

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.

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***City of Miami***  
***Fire Fighters' and Police Officers' Retirement Trust***

*October 1, 2015*  
*Actuarial Valuation Report*

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At the request of the plan sponsor, this report summarizes the City of Miami Fire Fighters' and Police Officers' Retirement Trust as of October 1, 2015. The purpose of this report is to communicate the following results of the valuation:

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

This report has been prepared in accordance with the applicable Federal and State laws. 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 plan administrator. Asset information has been provided to us by the plan administrator. 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.

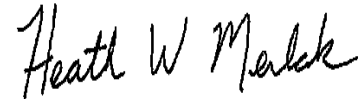
The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States and are available for any questions.

Nyhart



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



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Heath W. Merlak, FSA, EA, MAAA  
Enrolled Actuary No. 14-5967

May 23, 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:

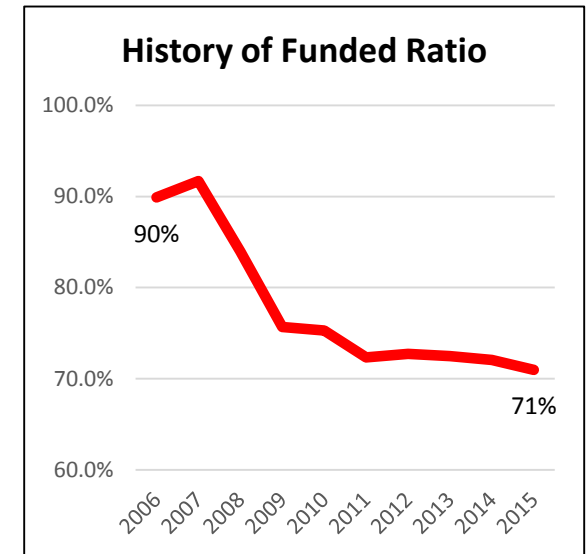
Ms. Sarah Carr  
Benefits Administrator  
Municipal Police Officers' &  
Firefighters' Trust Funds  
Division of Retirement  
Post Office Box 3010  
Tallahassee, FL 32315-3010

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	\$1,597,778,645	\$1,616,131,503
Actuarial Value of Assets	<u>1,151,016,531</u>	<u>1,147,334,950</u>
Unfunded Accrued Liability	\$446,762,114	\$468,796,553
Funded Percentage (AVA)	72.0%	71.0%
Funded percentage (MVA)	71.1%	67.5%
<b>Cost Measures</b>		
Recommended Contribution For Next Fiscal Year	\$43,964,153	\$47,102,220
Recommended Contribution (as a percentage of payroll)	46.9%	44.3%
<b>Asset Performance</b>		
Market Value of Assets (MVA)	\$1,136,462,242	\$1,090,944,360
Actuarial Value of Assets (AVA)	\$1,151,016,531	\$1,147,334,950
Actuarial Value/Market Value	101.3%	105.2%
<b>Participant Information</b>		
Active Members	1,482	1,650
Terminated Vested Members	12	15
Retirees, Beneficiaries, and Disabled Members	1,846	1,952
DROP Participants	<u>401</u>	<u>278</u>
Total	3,741	3,895
Expected Payroll	\$93,705,765	\$106,278,378
Total Payroll	\$127,786,644	\$133,966,173



### Changes Since Prior Valuation and Key Notes

As of October 1, 2015 all Fire Fighters will contribute 10% of pay, and all Police hired prior to 10/1/2012 will contribute 7% of pay. The benefit for Fire Fighters who had not reached rule of 64 by 9/30/2009 or 68 by 9/30/2010 increased to 3% of Average Final Compensation for the first fifteen years of Creditable Service plus 3.5% of Average Final Compensation for each Creditable Service after the fifteenth year.

The administrative expense has increased to \$2,058,798 from the prior year.

**Present Value of Future Benefits**

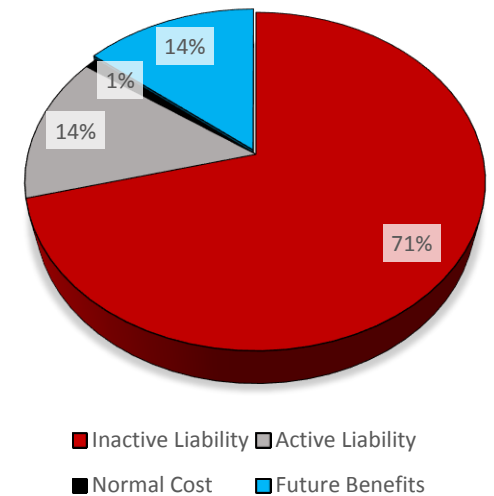
The Present Value of Future Benefits represents the current future benefits payable to the participant.

**October 1, 2015**

**Present Value of Future Benefits**

Active members	
Retirement	\$455,877,149
Disability	56,071,742
Death	8,046,397
Termination	26,849,525
Refund of contributions	2,462,886
Total active	\$549,307,699
Inactive members	
Retired members	\$1,046,575,406
DROP members	244,492,504
Beneficiaries	28,706,393
Disabled members	28,037,791
Terminated vested members	2,715,494
Total inactive	\$1,350,527,588
Total	\$1,899,835,287
Present value of future payrolls	\$1,585,673,300

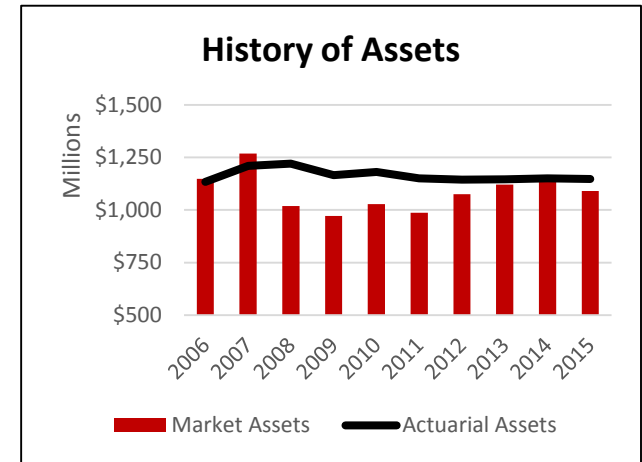
**Breakdown of Present Value of Future**



**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
<b>Market Value Reconciliation</b>	
Market value of assets, beginning of prior year	\$1,136,678,362
Employer contributions (incl. discounted accrued items)	42,919,757
Member contributions	9,317,231
Investment income, net expenses	30,555,177
Benefit payments and refunds	(126,153,910)
Administrative expenses	(2,222,561)
Other expenses	(149,696)
	\$1,090,944,360
Market value of asset, beginning of current year	\$1,090,944,360
Return on Market Value	2.8%
<b>Actuarial value of assets</b>	
Value at beginning of current year	\$1,147,334,950





**Asset Information (continued)**

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	\$1,151,016,531
(b) City Contributions	42,919,757
(c) Member Contributions	9,317,231
(d) Benefits payments and refunds	(126,153,910)
(e) Expected return	84,332,989
(f) Expected actuarial value of assets – beginning of current year	\$1,161,432,598
2. Market value of assets – beginning of current year	\$1,090,944,360
3. Present value of COLA transfers	
(a) Current year	\$0
(b) Next year	0
(c) Total	\$0
4. Market value net COLA transfer [(2)-(3)]	\$1,090,944,360
5. Amount subject to phase in [(4)-(1f)]	\$(70,488,238)
6. Phase in of asset gain loss [(5)x20%]	\$(14,097,648)
7. Preliminary actuarial value of assets – beginning of current year [(1f)+(6)]	\$1,147,334,950
8. 80% of Market value of assets	\$872,755,488
9. 120% of Market value of assets	\$1,309,133,232
10. Adjusted actuarial value of assets	\$1,147,334,950
11. Contribution surplus account balance	\$0
12. Final actuarial value of assets – beginning of current year [(10)-(11)]	\$1,147,334,950
13. Return on actuarial value of assets	6.2%

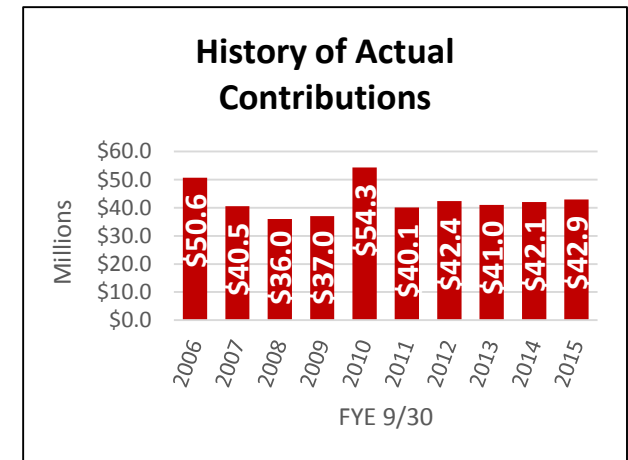
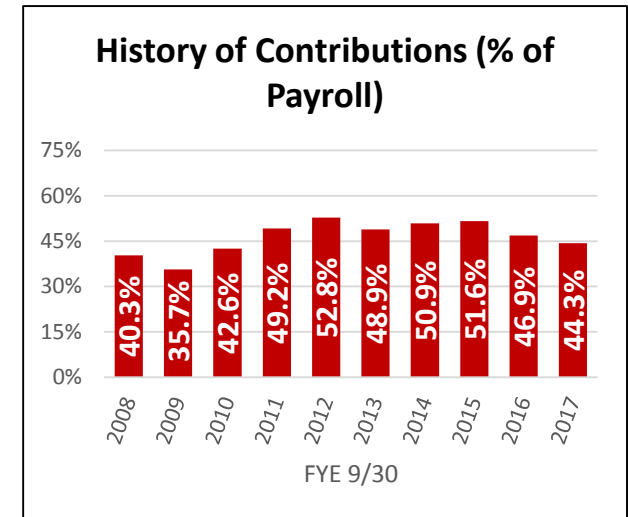
**Reconciliation of Gain/Loss**

	October 1, 2015
<b>Liability (gain)/loss</b>	
Present value of future benefits	\$1,862,016,468
Present value of employee contributions	(112,603,159)
Expected employee contribution	7,637,375
Benefit payments	(126,153,910)
Interest	125,776,393
Expected liability	\$1,756,673,167
Plan Amendment	\$(3,980,804)
Expected after changes	\$1,752,692,363
Actual liability	\$1,770,839,504
Liability (gain)/loss	\$18,147,141
<b>Asset (gain)/loss</b>	
Actuarial value of assets, beginning of prior year	\$1,151,016,531
Contributions	52,236,988
Benefit payments and expenses	(126,153,910)
Expected Investment return	84,332,989
Expected actuarial value of assets, beginning of current year	\$1,161,432,598
Actual actuarial value of assets, beginning of current year	\$1,147,334,950
Asset (gain)/loss	\$14,097,648
<b>Total (gain)/loss</b>	<b>\$32,244,789</b>

**Development of Recommended Contribution**

The actuarial determined contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

	October 1, 2015
1. Present value of future benefits	\$1,899,835,287
2. Actuarial value of assets	1,147,334,950
3. Present value of future member contributions	<u>128,995,783</u>
4. Present value of future normal Cost [(1)-(2)-(3)]	\$623,504,554
5. Present value of future payroll	\$1,585,673,300
6. Normal cost actual rate [(4)/(5)]	39.32%
7. Administrative expenses	\$2,058,798
8. Expected payroll	\$106,278,378
9. Applicable interest	7.42%
10. Normal cost [(6)x(8)+(7)]	\$43,848,650
11. Interest to estimated payment date	\$3,253,570
12. Total recommended contribution as of end of year [(10)+(11)]	\$47,102,220
13. As a percentage of expected payroll	44.32%
14. As a percentage of total payroll	35.16%



**Demographic Information**

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

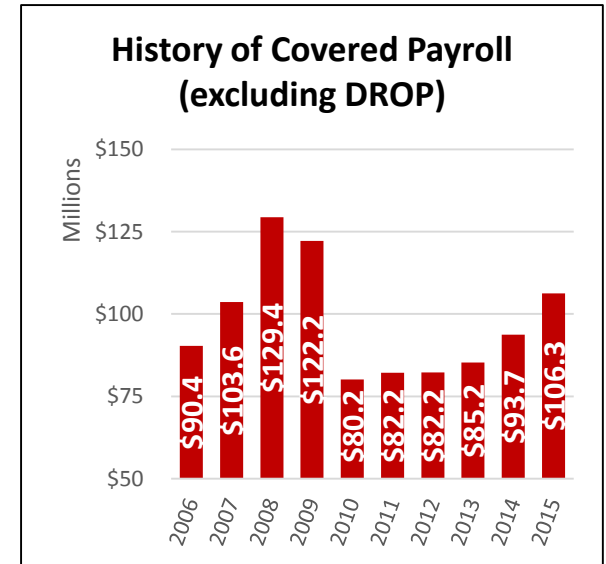
**October 1, 2015**

**Member Counts**

Active Members	1,650
Retired Members	1,546
Beneficiaries	259
Disabled Members	147
Terminated Vested Members	15
DROP Members	<u>278</u>
<b>Total</b>	<b>3,895</b>

**Active Participant Demographics**

Average Age	35.98
Average Service	8.93
Average Compensation	\$64,411
Covered Payroll	\$106,278,378
Total Payroll	\$133,966,173



**Demographic Information (continued)**

October 1, 2015

**Retired Member Statistics**

Average Age	64.91
Average Monthly Benefit	\$5,295

**Beneficiary Statistics**

Average Age	76.16
Average Monthly Benefit	\$1,079

**Disabled Member Statistics**

Average Age	76.35
Average Monthly Benefit	\$1,854

**Terminated Member Statistics**

Average Age	41.60
Average Monthly Benefit	\$2,240

**DROP Member Statistics**

Average Age	52.05
Average Monthly Benefit	\$6,074
Payroll	\$27,687,795

**Participant Reconciliation**

	<b>Active</b>	<b>Terminated Vested</b>	<b>Disabled</b>	<b>Retired</b>	<b>Beneficiaries</b>	<b>Totals</b>
<b>Prior Year</b>	1,482	12	149	1,842	256	3,741
<b>Active</b>						
To Terminated Vested	(4)	4				0
To Retired	(6)			6		0
To Refund	(28)					(28)
To Death	(3)					(3)
<b>Terminated Vested</b>						
To Retired		(1)		1		0
<b>Disabled</b>						
To Death			(2)			(2)
<b>Retired</b>						
To Death				(25)		(25)
<b>Survivor</b>						
To Death					(14)	(14)
<b>Additions</b>	209				17	226
<b>Current Year</b>	1,650	15	147	1,824	259	3,895

**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	59	69	1								129	\$33,838
25 to 29	68	200	45	4							317	46,329
30 to 34	43	91	180	53	1						368	57,421
35 to 39	14	32	93	100	55	1					295	71,525
40 to 44	7	10	45	63	111	43	4				283	79,992
45 to 49	1	3	29	31	74	43	9				190	84,570
50 to 54		2	8	10	13	15	6	2			56	93,230
55 to 59				3		4	1	1			9	92,951
60 to 64				1		1	1				3	77,667
65 to 69											0	0
70 & up											0	0
<b>Total</b>	192	407	401	265	254	107	21	3	0	0	1,650	\$64,411

## Plan Status

January 1, 1940, as restated effective May 23, 1985, and amended through September 30, 2012.

## Eligibility for Participation

Police officers and fire fighters.

## Accrual of Benefits

The accrued benefit is determined as follows:

For Police Officers who have reached Rule of 64 by 9/30/2010:

3% of Average Final Compensation for the first 15 years of Creditable Service plus 3.5% of Average Final Compensation after 15 years. Maximum of 100% of Average Final Compensation.

For other Police Officers:

For service prior to 10/1/2010: 3% of Average Final Compensation for the first 15 years of Creditable Service plus 3.5% of Average Final Compensation after 15 years.

For service after 9/30/2010: 3% of the Average Final Compensation for each year of Creditable Service.

The combined percentage for service may not exceed 100% of Average Final Compensation and the final benefit may not exceed the larger of the 9/30/2010 Accrued Benefit and \$100,000.

For Firefighters who have reached Rule of 64 by 9/30/2009 or Rule of 68 by 9/30/2010:

3% of Average Final Compensation for the first 15 years of Creditable Service plus 3.5% of Average Final Compensation after 15 years. Maximum of 100% of Average Final Compensation.

For all other Fire Fighters:

3% of Average Final Compensation for the first 15 years of Creditable Service plus 3.5% of Average Final Compensation after 15 years. Maximum of 100% of Average Final Compensation and the final benefit may not exceed the larger of the 9/30/2010 accrued benefit and \$100,000.



## Benefits

### Normal Retirement

Eligibility	Age plus Creditable Service equal to 64 (Rule of 64) on 9/30/2010 for police officers active 9/30/2010 and firefighters active 9/30/2009.  Age plus Creditable Service equal to 68 (Rule of 68) on 9/30/2010 for fire fighters active 9/30/2010 and not eligible for Rule of 64 at 9/30/2009.  Age plus Creditable Service equal to 70 (Rule of 70) with attainment of age 50 and 10 years of Creditable Service for all members hired on or after 10/1/2010 and police officers and fire fighters who were not eligible for the Rule of 64 or the Rule of 68 on the specified dates above.
Benefit	Unreduced Accrued Benefit payable immediately.

### Early Retirement

Eligibility	Completion of 20 years of Creditable Service.
Benefit	Accrued Benefit adjusted with actuarial equivalence for early commencement.

### Late Retirement

Eligibility	Participation continues after normal retirement date.
Benefit	Accrued Benefit

### Ordinary Death before Retirement

Eligibility	Participant with 3 years of Creditable Service who dies off duty.
Benefit	Between 3 and 10 years of Creditable Service: Lump sum benefit equal to 50% of Compensation received in year preceding death.  After 10 years of Creditable Service and before eligibility for Early Service or Rule of 64 Retirement: Accrued benefit, deferred to earlier of member's 50th birthday or Rule of 64 eligibility, payable for 10 years. Beneficiary does not have to survive deferred period or 10 years' certain period.  If eligible for Service, Early Service, or Rule of 64 retirement, considered to have retired on the date of death. Surviving spouse would receive 40% of the member's monthly retirement allowance.

**Accidental Death before Retirement**

Eligibility	Member who dies during performance of duties.
Benefit	Pension of 50% of Average Final Compensation to spouse until death or remarriage. If there is no spouse, or if spouse dies or remarries before youngest child is 18, payable to child until attainment of age 18. If no spouse or no children under 18, benefit is payable to dependent parents.  After 10 years of Creditable Service - Beneficiary receives benefit otherwise payable to member at early or normal retirement for a period of 10 years.

**Termination Benefit**

Eligibility	Fully vested after completion of 10 years of Creditable Service.
Benefit	Accrued Benefit payable at the member's Early or Normal Retirement Date. If the member terminates prior to 10 years of Creditable Service a refund of accumulated contributions with interest will be issued.

**Ordinary Disability Benefit**

Eligibility	Completion of 10 years of Creditable Service.
Benefit	90% of benefit rate times Average Final Compensation times Creditable Service, with a minimum benefit of 30% of Average Final Compensation. The normal form is a 10 year certain and life normal form.

**Accidental Disability Benefit**

Eligibility	Immediately upon permanent disability
Benefit	66 2/3% of Average Final Compensation, or 66 2/3% of Final Compensation, whichever is greater. The normal form is a 40% joint & survivor annuity, with a minimum of 10 years' certain and life.

## Compensation

### Earnable Compensation

An employee's base salary, including pick-up contributions, for all straight time hours worked, plus assignment pay and payments received for vacation and sick leave taken, jury duty, and death-in-family leave taken. Earnable compensation shall not include overtime pay; payments for accrued sick leave, accrued vacation leave, or accrued compensatory leave; holiday pay; premium pay for holidays worked; the value of any employment benefits or non-monetary entitlements; or any other form of remuneration.

### Average Final Compensation

For members who retire or terminate employment with ten or more years of creditable service prior to 10/1/2010: the annual earnable compensation of a member during either the last one year or the highest year of membership service, whichever is greater.

For members who retire on or after 10/1/2010: the Average Final Compensation shall mean the average of the highest 5 years of service, to be phased in effective 9/30/2010 over the next 4 years as follows:

For members who retire between 10/1/2010 and 9/30/2011: the average of the highest 2 years of membership service

For members who retire between 10/1/2011 and 9/30/2012: the average of the highest 3 years of membership service

For members who retire between 10/1/2012 and 9/30/2013: the average of the highest 4 years of membership service

For members who retire on or after 10/1/2013: the average of the highest 5 years of membership service.

Provided, in no event shall the Average Final Compensation of any member who was employed as a police officer or fire fighter on 9/30/2010 and retires on or after 10/1/2010, be less than the highest year of membership service prior to 9/30/2010.

## Creditable Service

### For Vesting and Benefit Accrual

Service credited under Retirement System; military service (maximum of four years) during wartime for which Member makes contributions; maternity leave (maximum of 180 days for each leave) for which Member makes contributions; up to 5 years, without member contributions, if member was an employee before period of military service.

Accumulated leave balances may be transferred into system immediately prior to retirement to purchase up to 3 whole years of additional Creditable Service, on an actuarially equivalent basis.

457 balances of Firefighters may be transferred into System at retirement to purchase up to 3 whole years of additional Creditable Service for multiplier purposes.

### Member Contributions

Police Officers:	7% (10% if hired on or after 10/1/2012)
Fire Fighters:	10%

### DROP

Eligibility	Election must be made within 10 years after eligibility for normal retirement. Members eligible for forward DROP as of 1/1/2013 or vested as of 1/1/2010 remain eligible for forward DROP.
Benefit	Effective 1/1/2013 members may elect the BackDROP option (maximum of 7 years). Members receive a monthly benefit based on an earlier retirement date and a lump sum of past payments compounded at 3%/year.

### COLA

Eligibility	Participant or Beneficiary
Benefit	Amount varies annually with the adjustment on January 1

### Payment Forms

#### Normal Form

For Police Officers who have reached Rule of 64 by 9/30/2010 or Fire Fighters who reached Rule of 64 by 9/30/2009: Joint and 40% Contingent Survivor with a minimum 10 years Certain and Life

For Fire Fighters who have reached Rule of 68 by 9/30/2010: Joint and 40% Contingent Survivor with a minimum of 10 years Certain and Life

#### For all others:

Benefits based on service prior to 10/1/2010: Joint and 40% Contingent Survivor with minimum of 10 years Certain and Life

Benefits based on service after 9/30/2010: 10 years Certain and Life

#### Optional Forms

Option 1 – Cash refund annuity based on Present Value at retirement

Option 2 – Joint and 100% Contingent Annuity

Option 3 – Joint and 50% Contingent Annuity

Option 4 – Joint and Contingent Annuity approved by the Board

Option 5 – Determined by Board due to incapacity of member

Option 6 – Withdrawal of member contributions with interest and benefit that is ½ of normal level

### **Plan Provision Not Included**

The COLA benefits and liabilities are not included in this report; these benefits are reported in a separate COLA report dated December 9, 2015. We are not aware of any other provisions not included in this report.

### **Adjustments Made for Subsequent Events**

We are not aware of any event following the measurement date and prior to the date of this report that would materially impact the results.

### **Pension Stabilization Fund**

Beginning October 1, 2008, any time the city's contributions to normal cost fall below 37% of valuation payroll, the difference will be deposited into the Pension Stabilization Fund to be used in subsequent years when the city's required contributions exceed 37%. No payment to this trust is required if the funded level of this trust exceeds 10% of the actuarial value of assets of the retirement system.

### **Changes Since Prior Report**

Police officers hired prior to October 1, 2012 will contribute 7% of compensation. All fire fighters will contribute 10% of compensation. The benefit for fire fighters who had not reached rule of 64 by 9/30/2009 or rule of 68 by 9/30/2010 increased to a 3.5% from 3.0% accrual for service over 15 years.

**Cost Method (CO)**

Aggregate Cost Method

**Asset Valuation Method (CO)**

20% Write-Up Method: Expected actuarial value of assets, adjusted by 20% of the difference between expected actuarial value and actual market value (net of pending transfers to the COLA Fund).

The result cannot be greater than 120% of market value or less than 80% of market value (net of pending COLA transfers).

**Interest Rates (CO)**

7.42% net of investment expenses

**Annual Pay Increases (FE)**

3.25% inflation and 1.5% for promotions and other increases plus salary merit scale below.

<u>Service</u>	<u>Police</u>	<u>Fire</u>
0-6	5.0%	5.0%
7	2.5%	5.0%
8-9	5.0%	5.0%
10-14	1.0%	0.0%
15-16	1.25%	2.5%
17-21	1.0%	1.0%
22+	0.0%	0.0%

There is no additional increase at retirement.

**Expense and/or Contingency Loading (FE)**

\$2,058,798

**Mortality Rates (CO)**

Healthy  
 Disabled

RP 2000 Mortality Table projected to 2020 using Scale AA  
 RP 2000 Disabled Mortality Table projected to 2020 using Scale AA

100% of the assumed deaths are expected to be ordinary deaths

**Retirement Rates (FE)**

If eligible for Retirement, the following decrements apply, based on service.

<u>Years of Service</u>	<u>Police %</u>	<u>Fire %</u>
<20	0	0
20	10	10
21-24	3	3
25-29	40	5
30-34	50	25
35	100	25
36		25
37		100

All Members are assumed to elect a 5-year BackDROP when they reach five years following first retirement eligibility.

**Disability Rates (FE)**

100% of the disabilities are expected to be accidental with the following probabilities. No recovery is assumed.

<u>Age</u>	<u>Rates</u>
35	0.285%
40	0.390%
45	0.800%
50	1.210%

**Withdrawal Rates (FE)**

Based on Years of Creditable Service using the rates below

<u>Age</u>	<u>&lt;5</u>	<u>5+</u>
30	2.40%	1.92%
35	2.40%	1.92%
40	1.80%	1.44%
45	1.20%	0.96%
50	0.00%	0.00%

**Marital Status and Ages**

100% of Members are assumed to be married. Female spouses assumed to be 3 years younger than male spouses.

**Compensated Absence Balance Transfers**

No liabilities or costs are included for the provision to transfer compensated absence balances into FIPO to purchase additional creditable service, based on our understanding that assets will be transferred immediately prior to retirement to cover 100% of the liability for the additional service.

**Withdrawal of Employee Contributions**

It is assumed that employees do not withdraw their contribution balances upon employment termination or retirement.

**COLA**

COLA benefits are assumed to increase as indicated in the COLA table; these are documented in a separate COLA report. No increase to the table is assumed to occur.

**Changes Since Prior Report**

The administrative expense increased to \$2,058,798.

**FE indicates an assumption representing an estimate of future experience.**

**MO indicates an assumption representing an observation of estimates inherit to market data.**

**CO indicates an assumption representing a combination of an estimate of future experience and observations of market data.**



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

- ✓ Market Value Reconciliation
- ✓ Membership and Benefits Cost-Of-Living Adjustment Account Summary
- ✓ Investment Results
- ✓ Florida State Requirements
  - Comparative Summary of Principal Valuation Results
  - Separation for Police & Fire
  - Comparison of payroll growth, salary increases and investment returns
  - Requirements under Florida Statute 112.664 and F.A.C. 60T-1.0035
- ✓ COLA GASB 5 information

**Market Value Reconciliation**

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.

	<b>September 30, 2015</b>		
	<u>Membership and Benefits Accounts</u>	<u>COLA I Account</u>	<u>COLA II Account</u>
1. Market value – beginning of prior year	\$1,136,678,362	\$57,880,282	\$336,471,254
2. Book value – beginning of prior year	\$991,118,217	\$50,467,336	\$293,378,112
3. Income			
(a) City contributions	\$42,919,757	\$0	\$5,696,920
(b) Member contributions	9,317,231	0	0
(c) Other contributions	0	0	0
(d) Interest and dividends	22,574,666	953,019	5,428,186
(e) Net realized gains (losses)	71,178,572	2,981,475	17,101,242
(f) Securities lending income	466,401	19,746	112,200
(g) Rental and other income	245,520	10,394	59,143
(h) Income transfer	0	0	0
(i) Total	<u>\$146,702,147</u>	<u>\$3,964,634</u>	<u>\$28,397,691</u>
4. Disbursements			
(a) Benefit payments and refunds	\$126,153,910	\$164,707	\$23,399,027
(b) Custodial and investment expenses	4,211,734	177,536	1,013,078
(c) Administrative expense	2,222,561	0	0
(d) Other expense	0	0	0
(e) Securities lending fees	116,494	4,932	28,024
(f) Building depreciation	33,202	1,458	8,065
(g) Total	<u>\$132,737,901</u>	<u>\$348,633</u>	<u>\$24,448,194</u>
5. Book value – beginning of current year [(2)+(3i)-(4g)]	\$1,005,082,463	\$54,083,337	\$297,327,609
6. Net change in unrealized gains (losses)	\$(59,698,248)	\$(2,791,286)	\$(17,685,187)
7. Unrealized gains (losses)	\$85,861,897	\$4,621,660	\$25,407,955
8. Market value – beginning of current year [(1)+(3i)-(4g)+6]	\$1,090,944,360	\$58,704,997	\$322,735,564
9. Current year allocation to COLA II (discounted)	<u>\$0</u>	<u>N/A</u>	<u>\$0</u>
10. Net market value – beginning of current year	\$1,090,944,360	\$58,704,997	\$322,735,564

**Membership and Benefits Cost-Of-Living Adjustment Account Summary**

**September 30, 2015**

	<u>Market</u>	<u>Book</u>
1. Investments		
(a) Bill, bonds, notes	\$530,228,074	\$536,960,245
(b) Domestic stocks	387,709,723	320,180,881
(c) International stocks	231,843,380	222,252,977
(d) Private equity	119,680,233	109,160,298
(e) Money market fund and time deposit	9,065,975	10,685,785
(f) Mutual fund	146,332,060	109,727,747
(g) Real estate	1,871,735	1,871,735
(h) Securities lending adjustment	0	0
(i) Total investment	\$1,426,731,180	\$1,310,839,668
2. Cash	\$44,746,653	\$44,746,653
3. Receivables		
(a) City contributions	\$349,061	\$349,061
(b) Member contributions	0	0
(c) Accounts receivable	5,768	5,768
(d) Accrued interest and dividend	3,539,126	3,539,126
(e) Securities sold	8,728,226	8,728,226
(f) Total receivables	\$12,622,181	\$12,622,181
4. Payables:		
(a) Budget advance	\$0	\$0
(b) Accrual expense	160,006	160,006
(c) Transfer	0	0
(d) Tax withheld	13,628	13,628
(e) Accounts payable	176,380	176,380
(f) Securities purchased	11,365,079	11,365,079
(g) Total payables	\$11,715,093	\$11,715,093
5. Total [(1i)+(2)+(3f)-(4g)]	\$1,472,384,921	\$1,356,493,409
6. COLA I account	\$58,704,997	\$54,083,337
7. COLA II account	\$322,735,564	\$297,327,609
8. Current year COLA II transfer	\$0	\$0
9. Membership & benefits account [(5)-(6)-(7)-(8)]	\$1,090,944,360	\$1,005,082,463

**Investment Results - Membership and Benefits Accounts**

**September 30, 2015**

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
Interest	\$13,745,436	1.3%	1.4%
Dividends	8,829,230	0.8%	0.9%
Rental and other income, less depreciation	212,318	0.0%	0.0%
Realized gains	71,178,572	6.5%	7.5%
Securities lending (net)	349,907	0.0%	0.0%
Increase in unrealized gains	(59,698,248)	(5.4)%	N/A
Custodial and investment expenses	<u>(4,211,734)</u>	<u>(0.4)%</u>	<u>(0.4)%</u>
Total return on investment	\$30,405,481	2.8%	9.4%

**Investment Results – COLA I and II Accounts**

**September 30, 2015**

**COLA I Account**

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
Interest	\$578,846	1.0%	1.2%
Dividends	374,173	0.6%	0.7%
Rental and other income, less depreciation	8,936	0.0%	0.0%
Realized gains	2,981,475	5.2%	5.9%
Securities lending (net)	14,814	0.0%	0.0%
Increase in unrealized gains	(2,791,286)	(4.8)%	N/A
Custodial and investment expenses	<u>(177,536)</u>	<u>(0.3)%</u>	<u>(0.3)%</u>
Total return on investment	\$989,422	1.7%	7.5%

**COLA II Account**

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
Interest	\$3,303,444	1.0%	1.2%
Dividends	2,124,742	0.7%	0.8%
Rental and other income, less depreciation	51,078	0.0%	0.0%
Realized gains	17,101,242	5.2%	6.0%
Securities lending (net)	84,176	0.0%	0.0%
Increase in unrealized gains	(17,685,187)	(5.4)%	N/A
Custodial and investment expenses	<u>(1,013,078)</u>	<u>(0.3)%</u>	<u>(0.4)%</u>
Total return on investment	\$3,966,417	1.2%	7.6%

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

Comparative Summary of Principal Valuation Results

	10/1/2015 7.42% Plan Changes	10/1/2015 7.42%	10/1/2014 7.42%
<b>Participant Data</b>			
Active members	1,650	1,650	1,482
Total annual payroll	\$106,278,378	\$106,278,378	\$93,705,765
Members in Forward DROP	278	278	401
DROP payroll	\$27,687,795	\$27,687,795	\$34,080,879
Projected total payroll	\$133,966,173	\$133,966,173	\$127,786,644
Retired members and beneficiaries	1,805	1,805	2,098
Total annualized benefit	\$121,842,316	\$121,842,316	\$122,009,571
Disabled members receiving benefits	147	147	149
Total annualized benefit	\$3,271,325	\$3,271,325	\$3,297,718
Terminated vested members	15	15	12
Total annualized benefit	\$403,236	\$403,236	\$319,796
<b>Assets</b>			
Actuarial value of assets	\$1,147,334,950	\$1,147,334,950	\$1,151,016,531
Market value of assets	\$1,090,944,360	\$1,090,944,360	\$1,136,462,242

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

Comparative Summary of Principal Valuation Results (continued)

	10/1/2015 7.42% Plan Changes	10/1/2015 7.42%	10/1/2014 7.42%
Liabilities, present value of all future expected benefit payments			
Active members			
Retirement benefits	\$455,877,149	\$454,747,832	\$406,475,370
Vesting benefits	26,849,525	26,548,401	25,029,798
Disability benefits	56,071,742	56,071,742	51,259,582
Death benefits	8,046,397	7,977,416	7,307,646
Return of contribution	2,462,886	2,315,426	2,235,295
Total	<u>\$549,307,699</u>	<u>\$547,660,817</u>	<u>\$492,307,691</u>
Terminated vested members	\$2,715,494	\$2,715,494	\$2,307,321
Retired members and beneficiaries	\$1,319,774,303	\$1,319,774,303	\$1,338,709,196
Disabled members	\$28,037,791	\$28,037,791	\$28,692,260
Total	\$1,899,835,287	\$1,898,188,405	\$1,862,016,468
Liabilities due and unpaid	\$0	\$0	\$0
Actuarial accrued liability	N/A	N/A	N/A
Unfunded actuarial accrued liability	N/A	N/A	N/A

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

Comparative Summary of Principal Valuation Results (continued)

	10/1/2015 7.42% Plan Changes	10/1/2015 7.42%	10/1/2014 7.42%
	_____	_____	_____
<b>Actuarial present value of accrued benefits</b>			
Statement of actuarial present value of all accrued benefits			
Vested accrued benefits			
Inactive members and beneficiaries	\$1,350,527,588	\$1,350,527,588	\$1,369,708,777
Active members	241,943,732	240,107,472	208,780,651
Total value of all vested accrued benefits	<u>\$1,592,471,320</u>	<u>\$1,590,635,060</u>	<u>\$1,578,489,428</u>
Non-vested accrued benefits	17,066,732	17,123,300	11,128,196
Total actuarial present value of all accrued benefits	<u>\$1,609,538,052</u>	<u>\$1,607,758,360</u>	<u>\$1,589,617,624</u>
Statement of changes in total actuarial present value of all accrued benefits (ASC 960)			
Actuarial present value of accrued benefits, beginning of year	\$1,589,617,624	\$1,589,617,624	\$1,556,761,507
Increase (decrease) during year			
Benefits accumulated	\$30,941,588	\$30,941,588	\$34,913,897
Plan amendment	1,779,692	0	0
Changes in actuarial assumptions	0	0	12,379,458
Interest	113,353,058	113,353,058	112,015,149
Benefits paid	(126,153,910)	(126,153,910)	(126,452,387)
Other changes	0	0	0
Net increase (decrease)	<u>\$19,920,428</u>	<u>\$18,140,736</u>	<u>\$32,856,117</u>
Actuarial present value of accrued benefits, end of year	<u>\$1,609,538,052</u>	<u>\$1,607,758,360</u>	<u>\$1,589,617,624</u>



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

Comparative Summary of Principal Valuation Results (continued)

	10/1/2015 7.42% Plan Changes	10/1/2015 7.42%	10/1/2014 7.42%
<b>Pension cost</b>			
Normal Cost	\$56,329,666	\$56,521,332	\$52,045,324
Member contributions	\$9,227,446	\$9,164,333	\$8,081,171
Expected plan sponsor contribution	\$47,102,220	\$47,356,999	\$43,964,153
As % of payroll	44.32%	44.56%	46.92%
As % of total payroll	35.16%	35.35%	34.40%
Member Contributions as % of payroll	8.68%	8.62%	8.62%
<b>Past contributions</b>		9/30/2015	9/30/2014
Required plan sponsor contribution		\$42,919,757	\$42,057,691
Required member contribution		\$9,317,231	\$9,462,569
Actual contributions made by:			
Plan's sponsor		\$42,919,757	\$42,057,691
Members		\$9,317,231	\$9,462,569
Other		\$0	\$0
<b>Net actuarial gain (loss) (if applicable)</b>	N/A	N/A	N/A
<b>Other disclosures (where applicable)</b>			
Present value of active member			
Future salaries at attained age	\$1,585,673,300	\$1,585,673,300	\$1,441,538,742
Future contributions at attained age	\$128,995,783	\$123,368,097	\$112,603,159

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

**Hypothetical City Contribution Requirement for 2015/2016 Fiscal Year**

	Police	Fire	Total
	\$0	\$0	\$0
Unfunded actuarial accrued liability			
Liabilities, present value of all future expected benefit payments			
Active members			
Retirement benefits	\$257,526,533	\$198,350,616	\$455,877,149
Vesting benefits	14,015,016	12,834,509	26,849,525
Disability benefits	31,879,084	24,192,658	56,071,742
Death benefits	3,931,972	4,114,425	8,046,397
Return of contribution	1,319,474	1,143,412	2,462,886
Total	\$308,672,079	\$240,635,620	\$549,307,699
Terminated vested members	\$2,352,919	\$362,575	\$2,715,494
Retired members and beneficiaries	\$726,632,603	\$593,141,700	\$1,319,774,303
Disabled members	\$24,467,983	\$3,569,808	\$28,037,791
Total	\$1,062,125,584	\$837,709,703	\$1,899,835,287
Entry age reserve			
Active	\$148,090,459	\$117,513,456	\$265,603,915
Inactive	753,453,505	597,074,083	1,350,527,588
Total	\$901,543,964	\$714,587,539	\$1,616,131,503
Actuarial asset value <sup>1</sup>	\$640,030,157	\$507,304,793	\$1,147,334,950

<sup>1</sup>Allocated based on Entry Age Reserve

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

**Hypothetical City Contribution Requirement for 2015/2016 Fiscal Year**

	Police	Fire	Total
Normal cost			
Total present value of future benefits	\$1,062,125,584	\$837,709,703	\$1,899,835,287
Present value of future member contributions	(57,958,565)	(71,037,218)	(128,995,783)
Actuarial asset value	(640,030,157)	(507,304,793)	(1,147,334,950)
Unfunded actuarial accrued liability	\$0	\$0	\$0
Present value of future normal costs	\$364,136,862	\$259,367,692	\$623,504,554
Present value of future payrolls	\$812,375,475	\$773,297,824	\$1,585,673,299
Administrative expense <sup>1</sup>	\$1,148,481	\$910,317	\$2,058,798
Current payroll	\$57,494,879	\$48,783,499	\$106,278,378
Interest rate	7.42%	7.42%	7.42%
Current normal cost at end of year	\$28,917,272	\$18,554,151	\$47,102,220
As a percentage of payroll	50.30%	38.03%	44.32%
Hypothetical Total			47,471,423

<sup>1</sup>Allocated based on Entry Age Reserve

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

Historical Salary Increases and Asset Performance

<u>Year Ending</u>	<u>Payroll Growth</u>	<u>Salary Growth</u>	<u>Expected Salary Growth</u>	<u>Asset Return (Market)</u>	<u>Asset Return (Actuarial)</u>	<u>Asset Return (Expected)</u>
9/30/2015	13.42%	12.60%	7.79%	2.80%	6.18%	7.42%
9/30/2014	10.00%	1.38%	7.72%	8.60%	7.18%	7.50%
9/30/2013	3.70%	3.64%	7.77%	11.20%	6.95%	7.50%
9/30/2012	0.10%	(0.75%)	7.92%	17.40%	5.98%	7.50%
9/30/2011	2.50%	7.14%	7.48%	3.60%	3.98%	7.50%
9/30/2010	(34.40%)	(9.33%) <sup>1</sup>	7.51%	9.80%	4.48%	7.75%
9/30/2009	(5.50%)	6.35%	7.26%	(0.30%)	(1.31%)	7.75%
9/30/2008	24.80%	18.20%	7.17%	(14.30%)	3.65%	7.75%
9/30/2007	14.70%	18.19% <sup>1</sup>	5.81%	14.20%	8.27%	7.75%
9/30/2006	(1.30%)	2.84%	5.79%	9.10%	7.57%	7.75%
Averages						
3-year				7.48%	6.77%	
5-year				8.59%	6.05%	
10-year	2.80%			5.85%	5.26%	
20-year				7.79%	7.26%	

<sup>1</sup>Including impact of change in valuation pay definition

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

	October 1, 2015			
	Valuation 7.42%	- 200 bp <sup>2</sup> 5.42%	Funding Rate <sup>2</sup> 7.42%	+ 200 bp <sup>2</sup> 9.42%
Total pension liability				
Service Cost	\$19,610,906	\$19,610,906	\$19,610,906	\$19,610,906
Interest	155,662,686	155,662,686	155,662,686	155,662,686
Benefit changes	1,019,168	1,019,168	1,019,168	1,019,168
Difference between expected and actual experience	15,989,154	15,989,154	15,989,154	15,989,154
Changes in assumptions	0	494,246,097	23,819,635	(311,110,932)
Benefit payments	(164,534,254)	(164,534,254)	(164,534,254)	(164,534,254)
Contribution refunds	(1,001,073)	(1,001,073)	(1,001,073)	(1,001,073)
Net change in pension liability	\$26,746,587	\$520,992,684	\$50,566,222	(\$284,364,345)
Total pension liability, beginning of year	\$2,161,036,624	\$2,161,036,624	\$2,161,036,624	\$2,161,036,624
Total pension liability, end of year	\$2,187,783,211	\$2,682,029,308	\$2,211,602,846	\$1,876,672,279
Plan fiduciary net position				
Contributions - Employer	\$48,616,677	\$48,616,677	\$48,616,677	\$48,616,677
Contributions - State	0	0	0	0
Contributions - Member	9,317,231	9,317,231	9,317,231	9,317,231
Net investment income	35,529,492	35,529,492	35,529,492	35,529,492
Benefit payments	(164,534,254)	(164,534,254)	(164,534,254)	(164,534,254)
Contribution refunds	(1,001,073)	(1,001,073)	(1,001,073)	(1,001,073)
Administrative expense	(2,222,561)	(2,222,561)	(2,222,561)	(2,222,561)
Other	269,771	269,771	269,771	269,771
Net change in plan fiduciary net position	(\$74,024,717)	(\$74,024,717)	(\$74,024,717)	(\$74,024,717)
Plan fiduciary net position, beginning of year	\$1,748,696,334	\$1,748,696,334	\$1,748,696,334	\$1,748,696,334
Plan fiduciary net position, end of year	\$1,674,671,617	\$1,674,671,617	\$1,674,671,617	\$1,674,671,617
Net pension liability/(asset)	\$513,111,594	\$1,007,357,691	\$536,931,229	\$202,000,662
Funded ratio	76.55%	62.44%	75.72%	89.24%
Years that Assets support expected benefit payments	15	12	15	19
Estimated city contribution				
Annual dollar value	\$47,102,220	\$74,480,439	\$48,779,839	\$26,092,134
Percentage of payroll	44.32%	70.08%	45.90%	24.55%

<sup>1</sup>Includes COLA and 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<sup>1</sup>

October 1, 2015

**Sustainment of Expected Benefit Payments**

Mortality Valuation  
 Interest 7.42%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$1,674,671,617	\$111,378,955	\$353,540,678 <sup>1</sup>
2	1,432,509,894	100,785,494	151,133,770
3	1,382,161,618	97,051,373	151,086,520
4	1,328,126,471	93,034,418	151,293,648
5	1,269,867,241	88,677,452	152,230,400
6	1,206,314,293	83,902,577	153,856,432
7	1,136,360,438	78,616,304	156,482,840
8	1,058,493,902	72,731,944	159,410,230
9	971,815,616	66,137,080	163,893,020
10	874,059,676	58,773,143	166,924,226
11	765,908,593	50,685,290	168,654,439
12	647,939,444	41,844,578	171,053,204
13	518,730,818	32,204,928	172,490,506
14	378,445,240	21,673,152	175,854,907
15	224,263,485	10,049,046	180,899,895
16	53,412,636		185,442,801

<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<sup>1</sup>

October 1, 2015

**Sustainment of Expected Benefit Payments**

Mortality RP 2000 Generational (Scale AA)  
 Interest 5.42%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$1,674,671,617	\$81,313,825	\$353,497,394 <sup>1</sup>
2	1,402,488,048	71,976,669	151,002,905
3	1,323,461,812	67,696,483	150,889,369
4	1,240,268,926	63,183,065	151,052,537
5	1,152,399,454	58,396,034	151,968,889
6	1,058,826,599	53,280,791	153,599,061
7	958,508,329	47,772,520	156,254,773
8	850,026,076	41,812,995	159,238,304
9	732,600,767	35,326,433	163,804,499
10	604,122,701	28,278,846	166,948,403
11	465,453,144	20,712,871	168,821,260
12	317,344,755	12,616,630	171,392,681
13	158,568,704		173,033,791

<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<sup>1</sup>

October 1, 2015

**Sustainment of Expected Benefit Payments**

Mortality RP 2000 Generational (Scale AA)  
 Interest 7.42%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$1,674,671,617	\$111,380,532	\$353,497,394 <sup>1</sup>
2	1,432,554,755	100,793,591	151,002,905
3	1,382,345,441	97,072,196	150,889,369
4	1,328,528,268	93,073,017	151,052,537
5	1,270,548,748	88,737,548	151,968,889
6	1,207,317,407	83,986,385	153,599,061
7	1,137,704,731	78,724,361	156,254,773
8	1,060,174,319	72,862,896	159,238,304
9	973,798,911	66,287,465	163,804,499
10	876,281,877	58,937,150	166,948,403
11	768,270,624	50,854,475	168,821,260
12	650,303,839	42,007,647	171,392,681
13	520,918,805	32,347,481	173,033,791
14	380,232,495	21,777,241	176,637,789
15	225,371,947	10,092,716	181,958,675
16	53,505,988		186,819,967

<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<sup>1</sup>

October 1, 2015

**Sustainment of Expected Benefit Payments**

Mortality RP 2000 Generational (Scale AA)  
Interest 9.42%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$1,674,671,617	\$141,478,993	\$353,497,394 <sup>1</sup>
2	1,462,653,216	130,829,736	151,002,905
3	1,442,480,047	128,934,651	150,889,369
4	1,420,525,329	126,859,004	151,052,537
5	1,396,331,796	124,537,784	151,968,889
6	1,368,900,691	121,878,721	153,599,061
7	1,337,180,351	118,768,396	156,254,773
8	1,299,693,974	115,099,817	159,238,304
9	1,255,555,487	110,731,743	163,804,499
10	1,202,482,731	105,587,543	166,948,403
11	1,141,121,871	99,721,124	168,821,260
12	1,072,021,735	93,093,502	171,392,681
13	993,722,556	85,642,163	173,033,791
14	906,330,928	77,243,943	176,637,789
15	806,937,082	67,636,068	181,958,675
16	692,614,475	56,643,064	186,819,967
17	562,437,572	44,214,625	190,420,618
18	416,231,579	30,283,745	193,858,391
19	252,656,933	14,515,243	201,672,658
20	65,499,518		204,452,125

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

**GASB 5 – COLA Fund**

<b>Funding Status and Progress as of September 30, 2015 and 2014</b>	<u>2014</u>	<u>2015</u>
1. COLA Fund Table	\$1,629	\$1,670
2. Pension benefit obligation (in millions)		
a. Retirees and beneficiaries receiving COLA I benefits	\$0.9	\$0.8
b. Retirees and beneficiaries receiving benefits and terminated members not yet receiving	323.7	338.5
c. Current employees		
Accumulated employee contributions including interest	0.2	0.0
Employer-financed vested	0.0	0.0
Employer-financed nonvested	46.2	54.2
d. Total pension benefit obligation (a+b+c)	\$371.0	\$393.5
3. Net assets available for benefits	\$394.6	\$381.4
4. Unfunded pension benefit (obligation)/asset [(3)-(2)]	\$23.6	\$(12.2)

The pension benefit obligations were determined as part of actuarial valuations at January 1, 2016 and January 1, 2015, based on data and asset information at September 30, 2015 and September 30, 2014. Significant actuarial assumptions used include (a) a rate of return on the investment of present and future assets of 7.42% per year compounded annually for 2015 and 7.50% for 2014, (b) post retirement COLA benefits based on the table in effect at January 1, 2015 and January 1, 2014. All plan provisions and other assumptions not listed above can be found in the January 1, 2016 COLA Fund Report.

**GASB 5 – COLA Fund**

**Contributions required and contributions made**

The funding policy provides for annual employer contributions from January 1, 1994. The amount of the contribution was \$2.5 million, beginning January 1, 1994, increasing 4% per year each year thereafter, and reduced (but not below zero) by any excess investment income transfer due on the same date.

The excess investment income transfer consists of a portion of gains due to investment return exceeding the 7.42 percent assumption

**Analysis of funding progress**

Fiscal Year	(1) Net Assets Available for Benefits <sup>(1)</sup> (\$)	(2) Pension Benefit Obligation <sup>(2)</sup> (\$)	(3) Percent Funded (%)	(4) Unfunded PBO (2)-(1) (\$)	(5) Annual Covered Payroll (\$)	(4)/(5) (%)
2006	249.0	216.8	115	(32.2)	90.4	(36)
2007	300.2	242.9	124	(57.3)	103.6	(55)
2008	305.8	279.4	109	(26.4)	129.4	(20)
2009	296.3	290.0	102	(6.3)	122.2	(5)
2010	311.8	315.6	99	3.8	80.2	5
2011	310.0	303.6	102	(6.4)	82.2	(8)
2012	350.3	312.6	112	(37.7)	82.2	(46)
2013	378.7	320.0	118	(58.7)	85.2	(69)
2014	394.6	371.0	106	(23.6)	93.7	(25)
2015	381.4	393.5	97	12.1	106.3	11

<sup>(1)</sup> Excluding future City minimum contributions

<sup>(2)</sup> Excluding new increment and contingency reserves

**GASB 5 – COLA Fund**

**Revenues and Expenses**

Fiscal Year	Revenues by Source			
	Employee Contributions (\$)	Employer Contributions (\$)	Investment Income (\$)	Total (\$)
2006	0	0	25,340,983	25,340,983
2007	0	0	47,781,293	47,781,293
2008	0	0	44,539,016	44,539,016
2009	0	0	44,696,486	44,969,486
2010	0	4,682,453	18,493,888	23,176,341
2011	0	4,869,751	25,484,227	30,353,978
2012	0	5,064,541	21,399,142	26,463,683
2013	0	5,267,123	27,293,996	32,561,119
2014	0	5,477,808	30,812,622	36,290,430
2015	0	5,696,920	26,665,405	32,362,325

Fiscal Year	Expenses by Type			Total (\$)
	Benefits (\$)	Administrative Expenses (\$)	Refunds (\$)	
2006	11,760,071	807,594	1,934	12,569,599
2007	13,304,749	944,477	388	14,249,614
2008	15,666,175	1,053,599	14,154	16,733,928
2009	16,925,422	867,083	0	17,795,505
2010	17,236,918	1,164,379	0	18,401,297
2011	17,363,841	1,321,324	0	18,685,165
2012	17,747,481	1,456,098	421	19,204,000
2013	19,522,271	1,604,698	0	21,126,969
2014	22,188,409	1,483,762	0	23,672,171
2015	23,563,734	1,190,614	0	24,754,348