiduciary Net Position	(190,580)	337,698
Plan Fiduciary Net Position - Beginning	8,756,934	8,419,236
Plan Fiduciary Net Position - Ending (b)	<u>\$ 8,566,354</u>	<u>\$ 8,756,934</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,761,382</u>	<u>\$ 2,333,549</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	75.62%	78.96%
Covered Employee Payroll	\$ 1,130,458	\$ 1,135,179
Net Pension Liability as a percentage of Covered Employee Payroll	244.27%	205.57%

Notes to Schedule:

Changes of benefit terms:

For the 2016 Reporting Period Ending year, amounts reported as changes of benefit terms were resulted from:

- 1.) For Members hired after July 1, 2011 the Member Contribution rate is decreased from 8% of pay to 7% of pay effective October 1, 2015.
- 2.) Establishing a share plan.
- 3.) The bargaining parties mutually consent to allowing the use of all State Monies received to be utilized to offset the City's Required Contribution.

* For the 2015 Reporting Period Ending year, the Covered Employee Payroll figure was based on Pensionable Salary.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Reporting Period Ending	09/30/2016	09/30/2015
Measurement Date	09/30/2015	09/30/2014
Actuarially Determined Contribution	621,879	732,247
Contributions in relation to the		
Actuarially Determined Contributions	621,879	732,247
Contribution Deficiency (Excess)	\$ -	\$ -
Covered Employee Payroll*	\$ 1,130,458	\$ 1,135,179
Contributions as a percentage of		
Covered Employee Payroll	55.01%	64.50%

* For the 2015 Reporting Period Ending year, the Covered Employee Payroll figure was 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:	25 Years (as of 10/01/2013).
Asset Valuation 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.
Inflation:	3.0% per year.
Salary Increases:	6.0% per year until the assumed retirement age. Projected salary at retirement is increased 40% to account for non-regular compensation.
Interest Rate:	7.5% per year compounded annually, net of investment related expenses.
Payroll Increase:	Up to 5.0% per year (2.32% for 10/01/13 Valuation).
Cost-of-Living Adjustments:	2.0% per year for all retirees who retired after September 30, 2006 commencing 5 years after retirement (including disability retirees & beneficiaries of retirees).
Retirement Age:	Earlier of age 55 and 6 years of service (10 years of service if hired after July 1, 2011), or the completion of 20 years of service, regardless of age. Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year.
Early Retirement:	Commencing with eligibility for Early Retirement Age (age 50 with 6 years of Service (10 years of service if hired after July 1, 2011)), Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year.
Termination Rates:	See table on next page.
Disability Rates:	See table on next page. 75% of disablements are assumed to be service related.
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).

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Termination and Disability Rate Table:

Age	% Becoming Disabled During the Year	% Terminating During the Year
20	0.03%	17.2%
30	0.04%	15.0%
40	0.07%	8.2%
50	0.18%	1.7%

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2015

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 2,651,628	\$ -	\$ 636,738	\$ -
Employer Contributions made after September 30, 2014	-	-	519,860	-
Total Pension Liability Factors:				
Service Cost	249,756	-	-	249,756
Interest	810,040	-	-	810,040
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	(1,040,177)	-	-	(1,040,177)
Net change	<u>19,619</u>	<u>-</u>	<u>519,860</u>	<u>19,619</u>
Plan Fiduciary Net Position:				
Contributions - Employer	636,738	-	(636,738)	-
Contributions - State	95,509	-	-	(95,509)
Contributions - Employee	67,173	-	-	(67,173)
Net Investment Income	621,591	-	-	(621,591)
Difference between projected and actual earnings on Pension Plan investments	(21,180)	-	21,180	-
Current year amortization	-	-	(4,236)	4,236
Benefit Payments	(1,040,177)	-	-	1,040,177
Administrative Expenses	(21,956)	-	-	21,956
Net change	<u>337,698</u>	<u>-</u>	<u>(619,794)</u>	<u>282,095</u>
Ending Balance	<u><u>\$ 2,333,549</u></u>	<u><u>\$ -</u></u>	<u><u>\$ 536,804</u></u>	<u><u>\$ 301,714</u></u>

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2016

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 2,333,549	\$ -	\$ 536,804	\$ -
Employer Contributions made after September 30, 2015	-	-	467,035	-
Total Pension Liability Factors:				
Service Cost	222,322	-	-	222,322
Interest	823,857	-	-	823,857
Changes in benefit terms	(526)	-	-	(526)
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(153,367)	153,367	-	-
Current year amortization of experience difference	-	(51,123)	-	(51,123)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	-	-
Benefit Payments	(655,033)	-	-	(655,033)
Net change	<u>237,253</u>	<u>102,244</u>	<u>467,035</u>	<u>339,497</u>
Plan Fiduciary Net Position:				
Contributions - Employer	519,860	-	(519,860)	-
Contributions - State	102,019	-	-	(102,019)
Contributions - Employee	72,917	-	-	(72,917)
Net Investment Income	657,349	-	-	(657,349)
Difference between projected and actual earnings on Pension Plan investments	(863,371)	-	863,371	-
Current year amortization	-	-	(176,911)	176,911
Benefit Payments	(655,033)	-	-	655,033
Administrative Expenses	(24,321)	-	-	24,321
Net change	<u>(190,580)</u>	<u>-</u>	<u>166,600</u>	<u>23,980</u>
Ending Balance	<u>\$ 2,761,382</u>	<u>\$ 102,244</u>	<u>\$ 1,170,439</u>	<u>\$ 363,477</u>