GRS Gabriel Roeder Smith & Company
Consultants & Actuaries

CITY OF JACKSONVILLE BEACH FIREFIGHTERS' RETIREMENT SYSTEM

SIXTY-FIFTH ANNUAL ACTUARIAL VALUATION

OCTOBER 1, 2015

Outline of Contents
Report of October 1, 2015 Actuarial Valuation

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April 28, 2016

Board of Trustees
City of Jacksonville Beach
Firefighters' Retirement System
Jacksonville Beach, Florida

The results of the October 1, 2015 Annual Actuarial Valuation of the City of Jacksonville Beach Firefighters' Retirement System are presented in this report. The purpose of the annual valuation is to measure the System's funding progress and to determine the City's contribution rate for the fiscal year beginning October 1, 2016 in accordance with established funding policies. The results of the valuation may not be applicable for other purposes. Disclosures under the Governmental Accounting Board (GASB) Statements No. 67 and No. 68 were issued in a separate report.

This report should not be relied on for any purpose other than those described above. It 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 signing actuaries are independent of the plan sponsor.

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. We did not perform an analysis of the potential range of such future measurements under the scope of this assignment.

Valuation results, comments, recommendations and our certification are contained in Section A.

The valuation was based upon information compiled during the fiscal year ending September 30, 2015, furnished by the Pension Fund Administrator, concerning pension fund benefits, financial transactions, and individual members, terminated members, retired members and beneficiaries. Data was checked for reasonableness and missing information, but was not audited. GRS is not responsible for the accuracy or completeness of the data provided to us. This information is summarized in Section B.

A description of the actuarial valuation process, actuarial assumptions and definitions of technical terms are contained in Section C.

Additional Disclosure information is contained in Section D.

A summary of valuation results in the State format is contained in Section E.

The computed contribution rate shown on page A-2 may be considered as a minimum contribution rate that complies with the Board's funding policy and/or state and city statutes. 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 C of this report. This report includes certain risk metrics but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of 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 has been prepared by actuaries who have substantial experience valuing public employee retirement systems. We certify that the information contained in this report is accurate and fairly presents the actuarial position of the City of Jacksonville Beach Firefighters' Retirement System as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. **It is our opinion that the mortality tables needed a load to be reasonable for purposes of determining the employer contribution rates. All other actuarial assumptions used for the valuation are reasonable.**

Brad Lee Armstrong and Jeff T. Tebeau are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,

Brad Lee Armstrong, ASA, EA, FCA, MAAA

Jeffrey T. Tebeau, ASA, MAAA

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SECTION A

VALUATION RESULTS, COMMENTS, CONCLUSION, RECOMMENDATIONS (IF ANY) AND STATEMENT BY ENROLLED ACTUARY

FUNDING OBJECTIVE

The funding objective of the Retirement System is to establish and receive contributions, expressed as percents of active member payroll, which will achieve progress towards 100% funded status and will remain approximately level from year-to-year and will not have to be increased for future generations of citizens in the absence of benefit improvements. This objective is stated in the Ordinance and meets the requirements of Part VII, Chapter 112, Florida Statutes.

CONTRIBUTION RATES

The Retirement System is supported by member contributions, property insurance premium tax monies received from the State pursuant to Chapters 175 Florida Statutes, City contributions, and investment income from Retirement System assets.

Contributions which satisfy the funding objective are determined by the actuarial valuation and are sufficient to:

(1) cover the actuarial costs allocated to the current year (the normal cost) by the actuarial cost methods described in Section C; and

(2) finance over a period of future years the actuarial costs not covered by present assets and anticipated future normal costs (Unfunded Actuarial Accrued Liability).

Contribution requirements for the Plan and fiscal year beginning October 1, 2016 are shown on page A-2.

CONTRIBUTIONS TO FINANCE BENEFITS OF THE RETIREMENT SYSTEM FOR THE PLAN YEAR BEGINNING OCTOBER 1, 2016 TO BE CONTRIBUTED DURING THE FISCAL YEAR BEGINNING OCTOBER 1, 2016

Contributions for	Contributions Expressed as Percents of UnDROPed Active Member Payroll
Normal Cost	
Service pensions	7.70 %
Disability pensions	1.67
Survivor pensions	
Pre-retirement	0.24
Termination benefits	
Deferred service pensions	3.78
Refunds of member contributions	0.96
Total Normal Cost	14.35
Unfunded Actuarial Accrued Liability (1)	
Retired members and beneficiaries	0.00
Active and vested terminated members	14.43
Total unfunded actuarial accrued liability	14.43
Administrative Expenses	3.59
Total Calculated Contribution Requirement	32.37
Adjustments to Calculated Contribution Requirement	
Temporary full funding credit	0.00
FS 112.64(5) compliance	1.34
Total adjustments	1.34
Total Adjusted Contribution Requirement	33.71 %
Member portion	7.95 %
Estimated Chapter 175 and Additional Premium Tax Revenue monies	11.48 %
Estimated City portion	14.28 %

(1) *Unfunded Actuarial Accrued Liability was financed as level percents of unDROPed member payroll. Please refer to page A-11 for a schedule of financing periods.*

FS 112.64 requires that City contributions be deposited not less frequently than quarterly. FS 175.131 requires that Chapter 175 monies be deposited within 5 days of receipt from the State. Member contributions, which are in addition to the City/Chapter contributions, must be deposited immediately after each pay period.

Procedures for determining dollar contributions are shown on page A-3.

Comparative contribution amounts for prior fiscal years are shown on page A-13.

CHAPTER 99-1, LAWS OF FLORIDA
MINIMUM COMPLIANCE AND EXTRA BENEFITS

	Prior Year			Cumulative		
	Premium Tax Distributions	Supplemental Compensation Fund	Total	Premium Tax Distributions	Supplemental Compensation Fund	Total
A. Additional premium tax revenues as of 9/30/2014			$ 25,210			
B. Chapter 175 receipts during fiscal year ending 9/30/2015	$147,843	$64,418	212,261	$2,096,933	$927,802	$3,024,735
C. Chapter 175 "frozen" receipts during fiscal year ending 9/30/2015	77,527	3,082	80,609	1,317,959	49,129	1,367,088
D. Qualifying benefit improvements since Chapter 99-1 effective date	129,254	0	129,254	1,561,370	51,395	1,612,765
E. Additional premium tax revenues as of 9/30/2015 [A + B - C - D] not less than 0			27,608			44,882

DETERMINING DOLLAR CONTRIBUTIONS

For any period of time, the percent-of-payroll contribution rate needs to be converted to dollar amounts. We recommend the following procedure.

The City/Chapter contribution amount is indicated in the following schedule. Included in these amounts is the projected increase in salary level between the valuation date and the fiscal year in which the contribution is made. The projection factor of 1.052957 [$(1.035)^{1.5}$] is consistent with that used to calculate the actuarial liability. The member contribution amounts should not be used to reconcile actual member contributions.

Total Contribution Requirement	$ 656,108
Less Member Contributions	154,733
Total Employer Contribution Requirement	501,375
Less Estimated Chapter 175 and Additional Premium	
Tax Revenue Monies	212,261
Estimated Base City Contribution	**$ 289,114 ***

* *Chapter 175 Florida Statutes. The base City contribution amount may need to be increased if the amount received under the provisions of Chapter 175, Florida Statutes, is not sufficient to meet the total employer contribution requirement. CAUTION: If the amount received under the provisions of Chapter 175, Florida Statutes, exceeds $209,863 the City may NOT use any of the excess to reduce the City contribution shown.*

The above City/Chapter contribution amounts are estimated to be contributed, on average, halfway through the fiscal year. If contributions are made on a later schedule, interest should be added at the rate of .64% (.0064) for each month of delay.

FUNDING PROGRESS ACHIEVEMENT INDICATORS

There is no single all-encompassing measure of a retirement system's funding progress and current funded status.

A traditional measure has been the relationship of valuation assets to Unfunded Actuarial Accrued Liability - a measure that is influenced by the choice of actuarial cost method. This relationship is shown on page A-12.

We believe a better understanding of funding progress and status can be achieved using the following indicators.

Indicator (1) ***The actuarial present value of gains or losses realized in the operation of the retirement system.*** Gains and losses are expected to cancel each other over an economic cycle but sizable year-to-year fluctuations are common. An experience gain can result from assets increasing in value by more than anticipated, or by the system's obligation increasing by less than anticipated, or by other favorable combinations or deviation from expected asset and liability changes. Further details on the derivation of the gain (loss) are shown on page A-10.

Indicator (2) ***The ratio of valuation assets to the actuarial present value of credited projected benefits*** allocated in the proportion credited service is to projected total service. The ratio is expected to increase over time, but the basic trend may be interrupted by benefit improvements. This ratio is the most appropriate of the three described here for assessing the need for future contributions above the amounts needed to fund the normal cost.

Indicator (3) ***The ratio of the unfunded actuarial present value of credited projected benefits to member payroll.*** The unfunded actuarial present value of credited projected benefits is controlled by the funding program. The ratio to payroll is a relative index of condition where inflation is present in both components. The ratio is expected to decrease over time, but the basic trend may be interrupted by benefit improvements.

FUNDING PROGRESS INDICATORS* - HISTORICAL DEVELOPMENT
($ AMOUNTS IN THOUSANDS)

	Indicator (1)		*Indicator (2)*			*Indicator (3)*		
	Gain/(Loss)		Funding					
Valuation Date	Amount	% of AAL	Value of Assets	APVCPB^	Funded Ratio	Unfunded APVCPB^	Member Payroll	Ratio to Payroll
10/1/1995 (a)	$ 1,315	4.5	$ 30,791	$ 28,889	106.6	$ (1,902)	$ 10,601	(17.90) %
10/1/2000 (aa)	321	4.4	8,055	7,792	103.4	(263)	1,408	(18.69)
10/1/2001	29	(3.1)	8,257	8,222	100.4	(36)	1,174	(3.03)
10/1/2002 (a)	(638)	(7.5)	8,242	8,502	96.9	260	1,196	21.78
10/1/2003	49	0.5	8,049	8,213	98.0	164	1,345	12.21
10/1/2004	(705)	(8.0)	7,549	8,521	88.6	972	1,468	66.23
10/1/2005	(592)	(6.5)	7,483	8,998	83.2	1,515	1,651	91.74
10/1/2006	151	1.6	7,502	9,083	82.6	1,581	1,768	89.41
10/1/2007 (a)	289	3.0	8,044	9,356	86.0	1,312	1,726	76.00
10/1/2008	(248)	(2.5)	8,366	9,711	86.2	1,345	1,928	69.76
10/1/2009 (a)	(229)	(2.1)	8,468	10,588	80.0	2,120	1,985	106.80
10/1/2010	(457)	(4.0)	8,434	10,960	77.0	2,526	2,079	121.50
10/1/2011	(507)	(4.2)	8,363	11,421	73.2	3,058	2,120	144.26
10/1/2012	303	2.4	8,888	11,679	76.1	2,791	2,066	135.11
10/1/2013	242	1.9	9,701	12,119	80.1	2,418	1,836	131.67
10/1/2014 (a)	99	0.7	10,438	12,223	85.4	1,785	1,868	95.58
10/1/2015	**35**	**0.0**	**11,135**	**12,776**	**87.2**	**1,642**	**1,848**	**88.81**
10/1/2015 (a)	**35**	**0.3**	**11,135**	**13,520**	**82.4**	**2,386**	**1,848**	**129.07**

(a) After changes in benefit provisions and/or actuarial assumptions and actuarial cost methods.
(aa) After Minimum Benefit changes.
^ AAL starting with 2014.
** None of these funding progress indicators are appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligations.*

COMMENTS AND CONCLUSION

COMMENT A: For the fiscal year ended September 30, 2015, the Firefighters' System had a $34,586 experience gain. The gain was attributed to less than expected pay increases (-1.0% reported vs. 6.2% assumed) and higher than expected recognized investment return on the funding value of assets (8.8% recognized vs. 8.0% assumed) due to favorable returns in three out of the last four years. The gain was offset by losses attributable to retiree mortality and less turnover than assumed. In order to generate the appropriate dollar contribution to amortize the unfunded actuarial accrued liability, the UAAL rate must be higher since it is applied to a smaller payroll than it would have been in equivalent circumstances with a larger payroll. The 10-year average payroll growth rate was 1.7% and compliance under Florida Statute 112.64(5) caused an increase in the City's contribution rate of 0.54% of payroll compared to last year. Additional experience information is reported on pages B-7, B-13, C-4, C-5, and C-6. The funded ratio decreased from 85.4% to 82.4% from 2014 to 2015 on a funding value of assets basis and from 89.6% to 79.1% on a market value of assets basis.

COMMENT B: It is our opinion that the mortality tables used for this valuation are minimally reasonable for determining future life expectancies. Therefore, we loaded the liabilities by 3.0% to account for this. The merit and seniority salary increase rates were reduced and the wage inflation assumption was decreased from 4.5% to 3.5% as well. These changes increased the contribution rates and lowered the funded ratio. The assumed rate of price inflation used for this valuation was changed from 3.5% to 3.0% in order to be considered reasonable. This change had no effect as the price inflation is not directly used.

House Bill 1309 will mandate the use of the Florida Retirement System (FRS) mortality tables for the valuation dates beginning with the September 30, 2016 actuarial valuation. The FRS uses versions of the RP-2000 tables and projection scale BB in a reasonable manner. These mortality tables produce life expectancies that are longer for males and females. This change will increase the computed contribution rates and decrease the funded ratio in next year's report.

LOOKING FORWARD: Due to the Board's use of a four-year smoothed market asset valuation method, greater than expected market returns during 2013 and 2014 and lower than expected market returns during 2015 have only been partially recognized in developing the funding value of assets as of September 30, 2015. The funding value of assets currently exceeds the market value of assets by $434,792. If gains from investment returns above the 8% assumed or gains from other sources do not emerge, this will create an upward pressure on contribution requirements and a coinciding downward pressure on the funded ratios in subsequent valuation years. An additional risk factor to the level of the contribution rate is the 10-year average payroll growth, which was 1.70% for the 10 years ending September 30, 2015. If the average payroll growth is lower in subsequent reports, this will increase the City's contribution requirement pursuant to compliance with Florida Statute 112.64(5).

RISKS TO FUTURE EMPLOYER CONTRIBUTION REQUIREMENTS: There are ongoing risks to future employer contribution requirements to which the Retirement System is exposed, such as:

- Actual and Assumed Investment Rate of Return
- Actual and Assumed Mortality Rates
- Amortization Policy
- F.S. 112.64(5) Compliance Regarding Payroll Growth

We are recommending the Retirement System perform an experience study, as discussed in our April 8, 2015 correspondence.

CONCLUSION: It is the actuary's opinion that the required contribution rates determined by the most recent actuarial valuation are sufficient to meet the Retirement System's funding objective, presuming continued timely receipt of required contributions.

OTHER OBSERVATIONS

General Implications of Contribution Allocation Procedure or Funding Policy on Future Expected Contributions and Funded Status

Given the System's contribution allocation procedure, if all actuarial assumptions are met (including the assumption of the Retirement and Benefit System earning 8.00% on the Market Value of Assets), it is expected that:

1. The employer normal cost is sufficient to cover the cost of benefits accruing each year;
2. The Unfunded Actuarial Accrued Liabilities (UAAL) will continue to be fully amortized; and
3. The funded status of the Retirement and Benefit System will continue to increase gradually towards a 100% funded ratio.

Limitations of Funded Status Measurements

Unless otherwise indicated, a funded status measurement presented in this report is based upon the Actuarial Accrued Liability (AAL) and the Funding Value of Assets (FVA). Unless otherwise indicated, with regard to any funded status measurements presented in this report:

1. The measurement is inappropriate for assessing the sufficiency of Retirement System assets to cover the estimated cost of settling the Retirement and Benefit System's benefit obligations, for example: transferring the liability to an unrelated third party in a market value type transaction.
2. The measurement is dependent upon the Actuarial Cost Method which, in combination with the Retirement System's amortization policy, affects the timing and amounts of future contributions. The amounts of future contributions will most certainly differ from those assumed in this report due to future actual experience differing from assumed experience based upon the actuarial assumptions. A funded status measurement in this report of 100% is not synonymous with no required future contributions. Even though the funded status is over 100%, the Retirement and Benefit System would still require future normal cost contributions (i.e., contributions to cover the cost of active membership accruing an additional year of service credit).
3. The measurement would produce a different result if the Market Value of Assets (MVA) were used instead of the FVA, unless the MVA is used in the measurement.

Limitations of Project Scope

Actuarial standards do not require the actuary to evaluate the ability of the plan sponsor or other contributing entities to make required contributions to the plan when due. Such an evaluation was not within the scope of this project and is not within the actuary's domain of expertise. Consequently, the actuary performed no such evaluation.

STATEMENT BY ENROLLED ACTUARY

STATEMENT BY ENROLLED ACTUARY: "This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation."

4/28/2016	Brad Lee Armstrong
Date	Brad Lee Armstrong, ASA, EA, MAAA [14-5614]

EXPERIENCE GAIN (LOSS)
YEAR ENDED OCTOBER 1, 2015

DERIVATION

(1)	UAAL* at start of year	$1,785,318
(2)	Normal cost for year (ER normal cost & expenses from the prior corresponding valuation x current valuation pay)	145,288
(3)	Actual City/Chapter contribution	387,599
(4)	Interest accrual .08 x [(1) + 1/2 [(2)-(3)]]	133,133
(5)	Expected UAAL before changes	1,676,140
(6)	Effect of timing/accounting	0
(7)	Effect of assumption/cost method changes	744,236
(8)	Effect of benefit changes	0
(9)	Expected UAAL after changes	2,420,376
(10)	Actual UAAL at end of year	2,385,790
(11)	Gain (loss): (9) - (10)	$ 34,586
(12)	% of AAL at start of year	0.3%

**UAAL represents Unfunded Actuarial Accrued Liability.*

Valuation Date September 30	Actuarial Gain (Loss) As % of Beginning Accrued Liabilities
2006	1.6 %
2007	3.0
2008	(2.5)
2009	(2.1)
2010	(4.0)
2011	(4.2)
2012	2.4
2013	1.9
2014	0.7
2015	**0.3**

SOURCES AND FINANCING OF UNFUNDED ACTUARIAL ACCRUED LIABILITY

Unfunded Actuarial Accrued Liability				Remaining Financing		Contribution		
Source of Unfunded Act. Accrued Liab.	**Initial Amount**	**Fin. Per.**	**Current Amount**	**Period 9/30/2015**	**Amort. Factor**	**Dollar**	**% of Payroll**	**FS112.64(5) Compliance**
Initial unfunded actuarial accrued liability								
			$ (17,207)	5 yrs.	4.503818	$ (3,821)	(0.21)%	(0.01)%
Changes from experience deviations.								
Pre-9/30/2002	$ (546,351)	15 yrs.	(82,739)	5 yrs.	4.503818	(18,372)	(0.99)%	(0.04)%
9/30/2002	637,858	25	676,551	12	9.397040	71,996	3.89%	0.39%
9/30/2003	(48,620)	25	(52,648)	13	9.984518	(5,273)	(0.29)%	(0.03)%
9/30/2004	704,589	25	774,288	14	10.547518	73,409	3.97%	0.46%
9/30/2005	591,854	25	656,810	15	11.087059	59,241	3.20%	0.40%
9/30/2006	(151,158)	25	(168,652)	16	11.604120	(14,534)	(0.79)%	(0.10)%
9/30/2007	(289,183)	25	(323,155)	17	12.099637	(26,708)	(1.44)%	(0.20)%
9/30/2008	248,390	25	277,059	18	12.574507	22,033	1.19%	0.17%
9/30/2009	228,877	25	254,066	19	13.029592	19,499	1.05%	0.16%
9/30/2010	457,120	25	490,836	20	13.465714	36,451	1.97%	0.31%
9/30/2011	506,544	25	533,106	21	13.883665	38,398	2.08%	0.34%
9/30/2012	(302,804)	25	(320,030)	22	14.284201	(22,404)	(1.21)%	(0.21)%
9/30/2013	(242,486)	25	(248,902)	23	14.668049	(16,969)	(0.92)%	(0.16)%
9/30/2014	(242,486)	25	(99,131)	24	15.035902	(6,593)	(0.36)%	(0.06)%
9/30/2015	(34,586)	25	(34,586)	25	15.388429	(2,248)	(0.12)%	(0.02)%
Changes from actuarial assumption and actuarial cost method revisions.								
9/30/1995	251,036	25 yrs.	168,980	5 yrs.	4.503818	37,519	2.03%	0.09%
9/30/2002	(152,905)	25	(162,180)	12	9.397040	(17,259)	(0.93)%	(0.10)%
9/30/2015	744,236	26	744,236	25	15.388429	48,363	2.62%	0.49%
Changes from amendments to benefit provisions.								
9/30/1997	161,519	25 yrs.	134,935	7 yrs.	6.053567	22,290	1.21%	0.07%
9/30/2000	359,387	25	353,266	10	8.144346	43,376	2.35%	0.19%
9/30/2007	111,694	25	124,816	17	12.099637	10,316	0.56%	0.07%
9/30/2009	365,850	25	406,112	19	13.029592	31,168	1.69%	0.25%
9/30/2014	(1,702,388)	25	(1,700,041)	24	15.035902	(113,065)	(6.12)%	(1.12)%
Totals			**$2,385,790**			**$266,813**	**14.43%**	**1.34%**

Weighted average remaining financing period: 17.5 yrs.

UNFUNDED ACTUARIAL ACCRUED LIABILITY

	October 1, 2015	October 1, 2014
A. Actuarial present value of future benefits	**$15,463,532**	$14,155,177
B. Actuarial present value of future normal costs	**1,943,127**	1,932,325
C. Actuarial accrued liability	**13,520,405**	12,222,852
D. Funding value of assets	**11,134,615**	10,437,534
E. Unfunded actuarial accrued liability	**$ 2,385,790**	$ 1,785,318

Unfunded Actuarial Accrued Liability is not a good measure of the System's funded status because the amount is dependent upon the actuarial cost method (please refer to page C-1). The funding progress indicators (2) and (3) on pages A-4 and A-5 are less dependent of the actuarial cost method and are a better guide to funded status and funding progress. The funded status and the funding progress indicators would be different if based on the market value of assets instead of the funding value of assets.

RECOMMENDED AND ACTUAL CONTRIBUTIONS COMPARATIVE STATEMENT

Fiscal Year	Valuation Date	City/Chapter Dollar Contributions# Recommended	Actual	Recommended City/Chapter % of Payroll Contributions
92/93	10/1/1991 (a)	726,300	726,300	11.32 %
93/94	10/1/1992	793,594	793,594	12.38
94/95	10/1/1993	681,170	716,980	10.12
95/96	10/1/1994	790,417	818,057	11.20
96/97	10/1/1995 (a)	612,267	618,521	10.01
97/98	10/1/1996	563,577	563,577	10.00
98/99	10/1/1997 (a)	161,897	170,318	13.09
99/00	10/1/1998	157,388	200,849	12.17
00/01	10/1/1999	140,765	154,219	9.93
01/02	10/1/2000 (aa)	188,644	188,644	12.45
02/03	10/1/2001	181,171	210,934	14.34
03/04	10/1/2002 (a)	187,031	200,796	14.64
04/05	10/1/2003 (a)	201,242	195,785	14.01
05/06	10/1/2004	289,937	313,076	18.49
06/07	10/1/2005	345,883	518,567	19.61
07/08	10/1/2006	347,184	584,172	18.38
08/09	10/1/2007 (a)	329,117	425,843	17.85
09/10	10/1/2008	373,810	423,928	18.15
10/11	10/1/2009 (a)	501,859	533,544	23.67
11/12	10/1/2010	573,563	573,563	25.83
12/13	10/1/2011	639,810	639,810	28.25
13/14	10/1/2012 (a)	408,279	457,932	18.50
14/15	10/1/2013 (a)	368,361	389,997	18.78
15/16	10/1/2014 (a)	422,041		21.15
16/17	**10/1/2015**	**439,350**		**22.25**
16/17	**10/1/2015 (a)**	**501,375**		**25.76**

(a) After changes in benefit provisions and/or actuarial assumptions and/or actuarial cost methods.
(aa) After Minimum Benefit changes.
 # Prior to the fiscal year ending 9/30/99, results include General, Police and Fire.

ACTUARIAL BALANCE SHEET - OCTOBER 1, 2015

PRESENT RESOURCES AND EXPECTED FUTURE RESOURCES

A. Funding value of system assets:	
1. Net assets from system financial statements (market value)	$ 10,699,823
2. Funding value adjustment	434,792
3. Funding value of assets	11,134,615
B. Actuarial present value of expected future employer contributions:	
1. For normal costs	846,082
2. For unfunded actuarial accrued liability	2,385,790
3. Totals	3,231,872
C. Actuarial present value of expected future member contributions	1,097,044
D. Total Present and Expected Future Resources	$15,463,532

ACTUARIAL PRESENT VALUE OF EXPECTED FUTURE BENEFIT PAYMENTS AND RESERVES

A. To retired members and beneficiaries	$ 7,159,894
B. To vested terminated members	0
C. To present active members:	
1. Allocated to service rendered prior to valuation date	6,156,764
2. Allocated to service likely to be rendered after valuation date	1,943,127
3. Totals	8,099,891
D. Extra Benefit Reserve	27,608
E. Reserve for DROP balances	176,139
F. Total Actuarial Present Value of Expected Future Benefit Payments	$15,463,532

5-Year Projections of Future Funded Ratios and Future Employer Contributions (Reflects Change in Mortality Under HB 1309)

Year Ended 9/30	Active Count	Payroll	Benefit Payments	Actuarial Accrued Liability	Actuarial Value of Assets	Funded Ratio	Fiscal Year	Total Employer Contribution % of Payroll	Total Employer Contribution Dollar Amount	Less Estimated Chapter 175 and Additional Premium Tax Revenue	Estimated City's Contributions
2015	28	$ 1,848,443	$ 753,994	$ 13,520,405	$ 11,134,615	82.4%	2017	25.76%	$ 501,375	$ 212,261	$ 289,114
2016	28	1,893,060	819,698	14,295,444	11,691,663	81.8%	2018	27.07%	539,491	212,261	327,230
2017	28	1,942,793	856,784	14,822,042	12,282,461	82.9%	2019	27.65%	565,670	212,261	353,409
2018	28	2,002,856	886,549	15,363,649	12,856,182	83.7%	2020	28.50%	601,123	212,261	388,862
2019	28	2,049,271	926,275	15,910,851	13,689,208	86.0%	2021	28.43%	613,488	212,261	401,227
2020	28	2,125,660	953,248	16,479,805	14,588,125	88.5%	2022	28.37%	634,966	212,261	422,705

Chapter 185 monies are assumed to stay level in future years.
Uses 3.5% wage growth assumption.
We have reflected compliance with F.S. 112.64(5) to remain constant with year ended 9/30/15.
We have not determined any additional possible impact due to F.S. 112.64(5).
Actuarial assumptions were those used for the 9/30/15 valuation.
Reflects change in mortality under HB 1309 beginning with the 9/30/2016 valuation.
Future experience was assumed to be consistent with the actuarial assumptions. If experience differs from the actuarial assumptions, future results could be significantly different from the projected results above.
Existing schedule of unrecognized investment gains and losses are reflected in this projection.

SECTION B

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA SUBMITTED BY THE RETIREMENT SYSTEM

SUMMARY OF BENEFIT PROVISIONS
(AS OF OCTOBER 1, 2015)

NORMAL RETIREMENT (NO REDUCTION FACTOR FOR AGE):

Eligibility
Members with 10 or more years of service as of July 21, 2014: 30 years of service regardless of age, or age 52 with 25 or more years of service, or age 55 with 5 or more years of service.

Members with less than 10 years of service as of July 21, 2014: 30 years of service regardless of age, or age 52 with 25 or more years of service, or age 55 with 10 or more years of service.

Mandatory Retirement Age - None.

Pension Amount
Members Not Eligible for Normal Retirement as of July 21, 2014: Total credited service times 3.0% of final average compensation. Maximum pension is 90% of final average compensation or $90,000, whichever is less. Accrued benefits as of July 21, 2014 in excess of the maximum amount are retained.

The normal form of benefit is a benefit payable for the life of the retired member with the first 10 years guaranteed. Optional benefit forms are available on an actuarial equivalent basis.

Final Average Compensation - Highest 5 years out of last 10. Compensation includes base pay plus longevity and incentive pay. Excludes overtime and all other forms of compensation.

EARLY RETIREMENT:

Eligibility - 20 years of service or age 50 with 10 years of service as of July 21, 2014. Members that do not meet these conditions are not eligible for Early Retirement.

Pension Amount - Computed as regular retirement, but reduced to take into account earlier commencement of retirement income payments, as follows:

3.0% per year reduction prior to Normal Retirement

DEFERRED RETIREMENT (VESTED BENEFIT):

Eligibility - 10 or more years of service for members with less than 5 years of service and new hires as of July 21, 2014. Benefit begins at the earlier of: age 55 with 10 years of service, age 52 with 25 years of service, and age 65 with 5 years of service.

Members with 10 or more years of service as of July 21, 2014: 5 or more years of service. Benefit begins at regular retirement age of 55.

Pension Amount - Computed as a normal retirement but based upon service and final average compensation at time of termination.

Summary of Benefit Provisions (Continued)

Duty Disability Retirement:

Eligibility - No age or service requirements.

Pension Amount - Computed as a normal retirement to regular retirement age. Minimum benefit is not less than 50% of final average compensation. At regular retirement age, the participant has the option to have the benefit re-computed as a normal retirement with additional service credit granted from date of retirement to the later of normal retirement age or five years after date of disability. Minimum benefit is not less than 42% of final average compensation.

Non-Duty Disability Retirement:

Eligibility - 10 or more years of service.

Pension Amount - Computed as a normal retirement. Minimum benefit is not less than 25% of final average compensation.

Duty Death Before Retirement:

Eligibility - No age or service requirements.

Pension Amount - To spouse: 100% of the normal retirement benefit. Minimum benefit is not less than 35% of final average compensation.

Non-Duty Death Before Retirement:

Eligibility - 10 or more years of service.

Pension Amount - To spouse: 100% of the normal retirement benefit.

Member Contributions: **7**.95% of pay.

Cost-of-Living Adjustments: A one-time, permanent benefit increase of 2% was granted to retirees who retired before January 1, 2009. Retirees who retire after January 1, 2009 and before July 21, 2014 will receive on the 2nd anniversary of retirement, a 2% benefit increase and an additional 2% compounded annually, inclusive of certain periods and/or survivor benefits. Members who were employed on and retire after July 21, 2014 receive a 2% benefit increase for service earned before July 21, 2014 and a 1% increase for service earned after July 21, 2014, compounded annually beginning two years after retirement. Members hired after July 21, 2014 are not eligible for a COLA.

Premium Tax Monies: A distribution of property insurance premium tax monies collected by the State pursuant to Chapter 175, Florida Statutes.

SUMMARY OF BENEFIT PROVISIONS
(CONCLUDED)

CITY CONTRIBUTIONS: Actuarially determined amounts which together with member contributions and premium tax monies are sufficient to at least cover the requirements of the funding objective.

FORFEITURE OF RETIREMENT BENEFITS: Retirement benefits granted by the Retirement System are subject to forfeiture if an employee is convicted of an offense specified in Sections 112.3173 and 175.195, Florida Statutes, pursuant to the procedures set forth in the cited statute.

PRIOR SERVICE PURCHASES: A former member with credited service who wishes to return to city employment may restore the forfeited credited service to receive credit for prior service within ninety (90) days after return to city employment.

DEFERRED RETIREMENT OPTION PROGRAM (DROP): Any eligible member of the retirement system who meets the requirements of retirement may elect to participate, deferring receipt of retirement benefits while continuing employment with the City. The deferred monthly benefits shall accrue in the reserve for pension payments fund on behalf of the participant, plus 3.5% annual interest compounded monthly less a service fee, for the specified period of the DROP participation not to exceed 36 consecutive months. Upon termination from the DROP, the participant shall receive all accrued DROP benefits either by lump sum, direct rollover or partial lump sum. The DROP was closed to new members on July 21, 2014.

BACKWARDS DEFERRED RETIREMENT OPTION PROGRAM (BACKDROP):

> ***Eligibility*** – Same as normal retirement. Member must not be participating in the DROP on July 21, 2014 and must continue employment beyond the normal retirement date. The member may elect a BackDROP period for the number of months worked beyond their normal retirement date, up to a maximum of 36 months.
>
> ***Amount of Pension*** – Computed as if the member had chosen to terminate on a day chosen by the member but not before the member's normal retirement date, using credited service and final average salary at the BackDROP date. In addition to the pension, there will be a lump sum payment equal to the pension benefits the member would have received had he/she retired on the BackDROP date with interest at the rate of 3.0% per year.

CLAIMS PROCEDURE: Claims for benefits should be filed with the office of the City Clerk. If a claim is denied, you will be notified and informed of the procedure to request a hearing before the Board of Trustees. An applicant for benefits must appeal said denial within 20 days of being informed of the denial by filing an appeal with the Board Secretary. If no appeal is filed within the time period then the denial shall be final.

DISCLAIMER: The preceding summary briefly describes the principle benefits of the Retirement System. Detailed benefit conditions and limitations are contained in the City of Jacksonville Beach Firefighters' Retirement System Ordinance as amended, which establishes the System. The Internal Revenue Code, Florida Statutes, and the Ordinance all govern the operation of the System, and should be consulted before you take any action concerning your membership or benefits. In case of any conflict between this Summary and the Ordinance or other applicable law, the Ordinance or other applicable law will prevail. Copies of the Ordinance are available at the office of the City Clerk.

ACCOUNTING INFORMATION SUBMITTED FOR VALUATION

Revenues and Expenditures

	Year Ended September 30, 2015	Year Ended September 30, 2014
Revenues:		
a. Member contributions	**$ 146,951**	$ 122,590
b. City contributions	**177,736**	222,859
c. Premium taxes from State	**212,261**	235,073
d. Total contributions to System	**$ 536,948**	$ 580,522
e. Investment income:		
1. Interest and dividends	**311,881**	238,918
2. Realized gain on investments	**307,119**	777,166
3. Unrealized gain on investments	**(617,952)**	25,998
4. Investment expense	**(34,597)**	(31,922)
f. Total investment income	**($33,549)**	$1,010,160
g. Total revenues	**$503,399**	$1,590,682
Expenditures:		
a. Refunds of member contributions	**0**	0
b. Benefits paid	**683,521**	664,459
c. Administrative expenses	**66,361**	77,810
d. Total expenditures	**$ 749,882**	$ 742,269
Reserve Increase:		
Total revenues minus total expenditures	**$(246,483)**	$848,413

Summary of Assets (Market Value)

		September 30, 2015	September 30, 2014
Cash and equivalents		**$ 341,153**	$ 206,116
Due from Other Government Units		**64,418**	$ 83,710
Receivables less payables		**18,317**	18,285
Certificates of deposit & savings		**none**	none
U.S. Government Securities		**1,399,336**	1,754,118
Bonds	- government	**none**	none
	- corporate	**2,270,151**	1,876,858
Stocks	- common	**none**	none
	- preferred	**none**	none
Other (equity mutual funds)		**6,606,448**	7,007,219
Total assets		**$10,699,823**	$10,946,306

DERIVATION OF FUNDING VALUE OF RETIREMENT SYSTEM ASSETS

	Values as of September 30				
	2014	2015	2016	2017	2018
Beginning of Year Values					
(1) Market Value	$10,097,893	$10,946,306			
(2) Funding Value	9,701,319	10,437,534			
End of Year					
(3) Market Value	10,946,306	10,699,823			
(4) Net Addition to Assets Excluding Investment Income#	(161,747)	(212,934)			
(5) Total Net Investment Income# =(3)-(1)-(4)	1,010,160	(33,549)			
(6) Projected Net Rate of Return#	8.00%	8.00%			
(7) Projected Investment Income =(6) x [(2)+0.5 x (4)]	769,636	826,485			
(8) Investment Income in Excess of Projected	240,524	(860,034)			
Excess Investment Income Recognized					
(9a) From Current Year = .25 x (8)	60,131	(215,009)			
(9b) From One Year Prior	89,970	60,131	$ (215,009)		
(9c) From Two Years Prior	148,440	89,970	60,131	$ (215,009)	
(9d) From Three Years Prior	(170,215)	148,438	89,971	60,131	$ (215,007)
(9e) Total Cap. Val. Change Recogn. = (9a)+(9b)+(9c)+(9d)	128,326	83,530	(64,907)	(154,878)	(215,007)
(10) Increase(Decr.) in Funding Value = (4) + (7) + (9e)	736,215	697,081			
End of Year					
(11) Market Value	10,946,306	10,699,823			
(12) Funding Value = (2)+(10)	10,437,534	11,134,615			
(13) Market Value Rate of Return	10.1%	(0.3)%			
(14) Funding Value Rate of Return	9.3%	8.8%			
(15) Ratio of Market to Funding Value	104.9%	96.1%			

 # Net of expenses paid from investment income.

ACCOUNTING INFORMATION SUBMITTED FOR VALUATION
RECONCILIATION TO MARKET VALUE OF ASSETS

Reserve Accounts

	9/30/2015	9/30/2014
Member Contributions		
(Members' Savings Reserve Fund)	**$ 1,822,465**	$ 1,615,601
City/State Contributions		
(Pension Reserve Fund)	**0**	0
Retired Members and Beneficiaries		
(Retirement Reserve Fund)	**8,701,219**	9,228,227
DROP Balances		
(Pension Payments Fund)	**176,139**	102,478
Total Reserve Accounts	**10,699,823**	10,946,306
Funding Value Adjustment	**434,792**	(508,772)
Funding Value of Assets	**$11,134,615**	$ 10,437,534

Retirement System reserve accounts are maintained and reported on a market value basis by the outside auditor.

RETIRED MEMBER AND BENEFICIARY DATA
HISTORICAL SCHEDULE

Year Ended	Added No.	Added Annual Pensions	Removed No.	Removed Annual Pensions	Net Increase No.	Net Increase Annual Pensions	End of Year No.	End of Year Annual Pensions	Expected Removals No.	Expected Removals Pensions
9/30/1975			3	$ 5,238	(3)	$ (5,238)	38	$ 96,998		
9/30/1980	4	$ 12,535	2	6,322	2	6,213	43	126,043		
9/30/1985	6	38,897	3	9,338	3	29,559	54	206,265	1.7	$ 4,085
9/30/1987	3	17,843	2	3,074	1	14,769	61	289,976	1.6	4,955
9/30/1988	1	5,391	1	970		4,421	61	294,397	1.6	5,476
9/30/1989	2	5,579	1	2,946	1	2,633	62	297,030	1.8	6,098
9/30/1990	6	63,868	5	14,043	1	49,825	63	346,855	1.9	6,447
9/30/1991	3	67,943	3	11,449		56,494	63	403,349	1.9	7,388
9/30/1992	16	232,066	5	13,210	11	218,856	74	622,205	1.9	8,303
9/30/1993	6	87,030	7	27,306	(1)	59,724	73	681,929	2.2	11,617
9/30/1994	12	187,409	2	14,164	10	173,245	83	855,174	2.1	12,465
9/30/1995	8	184,693	6	24,617	2	160,076	85	1,015,250	2.3	14,657
9/30/1996	14	247,257	7	33,348	7	213,909	92	1,229,159	1.9	14,218
9/30/1997	5	65,068	4	22,208	1	42,860	93	1,272,018	2.0	16,685
9/30/1998 #							14	289,524	2.0	16,685
9/30/1999							14	289,524	0.2	3,497
9/30/2000	1	32,824			1	32,824	15	322,348	0.2	3,883
9/30/2001	3	136,130			3	136,130	18	458,478	0.2	4,487
9/30/2002	3	147,176 *			3	147,176	21	605,654	0.3	5,710
9/30/2003	1	54,211	2	55,764	(1)	(1,553)	20	604,101	0.3	7,094
9/30/2004	1	60,277			1	60,277	21	664,378	0.3	7,970
9/30/2005	4	70,107	1	15,608	3	54,499	24	718,877	0.4	8,984
9/30/2006							24	718,877	0.4	9,685
9/30/2007							24	718,877	0.4	10,710
9/30/2008							24	718,877	0.5	11,858
9/30/2009	1	42,517	1	28,994		13,523	24	732,400	0.5	13,143
9/30/2010			1	24,355	(1)	(24,355)	23	708,045	0.6	14,312
9/30/2011			2	48,190	(2)	(48,190)	21	659,855	0.6	14,354
9/30/2012							21	659,855	0.6	15,813
9/30/2013	3	82,016	1	14,397	2	67,619	23	727,474	0.7	17,445
9/30/2014	1	25,134			1	25,134	24	752,608	0.7	18,427
9/30/2015		**1,386**		**-**		**1,386**	**24**	**753,994**	**0.8**	**20,452**
Expected for **9/30/2016**									**0.9**	**22,569**

 # Prior to 1998 valuation, results include General, Police and Fire.
** Includes changes in benefits due to minimum benefit requirement.*

NORMAL (AGE AND SERVICE) RETIREMENTS

Valuation Year	No.	Average Attained Age	Average Retirement Age	Average Annual Pensions	Newly Retired During Year No.	Newly Retired Averages Retirement Age	Newly Retired Averages Service	Newly Retired Averages Annual Pensions
2003	14	64.8 yrs.	54.0 yrs.	$31,366	1	53.5 yrs.	28.6 yrs.	$54,210
2004	15	63.5	55.0	33,293	1	51.0	30.2	60,279
2005	16	63.1	55.0	30,772	1	50.0	10.2	15,057
2006	16	64.1	55.0	30,772				
2007	16	65.1	55.0	30,772				
2008	16	66.1	55.0	30,772				
2009	16	67.1	55.3	31,340				
2010	16	68.1	55.3	31,299				
2011	14	69.1	55.3	34,180				
2012	14	70.1	55.3	34,180				
2013	16	67.7	55.5	34,134	3	56.6	22.2	27,338
2014	17	68.7	54.2	33,604	1	55.0	21.7	25,134
2015	**17**	**69.7**	**54.2**	**33,686**				

RETIRED MEMBERS AND BENEFICIARIES HISTORICAL COMPARISON

Valuation Date	% Incr. in Annual Pensions#	No. of Active Per Retired	Pension Payroll as % of Active Payroll	Average Pension#
10/1/1990 *	16.8 %			$ 5,506
10/1/1995	18.7	2.7 %	16.7 %	11,944
10/1/2000	11.3	2.2	22.9	21,490
10/1/2002	32.1	1.2	50.6	28,841
10/1/2003	(0.3)	1.4	44.9	30,205
10/1/2004	10.0	1.4	45.3	31,637
10/1/2005	8.2	1.2	43.5	29,953
10/1/2006	0.0	1.3	40.7	29,953
10/1/2007	0.0	1.3	41.7	29,953
10/1/2008	0.0	1.3	37.3	29,953
10/1/2009	1.9	1.3	36.9	30,517
10/1/2010	(3.3)	1.3	34.1	30,785
10/1/2011	(6.8)	1.4	31.1	31,422
10/1/2012	0.0	1.4	31.9	31,422
10/1/2013	10.2	1.2	39.6	31,629
10/1/2014	3.5	1.2	40.3	31,359
10/1/2015	**0.2**	**1.2**	**40.8**	**31,416**

 # Prior to 1999 valuation, results include General, Police and Fire.
** For the 5 years ending with the valuation date.*

RETIRED MEMBERS AND BENEFICIARIES AS OF OCTOBER 1, 2015
BY TYPE OF PENSION BEING PAID*

New Plan Pensions

Type of Pension Being Paid	No.	Annual Pension	Average Pension	Actuarial Liability
Age and Service Pensions				
Regular	3	$ 42,651	$ 14,217	$ 434,034
Option I	3	168,483	56,161	1,539,963
Option II	7	203,455	29,065	2,035,611
Option III	2	87,387	43,694	772,858
DROP	2	70,684	35,342	988,649
Survivor Beneficiaries	2	36,679	18,340	301,369
Total Age and Service Pensions	19	609,339	32,070	6,072,483
Disability Pensions				
Regular	1	25,414	25,414	154,427
Option I	1	34,326	34,326	248,888
Option III	2	76,330	38,165	640,171
Total Disability Pensions	4	136,070	34,018	1,043,486
Total New Plan Pensions	**23**	**$745,409**	**$32,409**	**$7,115,969**

* *Regular - benefit terminating upon death of retired member*
Option I – 10-year certain
Option II - 100% joint and survivor benefit
Option III - 50% joint and survivor benefit
Surviving Beneficiaries - benefit terminating upon death of beneficiary

RETIRED MEMBERS AND BENEFICIARIES AS OF OCTOBER 1, 2015
BY TYPE OF PENSION BEING PAID*

Old Plan Pensions

Type of Pension Being Paid	No.	Annual Pension	Average Pension	Actuarial Liability
Age and Service Pensions				
Survivor Beneficiaries	1	$ 8,585	$ 8,585	$ 43,924
Total Age and Service Pensions	1	8,585	8,585	43,924
Total Old Plan Pensions	**1**	**$ 8,585**	**$ 8,585**	**$ 43,924**
Total New & Old Plan				
Pensions Being Paid	**24**	**$753,994**	**$31,416**	**$7,159,894**

* *Regular - benefit terminating upon death of retired member*
Automatic Spouse Benefit - 75% joint and survivor benefit
Surviving Beneficiaries - benefit terminating upon death of beneficiary

RETIRED MEMBER AND BENEFICIARY DATA AS OF OCTOBER 1, 2015
BY ATTAINED AGES

Attained Ages	New Plan		Old Plan		Totals	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
56	1	$ 25,134			1	$ 25,134
57	2	54,147			2	54,147
62	2	90,739			2	90,739
63	1	34,326			1	34,326
65	4	174,895			4	174,895
66	1	42,850			1	42,850
67	1	45,013			1	45,013
68	4	148,961			4	148,961
73	1	28,719			1	28,719
74	2	24,466			2	24,466
76	1	4,800			1	4,800
83	1	32,948			1	32,948
85	1	17,077			1	17,077
86			1	$ 8,585	1	8,585
87	1	21,334			1	21,334
Totals	**23**	**$745,409**	**1**	**$8,585**	**24**	**$753,994**

VESTED TERMINATED MEMBERS AS OF OCTOBER 1, 2015
BY ATTAINED AGES

Attained Ages	No.	Annual Benefits
0	0	$0
Totals	**0**	**$0**

Active and Vested Terminated Members Included in Valuation

Valuation Date	Active Members	Vested Terminated Members	Valuation Payroll	Average Age	Average Service	Average Pay
10/1/2001	26	2	$ 1,174,238	35.2 yrs.	8.4 yrs.	$45,163
10/1/2002	26	2	1,195,910	32.7	5.8	45,997
10/1/2003	27	3	1,344,644	33.3	5.4	49,802
10/1/2004	29	2	1,467,892	33.2	5.0	50,617
10/1/2005	29	1	1,651,115	33.6	5.6	56,935
10/1/2006	31	2	1,768,236	33.9	5.0	57,040
10/1/2007	30	3	1,725,988	34.0	5.3	57,533
10/1/2008	31	3	1,927,966	35.3	5.9	62,192
10/1/2009	30	2	1,984,765	36.6	7.1	66,159
10/1/2010	30	2	2,078,655	37.4	7.9	69,289
10/1/2011	30	2	2,120,109	38.1	8.8	70,670
10/1/2012	30	2	2,065,908	38.5	9.5	68,864
10/1/2013	28	1	1,836,131	38.2	10.2	65,576
10/1/2014	28	0	1,867,968	39.2	11.3	66,713
10/1/2015	**28**	**0**	**1,848,443**	**40.2**	**12.3**	**66,016**

Number Added to and Removed from Active Membership

Year Ended September 30	Number Added During Year A	Number Added During Year E	Normal Retirement A	Normal Retirement E	Disability Retirement A	Disability Retirement E	Died-in Service A	Died-in Service E	Withdrawal Vested A	Withdrawal Other A	Withdrawal Total A	Withdrawal Total E	Active Members End of Year
2006	9	7	0	0.0	0	0.1	0	0.0	1	6	7	3.1	31
2007	4	5	0	0.0	0	0.1	0	0.0	1	4	5	3.6	30
2008	3	2	0	0.4	0	0.0	0	0.0	0	2	2	3.1	31
2009	0	1	0	0.3	0	0.1	0	0.0	0	1	1	3.0	30
2010	1	1	0	0.3	0	0.1	0	0.0	0	1	1	2.4	30
2011	1	1	0	0.8	0	0.1	0	0.0	0	1	1	2.2	30
2012	1	1	0	0.8	0	0.1	0	0.0	0	1	1	2.2	30
2013	0	2	2	1.7	0	0.1	0	0.0	0	0	0	2.1	28
2014	0	0	0	0.4	0	0.1	0	0.0	0	0	0	1.9	28
2015	**0**	**0**	**0**	**0.3**	**0**	**0.1**	**0**	**0.0**	**0**	**0**	**0**	**1.9**	**28**
5-yr. Totals 2011 - 2015	2	4	2	4.0	0	0.5	0	0.0	0	2	2	10.3	
Expected for 2016				0.7		0.1		0.0				1.8	

A represents actual number.
E represents expected number.

ACTIVE MEMBERS AS OF OCTOBER 1, 2015
BY NEAR AGE AND YEARS OF SERVICE
(EXCLUDING DROP MEMBERS)

Near Age	Years of Service to Valuation Date							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
25-29	2	1						3	$ 156,121
30-34		4						4	241,943
35-39		1	3					4	256,031
40-44		5	2	3	1			11	750,960
50-54			1		1			2	172,260
55-59							1	1	93,847
Totals	**2**	**12**	**8**	**3**	**2**		**1**	**28**	**$1,848,443**

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 40.2 years

Service: 12.3 years

Annual Pay: $66,016

SECTION C

ACTUARIAL COST METHOD, ACTUARIAL ASSUMPTIONS AND DEFINITIONS OF TECHNICAL TERMS

ACTUARIAL COST METHOD

The actuarial cost method is a procedure for allocating the actuarial present value of benefits and expenses to time periods. The method used for your valuation is known as the individual entry-age actuarial cost method, and has the following characteristics:

(i) The annual normal costs for each individual active member is sufficient to accumulate the value of the member's pension at time of retirement or DROP.

(ii) Each annual normal cost is a constant percentage of the member's year-by-year projected pensionable compensation.

The entry-age actuarial cost method allocates the actuarial present value of each member's projected benefits on a level basis over the member's pensionable compensation between the entry age of the member and the estimated exit ages. This is based on our understanding of the approach preferred by the Florida Division of Retirement.

The portion of the actuarial present value allocated to the valuation year is called the normal cost. The portion of the actuarial present value not provided for by the actuarial present value of future normal costs is called the Actuarial Accrued Liability. Deducting accrued assets from the Actuarial Accrued Liability determines the Unfunded Actuarial Accrued Liability. The Unfunded Actuarial Accrued Liability was financed as a level percent of member payroll. Please refer to page A-11 for a schedule of financing periods.

The characteristics of this method of financing the Unfunded Actuarial Accrued Liability are shown on page C-2.

The sum of active & DROP member payroll was assumed to increase 3.5% a year for the purpose of determining the level percent contributions, except to the extent needed for FS 112.64(5) compliance. This assumption is consistent with the base rate of increase in salaries used to calculate actuarial present values. Expressing contributions, as on page A-2, as a percent of active member payroll excluding DROP members may cause fluctuations due to the level of participation in the DROP.

LEVEL PERCENT OF ACTIVE MEMBER PAYROLL AMORTIZATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY* (AMORTIZATION SCHEDULE $ AMOUNTS IN THOUSANDS)

	Payroll		Unfunded		Contribution	
Year Ended September 30	Inflated Dollars	Constant Value	Inflated Dollars	Constant Value	Inflated Dollars	Constant Value
2015	$1,848	$1,848	$2,386	$2,386	$292	$292
2016	1,880	1,848	2,271	2,233	297	292
2017	1,912	1,848	2,142	2,071	302	292
2018	1,944	1,848	1,997	1,899	307	292
2019	1,977	1,848	1,836	1,716	312	292
2024	2,151	1,848	860	739	293	252
2029	2,340	1,848	(173)	(137)	87	69
2034	2,546	1,848	(486)	(353)	(63)	(46)
2038	2,724	1,848	(50)	(34)	(128)	(87)
2039	2,770	1,848	80	53	82	55
2040	2,817	1,848	0	0	0	0

* $ 709,650	over 25 years	$ (168,652)	over 16 years
(1,799,172)	over 24 years	656,810	over 15 years
(248,902)	over 23 years	774,288	over 14 years
(320,030)	over 22 years	(52,648)	over 13 years
533,106	over 21 years	514,371	over 12 years
490,836	over 20 years	353,266	over 10 years
660,178	over 19 years	134,935	over 7 years
277,059	over 18 years	69,034	over 5 years
(198,339)	over 17 years		
		$ 2,385,790	**TOTAL**

Level percent-of-payroll financing of Unfunded Actuarial Accrued Liability treats each generation of taxpayers equally during the financing period. The alternative, level dollar financing, produces declining percent-of-payroll contributions and places a greater relative burden on current taxpayers.

The annual rate of increase in participant payroll used to compute the level percent-of-payroll contribution is the same rate of payroll growth used to compute actuarial liability and costs. It reflects across-the-board salary increases, not group size increases.

If future payroll growth is less than the assumed rate due to smaller than projected salary increases, the percent-of-payroll contribution rate for Unfunded Actuarial Accrued Liability will tend to decline.

If future payroll growth is less than the assumed rate due to decreases in the number of participants, the percent-of-payroll contribution rate for Unfunded Actuarial Accrued Liability will tend to increase but dollar contributions will be less than indicated in the preceding schedule.

ACTUARIAL ASSUMPTIONS USED FOR THE VALUATION

Funding objective contribution requirements and actuarial present values are calculated by applying estimates of future plan activities (actuarial assumptions) to the benefit provisions and people information of the system, using the actuarial cost method described on page C-1. All actuarial assumptions used in this report are estimates of future experience.

The principal areas of risk which require estimates of future plan activities are:

(i) long-term rates of investment return to be generated by the assets of the system
(ii) patterns of pay increases to active members
(iii) rates of mortality among active members, retired members and beneficiaries
(iv) rates of withdrawal of active members
(v) rates of disability among active members
(vi) the age patterns of actual retirements

In making a valuation, the monetary effect of each activity is calculated for as long as a present covered person survives - - a period of time which can be as long as a century.

Actual activities of the system will not coincide exactly with estimated activities, due to their nature. Each valuation provides a complete recalculation of estimated future activities and takes into account the effect of differences between estimated and actual activity to date. The result is a continual series of adjustments (usually small) to the computed contribution rate. From time to time one or more of the assumptions are modified to reflect experience trends (but not random or temporary year-to-year fluctuations).

The actuarial assumptions are adopted by the Board of Trustees after consultation with the actuary. In general, the actuarial assumptions were based on the System's experience, as well as experience of plans similar in nature where the System's experience was insufficient. In addition, the mortality tables also reflect actual trends. The reasonableness of the economic assumptions was based upon capital market expectations provided by various investment consultants and other sources such as the Social Security Trustees report. All actuarial assumptions are based on future expectations, not market measures.

The actuarial assumptions regarding the INFLATION rate, the SALARY INCREASE rates, and REAL INVESTMENT RETURN were effective October 1, 2015. These actuarial assumptions are used, in combination with the other actuarial assumptions, to (i) determine the present value of amounts expected to be paid in the future and (ii) establish rates of contribution which are expected to remain relatively level as a percent of covered payroll.

The annual interest rate used in making this valuation was 8.0%. It is composed of inflation and real investment return.

PRICE INFLATION. 3.0% per annum, compounded annually. This is the rate at which growth in the supply of money and credit is estimated to exceed growth in the supply of goods and services. It may be thought of as the rate of depreciation of the purchasing power of the dollar. There are a number of indices for measuring the inflation rate. The recent inflation rate, as measured by the Consumer Price Index, has been:

	Year Ended September 30					**Average**	
	2015	**2014**	**2013**	**2012**	**2011**	**3-Year**	**5-Year**
Actual	**(0.0)%**	1.7%	1.2%	2.0%	3.9%	0.9%	1.7%
Assumed	**3.5%**	3.5%	3.5%	3.5 %	3.5%	3.5%	3.5%

REAL INVESTMENT RETURN. 5.0% per annum, compounded annually. This is the rate of return estimated to be produced by investing a pool of assets in an inflation-free environment. Recent real investment return for the Retirement System has been:

	Year Ended September 30					**Average**	
	2015	**2014**	**2013**	**2012**	**2011**	**3-Year**	**5-Year**
Net Rate	**8.8%**	9.3%	8.6 %	6.8%	0.4%	8.9%	6.7%
Less Inflation Rate	**(0.0)%**	1.7%	1.2%	2.0%	3.9%	0.9%	1.7%
Net Real Rate	**8.8%**	7.6%	7.4 %	4.8%	(3.5)%	8.0%	5.0%
Target Real Rate	**4.5%**	4.5%	4.5 %	4.5%	4.5%	4.5%	4.5%

The total investment return rate was computed using the approximate formula i = I divided by 1/2 (A + B - I), where I is actual realized investment income plus market value adjustments, A is the beginning of year funding asset value and B is the end of year funding value of assets.

The preceding investment return rates reflect the particular characteristics of this retirement system and should not be used to measure an investment advisor's performance or for comparison with other retirement systems. Such use will usually mislead.

SALARY INCREASES. Employee salaries are estimated to increase between the date of hire and date of retirement. Salary increases occur in recognition of (i) individual merit and seniority, (ii) inflation-related depreciation of the purchasing power of salaries, and (iii) competition from other employers for personnel.

A schedule of estimated rates of increases in individual salaries for sample ages follows:

	Annual Rates for Salary Increase for Sample Ages				
Attributable to:	**20**	**30**	**40**	**50**	**60**
Merit & Seniority	3.8 %	2.7 %	2.1 %	1.1 %	0.2 %
General Increase in Wage Level Due to:					
Price Inflation	3.0	3.0	3.0	3.0	3.0
Other Factors	0.5	0.5	0.5	0.5	0.5
Total	7.3 %	6.2 %	5.6 %	4.6 %	3.7 %

The valuation is based on a constant group size and total payroll increasing at the rate of the general increase in wage levels due to inflation and other causes, which in this case is 3.5% a year.

A schedule of recent salary change experience, as measured by average reported pay, follows:

	Year Ended September 30					**Average**		
	2015	**2014**	**2013**	**2012**	**2011**	**3-Year**	**5-Year**	**10-Year**
% Change:								
Actual (1)	(1.0)%	1.7%	(1.5)%	(1.4)%	2.5%	(0.3)%	0.0%	3.4%
Assumed	6.2%	6.4%	6.5%	6.4%	6.4%	6.4%	6.4%	6.5%
% Change in Total Payroll (2)	(1.0)%	1.7%	(11.1)%	(2.6)%	2.0%	(3.6)%	(2.3)%	1.7%

(1) Excluding terminations and new members.
(2) Including pays of members electing DROP participation but still working.

In order to achieve the funding objective of a contribution rate which remains level as a percent-of-payroll, the total rate of investment return must exceed the rate of average increase in salaries by an amount equal to the estimated real investment return rate. The following schedule illustrates the recent history of the relationship between total investment return and average pay changes.

	Year Ended September 30					Average	
	2015	2014	2013	2012	2011	3-Year	5-Year
Net Investment Return Rate	8.8%	9.3%	8.6%	6.8%	0.4%	8.9%	6.7%
Rate of Change in Average Pay	(1.0)%	1.7%	(1.5)%	(1.4)%	2.5%	(0.3)%	0.0%
Difference: Actual	9.8%	7.6%	10.1%	8.2%	(2.1)%	9.2%	6.7%
Target	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

RATES OF MORTALITY. The 1994 Group Annuity Mortality Tables, set back 0 years for men and 0 years for women. This table was first used for the October 1, 2002 valuation. No margin for future mortality improvements is included in these tables. A 3.0% load was used as a margin for future mortality improvements. **We recommend changing the mortality table so that it reflects additional mortality improvement.**

	1994 GAM Table			
	Value of $1 Monthly for Life		Future Life Expectancy (Years)	
Ages	Men	Women	Men	Women
50	$134.63	$140.32	30.69	34.89
55	127.16	134.40	26.15	30.17
60	117.78	126.60	21.83	25.59
65	106.80	117.13	17.84	21.28
70	94.73	106.11	14.29	17.30
75	81.36	92.79	11.12	13.60
80	67.17	77.98	8.37	10.31

This estimate is used to measure the probabilities of members dying before retirement and the probabilities of each benefit payment being made after retirement. The rates before retirement assume 75% will be duty related and have been multiplied by 50%.

Rates of withdrawal from active membership. The 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	Years of Service	% of Active Members Separating During Next Year
	0	20.00%
	1	15.00%
	2	12.00%
	3	10.00%
	4	7.00%
25	5 & Over	13.95%
30		12.01%
35		9.12%
40		6.66%
45		4.63%
50		3.08%
55		2.01%
60		1.44%

These rates were first used for the October 1, 2002 valuation.

Rates of Disability. These estimates represent the probabilities of active members becoming disabled.

Sample Ages	% of Active Members Becoming Disabled During Next Year
20	0.14%
25	0.18%
30	0.20%
35	0.28%
40	0.42%
45	0.64%
50	1.04%
55	1.84%
60	3.06%
65	3.30%

The mortality table was set forward 10 years from the age at disability for projecting disability costs. The rates assume 75% of disabilities will be duty related. These rates were first used for the October 1, 1995 valuation.

Rates of Retirement. These rates are used to measure the probabilities of an eligible member retiring during the next year.

Retirement Ages	Age Based	Yrs. of Service	Service Based	Early Retirement Ages	Early Retirement Rates
52	50%	30	100%	40	5%
53	40%			41	5%
54	30%			42	5%
55	30%			43	5%
56	20%			44	5%
57	20%			45	5%
58	20%			46	5%
59	20%			47	5%
60	100%			48	5%
				49	5%
				50-54	5%

A Fire member is eligible for normal retirement after 30 years of service, or after attaining age 52 with 25 years of service, or after attaining age 55 with 5 (10 years if less than 10 years of service as of July 21, 2014) or more years of service.

A Fire member is eligible for early retirement after 20 years of service or after attaining age 50 with 10 years of service if eligible for early retirement by July 21, 2014.

These rates were first used for the October 1, 2002 valuation.

Administrative Expenses. Administrative expenses are projected to continue at the same percent-of-payroll as experienced during the preceding fiscal year.

Investment Expenses. Investment expenses are offset against gross investment income.

Active Member Group Size. The valuation was based on a constant active member group size. This is unchanged from previous valuations.

Vested members who terminate with a benefit worth less than 100% of their own accumulated contributions were assumed to forfeit their vested benefit.

Compensation reported for the actuarial valuation includes all amounts included in the final average compensation for benefit purposes.

SUMMARY OF ASSUMPTIONS USED
SEPTEMBER 30, 2015

Pensions in an Inflationary Environment

Value of $1,000/month Retirement Benefit
To an Individual Who Retires at Age 52
In an Environment of 3.0% Inflation

Age	Value
52	$1,000
53	971
54	943
55	916
60	790
65	682
70	588
75	507
80	437
85	377

The life expectancy of a 52 year old male retiree is age 79. The life expectancy for a 52 year old female retiree is age 85. Half of the people will outlive their life expectancy. The effects of even moderate amounts of inflation can be significant for those who live to an advanced age.

SUMMARY OF ASSUMPTIONS USED
MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption. 100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits.

Pay Increase Timing. Beginning of (Fiscal) year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

Decrement Timing. Decrements of all types are assumed to occur mid-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.

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

Decrement Relativity. Decrement rates are used without adjustment for multiple decrement table effects.

Decrement Operation. Disability and mortality decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during retirement eligibility.

Normal Form of Benefit. The normal form of benefit is a benefit payable for the life of the retired member with the first 10 years guaranteed. Optional benefit forms are available on an actuarial equivalent basis.

Loads. A 3.0% load on the present value of future benefits was used as a margin for future mortality improvements.

Incidence of Contributions. 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. New entrant normal cost contributions are applied to the funding of new entrant benefits.

DEFINITIONS OF TECHNICAL TERMS

Accrued Service. Service credited under the system which was rendered before the date of the actuarial valuation.

Actuarial Accrued Liability. The difference between the actuarial present value of future benefit payments and the actuarial present value of future normal costs. Also referred to as "accrued liability" or "past service liability."

Actuarial Assumptions. Estimates of expected future experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Decrement estimates (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic estimates (salary increases and investment income) consist of the underlying rates in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method. A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future benefit payments" between future normal costs and actuarial accrued liabilities. Sometimes referred to as the "actuarial valuation cost method."

Actuarial Equivalent. A single amount or series of amounts of equal actuarial present value to another single amount or series of amounts, computed on the basis of appropriate actuarial assumptions.

Actuarial Present Value. The amount of funds currently required to provide a payment or series of payments in the future. It is determined by discounting future payments at predetermined rates of interest, and by probabilities of payment. Also referred to as "present value."

Amortization. Paying off an interest-discounted amount with periodic payments of interest and principal -- as opposed to paying off with a lump sum payment.

DEFINITIONS OF TECHNICAL TERMS

Experience Gain (Loss). The difference between actual actuarial costs and assumed actuarial costs -- during the period between two valuation dates.

Funding Value of Assets. Also referred to as actuarial value of assets, smoothed market value of assets, or valuation assets.

Valuation assets recognize assumed investment return fully each year. Differences between actual and assumed investment return are phased-in over a closed 4-year period. During periods when investment performance exceeds the assumed rate, valuation assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, valuation assets will tend to be greater than market value. If assumed rates are exactly realized for 3 consecutive years, valuation assets will become equal to market value.

Normal Cost. The actuarial cost allocated to the current year by the actuarial cost method. Sometimes referred to as "current service cost."

Pension Benefit Obligation. A standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The PBO is independent of the actuarial funding method used to determine contributions.

Unfunded Actuarial Accrued Liability. The difference between Actuarial Accrued Liability and the funding value of system assets. Sometimes referred to as "unfunded past service liability," "unfunded accrued liability" or "unfunded supplemental present value."

Most retirement systems have Unfunded Actuarial Accrued Liability. An amount arises each time new benefits are added and each time an experience loss occurs.

The existence of Unfunded Actuarial Accrued Liability is not in itself bad, any more than a mortgage on a house is bad. Unfunded Actuarial Accrued Liability does not represent a debt that is payable today. What is important is the ability to control the amount of Unfunded Actuarial Accrued Liability and the trend in the amount (after due allowance for devaluation of the dollar).

SECTION D

ADDITIONAL DISCLOSURE INFORMATION

GASB Statements No. 67 and No. 68 are the accounting standards which replaced GASB Statements No. 25 and No. 27. GASB Statement No. 67 is first effective for fiscal year 2014 and GASB Statement No. 68 is first effective for fiscal year 2015. A separate GASB Statements No. 67 and No. 68 report has been issued outside of this report. This section contains historical GASB Statements No. 25 and No. 27 reporting information for prior fiscal years and illustrative information for fiscal year 2015.

CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

The City's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are designed to accumulate sufficient assets to pay benefits when due. The normal cost and Actuarial Accrued Liability are determined using an entry-age actuarial funding method. Unfunded Actuarial Accrued Liability is being amortized as a level percent-of-payroll over periods of 5 to 25 years.

During the year ended September 30, 2015 contributions totaling $536,948 -- $389,997 employer and $146,951 employee -- were made in accordance with contribution requirements determined by an actuarial valuation of the plan as of October 1, 2013. The total employer contributions consisted of $145,288 for normal cost and administrative expenses and $242,311 for amortization of the Unfunded Actuarial Accrued Liability and $2,398 for additional premium tax revenue. Employer contributions represented 21.1% of covered payroll.

Significant actuarial assumptions used to compute contribution requirements were the same as those used to compute the standardized measure of the Actuarial Accrued Liability.

COMPUTED EMPLOYER CONTRIBUTION COMPARATIVE SCHEDULE

Fiscal Year Beginning October 1	Valuation Date	Contribution Rates As Percents of Valuation Payroll	Valuation Payroll	Dollar Contribution For Fiscal Year	
				Computed	Actual
2006	10/01/2005	19.61 %	$ 1,651,115	$ 345,883	$518,567
2007	10/01/2006	18.38	1,768,236	347,184	584,172
2008	10/01/2007	17.85	1,725,988	329,117	425,843
2009	10/01/2008	18.15	1,927,966	373,810	423,928
2010	10/01/2009 *	23.67	1,984,765	501,859	533,544
2011	10/01/2010	25.83	2,078,655	573,563	573,563
2012	10/01/2011	28.25	2,120,109	639,810	639,810
2013	10/01/2012 *	18.50	2,065,908	408,279	457,932
2014	10/01/2013 *	18.78	1,836,131	368,361	389,997
2015	10/01/2014 *	21.15	1,867,968	422,041	
2016	**10/01/2015 ***	**25.76**	**1,848,443**	**501,375**	

* *After changes in benefit provisions and/or actuarial assumptions.*

Actuarial Accrued Liability

The Actuarial Accrued Liability is a measure intended to help users assess (i) a pension fund's funded status on a going concern basis, and (ii) progress being made toward accumulating the assets needed to pay benefits as due. Allocation of the actuarial present value of projected benefits between past and future service was based on service using the individual entry-age actuarial cost method. Assumptions, including projected pay increases, were the same as used to determine the Fund's level percent-of-payroll annual required contribution between entry-age and assumed exit age. Entry-age was established by subtracting credited service from current age on the valuation date.

The preceding methods comply with the financial reporting standards established by the Governmental Accounting Standards Board.

The entry age Actuarial Accrued Liability was determined as part of an actuarial valuation of the plan as of October 1, 2015. Significant actuarial assumptions used in determining the entry age Actuarial Accrued Liability include (a) a rate of return on the investment of present and future assets of 8% per year compounded annually, (b) projected salary increases of 3.5% per year compounded annually, 3.0% attributable to inflation and 0.5% attributable to other causes, (c) additional projected salary increases of 3.8% to 0.0% per year, depending on age, attributable to seniority/merit, and (d) the assumption that benefits will not increase after retirement.

As of October 1, 2015, the Unfunded Actuarial Accrued Liability was $2,385,790 determined as follows:

Actuarial Accrued Liability:	
Active participants (25 vested and 3 non-vested)	$ 6,156,764
Retired participants and beneficiaries currently receiving benefits (24 vested)	7,159,894
Vested terminated participants not yet receiving benefits (0 vested)	0
Extra Benefit Reserve	27,608
DROP Reserve	176,139
Total Actuarial Accrued Liability	13,520,405
Actuarial Value of Assets (market value was $10,699,823)	11,134,615
Unfunded Actuarial Accrued Liability	$ 2,385,790

During the year ended September 30, 2015 the Plan experienced a net change of $1,297,553 in the Actuarial Accrued Liability, of which $744,236 was due to changes in actuarial assumptions. There were no changes in benefit provisions and methods.

SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date October 1	Actuarial Value of Assets# (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (b)-(a)	Funded Ratio (a)/(b)	Active Participant Covered Payroll (c)	Unfunded AAL as a Percentage of Active Member Covered Payroll ((b-a)/c)
1996	$34,171	$34,336	$165	99.5 %	$10,537	1.6 %
1997 *	38,554	37,440	(1,114)	103.0	10,658	(10.5)
1998	43,678	39,897	(3,781)	109.5	10,536	(35.9)
1999 @	7,324	7,294	(30)	100.4	1,318	(2.3)
2000 *	8,055	8,011	(44)	100.6	1,408	(3.2)
2001	8,257	8,467	210	97.5	1,174	17.9
2002	8,242	9,001	759	91.6	1,196	63.5
2003	8,049	8,816	767	91.3	1,345	57.0
2004	7,549	9,058	1,509	83.3	1,468	102.8
2005	7,483	9,707	2,224	77.1	1,651	134.7
2006	7,502	9,662	2,160	77.6	1,768	122.2
2007 *	8,044	10,099	2,055	79.7	1,726	119.1
2008 *	8,366	10,726	2,360	78.0	1,928	122.4
2009 *	8,468	11,472	3,004	73.8	1,985	151.4
2010	8,434	11,987	3,553	70.4	2,079	170.9
2011	8,363	12,512	4,149	66.8	2,120	195.7
2012	8,888	12,779	3,891	69.6	2,066	188.3
2013	9,701	13,271	3,570	73.1	1,836	194.4
2014 *	10,438	12,223	1,785	85.4	1,868	95.6
2015 *	**11,135**	**13,520**	**2,385**	**82.4**	**1,848**	**129.0**

Dollar amounts are in thousands.

* *After changes in benefits and/or actuarial assumptions and/or actuarial cost methods.*
\# *The actuarial value of assets is four-year smoothed market value.*
@ *Prior to 1999 valuation, results include General, Police and Fire.*

Analysis of the dollar amounts of actuarial value of assets, Actuarial Accrued Liability, or Unfunded Actuarial Accrued Liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the Actuarial Accrued Liability provides one indication of the System's funded status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the plan. The Unfunded Actuarial Accrued Liability and annual covered payroll are both affected by inflation. Expressing the Unfunded Actuarial Accrued Liability as a percentage of covered payroll approximately adjusts for the effects of inflation and aids analysis of the progress being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan.

SECTION E

SUMMARY OF VALUATION RESULTS IN STATE FORMAT

SUMMARY OF VALUATION RESULTS IN STATE FORMAT
($ AMOUNTS IN THOUSANDS)

	October 1, 2015		October 1, 2014
	After	Before	
(a) Participant Data			
(i) Active members - number	28	28	28
- annual payroll	$ 1,848	$ 1,848	$ 1,868
(ii) Retired members & beneficiaries (excl. disability)			
- number	20	20	20
- annualized benefit payroll	618	618	617
(iii) Disabled members & beneficiaries			
- number	4	4	4
- annualized benefit payroll	136	136	136
(iv) Terminated vested members			
- number	0	0	0
- annualized deferred benefit payroll	0	0	0
(b) Assets			
(i) Actuarial value for funding	11,135	11,135	10,438
(ii) Market value	10,700	10,700	10,946
(c) Actuarial Liability			
(i) Actuarial present value of active member benefits:			
service retirement	5,946	5,439	4,873
termination benefits - pension	1,371	1,358	1,324
disability retirement	636	630	611
survivor benefits (pre-retirement)	114	113	110
termination benefits - refunds	33	33	33
extra benefit reserve	28	28	25
Total	8,128	7,601	6,976
(ii) Actuarial present value of terminated vested member benefits	0	0	0
(iii) Actuarial present value of retired member benefits:			
service retirement & survivors	6,117	5,938	6,035
DROP reserve	176	176	102
disability retirement & survivors	1,043	1,013	1,042
Total	7,336	7,127	7,179
(iv) Total actuarial present value of future benefit payments	15,464	14,728	14,155
(v) Payables	0	0	0
(vi) Actuarial accrued liability	13,520	12,776	12,223
(vii) Unfunded actuarial accrued liability[(1)]	$ 2,386	$ 1,642	$ 1,785

(1) Please refer to page A-9 for requested detail.

SUMMARY OF VALUATION RESULTS IN STATE FORMAT
($ AMOUNTS IN THOUSANDS)

	October 1, 2015 After	October 1, 2015 Before	October 1, 2014
(d) Actuarial Present Value of Accrued Benefits (calculated in accordance with FASB Statement No. 35)			
(i) Vested accrued benefits			
Retired members and beneficiaries	$ 7,336	$ 7,127	$ 7,179
Terminated members	0	0	0
Active members (includes non-forfeitable accum. member contributions of $1,822 for 2015 and $1,616 for 2014)	4,778	4,326	3,914
Total	12,114	11,453	11,093
(ii) Non-vested accrued benefits	43	43	48
(iii) Total actuarial p.v. of accrued benefits	12,157	11,496	11,141
(iv) Actuarial p.v. of accrued benefits at begin. of year	11,141	11,141	11,172
(v) Changes attributable to:			
Amendments	661	0	(427)
Assumption change	0	0	0
Operation of decrements	1,039	1,039	1,060
Benefit payments	(684)	(684)	(664)
Other	none	none	none
(vi) Net change	1,016	355	(31)
(vii) Actuarial p.v. of accr. benefits at end of year	12,157	11,496	11,141
(e) Plan costs for fiscal year beginning October 1, 2016 and October 1, 2015 (EANC)			
(i) Normal costs			
Service pensions	7.70%	7.35%	7.18%
Disability pensions	1.67%	1.67%	1.54%
Survivor pensions (pre-retirement)	0.24%	0.25%	0.23%
Deferred service pensions	3.78%	3.79%	3.49%
Refunds of member contributions	0.96%	0.89%	0.83%
Total normal cost	14.35%	13.95%	13.27%
(ii) Payment to amortize unf'd. act. accr. liab.	14.43%	11.35%	10.86%
(iii) FS112.64(5) Compliance	1.34%	1.31%	0.80%
(iv) Administrative expenses	3.59%	3.59%	4.17%
(v) Amount to be paid by members	7.95%	7.95%	7.95%
(vi) Expected plan sponsor/Chapter 175 contribution	25.76%	22.25%	21.15%
- dollars	$ 501	$ 439	$ 422

SUMMARY OF VALUATION RESULTS IN STATE FORMAT
($ AMOUNTS IN THOUSANDS)

		October 1, 2015		October 1, 2014
		After	Before	
(f)	Past Contributions (fiscal year ending 9/30/2015 & 2014)			
	(i) Required minimum:			
	Plan sponsor / Chapter 175 monies	$ 368	$ 368	$ 408
	Members	156	156	149
	Total	524	524	557
	(ii) Actual:			
	Plan sponsor / Chapter 175 monies	388	388	433
	Members	147	147	123
	Total	535	535	556
(g)	Net Experience Gain (Loss)	35	35	99
(h)	Other Disclosures			
	(i) Present value of active member future salaries			
	from attained age	$13,799	$14,309	$14,898
	from entry age	not applicable to individual EANC method		
	(ii) Present value of active member future contribs.			
	from attained age	$ 1,097	$ 1,138	$ 1,184
	from entry age	not applicable to individual EANC method		
(i)	Actuarial Present Value of Accrued Benefits Using FRS Interest Rate			
	(i) Vested	$12,441	$12,095	$11,391
	(ii) Non-Vested	47	50	52
	(iii) Total	12,488	12,144	11,443
	(iv) Market Value of Assets (MVA)	10,700	10,700	10,946
	(v) Funded Ratio Using FRS Interest Rate and MVA	85.68 %	88.10 %	95.66 %

RECONCILIATION OF MEMBERSHIP
FOR THE PLAN YEAR ENDED SEPTEMBER 30, 2015

	Active Members	Vested Terminated Members	Pension Recipients			
			Active DROP*	Service Retired	Disability Retired	All Beneficiaries
No. at Start of Year	**28**	**0**	**2**	**15**	**4**	**3**
Increase (Decrease) From						
Service Retirement						
DROP Retirement						
Disability Retirement						
Deaths						
Other Pension Terminations						
Vested Terminations						
Non-Vested Terminations						
New Entrants/Rehires						
No. at End of Year	**28**	**0**	**2**	**15**	**4**	**3**

**The DROP was closed to new members on July 21, 2014.*