

CITY OF BOYNTON BEACH MUNICIPAL POLICE OFFICERS' RETIREMENT FUND ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2016

ANNUAL EMPLOYER CONTRIBUTION IS DETERMINED BY THIS VALUATION FOR THE PLAN YEAR ENDING SEPTEMBER 30,  $2018\,$ 



April 7, 2017

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

Dear Board Members:

The results of the October 1, 2016 Annual Actuarial Valuation of the City of Boynton Beach Municipal Police Officers' Retirement Fund are presented in this report.

The computed contribution rate shown on page 1 may be considered as a minimum contribution rate that complies with the Board's funding policy. Users of this report should be aware that contributions made at that rate do not guarantee benefit security. Given the importance of benefit security to any retirement system, we suggest that contributions to the System in excess of those presented in this report be considered.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report does not include a robust assessment of the risks of future experience not meeting the actuarial assumptions, as the assessment of these risks was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks that may have a material effect on the Plan's financial condition.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purpose of the valuation is to measure the System's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2018, and to determine the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67. This report also includes estimated GASB Statement No. 67 information for the fiscal year ending September 30, 2017. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The findings in this report are based on data or other information through September 30, 2015. 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. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The valuation was based upon information furnished by the Plan Administrator concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator.

In addition, this report was prepared using assumptions approved by the Board as described in the section of this report entitled Actuarial Assumptions and Methods.

In addition, this report was prepared using certain assumptions approved by the Board and prescribed by the Florida Statues as described in the section of this report entitled Actuarial Assumptions and Cost Methods. The prescribed assumptions are the assumed mortality rates detailed in the Actuarial Assumptions and Cost Methods section in accordance with Florida House Bill 1309 (codified in Chapter 2015-157).

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

Peter N. Strong and Jeffrey Amrose are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

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 our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. 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.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

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Peter N. Strong, FSA, FCA, MAAA Enrolled Actuary No. 17-06975 Bv

Jeffrey Amrose, MAAA

Enrolled Actuary No. 17-06599



## TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
$\mathbf{A}$	Discussion of Valuation Results	1
	Chapter Revenue	5
В	Valuation Results	
	1. Participant Data	6
	2. Actuarially Determined Employer	
	Contribution (ADEC)	7
	3. Actuarial Value of Benefits & Assets	8
	<ol><li>Calculation of Employer Normal Cost</li></ol>	9
	5. Liquidation of the Unfunded Frozen	
	Actuarial Accrued Liability	10
	<ol><li>Actuarial Gains and Losses</li></ol>	11
	7. Actual Compared to Expected Decrements	17
	8. Supplemental Pension Distribution	18
	<ol><li>Recent History of Valuation Results</li></ol>	19
	<ol><li>Recent History of Required and</li></ol>	
	Actual Contributions	20
	11. Actuarial Assumptions and Cost Method	21
	12. Glossary of Terms	26
C	Pension Fund Information	
	1. Summary of Assets	29
	2. Summary of Fund's Income and Disbursements	30
	3. Calculation of Actuarial Value of Assets	31
	4. Reconciliation of DROP Accounts	32
	5. Investment Rate of Return	33
D	Financial Accounting Information	
	1. FASB No. 35	34
	3. GASB No. 67	35
E	Miscellaneous Information	
	1. Reconciliation of Membership Data	41
	2. Age/Service/Salary Distributions	42
F	Summary of Plan Provisions	44

## SECTION A DISCUSSION OF VALUATION RESULTS

#### DISCUSSION OF VALUATION RESULTS

## **Comparison of Required Employer Contributions**

A comparison of the required employer contribution developed in this and the last actuarial valuation is shown below. The contribution policy of the City is to contribute the dollar amount determined by multiplying the required percentage of payroll determined as of the valuation date by the projected pensionable payroll for the year.

		For FYE 9/30/18 Based on 10/1/2016 Valuation		r FYE 9/30/17 Based on 10/1/2015 Valuation	Increase (Decrease)
Required Employer/State Contribution As % of Covered Payroll	\$	5,820,145 51.64 %	\$	5,256,615 43.16 %	\$ 563,530 8.48 %
Estimated State Contribution As % of Covered Payroll	\$	465,087 4.13 %	\$	465,087 3.82 %	\$ 0 0.31 %
Required Employer Contribution As % of Covered Payroll	\$	5,355,058 47.51 %	\$	4,791,528 39.34 %	\$ 563,530 8.17 %

The required employer contribution has been computed under the assumption that the amount to be received from the State next year will be at least \$465,087. The City may not take credit for State revenue in excess of \$465,087. If the next payment from the State falls below \$465,087, the City must raise its contribution by the difference.

The employer contribution listed above is for the City's fiscal year ending September 30, 2018 and has been calculated assuming the employer contribution is made on October 1, 2017. The actual City contribution for the fiscal year ending September 30, 2016 was \$4,391,305, which equals the required contribution.

### **Revisions in Benefits**

There have been no revisions in benefits since the last valuation. However, this is the first actuarial valuation in which there are members hired on or after October 1, 2015 (with the reduced benefit multiplier) being valued. Since these new members are very early in their career, the impact on the required contribution is minimal at this time.

## **Revisions in Actuarial Assumptions and Methods**

The investment return assumption has been lowered from 7.75% to 7.5% since the prior valuation.

Additionally, the Florida Retirement System (FRS) revised their mortality assumption for preretirement mortality (for active members) in their July 1, 2016 actuarial valuation. All Florida municipal pension plans are now required to use the same mortality assumptions as FRS, so we have made the same adjustment to pre-retirement mortality rates in this actuarial valuation. The Board approved use of the mortality assumption used by the FRS effective with the October 1, 2015 valuation. Since that valuation, FRS has made adjustments to their pre-retirement mortality assumption for active members in their most recent valuation as of July 1, 2016.

The combined effect of these assumption changes was an increase in the required employer contribution rate of 2.68% of covered payroll (\$302,052).

## **Actuarial Experience**

There was a net actuarial experience gain of \$2,092,313 for the year, which means that actual experience was more favorable than expected. The actuarial gain was primarily due to the recognized investment experience on the actuarial value of assets, which was greater than the assumed rate of returns, and lower than expected salary increases. The return on the actuarial value of assets was 9.30% versus 7.75% expected. The return on the market value of assets was 10.56%. Average salary increases were 1.5%, versus 5.7% expected.

The net actuarial gain for the year caused a decrease in the annual required employer contribution of 1.28% of covered payroll (or \$144,264).

## **Funded Ratio**

The funded ratio is 64.4% as of October 1, 2016 compared to 63.3% as of October 1, 2015. Prior to recognizing the changes in assumptions described above, the funded ratio as of October 1, 2016 would have been 66.2%. The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued liability.

### **Analysis of Change in Employer Contribution**

The components of change in the required employer contribution are as follows:

Contribution Rate Last Year	39.34 %
Actuarial Experience	(1.28)
Change in Administrative Expense	0.23
Amortization Payment on UAL	7.19
Change in State Contribution	(0.31)
Change in Normal Cost Rate	(0.34)
Change in Assumptions and Methods	2.68
Contribution Rate This Year	47.51

According to the Florida Administravitve Code (Statute 112.64), the payroll growth assumption may not exceed the average payroll growth during the last ten years. The ten-year average rate this year is 1.76% compared to the assumed rate of 4.0%. Using a 1.76% payroll growth assumption instead of 4.0% in the amortization of the Unfunded Actuarial Liability (UAL) caused an increase in the annual required employer contribution rate of 4.35% of Covered Payroll (or \$430,456).

#### **Required Contributions in Later Years**

The current calculated City contribution requirement is 47.51% of payroll starting October 1, 2017. It is important to keep in mind that under the asset smoothing method, gains and losses are recognized over five years. As of September 30, 2016, the market value of assets exceeded the actuarial value of assets by \$220,141. Once all the gains and losses through September 30, 2016 are fully recognized in the actuarial asset values, the contribution rate will decrease by roughly 0.13% of payroll before any other changes are taken into account, unless there are offsetting gains.

Another important factor to consider is the annual payment on the UAL. This payment is computed as a level percentage of covered payroll under the assumption that covered payroll will rise by 1.76% per year (as limited under Florida Statute 112.64). According to Florida Statute 112.64, this payroll growth assumption

may not exceed the average actual payroll growth during the last ten years, which is currently 1.76%. Therefore, the UAL is being amortized with a 1.76% payroll growth assumption. Over the next few years, the ten-year average payroll growth rate is expected to continue declining due to flat or negative payroll increases in recent years, which will put upward pressure on the city contribution rate. If the payroll growth assumption was 0.0%, the city contribution rate would increase by approximately 4.1% of covered payroll (approximately \$458,000).

## **Relationship to Market Value**

If Market Value had been the basis for the valuation, the City contribution rate would have been 47.38% (\$5,340,406) for the fiscal year ending September 30, 2018 and the funded ratio would have been 64.5%. The funded ratio on a market value basis was 62.6% last year.

## **Conclusion**

The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.

## **CHAPTER REVENUE**

Increments in Chapter revenue over that received in 1998 must first be used to fund the cost of compliance with minimum benefits. Once minimums are met, any subsequent additional Chapter revenue must be used to provide extra benefits.

As of the valuation date, all minimum Chapter requirements have been met.

Actuarial Confirmation of the Use of State Chapter Money			
Base Amount Previous Plan Year	\$ 465,087		
2. Amount Received for Previous Plan Year	735,945		
3. Benefit Improvements Made in Previous Plan Year	0		
4. Excess Funds for Previous Plan Year: (2) - (1) - (3)	270,858		
5. Accumulated Excess at Beginning of Previous Year	94,604		
6. Prior Excess Used in Previous Plan Year	207,333		
7. Accumulated Excess as of Valuation Date (Available for Benefit Improvements)	158,129		
8. Base Amount This Plan Year	465,087		

## SECTION B VALUATION RESULTS

PARTICIPANT DATA					
	October 1, 2016 October 1, 2015				
ACTIVE MEMBERS					
Number		133		137	
Covered Annual Payroll	\$	11,075,682	\$	11,774,623	
Average Annual Payroll	\$	83,276	\$	85,946	
Average Age		38.1		39.2	
Average Past Service		10.1		10.6	
Average Age at Hire		28.0		28.6	
RETIREES & BENEFICIARIES & D	ROP				
Number		113		106	
Annual Benefits	\$	5,444,487	\$		
Average Annual Benefit	\$	48,181	\$	47,677	
Average Age		59.4		58.9	
DISABILITY RETIREES			<u> </u>		
Number		14		14	
Annual Benefits	\$	305,130	\$	305,130	
Average Annual Benefit	\$	21,795	\$	21,795	
Average Age		63.4		62.4	
TERMINATED VESTED MEMBERS	S				
Number		20		10	
Annual Benefits	\$	515,393	\$	234,356	
Average Annual Benefit	\$	25,770	\$	23,436	
Average Age	Ψ	39.3	Ψ	36.5	

ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC)				
A. Valuation Date	October 1, 2016 Current Assumption (7.5% Interest FRS Mortality Adjustment)		October 1, 2015	
B. ADEC to Be Paid During Fiscal Year Ending	9/30/2018	9/30/2018	9/30/2017	
C. Assumed Date of Employer Contrib.	10/1/2017	10/1/2017	10/1/2016	
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 3,304,156	\$ 3,152,537	\$ 2,656,247	
E. Employer Normal Cost	2,415,066	2,269,615	2,425,913	
F. ADEC if Paid on the Valuation Date: D+E	5,719,222	5,422,152	5,082,160	
G. ADEC Adjusted for Frequency of Payments	5,719,222	5,422,152	5,082,160	
H. ADEC as % of Covered Payroll	51.64 9	48.96 %	43.16 %	
Assumed Rate of Increase in Covered     Payroll to Contribution Year	1.76 %	% 1.76 %	N/A %	
J. Covered Payroll for Contribution Year	11,270,614	11,270,614	12,179,367 *	
K. ADEC for Contribution Year: H x J	5,820,145	5,518,093	5,256,615	
L. Estimate of State Revenue in Contribution Year	465,087	465,087	465,087	
M. Actuarially Determined Employer Contribution (ADEC) in Contribution Year	5,355,058	5,053,006	4,791,528	
N. ADEC as % of Covered Payroll in Contribution Year: M ÷ J	47.51 9	44.83 %	39.34 %	

<sup>\*</sup>Estimate provided by the City, but adjusted to reflect average overtime during the last three years.

ACTUARIAL VALUE OF BENEFITS AND ASSETS					
A. Valuation Date	October 1, 2016 Current Assumptions (7.5% Interest FRS Mortality Adjustment)	October 1, 2016 Prior Assumptions (7.75% Interest)	October 1, 2015		
B. Actuarial Present Value of All Projected     Benefits for     1. Active Members					
a. Service Retirement Benefits b. Vesting Benefits c. Disability Benefits d. Preretirement Death Benefits e. Return of Member Contributions f. Total	\$ 63,744,228 2,238,784 3,446,196 945,933 50,714 70,425,855	\$ 59,759,039 2,116,550 3,279,253 1,933,235 51,797 67,139,874	\$ 63,650,705 2,335,667 3,651,662 2,140,193 34,565 71,812,792		
Inactive Members     a. Service Retirees & Beneficiaries     b. Disability Retirees     c. Terminated Vested Members     d. Total	62,894,950 2,807,155 4,082,598 69,784,703	61,456,152 2,753,996 3,920,536 68,130,684	57,155,204 2,793,859 1,655,681 61,604,744		
Total for All Members     C. Actuarial Accrued (Past Service)     Liability	140,210,558 113,697,993	135,270,558 110,600,284	133,417,536 106,464,806		
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	102,633,140	99,964,824	94,104,420		
E. Plan Assets 1. Market Value 2. Actuarial Value F. Unfunded Actuarial Accrued	73,386,776 73,166,635	73,386,776 73,166,635	66,678,188 67,380,705		
Liability: C - E2  G. Actuarial Present Value of Projected	40,531,358	37,433,649	39,084,101		
Covered Payroll H. Actuarial Present Value of Projected Member Contributions	97,850,497 6,849,535	95,648,728 6,695,411	102,461,195 7,172,284		
I. Accumulated Contributions of Active Members	6,662,803	6,662,803	7,050,516		

ENTRY AGE NORMAL METHOD CALCULATION OF EMPLOYER NORMAL COST				
A. Valuation Date     B. Normal Cost for	October 1, 2016 Current Assumptions (7.5% Interest FRS Mortality Adjustment)	October 1, 2016  Prior Assumptions (7.75% Interest)	October 1, 2015	
<ol> <li>Service Retirement Benefits</li> <li>Vesting Benefits</li> <li>Disability Benefits</li> <li>Preretirement Death Benefits</li> <li>Return of Member Contributions</li> <li>Total for Future Benefits</li> <li>Assumed Amount for Administrative Expenses</li> <li>Total Normal Cost</li> </ol>	\$ 2,504,904	\$ 2,317,948	\$ 2,502,042	
	197,748	187,792	191,879	
	249,830	240,583	265,460	
	55,641	115,453	125,338	
	23,490	24,386	26,303	
	3,031,613	2,886,162	3,111,022	
	158,751	158,751	139,115	
	3,190,364	3,044,913	3,250,137	
<ul><li>C. Expected Member Contribution</li><li>D. Employer Normal Cost: B8-C</li><li>E. Employer Normal Cost as a % of Covered Payroll</li></ul>	775,298	775,298	824,224	
	2,415,066	2,269,615	2,425,913	
	21.81%	20.49%	20.60%	

## LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

UAAL Amortization Period and Payments						
Original UAAL				Current UAA	L	
Date Established	Type of Amortization Base	Amortization Period (Years)	Amount	Years Remaining	Amount	Payment
10/1/98	Fresh Start	30	\$ 1,331,353	12	\$ 1,386,650	\$ 153,495
10/1/99	Plan Amendment	30	1,656,722	13	1,765,544	184,845
10/1/00	Plan Amendment	30	185,619	14	199,981	19,916
10/1/01	Plan Amendment	30	46,601	15	51,296	4,883
10/1/04	Plan Amendment	30	1,166,935	18	1,344,546	114,396
10/1/05	Plan Amendment	30	2,985,574	19	3,461,694	285,481
10/1/05	Method/Assum Change	30	13,646,165	19	15,822,359	1,304,846
10/1/06	Experience Loss	30	2,307,394	20	2,686,206	215,269
10/1/07	Experience Loss	30	16,404	21	19,069	1,488
10/1/08	Experience Loss	30	3,582,504	22	4,127,230	314,384
10/1/09	Experience Loss	30	3,419,100	23	3,896,398	290,191
10/1/10	Experience Loss	30	1,404,570	24	1,580,462	115,277
10/1/11	Experience Loss	30	4,476,765	25	4,949,282	354,076
10/1/11	Assumption Change	30	1,634,520	25	1,807,040	129,277
10/1/12	Experience Gain	30	(2,249,576)	26	(2,422,450)	(170,216)
10/1/12	Assumption Change	30	412,194	26	443,870	31,189
10/1/12	Plan Amendment	30	(426,604)	26	(459,387)	(32,279)
10/1/13	Experience Gain	30	(794,394)	27	(843,857)	(58,311)
10/1/13	Assumption Change	30	430,545	27	457,354	31,603
10/1/14	Experience Gain	30	(2,463,259)	28	(2,569,754)	(174,825)
10/1/14	Assumption Change	30	461,268	28	481,210	32,738
10/1/15	Experience Loss	30	1,896,466	29	1,945,217	130,427
10/1/15	Assumption Change	30	(588,861)	29	(603,998)	(40,498)
10/1/16	Experience Gain	30	(2,092,313)	30	(2,092,313)	(138,400)
10/1/16	Assumption Change	30	3,097,709	30	3,097,709	204,904
			\$ 35,543,401		\$ 40,531,358	\$ 3,304,156

## **Amortization Schedule**

The UAAL is being amortized as a level percent of payroll over the number of years remaining in the amortization period. The expected amortization schedule is as follows:

Amortization Schedule				
Year	Expected UAAL			
2016 2017 2018 2019 2020	\$ 40,531,358 40,019,217 39,406,176 38,683,542 37,841,976			
2021 2026 2031 2036 2041	36,871,418 29,674,076 18,438,498 4,555,049 5,524			
2046	-			

## **ACTUARIAL GAINS AND LOSSES**

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. If significant long term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified. The net actuarial gain (loss) for the past year is computed as follows:

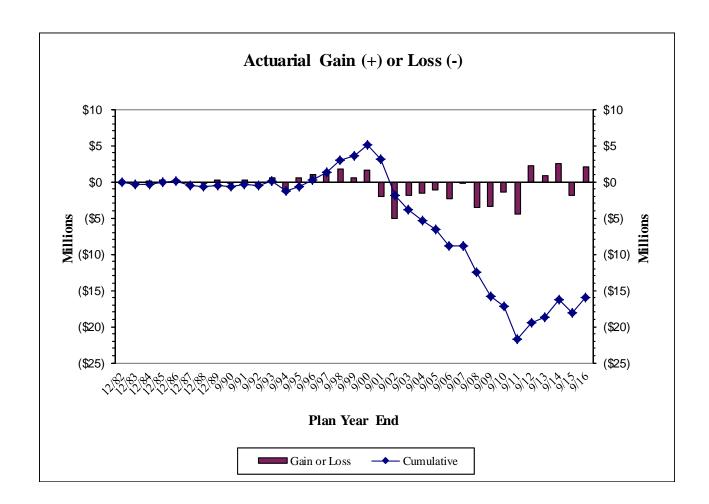
A. Derivation of the Current UAAL				
1. Last Year's UAAL	\$ 39,084,101			
2. Last Year's Employer Normal Cost	2,425,913			
3. Last Year's Contributions	4,856,392			
4. Interest at the Assumed Rate on:				
a. 1 and 2 for one year	3,217,026			
b. 3 from dates paid	344,686			
c. a - b	2,872,340			
5. This Year's Expected UAAL: 1+2-3+4c	39,525,962			
6. This Year's Actual UAAL (Before any				
changes in benefits and assumptions)	37,433,649			
7. Net Actuarial Gain (Loss): (5) - (6)	2,092,313			
8. Gain (Loss) due to investments	1,219,839			
9. Gain (Loss) due to other sources	872,474			

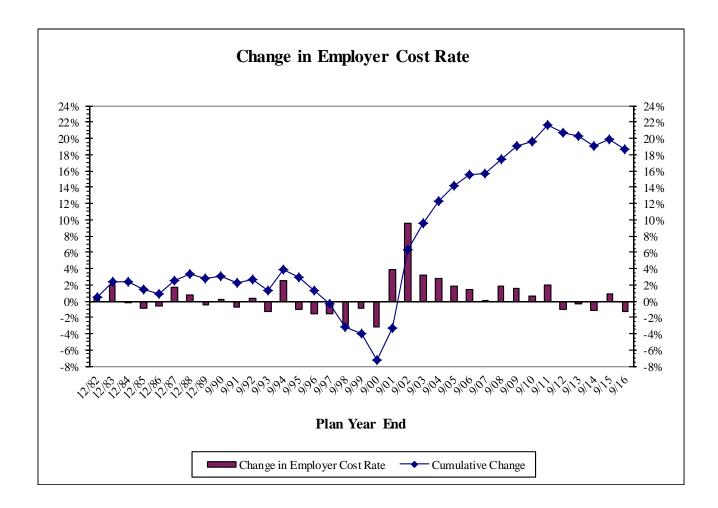
Net actuarial gains in previous years are detailed in the table on the next page.

## HISTORY OF NET ACTUARIAL GAINS AND LOSSES

Year Ended	Change in Employer Cost Rate *	Gain (Loss)
12/31/82	0.46 %	\$ (56,551)
12/31/83	1.92	(265,213)
12/31/84	(0.04)	6,977
12/31/85	(0.85)	185,443
12/31/86	(0.59)	158,678
12/31/87	1.67	(516,444)
12/31/88	0.74	(254,892)
12/31/89	(0.52)	206,590
9/30/90	0.24	(94,609)
9/30/91	(0.74)	286,744
9/30/92	0.35	(142,237)
9/30/93	(1.34)	564,365
9/30/94	2.57	(1,370,604)
9/30/95	(1.01)	574,379
9/30/96	(1.56)	938,153
9/30/97	(1.60)	1,008,362
9/30/98	(2.85)	1,694,077
9/30/99	(0.88)	568,386
9/30/00	(3.16)	1,596,887
9/30/01	3.92	(1,978,307)
9/30/02	9.58	(5,069,210)
9/30/03	3.22	(1,870,014)
9/30/04	2.75	(1,615,637)
9/30/05	1.85	(1,083,369)
9/30/06	1.46	(2,307,394)
9/30/07	0.02	(16,404)
9/30/08	1.84	(3,582,504)
9/30/09	1.54	(3,419,100)
9/30/10	0.66	(1,404,570)
9/30/11	1.98	(4,476,765)
9/30/12	(1.01)	2,249,576
9/30/13	(0.38)	794,394
9/30/14	(1.18)	2,463,259
9/30/15	0.86	(1,896,466)
9/30/16	(1.28)	2,092,313

<sup>\*</sup> Before 9/30/06, change in Employer Normal Cost.



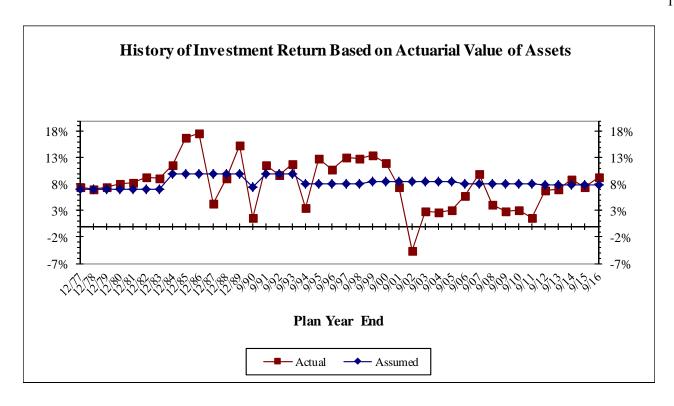


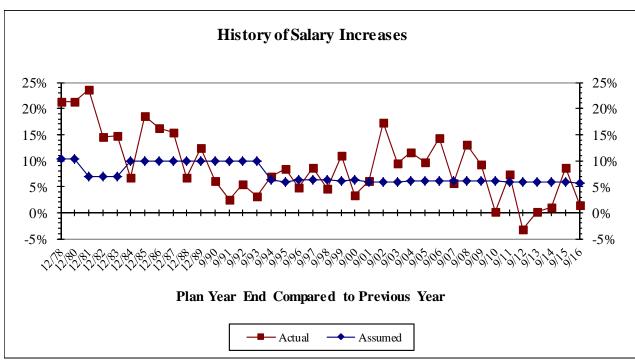
The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for the last few years:

## HISTORY OF INVESTMENT EARNINGS AND SALARY INCREASES

	Investme	nt Return	Salary	Increases
Year Ending	Actual	Assumed	Actual	Assumed
12/31/1977	7.5 %	7.00 %		
12/31/1978	7.1	7.00	18.3 %	10.3% (2 yrs)
12/31/1979	7.5	7.00		, ,
12/31/1980	8.0	7.00	21.2	10.3 (2 yrs)
12/31/1981	8.2	7.00	23.6	7.0
12/31/1982	9.3	7.00	14.6	7.0
12/31/1983	9.0	7.00	14.8	7.0
12/31/1984	11.5	10.00	6.8	10.0
12/31/1985	16.8	10.00	18.6	10.0
12/31/1986	17.6	10.00	16.3	10.0
12/31/1987	4.4	10.00	15.3	10.0
12/31/1988	9.0	10.00	6.7	10.0
12/31/1989	15.4	10.00	12.4	10.0
9/30/1990 (9 mos.)	1.7	7.50	6.1	10.0
9/30/1991	11.6	10.00	2.5	10.0
9/30/1992	9.7	10.00	5.4	10.0
9/30/1993	11.9	10.00	3.1	10.0
9/30/1994	3.5	8.00	7.0	6.3
9/30/1995	12.9	8.00	8.5	5.8
9/30/1996	10.8	8.00	4.9	6.3
9/30/1997	13.1	8.00	8.7	6.3
9/30/1998	12.9	8.00	4.6	6.3
9/30/1999	13.5	8.50	10.9	6.1
9/30/2000	12.1	8.50	3.4	6.3
9/30/2001	7.5	8.50	6.0	5.9
9/30/2002	(4.7)	8.50	17.2	5.9
9/30/2003	2.8	8.50	9.5	5.9
9/30/2004	2.6	8.50	11.5	6.0
9/30/2005	3.0	8.50	9.6	6.0
9/30/2006	5.7	8.00	14.4	6.0
9/30/2007	9.9	8.00	5.7	6.1
9/30/2008	4.2	8.00	13.1	6.1
9/30/2009	2.8	8.00	9.3	6.1
9/30/2010	3.0	8.00	0.2	6.1
9/30/2011	1.6	8.00	7.3	5.8
9/30/2012	6.9	7.75	(3.1)	5.9
9/30/2013	7.0	7.75	0.1	5.8
9/30/2014	8.9	7.75	1.0	5.8
9/30/2015	7.5	7.75	8.6	5.8
9/30/2016	9.3	7.75	1.5	5.7
Averages	8.0 %		8.5 %	

The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and the end of each year.





## Actual (A) Compared to Expected (E) Decrements Among Active Employees

Year Ended	Nun Add Dur Ye	ded ing		ice & COP ement		bility ement E	De A	ath E	Vested A	Termi Other	nations To	tals E	Active Members End of Year
Dided	A	15	A	15	A	IL.	A	112	A	A	A	E	Tear
9/30/2002	14	17	1	1	0	0	0	0	1	15	16	8	119
9/30/2003	14	9	6	4	0	0	0	0	1	2	3	9	124
9/30/2004	8	23	14	0	0	0	0	0	2	7	9	9	109
9/30/2005	21	14	1	1	0	0	0	0	3	10	13	8	116
9/30/2006	25	10	3	2	0	0	0	0	1	6	7	9	131
9/30/2007	17	4	3	3	0	0	0	0	0	1	1	11	144
9/30/2008	14	9	2	1	0	0	0	0	0	7	7	12	149
9/30/2009	8	6	3	7	0	0	0	0	0	3	3	11	151
9/30/2010	5	8	4	2	0	0	0	0	1	3	4	11	148
9/30/2011	5	9	5	4	0	0	0	0	2	2	4	10	144
9/30/2012	9	7	3	1	0	0	0	0	2	2	4	4	146
9/30/2013	5	10	3	1	0	0	0	0	4	3	7	7	141
9/30/2014	5	7	2	1	0	0	0	0	2	3	5	6	139
9/30/2015	9	11	3	2	1	0	0	0	4	3	7	4	137
9/30/2016	17	21	7	1	0	0	0	0	11	3	14	4	133
9/30/2017				3		0		0				5	
15 Yr Totals *	176	165	60	31	1	0	0	0	34	70	104	123	

<sup>\*</sup> Totals are through current Plan Year only.

SUPPLEMENTAL PENSION DISTRIBUTION

	Cumulative Actuarial Gains (Losses)						
Year Ending 9/30	Balance at Beginning of Year	Gain (Loss) for Year	Supplemental Payment	Balance at End of Year			
2000	\$ 0	\$ 1,596,887	\$ 0	\$ 1,596,887			
2001	1,596,887	(1,978,307)	0	(381,420)			
2002	(381,420)	(5,069,210)	0	(5,450,630)			
2003	(5,450,630)	(1,870,014)	0	(7,320,644)			
2004	(7,320,644)	(1,615,637)	0	(8,936,281)			
2005	(8,936,281)	(1,083,369)	0	(10,019,650)			
2006	(10,019,650)	(2,307,394)	0	(12,327,044)			
2007	(12,327,044)	(16,404)	0	(12,343,448)			
2008	(12,343,448)	(3,582,504)	0	(15,925,952)			
2009	(15,925,952)	(3,419,100)	0	(19,345,052)			
2010	(19,345,052)	(1,404,570)	0	(20,749,622)			
2011	(20,749,622)	(4,476,765)	0	(25,226,387)			
2012	(25,226,387)	2,249,576	0	(22,976,811)			
2013	(22,976,811)	794,394	0	(22,182,417)			
2014	(22,182,417)	2,463,259	0	(19,719,158)			
2015	(19,719,158)	(1,896,466)	0	(21,615,625)			
2016	(21,615,625)	2,092,313	0	(19,523,311)			

Under certain conditions, participants in payment status can receive a supplemental distribution per Section 18-177 of the Plan. The cumulative actuarial gain for plan years beginning after 9/30/1999 must be a positive amount for a supplemental payment to occur.

	RECENT HISTORY OF VALUATION RESULTS										
	Numl	er of					Actuarial			Employer No	rmal Cost
Valuation	Active	Inactive	Covered Annual	Act	tuarial Value		Accrued		Funded		% of
Date	Members	Members	Payroll		of Assets		Liability	UFAAL	Ratio	Amount	Payroll
10/1/00	124	56	\$ 6,907,740	\$	32,559,614	\$	33,726,879	\$ 1,167,265	96.5 %	\$ 464,164	6.72 %
10/1/01	122	75	6,555,316		34,331,760		37,715,963	3,384,203	91.0	726,204	11.08
10/1/02	119	75	7,382,088		32,133,373		40,604,148	8,470,775	79.1	1,538,895	20.85
10/1/03	124	81	7,917,021		33,206,438		44,029,168	10,822,730	75.4	1,935,704	24.45
10/1/04	109	94	7,207,008		34,495,794		48,154,162	13,658,368	71.6	2,043,434	28.35
10/1/05	116	96	7,836,390		35,445,474		56,691,347	21,245,873	62.5	1,238,339	15.80
10/1/06	131	100	9,302,405		37,691,909		61,468,267	23,776,358	61.3	1,441,317	15.49
10/1/07	144	103	10,296,812		41,981,125		66,068,756	24,087,631	63.5	1,587,552	15.42
10/1/08	149	104	11,532,888		44,277,726		72,349,643	28,071,917	61.2	1,774,031	15.38
10/1/09	151	107	12,537,968		46,116,985		78,055,403	31,938,418	59.1	1,931,395	15.40
10/1/10	148	109	12,134,525		48,129,593		81,957,204	33,827,611	58.7	1,895,893	15.62
10/1/11	144	113	12,397,266		49,115,728		89,656,412	40,540,684	54.8	2,126,920	17.16
10/1/12	146	116	11,789,237		52,594,653		91,924,429	39,329,776	57.2	2,114,509	17.94
10/1/13	141	122	11,302,523		56,693,338		95,951,447	39,258,109	59.1	2,132,984	18.87
10/1/14	139	123	11,142,832		62,320,013		99,965,363	37,645,350	62.3	2,214,983	19.88
10/1/15	137	130	11,774,623		67,380,705		106,464,806	39,084,101	63.3	2,425,913	20.60
10/1/16	133	147	11,075,682		73,166,635		113,697,993	40,531,358	64.4	2,415,066	21.81

	RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS									
	End of Required Contributions									
V-14	Year To Which	Employer	& State	Estimate	ed State	Net Em	ployer	Ac	tual Contribu	tions
Valuation	Valuation Applies	Amount	% of Payroll	Amount	% of Payroll	Amount	% of Payroll	Employer	State	Total
10/1/98	9/30/99	863,996	13.88	427,874	6.87	436,122	7.01	426,129	427,874	854,003
10/1/99	9/30/00	920,372	12.92	427,874	6.00	492,498	6.92	490,425	429,945	920,370
10/1/00	9/30/01	742,646	10.75	429,945	6.22	312,701	4.53	312,701	430,572	743,273
10/1/01	9/30/02	1,053,863	16.08	443,454	6.77	610,409	9.31	610,409	443,454	1,053,863
10/1/02	9/30/03	1,929,458	26.14	443,454	6.01	1,486,004	20.13	1,486,004	465,087	1,951,091
10/1/03	9/30/04	2,343,601	29.60	465,087	5.87	1,878,514	23.73	1,878,514	465,087	2,343,601
10/1/04	9/30/05	2,571,109	35.67	465,087	6.45	2,106,022	29.22	2,106,022	465,087	2,571,109
10/1/05	9/30/06	2,808,957	35.85	465,087	5.93	2,343,870	29.92	2,343,870	465,087	2,808,957
10/1/06	9/30/07	3,030,547	32.58	465,087	5.00	2,565,460	27.58	2,685,841	465,087	3,150,928
10/1/07	9/30/08	3,236,241	31.43	465,087	4.52	2,771,154	26.91	2,771,154	465,087	3,236,241
10/1/08	9/30/09	3,710,169	32.17	465,087	4.03	3,245,082	28.14	3,245,082	465,087	3,710,169
10/1/09	9/30/10	4,153,603	33.13	465,087	3.71	3,688,516	29.42	3,688,516	465,087	4,153,603
10/1/09	9/30/11	3,997,173	31.78	465,087	3.70	3,532,086	28.08	3,552,348	465,087	4,017,435
10/1/10	9/30/12	4,098,955	32.55	465,087	3.69	3,633,868	28.86	3,633,868	465,087	4,098,955
10/1/11	9/30/13	4,701,572	36.68	465,087	3.63	4,236,485	33.05	4,236,485	465,087	4,701,572
10/1/12	9/30/14	4,560,918	38.54	465,087	3.93	4,095,831	34.61	4,159,736	465,087	4,624,823
10/1/13	9/30/15	4,830,346	41.73	465,087	4.02	4,365,259	37.71	4,365,259	465,087	4,830,346
10/1/14	9/30/16	4,856,392	42.26	465,087	4.05	4,391,305	38.21	4,391,305	465,087	4,856,392
10/1/15	9/30/17	5,256,615	43.16	465,087	3.82	4,791,528	39.34	na	na	na
10/1/16	9/30/18	5,820,145	51.64	465,087	4.13	5,355,058	47.51	na	na	na

#### ACTUARIAL ASSUMPTIONS AND COST METHOD

#### **Valuation Methods**

**Actuarial Cost Method** - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement:
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

*Financing of Unfunded Actuarial Accrued Liabilities* - Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) percent-of-payroll contributions over a reasonable period of future years.

Actuarial Value of Assets - The Actuarial Value of Assets phase in the difference between the expected actuarial value and actual market value of assets at the rate of 20% per year. The Actuarial Value of Assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

## **Valuation Assumptions**

The actuarial assumptions used in the valuation are shown in this Section.

## **Economic Assumptions**

**The investment return rate** assumed in the valuation is 7.50% per year, compounded annually (net after investment expenses). This rate was 7.75% in the previous valuation.

The **Wage Inflation Rate** assumed in this valuation was 3% per year. The Wage Inflation Rate is defined to be the portion of total pay increases for an individual that are due to macro economic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

The assumed **real rate of return** over wage inflation is defined to be the portion of total investment return that is more than the assumed wage inflation rate. Considering other economic assumptions, the 7.50% investment return rate translates to an assumed real rate of return over wage inflation of 4.50%.

*The rates of salary increase* are as follows:

0/0	Increase	in	Salary
70	HICLEASE		Salarv

Age	Merit and Seniority	Base (Economic)	Total Increase
20	3.5%	3.0%	6.5%
25	3.5%	3.0%	6.5%
30	3.5%	3.0%	6.5%
35	3.5%	3.0%	6.5%
40	2.5%	3.0%	5.5%
45	2.0%	3.0%	5.0%
50	2.0%	3.0%	5.0%
55	2.0%	3.0%	5.0%

Projected service retirement benefits are increased to allow for the inclusion of unused sick and vacation pay in average final earnings. The increase amount is unique for each member based on the number of hours of accumulated sick and vacation time reported for each member as of June 18, 2013.

For purposes of financing the unfunded liabilities, total payroll is assumed to grow at 4% per year, but not exceeding the average annual increase over the most recent ten years. The most recent ten-year average is 1.76%.

## **Demographic Assumptions**

The mortality table is the RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Florida House Bill 1309.

FRS Healthy Post-Retirement Mortality for Special Risk Class Members

Sample	Probabil	lity of	<b>Future Life</b>		
<b>Attaine d</b>	Dying Ne	xt Year	Expectano	cy (years)	
Ages (in 2016)	Men	Women	Men	Women	
50	0.54 %	0.23 %	33.78	38.21	
55	0.67	0.32	29.14	33.19	
60	0.91	0.48	24.56	28.29	
65	1.32	0.75	20.17	23.56	
70	2.04	1.25	16.05	19.10	
75	3.31	2.12	12.34	15.04	
80	5.45	3.55	9.15	11.43	

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

Sample	Probabil	ity of	Future	Life
Attained	Dying Nex	xt Year	Expectano	ey (years)
Ages (in 2016)	Men	Women	Men	Women
50	0.23 %	0.15 %	34.77	38.56
55	0.39	0.24	29.65	33.42
60	0.72	0.40	24.77	28.40
65	1.24	0.71	20.21	23.58
70	2.04	1.25	16.05	19.10
75	3.31	2.12	12.34	15.04
80	5.45	3.55	9.15	11.43

This assumption is used to measure the probabilities of active members dying prior to retirement.

For disabled retirees, the mortality table used was 60% of the RP-2000 for Disabled Annuitants with ages set back 4 years for males and set forward 2 years for females, and 40% of the RP2000 Annuitant Mortality Table with a White Collar adjustment with no age setback, both with no provision being made for future mortality improvements. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Florida House Bill 1309.

FRS Disabled Mortality for Special Risk Class Members

Sample Attained	Probabil Dying Ne	•	Future Life Expectancy (years		
Ages (in 2016)	Men	Women	Men	Women	
50	1.67 %	0.91 %	23.74	27.06	
55	2.03	1.26	20.77	23.37	
60	2.47	1.67	17.91	19.90	
65	3.07	2.24	15.15	16.62	
70	3.90	3.18	12.52	13.58	
75	5.30	4.60	10.02	10.86	
80	7.59	6.66	7.80	8.48	

**The rates of retirement** used to measure the probability of eligible members retiring under early retirement is 5% per year. For normal retirement these rates are as follows:

Number of Years	
<b>After First Eligibility</b>	Probability of
for Normal Retirement	Normal Retirement
0	40 %
1	10 %
2	10 %
3	10 %
4	10 %
5	10 %
6	10 %
7	100 %

*Rates of separation from active membership* are as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability).

Years	Sample	% of Active Members
of Service	Ages	Separating Within Next Year
0 - 1	ALL	15.0%
1 - 2		10.0%
2 - 3		7.0%
3 - 4		5.0%
4 - 5		4.0%
At least 5	25	4.0%
	30	3.0%
	35	2.0%
	40	1.0%
	45	0.0%

Rates of disability among active members (90% of disabilities are assumed to be service connected).

Sample	% Becoming Disabled
Ages	within Next Year
20	0.14 %
25	0.15 %
30	0.18 %
35	0.23 %
40	0.30 %
4.5	0.51.0/
45	0.51 %
50	1.00 %
55	1.55 %

### **Miscellaneous and Technical Assumptions**

Administrative & Investment Expenses

The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the average of the prior two years' expenses. Assumed administrative expenses are added to the Normal Cost.

Benefit Service

Exact fractional service is used to determine the amount of benefit payable.

**Decrement Operation** 

Disability and mortality decrements operate during retirement eligibility.

**Decrement Timing** 

Decrements of all types are assumed to occur at the beginning of the year.

Eligibility Testing

Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

**Forfeitures** 

For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.

Incidence of Contributions

Employer contributions are assumed to be made at the beginning of the year effective October 1, 2011. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

Liability Load

Projected normal and early retirement benefits are loaded by a unique amount for each member to allow for the inclusion of unused sick and vacation pay in final average earnings. These individual loads are based on the number of hours of unused accumulated sick and vacation time reported for each member as of June 18, 2013.

Marriage Assumption

100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.

Normal Form of Benefit

A 10-year certain and life annuity is the normal form of benefit.

Pay Increase Timing

Middle of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

#### **GLOSSARY**

Actuarial Accrued Liability (AAL)

The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.

**Actuarial Assumptions** 

Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.

Actuarial Cost Method

A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.

Actuarial Equivalent

Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV)

The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.

Actuarial Present Value of Future Benefits (APVFB)

The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

Actuarial Valuation

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB, such as the Funded Ratio and the Actuarially Determined Contribution (ADEC).

Actuarial Value of Assets

The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the Actuarially Determined contribution (ADEC).

Actuarially Determined Contribution (ADEC)

The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB. The ADEC consists of the Employer Normal Cost and Amortization Payment.

Amortization Method

A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is

one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.

Amortization Payment

That portion of the plan contribution or ADEC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

**Amortization Period** 

The period used in calculating the Amortization Payment.

Closed Amortization Period

A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.

**Employer Normal Cost** 

The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

Equivalent Single Amortization Period For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.

Experience Gain/Loss

A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

Funded Ratio

The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

**GASB** 

Governmental Accounting Standards Board.

GASB No. 68 and GASB No. 67 These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.

Normal Cost

The annual cost assigned, under the Actuarial Cost Method, to the current plan year.

**Open Amortization Period** 

An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

Unfunded Actuarial Accrued Liability

The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.

Valuation Date

The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.

# SECTION C PENSION FUND INFORMATION

# SUMMARY OF ASSETS

		Septem	ber:	30
<ul> <li>6. DROP Loans</li> <li>7. Total Receivables</li> <li>C. Investments <ol> <li>Short-Term Investments</li> <li>Domestic Equities (Large cap defensive)</li> <li>Real Estate</li> <li>Multi-Asset Core Fund (Equities)</li> <li>Multi-Manager Bond Fund (Fixed Income)</li> <li>Total Investments</li> </ol> </li> <li>D. Liabilities and Reserves <ol> <li>Benefits Payable</li> <li>Accrued Expenses and Other Payables</li> <li>Total Liabilities and Reserves</li> </ol> </li> <li>E. Total Market Value of Assets Available for Benefits</li> <li>F. Reserves <ol> <li>State Contribution Reserve</li> <li>DROP Accounts</li> <li>Supplemental Benefit Reserve</li> </ol> </li> <li>G. Market Value Net of Reserves</li> <li>H. Allocation of Investments <ol> <li>Short-Term Investments</li> <li>Domestic Equities (Large cap defensive)</li> </ol> </li> </ul>		2016		2015
A. Cash and Cash Equivalents (Operating Cash)	\$	2,494	\$	8,692
B. Receivables:				
1. Member Contributions	\$	-	\$	-
2. Employer Contributions		-		-
3. State Contributions		-		-
4. Buy-Back Installment Payments		102,537		62,976
5. Receivables for Securities Sold plus Prepaid Expense	s	438,583		403,960
6. DROP Loans		298,294		299,439
7. Total Receivables	\$	839,414	\$	766,375
C. Investments				
1. Short-Term Investments	\$	-	\$	-
2. Domestic Equities (Large cap defensive)		22,077,962		20,005,118
3. Real Estate		6,759,760		6,259,818
4. Multi-Asset Core Fund (Equities)		33,038,093		29,668,247
5. Multi-Manager Bond Fund (Fixed Income)		23,733,809		21,709,238
6. Total Investments	\$	85,609,624	\$	77,642,421
D. Liabilities and Reserves				
1. Benefits Payable	\$	_	\$	-
2. Accrued Expenses and Other Payables		(146,905)		(144,804)
3. Total Liabilities and Reserves	\$	(146,905)	\$	(144,804)
E. Total Market Value of Assets Available for Benefits	\$	86,304,627	\$	78,272,684
F. Reserves				
1. State Contribution Reserve	\$	(158,129)	\$	(94,604)
2. DROP Accounts		(10,639,649)		(9,570,232)
3. Supplemental Benefit Reserve		(2,120,073)		(1,929,660)
	\$	(12,917,851)	\$	(11,594,496)
G. Market Value Net of Reserves	\$	73,386,776	\$	66,678,188
H. Allocation of Investments				
1. Short-Term Investments		0.00%		0.00%
2. Domestic Equities (Large cap defensive)		25.79%		25.77%
3. Real Estate		7.90%		8.06%
4. Multi-Asset Core Fund (Equities)		38.59%		38.21%
5. Multi-Manager Bond Fund (Fixed Income)		27.72%		27.96%
6. Total Investments		100.00%		100.00%

# PENSION FUND DISBURSEMENTS & INCOME

		Septem	ıber 3	30
Item		2016		2015
A. Market Value of Assets at Beginning of Year	\$	78,272,684	\$	76,341,372
B. Revenues and Expenditures				
1. Contributions				
a. Employee Contributions	\$	902,350	\$	924,289
b. Employer Contributions		4,391,305		4,365,259
c. State Contributions		735,945		675,227
d. Buy Back Contributions		25,803		116,586
e. Health Subsidy Contributions		-		-
f. DROP Rollover		109,362		78,814
g. Change in Value of Remaining Buy Back Payments		39,561		3,669
h. Total	\$	6,204,326	\$	6,163,844
2. Investment Income				
a. Interest, Dividends, and Other Income	\$	8,932	\$	10,164
b. Net Realized Gains/(Losses)		1,747,966		1,752,200
c. Net Unrealized Gain/(Losses)		7,074,131		243,898
d. Investment Expenses		(576,576)		(577,798)
e. Net Investment Income	\$	8,254,453	\$	1,428,464
3. Benefits and Refunds				
a. Refunds	\$	(93,339)	\$	(69,179)
b. Regular Monthly Benefits to Retirees		(5,321,881)		(4,426,102)
c. Supplemental Distributions and DROP Loans		(376,822)		(486,239)
d. DROP Distributions		(470,396)		(526,372)
e. Total	\$	(6,262,438)	\$	(5,507,892)
4. Administrative and Miscellaneous Expenses	\$	(164,398)	\$	(153,104)
5. Transfers	\$	-	\$	-
C. Market Value of Assets at End of Year	\$	86,304,627	\$	78,272,684
D. Reserves				
State Contribution Reserve	\$	(158,129)	\$	(94,604)
2. DROP Accounts	Ψ	(10,639,649)	Ψ	(9,570,232)
3. Supplemental Benefit Reserve		(2,120,073)		(1,929,660)
4. Total Reserves	\$	(12,917,851)	\$	(11,594,496)
E. Market Value Net of Reserves	\$	73,386,776	\$	66,678,188

# ACTUARIAL VALUE OF ASSETS

Valuation Date – September 30	2015	2016	2017	2018	2019	2020
A. Actuarial Value of Assets Beginning of Year	\$ 72,949,983 \$	78,975,201	\$ - \$	- \$	- \$	-
B. Market Value End of Year	78,272,684	86,304,627	-	-	-	-
C. Market Value Beginning of Year	76,341,372	78,272,684	-	-	-	-
D. Non-Investment/Administrative Net Cash Flow	502,848	(222,510)				
E. Investment Income						
E1. Actual Market Total: B-C-D	1,428,464	8,254,453	-	-	-	-
E2. Assumed Rate of Return	7.75%	7.75%	7.50%	7.50%	7.50%	7.50%
E3. Assumed Amount of Return	5,673,109	6,111,956	-	-	-	-
E4. Amount Subject to Phase-In: E1-E3	(4,244,645)	2,142,497	-	-	-	-
F. Phase-In Recognition of Investment Income						
F1. Current Year: 0.2 x E4	(848,929)	428,499	-	-	-	-
F2. First Prior Year	393,473	(848,929)	428,499	=	-	-
F3. Second Prior Year	265,985	393,473	(848,929)	428,499	-	-
F4. Third Prior Year	980,811	265,985	393,473	(848,929)	428,499	-
F5. Fourth Prior Year	 (942,079)	980,811	265,985	393,472	(848,929)	428,501
F6. Total Phase-Ins	(150,739)	1,219,839	239,028	(26,958)	(420,430)	428,501
G. Actuarial Value of Assets End of Year						
G1. Preliminary Actuarial Value of Assets:	\$ 78,975,201 \$	86,084,486	\$ - \$	- \$	- \$	-
G2. Upper Corridor Limit: 120% *B	93,927,221	103,565,552	-	-	-	-
G3. Lower Corridor Limit: 80% *B	62,618,147	69,043,702	-	-	-	-
G4. Funding Value End of Year	78,975,201	86,084,486	-	-	-	-
G5. Less: State Contribution Reserve	(94,604)	(158,129)	-	-	-	-
G6. Less: DROP Account Balances	(9,570,232)	(10,639,649)	-	-	-	-
G7. Less: Supplemental Benefit Reserve	(1,929,660)	(2,120,073)	-	-	-	-
G8. Final Funding Value End of Year	67,380,705	73,166,635	=	-	-	-
H. Difference between Market & Actuarial Value	\$ (702,517) \$	220,141	\$ - \$	- \$	- \$	-
I. Actuarial Rate of Return	7.54%	9.30%	0.00%	0.00%	0.00%	0.00%
J. Market Value Rate of Return	1.87%	10.56%	0.00%	0.00%	0.00%	0.00%
K Ratio of Actuarial Value to Market Value	100.90%	99.74%	0.00%	0.00%	0.00%	0.00%

RECONCILIATION OF DROP ACCOUNTS								
Value at beginning of year	\$	9,570,232						
Adjustment to beginning of year balances	+	74,093						
Payments credited to accounts	+	724,072						
Rollovers into DROP account	+	109,362						
Investment Earnings credited	+	694,612						
Withdrawals from accounts	-	470,396						
Loan Proceeds	-	155,000						
Loan Payments	+_	92,674						
Value at end of year		10,639,649						

# INVESTMENT RATE OF RETURN

	Investment Rate of Return					
Year Ended	Market Value	Actuarial Value				
12/31/82	16.4 %	9.3 %				
12/31/83	12.3	9.0				
12/31/84	11.9	11.5				
12/31/85	23.0	16.8				
12/31/86	19.0	17.6				
12/31/87	0.3	4.4				
12/31/88	10.4	9.0				
12/31/89	20.6	15.4				
9/30/90 (9 mos		1.7				
9/30/91	14.4	11.6				
9/30/92	10.0	9.7				
9/30/93	12.6	11.9				
9/30/94	1.1	3.5				
9/30/95	19.1	12.9				
9/30/96	12.8	10.8				
9/30/97	20.2	13.1				
9/30/98	10.1	12.9				
9/30/99	10.5	13.5				
9/30/00	9.8	12.1				
9/30/01	(9.1)	7.5				
9/30/02	(9.2)	(4.7)				
9/30/03	16.1	2.8				
9/30/04	8.3	2.6				
9/30/05	10.6	3.0				
9/30/06	6.9	5.7				
9/30/07	13.1	9.9				
9/30/08	(15.1)	4.2				
9/30/09	(0.8)	2.8				
9/30/10	10.2	3.0				
9/30/11	(0.6)	1.6				
9/30/12	18.0	6.9				
9/30/13	9.8	7.0				
9/30/14	10.3	8.9				
9/30/15	1.9	7.5				
9/30/16	10.6	9.3				
Average Returns:						
Last Five Years	10.0 %	7.9 %				
Last Ten Years	5.3 %	6.1 %				
All Years	8.7 %	8.1 %				

# SECTION D FINANCIAL ACCOUNTING INFORMATION

	FASB NO. 35 INFORMATION									
A.	Valuation Date	October 1, 2016	October 1, 2015							
	Actuarial Present Value of Accumulated Plan Benefits									
	1. Vested Benefits									
	<ul><li>a. Members Currently Receiving Payments</li><li>b. Terminated Vested Members</li><li>c. Other Members</li><li>d. Total</li></ul>	\$ 65,702,105 4,082,598 32,081,978 101,866,681	\$ 59,949,063 1,655,681 31,909,764 93,514,508							
	2. Non-Vested Benefits	766,459	589,912							
	3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	102,633,140	94,104,420							
	4. Accumulated Contributions of Active Members	6,662,803	7,050,516							
C.	Changes in the Actuarial Present Value of Accumulated Plan Benefits									
	1. Total Value at Beginning of Year	94,104,420	88,601,310							
	2. Increase (Decrease) During the Period Attributable to:									
	a. Plan Amendment	0	0							
	<ul><li>b. Change in Actuarial Assumptions</li><li>c. Latest Member Data, Benefits Accumulated</li></ul>	2,668,316	14,887							
	and Decrease in the Discount Period d. Benefits Paid (Net basis, including credits	11,999,696	10,762,355							
	to DROP accounts)	(6,139,292)	(5,274,132)							
	e. Net Increase	8,528,720	5,503,110							
	3. Total Value at End of Period	102,633,140	94,104,420							
D.	Market Value of Assets	73,386,776	66,678,188							
II	Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods									

# SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS GASB Statement No. 67

Fiscal year ending September 30,	 2017*	2016	2015
Total pension liability			
Service Cost	\$ 2,886,162 \$	3,047,445	\$ 2,767,701
Interest	9,644,870	9,076,479	8,679,595
Benefit Changes	-	-	-
Difference between actual & expected experience	(1,118,136)	1,820,086	(1,776,804)
Assumption Changes	3,177,866	(565,994)	617,426
Benefit Payments	(5,971,610)	(6,169,099)	(5,438,713)
Refunds	(12,543)	(93,339)	(69,179)
Other (Adjustments to Reserves)	-	481,282	395,891
Net Change in Total Pension Liability	8,606,609	7,596,860	5,175,917
<b>Total Pension Liability - Beginning</b>	 124,555,848	116,958,988	111,783,071
Total Pension Liability - Ending (a)	\$ 133,162,457 \$	124,555,848	116,958,988
Plan Fiduciary Net Position			
Contributions - Employer (from City)	\$ 4,791,528 \$	4,391,305	\$ 4,365,259
Contributions - Employer (from State)	735,945	735,945	675,227
Contributions - Non-Employer Contributing Entity	-	-	-
Contributions - Member	775,298	928,153	1,040,875
Net Investment Income	6,630,136	8,254,453	1,428,464
Benefit Payments	(5,971,610)	(6,169,099)	(5,438,713)
Refunds	(12,543)	(93,339)	(69,179)
Administrative Expense	(158,751)	(164,398)	(153,104)
Other	 -	109,362	78,814
Net Change in Plan Fiduciary Net Position	6,790,003	7,992,382	1,927,643
Plan Fiduciary Net Position - Beginning	 86,202,090	78,209,708	76,282,065
Plan Fiduciary Net Position - Ending (b)	\$ 92,992,093 \$	86,202,090	\$ 78,209,708
Net Pension Liability - Ending (a) - (b)	40,170,364	38,353,758	38,749,280
Plan Fiduciary Net Position as a Percentage			
of Total Pension Liability	69.83 %	69.21 %	66.87 %
Covered Payroll	\$ 11,100,000	11,279,375	11,553,613
Net Pension Liability as a Percentage			
of Covered Payroll	361.90 %	340.03 %	335.39 %

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year. Note that only three years are shown here for summary purposes. The actual September 30, 2017 GASB 67 disclosure report will include all years (up to 10) beginning with the first year GASB 67 was implemented (Fiscal Year 2014).

# SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY GASB Statement No. 67

	Total			Plan Net Position		Net Pension Liability
FY Ending	Pension	Plan Net	Net Pension	as a % of Total	Covered	as a % of
September 30,	Liability	Position	Liability	Pension Liability	Payroll	Covered Payroll
2014	\$111,783,071	\$ 76,282,065	\$35,501,006	68.24%	\$11,070,863	320.67%
2015	116,958,988	78,209,708	38,749,280	66.87%	11,553,613	335.39%
2016	124,555,848	86,202,090	38,353,758	69.21%	11,279,375	340.03%
2017*	133,162,457	92,992,093	40,170,364	69.83%	11,100,000	361.90%

st These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

# NOTES TO NET PENSION LIABILITY GASB Statement No. 67

Valuation Date: October 1, 2016
Measurement Date: September 30, 2017

# Methods and Assumptions Used to Determine Net Pension Liability:

Actuarial Cost Method Entry Age Normal

Inflation 3.0%

Salary Increases 5.0% to 6.5% depending on age, including inflation.

Investment Rate of Return 7.50%

Retirement Age Experience-based table of rates that are specific to the type of eligibility

condition.

Mortality RP-2000 Combined Healthy Participant Mortality Table (for

preretirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as

mandated by Florida House Bill 1309.

Other Information:

Notes See Discussion of Valuation Results.

# SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

FY Ending September 30,	Actuarially Determined Contribution	Actual Contribution	De	ntribution eficiency Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2014	\$ 4,560,918	\$ 4,624,823	\$	(63,905)	\$ 11,070,863	41.77%
2015	4,830,346	4,830,346		-	11,553,613	41.81%
2016	4,856,392	4,856,392		-	11,279,375	43.06%
2017*	5,256,615	5,256,615		-	11,100,000	47.36%

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

# NOTES TO SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

**Valuation Date:** October 1, 2015

Notes Actuarially determined contribution rates are calculated as of October 1,

which is two year(s) prior to the end of the fiscal year in which

contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method Entry Age Normal

Amortization Method Level Percentage of Payroll, Closed Remaining Amortization Period 21 years (single equivalent period)

Asset Valuation Method 5-year smoothed market

Inflation 3.0%

Salary Increases 5.0% to 6.5% depending on age, including inflation.

Investment Rate of Return 7.50%

Retirement Age Experience-based table of rates that are specific to the type of eligibility

condition.

Mortality RP-2000 Mortality Table for Annuitants with mortality improvement

projected to all future years using Scale BB. For females, the base mortality rates include a 100% white collar adjustment. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. These are the same rates used for Special Risk Class members in the July 1, 2015 actuarial valuation of the Florida

Retirement System (FRS).

Other Information:

See Discussion of Valuation Results in the October 1, 2015 Actuarial

Notes Valuation Report.

# SINGLE DISCOUNT RATE GASB Statement No. 67

A single discount rate of 7.50% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.50%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the total actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments (7.50%) was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 7.50%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

#### Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption\*

	Current Single Discount									
1% Decrease			Rate Assumption	1% Increase						
6.50%			7.50%		8.50%					
\$	54,577,829	\$	40,170,364	\$	28,185,999					

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

# SECTION E MISCELLANEOUS INFORMATION

	RECONCILIATION OF MEMBERSHIP DATA  From 10/1/15 From 10/1/12							
		To 10/1/16	To 10/1/15					
A.	Active Members	•	•					
1	N 1 T 1 1 1 1 T 4 X7 1 2	127	120					
1.	Number Included in Last Valuation	137	139					
2.	New Members Included in Current Valuation	17	9					
	Non-Vested Employment Terminations Vested Employment Terminations	(3)	(3)					
4. 5.	Vested Employment Terminations DROP Participation	(11) (5)	(4) (3)					
5. 6.	Service Retirements	(2)	0					
7.	Disability Retirements	0	(1)					
	Deaths	0	0					
	Number Included in This Valuation	133	137					
В.								
ъ.	Terminated Vested Members							
1.	Number Included in Last Valuation	10	7					
2.	Additions from Active Members	11	4					
3.	Lump Sum Payments/Refund of Contributions	(1)	(1)					
4.	Payments Commenced	0	(1)					
5.	Deaths	0	0					
6.	OtherData Correction	0	1					
7.	Number Included in This Valuation	20	10					
C.	DROP Plan Members							
1.	Number Included in Last Valuation	9	11					
2.	Additions from Active Members	5	3					
3.	Retirements	(3)	(5)					
4.	Deaths Resulting in No Further Payments	0	0					
5.	Other	0_	0_					
6.	Number Included in This Valuation	11	9					
D.	Service Retirees, Disability Retirees and Benef	iciaries	•					
1	Number Included in Last Valuation	111	105					
1. 2.	Additions from Active Members	2	103					
2. 3.	Additions from Terminated Vested Members	$\begin{bmatrix} 2 \\ 0 \end{bmatrix}$	1					
<i>3</i> . 4.	Additions from DROP Plan	3	5					
5.	Deaths Resulting in No Further Payments	0	(1)					
<i>5</i> . 6.	Deaths Resulting in New Survivor Benefits		0					
7.	End of Certain Period - No Further Payments	0	0					
8.	Other Lump Sum Distributions	0	0					
9.	Number Included in This Valuation	116	111					

# ACTIVE PARTICIPANT SCATTER

Years of Service to Valuation Date											
Age Group	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25+	Totals
20-24 NO.	3	0	0	0	0	0	0	0	0	0	3
TOT PAY	157,011	0	0	0	0	0	0	0	0	0	157,011
AVG PAY	52,337	0	0	0	0	0	0	0	0	0	52,337
25-29 NO.	10	4	0	0	2	5	0	0	0	0	21
TOT PAY	523,369	246,214	0	0	145,884	344,594	0	0	0	0	1,260,061
AVG PAY	52,337	61,554	0	0	72,942	68,919	0	0	0	0	60,003
30-34 NO.	2	2	1	0	1	11	6	0	0	0	23
TOT PAY	104,674	119,198	63,682	0	65,022	792,085	501,341	0	0	0	1,646,002
AVG PAY	52,337	59,599	63,682	0	65,022	72,008	83,557	0	0	0	71,565
35-39 NO.	1	1	0	1	1	2	20	2	0	0	28
TOT PAY	52,337	59,701	0	64,910	62,212	150,319	1,626,755	242,671	0	0	2,258,905
AVG PAY	52,337	59,701	0	64,910	62,212	75,160	81,338	121,336	0	0	80,675
40-44 NO.	1	1	1	0	0	2	8	13	1	0	27
TOT PAY	52,337	119,570	72,292	0	0	136,486	715,807	1,362,651	94,854	0	2,553,997
AVG PAY	52,337	119,570	72,292	0	0	68,243	89,476	104,819	94,854	0	94,592
45-49 NO.	0	0	0	0	0	0	8	14	1	0	23
TOT PAY	0	0	0	0	0	0	654,758	1,476,241	112,924	0	2,243,923
AVG PAY	0	0	0	0	0	0	81,845	105,446	112,924	0	97,562
50-54 NO.	0	0	1	0	0	2	2	2	0	0	7
TOT PAY	0	0	62,983	0	0	121,167	164,378	269,395	0	0	617,923
AVG PAY	0	0	62,983	0	0	60,584	82,189	134,698	0	0	88,275
55-59 NO.	0	0	0	0	0	1	0	0	0	0	1
TOT PAY	0	0	0	0	0	65,509	0	0	0	0	65,509
AVG PAY	0	0	0	0	0	65,509	0	0	0	0	65,509
60-64 NO.	0	0	0	0	0	0	0	0	0	0	0
TOT PAY	0	0	0	0	0	0	0	0	0	0	0
AVG PAY	0	0	0	0	0	0	0	0	0	0	0
TOT NO.	17	8	3	1	4	23	44	31	2	0	133
TOT AMT	889,728	544,683	198,957	64,910			3,663,039		207,778	0	10,803,331
AVG AMT	52,337	68,085	66,319	64,910	68,280	70,007	83,251	108,095	103,889	0	81,228

# INACTIVE PARTICIPANT SCATTER

								ased with
	Terminated Vested		Disabled		Retired		Beneficiary	
		Total		Total		Total		Total
Age Group	Number	Benefits	Number	Benefits	Number	Benefits	Number	Benefits
Under 20	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-
30-34	6	153,378	-	-	-	_	-	-
35-39	6	120,037	-	-	-	-	-	-
40-44	4	128,475	-	-	1	69,209	-	-
45-49	4	113,503	1	41,698	10	627,557	-	-
50-54	-	-	-	-	24	1,247,501	1	23,843
55-59	-	-	4	83,217	31	1,754,299	-	-
60-64	-	-	3	61,035	19	802,744	-	-
65-69	-	-	3	78,232	12	493,356	1	9,397
70-74	-	-	2	28,399	10	300,233	-	-
75-79	-	-	1	12,549	3	88,711	-	-
80-84	-	-	-	-	1	27,637	-	-
85-89	-	-	-	-	-	-	-	-
90-94	-	-	-	-	-	-	-	-
95-99	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-
Total	20	515,393	14	305,130	111	5,411,247	2	33,240
Average Age		39		63		59		60

# SECTION F SUMMARY OF PLAN PROVISIONS

#### SUMMARY OF PLAN PROVISIONS

#### A. Ordinances

Plan established under the Code of Ordinances for the City of Boynton Beach, Florida, Chapter 18, Article III, and was most recently amended under Ordinance No.15-022 passed and adopted on its second reading on September 3, 2015. The Plan is also governed by certain provisions of Chapter 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

#### **B.** Effective Date

August 15, 1981

#### C. Plan Year

October 1 through September 30

#### D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes it is a single employer plan.

#### E. Eligibility Requirements

All full-time police officers are eligible to participate on the first day of employment.

#### F. Credited Service

Service is measured as the aggregate numbers of years and fractional parts of years of service for which a police officer made Member Contributions to the plan. No service is credited for any periods of employment for which the member received a refund of their contributions.

#### **G.** Compensation

Total cash remuneration including up to 300 hours of overtime and lump sum payments for the lesser of the amount of sick and vacation leave accumulated as of June 18, 2013 or the amount cashed out at retirement, but exclusive of any payments for extra duty or special detail work.

#### H. Average Final Compensation (AFC)

The average of Compensation over the highest 5 years during the last 10 years of Credited Service.

#### I. Normal Retirement

Eligibility: A member may retire on the first day of the month coincident with or next following

the earliest of:

(1) age 55 and 10 years of Credited Service, or (2) age 50 and 15 years of Credited Service, or

(3) 20 years of Credited Service regardless of age.

Benefit: 3.5% of AFC multiplied by years of Credited Service for Members hired before

October 1, 2015. Benefit is limited to 100% of AFC and the provisions of Internal

Revenue Code Section 415.

All Members hired on or after October 1, 2015 will receive 3.0% of AFC multiplied by years of Credited Service. Benefit is limited to 100% of AFC and the provisions

of the Internal Revenue Code Section 415.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA None

Supplemental

Benefit: All retirees in pay status are entitled to a monthly supplemental pension benefit

paid in a lump sum on October 1 of each year. The supplemental benefit is funded by a 1% of pay contribution from the members and a 1% of pay contribution from the Chapter 185 money. The benefit pool is divided according to the total number of shares of all eligible retirees on a pro-rata basis. The number of shares allotted to each eligible retiree is the sum of credited service at retirement (maximum of 20 years) and the number of years the participant has been retired (maximum of 20 years). An individual retiree's distribution is the number of shares multiplied by the share value. The benefit ceases upon the later of the death of the retired member or

beneficiary.

J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility upon

attainment of age 50 and 10 years of Credited Service.

Benefit: The Normal Retirement Benefit is reduced by 1.5% for each year by which the Early

Retirement date precedes the Normal Retirement date. For this purpose, the Normal Retirement date is the earlier of the date the member would have attained age 55 or completed 20 years of Credited Service had the member continued employment as a

police officer.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: None

Supplemental

Benefit: All retirees in pay status are entitled to a monthly supplemental pension benefit

paid in a lump sum on October 1 of each year. The supplemental benefit is funded by a 1% of pay contribution from the members and a 1% of pay contribution from the Chapter 185 money. The benefit pool is divided according to the total number of shares of all eligible retirees on a pro-rata basis. The number of shares allotted to each eligible retiree is the sum of credited service at retirement (maximum of 20 years) and the number of years the participant has been retired (maximum of 20 years). An individual retiree's distribution is the number of shares multiplied by the share value. The benefit ceases upon the later of the death of the retired member or beneficiary.

#### K. Delayed Retirement

Same as Normal Retirement taking into account compensation earned and service credited until the date of actual retirement.

#### L. Service Connected Disability

Eligibility: Any member who becomes totally and permanently disabled and unable to render

> useful and efficient service as a police officer as a result of an act occurring in the performance of service for the City is immediately eligible for a disability benefit.

Benefit: 66 2/3% of the member's basic rate of earnings in effect on the date of disability,

reduced by amounts payable under Worker's Compensation and Social Security PIA with a minimum benefit being the greater of the accrued Normal Retirement benefit

on the date of disability or 42% of AFC.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: None

Supplemental

Benefit: All retirees in pay status are entitled to a monthly supplemental pension benefit

paid in a lump sum on October 1 of each year. The supplemental benefit is funded by a 1% of pay contribution from the members and a 1% of pay contribution from the Chapter 185 money. The benefit pool is divided according to the total number of shares of all eligible retirees on a pro-rata basis. The number of shares allotted to each eligible retiree is the sum of credited service at retirement (maximum of 20 years) and the number of years the participant has been retired (maximum of 20 years). An individual retiree's distribution is the number of shares multiplied by the share value. The benefit ceases upon the later of the death of the retired member or

beneficiary.

#### M. Non-Service Connected Disability

Eligibility: Any member with 10 years of Credited Service who becomes totally and

permanently disabled and unable to render useful and efficient service as a police

officer is eligible for a disability benefit.

Benefit: The accrued Normal Retirement Benefit taking into account compensation earned

and service credited as of the date of disability with a minimum benefit equal to 25%

of AFC and a maximum benefit equal to 60% of AFC.



Normal Form

of Benefit: 10 years Certain and Life thereafter; other options are also available.

COLA: None

Supplemental

Benefit: All retirees in pay status are entitled to a monthly supplemental pension benefit

paid in a lump sum on October 1 of each year. The supplemental benefit is funded by a 1% of pay contribution from the members and a 1% of pay contribution from the Chapter 185 money. The benefit pool is divided according to the total number of shares of all eligible retirees on a pro-rata basis. The number of shares allotted to each eligible retiree is the sum of credited service at retirement (maximum of 20 years) and the number of years the participant has been retired (maximum of 20 years). An individual retiree's distribution is the number of shares multiplied by the share value. The benefit ceases upon the later of the death of the retired member or

beneficiary.

# N. Death in the Line of Duty

Eligibility: Any member whose death is determined to be the result of a service incurred injury

is eligible for survivor benefits regardless of Credited Service.

Benefit: Spouse will receive the accrued Normal Retirement Benefit taking into account

compensation earned and service credited as of the date of death with a minimum benefit equal to 30% of AFC. If there is no spouse, benefits will be paid to the

deceased member's estate.

Normal Form

of Benefit: Paid until death of spouse.

COLA: None

Supplemental

Benefit: All retirees and beneficiaries in pay status are entitled to a monthly supplemental

pension benefit paid in a lump sum on October 1 of each year. The supplemental benefit is funded by a 1% of pay contribution from the members and a 1% of pay contribution from the Chapter 185 money. The benefit pool is divided according to the total number of shares of all eligible retirees on a pro-rata basis. The number of shares allotted to each eligible retiree is the sum of credited service at retirement (maximum of 20 years) and the number of years the participant has been retired (maximum of 20 years). An individual retiree's distribution is the number of shares multiplied by the share value. The benefit ceases upon the later of the death of the

retired member or beneficiary.

#### O. Other Pre-Retirement Death

Eligibility: Members are eligible for survivor benefits after the completion of 10 or more years

of Credited Service.

Benefit: Spouse will receive the accrued Normal Retirement Benefit taking into account

compensation earned and service credited as of the date of death. If there is no

spouse, benefits will be paid to the deceased member's estate.

Normal Form

of Benefit: Paid until death or remarriage of spouse; or 10 years to the member's estate.

COLA: None

Supplemental

Benefit: All retirees and beneficiaries in pay status are entitled to a monthly supplemental

pension benefit paid in a lump sum on October 1 of each year. The supplemental benefit is funded by a 1% of pay contribution from the members and a 1% of pay contribution from the Chapter 185 money. The benefit pool is divided according to the total number of shares of all eligible retirees on a pro-rata basis. The number of shares allotted to each eligible retiree is the sum of credited service at retirement (maximum of 20 years) and the number of years the participant has been retired (maximum of 20 years). An individual retiree's distribution is the number of shares multiplied by the share value. The benefit ceases upon the later of the death of the retired member or beneficiary.

The beneficiary of a plan member with less than 10 years of Credited Service at the time of death will receive a refund of the member's accumulated contributions.

#### P. Post Retirement Death

Benefit determined by the form of benefit elected upon retirement.

#### Q. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are a Single Life Annuity, the 50%, 66 2/3%, 75% and 100% Contingent Annuitant options and the 50%, 66 2/3%, 75% and 100% Survivor Annuity options.

#### **R.** Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of

5 years of Credited Service if they elect to leave their accumulated contributions in

the fund.

Benefit: The benefit is the member's accrued Normal Retirement Benefit as of the date of

termination.

For members with at least 5 years of Credited Service, the benefit begins on the date that would have been the member's Normal Retirement date had they continued employment until attaining age 55 with 10 years of Credited Service or upon reaching what would have been 20 years of Credited Service. Alternatively, members with at least 10 years of Credited Service can elect a reduced Early

Retirement benefit any time after age 50.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: None

#### Supplemental

Benefit:

Once in pay status, all retirees are entitled to a monthly supplemental pension benefit paid in a lump sum on October 1 of each year. The supplemental benefit is funded by a 1% of pay contribution from the members and a 1% of pay contribution from the Chapter 185 money. The benefit pool is divided according to the total number of shares of all eligible retirees on a pro-rata basis. The number of shares allotted to each eligible retiree is the sum of credited service at retirement (maximum of 20 years) and the number of years the participant has been retired (maximum of 20 years). An individual retiree's distribution is the number of shares multiplied by the share value. The benefit ceases upon the later of the death of the retired member or beneficiary.

Members terminating employment with less than 5 years of Credited Service will receive a refund of their own accumulated contributions.

#### S. Refunds

Eligibility: All members terminating employment with less than 5 years of Credited Service are

eligible. Optionally, vested members (those with 5 or more years of Credited

Service) may elect a refund in lieu of the vested benefits otherwise due.

Benefit: Refund of the member's contributions.

#### T. Member Contributions

7% of Compensation

#### **U. Employer Contributions**

Chapter 185 Premium Tax Refunds and any additional amount determined by the actuary needed to fund the plan properly according to State laws.

#### V. Changes from Previous Valuation

There have been no changes since the last valuation.

# W. 13th Check

As described under the Supplemental Benefit subsections, a thirteenth check will be paid to retirees on each October 1 of each year following December 1, 2006.



#### X. Deferred Retirement Option Plan

Eligibility: Plan members who have less than 30 years of Credited Service but have met one of

the following criteria are eligible for the DROP:

(1) age 55 and 10 years of Credited Service, or

(2) age 50 and 15 years of Credited Service, or

(3) 20 years of Credited Service regardless of age.

Members who meet eligibility must submit a written election to participate in the DROP.

DROI

Benefit: The member's Credited Service and FAC are frozen upon entry into the DROP.

The monthly retirement benefit as described under Normal Retirement is calculated

based upon the frozen Credited Service and FAC.

Maximum

DROP Period: The earlier of 5 years of participation in the DROP or 30 years of employment.

Interest

Credited: The member's DROP account is credited at an interest rate based upon the option

chosen by the member. Members must elect from 1 of the 3 following options:

1. Gain or loss at the same rate earned by the Plan, or

2. Guaranteed rate of 7%, or

3. A percentage of the DROP credited at the same rate earned by the Plan and the remaining percentage credited with earnings at a guaranteed rate of 7%.

Normal Form

of Benefit:

Options include a lump sum, equal annual payments over 5 years, or monthly installments based upon actuarial tables until the balance is paid out.

COLA: None

Supplemental

Benefit:

DROP retirees are entitled to a monthly supplemental pension benefit paid in a lump sum on October 1 of each year. The supplemental benefit is funded by a 1% of pay contribution from the members and a 1% of pay contribution from the Chapter 185 money. The benefit pool is divided according to the total number of shares of all eligible retirees on a pro-rata basis. The number of shares allotted to each eligible retiree is the sum of credited service at retirement (maximum of 20 years) and the number of years the participant has been retired (maximum of 20 years). An individual retiree's distribution is the number of shares multiplied by the share value. The benefit ceases upon the later of the death of the retired member or beneficiary.

#### Y. Other Ancillary Benefits

There are no ancillary benefits not required by statutes but which might be deemed a City of Boynton Beach Municipal Police Officers' Retirement Fund liability if continued beyond the availability of funding by the current funding source.

