

The logo for nyhart, featuring the word "nyhart" in a white, lowercase, sans-serif font centered within a black rectangular box. This box is part of a larger graphic element consisting of a thick black vertical bar on the left and a thin red vertical bar to its right, both extending from the top to the bottom of the page.

nyhart

***City of Ocala Firefighters  
Retirement Plan***

*October 1, 2015  
Actuarial Valuation Report*

<b>Actuarial Certification</b>	<b>3</b>
<b>Executive Summary</b>	<b>5</b>
Summary Results	5
Changes Since Prior Valuation and Key Notes	6
<b>Assets and Liabilities</b>	<b>7</b>
Present Value of Future Benefits	7
Accrued Liabilities	8
Asset Information	9
Reconciliation of Gain/Loss	11
<b>Contribution Requirements</b>	<b>12</b>
Development of Recommended Contribution	12
<b>Demographic Information</b>	<b>13</b>
<b>Participant Reconciliation</b>	<b>15</b>
<b>Plan Provisions</b>	<b>17</b>
<b>Actuarial Assumptions</b>	<b>21</b>
<b>Appendix</b>	<b>23</b>
Reconciliation of Unfunded Actuarial Liability	24
Market Value Reconciliation	25
Amortization of UAAL	27
Florida State Requirements	28
Reserve Account Under 99-1	38
Accrued/(Prepaid) Position	39
COLA Fund Assets	40
Cumulative Experience Position	41

At the request of the plan sponsor, this report summarizes the Firefighters' Retirement Plan for the City of Ocala as of October 1, 2015. The purpose of this report is to communicate the following results of the valuation:

- Determine Funded Status; and
- Determine Actuarial Contribution for the fiscal year October 1, 2016 through September 30, 2017

This report has been prepared in accordance with the laws and accounting standards indicated above and their applicable regulations. Consequently, it may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The results in this report were prepared using information provided to us by other parties. The census information has been provided to us by the employer. Asset information has been provided to us by the trustee. We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we have made assumptions we believe to be reasonable. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report. A summary of the data used in the valuation is included in this report.

The actuarial assumptions and methods were chosen by the Board. In our opinion, all actuarial assumptions and methods are individually reasonable and in combination represent our best estimate of anticipated experience of the plan. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- changes in plan provisions or applicable law. We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement. This report has been prepared in accordance with generally accepted actuarial principles and practice.

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

With respect to reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were 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, meet the requirements of Section 112.664 (1), Florida Statutes, and Rule 60T-1.0035, Florida Administrative Code.

Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report. To the extent that this report or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States and are available for any questions.

Nyhart



David D. Harris, ASA, EA  
Enrolled Actuary No. 14-5609



David Guy, ASA, EA  
Enrolled Actuary No. 14-8368

May 25, 2016  
Date

Copies of this Report are to be furnished to the Division of Retirement within 60 days of receipt from the actuary at the following addresses:

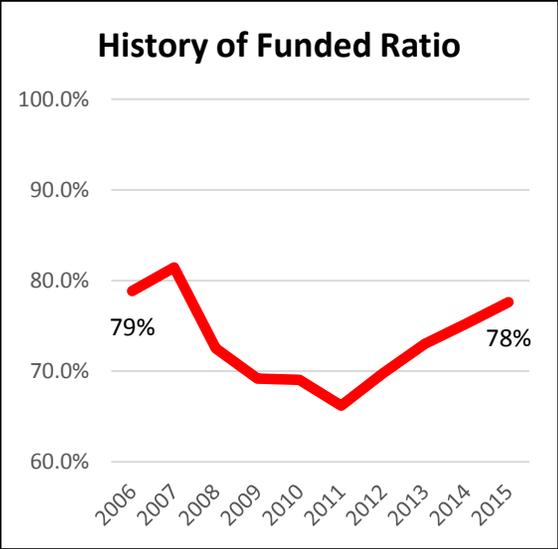
Ms. Sarah Carr  
Benefits Administrator  
Municipal Police Officers' &  
Firefighters' Trust Funds  
Division of Retirement  
Post Office Box 3010  
Tallahassee, FL 32315-3010

Mr. Keith Brinkman  
Bureau Chief, Bureau of Local Retirement Systems  
Florida Department of Management Services  
Division of Retirement  
Department of Management Services  
P. O. Box 9000  
Tallahassee, FL 32315-9000

**Summary Results**

The actuarial valuation's primary purpose is to produce a scorecard measure displaying the funding progress of the plan toward the ultimate goal of paying benefits at retirement. The accrued liability is based on an entry age level percentage of pay.

	October 1, 2014	October 1, 2015
<b>Funded Status Measures</b>		
Accrued Liability	\$52,391,985	\$54,714,308
Actuarial Value of Assets	39,428,316	42,847,687
Unfunded Accrued Liability	\$12,963,669	\$11,866,621
Funded Percentage (AVA)	75%	78%
Funded percentage (MVA)	76%	73%
<b>Cost Measures</b>		
Recommended Contribution	\$2,129,952	\$1,996,205
Recommended Contribution (as a percentage of payroll)	33.7%	28.9%
<b>Asset Performance</b>		
Market Value of Assets	39,587,410	40,167,750
Actuarial Value of Assets	39,428,316	42,847,687
Actuarial Value/Market Value	99.6%	106.7%
<b>Member Information</b>		
Active Members	117	116
Terminated Vested Members	5	5
Retirees, Beneficiaries, and Disabled Members	65	71
DROP Participants	12	9
Total	199	201
Expected Payroll	\$6,689,716	\$6,898,120



### Changes since Prior Valuation and Key Notes

The payroll growth assumption used to amortize unfunded liability bases has been lowered to 1.9% (from 3.25%) to match the 10-year average payroll growth.

The Accumulated Reserve above \$1,000,000 has been transferred to a COLA fund, which will increase with member contributions, market rate of return, and 50% of annual State Premium Tax Revenues in excess of \$240,401 (percentage increasing to 100% once the plan is 90% funded).

For those members who are not within 5 years of normal retirement on November 1, 2015, Average Monthly Earnings is based on the average highest 5 of last 10 years of earnings, including base salary, state education incentive pay, and up to 300 hours of overtime pay per fiscal year, excluding all other payments. Also, for this group the normal form of payment will be a single life annuity with 10 years certain.

Employee contributions have been reduced to 8.17% from 8.42%, of which 0.50% (down from 0.75%) shall be contributed to the COLA fund.

Fifty percent (50%) of annual State Premium Tax Revenues in excess of \$240,401 will be used to reduce the unfunded liability until the plan is 90% funded.

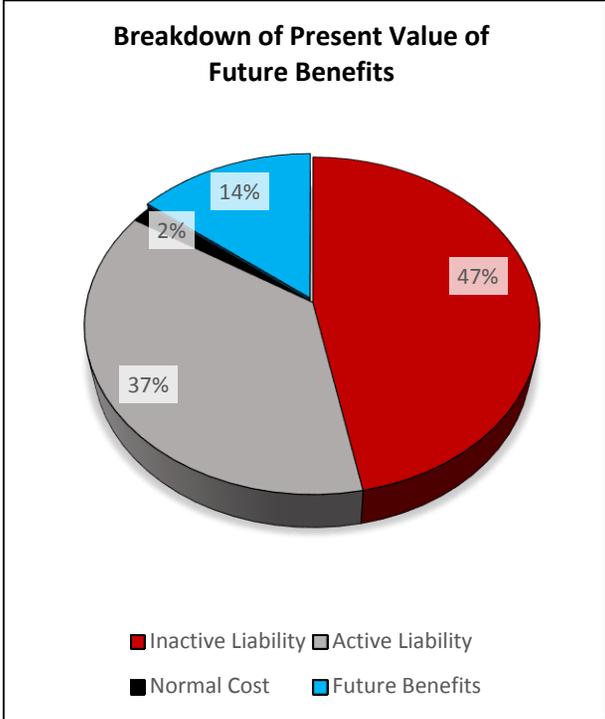
**Present Value of Future Benefits**

The Present Value of Future Benefits represents the discounted value of all future benefits expected to be payable to current members, considering future service and compensation not yet earned.

October 1, 2015

**Present Value of Future Benefits**

Active members	
Retirement	\$30,863,898
Disability	2,089,335
Death	274,536
Termination	1,216,702
Return of contributions	134,799
Total active	\$34,579,270
Inactive members	
Retired members	\$26,528,263
Beneficiaries	379,127
Disableds	2,919,443
Terminated vested members	748,531
Total inactive	\$30,575,364
Total	\$65,154,634
Present value of future payrolls	\$62,943,668

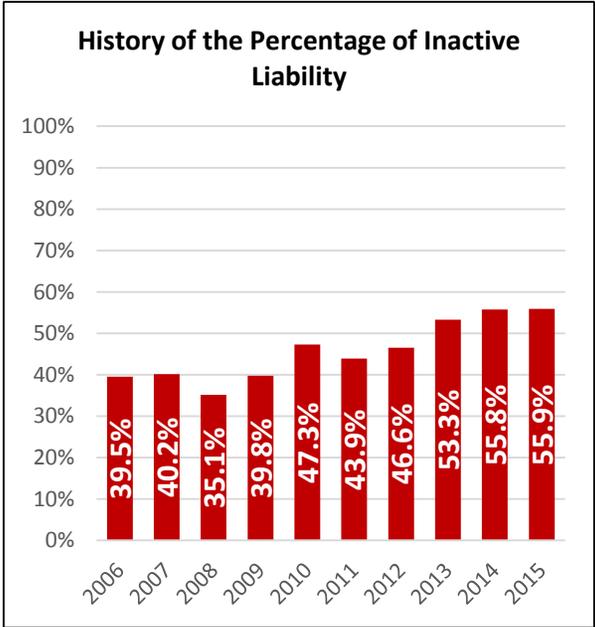


**Accrued Liability**

The Accrued Liability measures the present value of benefits earned as of the valuation date, using a specified set of actuarial assumptions. It is not a long-term snapshot of the liabilities.

**October 1, 2015**

<b>Accrued Liabilities</b>	
<b>Active members</b>	
Retirement	\$22,189,597
Disability	1,091,765
Death	159,913
Termination	637,863
Refund of contributions	59,806
<b>Total Active</b>	<b>\$24,138,944</b>
<b>Inactive members</b>	
Retired members	\$26,528,263
Beneficiaries	379,127
Disableds	2,919,443
Terminated vested members	748,531
<b>Total Inactive</b>	<b>\$30,575,364</b>
<b>Total</b>	<b>\$54,714,308</b>
Normal Cost	\$1,110,007



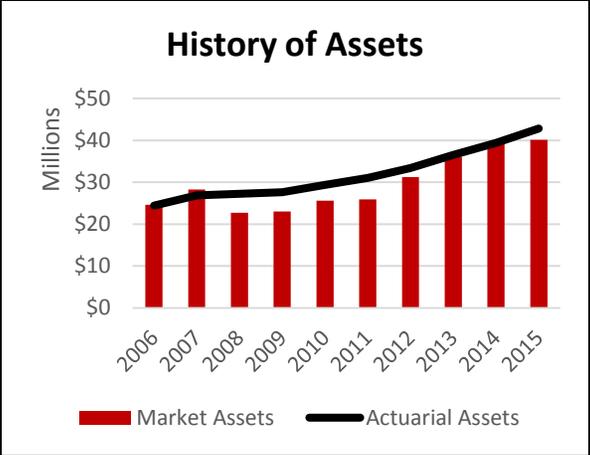
**Asset Information**

The amount of assets backing the pension promise is the most significant driver of volatility and future costs within a pension plan. The investment performance of the assets directly offsets the ultimate cost.

**October 1, 2015**

**Market Value Reconciliation**

Market value of assets, beginning of prior year	\$45,532,783
Contributions	
Employer	\$2,180,098
Employee	554,915
Non-Employer	467,838
Total	3,202,851
Investment income, net expenses	24,145
Benefit payments	(3,092,920)
Administrative expenses	(77,503)
Other expenses	0
Market value of asset, beginning of current year	\$45,589,356
Return on Market Value	0.05%
Reserved Assets	(\$3,795,295)
DROP Account	(\$1,626,311)
Market value of assets available for pension benefits	\$40,167,750
 <b>Actuarial value of plan assets</b>	
Value at beginning of current year	\$42,847,687



**Asset Information (continued) – 20% Write up**

Plan Assets are used to develop funded percentages and contribution requirements.

	October 1, 2015
1. Expected actuarial value of assets	
(a) Actuarial value of assets, beginning of prior year	\$39,428,316
(b) Contributions	3,202,851
(c) Benefit payments	(3,092,920)
(d) Expenses	(77,503)
(e) Expected return	3,056,927
(f) Expected actuarial value of assets, beginning of current year	\$42,517,671
2. Market value of assets, beginning of current year	\$39,167,750
3. Amount subject to phase in [(2)-(1f)]	(\$3,349,921)
4. Phase in of asset gain/(loss) 20% x (\$3,349,921)	(\$669,984)
5. Preliminary actuarial value of assets, beginning of current year [(1f)+(4)]	\$41,847,687
6. 80% Market value of assets	\$31,334,200
7. 120% Market value of assets	\$47,001,300
8. Adjusted actuarial value of assets	\$41,847,687
9. Reserved Assets	\$1,000,000
10. Final actuarial value of assets (8+9)	\$42,847,687
11. Return on actuarial value of assets	6.06%

**Reconciliation of Gain/Loss**

**October 1, 2015**

**Liability (gain)/loss**

Actuarial liability, beginning of prior year	\$52,391,985
Normal cost	1,121,979
Benefit payments	(3,092,920)
Interest	4,029,718
1-year lag adjustment	<u>626,232</u>
Expected actuarial liability, beginning of current year	\$55,076,994
Plan Provision Changes	(499,457)
Actual actuarial liability	\$54,714,308
Liability (gain)/loss	\$136,771

**Asset (gain)/loss**

Actuarial value of assets, beginning of prior year	\$39,428,316
Contributions	3,202,851
Benefit payments and expenses	(3,170,423)
Investment return	<u>3,056,927</u>
Expected actuarial value of assets, beginning of current year	\$42,517,671
Actual actuarial value of assets, beginning of current year (before accumulated reserve adjustment)	\$41,847,687
Asset (gain)/loss	\$669,984

**Total (gain)/loss**

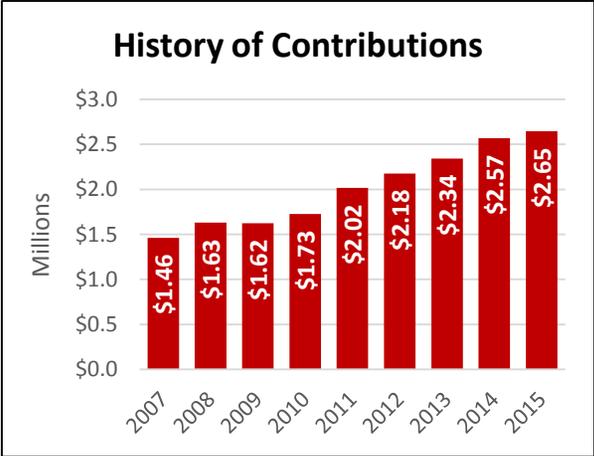
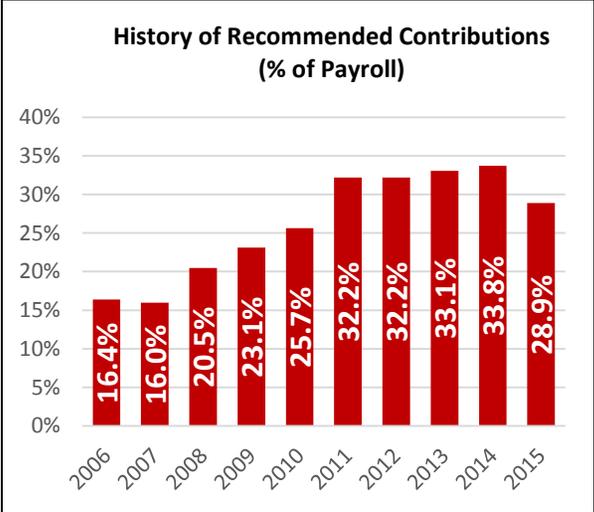
\$806,755

**Development of Recommended Contribution – Entry Age**

The minimum recommended contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws. The recommended contribution is composed of the normal cost, administrative expenses, plus an amortization charge.

**October 1, 2015**

<b>Funded Position</b>	
1. Entry age accrued liability	\$54,714,308
2. Actuarial value of assets	42,847,687
3. Unfunded actuarial accrued liability (UAAL)	\$11,866,621
<b>Employer Contributions</b>	
1. Normal Cost	
(a) Total normal cost	\$1,110,007
(b) Expected participant contributions	\$491,786
(c) Net normal cost	\$618,221
2. Salary Increase	37,093
3. Administrative expenses	77,503
4. Amortization of UAAL	1,336,913
5. Applicable interest	166,876
6. Total required contribution	\$2,236,606
7. Expected non-employer contributions	240,401
8. Total recommended contribution	\$1,996,205
As a percentage of expected payroll	28.94%



**Demographic Information**

The foundation of a reliable actuarial report is the participant information provided by the plan sponsor. Monitoring trends in demographic information is crucial for long-term pension planning.

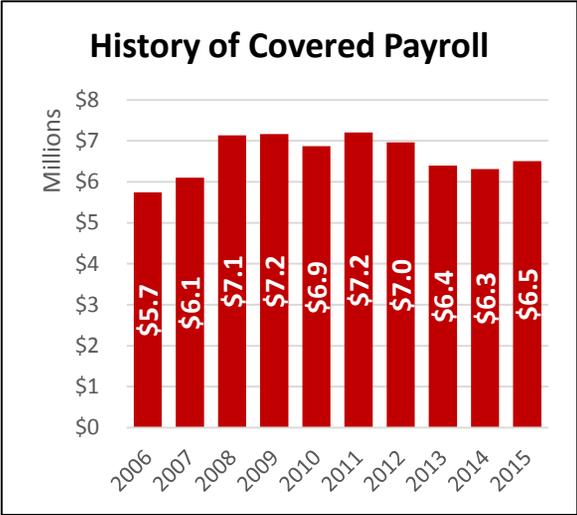
**October 1, 2015**

**Participant Counts**

Active Participants	116
Retired Participants	50
Beneficiaries	9
Disabled Participants	12
Terminated Vested Participants	5
DROP Participants	9
<b>Total Participants</b>	<b>201</b>

**Active Participant Demographics**

Average Age	38.20
Average Service	12.46
Average Compensation	\$56,101
Covered Payroll	\$6,507,660



Demographic Information (continued)

October 1, 2015

**Retiree Statistics**

Average Age	64.92
Average Monthly Benefit	\$3,073

**Beneficiary Statistics**

Average Age	70.19
Average Monthly Benefit	\$476

**Disabled Participants Statistics**

Average Age	61.97
Average Monthly Benefit	\$2,053

**Terminated Participants Statistics**

Average Age	48.46
Average Monthly Benefit	\$2,095

**DROP Participants Statistics**

Average Age	56.10
Average Monthly Benefit	\$4,842

**Participant Reconciliation**

	<b>Active</b>	<b>Terminated Vested</b>	<b>Disabled</b>	<b>Retired</b>	<b>Beneficiaries</b>	<b>DROP</b>	<b>Totals</b>
<b>Prior Year</b>	117	5	12	45	8	12	199
<b>Active</b>							
To Retired	(2)	0	0	2	0	0	0
To Terminated Non-Vested	(2)	0	0	0	0	0	(2)
To Lump Sum Cash-Out	(2)	0	0	0	0	0	(2)
To DROP	(1)	0	0	0	0	1	0
<b>Retired</b>							
To Death	0	0	0	(1)	0	0	(1)
<b>DROP</b>							
To Retired	0	0	0	4	0	(4)	0
<b>Additions</b>	6	0	0	0	1	0	7
<b>Departures</b>	0	0	0	0	0	0	0
<b>Current Year</b>	116	5	12	50	9	9	201

**Active Participant Schedule**

Active participant information grouped based on age and service.

Age Group	Years of Service										Total	Average Pay
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up		
Under 25	2	5									7	36,362
25 to 29	3	5	5								13	39,259
30 to 34		5	15	4							24	44,903
35 to 39		1	3	12	2						18	55,395
40 to 44	1		4	4	11	3	1				24	59,238
45 to 49		1	1		9	4	7				22	75,781
50 to 54				1	1	5		1			8	72,386
55 to 59												
60 to 64												
65 to 69												
70 & up												
<b>Total</b>	<b>6</b>	<b>17</b>	<b>28</b>	<b>21</b>	<b>23</b>	<b>12</b>	<b>8</b>	<b>1</b>			<b>116</b>	<b>56,101</b>

**Plan Status**

Established October 1, 1999 under the Code of Ordinances for the City of Ocala, Florida, Chapter 43 Article II Sections 43-21 through 43-45 and was most recently amended by Ordinance No. 5247 on January 27, 2004. The Plan is also governed by certain provisions of Chapters 175 and 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes (F.S.) and the Internal Revenue Code.

**Eligibility for Participation**

Employees in the Fire Department, certified as firefighters.

**Accrual of Benefits**

The accrued benefit is determined as 3% of Average Final Compensation multiplied by Credited Service as of date of determination; maximum of 93% of Average Monthly Earnings.

**Vesting**

100% after 10 years

**Benefits**

**Normal Retirement**

Eligibility	Age 55 and 10 years of credited service, Rule of 70, or 25 years of credited service.
Benefit	Accrued Benefit

**Early Retirement**

Eligibility	Age 50 and 10 years of credited service
Benefit	Accrued Benefit reduced by 2% for each year prior to normal retirement date.

**Termination Benefit**

Eligibility	Fully vested after 10 years of credited service
Benefit	Accrued retirement benefit payable at participant's normal retirement date. If the participant terminates prior to 10 years of service a refund of the accumulated contributions with interest will be issued.

**Disability Benefit In Line of Duty**

Eligibility	Immediately upon permanent disability
Benefit	Accrued benefit, but not less than 42% of AME.

**Disability Benefit Not In Line of Duty**

Eligibility	Participant without vested benefit
Benefit	Refund of Contributions
Eligibility	Participant with vested benefit
Benefit	If vested, accrued benefit, but not less than 30% of AME.

**Death Benefit**

Eligibility	Participant without vested benefit
Benefit	Refund of Contributions
Eligibility	Service Incurred; Participant with vested benefit
Benefit	Choice of (i) Accrued benefit payable for 120 months; or (ii) 50% of AME to spouse until death.
Eligibility	Non-Service Incurred; Participant with vested benefit
Benefit	If not eligible for either early or normal retirement, same as for Service-Incurred Death Benefits.
	If eligible for either early or normal retirement, choice of (i) accrued benefit payable for 120 months; or (ii) 50% of accrued benefit to spouse until death.

### **Credited Service**

For Vesting and Benefit Accrual  
Service is defined as years and completed months.

### **Compensation**

#### Average Monthly Earnings

Within 5 years of normal retirement as of November 1, 2015: Average during highest 3 consecutive of last 5 years of total earnings, including base salary, pick-up contributions, overtime pay, assignment pay, and educational incentive.

Others: Average during highest 5 of last 10 years of earnings, including base salary, state education incentive pay, and up to 300 hours of overtime pay per fiscal year, excluding all other compensation

### **Employee Contributions**

7.67% to Regular Fund Retirement Plan and 0.50% to COLA Fund (8.17% total).

### **Payment Forms**

#### Normal Form

50% joint & contingent survivor, with 10 years' certain, payable for life (married); 10 years' certain and life (single).

#### Optional Forms

50%, 66 2/3%, 75%, and 100% Joint and Survivor Annuity (last survivor basis) and Life Annuity.

### **DROP**

Up to 5 years; actuarially equivalent BAC-DROP

### **COLA**

Benefit payment schedule to be designed by Board. Funding is from .50% member contributions, market return, and 50% of State Premium Tax Revenues in excess of \$240,401 (percentage increased to 100% once the Plan becomes 90% funded). A portion of excess returns on COLA assets will be transferred to the plan until the plan becomes 90% funded.

### Changes Since Last Valuation

For those members who are not within 5 years of normal retirement on November 1, 2015, Average Monthly Earnings is based on the average highest 5 of last 10 years of earnings, including base salary, state educational incentive pay, and up to 300 hours of overtime pay per fiscal year, excluding all other compensation. Also, for this group the normal form of payment will be a single life annuity with 10 years certain.

COLA fund employee contributions are reduced to 0.50% of payroll.

COLA Fund will accumulate with plan's investment return and some portion of State Premium Tax Revenue in excess of \$240,401 annually.

<b>Valuation Date</b>	October 1, 2015												
<b>Participant and Asset Information Collected as of</b>	October 1, 2015												
<b>Cost Method</b>	Entry Age Normal Cost Method												
<b>Amortization Method</b>	<p>The following amortization periods will apply for any unfunded actuarial accrued liabilities, all on an increasing payroll basis of 1.90%:</p> <ul style="list-style-type: none"> <li>- Unfunded liability as of October 1, 2001: 25 years</li> <li>- Benefit improvements for actives: 25 years</li> <li>- Benefit improvements for inactive: 15 years</li> <li>- Actuarial gains/losses: 20 years</li> <li>- Changes in actuarial assumptions: 20 years</li> </ul>												
<b>Asset Valuation Method</b>	20% write up method												
<b>Interest Rates</b>	7.75% net of investment expenses												
<b>Annual Pay Increases</b>	<p>3.25% inflation plus the below merit increases</p> <table border="0" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><u>Age</u></th> <th style="text-align: left;"><u>General</u></th> </tr> </thead> <tbody> <tr> <td>&lt;= 30</td> <td>4.0%</td> </tr> <tr> <td>35</td> <td>3.0%</td> </tr> <tr> <td>40</td> <td>2.0%</td> </tr> <tr> <td>45</td> <td>1.0%</td> </tr> <tr> <td>50</td> <td>0.0%</td> </tr> </tbody> </table>	<u>Age</u>	<u>General</u>	<= 30	4.0%	35	3.0%	40	2.0%	45	1.0%	50	0.0%
<u>Age</u>	<u>General</u>												
<= 30	4.0%												
35	3.0%												
40	2.0%												
45	1.0%												
50	0.0%												
<b>Expense and/or Contingency Loading</b>	Non-investment expenses in previous year												
<b>Mortality Rates</b>													
Healthy	RP 2000 Mortality Table, Employees and Annuitants, projected by scale AA to 2020												
Disabled	<p>RP 2000 Disabled Mortality Table, projected by scale AA to 2020</p> <p>10% of Active deaths are assumed to be in the line of duty</p>												

**Retirement Rates**

75% at 80 points (age plus service), with remainder at the earlier of  
1) Age 60 and 10 years of service; or  
2) 30 years of service

**Disability Rates**

<u>Age</u>	<u>Rate</u>
20	0.10%
30	0.14%
40	0.29%
50	0.92%

80% of disabilities are assumed to be in the line of duty.

**Withdrawal Rates**

<u>Age</u>	<u>Rate</u>
20	6.68%
30	4.18%
40	2.28%
50	0.98%

**Marital Status and Ages**

80% of Participants assumed to be married with wives assumed to be 3 years younger than husbands.

**Changes Since Prior Valuation**

The payroll growth assumption used to amortize unfunded liability bases has been reduced to 1.9% from 3.25% to match the 10-year average payroll growth.

The actuarial report also shows the necessary items required for plan reporting and the any state requirements.

- ✓ Reconciliation of unfunded actuarial liability
- ✓ Statement of changes on value of assets
- ✓ Distribution of Assets
- ✓ Schedule of amortizations
- ✓ Florida State requirements
  - Comparative Summary of Principal Valuation Results
  - Comparison of Payroll Growth, salary increases and investment results
  - Requirements under Florida Statute 112.664 and F.A.C. 60T – 1.0035
  - Reserve account for benefit improvements under F.L. 99-1 and SB 172
- ✓ Accrued (Prepaid) Position
- ✓ Determination of COLA Fund Assets
- ✓ Cumulative Experience Position Net of Asset Transfers

**Reconciliation of Unfunded Actuarial Liability**

	October 1, 2015
1. Unfunded Actuarial Accrued Liability beginning of prior year	\$12,963,669
2. Normal Cost	\$1,121,979
3. Expenses	\$77,503
4. Employer Contributions	\$(2,180,098)
5. Non-Employer Contributions	\$(1,022,753)
6. Interest	\$972,791
7. 1-year lag adjustment	\$626,232
8. Expected Unfunded Actuarial Accrued Liability, beginning of current year	\$12,559,323
9. Accumulated Reserve Adjustment	\$(1,000,000)
10. Liability changes due to:	
(a) Amendments	(\$499,457)
(b) Assumptions	0
(c) Funding Methods	0
(d) (Gain)/Loss	\$806,755
(e) Total	\$(692,702)
11. Unfunded Actuarial Liability beginning of current year	\$11,866,621

**Statement of Changes on Value of Assets**

**Additions**

Contributions:

	<b>September 30, 2014</b>	<b>September 30, 2015</b>
Employer	\$2,117,780	\$2,180,098
Member	553,787	467,838
Nonemployer contributing entity	450,140	554,915
Total contributions	\$3,121,707	\$3,202,851

Investment income

Net increase in fair value of investments	\$3,198,746	\$(865,315)
Interest and dividends	718,812	1,026,020
Less investment expense, other than from securities lending	(136,111)	(147,197)
Net income other than from securities lending	\$3,781,447	\$13,508
Securities lending income	0	0
Less securities lending expense	0	0
Net income from securities lending	\$0	\$0
Net investment income	\$3,781,447	\$13,508

Other	89,606	10,637
Total additions	\$6,992,760	\$3,226,996

**Deductions**

Benefit payments, including refunds of member contributions	\$2,901,757	\$3,092,920
Administrative expense	67,517	77,503
Other	0	0
Total deductions	\$2,969,274	\$3,170,423

<b>Net increase in market value</b>	\$4,023,486	\$56,573
-------------------------------------	-------------	----------

**Market Value as of**

Beginning of year	41,509,297	45,532,783
End of year	\$45,532,783	\$45,589,356

**City of Ocala Firefighters' Retirement Plan**  
**Actuarial Valuation as of October 1, 2015**  
**Other Measurements**

**Distribution of Assets**

	<b>September 30, 2014</b>	<b>September 30, 2015</b>
Cash and deposits	\$1,484,759	\$1,837,147
Securities lending cash collateral	0	0
Total cash	\$1,484,759	\$1,837,147
Receivables:		
Contributions	\$0	\$7,600
Due from broker for investments sold	0	0
Investment income	(5,319)	87,794
Other	1,800	636
Total receivables	(\$3,519)	\$96,030
Investments:		
Fixed Income	\$11,064,865	\$11,275,410
Domestic Equities	22,484,160	21,284,176
International Equities	5,994,284	5,492,352
Real Estate Fund	4,538,482	5,650,779
Total investments	\$44,081,791	\$43,702,717
Total assets	\$45,563,031	\$45,635,894
<b>Liabilities</b>		
Payables		
Investment management fees	\$30,248	\$46,538
Due to broker for investments purchased	0	0
Collateral payable for securities lending	0	0
Other	0	0
Total liabilities	\$30,248	\$46,538
Total	\$45,532,783	\$45,589,356
Reserved Assets		
COLA Fund	(1,076,985)	(3,645,542)
DROP Account	(1,818,501)	(1,626,311)
State Reserve Account	(3,057,060)	0
Accrued (Prepaid) Position	7,173	(149,753)
<b>Assets available for benefits</b>	<b>\$39,587,410</b>	<b>\$40,167,750</b>

**Schedule of Amortizations**

			<b>October 1, 2015</b>		
			Total	\$11,866,621	\$1,336,913
<u>Date Established</u>	<u>Description</u>	<u>Original Amount</u>	<u>Remaining Period Years</u>	<u>Remaining Balance</u>	<u>Annual Payment</u>
10/1/2001	Original	3,756,166	11	2,578,761	305,133
10/1/2002	Actuarial (Gain)/Loss	1,132,486	7	602,247	101,089
10/1/2002	Plan Amendments	186,544	2	37,342	19,192
10/1/2003	Actuarial (Gain)/Loss	2,150,309	9	1,497,783	205,910
10/1/2003	Assumption Change	671,278	9	550,032	75,616
10/1/2004	Software Change	(337,307)	10	(263,258)	(33,412)
10/1/2004	Actuarial (Gain)/Loss	1,946,896	10	1,519,491	192,852
10/1/2004	Assumption Change	(3,172,477)	10	(2,476,016)	(314,253)
10/1/2005	Actuarial (Gain)/Loss	770,808	11	654,606	77,456
10/1/2006	Actuarial (Gain)/Loss	119,465	12	98,907	10,999
10/1/2007	Actuarial (Gain)/Loss	(339,027)	13	(290,881)	(30,605)
10/1/2008	Actuarial (Gain)/Loss	4,327,025	14	4,092,377	409,721
10/1/2009	Actuarial (Gain)/Loss	1,693,744	15	1,626,890	155,744
10/1/2010	Actuarial (Gain)/Loss	825,265	16	801,652	73,689
10/1/2010	Assumption Change	1,779,240	16	1,728,333	158,872
10/1/2011	Actuarial (Gain)/Loss	844,373	17	828,285	73,376
10/1/2012	Actuarial (Gain)/Loss	(1,268,648)	18	(1,252,560)	(107,283)
10/1/2013	Actuarial (Gain)/Loss	(598,254)	19	(592,757)	(49,227)
10/1/2014	Actuarial (Gain)/Loss	(183,432)	20	(181,911)	(14,685)
10/1/2015	Actuarial (Gain)/Loss	806,755	20	806,755	70,173
10/1/2015	Plan Amendment	(499,457)	20	(499,457)	(43,444)

Information to Comply with Florida 60T-1.003(4)(i)

**Comparative Summary Of Principal Valuation Results**

	10/1/2015 7.75% (assumption changes and plan changes)	10/1/2015 7.75% (plan changes)	10/1/2015 7.75% (prior methods & assumptions)	10/1/2014 7.75%
<b>Participant Data</b>				
Active members	116	116	116	117
Total annual payroll	\$6,507,660	\$6,507,660	\$6,507,660	\$6,311,053
Members in DROP	9	9	9	12
Total annualized benefit	\$522,887	\$522,887	\$522,887	\$669,084
Retired members and beneficiaries	59	59	59	53
Total annualized benefit	\$1,895,296	\$1,895,296	\$1,895,296	\$1,612,593
Disabled members receiving benefits	12	12	12	12
Total annualized benefit	\$295,620	\$295,620	\$295,620	\$295,620
Terminated vested members	5	5	5	5
Total annualized benefit	\$125,694	\$125,694	\$125,694	\$125,694
<b>Assets</b>				
Actuarial value of assets	\$42,847,687	\$42,847,687	\$41,847,687	\$39,428,316
Market value of assets	\$40,167,750	\$40,167,750	\$39,167,750	\$39,487,410

Information to Comply with Florida 60T-1.003(4)(i)

**Comparative Summary Of Principal Valuation Results (continued)**

	10/1/2015 7.75%	10/1/2015 7.75%	10/1/2015 7.75%	10/1/2014 7.75%
	(assumption changes and plan changes)	(plan changes)	(prior methods & assumptions)	
Liabilities, present value of all future expected benefit payments				
Active members				
Retirement benefits	\$30,863,898	\$30,863,898	\$31,680,974	\$30,151,666
Vesting benefits	1,216,702	1,216,702	1,295,260	1,281,283
Disability benefits	2,089,335	2,089,335	2,233,949	2,188,232
Death benefits	274,536	274,536	281,607	279,153
Return of contribution	134,799	134,799	134,799	147,245
Total	\$34,579,270	\$34,579,270	\$35,626,589	\$34,047,579
Terminated vested members	\$748,531	\$748,531	\$748,531	\$693,981
Retired members and beneficiaries	\$26,907,390	\$26,907,390	\$26,907,390	\$25,564,521
Disabled members	\$2,919,443	\$2,919,443	\$2,919,443	\$2,971,448
Total	\$65,154,634	\$65,154,634	\$66,201,953	\$63,277,529
Liabilities due and unpaid	\$0	\$0	\$0	\$0
Actuarial accrued liability	\$54,714,308	\$54,714,308	\$55,213,764	\$52,391,985
Unfunded actuarial accrued liability	\$11,866,621	\$11,866,621	\$13,366,077	\$12,963,669

Information to Comply with Florida 60T-1.003(4)(i)

**Comparative Summary Of Principal Valuation Results (continued)**

	10/1/2015 7.75%	10/1/2015 7.75%	10/1/2015 7.75%	10/1/2014 7.75%
	(assumption changes and plan changes)	(plan changes)	(prior methods & assumptions)	
<b>Actuarial present value of accrued benefits</b>				
Statement of actuarial present value of all accrued benefits				
Vested accrued benefits				
Inactive members and beneficiaries	\$30,575,364	\$30,575,364	\$30,575,364	\$29,229,950
Active members	15,887,008	15,887,008	15,998,790	15,165,400
Total value of all vested accrued benefits	<u>\$46,462,372</u>	<u>\$46,462,372</u>	<u>\$46,574,154</u>	<u>\$44,395,350</u>
Non-vested accrued benefits	1,162,588	1,162,588	1,187,471	1,211,270
Total actuarial present value of all accrued benefits	<u>\$47,624,960</u>	<u>\$47,624,960</u>	<u>\$47,761,625</u>	<u>\$45,606,620</u>
Statement of changes in total actuarial present value of all accrued benefits (ASC 960)				
Actuarial present value of accrued benefits, beginning of year	\$45,606,620	\$45,606,620	\$45,606,620	\$42,923,512
Increase (decrease) during year				
Benefits accumulated	\$12,548,534	\$12,548,534	\$12,548,534	\$2,370,736
Plan amendment	(136,665)	(136,665)	0	0
Changes in actuarial assumptions	0	0	0	0
Interest	3,024,275	3,024,275	3,024,275	3,214,129
Benefits paid	(13,417,804)	(13,417,804)	(13,417,804)	(2,901,757)
Other changes	0	0	0	0
Net increase (decrease)	<u>\$2,018,340</u>	<u>\$2,018,340</u>	<u>\$2,155,005</u>	<u>\$2,683,108</u>
Actuarial present value of accrued benefits, end of year	<u>\$47,624,960</u>	<u>\$47,624,960</u>	<u>\$47,761,625</u>	<u>\$45,606,620</u>

Information to Comply with Florida 60T-1.003(4)(i)

**Comparative Summary Of Principal Valuation Results (continued)**

	10/1/2015 7.75%	10/1/2015 7.75%	10/1/2015 7.75%	10/1/2014 7.75%
	(assumption changes and plan changes)	(plan changes)	(prior methods & assumptions)	
<b>Pension cost</b>				
Normal Cost	\$1,110,007	\$1,110,007	\$1,155,261	\$1,121,979
Member contributions	\$491,786	\$491,786	\$491,786	\$477,072
Expected plan sponsor contribution	\$1,996,205	\$1,906,363	\$2,114,850	\$2,129,952
As % of payroll	28.94%	27.64%	30.66%	33.75%
Member Contributions as % of payroll	7.67%	7.67%	7.67%	7.67%
<b>Past contributions</b>	9/30/2015			9/30/2014
Required plan sponsor contribution	\$2,355,312			\$2,482,131
Required member contribution	\$505,487			\$504,459
Actual contributions made by:				
Plan's sponsor	\$2,355,312			\$2,482,131
Members	\$505,487			\$504,459
Other	\$0			\$0
<b>Net actuarial gain (loss) (if applicable)</b>	(\$805,227)	(\$805,227)	(\$805,227)	\$183,432
<b>Other disclosures (where applicable)</b>				
Present value of active member				
Future salaries at attained age	\$62,943,668	\$62,943,668	\$62,943,668	\$62,301,923
Future contributions at attained age	\$4,559,518	\$4,559,518	\$4,559,518	\$4,516,147

Information to Comply with Florida 60T-1.003(3)(f)

September 30, 2015

Historical Salary Increases and Asset Performance

Year Ending	Payroll Growth	Salary Growth	Expected Salary Growth	Asset Return (Market)	Asset Return (Actuarial)	Asset Return (Expected)
9/30/2015	3.10%	5.59%	5.31%	0.05%	6.06%	7.75%
9/30/2014	(1.30%)	1.10%	5.40%	9.50%	7.86%	7.75%
9/30/2013	(8.20%)	(1.00%)	5.50%	13.20%	7.42%	7.75%
9/30/2012	(3.40%)	0.30%	5.40%	17.90%	6.00%	7.75%
9/30/2011	4.80%	3.10%	5.40%	(0.10%)	3.70%	7.75%
9/30/2010	(4.10%)	1.50%	5.80%	9.10%	4.60%	8.00%
9/30/2009	0.40%	1.40%	5.70%	0.80%	0.30%	8.00%
9/30/2008	17.00%	20.00%	5.60%	(19.40%)	0.20%	8.00%
9/30/2007	6.20%	4.70%	5.70%	14.00%	9.20%	8.00%
9/30/2006	4.20%	4.40%	5.80%	7.20%	8.10%	8.00%
<b>Averages</b>						
3-year				7.44%	7.11%	
5-year				7.87%	6.20%	
10-year	1.87%			4.70%	5.30%	
20-year				5.05%	5.15%	

Amortization of Unfunded Actuarial Accrued Liability

	UAAL	Amortization
10/1/2015	\$11,866,621	\$1,310,184
10/1/2016	\$11,374,560	\$1,361,806
10/1/2017	\$10,788,742	\$1,367,753
10/1/2018	\$10,151,116	\$1,393,742
10/1/2035	\$38,221	\$38,221

Information to Comply with Florida Statute 112.664 and Florida Administrative Code 60T-1.0035<sup>1</sup>

	October 1, 2015			
	Valuation	- 200 bp <sup>2</sup>	Funding Rate <sup>2</sup>	+ 200 bp <sup>2</sup>
	7.75%	5.75%	7.75%	9.75%
<b>Total pension liability</b>				
Service Cost	\$1,121,980	\$1,121,980	\$1,121,980	\$1,121,980
Interest	4,488,804	4,488,804	4,488,804	4,488,804
Benefit changes	(499,457)	(499,457)	(499,457)	(499,457)
Difference between expected and actual experience	(376,776)	(376,776)	(376,776)	(376,776)
Changes in assumptions	0	12,774,350	(2,790,419)	(13,585,460)
Benefit payments	(3,034,089)	(3,034,089)	(3,034,089)	(3,034,089)
Contribution refunds	(58,832)	(58,832)	(58,832)	(58,832)
Net change in pension liability	\$1,641,630	\$14,415,980	(\$1,148,789)	(\$11,943,830)
Total pension liability, beginning of year	\$58,344,531	\$58,344,531	\$58,344,531	\$58,344,531
Total pension liability, end of year	\$59,986,161	\$72,760,511	\$57,195,742	\$46,400,701
<b>Plan fiduciary net position</b>				
Contributions - Employer	\$2,180,098	\$2,180,098	\$2,180,098	\$2,180,098
Contributions - State	467,838	467,838	467,838	467,838
Contributions - Member	554,915	554,915	554,915	554,915
Net investment income	13,508	13,508	13,508	13,508
Benefit payments	(3,034,089)	(3,034,089)	(3,034,089)	(3,034,089)
Contribution refunds	(58,832)	(58,832)	(58,832)	(58,832)
Administrative expense	(77,503)	(77,503)	(77,503)	(77,503)
Other	0	0	0	0
Net change in plan fiduciary net position	\$45,935	\$45,935	\$45,935	\$45,935
Plan fiduciary net position, beginning of year	\$45,543,421	\$45,543,421	\$45,543,421	\$45,543,421
Plan fiduciary net position, end of year	\$45,589,356	\$45,589,356	\$45,589,356	\$45,589,356
Net pension liability/(asset)	\$14,396,805	\$27,171,155	\$11,606,386	\$811,345
Funded ratio	76.00%	62.66%	79.71%	98.25%
Years that Assets support expected benefit payments	17	15	18	23
<b>Estimated city contribution</b>				
Annual dollar value	\$1,996,205	\$3,670,310	\$1,762,928	\$369,344
Percentage of payroll	28.94%	53.21%	25.56%	5.35%

<sup>1</sup>Includes DROP assets and liabilities

<sup>2</sup>Based on valuation assumption with the following changes

-interest rate (as noted)

-mortality table of RP 2000 with generational projection using Scale AA





Information to Comply with Florida Statute 112.664 and Florida Administrative Code 60T-1.0035

October 1, 2015

Sustainment of Expected Benefit Payments

Mortality RP-2000 Generational with Scale AA  
 Interest 7.75%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$45,589,356	\$3,354,379	\$4,701,811 <sup>1</sup>
2	44,241,924	3,317,097	2,936,141
3	44,622,880	3,339,905	3,112,744
4	44,850,041	3,338,950	3,600,825
5	44,588,166	3,311,261	3,795,243
6	44,104,184	3,270,551	3,879,450
7	43,495,285	3,216,886	4,049,731
8	42,662,440	3,138,678	4,408,998
9	41,392,120	3,027,644	4,739,932
10	39,679,832	2,882,478	5,067,684
11	37,494,626	2,706,295	5,247,294
12	34,953,627	2,496,083	5,596,638
13	31,853,072	2,249,516	5,761,623
14	28,340,965	1,964,720	6,093,164
15	24,212,521	1,636,817	6,302,182
16	19,547,156	1,263,362	6,614,835
17	14,195,683	841,388	6,805,095
18	8,231,976	371,485	7,007,992
19	1,595,469		7,118,377

<sup>1</sup>Benefit payments include the DROP balance at 9/30/2015

Information to Comply with Florida Statute 112.664 and Florida Administrative Code 60T-1.0035

October 1, 2015

Sustainment of Expected Benefit Payments

Mortality      RP-2000 Generational with Scale AA  
 Interest                                      9.75%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$45,589,356	\$4,221,079	\$4,701,811 <sup>1</sup>
2	45,108,624	4,258,283	2,936,141
3	46,430,766	4,378,782	3,112,744
4	47,696,804	4,478,980	3,600,825
5	48,574,959	4,555,343	3,795,243
6	49,335,059	4,625,443	3,879,450
7	50,081,052	4,690,069	4,049,731
8	50,721,390	4,735,395	4,408,998
9	51,047,787	4,751,461	4,739,932
10	51,059,316	4,736,979	5,067,684
11	50,728,611	4,696,183	5,247,294
12	50,177,500	4,625,815	5,596,638
13	49,206,677	4,523,304	5,761,623
14	47,968,358	4,386,781	6,093,164
15	46,261,975	4,210,456	6,302,182
16	44,170,249	3,991,625	6,614,835
17	41,547,039	3,726,803	6,805,095
18	38,468,747	3,417,008	7,007,992
19	34,877,763	3,061,631	7,118,377
20	30,821,017	2,644,161	7,579,079
21	25,886,099	2,147,788	7,898,678
22	20,135,209	1,579,591	8,055,892
23	13,658,908	942,820	8,167,853
24	6,433,875		8,323,623

<sup>1</sup>Benefit payments include the DROP balance at 9/30/2015



**Reserve Account For Future Benefit Improvements Under F.L. 99-1**

1. Adjusted Base Amount at 10/1/2015

Year <u>Established</u>	<u>Description</u>	Ch. 175 <u>Fire</u>	Suppl. <u>Fire</u>	<u>Total</u>
		-\$-	-\$-	-\$-
1998	Base Year Premium Tax Distribution	<u>240,401</u>	<u>18,976</u>	<u>259,377</u>
	Adjusted Base Amount	240,401	18,976	259,377

2. Reserve Account for 2014/2015

	Ch. 175 <u>Fire</u>	Suppl. <u>Fire</u>	<u>Total</u>
	-\$-	-\$-	-\$-
(a) Reserve Account at September 30, 2014	2,662,596	394,464	3,057,060
(b) Interest on (a) for full year	206,351	30,571	236,922
(c) Use of State Reserve	0	0	0
(d) Reserve Account at September 30, 2015	2,868,947	425,035	3,293,982
(a + b + c)			
(e) City Contribution Receivable for State Premium Shortfall			
i. Premium Tax Distribution for 2014	460,238	7,600	467,838
ii. Date received	9/3/2015		
iii. Adjusted Base Amount	240,401	18,976	259,377
iv. Shortfall of State Tax Premium Distribution	0	0	0
v. Net Increase in Reserve Account	219,837	0	219,837
vi. Interest on e(v) to September 30, 2015	1,262	0	1,262
(f) Final Reserve Account at September 30, 2015	3,090,046	425,035	3,515,081

3. Allocation of Accumulated Reserve Account under SB 172

	Ch. 175 <u>Fire</u>	Suppl. <u>Fire</u>	<u>Total</u>
	-\$-	-\$-	-\$-
(a) Amount allocated to Unfunded Liability	(879,082)	(120,918)	(1,000,000)
(b) Amount allocated to COLA Fund	(2,210,964)	(304,117)	(2,515,081)
(c) Total	(3,090,046)	(425,035)	(3,515,081)
(d) Final Reserve Account at September 30, 2015	0	0	0

**Accrued/(Prepaid) Position**

1.	<u>Accrued/(Prepaid) Position 10/01/2014</u>		\$7,173
2.	<u>Costs</u>		
	Minimum Required City Contribution (2014/2015 Plan Year)	\$2,114,911	
	State Contribution	\$240,401	
	Interest to September 30, 2015	\$0	
	Total Costs with Interest		\$2,355,312
3.	<u>Contributions</u>		
	City Biweekly Contributions	(\$2,180,098)	
	State Contribution September 03, 2015	(\$240,401)	
	Interest to September 30, 2015	(\$92,295)	
	Total Contributions with Interest		(\$2,512,794)
4.	<u>Interest on Beginning of Year Amount</u>		\$556
5.	<u>Accrued/(Prepaid) Position 10/01/2015</u>		(\$149,753)

**Determination of COLA Fund Assets**

	<u>September 30, 2015</u>
COLA Fund Assets, beginning of Prior Year	\$1,076,985
Distributions	0
Investment Return	4,048
Asset Transfers	0
Member Contributions	49,428
Additional from Accumulated State Reserve	2,515,081
COLA Fund Assets, beginning of current year	\$3,645,542

**Cumulative Experience Position Net of Asset Transfers**

**Calculation of expected unfunded actuarial accrued liability**

(a) Expected unfunded actuarial accrued liability at beginning of year	(\$7,359,825)
(b) Effect of assumption change	0
(c) Entry age normal cost for year (including expenses)	(513,388)
(d) Interest on (a), (b), and (c)	(610,174)
(e) Contributions for year <sup>1</sup>	2,355,312
(f) Interest on (e)	0
(g) Expected unfunded actuarial accrued liability at end of year	(\$10,838,699)
((a) + (b) + (c) + (d) - (e) - (f))	

**Determination of net cumulative experience position**

(a) Expected unfunded actuarial accrued liability at September 30, 2015	(\$10,838,699)
(b) Entry Age Reserve	
- Active	24,138,944
- Inactives	<u>30,575,364</u>
- Total	54,714,308
(c) Actuarial asset value	42,847,687
(d) Actual unfunded actuarial liability (b) - (c)	<u>11,866,621</u>
(e) Cumulative experience (gain) loss (d) - (a)	\$22,705,320

<sup>1</sup> Excluding reserve account contribution and prepaid/accrued account accumulation