

CITY OF COOPER CITY FIREFIGHTERS RETIREMENT PLAN
ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2015

ANNUAL EMPLOYER CONTRIBUTION IS DETERMINED BY THIS VALUATION FOR
THE FISCAL YEAR ENDING SEPTEMBER 30, 2017



February 9, 2016

Board of Trustees
City of Cooper City Firefighters
Retirement Plan
Cooper City, Florida

**Re: City of Cooper City Firefighters Retirement Plan Actuarial Valuation as of October 1, 2015
Actuarial Disclosures**

Dear Board Members:

The results of the October 1, 2015 Annual Actuarial Valuation of the City of Cooper City Firefighters Retirement Plan are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement Plan and those designated or approved by the Board. This report may be provided to parties other than the Plan 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, 2017, 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, 2016. 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.

The 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 certain assumptions approved by the Board as described in the section of this report entitled Actuarial Assumptions and Cost Method.

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.

Melissa R. Algayer 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 us or under our direct supervision, and we 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

By Melissa R. Algayer
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SECTION A
DISCUSSION OF VALUATION RESULTS

DISCUSSION OF VALUATION RESULTS

Preliminary Note

Effective February 14, 2004, the responsibility for fire and rescue services for the City was transferred to the Broward Sheriff's Office. Plan members who were City employees on the date of transfer became employees of BSO and were required to choose whether to remain in this Plan. Twenty-six firefighters chose to do so.

BSO will pick up the former 5% member contribution rate. This amount is not deducted from each member's pay and is not included in pensionable compensation.

Members will contribute 3.45% of pay. This contribution is deducted from each member's pay and is included in pensionable compensation.

The increase in annual required contributions attributable to benefit changes that were adopted in 2004 is funded by:

- Chapter 175 revenue up to \$294,036, but limited to the amount needed to fully fund extra benefits.
- A payment by the City of up to \$130,000. The City's contribution of \$130,000 will decrease as Chapter 175 revenue increases above the 2004 revenue of \$164,036.
- The new member contribution rate of 3.45%

To the extent that Chapter 175 revenue exceeds the 2004 revenue of \$164,036 plus the \$130,000 that the City agreed to pay for additional benefits, this excess is payable as a Supplemental Benefit for members who elected to remain in the City Plan in 2004. In the 2015 fiscal year the Chapter revenue of \$255,058 did not exceed \$294,036, so there will be no Supplemental Benefit payable for the year. The required City contribution for the 2015 fiscal year was \$38,978. Excess City contributions totaling \$64,429 were available as of September 30, 2014 to offset the City's future contribution requirements. After reflecting \$38,978 applied to the City's contribution requirement for the 2015 fiscal year, the total excess City contribution as of September 30, 2015 is \$25,451. This amount will be applied to the City's future contribution requirements.

Comparison of Required Employer Contributions

The required employer contribution developed in this year's valuation is compared below to last year's result.

	For FYE 9/30/2017 Based on 10/1/2015 Valuation	For FYE 9/30/2016 Based on 10/1/2014 Valuation	Increase (Decrease)
Required Employer/State Contribution	\$ 1,220,415	\$ 1,279,156	\$ (58,741)
As % of Covered Payroll	222.55 %	234.38 %	(11.83) %
Credit for State Contribution	255,058	255,058 *	0
As % of Covered Payroll	46.51 %	46.74 %	(0.23) %
Portion of Cost to be paid by the City	38,978	38,978 *	0
As % of Covered Payroll	7.11 %	7.14 %	(0.03) %
Remainder of Cost to be Paid by BSO (includes 5% pick-up contribution)	926,379	985,120	(58,741)
As % of Covered Payroll	168.93 %	180.51 %	(11.58) %

* We have updated the amount shown in our October 1, 2014 Actuarial Valuation Report to be equal to the amount received from the State for the fiscal year ending September 30, 2015.

The required contribution has been adjusted for interest on the basis that contributions are made in equal installments at the end of each quarter. The required contribution has also been computed under the assumption that the amount to be received from the State on behalf of firefighters for 2016 and 2017 will be the same as the amount for 2015, i.e., \$255,058. If the payment from the State falls below this amount, then the City and/or BSO will need to raise its contribution by the difference.

The actual employer and State contributions for the fiscal year ending September 30, 2015 were \$1,064,018 by BSO, \$38,978 by the City, and \$255,058 by the State, for a total of \$1,358,054. The \$1,064,018 and \$38,978 includes prepaid BSO and City contributions of \$764,767 and \$38,978, respectively. The required contribution was \$1,358,054.

Revisions in Benefits

There have been no changes in benefits since the last valuation.

Revisions in Actuarial Assumptions or Methods

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

Actuarial Experience

There was a net actuarial gain of \$363,614 for the year which means that actual experience was more favorable than expected. The gain was primarily due to lower than expected salary increases and was partially offset by losses due to recognized investment return slightly below the assumed rate of 7.0%. The investment return was (2.4)% based on market value of assets and 6.9% based on actuarial value of assets.

Funded Ratio

The funded ratio this year is 77.6% compared to 72.8% last year. The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability.

Variability of Future Contribution Rates

The Actuarial Value of Assets exceeds the Market Value of Assets by \$476,019. This difference will be gradually recognized over the next several years, causing the contribution requirement to increase, in absence of offsetting gains.

Relationship to Market Value

If Market Value had been the basis for the valuation, the BSO contribution rate would have been 184.5% and the funded ratio would have been 75.7%. In the absence of other gains and losses, the employer contribution rate should increase to that level over the next several years.

Conclusion

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

STATE CONTRIBUTION RESERVE

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, the Plan meets all minimum required benefits.

Actuarial Confirmation of the Use of State Chapter Money	
1. Base Amount Previous Plan Year	\$ 294,036
2. Amount Received for Previous Plan Year	255,058
3. Benefit Improvements Made in Previous Plan Year	0
4. Excess Funds for Previous Plan Year: (2) - (1) - (3); not less than zero	0
5. Accumulated Excess at Beginning of Previous Year	0
6. Prior Excess Used in Previous Plan Year	0
7. Accumulated Excess as of Valuation Date (Available for Benefit Improvements): (4) + (5) - (6); not less than zero	0
8. Base Amount This Plan Year: (1) + (3); not to exceed actual State revenue received for previous Plan Year	\$ 255,058

The Accumulated Excess shown in line 7 is held in reserve to pay for the Supplemental Benefit provided in accordance with Section 15.06 of the Plan. This amount is allocated equally among the 26 members who elected to remain in the City Plan in 2004. Retirement members will be distributed their portion. Active members will receive their portion, along with additional annual amounts in a lump sum when they retire.

The Base Amount will be updated each year based on actual Chapter revenue up to a maximum of \$294,036.

The reserve is subtracted from Plan assets (see Section C of this Report).

SECTION B
VALUATION RESULTS

PARTICIPANT DATA		
	October 1, 2015	October 1, 2014
ACTIVE MEMBERS		
Number	5	5
Covered Annual Payroll	\$ 548,388	\$ 545,753
Average Annual Payroll	\$ 109,678	\$ 109,151
Average Age	43.2	42.2
Average Past Service	18.3	17.3
Average Age at Hire	24.9	24.9
RETIREES & BENEFICIARIES & DROP		
Number	22	22
Annual Benefits	\$ 1,697,938	\$ 1,697,938
Average Annual Benefit	\$ 77,179	\$ 77,179
Average Age	54.6	53.6
DISABILITY RETIREES		
Number	0	0
Annual Benefits	\$ 0	\$ 0
Average Annual Benefit	\$ 0	\$ 0
Average Age	0.0	0.0
TERMINATED VESTED MEMBERS		
Number	1	1
Annual Benefits	\$ 19,056	\$ 19,056
Average Annual Benefit	\$ 19,056	\$ 19,056
Average Age	49.4	48.4

ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC)		
A. Valuation Date	October 1, 2015	October 1, 2014
B. ADEC to Be Paid During Fiscal Year Ending	9/30/2017	9/30/2016
C. Assumed Dates of Employer Contributions	Quarterly	Quarterly
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 0	\$ 0
E. Employer Normal Cost	1,170,516	1,226,855
F. ADEC if Paid on the Valuation Date: D+E	1,170,516	1,226,855
G. ADEC Adjusted for Frequency of Payments	1,220,415	1,279,156
H. ADEC as % of Covered Payroll	222.55 %	234.38 %
I. Assumed Rate of Increase in Covered Payroll to Contribution Year	0.00 %	0.00 %
J. Covered Payroll as of Contribution Date	548,388	545,753
K. ADEC for Contribution Year: H x J	1,220,415	1,279,156
L. Allowable Credit for State Revenue in Contribution Year	255,058	255,058 *
M. Portion of K to be paid by City	38,978	38,978 *
N. Remainder of ADEC to be Paid by BSO (includes 5% pick-up contributions)	926,379	985,120
O. N as % of Covered Payroll in Contribution Year	168.93 %	180.51 %

* We have updated the amount shown in our October 1, 2014 Actuarial Valuation Report to be equal to the amount received from the State for the fiscal year ending September 30, 2015.

ACTUARIAL VALUE OF BENEFITS AND ASSETS		
A. Valuation Date	October 1, 2015	October 1, 2014
B. Actuarial Present Value of All Projected Benefits for		
1. Active Members		
a. Service Retirement Benefits	\$ 4,006,277	\$ 3,874,751
b. Vesting Benefits	223,650	260,647
c. Disability Benefits	140,065	150,446
d. Preretirement Death Benefits	26,294	28,767
e. Return of Member Contributions	-	-
f. Total	<u>4,396,286</u>	<u>4,314,611</u>
2. Inactive Members		
a. Service Retirees & Beneficiaries	21,264,668	21,491,402
b. Disability Retirees	-	-
c. Terminated Vested Members	<u>239,116</u>	<u>223,141</u>
d. Total	21,503,784	21,714,543
3. Total for All Members	25,900,070	26,029,154
C. Actuarial Accrued (Past Service) Liability per GASB No. 25	24,979,447	24,981,244
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	24,331,663	24,184,691
E. Plan Assets		
1. Market Value	18,912,731	19,740,952
2. Actuarial Value	19,388,750	18,193,266
F. Unfunded Actuarial Accrued Liability (EAN Method): C-E2	5,590,697	6,787,978
G. Actuarial Present Value of Projected Covered Payroll	3,178,442	3,622,775
H. Actuarial Present Value of Projected Member Contributions	109,656	124,986

CALCULATION OF EMPLOYER NORMAL COST		
A. Valuation Date	October 1, 2015	October 1, 2014
B. Actuarial Present Value of Projected Benefits	\$ 25,900,070	\$ 26,029,154
C. Actuarial Value of Assets	19,388,750	18,193,266
D. Unfunded Actuarial Liability	0	0
E. Actuarial Present Value of Projected Member Contributions	109,656	124,986
F. Actuarial Present Value of Projected Employer Normal Costs: B-C-D-E	6,401,664	7,710,902
G. Actuarial Present Value of Projected Covered Payroll at Valuation Date	3,178,442	3,622,775
H. Employer Normal Cost Rate: F/G	201.41 %	212.85 %
I. Covered Annual Payroll	548,388	545,753
J. Employer Normal Cost: H x I	1,104,508	1,161,635
K. Assumed Amount of Administrative Expenses	66,008	65,220
L. Total Employer Normal Cost: J+K	1,170,516	1,226,855
M. Employer Normal Cost as % of Covered Payroll	213.45 %	224.80 %

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. Employer Normal Cost as a Percentage of Covered Payroll	
1. Last Valuation	212.85 %
2. Current Valuation	<u>201.41</u>
3. Difference: 1 - 2	11.44
B. Actuarial Present Value of Projected Covered Payroll	\$ 3,178,442
C. Net Actuarial Gain (Loss): A3 x B	363,614

Net actuarial gains (losses) in previous years have been as follows:

Year Ending 9/30	Change in Employer Cost Rate	Net Gain (Loss)*
1981	NA	NA
1982	0.77 %	\$2,601
1983	(0.73)	(5,769)
1984	2.94	14,409
1985	(1.01)	(10,146)
1986	1.32	15,835
1987	(4.10)	(172,372)
1988	0.11	5,874
1989	0.04	2,861
1990	0.24	17,687
1991	0.61	49,866
1992	0.61	54,369
1993	(0.27)	(29,399)
1994	0.08	10,160
1995	0.20	26,532
1996	(0.69)	(108,094)
1997	0.07	12,390
1998	0.08	15,297
1999	0.52	99,213
2000	(0.81)	(191,868)
2001	(0.06)	(14,483)
2002	0.13	25,257
2003	(0.06)	(11,654)
2004	(5.86)	(935,537)
2005	2.60	600,034
2006	(5.95)	(1,608,805)
2007	(2.59)	(762,116)
2008	(1.92)	(585,925)
2009	(15.90)	(1,923,440)
2010	(4.81)	(512,243)
2011	(28.04)	(1,412,399)
2012	4.39	192,798
2013	16.83	705,412
2014	(24.54)	(889,029)
2015	11.44	363,614

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:

Year Ending	Investment Return		Salary Increases	
	Actual	Assumed	Actual	Assumed
9/30/1992	10.3 %	8.0 %	12.2 %	8.0 %
9/30/1993	8.7	8.0	8.6	8.0
9/30/1994	5.9	8.0	8.8	8.0
9/30/1995	8.9	8.0	9.8	7.3
9/30/1996	8.4	8.0	10.3	7.3
9/30/1997	10.1	8.0	7.3	7.3
9/30/1998	8.5	8.0	4.4	7.3
9/30/1999	10.7	8.0	5.2	7.3
9/30/2000	4.9	8.0	6.5	7.3
9/30/2001	6.8	8.0	4.2	7.3
9/30/2002	3.0	8.0	4.7	7.3
9/30/2003	3.2	8.0	2.4	7.3
9/30/2004	3.1	8.0	9.3 *	7.3
9/30/2005	4.0	8.0	(4.0) **	7.3
9/30/2006	5.7	8.0	22.7	7.3
9/30/2007	7.8	8.0	13.5	7.3
9/30/2008	3.7	8.0	7.1	7.3
9/30/2009	1.9	8.0	9.7	7.3
9/30/2010	5.8	8.0	2.6	7.3
9/30/2011	4.3	7.8	5.4	7.3
9/30/2012	6.0	7.5	(6.8)	7.3
9/30/2013	6.8	7.3	5.9	7.3
9/30/2014	9.0	7.0	1.6	7.3
9/30/2015	6.9	7.0	0.5	7.3
Average	6.4		6.2	

*2004 calendar year gross pay compared to gross pay for year ended 9/30/03.

**Gross pay for year ended 9/30/05 compared to 2004 calendar year gross pay.

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 valuation both at the beginning and the end of each period.

Actual (A) Compared to Expected (E) Decrements Among Active Employees													
Year Ended	Number Added During Year		Normal & Early Retirement		Disability Retirement		Death		Terminations				Active Members End of Year
	A	E	A	E	A	E	A	E	Vested	Other	Totals		
									A	A	A	E	
9/30/2002	2	2	0	0	0	0	0	0	1	1	2	1	34
9/30/2003	2	1	0	0	0	0	0	0	0	1	1	1	35
9/30/2004	0	0	0	0	0	0	0	0	1	8	9	1	26
9/30/2005	0	0	1	0	0	0	1	0	0	0	0	1	24
9/30/2006	0	0	0	0	1	0	0	0	0	0	0	1	23
9/30/2007	0	0	1	1	0	0	0	0	0	0	0	0	22
9/30/2008	0	0	1	1	0	0	0	0	0	0	0	0	21
9/30/2009	0	0	3	2	0	0	0	0	0	0	0	0	18
9/30/2010	0	0	7	2	0	0	0	0	0	0	0	0	11
9/30/2011	0	0	5	2	0	0	0	0	0	0	0	0	6
9/30/2012	0	0	0	0	0	0	0	0	0	0	0	0	6
9/30/2013	0	0	0	0	0	0	0	0	0	0	0	0	6
9/30/2014	0	0	1	0	0	0	0	0	0	0	0	0	5
9/30/2015	0	0	0	0	0	0	0	0	0	0	0	0	5
9/30/2016				0		0		0				0	
14 Yr Totals *	4	3	19	8	1	0	1	0	2	10	12	5	

* Totals are through current Plan Year only

RECENT HISTORY OF UAAL AND FUNDED RATIO

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL As % of Covered Payroll (b-a)/(c)
10/1/1992	\$ 4,418,001	\$ 4,286,760	\$ (131,241)	103.1 %	\$ 4,548,058	(2.9) %
10/1/1993	5,463,381	5,872,846	409,465	93.0	4,880,767	8.4
10/1/1994	6,643,449	7,740,789	1,097,340	85.8	5,541,940	19.8
10/1/1995	8,159,543	9,095,864	936,321	89.7	5,787,179	16.2
10/1/1996	9,766,918	10,154,900	387,982	96.2	6,235,012	6.2
10/1/1997	11,633,049	11,432,645	(200,404)	101.8	6,348,795	(3.2)
10/1/1998	13,486,497	12,937,090	(549,407)	104.2	7,058,737	(7.8)
10/1/1999	3,015,457	2,880,577	(134,880)	104.7	1,378,984	(9.8)
10/1/2000	3,461,570	3,899,610	438,040	88.8	1,726,371	25.4
10/1/2001	4,000,580	4,923,658	923,078	81.3	1,798,957	51.3
10/1/2002	4,521,542	5,398,164	876,622	83.8	1,853,253	47.3
10/1/2003	5,224,729	6,082,646	857,917	85.9	1,932,707	44.4
10/1/2004	5,822,771	9,650,469	3,827,698	60.3	2,177,319	175.8
10/1/2005	6,871,638	10,077,015	3,205,377	68.2	1,895,410	169.1
10/1/2006	7,925,971	12,720,067	4,794,096	62.3	2,223,213	215.6
10/1/2007	9,690,436	14,891,878	5,201,442	65.1	2,422,769	214.7
10/1/2008	10,836,842	16,569,210	5,732,368	65.4	2,506,698	228.7
10/1/2009	12,310,131	18,857,373	6,547,242	65.3	2,396,729	273.2
10/1/2010	14,227,161	21,874,969	7,647,808	65.0	1,355,415	564.2
10/1/2011	15,330,822	23,349,584	8,018,762	65.7	666,772	1202.6
10/1/2012	16,485,737	23,834,063	7,348,326	69.2	621,690	1182.0
10/1/2013	17,818,745	24,708,531	6,889,786	72.1	658,222	1046.7
10/1/2014	18,193,266	24,981,244	6,787,978	72.8	545,753	1243.8
10/1/2015	19,388,750	24,979,447	5,590,697	77.6	548,388	1019.5

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 the **Aggregate Method**. The excess of the Actuarial Present Value of Projected Benefits of the group included in the valuation, over the sum of the Actuarial Value of Assets and the Actuarial Present Value of Future Member Contributions (if any) is allocated as a level percentage of earnings of the group between the valuation date and the assumed retirement age. This allocation is performed for the group as a whole, not as a sum of individual allocations. The portion of this Actuarial Present Value allocated to a specific year is called the Employer Normal Cost.

Under this method, actuarial gains and losses, plan amendments, and changes in actuarial assumptions and methods reduce or increase future Normal Costs.

Actuarial Value of Assets - The Actuarial Value of Assets phase in the difference between the actual and expected investment earnings over a period of five years. 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 7.0% per year, compounded annually (net after investment expenses).

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 7.0% investment return rate translates to an assumed real rate of return over wage inflation of 4.0%.

Pay increase assumptions for individual active members are assumed to be 7.25% per year from valuation date to the assumed retirement age. Part of the assumption is for merit and/or seniority increase, and the other 3% recognizes wage inflation, including price inflation, productivity increases, and other macroeconomic forces.

Demographic Assumptions

The mortality table was the RP-2000 Combined Healthy Participant Mortality Tables for males and females. The provision for future mortality improvements is being made by using Scale AA for each year after 2000.

Sample Attained Ages (in 2015)	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.16 %	0.13 %	34.35	35.68
55	0.27	0.24	29.23	30.71
60	0.53	0.47	24.29	25.93
65	1.03	0.90	19.68	21.44
70	1.77	1.55	15.48	17.32
75	3.06	2.49	11.68	13.59
80	5.54	4.13	8.45	10.28

For active members, the probabilities of dying before retirement were based upon the same mortality table as members dying after retirement.

For disabled retirees, the regular mortality tables are set forward 5 years in ages to reflect impaired longevity.

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows:

Number of Years After First Eligibility for Normal Retirement	Probability of Normal Retirement
0	80 %
1	40
2	40
3	40
4	40
5	100

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

Sample Ages	% of Active Members Separating Within Next Year
20	6.0 %
25	5.7
30	5.0
35	3.8
40	2.6
45	1.6
50	0.8
55	0.3

Rates of disability among active members (75% of future disability retirements are assumed to be service-connected):

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

Miscellaneous and Technical Assumptions

<i>Administrative & Investment Expenses</i>	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 expenses over the previous 2 years. Assumed administrative expenses are added to the Normal Cost.
<i>Benefit Service</i>	Fractional service based on years and completed months is used to determine the amount of benefit payable.
<i>Decrement Operation</i>	Disability and mortality decrements operate during retirement eligibility.
<i>Decrement Timing</i>	Decrements of all types are assumed to occur at the beginning of the year.
<i>Eligibility Testing</i>	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.
<i>Forfeitures</i>	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.
<i>Incidence of Contributions</i>	Employer contributions are assumed to be made at the end of each calendar quarter. 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.
<i>Marriage Assumption</i>	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.
<i>Normal Form of Benefit</i>	Ten year Certain and Life annuity.
<i>Pay Increase Timing</i>	Middle of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to member during the year ended on the valuation date.
<i>Service Credit Accruals</i>	It is assumed that members accrue one year of service credit per year.

GLOSSARY

<i>Actuarial Accrued Liability (AAL)</i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i>Actuarial Assumptions</i>	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.
<i>Actuarial Cost Method</i>	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.
<i>Actuarial Equivalent</i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i>Actuarial Present Value (APV)</i>	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.
<i>Actuarial Present Value of Future Benefits (APVFB)</i>	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.
<i>Actuarial Valuation</i>	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 No. 67.
<i>Actuarial Value of Assets</i>	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 employer contribution (ADEC).

<i>Amortization Method</i>	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.
<i>Amortization Payment</i>	That portion of the plan contribution or ADEC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<i>Amortization Period</i>	The period used in calculating the Amortization Payment.
<i>Actuarially Determined Employer Contribution (ADEC)</i>	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.
<i>Closed Amortization Period</i>	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.
<i>Employer Normal Cost</i>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<i>Equivalent Single Amortization Period</i>	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.
<i>Experience Gain/Loss</i>	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.
<i>Funded Ratio</i>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<i>GASB</i>	Governmental Accounting Standards Board.

<i>GASB No. 67 and GASB No. 68</i>	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.
<i>Normal Cost</i>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<i>Open Amortization Period</i>	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.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<i>Valuation Date</i>	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

STATEMENT OF PLAN ASSETS AT MARKET VALUE

Item	September 30	
	2015	2014
A. Cash and Cash Equivalents (Operating Cash)	\$ -	\$ -
B. Receivables:		
1. Employer and Member Contributions	\$ 279,582	\$ -
2. State Contributions	77,407	304,056
3. Investment Income and Other Receivables	74,842	38,112
4. Total Receivables	\$ 431,831	\$ 342,168
C. Investments		
1. Short-Term Investments	\$ 283,840	\$ 523,360
2. Domestic and International Equities	13,174,818	14,941,848
3. Domestic and International Fixed Income	7,591,729	6,918,937
4. Real Estate	1,153,459	1,032,882
5. Private Equity	-	-
6. Total Investments	\$ 22,203,846	\$ 23,417,027
D. Liabilities		
1. Benefits Payable	\$ -	\$ -
2. Accrued Expenses and Other Payables	(23,394)	(50,021)
3. Prepaid City Contribution	(25,451)	(64,429)
4. Prepaid BSO Contribution	-	(764,767)
5. Total Liabilities	\$ (48,845)	\$ (879,217)
E. Total Market Value of Assets Available for Benefits	\$ 22,586,832	\$ 22,879,978
F. Reserves		
1. State Contribution Reserve (Share Plan Balance)	\$ (16,022)	\$ (16,022)
2. DROP Accounts	(3,658,079)	(3,123,004)
3. Total Reserves	\$ (3,674,101)	\$ (3,139,026)
G. Market Value Net of Reserves	\$ 18,912,731	\$ 19,740,952
H. Allocation of Investments		
1. Short-Term Investments	1.28%	2.23%
2. Domestic and International Equities	59.34%	63.81%
3. Domestic and International Fixed Income	34.19%	29.55%
4. Real Estate	5.19%	4.41%
5. Private Equity	0.00%	0.00%
6. Total Investments	100.00%	100.00%

PENSION FUND INCOME & DISBURSEMENTS

Item	September 30	
	2015	2014
A. Market Value of Assets at Beginning of Year	\$ 22,879,978	\$ 21,738,775
Adjustment (for Administrative Expenses)*	2,475	N/A
	\$ 22,882,453	\$ 21,738,775
B. Revenues and Expenditures		
1. Contributions		
a. Employee Contributions	\$ 18,257	\$ 20,357
b. Employee Contributions (Buy-backs)	-	-
c. Prepaid City Contributions - Prior Year	64,429	62,849
d. Actual City Contributions - Current Year	-	1,580
e. Prepaid City Contributions - Current Year	(25,451)	(64,429)
f. Total City Contributions	38,978	-
g. Prepaid BSO Contributions - Prior Year	764,767	-
h. Actual BSO Contributions - Current Year	299,251	1,032,767
i. Prepaid BSO Contributions - Current Year	-	(764,767)
j. Total BSO Contributions	1,064,018	268,000
k. State Contributions	255,058	304,056
l. Other Income	833	19
m. Total Contributions and Other Income	\$ 1,377,144	\$ 592,432
2. Investment Income		
a. Interest, Dividends, and Other Income	\$ 547,410	\$ 529,334
b. Net Realized and Unrealized Gains/(Losses)**	(990,490)	1,913,661
c. Investment Expenses	(99,975)	(103,189)
d. Net Investment Income	\$ (543,055)	\$ 2,339,806
3. Benefits and Refunds		
a. Refunds	\$ -	\$ -
b. Regular Monthly Benefits	(1,058,286)	(1,008,285)
c. DROP Disbursements	-	(719,184)
d. Share Plan Disbursements	-	(500)
e. Total	\$ (1,058,286)	\$ (1,727,969)
4. Administrative and Miscellaneous Expenses	\$ (71,424)	\$ (63,066)
D. Market Value of Assets at End of Year	\$ 22,586,832	\$ 22,879,978
E. Less: State Contribution Reserve (Share Plan Balance)	\$ 16,022	\$ 16,022
F. Less: DROP account balance	\$ 3,658,079	\$ 3,123,004
G. Final Market Value of Assets at End of Year	\$ 18,912,731	\$ 19,740,952

*Adjustment to match final financial statements as of September 30, 2014.

**Breakdown of Realized and Unrealized Gains/(Losses) was not provided.

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

Valuation Date – September 30	2014	2015	2016	2017	2018	2019
A. Actuarial Value of Assets Beginning of Year	\$ 20,726,037	\$ 21,332,292				
B. Market Value End of Year	22,879,978	22,586,832				
C. Market Value Beginning of Year	21,738,775	22,879,978				
D. Non-Investment/Administrative Net Cash Flow	(1,198,603)	249,909				
E. Investment Income						
E1. Actual Market Total: B-C-D	2,339,806	(543,055)				
E2. Assumed Rate of Return	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
E3. Assumed Amount of Return	1,408,871	1,502,007				
E4. Amount Subject to Phase-In: E1-E3	930,935	(2,045,062)				
F. Phase-In Recognition of Investment Income						
F1. Current Year: 0.20 x E4	186,187	(409,012)	-	-	-	-
F2. First Prior Year	168,719	186,187	(409,012)	-	-	-
F3. Second Prior Year	264,029	168,719	186,187	(409,012)	-	-
F4. Third Prior Year	(231,280)	264,029	168,719	186,187	(409,012)	-
F5. Fourth Prior Year	8,332	(231,280)	264,029	168,719	186,187	(409,012)
F6. Total Phase-Ins	395,987	(21,357)	209,923	(54,106)	(222,825)	(409,012)
G. Actuarial Value of Assets End of Year						
G1. Preliminary Actuarial Value of Assets: A+D+E3+F6	\$ 21,332,292	\$ 23,062,851				
G2. Upper Corridor Limit: 120% *B	27,455,974	27,104,198				
G3. Lower Corridor Limit: 80% *B	18,303,982	18,069,466				
G4. Funding Value End of Year	21,332,292	23,062,851				
G5. Less: State Contribution Reserve	16,022	16,022				
G6. Less: DROP Account Balance	3,123,004	3,658,079				
G7. Final Funding Value End of Year	18,193,266	19,388,750				
H. Difference between Market & Actuarial Value of Assets	\$ 1,547,686	\$ (476,019)				
I. Actuarial Rate of Return	8.97%	6.90%				
J. Market Value Rate of Return	11.07%	-2.36%				
K. Ratio of Actuarial Value of Assets to Market Value	93.24%	102.11%				

Reconciliation of Deferred Retirement Option Plan (DROP) Accounts	
Value at Beginning of Period	\$ 3,123,004
Payments Credited to Account	639,649
Investment Earnings Credited	(100,374)
Administrative Expenses	(4,200)
Withdrawals from Accounts	0
Value at End of Period	3,658,079

Reconciliation of Share Plan Balance	
Value at Beginning of Period	\$ 16,022
Allocation of Excess Chapter 175 Revenue	0
Investment Earnings Credited	0
Distributions	0
Value at End of Period	16,022

Prepaid City Contribution as of 10/1/2015	
Prepaid as of 10/1/2014	\$ 64,429
Actual Contribution for FYE 9/30/2015	0
Required Contribution for FYE 9/30/2015	(38,978)
Prepaid as of 10/1/2015	25,451

INVESTMENT RATE OF RETURN

The approximate annual rates of investment return have been calculated on two bases and are shown below:

Year Ending September 30th	Investment Rate of Return	
	Market Value	Actuarial Value
1981	11.6 %	11.6 %
1982	12.7	12.7
1983	10.6	10.6
1984	10.0	10.0
1985	10.3	10.3
1986	6.1	6.9
1987	7.7	7.4
1988	6.4	6.9
1989	12.2	10.1
1990	3.6	5.5
1991	21.2	15.0
1992	11.9	10.3
1993	8.0	8.7
1994	(1.7)	5.9
1995	19.2	8.9
1996	10.3	8.4
1997	20.1	10.1
1998	8.4	8.5
1999	10.1	10.7
2000	7.5	4.9
2001	(3.0)	6.8
2002	(1.6)	3.0
2003	10.3	3.2
2004	7.0	3.1
2005	9.1	4.0
2006	9.3	5.7
2007	10.3	7.8
2008	(12.4)	3.7
2009	1.7	1.9
2010	9.2	5.8
2011	0.2	4.3
2012	16.6	6.0
2013	11.6	6.8
2014	11.1	9.0
2015	(2.4)	6.9
Average Returns:		
Last Five Years	7.2 %	6.6 %
Last Ten Years	5.2 %	5.8 %
All Years	7.9 %	7.4 %

SECTION D
FINANCIAL ACCOUNTING INFORMATION

FASB NO. 35 INFORMATION		
A. Valuation Date	October 1, 2015	October 1, 2014
B. Actuarial Present Value of Accumulated Plan Benefits		
1. Vested Benefits		
a. Members Currently Receiving Payments	\$ 21,264,668	\$ 21,491,402
b. Terminated Vested Members	239,116	223,141
c. Other Members	<u>2,827,879</u>	<u>2,470,148</u>
d. Total	24,331,663	24,184,691
2. Non-Vested Benefits	0	0
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	24,331,663	24,184,691
4. Accumulated Contributions of Active Members	430,331	388,232
C. Changes in the Actuarial Present Value of Accumulated Plan Benefits		
1. Total Value at Beginning of Year	24,184,691	23,888,576
2. Increase (Decrease) During the Period Attributable to:		
a. Plan Amendment	0	0
b. Change in Actuarial Assumptions	0	0
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	1,844,907	1,946,095
d. Benefits Paid (Net Basis)	<u>(1,697,935)</u>	<u>(1,649,980)</u>
e. Net Increase	146,972	296,115
3. Total Value at End of Period	24,331,663	24,184,691
E. Market Value of Assets	18,912,731	19,740,952
F. 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,	2016*	2015	2014
Total pension liability			
Service Cost	\$ 159,041	\$ 158,031	\$ 188,438
Interest on the Total Pension Liability	1,992,885	1,939,322	1,885,382
Benefit Changes	-	-	-
Difference between expected and actual experience	(544,532)	47,678	104,017
Assumption Changes	-	-	-
Benefit Payments	(1,703,426)	(1,058,286)	(1,727,969)
Refunds	-	-	-
Other (Change in Share Plan Reserve)	-	-	10,020
Net Change in Total Pension Liability	(96,032)	1,086,745	459,888
Total Pension Liability - Beginning	29,162,456	28,075,711	27,615,823
Total Pension Liability - Ending (a)	<u>\$ 29,066,424</u>	<u>\$ 29,162,456</u>	<u>\$ 28,075,711</u>
Plan Fiduciary Net Position			
Contributions - Employer (from City)	\$ 38,978	\$ -	\$ 1,580
Contributions - Employer (from State)	255,058	255,058	304,056
Contributions - Non-Employer Contributing Entity (from BSO)	985,120	299,251	1,032,767
Contributions - Employee (including buyback contributions)	18,919	18,257	20,357
Net Investment Income	1,566,362	(542,222)	2,339,825
Benefit Payments	(1,703,426)	(1,058,286)	(1,727,969)
Refunds	-	-	-
Pension Plan Administrative Expense	(66,008)	(71,424)	(60,591)
Other	-	-	-
Net Change in Plan Fiduciary Net Position	1,095,003	(1,099,366)	1,910,025
Plan Fiduciary Net Position - Beginning	22,612,283	23,711,649	21,801,624
Plan Fiduciary Net Position - Ending (b)	<u>\$ 23,707,286</u>	<u>\$ 22,612,283</u>	<u>\$ 23,711,649</u>
Net Pension Liability - Ending (a) - (b)	5,359,138	6,550,173	4,364,062
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	81.56 %	77.54 %	84.46 %
Covered Employee Payroll**	\$ 548,388	\$ 529,204	\$ 590,048
Net Pension Liability as a Percentage of Covered Employee Payroll	977.25 %	1,237.74 %	739.61 %

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

**Estimated based on valuation payroll.

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

<u>FY Ending September 30,</u>	<u>Total Pension Liability</u>	<u>Plan Net Position</u>	<u>Net Pension Liability</u>	<u>Plan Net Position as a % of Total Pension Liability</u>	<u>Covered Employee Payroll*</u>	<u>Net Pension Liability as a % of Covered Employee Payroll</u>
2014	\$ 28,075,711	\$ 23,711,649	\$ 4,364,062	84.46%	\$ 590,048	739.61%
2015	29,162,456	22,612,283	6,550,173	77.54%	529,204	1237.74%
2016**	29,066,424	23,707,286	5,359,138	81.56%	548,388	977.25%

*Estimated based on valuation payroll.

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

SCHEDULE OF CONTRIBUTIONS
GASB Statement No. 67

FY Ending September 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Employee Payroll*	Actual Contribution as a % of Covered Employee Payroll
2014	1,296,957	1,328,383	(31,426)	590,048	225.13%
2015	1,358,054	554,309 **	803,745 **	529,204	104.74%
2016***	1,279,156	294,036	985,120	548,388	53.62%

*Estimated based on valuation payroll.

**Prepaid contributions of \$803,745 (resulting from previous years' excess contributions) were applied to fully meet the Actuarially Determined Contribution.

***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, 2013 (October 1, 2014 for fiscal year end September 30, 2016 estimates)

Notes Actuarially determined contribution rates are calculated as of October 1, which is two years prior to the end of the fiscal year in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Aggregate
Amortization Method	N/A
Remaining Amortization Period	N/A
Asset Valuation Method	5-year smoothed market
Inflation	3.0%
Salary Increases	7.25%
Investment Rate of Return	7.0%
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 males and females with mortality improvement projected to all future years after 2000 using Scale AA

Other Information:

Notes See Discussion of Valuation Results on Page 1 of the October 1, 2013 Actuarial Valuation Report

SINGLE DISCOUNT RATE
GASB Statement No. 67

A single discount rate of 7.00% 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 7.00%. 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 (7.00%) 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 7.00%, 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**

FY Ending September 30,	Current Single Discount		
	1% Decrease	Rate Assumption	1% Increase
	6.00%	7.00%	8.00%
2015	\$ 9,415,691	\$ 6,550,173	\$ 4,170,517
2016*	\$ 8,173,694	\$ 5,359,138	\$ 3,016,681

*** 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 10/1/14 To 10/1/15	From 10/1/13 To 10/1/14
A. Active Members		
1. Number Included in Last Valuation	5	6
2. New Members Included in Current Valuation	0	0
3. Non-Vested Employment Terminations	0	0
4. Vested Employment Terminations	0	0
5. Service Retirements	0	0
6. Disability Retirements	0	0
7. Deaths	0	0
8. DROP Participants	0	(1)
9. Other	<u>0</u>	<u>0</u>
10. Number Included in This Valuation	5	5
B. Terminated Vested Members		
1. Number Included in Last Valuation	1	1
2. Additions from Active Members	0	0
3. Lump Sum Payments/Refunds	0	0
4. Payments Commenced	0	0
5. Deaths	0	0
6. Other	<u>0</u>	<u>0</u>
7. Number Included in This Valuation	1	1
C. DROP Participation		
1. Number Included in Last Valuation	7	7
2. Additions from Active Members	0	1
3. Payments commenced	0	(1)
4. Deaths	0	0
5. Other	<u>0</u>	<u>0</u>
6. Number Included in This Valuation	7	7
D. Service Retirees, Disability Retirees and Beneficiaries		
1. Number Included in Last Valuation	15	14
2. Additions from Active Members	0	0
3. Additions from Terminated Vested Members	0	0
4. Additions from DROP	0	1
5. Deaths Resulting in No Further Payments	0	0
6. Deaths Resulting in New Survivor Benefits	0	0
7. End of Certain Period - No Further Payments	0	0
8. Other	<u>0</u>	<u>0</u>
9. Number Included in This Valuation	15	15

Cooper City Firefighters – Active Participants

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	25-29	Totals
20-24 NO.	-	-	-	-	-	-	-	-	-	-	-
TOT PAY	-	-	-	-	-	-	-	-	-	-	-
AVG PAY	-	-	-	-	-	-	-	-	-	-	-
25-29 NO.	-	-	-	-	-	-	-	-	-	-	-
TOT PAY	-	-	-	-	-	-	-	-	-	-	-
AVG PAY	-	-	-	-	-	-	-	-	-	-	-
30-34 NO.	-	-	-	-	-	-	-	-	-	-	-
TOT PAY	-	-	-	-	-	-	-	-	-	-	-
AVG PAY	-	-	-	-	-	-	-	-	-	-	-
35-39 NO.	-	-	-	-	-	-	-	1	-	-	1
TOT PAY	-	-	-	-	-	-	-	108,045	-	-	108,045
AVG PAY	-	-	-	-	-	-	-	108,045	-	-	108,045
40-44 NO.	-	-	-	-	-	-	-	2	-	-	2
TOT PAY	-	-	-	-	-	-	-	225,353	-	-	225,353
AVG PAY	-	-	-	-	-	-	-	112,677	-	-	112,677
45-49 NO.	-	-	-	-	-	-	-	-	2	-	2
TOT PAY	-	-	-	-	-	-	-	-	195,806	-	195,806
AVG PAY	-	-	-	-	-	-	-	-	97,903	-	97,903
50-54 NO.	-	-	-	-	-	-	-	-	-	-	-
TOT PAY	-	-	-	-	-	-	-	-	-	-	-
AVG PAY	-	-	-	-	-	-	-	-	-	-	-
55-59 NO.	-	-	-	-	-	-	-	-	-	-	-
TOT PAY	-	-	-	-	-	-	-	-	-	-	-
AVG PAY	-	-	-	-	-	-	-	-	-	-	-
60-64 NO.	-	-	-	-	-	-	-	-	-	-	-
TOT PAY	-	-	-	-	-	-	-	-	-	-	-
AVG PAY	-	-	-	-	-	-	-	-	-	-	-
65-99 NO.	-	-	-	-	-	-	-	-	-	-	-
TOT PAY	-	-	-	-	-	-	-	-	-	-	-
AVG PAY	-	-	-	-	-	-	-	-	-	-	-
TOT NO.	-	-	-	-	-	-	-	3	2	-	5
TOT AMT	-	-	-	-	-	-	-	333,398	195,806	-	529,204
AVG AMT	-	-	-	-	-	-	-	111,133	97,903	-	105,841

Cooper City Firefighters - Inactive Members										
Inactive Participant Data										
Age	Terminated Vested		Disabled		Retired		Other		Total	
	Number	Total Benefits	Number	Total Benefits	Number	Total Benefits	Number	Total Benefits	Number	Total Benefits
Under 20	-	-	-	-	-	-	-	-	-	-
20 - 24	-	-	-	-	-	-	-	-	-	-
25 - 29	-	-	-	-	-	-	-	-	-	-
30 - 34	-	-	-	-	-	-	-	-	-	-
35 - 39	-	-	-	-	-	-	-	-	-	-
40 - 44	-	-	-	-	1	82,210	-	-	1	82,210
45 - 49	1	19,056	-	-	4	373,288	-	-	5	392,344
50 - 54	-	-	-	-	7	691,560	1	49,240	8	740,800
55 - 59	-	-	-	-	6	414,717	-	-	6	414,717
60 - 64	-	-	-	-	1	27,164	1	44,913	2	72,077
65 - 69	-	-	-	-	-	-	-	-	-	-
70 - 74	-	-	-	-	-	-	-	-	-	-
75 - 79	-	-	-	-	-	-	-	-	-	-
80 - 84	-	-	-	-	-	-	1	14,846	1	14,846
85 - 89	-	-	-	-	-	-	-	-	-	-
90 - 94	-	-	-	-	-	-	-	-	-	-
95 - 99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
Total	1	19,056	-	-	19	1,588,939	3	108,999	23	1,716,994

SECTION F
SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

A. Ordinances

Plan established under the Code of Ordinances for the City of Cooper City, Florida, Chapter 2, Part II, and was most recently amended under Ordinance No. 11-10-2 passed and adopted on October 25, 2011. The Plan is also governed by certain provisions of Chapter 175, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

B. Effective Date

October 1, 1979

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

Only firefighters who, on February 14, 2004, elected to remain in the Plan after the transfer of fire and rescue to BSO are currently members of the Plan. Previously, all full-time firefighters were eligible for membership on the first day of employment.

F. Credited Service

Service is measured as the number of years and completed months of employment with the City or BSO as a firefighter. No service is credited for any periods of employment for which the member received a refund of employee contributions.

G. Compensation

Basic compensation including bonuses, overtime, any other non-regular payments and lump sum payments of unused leave pay.

H. Average Monthly Earnings (AME)

The average of Compensation over the highest 3 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 earlier of:

- (1) age 50 and 10 years of Credited Service, or
- (2) 25 years of Credited Service regardless of age.

- Benefit: 3.0% of AME multiplied by Credited Service.
- Normal Form of Benefit: 10 Years Certain and Life thereafter; other options are also available.
- Supplemental Benefit 1: \$5.00 per year of Credited Service paid monthly.
- Supplemental Benefit 2: Upon actual retirement, members will be paid a lump sum of any accumulated pro-rata allocations made on their behalf from Excess Premium Tax Revenues.
- COLA: There is a cost of living adjustment in the form of a 13th check paid to those who have been retired at least 1 year, but only if there are cumulative actuarial gains. Also see Section W, 13th Check.

J. Early Retirement

Not Applicable

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 firefighter resulting from an act occurring in the performance of service for the City is eligible for a disability benefit.
- Benefit: 60% of AME, but no less than the accrued Normal Retirement Benefit taking into account compensation earned and service credited until the date of disability.
- Normal Form of Benefit: Paid until death or recovery from disability. Optional forms are available.
- Supplemental Benefit 1: \$5.00 per year of Credited Service paid monthly.
- Supplemental Benefit 2: Upon actual retirement, members will be paid a lump sum of any accumulated pro-rata allocations made on their behalf from Excess Premium Tax Revenues.
- COLA: There is a cost of living adjustment in the form of a 13th check paid to those who have been retired at least 1 year, but only if there are cumulative actuarial gains. Also see Section W, 13th Check.

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: 25% of AME, but no less than the accrued Normal Retirement Benefit taking into account compensation earned and service credited until the date of disability.
- Normal Form of Benefit: Paid until death or recovery from disability. Optional forms are available.
- Supplemental Benefit 1: \$5.00 per year of Credited Service paid monthly.
- Supplemental Benefit 2: Upon actual retirement, members will be paid a lump sum of any accumulated pro-rata allocations made on their behalf from Excess Premium Tax Revenues.
- COLA: There is a cost of living adjustment in the form of a 13th check paid to those who have been retired at least 1 year, but only if there are cumulative actuarial gains. Also see Section W, 13th Check.

N. Death in the Line of Duty

- Eligibility: Members are eligible for survivor benefits after the completion of 10 years of Credited Service
- Benefit: Beneficiary will receive the member's accrued Normal Retirement Benefit as of the date of death. Benefit is payable as though the member retired on the date of death and elected the 100% Joint and Survivor option.
- Normal Form of Benefit: Payable for the life of the beneficiary.
- Supplemental Benefit 1: \$5.00 per year of Credited Service paid monthly.
- Supplemental Benefit 2: Not applicable to Pre-Retirement Death Benefits.
- COLA: Not applicable to Pre-Retirement Death Benefits.

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 with interest.

O. Other Pre-Retirement Death

- Eligibility: Members are eligible for survivor benefits after the completion of 10 years of Credited Service

Benefit: Beneficiary will receive the member's accrued Normal Retirement Benefit as of the date of death. Benefit is payable as though the member retired on the date of death and elected the 100% Joint and Survivor option.

Normal Form of Benefit: Payable for the life of the beneficiary.

Supplemental Benefit 1: \$5.00 per year of Credited Service paid monthly.

Supplemental Benefit 2: Not applicable to Pre-Retirement Death Benefits.

COLA: Not applicable to Pre-Retirement Death Benefits.

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 with interest.

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 or the 50%, 66 2/3%, 75% and 100% Joint and Survivor options.

R. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 10 years of Credited Service (see vesting table below).

YEARS OF CREDITED SERVICE	% OF NORMAL RETIREMENT BENEFITS
Less Than 10	0%
10 or more	100%

Benefit: The benefit is the member's vested accrued Normal Retirement Benefit as of the date of termination. Benefit begins at the member's Normal Retirement Date.

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

Supplemental Benefit 1: \$5.00 per year of Credited Service paid monthly upon actual retirement.

Supplemental Benefit 2: Upon actual retirement, members will be paid a lump sum of any accumulated pro-rata allocations made on their behalf from Excess Premium Tax Revenues

COLA: There is a cost of living adjustment in the form of a 13th check paid to those who have been retired at least 1 year, but only if there are cumulative actuarial gains. Also see Section W, 13th Check.

Members terminating employment with less than 10 years of Credited Service will receive a refund of their own accumulated contributions with interest.

S. Refunds

Eligibility: All members terminating employment with less than 10 years of Credited Service are eligible. Optionally, vested members (those with 10 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 with interest. The current rate of interest is 6.0%.

T. Member Contributions

3.45% of Compensation, plus 5% paid by BSO.

U. Employer Contributions

Chapter 175 Premium Tax Refunds and up to \$130,000 per year. BSO will provide any additional amount needed to fund the plan properly according to State laws.

V. Cost of Living Increases

There is a cost of living adjustment in the form of a 13th check paid to those who have been retired at least 1 year, but only if there are cumulative actuarial gains. Also see Section W, 13th Check.

W. 13th Check

Under certain conditions, the Plan will pay a Thirteenth Check to those who entered Normal or Disability Retirement on or after February 13, 2004 and have been receiving benefits for at least 1 year. The payment shall be based upon the cumulative net actuarial gains over the past three (3) year period as determined in the Plan's annual actuarial valuation report, subject to an overall limitation in net actuarial gain not to exceed two (2%) percent over the Plan's assumed rate investment return. No 13th check shall be paid in any year in which the Plan fails to experience a net actuarial gain as determined in the annual actuarial valuation report.

X. Deferred Retirement Option Plan

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

- (1) age 50 and 10 years of Credited Service, or
- (2) 25 years of Credited Service regardless of age.

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

Benefit: The member's Credited Service and AME 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 AME.

Maximum
DROP Period: No limit

Interest
Credited: The member's DROP account is credited or debited with the actual net interest rate realized by the Plan and is also debited for an administrative charge. Effective October 25, 2011, the member may make a one-time irrevocable election at any time during DROP participation to have his/her DROP account invested in a self-directed fund.

Normal Form
of Benefit: Lump Sum; other options are also available.

Supplemental
Benefit 1: \$5.00 per year of Credited Service paid monthly.

Supplemental
Benefit 2: Upon actual retirement and termination from the DROP, members will be paid a lump sum of any accumulated pro-rata allocations made on their behalf from Excess Premium Tax Revenues.

COLA: There is a cost of living adjustment in the form of a 13th check paid to those who have terminated from the DROP and been retired at least 1 year, but only if there are cumulative actuarial gains. Also see Section W, 13th Check.

Y. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Cooper City Firefighters' Retirement Plan liability if continued beyond the availability of funding by the current funding source.