# City of Indian Harbour Beach Police Officers' Supplemental Pension Plan

ACTUARIAL VALUATION AS OF OCTOBER 1, 2016

DETERMINES THE CONTRIBUTION FOR THE 2016/17 FISCAL YEAR



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December 3, 2017

#### Introduction

This report presents the results of the October 1, 2016 actuarial valuation for the City of Indian Harbour Beach Police Officers' Supplemental Pension Plan. The report is based on the participant data and asset information provided by the pension plan administrator and, except for a cursory review for reasonableness including a comparison to the data provided for the previous valuation, we have not attempted to verify the accuracy of this information.

The primary purpose of this report is to provide a summary of the funded status of the plan as of October 1, 2016 and to determine the minimum required contribution under Chapter 112, Florida Statutes, for the 2016/17 plan year. In addition, this report provides a projection of the long-term funding requirements of the plan, statistical information concerning the assets held in the trust, statistical information concerning the participant population, and a summary of any recent plan changes.

The liabilities and cost presented in this report are based on numerous assumptions concerning the cost of benefits to be provided in the future, long-term investment returns, and the future demographic experience of the current participants. Anyone referring to this report should remember that the cost developed herein is only an <u>estimate</u> of the true cost of providing post-employment pension benefits. No one can predict with certainty whether the true cost will be higher or lower than the cost presented in this report. The calculated cost is entirely dependent upon the assumptions that are described in Table IV-A. If any of the assumptions is changed, then the cost shown in this report will change accordingly. Likewise, if any of the assumptions is not completely realized, then the cost shown in this report will change in the future.

Certain assumptions play a bigger role than others in determining the cost of the post-employment pension benefits. In some cases, relatively small changes in a particular assumption can have a dramatic impact on the anticipated cost of benefits. Although a thorough analysis of the impact of such changes is beyond the scope of this report, Table I-B illustrates the impact that alternative long-term investment returns would have on the normal cost rate.

#### Minimum Required Contribution

Table I-A shows the development of the minimum required contribution for the 2016/17 plan year. The minimum required contribution rate is 2.19% of covered payroll, which represents a decrease of 0.20% of payroll from the prior valuation.

The normal cost rate is 2.10%, which is 0.19% lower than the normal cost rate that was developed in the prior valuation. Table I-C provides a breakdown of the sources of change in the normal cost rate. Significantly, the rate decreased by 0.06% of payroll due to investment gains, decreased by another 0.24% of payroll due to demographic experience, and increased by 0.11% of payroll due to the assumption change that is described below. The market



value of assets earned 10.90% during the 2015/16 plan year, whereas a 7.00% annual investment return was required to maintain a stable contribution rate.

Chapter 112, Florida Statutes, sets forth the rules concerning the minimum required contribution for public pension plans within the state. Essentially, the City must contribute an amount equal to the annual normal cost of the plan plus an adjustment as necessary to reflect interest on any delayed payment of the contribution beyond the valuation date. On this basis, the City's 2016/17 minimum required contribution will be equal to 2.19% multiplied by the total pensionable earnings for the 2016/17 fiscal year for the active employees who are covered by the plan.

Based on the current assets, participant data, and actuarial assumptions and methods that are used to value the plan, the present-day value of the total long-term funding requirement is \$308,960. As illustrated in Table I-A, current assets are sufficient to cover \$147,043 of this amount and the employer's 2016/17 expected contribution will cover \$19,207 of this amount, leaving \$142,710 to be covered by future employer funding beyond the 2016/17 fiscal year. Again, demographic and investment experience that differs from that assumed will either increase or decrease the future employer funding requirement.

#### Advance Employer Contribution

The City has made contributions to the plan in excess of the minimum amount that was required to be contributed pursuant to Chapter 112. In this report, the excess contributions are referred to as an "advance employer contribution." As of October 1, 2016, the advance employer contribution is \$55,816 as shown in Table II-F.

The City may apply all or any portion of the advance employer contribution towards the minimum required contribution for the 2016/17 plan year or for any later plan year. The minimum required contribution for that plan year will be reduced dollar-for-dollar by the amount of the advance employer contribution that is applied in this manner.

Alternatively, at any time, the City may apply all or any portion of the advance employer contribution as an <u>extra</u> contribution in excess of the minimum required contribution. In this case, the immediate application of the entire balance of the advance employer contribution as of October 1, 2016 would reduce the normal cost rate to 1.38% of payroll and would reduce the minimum required contribution for the 2016/17 plan year to 1.44% of payroll.

#### Contents of the Report

Tables I-D through I-G provide a detailed breakdown of various liability amounts by type of benefit and by participant group. Tables II-A through II-F provide information concerning the assets of the trust fund. Tables III-A through III-G provide statistical information concerning the plan's participant population. In particular, Table III-G gives a 10-year projection of the cash that is expected to be required from the trust fund in order to pay benefits to the current group of participants. Finally, Tables IV-A through V-B provide a summary of the actuarial assumptions and methods that are used to value the plan's benefits and of the relevant plan provisions as of October 1, 2016, as well as a summary of the changes that have occurred since the previous valuation report was prepared.



#### Assumption Change

Pursuant to the requirements of State law, the mortality basis has been changed from a 2015 projection of the RP-2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Blue Collar Mortality Table. This change increased the minimum required contribution for the 2016/17 plan year by 0.11% of payroll.

#### Certification

This actuarial valuation was prepared 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 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 change in plan costs or required contribution rates have been taken into account in the valuation.

For the firm.

3**.**....

Charl J. Cm

Charles T. Carr Consulting Actuary Southern Actuarial Services Company, Inc.

Enrolled Actuary No. 17-04927

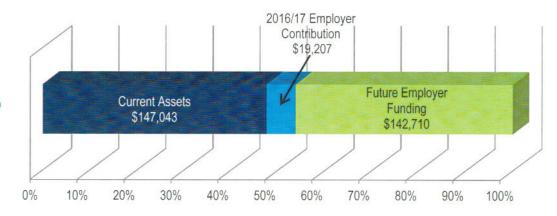
The individual above is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.



# Minimum Required Contribution

# Table I-A

**Funding Source** 



#### For the 2016/17 Plan Year

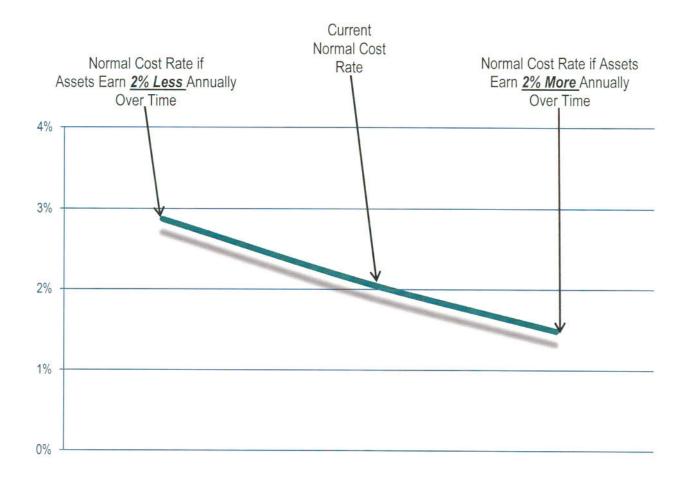
\$18,415 \$792 \$19,207 ÷ \$875,892
\$792
\$792
x \$875,892
= 2.1024%
÷ \$7,701,603
\$161,917
\$0
(\$147,043)
\$0
\$308,960

(The actual contribution should be based on the minimum required contribution rate multiplied by the actual payroll for the year.)



# Sensitivity Analysis

Table I-B



The line above illustrates the sensitivity of the normal cost rate to changes in the long-term investment return.



# Gain and Loss Analysis

Table I-C

Previous normal cost rate	2.29%
Increase (decrease) due to investment gains and losses Increase (decrease) due to demographic experience	-0.06% -0.24%
Increase (decrease) due to plan amendments Increase (decrease) due to actuarial assumption changes Increase (decrease) due to actuarial method changes	0.00% 0.11% 0.00%
Current normal cost rate	2.10%



# Present Value of Future Benefits

Table I-D

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants Retirement benefits Termination benefits Disability benefits	\$140,039 \$0 \$0	\$140,039 \$0 \$0	\$144,439 \$0 \$0
Death benefits Refund of employee contributions	\$0 \$0	\$0 \$0	\$0 \$0
Sub-total	\$140,039	\$140,039	\$144,439
<u>Deferred Vested Participants</u> Retirement benefits	\$22,800	\$22,800	\$23,437
Termination benefits Disability benefits	\$0 \$0	\$0 \$0	\$0 \$0
Death benefits Refund of employee contributions	\$0 \$0	\$0 \$0	\$0 \$0
Sub-total	\$22,800	\$22,800	\$23,437
Due a Refund of Contributions	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
Retired Participants	4407.000	A.0= 000	****
Service retirements Disability retirements	\$137,393 \$0	\$137,393 \$0	\$141,084 \$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants Sub-total	\$0 <b>\$137,393</b>	\$0 <b>\$137,393</b>	\$0 <b>\$141,084</b>
Grand Total	\$300,232	\$300,232	\$308,960
Present Value of Future Payroll	\$7,701,603	\$7,701,603	\$7,701,603
Present Value of Future Employee Contribs.  Present Value of Future Employer Contribs.	\$0 \$153,189	\$0 \$153,189	\$0 \$161,917



# Present Value of Accrued Benefits

Table I-E

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
	Wo / Moriamon	W / World World	W / W O M O M O M O M O M O M O M O M O M O
Actively Employed Participants			
Retirement benefits	\$92,720	\$92,720	\$95,361
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$92,720	\$92,720	\$95,361
Deferred Vested Participants			
Retirement benefits	\$22,800	\$22,800	\$23,437
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$22,800	\$22,800	\$23,437
Due a Refund of Contributions	\$0	\$0	\$0
Deferred Beneficiaries	\$0	\$0	\$0
Retired Participants			
Service retirements	\$137,393	\$137,393	\$141,084
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$137,393	\$137,393	\$141,084
Grand Total	<u>\$252,913</u>	\$252,913	\$259,882
Funded Percentage	80.21%	80.21%	78.06%

(Note: Funded percentage is equal to the ratio of the usable portion of the market value of assets divided by the present value of accrued benefits.)



# Present Value of Vested Benefits

Table I-F

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	\$92,720	\$92,720	\$95,361
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$92,720	\$92,720	\$95,361
Deferred Vested Participants			
Retirement benefits	\$22,800	\$22,800	\$23,437
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$22,800	\$22,800	\$23,437
Due a Refund of Contributions	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
Retired Participants			
Service retirements	\$137,393	\$137,393	\$141,084
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$137,393	\$137,393	\$141,084
Grand Total	<u>\$252,913</u>	<u>\$252,913</u>	\$259,882



# Entry Age Normal Accrued Liability

Table I-G

	Old Assumptions w/o Amendment	Old Assumptions w/ Amendment	New Assumptions w/ Amendment
Actively Employed Participants			
Retirement benefits	\$97,476	\$97,476	\$100,269
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$97,476	\$97,476	\$100,269
Deferred Vested Participants			
Retirement benefits	\$22,800	\$22,800	\$23,437
Termination benefits	\$0	\$0	\$0
Disability benefits	\$0	\$0	\$0
Death benefits	\$0	\$0	\$0
Refund of employee contributions	\$0	\$0	\$0
Sub-total	\$22,800	\$22,800	\$23,437
Due a Refund of Contributions	\$0	\$0	\$0
<u>Deferred Beneficiaries</u>	\$0	\$0	\$0
Retired Participants			
Service retirements	\$137,393	\$137,393	\$141,084
Disability retirements	\$0	\$0	\$0
Beneficiaries receiving	\$0	\$0	\$0
DROP participants	\$0	\$0	\$0
Sub-total	\$137,393	\$137,393	\$141,084
Grand Total	\$257,669	\$257,669	\$264,790



### Actuarial Value of Assets

### Table II-A

Market Value of Assets as of October 1, 2016

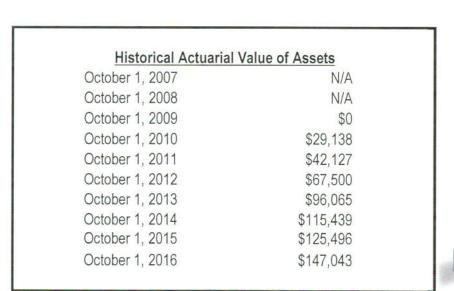
\$202,859

Minus advance employer contributions

(\$55,816)

Actuarial Value of Assets as of October 1, 2016

\$147,043



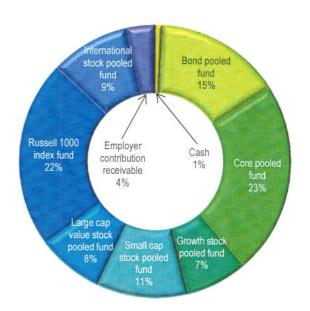


### Market Value of Assets

### Table II-B

#### As of October 1, 2016

Market Value of Assets	\$202,859
Cash	\$1,565
Bond pooled fund	\$30,520
Core pooled fund	\$46,562
Growth stock pooled fund	\$14,868
Small cap stock pooled fund	\$22,107
Large cap value stock pooled fund	\$16,042
Russell 1000 index fund	\$44,801
International stock pooled fund	\$19,173
Employer contribution receivable	\$7,221



#### Historical Market Value of Assets October 1, 2007 N/A October 1, 2008 N/A October 1, 2009 \$0 October 1, 2010 \$29,138 October 1, 2011 \$46,386 October 1, 2012 \$71,633 October 1, 2013 \$100,198 October 1, 2014 \$120,128 October 1, 2015 \$173,381 October 1, 2016 \$202,859



Investment Return Table II-C



	Market	Actuarial	
Plan	Value	Value	Assumed
Year	Return	Return	Return
2006/07	N/A	N/A	N/A
2007/08	N/A	N/A	N/A
2008/09	N/A	N/A	N/A
2009/10	0.00%	0.00%	7.50%
2010/11	-7.12%	-7.53%	7.50%
2011/12	14.27%	15.45%	7.50%
2012/13	10.85%	11.43%	7.50%
2013/14	7.88%	8.23%	7.00%
2014/15	-1.17%	-1.43%	7.00%
2015/16	7.78%	10.90%	7.00%
7yr. Avg.	4.40%	5.00%	7.29%



Asset Reconciliation		Table II-D
	Market Value	Actuarial Value
As of October 1, 2015	\$173,381	\$125,496
Increases Due To:		
Employer Contributions	\$35,117	\$35,117
Employee Contributions Service Purchase Contributions Total Contributions	\$0 \$0 \$35,117	\$0 \$0 \$35,117
Interest and Dividends Realized Gains (Losses) Unrealized Gains (Losses) Total Investment Income	\$0 \$0 \$14,089 \$14,089	\$14,089
Other Income	\$0	
Total Income	\$49,206	\$49,206
Decreases Due To:		
Annual Benefit Payments Refund of Employee Contributions	(\$12,180) \$0	(\$12,180) \$0
Total Benefit Payments	(\$12,180)	(\$12,180)
Investment Expenses Administrative Expenses	\$0 (\$7,548)	(\$7,548)
Advance Employer Contribution		(\$7,931)
Total Expenses	(\$19,728)	(\$27,659)
As of October 1, 2016	\$202,859	\$147,043



# Historical Trust Fund Detail

Table II-E

In	~	-	m	
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	v	•		~

			Service		Realized	Unrealized	
Employer	Chapter	Employee	Purchase	Interest /	Gains I	Gains /	Other
Contribs.	Contribs.	Contribs.	Contribs.	Dividends	Losses	Losses	Income
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
\$36,398	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$40,367	\$0	\$0	\$0	\$0	\$0	-\$2,787	\$0
\$27,298	\$0	\$0	\$0	\$0	\$0	\$7,860	\$0
\$28,747	\$0	\$0	\$0	\$0	\$0	\$8,839	\$0
\$26,298	\$0	\$0	\$0	\$0	\$0	\$8,356	\$0
\$68,454	\$0	\$0	\$0	\$0	\$0	-\$1,731	\$0
\$35,117	\$0	\$0	\$0	\$0	\$0	\$14,089	\$0
	Contribs.  N/A  N/A  N/A  \$36,398  \$40,367  \$27,298  \$28,747  \$26,298  \$68,454	Contribs.         Contribs.           N/A         N/A           N/A         N/A           N/A         N/A           N/A         N/A           \$36,398         \$0           \$40,367         \$0           \$27,298         \$0           \$28,747         \$0           \$26,298         \$0           \$68,454         \$0	Contribs.         Contribs.         Contribs.           N/A         N/A         N/A           N/A         N/A         N/A           N/A         N/A         N/A           N/A         N/A         N/A           \$36,398         \$0         \$0           \$40,367         \$0         \$0           \$27,298         \$0         \$0           \$28,747         \$0         \$0           \$26,298         \$0         \$0           \$68,454         \$0         \$0	Contribs.         Contribs.         Contribs.         Contribs.           N/A         N/A         N/A         N/A           N/A         N/A         N/A         N/A           N/A         N/A         N/A         N/A           \$36,398         \$0         \$0         \$0           \$40,367         \$0         \$0         \$0           \$27,298         \$0         \$0         \$0           \$28,747         \$0         \$0         \$0           \$26,298         \$0         \$0         \$0           \$68,454         \$0         \$0         \$0	Employer Contribs.         Contribs.         Contribs.         Contribs.         Contribs.         Dividends           N/A         N/A         N/A         N/A         N/A         N/A           N/A         N/A         N/A         N/A         N/A         N/A           N/A         N/A         N/A         N/A         N/A         N/A           \$36,398         \$0         \$0         \$0         \$0           \$40,367         \$0         \$0         \$0         \$0           \$27,298         \$0         \$0         \$0         \$0           \$28,747         \$0         \$0         \$0         \$0           \$26,298         \$0         \$0         \$0         \$0           \$68,454         \$0         \$0         \$0         \$0	Employer         Chapter         Employee         Purchase         Interest /         Gains /           Contribs.         Contribs.         Contribs.         Dividends         Losses           N/A         N/A         N/A         N/A         N/A           \$36,398         \$0         \$0         \$0         \$0           \$40,367         \$0         \$0         \$0         \$0           \$27,298         \$0         \$0         \$0         \$0           \$28,747         \$0         \$0         \$0         \$0           \$26,298         \$0         \$0         \$0         \$0           \$68,454         \$0         \$0         \$0         \$0	Employer Contribs.         Contribs.         Contribs.         Contribs.         Dividends         Losses         Losses           N/A         N/A

Expenses	Other Actuarial Adjustments

	Annual					Advance	
Plan	Benefit	Contrib.	Admin.	Invest.	DROP	Employer	
<u>Year</u>	<b>Payments</b>	Refunds	Expenses	Expenses	Credits	Contribs.	
2006/07	N/A	N/A	N/A	N/A	N/A	N/A	
2007/08	N/A	N/A	N/A	N/A	N/A	N/A	
2008/09	N/A	N/A	N/A	N/A	N/A	N/A	
2009/10	\$7,260	\$0	\$0	\$0	\$0	\$0	
2010/11	\$20,299	\$0	\$33	\$0	\$0	\$4,259	
2011/12	\$6,360	\$0	\$3,551	\$0	\$0	-\$126	
2012/13	\$7,875	\$0	\$1,146	\$0	\$0	\$0	
2013/14	\$8,460	\$0	\$6,264	\$0	\$0	\$556	
2014/15	\$12,230	\$0	\$1,240	\$0	\$0	\$43,196	
2015/16	\$12,180	\$0	\$7,548	\$0	\$0	\$7,931	

Note: Information was not available to separate the investment expenses from the investment income nor was information available to separate the investment income by source.



# Other Reconciliations

Table II-F

#### Advance Employer Contribution

Advance Employer Contribution as of October 1, 2015	\$47,885
Additional Employer Contribution	\$35,117
Minimum Required Contribution	(\$27,186)
Net Increase in Advance Employer Contribution	\$7,931
Advance Employer Contribution as of October 1, 2016	\$55,816

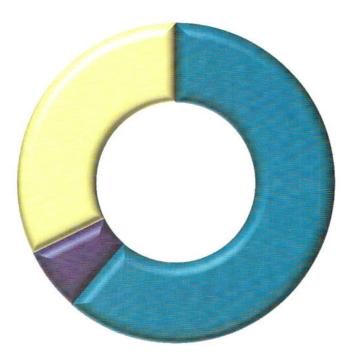


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# Summary of Participant Data

# Table III-A

As of October 1, 2016



Participant Distribution by Status

#### Actively Employed Participants Active Participants 19 **DROP** Participants 0 Inactive Participants **Deferred Vested Participants** 2 Due a Refund of Contributions 0 **Deferred Beneficiaries** 0 Participants Receiving a Benefit Service Retirements 10 **Disability Retirements** 0 Beneficiaries Receiving 0

**Total Participants** 

Number of Participants Included in Prior Valuations								
	Active	DROP	Inactive	Retired	Tot <b>al</b>			
October 1, 2007	N/A	N/A	N/A	N/A	N/A			
October 1, 2008	N/A	N/A	N/A	N/A	N/A			
October 1, 2009	19	0	1	6	26			
October 1, 2010	N/A	N/A	N/A	N/A	N/A			
October 1, 2011	19	0	1	5	25			
October 1, 2012	N/A	N/A	N/A	N/A	N/A			
October 1, 2013	19	0	2	7	28			
October 1, 2014	N/A	N/A	N/A	N/A	N/A			
October 1, 2015	19	0	2	10	31			
October 1, 2016	19	0	2	10	31			



# Data Reconciliation Table III-B

	<u>Active</u>	DROP	Deferred Vested	Due a Refund	Def. Benef.	Service Retiree	Disabled Retiree	Benef. Rec'v.	<u>Total</u>
October 1, 2015	19	0	2	0	0	10	0	0	31
Change in Status Re-employed									
Terminated Retired	(1)								(1)
Participation Ended Transferred Out Cashed Out Died									
Participation Began Newly Hired Transferred In New Beneficiary	1								1
Other Adjustment									
October 1, 2016	19	0	2	0	0	10	0	0	31

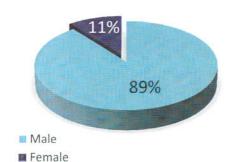


# Active Participant Data

### Table III-C

#### Gender Mix

#### As of October 1, 2016



Average Age
Average Service

Total Annualized Compensation for the Prior Year

Total Expected Compensation for the Current Year

Average Increase in Compensation for the Prior Year

Expected Increase in Compensation for the Current Year

41.9 years

8.6 years

\$1,094,311

\$875,892

12.77%

4.00%



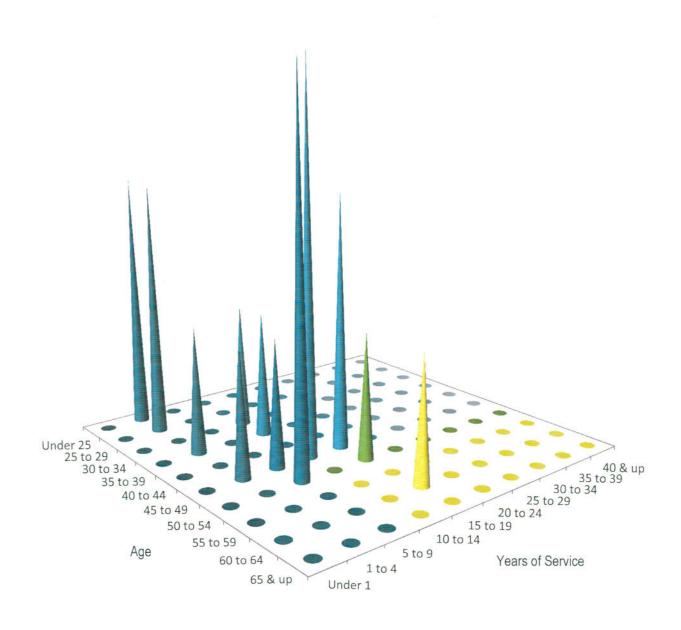
#### **Active Participant Statistics From Prior Valuations**

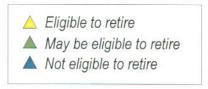
				Average	Average	
				Expected	Actual	
	Average	Average	Average	Salary	Salary	
	Age	Service	Salary	Increase	Increase	
October 1, 2007	N/A	N/A	N/A	N/A	N/A	
October 1, 2008	N/A	N/A	N/A	N/A	N/A	
October 1, 2009	43.1	8.3	\$52,411	N/A	N/A	
October 1, 2010	N/A	N/A	N/A	4.00%	14.43%	
October 1, 2011	44.4	10.3	\$59,203	4.00%	-0.93%	
October 1, 2012	N/A	N/A	N/A	4.00%	-8.75%	
October 1, 2013	42.3	9.2	\$50,453	4.00%	4.27%	
October 1, 2014	N/A	N/A	N/A	4.00%	1.06%	
October 1, 2015	40.9	7.6	\$51,012	4.00%	4.90%	
October 1, 2016	41.9	8.6	\$57,595	4.00%	12.77%	



# Active Age-Service Distribution

Table III-D







# Active Age-Service-Salary Table

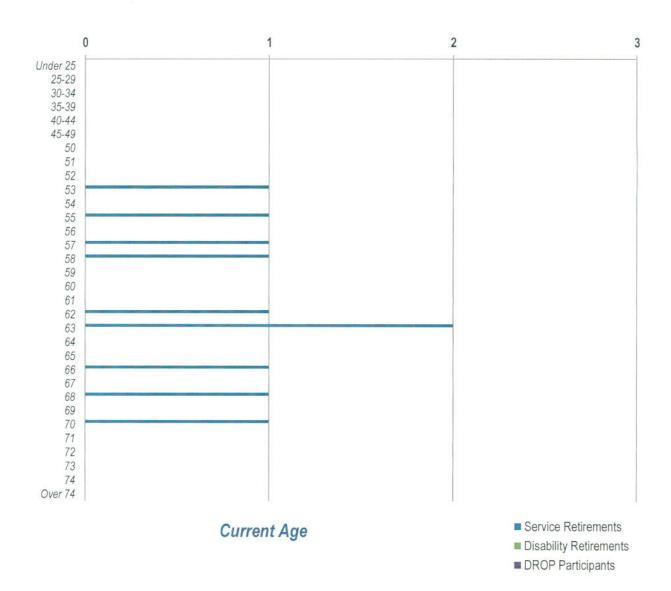
Table III-E

Attained					Complet	ed Years o	f Service				
Age	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
					9	2000					
Under 25	0	2	0	0	0	0	0	0	0	0	2
Avg.Pay	0	42,862	0	0	0	0	0	0	0	0	42,862
25 to 29	0	2	0	0	0	0	0	0	0	0	2
Avg.Pay	0	44,445	0	0	0	0	0	0	0	0	44,445
30 to 34	0	0	0	1	0	0	0	0	0	0	1
Avg.Pay	0	0	0	56,053	0	0	0	0	0	0	56,053
35 to 39	0	1	0	1	0	0	0	0	0	0	2
Avg.Pay	0	43,430	0	56,249	0	0	0	0	0	0	49,840
40 to 44	0	0	0					0	0	0	
Avg.Pay	<b>0</b> 0	<b>0</b> 0	0	<b>0</b> 0	<b>0</b> 0	0	<b>0</b> 0	<b>0</b> 0	<b>0</b>	0	0
Avg.ray	U	U	U	U	U	0	0	U	U	0	U
45 to 49	0	1	1	3	2	0	0	0	0	0	7
Avg.Pay	0	91,073	55,349	61,997	63,918	0	0	0	0	0	65,750
50 to 54	0	0	3	0	1	0	0	0	0	0	4
Avg.Pay	0	0	56,779	0	64,524	0	0	0	0	0	58,715
55 to 59	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
			7,000	1000	V-100	3007.43	***			1000	,
60 to 64	0	0	0	0	1	0	0	0	0	0	1
Avg.Pay	0	0	0	0	68,857	0	0	0	0	0	68,857
65 & up	0	0	0	0	0	0	0	0	0	0	0
Avg.Pay	0	0	0	0	0	0	0	0	0	0	0
Total	0	6	4	5	4	0	0	0	0	0	19
Avg.Pay	0	51,519	56,422	59,659	65,304	0	0	0	0	0	57,595



# Inactive Participant Data

# Table III-F



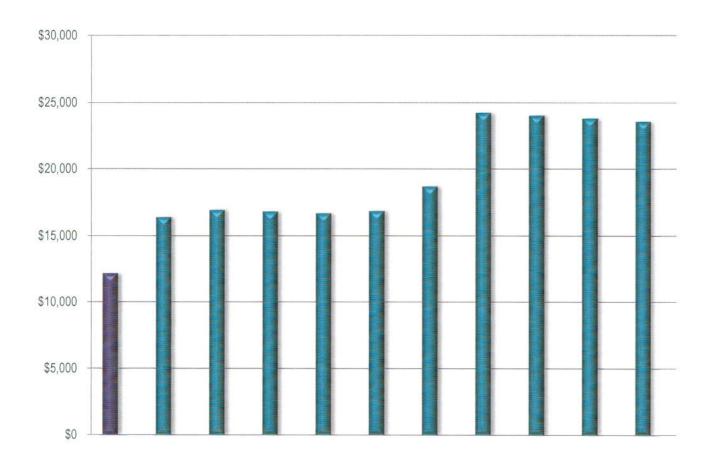
### Average Annual Benefit

Service Retirements	\$1,218.00
Disability Retirements	Not applicable
Beneficiaries Receiving	Not applicable
DROP Participants	Not applicable
Deferred Vested Participants	\$1,030.00
Deferred Beneficiaries	Not applicable



# Projected Benefit Payments

# Table III-G



For the period October 1, 2015 through September 30, 2016	\$12,180
<u>Projected</u>	
For the period October 1, 2016 through September 30, 2017	\$16,398
For the period October 1, 2017 through September 30, 2018	\$16,922
For the period October 1, 2018 through September 30, 2019	\$16,800
For the period October 1, 2019 through September 30, 2020	\$16,668
For the period October 1, 2020 through September 30, 2021	\$16,856
For the period October 1, 2021 through September 30, 2022	\$18,680
For the period October 1, 2022 through September 30, 2023	\$24,248
For the period October 1, 2023 through September 30, 2024	\$24,044
For the period October 1, 2024 through September 30, 2025	\$23,825
For the period October 1, 2025 through September 30, 2026	\$23,588



### Summary of Actuarial Methods and Assumptions

Table IV-A

NOTE: The following assumptions and methods have been selected and approved by the Board of Trustees based in part on the advice of the plan's enrolled actuary in accordance with the authority granted to the Board under the pension ordinances and State law.

#### 1. Actuarial Cost Method

Aggregate cost method. Under this actuarial cost method, a funding cost is developed for the plan as a level percentage of payroll. The level funding percentage is calculated as the excess of the total future benefit liability over accumulated assets and future employee contributions, with this excess spread over the expected future payroll for current active participants. The normal cost is equal to the level funding percentage multiplied by the expected payroll for the year immediately following the valuation date. The actuarial accrued liability is equal to the accumulated assets. Therefore, under the aggregate cost method, no unfunded accrued liability is developed.

#### 2. Asset Method

The actuarial value of assets is equal to the market value of assets.

#### 3. Interest (or Discount) Rate

7.00% per annum

#### Salary Increases

Compensation is assumed to increase at the rate of 4.00% per annum, unless actual plan compensation is known for a prior plan year.

#### 5. Decrements

Pre-retirement mortality: None is assumed.

Post-retirement mortality: Sex-distinct rates set forth in the RP-2000 Blue Collar Mortality Table, with

full generational improvements in mortality using Scale BB

Disability: None is assumed.

Termination: None is assumed.

Retirement: Retirement is assumed to occur at age 52.

#### Expenses

No explicit administrative expenses are assumed. The interest rate set forth in item 3. above is assumed to be net of investment expenses and commissions.



# Changes in Actuarial Methods and Assumptions

Table IV-B

Since the completion of the previous valuation, the mortality basis was changed from a 2015 projection of the RP-2000 Mortality Table for annuitants to a full generational projection using Scale BB of the RP-2000 Blue Collar Mortality Table as required by State law.

The following additional assumption and method changes were made during the past 10 years:

- (1) Effective October 1, 2013, the interest (or discount) rate was decreased from 7.50% per annum to 7.00% per annum.
- (2) Effective October 1, 2013, the mortality basis was changed from the RP-2000 Mortality Table for annuitants, projected to 2007 by Scale AA, to the RP-2000 Mortality Table for annuitants, projected to 2015 by Scale AA, both as published by the Internal Revenue Service (IRS) for purposes of Internal Revenue Code (IRC) section 430.



# Summary of Plan Provisions

Table V-A

#### Accrued Benefit

\$60.00 multiplied by Credited Service

(Note: The deferred vested participant is entitled to receive an additional \$500.00 annual benefit.)

#### 2. Normal Retirement Age and Benefit

Age

Age 52

Amount

Accrued Benefit payable annually as of each January 1

Form of Payment

Single life annuity

#### 3. Early Retirement Age and Benefit

\* Age

Age 50 with at least 10 years of service

\* Amount

Accrued Benefit payable annually as of each January 1

\* Form of Payment

Single life annuity

#### Participation Requirement

All police officers of the City of Indian Harbour Beach, Florida automatically become a participant in the plan on their date of hire.



# Summary of Plan Amendments

Table V-B

No significant plan changes have been adopted since the completion of the previous valuation.

The following additional plan amendments were adopted during the past 10 years and were reflected in prior valuation reports:

(1) The plan was amended to add an early retirement benefit at age 50 if the participant has earned at least 10 years of service.

