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City of Vero Beach

Police Officers' Retirement Fund

Actuarial Valuation as of October 1, 2015



February 13, 2016

REPORT TO DETERMINE MINIMUM FUNDING REQUIREMENTS
FOR THE PLAN AND FISCAL YEAR
ENDING SEPTEMBER 30, 2017



February 13, 2016

Board of Trustees
City of Vero Beach Police Officers' Retirement Fund
Vero Beach, Florida

RE: Actuarial Valuation as of October 1, 2015

Dear Board Members:

We are pleased to present the actuarial valuation as of October 1, 2015 for the City of Vero Beach Police Officers' Retirement Fund (the Plan). This report provides a review of the current funded status of the Plan, establishes the minimum funding requirements for the fiscal year ending September 30, 2017 and provides an analysis of experience since the last valuation. In addition to providing the summary and derivation of actuarial findings, this report describes the data, assumptions, and methods used to create these results.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

Statement by Enrolled Actuary:

"This actuarial valuation and/or cost determination 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."

We look forward to the presentation of these results to you in person and we are always available to answer any questions you may have.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chad M. Little'.

Chad M. Little, ASA, EA
Partner, Consulting Actuary
Enrollment Number 14-6619

A handwritten signature in black ink, appearing to read 'Paula C. Freiman'.

Paula C. Freiman, ASA, EA
Partner, Consulting Actuary
Enrollment Number 14-5796

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Section

1

Board Summary

This report presents the results of the October 1, 2015 actuarial valuation of the City of Vero Beach Police Officers' Retirement Fund (the Plan).

Summary of Principal Valuation Results

A summary of the key valuation findings as of October 1, 2015 are compared with the results of the last two valuations below.

Minimum Funding Requirements

Fiscal Year Ending September 30,	2015	2016	2017
Minimum Required City Contribution*	\$844,479	\$872,634	\$769,587
Expected State Contribution	<u>236,381</u>	<u>233,451</u>	<u>228,139</u>
Employer Minimum Funding Required (City plus State)	\$1,080,860	\$1,106,085	\$997,726
Minimum Required City Contribution*	32.46%	34.67%	29.17%
Expected State Contribution	<u>9.09%</u>	<u>9.27%</u>	<u>8.65%</u>
Employer Minimum Funding Required (City plus State)	41.55%	43.94%	37.82%

Funded Status

Valuation Date October 1,	2013	2014	2015
Accrued Liability (AL)	\$37,388,896	\$39,228,207	\$40,395,945
Actuarial Value of Assets	<u>30,454,547</u>	<u>33,133,933</u>	<u>35,432,388</u>
Unfunded Accrued Liability (UAL)	\$6,934,349	\$6,094,274	\$4,963,557
Funded Percentage	81.45%	84.46%	87.71%

Key Assumptions

Valuation Date October 1,	2013	2014	2015
Assumed Rate of Investment Return	7.75%	7.75%	7.75%
Salary Increase Assumption	6.25% - 4.28%	6.25% - 4.28%	6.25% - 4.28%
Funding Method	Entry Age	Entry Age	Entry Age

*The Minimum Required City Contribution is made at the beginning of the fiscal year.

Summary of Significant Events

Determination of the funded status of the Plan and minimum funding requirements are based on participant data, asset information, Plan provisions, actuarial methods and assumptions, as well as contributions made to the Plan by the State of Florida. Any significant events associated with these items are discussed in the following.

Participant Data

The number of active members increased from 48 to 50 where 1 member retired, 1 member terminated non-vested, there were 3 new hires, and there was one rehire. Pay increases less than expected is the primary cause of a demographic gain.

Historical pay information follows.

Year Ended 9/30	Average Annual Salary Increase for Continuing Active Members		Payroll From Annual Report	Increase (Decrease) in Annual Report Payroll	Valuation Date 10/1	Payroll Projected for 12 Mo. Pd. Beginning on Val. Date	Increase (Decrease) in Valuation Payroll
	Actual	Expected					
2006		6.5%	3,345,362	(3.9%)	2006	3,520,610	(1.4%)
2007		6.5%	3,415,819	2.1%	2007	3,673,793	4.4%
2008		6.5%	3,659,849	7.1%	2008	3,858,411	5.0%
2009		6.5%	3,733,644	2.0%	2009	3,869,093	0.3%
2010	(1.2%)	6.5%	3,577,177	(4.2%)	2010	3,723,032	(3.8%)
2011	3.4%	6.5%	3,297,317	(7.8%)	2011	3,186,869	(14.4%)
2012	(1.2%)	6.5%	3,013,887	(8.6%)	2012	3,043,048	(4.5%)
2013	(2.3%)	4.8%	2,947,305	(2.2%)	2013	2,725,692	(10.4%)
2014	4.3%	4.8%	2,899,869	(1.6%)	2014	2,907,418	6.7%
2015	(0.2%)	4.8%	2,938,951	1.3%	2015	2,856,355	(1.8%)
Average:	0.4%	6.0%		(1.7%)			(2.2%)

In general, should a pattern of consistent gains or losses develop, assumptions may require revision.

Assets

Whereas the assets were assumed to achieve a 7.75% investment return (net of expenses), the return on the market value of assets was 1.1%. Due to the smoothing method used to produce the actuarial value of assets which recognizes market value gains and losses over a five year period, an 8.9% return was achieved on the actuarial value of assets producing an investment related gain.

The following provides a summary of the actual return on investments for the 12 month periods ending on the date specified.

<u>Year Ending September 30,</u>	<u>Net Investment Return</u>	
	<u>Market Value</u>	<u>Actuarial Value</u>
2015	1.1%	8.9%
2014	9.4%	10.8%
2013	14.5%	7.9%
2012	19.3%	1.9%
2011	(0.5%)	0.4%
2010	9.4%	2.1%
2009	(1.7%)	1.5%
2008	(12.6%)	5.6%
2007	14.2%	10.4%
2006	6.6%	7.0%
10-Year Average:	5.6%	5.6%

Investment returns less than the assumed rate of return result in increased annual minimum required contributions in the future.

Plan Provisions

There were no changes in Plan provisions since the prior valuation of the Plan.

Methods

There were no changes in methods since the prior valuation of the Plan.

Assumptions

The mortality table continues to be based on the RP-2000 Combined Mortality. Scale AA has been applied to reflect mortality improvements to the valuation year.

State Contributions

The Estimated Minimum Required City Contribution assumes that the premium tax money received from the State will be in the same amount received in the prior year. Should the amount received be less than expected, the City will need to contribute any potential shortfall to the Plan.

Section 2 Results Derivation

In this section, the assets and liabilities of the Plan are shown in detail. Assets and liabilities are then compared to determine the funded status and minimum funding requirements. Finally, analysis is performed to explain movement in results from the prior valuation.

While asset information is based on the fair market value of assets, along with any techniques used to smooth out market fluctuations, liabilities are determined through a combination of the benefit provisions, participant census data which contains information for the members who will receive those benefits, and the methods and assumptions used with regard to how benefits will be paid to members. A summary of participant data, an outline of the benefit provisions, and a description of the methods and assumptions used in this valuation are described in Section 4.

Financial Information

Over the life of the Plan, the majority of assets are typically generated from investment return. In this section, we describe how the assets of the Plan are invested, show how the actuarial value of assets is derived, and review the investment results since the prior valuation.

Investment Allocation

Valuation Date	October 1, 2014		October 1, 2015	
Short term investments	\$793,589	2%	\$1,254,975	4%
Equity	22,268,185	64%	19,264,027	54%
Fixed income	9,000,378	25%	10,770,903	31%
Real estate	3,268,221	9%	3,812,380	11%
Net receivables/payables	<u>102,587</u>	<u>0%</u>	<u>109,153</u>	<u>0%</u>
Net market value of assets	\$35,432,960	100%	\$35,211,438	100%

Reconciliation of Market Value of Assets

Year Ending September 30,	2014	2015
1. Market Value of Assets Beginning of Year	\$33,407,578	\$35,432,960
2. Contributions		
a. City	\$869,837	\$852,721
b. State	233,451	228,139
c. Plan Members	167,975	174,267
d. Contribution Repayment	<u>0</u>	<u>17,515</u>
e. Total Contributions	\$1,271,263	\$1,272,642
3. Investment earnings		
a. Realized gains and (losses)	\$72,618	\$353,490
b. Unrealized gains and (losses)	2,357,984	(644,209)
c. Interest and dividends	926,812	924,541
d. Investment expense	<u>(268,657)</u>	<u>(248,224)</u>
e. Net investment income	\$3,088,757	\$385,598
4. Deductions		
a. Regular pension benefits	\$(1,685,547)	\$(1,792,149)
b. Contribution refunds	(8,102)	(1,269)
c. DROP distributions	(554,635)	0
d. Administrative expenses	<u>(86,354)</u>	<u>(86,344)</u>
e. Total Deductions	\$(2,334,638)	\$(1,879,762)
5. Market Value of Assets End of Year	\$35,432,960	\$35,211,438

Development of Historical Gain or Loss on Market Value of Assets

Year Ending September 30,	2015	2014
1. Market Value of Assets - Beginning of Year	\$35,432,960	\$33,407,578
2. Contributions	1,272,642	1,271,263
3. Benefit Payments + Administrative Expenses	(1,879,762)	(2,334,638)
4. Expected Return on Assets	<u>2,746,731</u>	<u>2,572,541</u>
5. Expected Value of Assets at End of Year	\$37,572,571	\$34,916,744
6. Market Value of Assets - End of Year	\$35,211,438	\$35,432,960
7. Gain (Loss) for Plan Year	\$(2,361,133)	\$516,216
	2013	2012
1. Market Value of Assets - Beginning of Year	\$29,566,638	\$25,330,192
2. Contributions	1,283,759	1,160,253
3. Benefit Payments + Administrative Expenses	(1,686,487)	(1,753,490)
4. Expected Return on Assets	<u>2,266,649</u>	<u>1,992,595</u>
5. Expected Value of Assets at End of Year	\$31,430,559	\$26,729,550
6. Market Value of Assets - End of Year	\$33,407,578	\$29,566,638
7. Gain (Loss) for Plan Year	\$1,977,019	\$2,837,088

Development of Actuarial Value of Assets

The market value of assets is adjusted to recognize gains and losses over a five-year period. However, the Actuarial Value of Assets is limited to no more than 120% or less than 80% of the market value of assets.

1.	Market Value of Assets as of October 1, 2015			\$35,211,438
2.	Phase-In Gains (Losses) Over Five Year Period			
		Original	Percent	Unrecognized
		Gain (Loss)	Unrecognized	Gain (Loss)
a.	Year Ending 9/30/2015	\$(2,361,133)	80%	\$(1,888,906)
b.	Year Ending 9/30/2014	516,216	60%	309,730
c.	Year Ending 9/30/2013	1,977,019	40%	790,808
d.	Year Ending 9/30/2012	2,837,088	20%	567,418
e.	Year Ending 9/30/2011	(2,174,962)	0%	<u>0</u>
f.	Total			\$(220,950)
3.	Preliminary Actuarial Value of Assets as of October 1, 2015			\$35,432,388
4.	Corridor Around Market Value			
a.	Minimum = 80% of Market Value of Assets			\$28,169,150
b.	Maximum = 120% of Market Value of Assets			\$42,253,726
c.	Corridor Adjustment to Preliminary Actuarial Value			\$0
5.	Cumulative Balance of State Funding Available for Benefit Improvements			\$0
6.	Actuarial Value of Assets as of September 30, 2015			\$35,432,388

Present Value of Benefits

Valuation as of October 1,	2014	2015
1. Active Members		
1 a. Retirement Benefits	\$17,021,207	\$17,394,901
b. Deferred Benefits	569,910	607,041
c. Survivor Benefits	165,440	167,807
d. Disability Retirement	<u>828,397</u>	<u>854,485</u>
e. Total for Active Members	\$18,584,954	\$19,024,234
2. Members in Payment Status		
a. Retirement Benefits	\$23,481,770	\$24,306,915
b. Terminated Vested	165,312	178,651
c. Beneficiaries	417,438	413,584
d. Disability Retirement	<u>252,458</u>	<u>248,768</u>
e. Total for Members in Payment Status	\$24,316,978	\$25,147,918
3. Present Value of Benefits	\$42,901,932	\$44,172,152

Accrued Liability

Valuation as of October 1,	2014	2015
1. Active Members		
a. Retirement Benefits	\$14,243,434	\$14,544,702
b. Deferred Benefits	156,137	173,227
c. Survivor Benefits	85,569	86,999
d. Disability Retirement	<u>426,089</u>	<u>443,099</u>
e. Total for Active Members	\$14,911,229	\$15,248,027
2. Members in Payment Status		
a. Retirement Benefits	\$23,481,770	\$24,306,915
b. Terminated Vested	165,312	178,651
c. Beneficiaries	417,438	413,584
d. Disability Retirement	<u>252,458</u>	<u>248,768</u>
e. Total for Members in Payment Status	\$24,316,978	\$25,147,918
3. Accrued Liability	\$39,228,207	\$40,395,945

Normal Cost – Entry Age Normal

Valuation as of October 1,	2014	2015
1. Preliminary Normal Cost		
a. Retirement Benefits	\$418,577	\$410,968
b. Deferred Benefits	61,015	61,543
c. Survivor Benefits	11,861	11,677
d. Disability Retirement	<u>58,904</u>	<u>58,999</u>
e. Total	\$550,357	\$543,187
2. Total Normal Cost		
a. Preliminary Normal Cost	\$550,357	\$543,187
b. Estimated Administrative Expense	<u>81,842</u>	<u>86,349</u>
c. Total Normal Cost	\$632,199	\$629,536
d. Total Normal Cost (% of Pay)	21.7%	22.0%
3. Estimated Employer Normal Cost		
a. Total Normal Cost	\$632,199	\$629,536
b. Expected Employee Contributions	<u>(171,003)</u>	<u>(170,750)</u>
c. Estimated Employer Normal Cost	\$461,196	\$458,786
d. Estimated Employer Normal Cost (% of Pay)	15.9%	16.1%
4. Actual Employer Normal Cost		
a. Total Normal Cost	\$550,357	
b. Actual Administrative Expense	86,344	
c. Actual Employee Contributions	<u>(191,782)</u>	
d. Estimated Employer Normal Cost	\$444,919	
5. Valuation Payroll		
a. Hires After 10/1/2012	\$443,817	\$546,025
b. Hires Prior to 10/1/2012	<u>2,463,601</u>	<u>2,310,330</u>
c. Total	\$2,907,418	\$2,856,355

Unfunded Accrued Liability

Valuation as of October 1,	2015
Unfunded Actuarial Liability	
1. Accrued Liability	\$40,395,945
2. Actuarial Value of Assets	<u>35,432,388</u>
3. Unfunded Accrued Liability	\$4,963,557
Determination of Expected Unfunded Accrued Liability	
1. Unfunded Accrued Liability as of Prior Year	\$6,094,274
2. Normal Cost (Net of Employee Contributions)	444,919
3. Interest on UAL and NC	506,787
4. Contributions	
a. City	\$852,721
b. State of Florida	<u>228,139</u>
c. Total	\$1,080,860
5. Interest on Contribution for Time on Deposit	66,086
6. Change in Plan, Methods or Assumptions	<u>44,151</u>
7. Expected UAL as of Current Year	\$5,943,185
Calculation of (Gain) or Loss	
1. Actual Unfunded Accrued Liability	\$4,963,557
2. Expected UAL	<u>5,943,185</u>
3. Total (Gain) or Loss	\$(979,628)
4. Breakdown of (Gain) or Loss	
a. Investment Experience	\$(337,018)
b. Demographic Experience	<u>(642,610)</u>
c. Total (Gain) or Loss	\$(979,628)
Calculation of Actuarial Asset Gain or (Loss)	
1. Actuarial Value of Assets - Beginning of Year	\$33,133,933
2. Expected Interest on Assets	2,567,880
3. Contributions	1,272,642
4. Benefit Payments + Administrative Expenses	(1,879,762)
5. Interest on items (3) and (4)	<u>677</u>
6. Expected Value of Assets at End of Year	\$35,095,370
7. Actuarial Value of Assets - End of Year	<u>35,432,388</u>
8. Gain (Loss) for Plan Year = (7) - (6)	\$337,018
9. Actual Investment Income	\$2,905,575
10. Actual % Return	8.85%

Amortization of Unfunded Liability

The Unfunded Accrued Liability is being amortized as a level dollar amount based on the assumed net investment return assumption. A fresh start has been implemented on the amortization of the Unfunded Accrued Liability over 26 years effective October 1, 2014. Future Unfunded Accrued Liability which arises from changes in Plan provisions, actuarial assumptions, changes in methods and actuarial gains or losses are to be amortized over 25 years.

Since a fresh start was implemented as of October 1, 2014 over 26 years and all new bases are set up over 25 years as of October 1, 2015, we have combined all of the outstanding bases into a single base amortized over 25 years as of October 1, 2015.

Amortization Bases

Date 10/1	Source	Outstanding Balance	Years Remain	Amortization Payment
2015	Fresh Start	\$4,963,557	25	\$422,358

Projected Unfunded Accrued Liability and Amortization Payments

Valuation as of October 1,	Unfunded Accrued Liability	Amortization Payment
2015	\$4,963,557	\$422,358
2016	4,893,142	422,358
2017	4,817,270	422,358
2018	4,735,518	422,358
2019	4,647,430	422,358
2020	4,552,515	422,358
2021	4,450,244	422,358
2022	4,340,047	422,358
2023	4,221,310	422,358
2024	4,093,371	422,358
2025	3,955,517	422,358
2026	3,806,979	422,358
2027	3,646,929	422,358
2028	3,474,475	422,358
2029	3,288,656	422,358
2030	3,088,436	422,358
2031	2,872,699	422,358
2032	2,640,242	422,358
2033	2,389,770	422,358
2034	2,119,886	422,358
2035	1,829,086	422,358
2036	1,515,749	422,358
2037	1,178,129	422,358
2038	814,343	422,358
2039	422,364	422,364

Actions Taken to Reduce Unfunded Actuarial Accrued Liability

The Unfunded Accrued Liability is being amortized as a level dollar amount based on the assumed net investment return assumption. A fresh start has been implemented on the amortization of the Unfunded Accrued Liability over 25 years effective October 1, 2015.

Minimum Funding Requirements

Actuarial Valuation as of October 1, Required Funding for Year Ending September 30,	2014 2016	2015 2017
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As a Dollar Amount

1. Total Normal Cost	\$632,199	\$629,536
2. Amortization of Unfunded Accrued Liability	<u>511,834</u>	<u>422,358</u>
3. Minimum Required Contribution at Valuation Date	\$1,144,033	\$1,051,894
4. Interest Adjustment	\$110,803	\$103,605
5. Expected Employee Contributions	\$148,751	\$157,773
6. Expected State Contribution	233,451	228,139
7. Remaining City Minimum Required Contribution	<u>872,634</u>	<u>769,587</u>
8. Total Minimum Required Contribution for Funding Year	\$1,254,836	\$1,155,499
9. City Plus State Minimum Required Contribution Projected to Beginning of Funding Year	\$1,106,085	\$997,726

As a Percent of Payroll

10. Expected Employee Contributions	5.91%	5.98%
11. Expected State Contribution	9.27%	8.65%
12. Remaining City Minimum Required Contribution	<u>34.67%</u>	<u>29.17%</u>
13. Total Minimum Required Contribution for Funding Year	49.85%	43.80%
14. City Plus State Minimum Required Contribution Projected to Beginning of Funding Year	43.94%	37.82%
15. Valuation Payroll		
a. Hires After 10/1/2012	\$443,817	\$546,025
b. Hires Prior to 10/1/2012	<u>2,463,601</u>	<u>2,310,330</u>
c. Total	\$2,907,418	\$2,856,355
16. Projected Valuation Payroll		
a. Hires After 10/1/2012	\$412,614	\$506,598
b. Hires Prior to 10/1/2012	<u>2,104,404</u>	<u>2,131,719</u>
c. Total	\$2,517,018	\$2,638,317

Reconciliation of Unfunded Accrued Liability

	Unfunded Accrued <u>Liability</u>	Funded <u>Percent</u>	Change in Unfunded Accrued <u>Liability</u>	Change in Funded <u>Percent</u>
As of Prior Valuation	\$6,094,274	84.46%		
Changes in Contribution Rate due to:				
Normal Operation of Plan	5,899,034	85.61%	\$(195,240)	1.15%
Investment Experience	5,562,016	86.43%	(337,018)	0.82%
Demographic Experience	4,919,406	87.81%	(642,610)	1.38%
Mortality Projection Update	4,963,557	87.71%	<u>44,151</u>	<u>(0.10)%</u>
Total Changes			\$(1,130,717)	3.25%
As of Current Valuation	\$4,963,557	87.71%		

Reconciliation of City Minimum Required Contribution

	<u>Dollar Amount</u>	<u>Percent of Pay</u>
As of Prior Valuation	\$872,634	34.67 %
Changes in Contribution due to:		
Normal Operation of Plan	\$(81,385)	(0.83)%
Change in Expected State Contribution	4,930	0.21 %
Investment Experience	(30,899)	(1.32)%
Demographic Experience	(326)	(3.74)%
Mortality Projection Update	<u>4,633</u>	<u>0.18 %</u>
Total Changes	\$(103,047)	(5.50)%
As of Current Valuation	\$769,587	29.17 %

Section 3 Accounting Information

Information Required by GASB 67/68

A supplemental report provides information under the Governmental Accounting Standards Board No. 67/68.

Statement of Accumulated Plan Benefits (FASB 35)

The following table is based on prior accounting standards and is required by the State. The actuarial present value of accumulated plan benefits is an estimate of the liability for all benefits accrued to date.

Valuation as of October 1,	2014	2015
1. Actuarial present value of accumulated plan benefits		
a. Participants currently receiving benefits	\$24,151,666	\$24,969,267
b. Terminated members due deferred benefit	165,312	178,651
c. Other participants	<u>12,155,853</u>	<u>12,594,439</u>
d. Total vested plan benefits	\$36,472,831	\$37,742,357
e. Total non-vested plan benefits	<u>503,706</u>	<u>370,554</u>
f. Total accumulated plan benefits	\$36,976,537	\$38,112,911
2. Change in present value of accumulated plan benefits		
a. Accumulated plan benefits beginning of year		\$36,976,537
b. Increase (decrease) during year due to:		
i. Plan amendment		\$0
ii. Change in assumptions or methods		40,848
iii. Increase for interest and probability of payment due to decrease in discount period and benefits accrued		2,888,944
iv. Benefits paid		(1,793,418)
v. Other changes		<u>0</u>
vi. Net increase (decrease)		\$1,136,374
c. Accumulated plan benefits end of year		\$38,112,911

Other Disclosures Required by the State of Florida

Valuation as of October 1,	2014	2015
Present value of active member:		
Future salaries:	\$19,710,870	\$20,098,058
Future contributions:	1,183,707	1,231,269
Active member accumulated contributions:	1,180,389	1,317,453

Required Disclosure Under F.S. 112.664(1)

As required under F.S. Section 112.664(1) we have produced the following information:

- (a) Total pension liability calculated assuming mortality under the RP-2000 Combined Mortality Table for healthy participants (by gender) with fully generational projection using Scale AA.
- (b) Total pension liability calculated using an assumed interest rate that is 200 basis points lower than that assumed in the valuation of the Plan.
- (c) Determination of the number of months or years for which the current market value of assets is adequate to sustain the payment of expected retirement benefits.
- (d) Recommended contribution to the Plan using the most recent valuation and the contributions necessary prepared pursuant to (a) and (b) stated as a dollar amount and % of payroll.

	RP-2000 Fully Generational Using Scale AA			Actual Valuation Results - 7.75% and RP-2000 Projected to 2015 Using Scale AA
	2% Decrease	Current Discount Rate	2% Increase	
	(5.75%)	(7.75%)	(9.75%)	
Total pension liability	\$51,884,884	\$41,099,305	\$33,620,650	\$40,395,945
Plan fiduciary net position	<u>(35,211,438)</u>	<u>(35,211,438)</u>	<u>(35,211,438)</u>	<u>(35,211,438)</u>
Net pension liability	<u>\$16,673,446</u>	<u>\$5,887,867</u>	<u>\$(1,590,788)</u>	<u>\$5,184,507</u>
 Plan fiduciary net position as a percentage of the total pension liability	 67.86%	 85.67%	 104.73%	 87.17%
 Years of benefit payments:				
Expected for current members:	96	96	96	96
Paid for with current assets:	15.76	20.28	39.42	20.44
 City Plus State Contribution Requirement, Plus Expected Employee Contributions				
Dollar Amount	\$2,322,867	\$1,235,453	\$514,319	\$1,155,499
Percent of Payroll	88.04%	46.83%	19.49%	43.80%

Required Disclosure Under F.S. 112.664(2)(b)2.

F.S. Section 112.664(2)(b)2. - For the previous five years, beginning with 2013, a side-by-side comparison of the plan's assumed rate of return compared to the actual rate of return, as well as the percentages of cash, equity, bond and alternative investments in the plan portfolio. The actual rate of return is as provided by the investment monitor.

Year Ending September 30,	2015	2014	2013	2012	2011	2010
Assumed rate of return	7.75%	7.75%	7.75%	8.00%	8.00%	8.00%
Actual rate of return	0.87%	9.08%	14.17%	19.27%	(1.69%)	9.89%
Percentages of assets in:						
Cash	4%	2%	4%	4%	6%	4%
Equity	54%	64%	65%	61%	56%	58%
Bond	31%	25%	24%	27%	35%	38%
Alternative	11%	9%	7%	8%	3%	0%
Total	100%	100%	100%	100%	100%	100%

Section
4Supplementary
Information

Summary of Participant Data

Member Statistics

Year Beginning October 1,	2014	2015
<u>Active Participants</u>		
Number	48	50
Average Age	38.5	38.7
Average Credited Service	11.9	12.1
Percent Male	93.8	94.0
Average Valuation Salary	\$ 62,502	\$ 61,099
Total Valuation Salary	\$ 3,000,108	\$ 3,054,939
Payroll Covered in Valuation	\$ 2,907,418	\$ 2,856,355
Annual Report	\$ 2,899,869	\$ 2,938,951
<u>Terminated With Rights to Deferred Benefits</u>		
Number	1	1
Average Age	46.2	47.2
Percent Male	100.0	100.0
Average Annual Benefit	\$ 26,563	\$ 26,563
<u>Retired and DROP Participants</u>		
Number	41	41
Average Age	62.5	63.1
Percent Male	92.7	95.1
Average Annual Benefit	\$ 46,040	\$ 47,758
DROP Balance	\$ 119,955	\$ 271,845
<u>Beneficiaries</u>		
Number	3	3
Average Age	60.4	61.4
Percent Male	0.0	0.0
Average Annual Benefit	\$ 13,282	\$ 13,415
<u>Disability Retirements</u>		
Number	2	2
Average Age	68.5	69.5
Percent Male	100.0	100.0
Average Annual Benefit	\$ 13,193	\$ 13,325

Number of Active Members by Age and Service as of October 1, 2015

Age	Service							Total
	< 1	< 5	< 10	< 15	< 20	< 25	25+	
< 21								
< 25	1	1						2
< 30	2	8	1					11
< 35		2	3					5
< 40		1	2	5				8
< 45		1		3	5			9
< 50			1	1	1	1	4	8
< 55					1	3	3	7
55+								
Total	3	13	7	9	7	4	7	50

Active Valuation Pay by Age and Service as of October 1, 2015

Age	Service							Total
	< 1	< 5	< 10	< 15	< 20	< 25	25+	
< 21								
< 25	42,713	46,166						44,440
< 30	24,284	45,411	50,537					42,036
< 35		45,475	52,515					49,699
< 40		49,075	51,588	58,334				55,490
< 45		43,664		53,235	72,577			62,917
< 50			61,701	62,195	80,346	94,555	86,035	80,367
< 55					61,276	75,787	104,475	86,009
55+								
Total	30,427	45,626	53,280	57,063	72,072	80,479	93,938	61,099

Reconciliation of Plan Participants

	Active	Term. Vested	DROP	Retired	Disabled	Survivor	Total
October 1, 2009	55	1	1	31	3	3	94
Retirement							0
DROP							0
Nonvested Termination	(5)						(5)
Vested Termination							0
Death							0
New Hires	4						4
October 1, 2010	54	1	1	31	3	3	93
Retirement	(2)			2			0
DROP	(3)		3				0
Nonvested Termination	(4)						(4)
Vested Termination	(1)	1					0
Death							0
New Hires	4						4
October 1, 2011	48	2	4	33	3	3	93
Retirement	(1)	(1)	(1)	3			0
Nonvested Termination	(3)						(3)
Death						(1)	(1)
New Hires	4						4
October 1, 2012	48	1	3	36	3	2	93
Retirement	(1)		(1)	2			0
Nonvested Termination	(7)						(7)
Death				(1)			(1)
New Hires	6						6
October 1, 2013	46	1	2	37	3	2	91
Retirement	(1)		(2)	3			0
DROP	(2)		2				0
Nonvested Termination	(2)						(2)
Death				(1)	(1)	1	(1)
Rehire	1						1
New Hires	6						6
October 1, 2014	48	1	2	39	2	3	95
Retirement	(1)			1			0
Nonvested Termination	(1)						(1)
Death				(1)			(1)
Rehire	1						1
New Hires	3						3
October 1, 2015	50	1	2	39	2	3	97

Reconciliation of DROP Account Balances

Fiscal Year Ending September 30,	2014	2015
Beginning Balance	\$472,051	\$119,955
Additions	169,449	154,760
Investment Income	33,090	(2,870)
Disbursements	<u>(554,635)</u>	<u>0</u>
Ending Balance	\$119,955	\$271,845

Outline of Plan Provisions

Plan Type: Single-employer Defined Benefit Pension Plan

Legal Authority: The Plan was established and is amended by local ordinance.

Effective Date: October 19, 1954. Most recently Plan provisions have been amended with the following ordinances.

<u>Ord. No.</u>	<u>Adopted</u>	<u>Ord. No.</u>	<u>Adopted</u>
2010-11	02/02/2010	2014-06	03/04/2014
2010-21	08/17/2010	2014-09	04/15/2014
2011-07	07/19/2011		
2011-08	07/19/2011		
2013-02	01/08/2013		

Ordinance No. 2014-06 revised provisions of the Plan to comply with Internal Revenue Code and was deemed to have no significant impact at the time of adoption.

Ordinance No. 2014-09 revised the definition of Compensation and Credited Service. The impact of this Ordinance was reflected in the October 1, 2013 actuarial valuation of the Plan. Part of the impact reflected in the October 1, 2013 actuarial valuation decreased the liability of the Plan for accrued hours being frozen effective October 1, 2012. However, in the last fiscal year we were informed accrued hours are not frozen effective October 1, 2012. The decrease in liability reflected in the October 1, 2013 actuarial valuation has been reversed to increase Plan liability as of October 1, 2014 in this valuation of the Plan.

Plan Administrator: The Board of Trustees

Board Composition: The trustees consist of five members which may include participants of any DROP who have at least 18 months remaining in the DROP at the time they take office, none who are elected city officials, and who are selected as follows:

- (a) Two members who are legal residents of the city appointed by city council,
- (b) Two are police officer participants elected by a majority of the active police officer members of this fund, and
- (c) The fifth member is chosen by a majority of the previous four members and will be appointed to the board of trustees by city council, as a ministerial duty.

Funding Requirements: Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended by ordinance.

Plan Year: The 12-month period from October 1st to the following September 30th.

Member: Full-time sworn police officers are eligible immediately upon hire.

Credited Service: Aggregate years and fractional part of years as a contributing Member, including unused medical leave days in excess of 120 days. Effective with Ordinance 2013-21, accrued sick leave under 120 days and accrued vacation under 60 days may be applied to service for Normal Retirement eligibility and benefits only. Credited Service also includes certain military service.

Additional Credited Service may be purchased. Unused annual and medical leave will be used in the calculation of benefits as reported to the Board by the City per City policy

Vesting: 100% upon earning ten years of Credited Service.

Compensation: Total cash remuneration including shift differential, state and local incentives, "actual overtime" (but excluding "court overtime") paid by the city to a police officer for services rendered. Payments for accrued unused sick or annual leave are not included. Effective with Ordinance 2013-02, overtime is limited to 300 hours per calendar year. Compensation or salary contributed as employee-elective salary reductions or deferrals to any salary reduction, deferred compensation, or tax-sheltered annuity program authorized under IRC is included. For the purpose of benefit calculation the Board of Trustees shall use the employee's compensation as reported by the City in accordance with the City's policies.

Employee Contributions: Prior to Ordinance 2013-02, 3.0% of Compensation. Effective with Ordinance 2013-02, Employee Contributions are increased to 5.5% of Compensation for Members hired prior to October 1, 2012 and to 8.0% of Compensation for Members hired after October 1, 2012. A Member who terminates non-vested is entitled to refund of accumulated Employee Contributions without interest.

Average Monthly Salary: One-twelfth the average of Compensation for the five highest years of Credited Service.

Normal Retirement Date: The first day of the month coincident with or next following the earlier of (i) age 55 and ten years of Credited Service, or (ii) 25 years of Credited Service with no age requirement.

Accrued Benefit: $3\% \times \text{Average Monthly Salary} \times \text{Credited Service}$, plus $\$5 \times \text{Credited Service}$.

Cost-of-Living-Adjustment: 1% annually on October 1st.

Late Retirement Benefit: Benefit as determined for Normal Retirement taking into account Compensation and Credited Service through the actual date of retirement.

Early Retirement Date: The first day of the month coincident with or next following the date the Member earns ten years of Credited Service and attains age 50.

Early Retirement Benefit: The Accrued Benefit reduced by 2.5% for each year the Member is younger than the Normal Retirement Date. (Note: the early retirement reduction is only taken on the 3% multiplier benefit and is not taken on the flat $\$5 \times \text{Credited Service}$ benefit.)

Disability Benefits: Members are eligible for service-connected Disability Benefits immediately upon hire. Members are eligible for a non-service-connected Disability Benefit after earnings at least ten years of Credited Service. The monthly Disability Benefit is the greater of (i) the Accrued Benefit and (ii) 50% of Average Monthly Salary.

Pre-Retirement Survivor Benefits: Members are eligible for service-connected Pre-Retirement Survivor Benefits immediately upon hire. Members are eligible for non-service-connected Pre-Retirement Survivor Benefits after one year of service. The monthly survivor benefit is the greater of (i) the Accrued Benefit and (ii) 25% of Average Monthly Salary.

Optional Forms of Benefit: Pension benefits described above are payable in the form of a 10 year certain and continuous annuity. Members may optionally choose an actuarially equivalent single life annuity, or joint and last survivor annuity (with 50%, 66 2/3, 75%, or 100% continuance), or a joint and survivor annuity (with 50%, 66 2/3, 75%, or 100% continuance).

Actuarial Equivalence: The 1983 Group Annuity Mortality Table (100% male) and an interest rate of 7.0% (with no COLA assumed payable) is defined for use in the determination of Optional Forms of Benefit.

Deferred Retirement Option Plan (DROP): Members are eligible to enter the DROP at the Normal Retirement Date. The Accrued Benefit is frozen and no further Employee Contributions are payable at DROP entry. The Accrued Benefit accumulates at the net investment return earned on Fund assets less an administrative fee. The maximum DROP participation duration is 5 years. DROP participants are not eligible for pre-retirement death or disability benefits.

Description of Assumptions and Methods

Assumed Rate of Investment Return: 7.75% per year net of investment expenses.

Salary Increase – Total Payroll: Based on individual salary increase assumptions and other decrements assumed in the valuation of Plan liabilities.

Salary Increase – Individual: The following table of annual increases based on service:

<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
0	6.250%				
1	5.850%	11	4.850%	21	4.500%
2	5.600%	12	4.800%	22	4.475%
3	5.500%	13	4.750%	23	4.450%
4	5.350%	14	4.700%	24	4.425%
5	5.250%	15	4.650%	25	4.400%
6	5.150%	16	4.625%	26	4.375%
7	5.100%	17	4.600%	27	4.350%
8	5.000%	18	4.575%	28	4.325%
9	4.950%	19	4.550%	29	4.300%
10	4.900%	20	4.525%	30	4.275%

Mortality: RP-2000 Combined Mortality Table projected to the valuation year using Scale AA.

75% of active deaths are assumed to be service connected.

Retirement: Members are assumed to retire at a rate of 5% per year eligible for early retirement. In the year of the Normal Retirement Date, Members are assumed to retire at a rate of 80%. For each of the four years subsequent to the Normal Retirement Date, Members are assumed to retire at 40%. 100% of Members are assumed to retire in the fifth year subsequent to the Normal Retirement Date.

Termination: Unisex rates, as follows:

<u>Service</u>	<u>Rate</u>
<6	12.00%
6-10	4.00%
11-15	3.00%
16-19	2.00%
20-24	1.00%

Termination rates are not applied when an active member reaches the age and service combinations where non-zero retirement decrements are in force.

Disability: Unisex rates, as follows:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
<=15	0.00%	34	0.22%	43	0.39%	52	1.20%
16-21	0.14%	35	0.23%	44	0.44%	53	1.31%
22-25	0.15%	36	0.24%	45	0.51%	54	1.43%
26-27	0.16%	37	0.25%	46	0.59%	55	1.55%
28-29	0.17%	38	0.26%	47	0.70%	56	1.68%
30	0.18%	39	0.28%	48	0.79%	57	1.81%
31	0.19%	40	0.30%	49	0.90%	58	1.95%
32	0.20%	41	0.32%	50	1.00%	59	2.09%
33	0.21%	42	0.35%	51	1.10%	>=60	0.00%

75% of disabilities are assumed to be service connected.

Accrued Leave: Retirement benefits are increased 1% to account for sick leave over 120 days. In addition, Members are assumed to include accrued sick leave under 120 days and accrued vacation under 60 days as 0.6923 in Credited Service for Normal Retirement eligibility and benefits. Normal Retirement benefits are increased by the following table of factors based on Credited Service earned:

<u>Service</u>	<u>Factor</u>	<u>Service</u>	<u>Factor</u>	<u>Service</u>	<u>Factor</u>	<u>Service</u>	<u>Factor</u>
10	1.0692	15	1.0462	20	1.0346	25	1.0277
11	1.0629	16	1.0433	21	1.0330	26	1.0266
12	1.0577	17	1.0407	22	1.0315	27	1.0256
13	1.0533	18	1.0385	23	1.0301	28	1.0247
14	1.0495	19	1.0364	24	1.0288	29	1.0239
						30	1.0231

Plan Expenses: An average of the prior two years of administrative expense is added to the normal cost.

Marital Assumption: 100% are assumed married with husbands assumed to be three years older than wives.

Liability Load: Liabilities are loaded by 0.9% to reflect the exclusion of the COLA in the determination of optional forms of benefit.

Funding Method: Entry Age (level percent of salary)

Glossary of Actuarial Terms

Present Value of Benefits (PVB): The present value, as of the valuation date, of all benefits that will become payable by the Plan for the current group of members in the census.

Normal Cost (NC): The value of the portion of the total benefit for active members which accrues in the year following the valuation date. Under the Entry Age Normal (Level Percent of Salary) funding method, the NC is a constant fraction of salary from the member's date of entry into the Plan to the member's assumed date of termination, retirement, disability or death.

Accrued Liability (AL): This is the portion of the PVB attributable to the past at the valuation date. For active members, AL is the annual NC accumulated from date of entry to the valuation date for each member. For retired and terminated members, the PVB and the AL are equal. The AL is the estimated liability owed by the pension fund at the valuation date.

Unfunded Accrued Liability (UAL): Any excess of the Accrued Liability over the fund assets. A negative UAL indicates fund assets are greater than the Accrued Liability, otherwise known as a surplus.

Actuarial Value of Assets: The market value of assets is adjusted to recognize gains and losses over a five-year period. The Actuarial Value of Assets shall not be more than 120% or less than 80% of the market value of assets.



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City of Vero Beach

Police Officers' Retirement Fund

GASB 67/68 Supplement



As of September 30, 2015



March 18, 2016 (Revised from February 13 and March 2, 2016)

Board of Trustees
City of Vero Beach Police Officers' Retirement Fund
Vero Beach, Florida

RE: GASB 67/68 Supplement as of September 30, 2015

Dear Board Members:

We are pleased to present the Governmental Accounting Standards Board Statement No. 67 (GASB 67) and No. 68 (GASB 68) Supplement as of September 30, 2015 for the City of Vero Beach Police Officers' Retirement Fund (the Plan).

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report provides information required to be disclosed under GASB 67 and GASB 68 as described in the statement and the implementation guide. The relevant dates are as follows:

GASB 67		GASB 68	
Valuation Date	10/01/2015	Valuation Date	10/01/2015
Measurement Date	09/30/2015	Measurement Date	09/30/2015
Reporting Date	09/30/2015	Reporting Date	09/30/2015

Please let us know if you have any questions or need additional information.

Sincerely,

Chad M. Little, ASA, EA
Partner, Consulting Actuary
Enrollment Number 14-6619

Paula C. Freiman, ASA, EA
Partner, Consulting Actuary
Enrollment Number 14-5796

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Statement of Fiduciary Net Position

As of September 30,	2014	2015
Assets		
Cash and cash equivalents	\$0	\$0
Receivables:		
Accrued interest and dividends	84,766	86,437
Distributions receivable	<u>17,821</u>	<u>23,725</u>
Total receivables	<u>102,587</u>	<u>110,162</u>
Investments, at fair value:		
Short Term Investments	793,589	1,254,975
US Bonds and Bills	4,662,329	5,866,926
Federal Agency Guaranteed Securities	2,486,810	3,472,047
Corporate Bonds	1,851,239	1,431,930
Stocks	22,268,185	19,264,027
Real Estate	<u>3,268,221</u>	<u>3,812,380</u>
Total investments	<u>35,330,373</u>	<u>35,102,285</u>
Total assets	<u>35,432,960</u>	<u>35,212,447</u>
Liabilities		
Accounts payable and accrued expenses	0	1,009
Payable for securities purchased	<u>0</u>	<u>0</u>
Total liabilities	<u>0</u>	<u>1,009</u>
Net position restricted for pensions	<u>\$35,432,960</u>	<u>\$35,211,438</u>

Statement of Changes in Fiduciary Net Position

As of September 30,	2014	2015
Additions		
Contributions:		
Employer	\$869,837	\$852,721
State of Florida	233,451	228,139
Employees	<u>167,975</u>	<u>191,782</u>
Total contributions	<u>1,271,263</u>	<u>1,272,642</u>
Investment income (loss):		
Net appreciation in fair value of investments	2,430,602	(290,719)
Interest and dividends	<u>926,812</u>	<u>924,541</u>
Total investment income	<u>3,357,414</u>	<u>633,822</u>
Less investment expenses:		
Investment expense	<u>268,657</u>	<u>248,224</u>
Net investment income	<u>3,088,757</u>	<u>385,598</u>
Total additions	<u>4,360,020</u>	<u>1,658,240</u>
Deductions		
Benefit payments	2,240,182	1,792,149
Refunds of contributions	8,102	1,269
Administrative expenses	<u>86,354</u>	<u>86,344</u>
Total deductions	<u>2,334,638</u>	<u>1,879,762</u>
Net increase in net position	2,025,382	(221,522)
Net position restricted for pensions		
Beginning of year	<u>33,407,578</u>	<u>35,432,960</u>
End of year	<u>\$35,432,960</u>	<u>\$35,211,438</u>

Net Pension Liability

The total pension liability under GASB 67 and 68 is based on the October 1, 2015 actuarial valuation which used the following actuarial assumptions applied to all periods included in the measurement.

Inflation	2.5%
Salary increases	6.25% to 4.28% based on service, including inflation
Investment rate of return	7.75% net of investment expense, including inflation
Mortality	RP-00 projected to the valuation year with Scale AA

Assumptions are based on the results of an actuarial experience study for the period October 1, 2006 to September 30, 2011.

The long-term expected net rate of return on investments was determined using a building-block method. Best-estimate ranges of expected future real rates of return (expected returns net of investment expense and inflation) are developed for each major asset class. The long-term expected net rate of return on investments is the best-estimate ranges weighted by the asset allocation plus expected inflation. Best estimates of arithmetic real rates of return for each major asset class as provided by the investment monitor are shown in the following table:

Asset Class	Target Allocation %	Expected Long- Term Real Return	Weighted Average Expected Long- Term Real Return
Domestic Equity	45.0%	7.5%	3.4%
International Equity	15.0%	8.5%	1.3%
Domestic Bonds	30.0%	2.5%	0.8%
International Bonds	0.0%	3.5%	0.0%
Real Estate	10.0%	4.5%	0.5%
	100.0%		6.0%

Based on the above target allocation and expected long-term real returns for each asset class, the weighted average expected long-term real return net of inflation is 6.0%. The investment monitor also indicated that the inflation estimate was 2.5% producing an expected long-term rate of return net of expenses, including inflation of 8.5%.

The discount rate used to measure the total pension liability was 7.75%. This is the single rate that reflects the long-term expected rate of return on pension plan investments expected to be used to finance the payment of benefits. A projection of cash flows used to determine the discount rate assumed that plan member contributions are made at the current contribution rate and that City contributions will be made equal to the difference between the actuarially determined contribution and the member contributions. Based on those assumptions, the pension plan's fiduciary net position is 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 is applied to all periods of projected benefit payments to determine the total pension liability. For purposes of this determination we understand the board of trustees finds the 7.75% assumption to be reasonable and that they expect pension plan assets to be invested using a strategy to achieve the 7.75% net discount rate.

Note: See "Actuarial Assumptions and Methods" for a full description of the assumptions used in the determination of the total pension liability.

The components of the net pension liability at September 30, 2015 were as follows:

Total pension liability	\$40,395,945
Plan fiduciary net position	<u>(35,211,438)</u>
Net pension liability	<u>\$5,184,507</u>

Plan fiduciary net position as a percentage of the total pension liability	87.17%
--	--------

Sensitivity of the net pension liability to changes in the discount rate follows.

	1% Decrease (6.75%)	Current Discount Rate (7.75%)	1% Increase (8.75%)
	<u> </u>	<u> </u>	<u> </u>
Net pension liability	\$9,832,491	\$5,184,507	\$1,289,026

Schedule of Changes in Net Pension Liability and Related Ratios

This schedule will be updated each year until a 10-year history is accumulated.

Year Ending September 30,	2014	2015
Total pension liability		
Service cost	\$478,211	\$550,357
Interest	2,881,001	3,009,258
Changes of benefit terms	118,425	0
Differences between expected and actual experience	96,146	(642,610)
Changes of assumptions	41,761	44,151
Benefit payments	(2,240,182)	(1,792,149)
Refunds of member contributions	<u>(8,102)</u>	<u>(1,269)</u>
Net change in total pension liability	1,367,260	1,167,738
Total pension liability - beginning	<u>37,860,947</u>	<u>39,228,207</u>
Total pension liability - ending (a)	\$39,228,207	\$40,395,945
 Plan fiduciary net position		
Contributions - employer	\$869,837	\$852,721
Contributions - State of Florida	233,451	228,139
Contributions - employee	167,975	191,782
Net investment income	3,088,757	385,598
Benefit payments	(2,240,182)	(1,792,149)
Refunds of member contributions	(8,102)	(1,269)
Administrative expense	(86,354)	(86,344)
Other	<u>0</u>	<u>0</u>
Net change in plan fiduciary net position	2,025,382	(221,522)
Plan fiduciary net position - beginning	<u>33,407,578</u>	<u>35,432,960</u>
Plan fiduciary net position - ending (b)	\$35,432,960	\$35,211,438
 Net pension liability - ending (a) - (b)	\$3,795,247	\$5,184,507
 Plan fiduciary net position as a percentage of the total pension liability	90.33 %	87.17 %
 Covered employee payroll	\$2,899,869	\$2,938,951
 Net pension liability as a percentage of covered employee payroll	130.88 %	176.41 %

Notes to Schedule:

The mortality table continues to be the RP-2000 Combined Mortality Table with Scale AA applied to reflect mortality improvements to the valuation year.

Statement of Changes in Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at 9/30/2014	\$39,228,207	\$35,432,960	\$3,795,247
Changes for the year:			
Service cost	550,357		550,357
Interest	3,009,258		3,009,258
Changes of benefit terms	0		0
Differences between expected and actual experience	(642,610)		(642,610)
Changes of assumptions	44,151		44,151
Contributions—employer		852,721	(852,721)
Contributions—State of Florida		228,139	(228,139)
Contributions—employee		191,782	(191,782)
Net investment income		385,598	(385,598)
Benefit payments, including refunds of employee contributions	(1,793,418)	(1,793,418)	0
Administrative expense		(86,344)	86,344
Other changes		0	0
Net changes	1,167,738	(221,522)	1,389,260
Balances at 9/30/2015	\$40,395,945	\$35,211,438	\$5,184,507

Pension Expense and Deferred Outflows and Inflows of Resources

Pension expense for the year ended September 30, 2015 is as shown below.

Description	Amount
Service cost	\$550,357
Interest on the total pension liability	3,009,258
Changes of benefit terms	0
Differences between expected and actual experience	(160,653)
Changes of assumptions	11,038
Employee contributions	(191,782)
Projected earnings on pension plan investments	(2,746,731)
Differences between projected and actual earnings on plan investments	472,227
Pension plan administrative expense	86,344
Other changes in fiduciary net position	0
Total pension expense	\$1,030,058

At September 30, 2015 there are deferred outflows and inflows of resources from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$0	\$481,957
Changes of assumptions	33,113	0
Net difference between projected and actual earnings	1,888,906	0
Total	\$1,922,019	\$481,957

Amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

Measurement Year Ended September 30:

2016	\$322,612
2017	322,612
2018	322,613
2019	472,225
2020	0

Recognition of Deferred Outflows and Inflows of Resources

<u>Year</u>	<u>Original Amount</u>	<u>Recognition Period</u>	<u>Measurement Year Recognition</u>					
			<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
Differences between Expected and Actual Experience								
2015	(642,610)	4.0	(160,653)	(160,653)	(160,653)	(160,651)	0	0
Changes in Assumptions								
2015	44,151	4.0	11,038	11,038	11,038	11,037	0	0
Differences between Projected and Actual Earnings on Pension Plan Investments								
2015	2,361,133	5.0	472,227	472,227	472,227	472,227	472,225	0

Schedule of Contributions

Year Ending September 30,	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially determined contribution	\$1,080,860	\$1,103,288	\$1,124,361	\$1,069,836	\$1,003,043	\$808,241	\$614,497	\$607,358	\$578,539	\$548,686
Contributions in relation to the actuarially determined contribution	<u>1,080,860</u>	<u>1,103,288</u>	<u>1,124,361</u>	<u>1,069,836</u>	<u>1,003,043</u>	<u>808,241</u>	<u>614,497</u>	<u>607,358</u>	<u>578,539</u>	<u>581,940</u>
Contribution deficiency (excess)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$(33,254)</u>
Covered employee payroll	\$2,938,951	\$2,899,869	\$2,947,305	\$3,013,887	\$3,297,317	\$3,577,177	\$3,733,644	\$3,659,849	\$3,415,819	\$3,345,362
Contributions as a percentage of covered-employee payroll	36.78 %	38.05 %	38.15 %	35.50 %	30.42 %	22.59 %	16.46 %	16.60 %	16.94 %	17.40 %

Notes to Schedule

Actuarially determined contributions are calculated based on the valuation as of the beginning of the year prior to the fiscal year in which contributions are due.

Methods and assumptions used to determine contributions:

Actuarial cost method	Entry age
Amortization method	Level dollar, closed
Remaining amortization period	26 years
Asset valuation method	5-year smoothed market
Inflation	2.5%
Salary increases	Scale of increase rates from 6.25% to 4.28% depending on years of service, including inflation
Investment rate of return	7.75% net of investment expenses, including inflation
Retirement age	See "Description of Assumptions and Methods" for the assumed retirement age assumption
Mortality	RP-2000 Combined Mortality Table using Scale AA projected to valuation year

Schedule of Investment Returns

The following information is as provided by the investment monitor.

Year Ending September 30,	Annual money-weighted rate of return net of investment expense
2015	0.87%
2014	9.08%
2013	14.17%
2012	19.27%
2011	(1.69%)
2010	9.89%
2009	(1.41%)
2008	(12.28%)
2007	14.97%
2006	7.18%

Plan Membership Statistics

Valuation for Year Beginning October 1,	2014	2015
Inactive members or beneficiaries currently receiving benefits	46	46
Inactive members entitled to but not yet receiving benefits	1	1
Active members	<u>48</u>	<u>50</u>
Total	<u>95</u>	<u>97</u>

Plan Description

Plan Type: Single-employer Defined Benefit Pension Plan

Legal Authority: The Plan was established and is amended by local ordinance.

Effective Date: October 19, 1954. Most recently Plan provisions have been amended with the following ordinances.

<u>Ord. No.</u>	<u>Adopted</u>	<u>Ord. No.</u>	<u>Adopted</u>
2010-11	02/02/2010	2014-06	03/04/2014
2010-21	08/17/2010	2014-09	04/15/2014
2011-07	07/19/2011		
2011-08	07/19/2011		
2013-02	01/08/2013		

Ordinance No. 2014-06 revised provisions of the Plan to comply with Internal Revenue Code and was deemed to have no significant impact at the time of adoption.

Ordinance No. 2014-09 revised the definition of Compensation and Credited Service. The impact of this Ordinance was reflected in the October 1, 2013 actuarial valuation of the Plan. Part of the impact reflected in the October 1, 2013 actuarial valuation decreased the liability of the Plan for accrued hours being frozen effective October 1, 2012. However, in the last fiscal year we were informed accrued hours are not frozen effective October 1, 2012. The decrease in liability reflected in the October 1, 2013 actuarial valuation has been reversed to increase Plan liability as of October 1, 2014 in this valuation of the Plan.

Plan Administrator: The Board of Trustees

Board Composition: The trustees consist of five members which may include participants of any DROP who have at least 18 months remaining in the DROP at the time they take office, none who are elected city officials, and who are selected as follows:

- (a) Two members who are legal residents of the city appointed by city council,
- (b) Two are police officer participants elected by a majority of the active police officer members of this fund, and
- (c) The fifth member is chosen by a majority of the previous four members and will be appointed to the board of trustees by city council, as a ministerial duty.

Funding Requirements: Employer contributions are actuarially determined and subject to State statute. Employee contributions are as described below and may be amended by ordinance.

Plan Year: The 12-month period from October 1st to the following September 30th.

Member: Full-time sworn police officers are eligible immediately upon hire.

Credited Service: Aggregate years and fractional part of years as a contributing Member, including unused medical leave days in excess of 120 days. Effective with Ordinance 2013-21, accrued sick leave under 120 days and accrued vacation under 60 days may be applied to service for Normal Retirement eligibility and benefits only. Credited Service also includes certain military service.

Additional Credited Service may be purchased. Unused annual and medical leave will be used in the calculation of benefits as reported to the Board by the City per City policy

Vesting: 100% upon earning ten years of Credited Service.

Compensation: Total cash remuneration including shift differential, state and local incentives, "actual overtime" (but excluding "court overtime") paid by the city to a police officer for services rendered. Payments for accrued unused sick or annual leave are not included. Effective with Ordinance 2013-02, overtime is limited to 300 hours per calendar year. Compensation or salary contributed as employee-elective salary reductions or deferrals to any salary reduction, deferred compensation, or tax-sheltered annuity program authorized under IRC is included. For the purpose of benefit calculation the Board of Trustees shall use the employee's compensation as reported by the City in accordance with the City's policies.

Employee Contributions: Prior to Ordinance 2013-02, 3.0% of Compensation. Effective with Ordinance 2013-02, Employee Contributions are increased to 5.5% of Compensation for Members hired prior to October 1, 2012 and to 8.0% of Compensation for Members hired after October 1, 2012. A Member who terminates non-vested is entitled to refund of accumulated Employee Contributions without interest.

Average Monthly Salary: One-twelfth the average of Compensation for the five highest years of Credited Service.

Normal Retirement Date: The first day of the month coincident with or next following the earlier of (i) age 55 and ten years of Credited Service, or (ii) 25 years of Credited Service with no age requirement.

Accrued Benefit: $3\% \times \text{Average Monthly Salary} \times \text{Credited Service}$, plus $\$5 \times \text{Credited Service}$.

Cost-of-Living-Adjustment: 1% annually on October 1st.

Late Retirement Benefit: Benefit as determined for Normal Retirement taking into account Compensation and Credited Service through the actual date of retirement.

Early Retirement Date: The first day of the month coincident with or next following the date the Member earns ten years of Credited Service and attains age 50.

Early Retirement Benefit: The Accrued Benefit reduced by 2.5% for each year the Member is younger than the Normal Retirement Date. (Note: the early retirement reduction is only taken on the 3% multiplier benefit and is not taken on the flat $\$5 \times \text{Credited Service}$ benefit.)

Disability Benefits: Members are eligible for service-connected Disability Benefits immediately upon hire. Members are eligible for a non-service-connected Disability Benefit after earnings at least ten years of Credited Service. The monthly Disability Benefit is the greater of (i) the Accrued Benefit and (ii) 50% of Average Monthly Salary.

Pre-Retirement Survivor Benefits: Members are eligible for service-connected Pre-Retirement Survivor Benefits immediately upon hire. Members are eligible for non-service-connected Pre-Retirement Survivor Benefits after one year of service. The monthly survivor benefit is the greater of (i) the Accrued Benefit and (ii) 25% of Average Monthly Salary.

Optional Forms of Benefit: Pension benefits described above are payable in the form of a 10 year certain and continuous annuity. Members may optionally choose an actuarially equivalent single life annuity, or joint and last survivor annuity (with 50%, 66 2/3, 75%, or 100% continuance), or a joint and survivor annuity (with 50%, 66 2/3, 75%, or 100% continuance).

Actuarial Equivalence: The 1983 Group Annuity Mortality Table (100% male) and an interest rate of 7.0% (with no COLA assumed payable) is defined for use in the determination of Optional Forms of Benefit.

Deferred Retirement Option Plan (DROP): Members are eligible to enter the DROP at the Normal Retirement Date. The Accrued Benefit is frozen and no further Employee Contributions are payable at DROP entry. The Accrued Benefit accumulates at the net investment return earned on Fund assets less an administrative fee. The maximum DROP participation duration is 5 years. DROP participants are not eligible for pre-retirement death or disability benefits.

Actuarial Assumptions and Methods

Assumed Rate of Investment Return: 7.75% per year net of investment expenses.

Salary Increase – Total Payroll: Based on individual salary increase assumptions and other decrements assumed in the valuation of Plan liabilities.

Salary Increase – Individual: The following table of annual increases based on service:

<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>	<u>Service</u>	<u>Rate</u>
0	6.250%				
1	5.850%	11	4.850%	21	4.500%
2	5.600%	12	4.800%	22	4.475%
3	5.500%	13	4.750%	23	4.450%
4	5.350%	14	4.700%	24	4.425%
5	5.250%	15	4.650%	25	4.400%
6	5.150%	16	4.625%	26	4.375%
7	5.100%	17	4.600%	27	4.350%
8	5.000%	18	4.575%	28	4.325%
9	4.950%	19	4.550%	29	4.300%
10	4.900%	20	4.525%	30	4.275%

Mortality: RP-2000 Combined Mortality Table projected to the valuation year using Scale AA.

75% of active deaths are assumed to be service connected.

Retirement: Members are assumed to retire at a rate of 5% per year eligible for early retirement. In the year of the Normal Retirement Date, Members are assumed to retire at a rate of 80%. For each of the four years subsequent to the Normal Retirement Date, Members are assumed to retire at 40%. 100% of Members are assumed to retire in the fifth year subsequent to the Normal Retirement Date.

Termination: Unisex rates, as follows:

<u>Service</u>	<u>Rate</u>
<6	12.00%
6-10	4.00%
11-15	3.00%
16-19	2.00%
20-24	1.00%

Termination rates are not applied when an active member reaches the age and service combinations where non-zero retirement decrements are in force.

Disability: Unisex rates, as follows:

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
<=15	0.00%	34	0.22%	43	0.39%	52	1.20%
16-21	0.14%	35	0.23%	44	0.44%	53	1.31%
22-25	0.15%	36	0.24%	45	0.51%	54	1.43%
26-27	0.16%	37	0.25%	46	0.59%	55	1.55%
28-29	0.17%	38	0.26%	47	0.70%	56	1.68%
30	0.18%	39	0.28%	48	0.79%	57	1.81%
31	0.19%	40	0.30%	49	0.90%	58	1.95%
32	0.20%	41	0.32%	50	1.00%	59	2.09%
33	0.21%	42	0.35%	51	1.10%	>=60	0.00%

75% of disabilities are assumed to be service connected.

Accrued Leave: Retirement benefits are increased 1% to account for sick leave over 120 days. In addition, Members are assumed to include accrued sick leave under 120 days and accrued vacation under 60 days as 0.6923 in Credited Service for Normal Retirement eligibility and benefits. Normal Retirement benefits are increased by the following table of factors based on Credited Service earned:

<u>Service</u>	<u>Factor</u>	<u>Service</u>	<u>Factor</u>	<u>Service</u>	<u>Factor</u>	<u>Service</u>	<u>Factor</u>
10	1.0692	15	1.0462	20	1.0346	25	1.0277
11	1.0629	16	1.0433	21	1.0330	26	1.0266
12	1.0577	17	1.0407	22	1.0315	27	1.0256
13	1.0533	18	1.0385	23	1.0301	28	1.0247
14	1.0495	19	1.0364	24	1.0288	29	1.0239
						30	1.0231

Plan Expenses: An average of the prior two years of administrative expense is added to the normal cost.

Marital Assumption: 100% are assumed married with husbands assumed to be three years older than wives.

Liability Load: Liabilities are loaded by 0.9% to reflect the exclusion of the COLA in the determination of optional forms of benefit.

Funding Method: Entry Age (level percent of salary)