

CITY OF MARCO ISLAND  
POLICE OFFICERS' PENSION PLAN

ACTUARIAL VALUATION  
AS OF OCTOBER 1, 2015

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

December 21, 2015

Thel Whitley, Administrator  
City of Marco Island Police Officers' Pension Plan  
The Pension Resource Center  
P. O. Box 152665  
Cape Coral, FL 33915-2665

Re: City of Marco Island Police Officers' Pension Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Marco Island Police Officers' Pension Plan. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. Please note that this valuation may not be applicable for any other purposes.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapters 112 and 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 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.

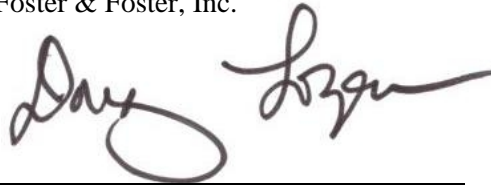
The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the 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 Marco Island, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the City of Marco Island Police Officers' Pension Plan. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

Foster & Foster, Inc.

A handwritten signature in dark ink, appearing to read "Douglas H. Lozen", written over a horizontal line.

By:

Douglas H. Lozen, EA, MAAA  
Enrolled Actuary #14-7778

DHL/lke

Enclosures

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## SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Marco Island Police Officers' Pension Plan, 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 City's plan/fiscal year ending September 30, 2017.

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


Valuation Date Applicable Fiscal Year End	10/1/2015 <u>9/30/2017</u>	10/1/2014 <u>9/30/2016</u>
Total Required Contribution % of Total Annual Payroll	36.67%	39.81%
Member Contributions % of Total Annual Payroll	0.50%	0.50%
Required City and State Cont. % of Total Annual Payroll	36.17%	39.31%
State Contribution <sup>1</sup> % of Total Annual Payroll	161,276 7.72%	161,276 7.72%
Balance from City % of Total Annual Payroll	28.45%	31.59%

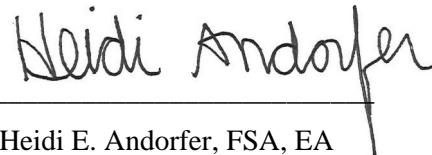
<sup>1</sup> A tentative union agreement was reached allowing the City to use future State Contributions to pay for the unfunded liability. In exchange, the City agreed to pay off the unfunded liability over the span of the agreement. For budgeting purposes, the required Sponsor Contribution (City and State) is 36.17% of Pensionable Earnings for the fiscal year ending September 30, 2017. The precise City requirement for the year is this amount, less actual State Contributions.

Experience since the prior valuation has been more favorable than expected on the basis of the actuarial assumptions. The primary component of favorable experience was average increases in pensionable valuation compensation that were less than the assumed rate by more than 4.00%. There were no other significant sources of gain/loss to the plan since the prior valuation.

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

Respectfully submitted,  
FOSTER & FOSTER, INC.

By:   
Douglas H. Lozen, EA, MAAA

By :   
Heidi E. Andorfer, FSA, EA

## CHANGES SINCE PRIOR VALUATION

### Plan Changes

There were no changes in benefits since the prior valuation.

### Actuarial Assumption/Method Changes

There have been no changes in methods or assumptions since the prior valuation.

## CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2014	32.59%
(2) Summary of Contribution Impact by component:	
Change in Available State Money	-0.8%
Payroll Change	0.5%
Increase in Administrative Expenses	1.0%
Amortization Payment Change Due to Excess Contributions	-2.7%
Investment Return (Actuarial Asset Basis)	0.1%
Salary Increases	-2.3%
Active Decrements	-0.1%
Inactive Mortality	0.1%
Other	<u>0.1%</u>
Total Change in Contribution	-4.14%
(3) Contribution Determined as of October 1, 2015	28.45%



# COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2015</u>	<u>10/1/2014</u>
A. Participant Data		
Number Included		
Actives	33	33
Service Retirees	11	9
Beneficiaries	0	0
Disability Retirees	0	0
Terminated Vested	<u>16</u>	<u>14</u>
Total	60	56
Total Annual Payroll	\$2,089,970	\$2,156,454
Payroll Under Assumed Ret. Age	2,089,970	2,156,454
Annual Rate of Payments to:		
Service Retirees	200,499	173,347
Beneficiaries	0	0
Disability Retirees	0	0
Terminated Vested	154,646	131,049
B. Assets		
Actuarial Value	8,773,349	6,685,459
Market Value	8,724,015	7,254,092
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	8,351,638	8,592,664
Disability Benefits	238,618	245,649
Death Benefits	42,527	45,744
Vested Benefits	725,083	755,379
Refund of Contributions	11,506	15,515
Service Retirees	2,703,973	2,341,188
Beneficiaries	0	0
Disability Retirees	0	0
Terminated Vested	1,528,706	1,137,612
Excess State Monies Reserve	<u>7,624</u>	<u>0</u>
Total	13,609,675	13,133,751

C. Liabilities - (Continued)	<u>10/1/2015</u>	<u>10/1/2014</u>
Present Value of Future Salaries	12,125,413	12,981,117
Present Value of Future		
Member Contributions	60,627	64,906
Normal Cost (Retirement)	482,999	501,083
Normal Cost (Disability)	31,154	32,242
Normal Cost (Death)	2,830	3,014
Normal Cost (Vesting)	63,610	73,677
Normal Cost (Refunds)	<u>3,999</u>	<u>4,671</u>
Total Normal Cost	584,592	614,687
Present Value of Future Normal Costs	3,152,583	3,383,791
Accrued Liability (Retirement)	5,760,199	5,801,575
Accrued Liability (Disability)	93,644	93,529
Accrued Liability (Death)	25,762	27,144
Accrued Liability (Vesting)	335,438	346,592
Accrued Liability (Refunds)	1,746	2,320
Accrued Liability (Inactives)	4,232,679	3,478,800
Excess State Monies Reserve	<u>7,624</u>	<u>0</u>
Total Actuarial Accrued Liability	10,457,092	9,749,960
Unfunded Actuarial Accrued		
Liability (UAAL)	1,683,743	3,064,501
Funded Ratio (AVA / AL)	83.9%	68.6%
D. Actuarial Present Value of Accrued Benefits		
Vested Accrued Benefits		
Inactives	4,232,679	3,478,800
Actives	3,606,691	3,299,614
Member Contributions	<u>457,645</u>	<u>472,450</u>
Total	8,297,015	7,250,864
Non-vested Accrued Benefits	<u>705,388</u>	<u>781,286</u>
Total Present Value Accrued Benefits	9,002,403	8,032,150
Funded Ratio (MVA / PVAB)	96.9%	90.3%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	561,173	
Benefits Paid	(186,343)	
Interest	595,423	
Other	<u>0</u>	
Total	970,253	

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

#### E. Pension Cost

Normal Cost (with interest)		
% of Total Annual Payroll <sup>1</sup>	29.02	29.57
Administrative Expenses (with interest)		
% of Total Annual Payroll <sup>1</sup>	2.81	1.70
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 10/1/2015, with interest)		
% of Total Annual Payroll <sup>1</sup>	4.84	8.54
Total Required Contribution		
% of Total Annual Payroll <sup>1</sup>	36.67	39.81
Expected Member Contributions		
% of Total Annual Payroll <sup>1</sup>	0.50	0.50
Expected City & State Contribution		
% of Total Annual Payroll <sup>1</sup>	36.17	39.31

#### F. Past Contributions

Plan Years Ending:	<u>9/30/2015</u>
Total Required Contribution	831,970
City and State Requirement	821,375

#### Actual Contributions Made:

Members (excluding buyback)	10,596
City	1,615,420
State	<u>153,652</u> <sup>2</sup>
Total	1,779,668

#### G. Net Actuarial (Gain)/Loss (493,706)

<sup>1</sup> Contributions developed as of 10/1/2015 are expressed as a percentage of total annual payroll at 10/1/2015 of \$2,089,970.

<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:

<u>Year</u>	<u>Projected Unfunded Accrued Liability</u>
2015	1,683,743
2016	1,705,190
2017	1,786,457
2024	2,080,357
2031	861,934
2038	234,946
2045	0

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2015	1.29%	6.00%
Year Ended	9/30/2014	10.34%	6.00%
Year Ended	9/30/2013	3.42%	6.00%

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


		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2015	7.29%	7.50%
Year Ended	9/30/2014	7.01%	7.50%
Year Ended	9/30/2013	6.82%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2015	\$2,089,970
	10/1/2005	1,459,781
(b) Total Increase		43.17%
(c) Number of Years		10.00
(d) Average Annual Rate		3.65%

## 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	\$3,064,501
(2)	Sponsor Normal Cost developed as of October 1, 2014	603,905
(3)	Expected administrative expenses for the year ended September 30, 2015	35,433
(4)	Expected interest on (1), (2) and (3)	276,459
(5)	Sponsor contributions to the System during the year ended September 30, 2015 <sup>1</sup>	1,769,072
(6)	Expected interest on (5)	33,777
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2015 (1)+(2)+(3)+(4)-(5)-(6)	2,177,449
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(493,706)
(10)	Unfunded Accrued Liability as of October 1, 2015	1,683,743

Type of Base	Date Established	Years Remaining	10/1/2015 Amount	Amortization Amount
Initial	10/1/2005	30	\$746,860	\$43,257
Amendment	10/1/2005	20	664,168	48,367
Loss	10/1/2006	14	491,381	45,664
Loss	10/1/2007	14	191,871	17,830
Loss	10/1/2008	14	500,078	46,472
Method Change	10/1/2008	14	(108,949)	(10,125)
Loss	10/1/2009	4	96,856	25,789
Gain	10/1/2010	5	(248,676)	(54,077)
Assump. Change	10/1/2010	15	112,285	9,928
Gain	10/1/2011	6	(165,805)	(30,670)
Assump. Change	10/1/2011	16	338,467	28,594
Gain	10/1/2012	7	(275,601)	(44,597)
Amendment	10/1/2012	27	(259)	(16)
Gain	10/1/2013	8	(242,537)	(35,043)
Loss	10/1/2014	9	77,310	10,131
Gain	10/1/2015	10	<u>(493,706)</u>	<u>(59,398)</u>
			1,683,743	42,106

Maximum of 30 Year Amortization of UAAL or  
Total of Individual Amortization Amounts,  
no Less Than Administrative Expenses

97,519

<sup>1</sup> A tentative union agreement was reached allowing the City to use future State Contributions to pay for the unfunded liability. In exchange, the City agreed to pay off the unfunded liability over the span of the agreement. As such, an additional \$830,417 was contributed to the plan on 9/28/2015.

## DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2014	\$3,064,501
(2) Expected UAAL as of October 1, 2015	2,177,449
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	15,764
Salary Increases	(437,344)
Active Decrements	(20,374)
Inactive Mortality	15,921
Other	<u>(67,673)</u>
Increase in UAAL due to (Gain)/Loss	(493,706)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2015	\$1,683,743

## ACTUARIAL ASSUMPTIONS AND METHODS

<u>Mortality Rate</u>	RP2000, Combined Healthy – sex distinct. Disabled lives are set forward five years. Based upon other studies of municipal Police Officers, we feel that this assumption sufficiently accommodates expected future mortality improvements.
<u>Interest Rate</u>	7.50% per year compounded annually, net of investment related expenses. This assumption is in line with the national average for public programs and is reasonable based on the asset allocation.
<u>Retirement Age</u>	Earlier of Age 55 and 6 years of service or 25 years of service, regardless of age. Also, any Member who has reached Normal Retirement is assumed to continue employment for one additional year. We feel that this assumption is reasonable based on the plan provisions.
<u>Early Retirement</u>	Commencing with the earliest Early Retirement Date (Age 50 with 6 years of service). Members are assumed to retire with an immediate subsidized benefit at the rate of 5.00% per year. We feel that this assumption is reasonable based on the plan provisions.
<u>Disability Rate</u>	See table on following page (1202). It is assumed that 75% of disablements and active Member deaths are service related. We believe this assumption is in line with the experience incurred by other plans containing Florida Police Employees.
<u>Termination Rate</u>	See table on following page (1305). We believe this assumption is in line with the experience incurred by other plans containing Florida Police Employees.
<u>Salary Increases</u>	6.00% per year until the assumed retirement age; see Table on following page. Projected salary at retirement is increased 20% to account for non-regular compensation. We feel that this assumption is reasonable based on plan experience.
<u>Administrative Expenses</u>	\$56,617 annually, based on prior year administrative expenses.
<u>Payroll Increase</u>	3.00% per year.
<u>Funding Method</u>	Entry Age Normal Actuarial Cost Method.



Actuarial Asset Method

Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric four-year average Market Value returns, net of fees. It is possible that over time this technique will produce an insignificant bias above or below Market Value.

	% Becoming Disabled <u>During the Year</u>	% Terminating <u>During the Year</u>	Current Salary as a % of Salary <u>at Age 55</u>
20	0.051%	17.20%	13.01%
30	0.058%	15.00%	23.30%
40	0.121%	8.20%	41.73%
50	0.429%	1.70%	74.73%

## VALUATION NOTES

Total Annual Payroll is the projected annual rate of pay as of the valuation date of all covered Members.

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

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

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.

Unfunded Actuarial Accrued Liability (UAAL) 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.

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 (40 years for the initial liability). 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>	<u>Amount</u>	Increase from <u>Previous Year</u>
2006	54,781.00	_____%
2007	92,192.71	68.3%
2008	95,758.33	3.9%
2009	99,567.96	4.0%
2010	102,822.00	3.3%
2011	96,375.00	-6.3%
2012	133,463.61	38.5%
2013	137,352.30	2.9%
2014	145,004.00	5.6%
2015	161,275.89	11.2%

# 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>
2006	\$54,781.00	\$153,652.00	\$0.00
2007	92,192.71	153,652.00	0.00
2008	95,758.33	153,652.00	0.00
2009	99,567.96	153,652.00	0.00
2010	102,822.00	153,652.00	0.00
2011	96,375.00	153,652.00	0.00
2012	133,463.61	153,652.00	0.00
2013	137,352.30	153,652.00	0.00
2014	145,004.00	153,652.00	0.00
2015	161,275.89	153,652.00	<u>7,623.89</u>
Total Excess State Monies			\$7,623.89

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2015

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Checking Account	19,525.20	19,525.20
Prepaid Benefits	16,708.27	16,708.27
Prepaid Expenses	450.00	450.00
Money Market	1,140,357.00	1,140,356.95
Cash	(8,011.35)	(8,011.35)
Total Cash and Equivalents	1,169,029.12	1,169,029.07
Receivables:		
State Contributions	161,275.89	161,275.89
From Broker for Investments Sold	7,693.47	7,693.47
Investment Income	17,829.97	17,829.97
Total Receivable	186,799.33	186,799.33
Investments:		
U. S. Bonds and Bills	1,175,806.17	1,178,332.02
Federal Agency Guaranteed Securities	228,470.16	230,288.14
Corporate Bonds	1,305,258.11	1,289,062.22
Equities	4,755,785.20	5,223,346.85
Total Investments	7,465,319.64	7,921,029.23
Total Assets	8,821,148.09	9,276,857.63
<u>LIABILITIES</u>		
Payables:		
Administrative Expenses	1,006.44	1,006.44
To Broker for Investments Purchased	551,836.17	551,836.17
Total Liabilities	552,842.61	552,842.61
NET POSITION RESTRICTED FOR PENSIONS	8,268,305.48	8,724,015.02

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

ADDITIONS

Contributions:

Member	10,595.65
City	1,615,419.65
State	161,275.89

Total Contributions	1,787,291.19
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Investment Income:

Net Realized Gain (Loss)	265,265.67
Unrealized Gain (Loss)	(403,177.60)
Net Increase in Fair Value of Investments	(137,911.93)
Interest & Dividends	137,220.77
Less Investment Expense <sup>1</sup>	(73,716.64)

Net Investment Income	(74,407.80)
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Total Additions	1,712,883.39
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DEDUCTIONS

Distributions to Members:

Benefit Payments	186,342.58
Refunds of Member Contributions	0.00

Total Distributions	186,342.58
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Administrative Expense	56,617.41
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Total Deductions	242,959.99
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Net Increase in Net Position	1,469,923.40
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	7,254,091.62
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End of the Year	8,724,015.02
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<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 <sup>1</sup>	
09/30/2012	12.78%	
09/30/2013	9.30%	
09/30/2014	8.56%	
09/30/2015	-0.99%	
Annualized Rate of Return for prior four (4) years:		7.29%
(A) 10/01/2014 Actuarial Assets:		\$6,685,459.45
(I) Net Investment Income:		
1. Interest and Dividends	137,220.77	
2. Realized Gains (Losses)	265,265.67	
3. Change in Actuarial Value	214,788.35	
4. Investment Related Expenses	(73,716.64)	
Total		543,558.15
(B) 10/01/2015 Actuarial Assets:		\$8,773,348.80
Actuarial Asset Rate of Return = 2I/(A+B-I):		7.29%
10/01/2015 Limited Actuarial Assets:		\$8,773,348.80
10/01/2015 Market Value of Assets:		\$8,724,015.02
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		(\$15,763.73)

<sup>1</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	10,595.65	
City	1,615,419.65	
State	161,275.89	
Total Contributions		1,787,291.19
Earnings from Investments:		
Interest & Dividends	137,220.77	
Net Realized Gain (Loss)	265,265.67	
Change in Actuarial Value	214,788.35	
Total Earnings and Investment Gains		617,274.79
EXPENDITURES		
Distributions to Members:		
Benefit Payments	186,342.58	
Refunds of Member Contributions	0.00	
Total Distributions		186,342.58
Expenses:		
Investment related <sup>1</sup>	73,716.64	
Administrative	56,617.41	
Total Expenses		130,334.05
Change in Net Assets for the Year		2,087,889.35
Net Assets Beginning of the Year		6,685,459.45
Net Assets End of the Year <sup>2</sup>		8,773,348.80

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

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



## STATISTICAL DATA

	<u>10/1/2012</u>	<u>10/1/2013</u>	<u>10/1/2014</u>	<u>10/1/2015</u>
<u>Actives</u>				
Number	32	34	33	33
Average Current Age	43.5	41.9	44.1	44.6
Average Age at Employment	37.9	36.8	37.7	38.0
Average Past Service	5.6	5.1	6.4	6.6
Average Annual Salary	\$63,445	\$60,169	\$65,347	\$63,332
<u>Service Retirees</u>				
Number	5	9	9	11
Average Current Age	N/A	N/A	N/A	60.3
Average Annual Benefit	\$22,098	\$18,711	\$19,261	\$18,227
<u>Beneficiaries</u>				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
<u>Disability Retirees</u>				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
<u>Terminated Vested</u>				
Number	11	11	14	16
Average Current Age	N/A	N/A	N/A	44.2
Average Annual Benefit <sup>1</sup>	\$15,682	\$18,885	\$16,381	\$17,183

<sup>1</sup> The Average Annual Benefit does not include the nonvested members entitled to a refund of contributions.

## AGE AND SERVICE DISTRIBUTION

### PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	1	0	0	0	0	0	0	0	1
30 - 34	0	2	0	4	0	0	0	0	0	0	0	6
35 - 39	0	1	1	0	0	0	0	0	0	0	0	2
40 - 44	1	0	1	0	2	1	2	0	0	0	0	7
45 - 49	0	0	0	0	0	1	2	1	0	0	0	4
50 - 54	1	0	0	1	0	1	0	3	0	0	0	6
55 - 59	1	2	0	0	1	1	0	1	0	0	0	6
60 - 64	0	0	0	0	0	1	0	0	0	0	0	1
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	5	2	6	3	5	4	5	0	0	0	33

## VALUATION PARTICIPANT RECONCILIATION

### 1. Active lives

a. Number in prior valuation 10/1/2014	33
b. Terminations	
i. Vested (partial or full) with deferred benefits	(3)
ii. Non-vested or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	<u>(1)</u>
f. Continuing participants	29
g. New entrants	<u>4</u>
h. Total active life participants in valuation	33

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	9	0	0	14	23
Retired	2	0	0	(1)	1
Vested Deferred	0	0	0	3	3
Death, With Survivor	0	0	0	0	0
Death, No Survivor	0	0	0	0	0
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	0	0
Rehires	0	0	0	0	0
Expired Annuities	0	0	0	0	0
Data Corrections	0	0	0	0	0
b. Number current valuation	11	0	0	16	27

SUMMARY OF PLAN PROVISIONS  
(Through Ordinance 11-02)

<u>Eligibility</u>	Full-time employees who are classified as full-time sworn police officers 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. Credited Service is used for determining eligibility for Retirement and Vesting.
<u>Salary</u>	Total W-2 compensation, including up to 300 hours of overtime pay annually and lump sum payments for unused leave, but excluding off-duty pay.
<u>Average Final Compensation</u>	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	This valuation of the Plan additionally reflects a 0.50% Member Contribution Rate for the fiscal year beginning October 1, 2014, per most recent Collective Bargaining Agreement.
<u>Normal Retirement</u>	
Date	Earlier of:  1) age 55 and 6 years of Credited Service, or  2) 25 years of Credited Service, regardless of age.
Benefit	3.00% of Average Final Compensation times Credited Service.
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 6 Years of Credited Service.
Benefit	Accrued benefit, reduced 3.00% for each year prior to Normal Retirement.
<u>Benefit Supplement</u>	\$3.00 per month per year of Credited Service, subject to minimum benefit of \$30.00 per month and maximum benefit of \$90.00 per month.

Cost-of-Living Increase (COLA)

3.00% automatic lifetime COLA, beginning the first July 1<sup>st</sup> following the later of termination or otherwise Normal Retirement Date. The Benefit Supplement is not subject to the COLA.

Vesting

Schedule

100% after 6 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

8 years of Credited Service.

Benefit

Benefit accrued to date of disability but not less than 42% of Average Final Compensation (if Service Incurred).

Duration

Payable for life and ten years 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 the otherwise Normal Retirement Date.

Non-Vested

Refund of accumulated contributions.

Post-Retirement

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

City and State Contributions

Remaining amount required in order to pay current costs and amortize any unfunded past service cost as provided in Part VII of Chapter 112, F.S.

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2015

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Checking Account	19,525
Prepaid Benefits	16,708
Prepaid Expenses	450
Money Market	1,140,357
Cash	(8,011)
Total Cash and Equivalents	1,169,029
Receivables:	
State Contributions	161,276
From Broker for Investments Sold	7,693
Investment Income	17,830
Total Receivable	186,799
Investments:	
U. S. Bonds and Bills	1,178,332
Federal Agency Guaranteed Securities	230,288
Corporate Bonds	1,289,062
Equities	5,223,347
Total Investments	7,921,029
Total Assets	9,276,857
<u>LIABILITIES</u>	
Payables:	
Administrative Expenses	1,006
To Broker for Investments Purchased	551,836
Total Liabilities	552,842
NET POSITION RESTRICTED FOR PENSIONS	8,724,015

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

ADDITIONS

## Contributions:

Member	10,596	
City	1,615,420	
State	161,276	
Total Contributions		1,787,292
Investment Income:		
Net Increase in Fair Value of Investments	(137,913)	
Interest & Dividends	137,221	
Less Investment Expense <sup>1</sup>	(73,717)	
Net Investment Income		(74,409)
Total Additions		1,712,883

DEDUCTIONS

## Distributions to Members:

Benefit Payments	186,343	
Refunds of Member Contributions	0	
Total Distributions		186,343
Administrative Expense		56,617
Total Deductions		242,960
Net Increase in Net Position		1,469,923
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		7,254,092
End of the Year		8,724,015

<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 City of Marco Island Police Officers' Pension Plan is a single-employer defined benefit pension plan administered by a Board of Trustees. The Board consists of five Trustees, two who are appointed by the City Council, two of whom are full-time Police Officers, elected by a majority of the members of the Plan, and a fifth Trustee who is elected by the first four Trustees.

#### *Plan Membership as of October 1, 2014:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	9
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	14
Active Plan Members	33
	56

#### *Benefits Provided*

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

##### Normal Retirement:

Date: Earlier of: 1) age 55 and 6 years of Credited Service, or 2) 25 years of Credited Service, regardless of age.

Benefit: 3.00% of Average Final Compensation times Credited Service.

##### Early Retirement:

Eligibility: Age 50 and 6 Years of Credited Service.

Benefit: Accrued benefit, reduced 3.00% for each year prior to Normal Retirement.

##### Benefit Supplement:

\$3.00 per month per year of Credited Service, subject to minimum benefit of \$30.00 per month and maximum benefit of \$90.00 per month.

##### Cost-of-Living Increase (COLA):

3.00% automatic lifetime COLA, beginning the first July 1st following the later of termination or otherwise Normal Retirement Date. The Benefit Supplement is not subject to the COLA.

##### Vesting:

Schedule: 100% after 6 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: 8 years of Credited Service.

Benefit: Benefit accrued to date of disability but not less than 42% of Average Final Compensation (if Service Incurred).

##### Pre-Retirement Death Benefits:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years beginning at the otherwise Normal Retirement Date.

Non-Vested: Refund of accumulated contributions.

#### *Contributions*

Member Contributions: The 10/01/2014 Valuation of the Plan additionally reflects a 0.5% Member Contribution Rate for the fiscal year beginning October 1, 2014, per most recent Collective Bargaining Agreement.

City and State Contributions: Remaining amount required in order to pay current costs and amortize any unfunded past service cost, as provided in Chapter 112, Florida Statutes.



## Investments

### *Investment Policy:*

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

Asset Class	Target Allocation
Domestic Equity	55%
International Equity	10%
Fixed Income	35%
Total	100%

### *Concentrations:*

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

### *Rate of Return:*

For the year ended September 30, 2015, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was -0.99 percent.

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

## 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	\$ 10,799,955
Plan Fiduciary Net Position	\$ (8,724,015)
Sponsor's Net Pension Liability	<u>\$ 2,075,940</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	80.78%

*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%

RP2000, Combined Healthy – sex distinct. Disabled lives are set forward five years. Based upon other studies of municipal Police Officers, we feel that this assumption sufficiently accommodates expected future mortality improvements.

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	7.66%
International Equity	7.72%
Fixed Income	2.35%

*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	\$ 3,644,459	\$ 2,075,940	\$ 784,878

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

	<u>09/30/2015</u>	<u>09/30/2014</u>
Total Pension Liability		
Service Cost	621,176	570,609
Interest	754,375	671,200
Change in Excess State Money	7,624	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	72,789	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(186,343)	(180,411)
Net Change in Total Pension Liability	<u>1,269,621</u>	<u>1,061,398</u>
Total Pension Liability - Beginning	<u>9,530,334</u>	<u>8,468,936</u>
Total Pension Liability - Ending (a)	<u><u>\$ 10,799,955</u></u>	<u><u>\$ 9,530,334</u></u>
 Plan Fiduciary Net Position		
Contributions - Employer	1,615,420	672,567
Contributions - State	161,276	145,004
Contributions - Employee	10,596	22,489
Net Investment Income	(74,409)	534,100
Benefit Payments, including Refunds of Employee Contributions	(186,343)	(180,411)
Administrative Expense	(56,617)	(35,433)
Net Change in Plan Fiduciary Net Position	<u>1,469,923</u>	<u>1,158,316</u>
Plan Fiduciary Net Position - Beginning	<u>7,254,092</u>	<u>6,095,776</u>
Plan Fiduciary Net Position - Ending (b)	<u><u>\$ 8,724,015</u></u>	<u><u>\$ 7,254,092</u></u>
 Net Pension Liability - Ending (a) - (b)	<u><u>\$ 2,075,940</u></u>	<u><u>\$ 2,276,242</u></u>
 Plan Fiduciary Net Position as a percentage of the Total Pension Liability	80.78%	76.12%
 Covered Employee Payroll*	\$ 2,049,015	\$ 2,093,651
Net Pension Liability as a percentage of Covered Employee Payroll	101.31%	108.72%

**Notes to Schedule:**

The City and Union tentatively agree that the City has access to all future State Monies under the 09/23/2015 proposed collective bargaining agreement.

*\*Covered Payroll figure was not available. Pensionable Salary has been reported instead.*

## SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	09/30/2015	09/30/2014
Actuarially Determined Contribution	821,375	817,571
Contributions in relation to the Actuarially Determined Contributions	1,769,072	817,571
Contribution Deficiency (Excess)	<u>\$ (947,697)</u>	<u>\$ -</u>
Covered Employee Payroll	\$ 2,049,015	\$ 2,093,651
Contributions as a percentage of Covered Employee Payroll	86.34%	39.05%

\*Covered Payroll figure was not available. Pensionable Salary has been reported instead.

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:	32 Years (as of 10/01/2013).
Mortality:	RP2000, Combined Healthy – sex distinct. Disabled lives are set forward five years. Based on a study of over 650 public safety funds, this table reflects a 10% margin for future mortality improvements.
Interest Rate:	7.50% per year compounded annually, net of investment related expenses.
Inflation:	3.00% per year.
Retirement Age:	Earlier of Age 55 and 6 years of service or 25 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 the earliest Early Retirement Date (Age 50 with 6 years of service), Members are assumed to retire with an immediate subsidized benefit at the rate of 5.00% per year.
Disability Rates:	See Table Below (1202). It is assumed that 75% of disablements and active Member deaths are service related.
Termination Rates:	See Table Below (1305).
Salary Increases:	6.00% per year until the assumed retirement age. Projected salary at retirement is increased 20% to account for non-regular compensation.
Payroll Increase:	3.00% per year.
Actuarial Asset Method:	Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value returns, net of fees. It is possible that over time this technique will produce an insignificant bias above or below Market Value.

Termination and Disability Rate Table:	% Terminating During the Year	% Becoming Disabled During the Year
Age		
20	17.2%	0.051%
30	15.0%	0.058%
40	8.2%	0.121%
50	1.7%	0.429%

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	-0.99%	8.56%

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2016)

### General Information about the Pension Plan

#### *Plan Description*

The City of Marco Island Police Officers' Pension Plan is a single-employer defined benefit pension plan administered by a Board of Trustees. The Board consists of five Trustees, two who are appointed by the City Council, two of whom are full-time Police Officers, elected by a majority of the members of the Plan, and a fifth Trustee who is elected by the first four Trustees. Full-time employees who are classified as full-time sworn police officers participate in the System as a condition of employment.

#### *Plan Membership as of October 1, 2014:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	9
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	14
Active Plan Members	33
	<hr style="border-top: 1px solid black; border-bottom: 1px solid black; height: 3px;"/>
	56

#### *Benefits Provided*

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

##### Normal Retirement:

Date: Earlier of: 1) age 55 and 6 years of Credited Service, or 2) 25 years of Credited Service, regardless of age.

Benefit: 3.00% of Average Final Compensation times Credited Service.

##### Early Retirement:

Eligibility: Age 50 and 6 Years of Credited Service.

Benefit: Accrued benefit, reduced 3.00% for each year prior to Normal Retirement.

##### Benefit Supplement:

\$3.00 per month per year of Credited Service, subject to minimum benefit of \$30.00 per month and maximum benefit of \$90.00 per month.

##### Cost-of-Living Increase (COLA):

3.00% automatic lifetime COLA, beginning the first July 1st following the later of termination or otherwise Normal Retirement

Date. The Benefit Supplement is not subject to the COLA.

##### Vesting:

Schedule: 100% after 6 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: 8 years of Credited Service.

Benefit: Benefit accrued to date of disability but not less than 42% of Average Final Compensation (if Service Incurred).

##### Pre-Retirement Death Benefits:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years beginning at the otherwise Normal Retirement Date.

Non-Vested: Refund of accumulated contributions.

#### *Contributions*

Member Contributions: The 10/01/2014 Valuation of the Plan additionally reflects a 0.5% Member Contribution Rate for the fiscal year beginning October 1, 2014, per most recent Collective Bargaining Agreement.

City and State Contributions: Remaining amount required in order to pay current costs and amortize any unfunded past service cost, as provided in Chapter 112, Florida Statutes.

## 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%

RP2000, Combined Healthy – sex distinct. Disabled lives are set forward five years. Based upon other studies of municipal Police Officers, we feel that this assumption sufficiently accommodates expected future mortality improvements.

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	55%	7.66%
International Equity	10%	7.72%
Fixed Income	35%	2.35%
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)
Balances at September 30, 2014	\$ 9,530,334	\$ 7,254,092	\$ 2,276,242
Changes for a Year:			
Service Cost	621,176	-	621,176
Interest	754,375	-	754,375
Change in Excess State Money	7,624	-	7,624
Differences between Expected and Actual Experience	72,789	-	72,789
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	1,615,420	(1,615,420)
Contributions - State	-	161,276	(161,276)
Contributions - Employee	-	10,596	(10,596)
Net Investment Income	-	(74,409)	74,409
Benefit Payments, including Refunds of Employee Contributions	(186,343)	(186,343)	-
Administrative Expense	-	(56,617)	56,617
Net Changes	1,269,621	1,469,923	(200,302)
Balances at September 30, 2015	\$ 10,799,955	\$ 8,724,015	\$ 2,075,940

*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	\$ 3,644,459	\$ 2,075,940	\$ 784,878

*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 \$808,722.

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	54,591	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	508,997	-
Employer contributions subsequent to the measurement date	-	-
Total	<u>\$ 563,588</u>	<u>\$ -</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	\$ 142,770
2018	\$ 142,771
2019	\$ 142,771
2020	\$ 135,276
2021	\$ -
Thereafter	\$ -

**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	621,176	570,609
Interest	754,375	671,200
Change in Excess State Money	7,624	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	72,789	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(186,343)	(180,411)
Net Change in Total Pension Liability	1,269,621	1,061,398
Total Pension Liability - Beginning	9,530,334	8,468,936
Total Pension Liability - Ending (a)	<u>\$ 10,799,955</u>	<u>\$ 9,530,334</u>
Plan Fiduciary Net Position		
Contributions - Employer	1,615,420	672,567
Contributions - State	161,276	145,004
Contributions - Employee	10,596	22,489
Net Investment Income	(74,409)	534,100
Benefit Payments, including Refunds of Employee Contributions	(186,343)	(180,411)
Administrative Expense	(56,617)	(35,433)
Net Change in Plan Fiduciary Net Position	1,469,923	1,158,316
Plan Fiduciary Net Position - Beginning	7,254,092	6,095,776
Plan Fiduciary Net Position - Ending (b)	<u>\$ 8,724,015</u>	<u>\$ 7,254,092</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,075,940</u>	<u>\$ 2,276,242</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	80.78%	76.12%
Covered Employee Payroll	\$ 2,049,015	\$ 2,093,651
Net Pension Liability as a percentage of Covered Employee Payroll	101.31%	108.72%

**Notes to Schedule:**

The City and Union tentatively agree that the City has access to all future State Monies under the 09/23/2015 proposed collective bargaining agreement.

*\*Covered Payroll figure was not available. Pensionable Salary has been reported instead.*

## SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	09/30/2015	09/30/2014
Actuarially Determined Contribution	821,375	817,571
Contributions in relation to the		
Actuarially Determined Contributions	1,769,072	817,571
Contribution Deficiency (Excess)	\$ (947,697)	\$ -
Covered Employee Payroll	\$ 2,049,015	\$ 2,093,651
Contributions as a percentage of		
Covered Employee Payroll	86.34%	39.05%

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:	32 Years (as of 10/01/2013).
Mortality:	RP2000, Combined Healthy – sex distinct. Disabled lives are set forward five years. Based on a study of over 650 public safety funds, this table reflects a 10% margin for future mortality improvements.
Interest Rate:	7.50% per year compounded annually, net of investment related expenses.
Inflation:	3.00% per year.
Retirement Age:	Earlier of Age 55 and 6 years of service or 25 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 the earliest Early Retirement Date (Age 50 with 6 years of service), Members are assumed to retire with an immediate subsidized benefit at the rate of 5.00% per year.
Disability Rates:	See Table Below (1202). It is assumed that 75% of disablements and active Member deaths are service related.
Termination Rates:	See Table Below (1305).
Salary Increases:	6.00% per year until the assumed retirement age. Projected salary at retirement is increased 20% to account for non-regular compensation.
Payroll Increase:	3.00% per year.
Actuarial Asset Method:	Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value returns, net of fees. It is possible that over time this technique will produce an insignificant bias above or below Market Value.

Termination and Disability Rate Table:

Age	% Terminating During the Year	% Becoming Disabled During the Year
20	17.20%	0.05%
30	15.00%	0.06%
40	8.20%	0.12%
50	1.70%	0.43%

FINAL COMPONENTS OF PENSION EXPENSE  
FISCAL YEAR SEPTEMBER 30, 2015

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 2,373,160	\$ -	\$ 672,567	\$ -
Employer Contributions made after September 30, 2014	-	-	1,615,420	-
Total Pension Liability Factors:				
Service Cost	570,609	-	-	570,609
Interest	671,200	-	-	671,200
Change in Excess State Money	-	-	-	-
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	(180,411)	-	-	(180,411)
Net change	1,061,398	-	1,615,420	1,061,398
Plan Fiduciary Net Position:				
Contributions - Employer	672,567	-	(672,567)	-
Contributions - State	145,004	-	-	(145,004)
Contributions - Employee	22,489	-	-	(22,489)
Net Investment Income	480,591	-	-	(480,591)
Difference between projected and actual earnings on Pension Plan investments	53,509	53,509	-	-
Current year amortization		(10,702)	-	(10,702)
Benefit Payments	(180,411)	-	-	180,411
Administrative Expenses	(35,433)	-	-	35,433
Net change	1,158,316	42,807	(672,567)	(442,942)
Ending Balance	\$ 2,276,242	\$ 42,807	\$ 1,615,420	\$ 618,456

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

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 2,276,242	\$ 42,807	\$ 1,615,420	\$ -
Employer Contributions made after September 30, 2015	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	621,176	-	-	621,176
Interest	754,375	-	-	754,375
Change in Excess State Money	7,624	-	-	7,624
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	72,789	-	72,789	-
Current year amortization of experience difference	-	-	(18,198)	18,198
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	-	-
Benefit Payments	(186,343)	-	-	(186,343)
Net change	<u>1,269,621</u>	<u>-</u>	<u>54,591</u>	<u>1,215,030</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,615,420	-	(1,615,420)	-
Contributions - State	161,276	-	-	(161,276)
Contributions - Employee	10,596	-	-	(10,596)
Net Investment Income	601,969	-	-	(601,969)
Difference between projected and actual earnings on Pension Plan investments	(676,378)	-	676,378	-
Current year amortization	-	(10,702)	(135,275)	124,573
Benefit Payments	(186,343)	-	-	186,343
Administrative Expenses	(56,617)	-	-	56,617
Net change	<u>1,469,923</u>	<u>(10,702)</u>	<u>(1,074,317)</u>	<u>(406,308)</u>
Ending Balance	<u>\$ 2,075,940</u>	<u>\$ 32,105</u>	<u>TBD</u>	<u>\$ 808,722</u>

\* Employer Contributions subsequent to the measurement date made after September 30, 2015 but made on or before September 30, 2016 needs to be filled out.