October 1, 2014 Actuarial Report

For the Fiscal and Plan Year October 1, 2015 through September 30, 2016

Prepared By:

THE NYHART COMPANY, INC. 2000 RiverEdge Parkway, Suite 900 Atlanta, GA 30328 (770) 933-1933

June 16, 2015

nyhart

June 16, 2015

Board of Trustees City of Marathon Firefighters' Pension Plan and Trust Fund 8900 Overseas Highway Marathon, FL 33050

Attention: Ms. Clara Werner

October 1, 2014 Actuarial Valuation

Dear Board Members:

Enclosed is our report on the actuarial valuation of the City of Marathon Firefighters' Pension Plan and Trust Fund as of October 1, 2014. This valuation was performed to determine the minimum required contribution for the 2015/2016 fiscal year.

We look forward to reviewing this report with the Board.

Respectfully submitted,

THE NYHART COMPANY, INC.

David D. Harris, ASA, FCA, MAAA, EA

David D. Harris

Actuary

Kimberly Lovingood, FSA, EA

Kimberey Lovingsod

Actuary

DDH/KL/di

503001701

Enclosures (4)

Bound (3)

Electronic

2014 ACTUARIAL REPORT

Table of Contents

	<u>I</u>	Page
SUMM	ARY OF RESULTS	1
REVIE	W OF COSTS	3
	kground and Scope	
Con	nparison of Deposit Requirements	3
	Table 1 – Comparison of Deposit Requirements	
	Table 2 – Sources of Funding	
	ets	
1	Cable 3 – Market Value vs. Actuarial Value	6
Gov	rernmental Accounting Standards	7
	ida SB 534 Disclosures	
Enr	olled Actuary's Statement	8
EXHIB	ITS	
1	Valuation Results	9
2	Summary of Asset Transactions	10
3	Distribution of Assets	
4	Investment Results	12
5	Reserve Account for Future Benefit Improvements Under 99-1	13
5A	Actuarial Confirmation of Use of State Money	.14
6	Actuarial Value of Assets	16
7	Member Statistics	17
8	Summary of Principal Plan Provisions	
9	Summary of Actuarial Basis	
10	Information Under Florida Statutes	
11	Summary of Accounting Information	
12	Information to comply with Florida SB 534	28

Comparative Summary of Principal Valuation Results

		Actuarial Valuation		
		Prepared as of		
		10/1/2014	10/1/2013	
A.	Participant Data (Ex. 7)			
	Active Members	24	23	
	Expected Annual Payroll for Current Year	\$1,358,418	\$1,295,521	
	Projected Payroll for Next Year	\$1,412,755	\$1,347,342	
	DROP Members	0	0	
	Total Annualized Benefits	\$0	\$0	
	Retired and Disabled Members and Beneficiaries	0	0	
	Total Annualized Benefits	\$0	\$0	
	Terminated Vested Members	2	2	
	Total Deferred Annualized Benefits	\$28,734	\$28,734	
	Inactive Due Refund	1	1	
B.	<u>Assets</u>	-\$-	-\$-	
	Actuarial Value (Ex. 6)	4,612,861	4,024,188	
	Market Value (Ex. 2)	5,617,154	4,763,357	
C.	<u>Liabilities</u>			
	Present Value of Benefits (Ex. 1)			
	Active Members			
	Benefits	7,953,839	7,446,702	
	Total	7,953,839	7,446,702	
	Inactive Members			
	Retirees and Beneficiaries	0	0	
	Terminated Vested	112,475	104,589	
	Due Refund of Contributions	14,319	2,473	
	Total	126,794	107,062	
	Total	<u>8,080,633</u>	<u>7,553,764</u>	
	Present Value of Future Expenses	161,613	151,075	
	Present Value of Future Member Contributions	683,637	672,789	
	Present Value of Future Normal Costs	2,945,748	3,007,862	

Comparative Summary of Principal Valuation Results (Continued)

		Actuarial Valuation Prepared as of	
		10/1/2014	10/1/2013
		-\$-	-\$-
D.	Actuarial Present Value of Accrued Benefits (Exhibit 11)		
	Vested Accrued Benefits		
	Inactive Members and Beneficiaries, including DROP	126,794	107,062
	Active Members	<u>1,126,378</u>	<u>885,497</u>
	Total	1,253,172	992,559
	Non-Vested Accrued Benefits	841,758	<u>766,751</u>
	Total	2,094,930	1,759,310
E.	Employer Pension Cost (Exhibit 1)	FYE 9/30/16	FYE 9/30/15
	Normal Cost (adjusted for quarterly contributions)	317,409	314,079
F.	Sources of Contributions		
	Expected State Contribution	193,515 ⁽¹⁾	193,515
	As % of Expected Covered Payroll	13.70%	14.36%
	Expected City Contribution (2)	123,894	120,564
	As % of Expected Covered Payroll	8.77%	8.95%
	Expected Member Contribution	70,638	67,367
	As % of Expected Covered Payroll	5.00%	5.00%

 ⁽¹⁾ Expectation of same level of State contribution as in prior year.
 (2) The City contribution must be adjusted for State contributions differing from expectations.

REVIEW OF COSTS

Background and Scope

This is the October 1, 2014 actuarial report for the fiscal year beginning October 1, 2015 for the Board of Trustees of the City of Marathon Firefighters' Pension Plan and Trust Fund. This report is intended to reflect the provisions of the plan as of October 1, 2014. This is the fourth actuarial valuation for the Plan prepared by Nyhart.

Comparison of Deposit Requirements

The contribution requirements for the 2015/2016 fiscal year compare to the previous year as follows:

Table 1 — Comparison of Deposit Requirements

	10/1/2014 Valuation FYE 9/30/16	10/1/2013 Valuation FYE 9/30/15
	-\$-	-\$-
Present Value of Projected Benefits and Expenses	8,242,246	7,704,839
Actuarial Value of Assets	4,612,861	4,024,188
Present Value of Future Normal Costs and	2 (20 20 7	2 (00 (71
Member Contributions	3,629,385	3,680,651
Total Cost (assuming quarterly payments)	388,047	381,446
Estimated Member Contribution	70,638	67,367
Estimated State Contribution	193,515	193,515
Estimated City Contribution	123,894	120,564

As will be noted, the Plan's experience for the 2014 fiscal year was a net actuarial loss, resulting in an increase in City cost.

As of October 1, 2014, the City has a prepaid contribution of \$2,526 that may be used to partially satisfy the contribution requirements for the fiscal year ending September 30, 2015.

REVIEW OF COSTS (Continued)

Expected Cost Increase/Savings: If all actuarial assumptions had been realized over the past year, a cost increase of \$21,458 would have resulted. The commentary below explains differences in the actual results and the impact on costs.

Investment Return: The rate of return on the market value of Plan assets for the fiscal year ending 9/30/2014 was approximately 8.3% net of investment expenses. The rate of return on the actuarial asset value was 7.68% (net of expenses) due to the asset smoothing method (Exhibit 6), resulting in a cost decrease of \$638.

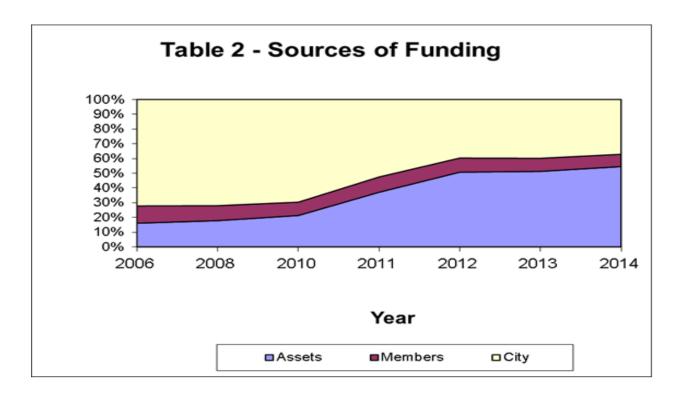
Salary Increases: Compensation increased on average 0.88% versus the salary increase assumption of 4.0%, resulting in a cost decrease of \$13,935.

Demographic Assumptions: The assumptions anticipated no turnover and one retirement; the plan experienced one termination, no retirements, and 2 new members. This results in a cost decrease of \$3,555.

REVIEW OF COSTS (Continued)

Sources of Funding

Table 2 compares the sources of funding for the Plan. The present value of benefits is equal to 100% in the Table. The present value of benefits is provided by three sources: the actuarial value of assets, the present value of member contributions, and the present value of future normal costs to be paid by the City and State.

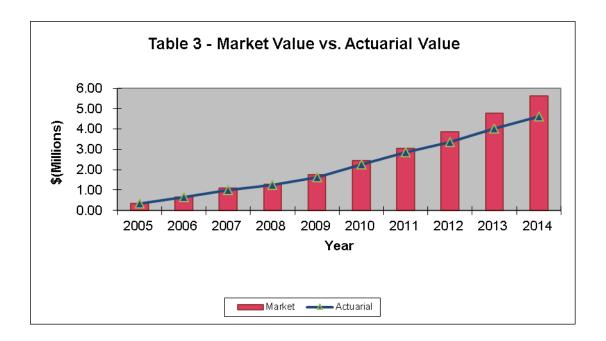


As seen in the table, the actuarial asset value has increased as a percentage of the total present value of benefits, resulting in a decreased city portion. As of October 1, 2014, the actuarial value of assets equals 55% of the present value of benefits, the present value of member contributions equals 8%, and the present value of future City and State normal costs equals the remaining 37% of the present value of future benefits.

REVIEW OF COSTS (Continued)

Assets

Table 3 illustrates the effect of the asset smoothing methodology which recognizes investment gains/losses over a 5-year period. Market values can be seen in the columns, while the actuarial value is illustrated by the line.



Exhibits 2, 3 and 4 summarize the asset transactions and investment results during the year. The rate of return on mean market value for the period ending September 30, 2014 was 8.27%.

After October 1, 2007, the actuarial asset valuation method (Exhibit 6) was changed to recognize yearly investment returns/losses over a 5-year period. A characteristic of this method is that, over time, it is more likely to produce an actuarial value of assets that is less than the market value of assets. The rate of return on the actuarial value of assets during 2014 (net of investment expenses) was 7.68%, as compared to the 7.50% assumption (Exhibit 6).

Governmental Accounting Standards

The Governmental Accounting Standards Board (GASB) has issued Statement No. 67 to replace GASB Statement No. 25 ("Financial Reporting for Pension Plans") and Statement No. 68 to replace Statement No. 27 ("Financial Reporting for Pensions").

A separate report, dated January 27, 2015, provides the necessary disclosures under GASB 67 and 68 for the plan year ending September 30, 2014.

As was the case for GASB 25 and GASB 27, the new standards are not meant to be used as a funding basis.

Florida SB 534 Disclosures

The State of Florida now requires that plans report their funded ratio, recommended contribution, and asset duration under a standard set of assumptions, using both the funding rate and a rate 200 basis points lower. The required mortality table is RP 2000 with generational projection using Scale AA. Exhibit 10 provides this information. For balance, we also have calculated and shown results using a rate 200 basis points higher than the current funding rate.

Enrolled Actuary's Statement

This report has been prepared in accordance with standards established by the American Academy of Actuaries. To the best of our knowledge, it reflects the actuarial condition of the City of Marathon Firefighters' Pension Plan and Trust Fund as of October 1, 2014.

All costs and cost components are calculated on the basis of actuarial assumptions which reasonably reflect the experience of the Trust.

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.

David D. Harris	
	June 16, 2015
David D. Harris	Date
Enrolled Actuary No. 14-5609	

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
Local Retirement Systems
Division of Retirement
Department of Management Services
P. O. Box 9000
Tallahassee, FL 32315-9000

Valuation Results

I. <u>Determination of Costs</u>	10/1/2014 -\$- FYE 9/30/16	10/1/2013 -\$- FYE 9/30/15
A. Present Value of Future Benefits		
Active Members a. Present Value of Future Retirement Benefits b. Total	7,953,839 7,953,839	7,446,702 7,446,702
2. Inactive Membersa. Retirees & Beneficiariesb. Terminated Vestedc. Due Refund of Contributionsd. Total	0 112,475 14,319 126,794	0 104,589 2,473 107,062
3. Total	8,080,633	7,553,764
B. Present Value of Future Expenses	161,613	151,075
C. Actuarial Value of Assets	4,612,861	4,024,188
D. Present Value of Future Member Contributions	683,637	672,789
E. Present Value of Future Normal Costs (A+B-C-D)	2,945,748	3,007,862
F. Present Value of Future Payrolls	14,176,200	13,951,257
G. Covered Payroll	1,358,418	1,295,521
H. Normal Cost $[(E)X(G)]/(F) \times 1.075$, but not less than zero)	303,443	300,260
I. Adjustment for Quarterly Contributions	13,966	13,819
J. Total City/State Required Contribution [(H) + (I)]	317,409	314,079

Summary of Asset Transactions

A.	Market Value as of October 1	2013/2014 -\$- 4,887,168	2012/2013 -\$- 4,048,543
B.	Income During Year		
	 City Contributions Member Contributions State Contributions Dividends and Interest Realized Gains (Losses) Total 	72,352 58,208 237,046 0 417,331 784,937	104,345 58,175 220,400 0 490,533 873,453
C.	Disbursements During Year 1. Benefit Payments 2. Contribution Refunds 3. Investment Expenses 4. Administrative Expenses	17,052 0 0 35,373 52,425	17,959 0 0 16,869 34,828
D.	Net Change in Unrealized Gains (Losses)	0	0
E.	Market Value as of September 30 (A)+(B)-(C)+(D)	5,619,680	4,887,168
F.	Prepaid City Contribution	(2,526)	(1,433)
G.	Accumulated Reserve	(165,909)	_(122,378)
H.	Market Value as of September 30	5,451,245	4,763,357

Distribution of Assets (Market Values)

_De	escription	9/30/2014	9/30/2013
Gro Sma Rus Dive	nd Funds wth Funds all to MidCap Funds sell 1000 Index Funds ersified Value Funds rnational Blend Funds	-\$- 2,173,769 441,374 452,409 1,291,020 601,373 _524,132	-\$- 1,866,201 379,974 529,077 1,096,633 375,164 500,219
A:	Subtotal	5,484,077	4,747,268
B:	Cash & Equivalents	33,103	62,527
Rec	eivables: Employer Contributions Employee Contributions State Contributions Accrued Income Securities Proceeds Subtotal	18,088 0 84,412 0 0 102,500	0 0 77,373 0 0 0 77,373
Paya	ables:		
	Accrued Benefits and Expenses Securities Purchased	0 0	0 0
D:	Subtotal	0	0
E.	Prepaid City Contribution	(2,526)	(1,433)
F.	Accumulated Reserve	(165,909)	(122,378)
G.	Net Assets	5,451,245	4,763,357

Investment Results

I. Yield on Mean Values for 12-Month Period Ending 9/30/2014

	Return	Market
Interest	-\$- 0	-%- 0.00
Dividends & Real Estate Income	0	0.00
Realized Gains (Losses)	417,331	8.27
Investment Expenses	0	0.00
Increase in Unrealized Gains (Losses)	0	0.00
	417,331	8.27

II. History of Investment Yield Rates

Year Ending	<u>Market</u>	Actuarial
	-%-	-%-
9/30/2014	8.27	7.68
9/30/2013	11.62	9.38
9/30/2012	16.33	4.00
9/30/2011	(0.30)	0.64
9/30/2010	7.98	3.04
9/30/2009	5.25	(3.70)
9/30/2008	(11.83)	(2.60)
9/30/2007	8.83	9.30
9/30/2006	5.45	5.48
Average for		
the last nine years	5.45	3.59
Average for		
the last five years	8.64	4.90

Reserve Account For Future Benefit Improvements Under 99-1

I. Base Amount for 2013/2014 Fiscal Year

<u>E</u>	Year stablished	<u>Description</u>	<u>Ch - 175</u> -\$-	Suppl. <u>175</u> -\$-	<u>Total</u> -\$-
	1998 2005	Base Year Premium Tax Distribution Ordinance 2005-21	0	0	0 193,515
		Adjusted Base Amount			193,515
II.	Reserve A	Account for 2013/2014 Fiscal Year			
					Total -\$-
	A. Reserv	re Account at September 30, 2013			122,378
	1. Prei 2. Adj	se in Reserve Account mium Tax Distribution for 2013 usted Base Amount Increase in Reserve Account			237,046 193,515 43,531
	C. Reserv	re Account at September 30, 2014			165,909

Actuarial Confirmation of the Use of State Moneys

Name of actuarial firm		The Nyhart Com	pany, Inc.
Date of valuation used to determine fiscal year 2014	contributions		10/1/2013
Does the plan meet all chapter minimum benefits and	l standards?		Yes
Actuary's name (printed) <u>David D.</u>	<u>Harris</u>		
Actuary's signature David I	> Harris	<u> </u>	
Date: <u>3/3/2015</u>			
2014 Receipts 1998 Receipts APTR 152,634 Calculation of cost of a chapter minimum benefits plane Normal Cost Administrative expenses Amortization of UAL Less: Employee contributions (5% minimum)	Fire Supplement 84,412		Total 237,046 0 237,046 205,212 35,373 0 (58,208)
Total APTR, minus cost of chapter minimums, or "Subsequence of the cost of th	uent" APTR		182,377 54,669
Calculation of cost of extra benefits provided Normal Cost Administrative expenses Amortization of UAL Less: Employee contributions (5% minimum) Total			20,063 0 0 0 20,063
Subsequent APTR, minus cost of extra benefits provi	ded		34,606

Actuarial Confirmation of the Use of State Moneys

Conclusion

APTR is more than sufficient to fund the cost of compliance with all chapter minimum benefits and standards, and the plan meets all chapter minimum benefits and standards. Excess APTR above the amount required to fund compliance with all chapter minimums is subsequent APTR.

Subsequent APTR is partially being used to fund the cost of extra benefits being provided in the plan. Therefore, a portion of premium tax receipts in fiscal year 2014, **subject to collective bargaining**, are available to offset required plan sponsor contributions. Some premium taxes are required to be set aside or expended, **subject to collective bargaining**, for missing chapter minimum benefits or extra benefits.

Accumulated APTR balance as of fiscal year end 2013	122,378
Add: Current year additions	43,531
Less: Current year use	0
Accumulated APTR balance as of fiscal year end 2014	165,909

Actuarial Value of Assets

I. <u>Determination of Actuarial Value of Assets as of October 1, 2014</u> 5-Year Roll Forward Method

	No	et Investment Return -\$-			Unrecognized Return
20 20 20	010/11 011/12 012/13 013/14 otal Adjustm	(8,139) 529,568 490,533 417,331	X X X X	20% 40% 60% 80%	(1,628) 211,827 294,320 <u>333,865</u> 838,384
A	. Market Va	alue at Octobe	r 1, 20	14	5,617,154
В			ributio	ons	0 0 165,909
C	. Adjustme	nt for Unrecog	nized	Return	838,384
D). Prelimina	4,612,861			
Е	Maximum	: 120% of Ma		alue less Accumulated Reserve ue less Accumulated Reserve	6,541,494 4,360,996
F	. Final Actu	arial Value of	Asset	s at October 1, 2014	4,612,861
II. <u>R</u>	ate of Return	on Actuarial	Value	of Assets	-\$-
A	. Actuarial	Value of Asse	ts at 10	0/1/2013	4,024,188
В	. Contributi	ions			321,549
C	Benefits, I	Refunds and E	xpense	es	52,425
D	O. Actuarial	Value of Asse	ts at 10	0/1/2014	4,612,861
Е	. Net Return	n on Investme	nt (D+	C-B-A)	319,549
F.	. Rate of Re	eturn [2xE/(A-	+ D- E)]	I	7.68%

Member Statistics

	10/1/2014	10/1/2013
Active Members		
- Number	24	23
- Expected Payroll	\$1,358,418	\$1,235,853
- Average Age	34.74	34.09
- Average Service	6.25	5.70
- Average Expected Pay	\$56,601	\$53,733
Retired Members		
- Number	0	0
- Total Annual Benefit	\$0	\$0
- Average Benefit	\$0	\$0
- Average Age	N/A	N/A
DROP Members		
- Number	0	0
- Total Annual DROP Benefit	\$0	\$0
- Average DROP Benefit	\$0	\$0
- Average Age	N/A	N/A
Vested Terminated Members		
- Number	2	2
- Total Annual Deferred Benefit	\$28,734	\$28,734
- Average Benefit	\$14,367	\$14,367
- Average Age	38.37	37.37
Inactive Due Refund	1	1

Active Members Age-Service Distribution as of 10/1/2013

ALL INCLUDED ACTIVES

	Completed Years of Service							nings			
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
15-24	-	-	-	-	-	-	-	-	-	-\$- O	-\$- 0
25-29	1	4	6	-	-	-	-	-	11	586,232	53,294
30-34	-	-	3	-	-	-	-	-	3	156,390	52,130
35-39	-	-	4	1	-	-	-	-	5	298,285	59,657
40-44	-	-	-	2	-	-	-	-	2	145,130	72,565
45-49	-	1	1	-	-	-	-	-	2	111,316	55,658
50-54	-	-	-	-	-	-	-	-	-		
55-59	-	-	1	-	-	-	-	-	1	61,065	61,065
60-64	-	-	-	-	-	-	-	-	-		
65-69	-	-	-	-	-	-	-	-	-		
70 +	-	-	-	-	-	-	-	-	-		
Total	1	5	15	3	0	0	0	0	24	1,358,418	56,601
		Ave	rage Age:	3	34.74		Average	Service:	6.25		

Reconciliation of Participant Counts

			Disableds			
			Retirees &	Vested	Due	
	<u>Actives</u>	<u>DROP</u>	<u>Beneficiaries</u>	<u>Terminated</u>	Refund	<u>Total</u>
10/1/2013	23	0	0	2	1	26
Retirement	_	-	-	-	_	_
Withdrawal	(1)	-	-	-	1	-
Disability	-	-	-	-	-	-
Death	-	-	-	-	-	-
New Beneficiary	-	-	-	-	-	-
Refund Contributions	-	-	-	-	(1)	(1)
New Hires	2		-	-	-	2
Data Changes			<u> </u>			
Net Change	1	0	0	2	0	1
10/1/2014	24	0	0	2	1	27

Summary of Principal Provisions

Ordinances and

Effective Date: October 1, 2005.

Plan Year: October 1 - September 30.

Membership: Full-time firefighters; Fire Chief may elect participation within 10

days of employment.

Retirement Age 20 Years of Credited Service or age 55 with 6 Years of Credited

and Benefit: Service.

Amount: Accrued Monthly Benefit.

Accrued Monthly Benefit: 3.50% of Average Final Compensation multiplied by Credited

Service.

Form of Benefit: 10 years certain & life (normal form);

Options: life annuity; joint & last survivor (50%, 66 2/3%, 75%, 100%); lump

sum option; member may change last annuitant up to 2 times after

retirement.

Covered Compensation: An employee's base pay, including pick-up contributions.

Member Contributions: 5% of Compensation.

City Contributions: Actuarially determined, reduced by Member contributions and

State Premium Tax refunds under Chapter 175 (up to the amounts

received for 1998).

Credited Service: Continuous full-time Service credited under Retirement System,

from most recent date of employment, during which the employee made the required Member Contributions. Member may purchase up to 5 additional years of governmental service, which cannot be used for eligibility or vesting at full actuarial cost. Purchased service other than military service must be for employment as a firefighter, and the member must not be eligible to receive benefits

from another plan based on such service.

Average Final

Compensation: Average Compensation during the highest 5 years of Credited

Service.

Summary of Principal Provisions (Continued)

Early Service Retirement Age and Benefit:

Age 50 with 6 years of Creditable Service.

Amount: Monthly Accrued Benefit, payable at Normal Retirement Age, or reduced 3%/year at Early Retirement Age.

Disability:

Service Incurred Disability: Incurred as accident in performance of duties. Total and permanent; completely incapacitated for service as a firefighter for the City.

Immediate benefit of larger of Accrued Benefit or 65% of Average Final Compensation, offset as necessary so that the addition of Social Security disability benefits and Workers' Compensation benefits does not exceed Average Final Compensation; benefit terminates upon the earliest of death, recovery, or Normal Service Retirement eligibility;

Non-Service Incurred Disability: Eligibility: 8 years of Credited Service; Immediate benefit of Accrued Benefit, offset as necessary so that the addition of Social Security disability benefits and Workers' Compensation benefits does not exceed 25% of Average Final Compensation.

Pre-Retirement Death:

Service Incurred Death: Incurred in performance of duties. Pension of 50% of Member's monthly Compensation to beneficiary.

Non-Service Incurred Death: Death not accidentally incurred in performance of duties. Accrued Benefit payable to beneficiary for 10 years beginning on early (reduced) or Normal Retirement Date.

For a member with at least 10 years of Credited Service, not less than the benefits otherwise payable at early or normal retirement age.

Employment Termination:

Refund of member contributions for Members with less than 6 years of Credited Service; for Members with 6 or more years of Credited Service: Accrued Service Retirement benefit, deferred to time at which 20 years would have been completed and attainment of age 50. Accrued Benefit reduced by 3%/year for receipt prior to Normal Retirement Date.

<u>Summary of Principal Provisions</u> (Continued)

DROP: Members eligible for Normal Service Retirement may elect

Deferred Retirement Option Plan for up to 84 months with

6.5% annual interest credited.

COLA: 1.5% Adjustment on October 1, if benefit is paid (to Beneficiary or

deceased Member) on the adjustment date and on July 1 of preceding

year.

Actuarial

Equivalence: 7.00% interest; 1994 Group Annuity Reserving Table, projected to

2002 (Scale AA).

Changes Since

Prior Valuation:

None

Summary of Actuarial Basis

Valuation Date: October 1, 2014 for the Fiscal Year beginning October 1, 2015.

Valuation Method: Aggregate Cost Method.

Asset Valuation

Method: Equal to the market value of assets, adjusted by five-year phase-in of

investment return. A characteristic of this asset valuation method is that, over time, it is more likely to produce an actuarial value of assets

that is less than the market value of assets.

Investment Discount/

Investment Return: 7.5% compounded annually, net of investment expenses

Salary Increases: 4% per annum. For service prior to valuation date, actual compensation is

used, where known.

Mortality: Pre-retirement: None Assumed.

Post-retirement: 1994 Group Annuity Reserves Table projected to 2002 by Scale AA for healthy lives and the same table for disabled lives, producing following specimen rates:

Age	<u> Male</u>	<u>Female</u>
20	.0435%	.0250%
30	.0770%	.0324%
40	.1005%	.0628%
50	.2230%	.1245%
60	.7010%	.4265%
70	2.1027%	1.3190%

Summary of Actuarial Basis (Continued)

Retirement: 100% at Normal Retirement Age.

Form of Payment: Future retirees are assumed to select the 10 years certain and life

normal form.

Turnover: None Assumed.

Disability: None Assumed.

Type of Disability: Not applicable.

Recovery: None assumed

Administrative

Expenses: 2% of present value of projected benefits.

Summary of Actuarial Basis (Continued)

Disability Offsets: It is assumed that there are no offsets for service-incurred or non-

service incurred disabilities of active Members; benefits valued for

disability retirees are net of all current offsets.

Type of Death: Not applicable.

Remarriage: None assumed.

Spouse's Ages: Females assumed to be the same age as males.

Marital Status: 100% of Members are assumed to be married.

State Contributions: Premium tax revenues under Chapter 175 are assumed to be the

same as in prior year.

Sources of Data: Membership data and asset information were furnished by the

Board Clerk.

None.

DROP Participation: No distinction is made between retirement and DROP entry.

Changes Since

Prior Valuation:

Information Under Florida Statutes

I. Comparison of Salary Increases (1)

Year Ending	<u>Actual</u>	<u>Assumed</u>
	%	%
09/30/2014	0.88	4.00
09/30/2013	7.30	4.00
09/30/2012	(7.00)	5.00
09/30/2011	0.29	5.00
09/30/2010	0.12	5.00
09/30/2009	N/A	5.00
09/30/2008	13.82	5.00
09/30/2007	N/A	5.00

II. Comparison of Investment Returns (1)

	Actual	Actual	
Year Ending	MV	\underline{AAV}	<u>Assumed</u>
	%	%	%
09/30/2014	8.27	7.68	7.50
09/30/2013	11.62	9.38	7.50
09/30/2012	16.33	4.00	7.50
09/30/2011	(0.30)	0.64	7.50
09/30/2010	7.98	3.04	7.50
09/30/2009	5.25	(3.70)	7.50
09/30/2008	(11.83)	(2.60)	8.00
09/30/2007	8.83	9.30	8.00

III. Comparison of Payroll Growth (1)

<u>Actual</u>	<u>Assumed</u>
%	%
4.85	
11.27	
(14.95)	
0.29	
N/A	
N/A	
N/A	
N/A	
	% 4.85 11.27 (14.95) 0.29 N/A N/A N/A

⁽¹⁾ Numbers for years prior to 9/30/2011 from prior actuary (Southern Actuarial Services)

Summary of Accounting Information

	10/1/2014 7.5 % -\$-	10/1/2013 7.5% -\$-
I. Present Value of Vested Accrued Benefits	·	
 A. Retirements, DROPS, and Beneficiaries B. DROP Accounts C. Vested Terminated, Refunds D. Active Members E. Total 	0 0 126,794 <u>1,126,378</u> 1,253,172	0 0 107,062 <u>885,497</u> 992,559
II. Present Value of Non-Vested Accrued Benefits	841,758	766,751
III. Present Value of Accrued Benefits	2,094,930	1,759,310
 IV. The values of accumulated plan benefits were determine Academy of Actuaries Interpretations and ASC 960, Accounting and Reporting by Defined Benefit Pension Power V. V. Statement of Changes in Accrued Benefits 	(formerly FASB Sta	
A. Present Value of Accrued Benefits at Beginning of Prior YearB. Increase (Decrease) During the Year Attributable to:		1,759,310
 Benefits Accumulated Benefits Paid and Contributions Refunded Assumptions and Methods Changes Plan Amendment Increase Due to Decrease in Discount Period Net Increase 		221,363 (17,052) 0 0 131,309 335,620
C. Present Value of Accrued Benefits at Valuation Date		2,094,930

<u>Information to Comply with Florida SB 534 (as interpreted)</u>

		Valuation ⁽¹⁾ 7.50%	- 200 bp ⁽²⁾ 5.50%	Funding Rate ⁽²⁾ 7.50%	+ 200 bp ⁽²⁾ 9.50%
I.	Total Pension Liability				
	Service Cost	402,517	402,517	402,517	402,517
	Interest	255,647	255,647	255,647	255,647
	Benefit changes	0	0	0	0
	Difference between expected and				
	actuarial experience	(174,661)	(174,661)	(174,661)	(174,661)
	Changes in assumptions	0	1,768,798	140,410	(887,213)
	Benefit payments	(17,052)	(17,052)	(17,052)	(17,052)
	Contribution refunds	0	0	0	0
	Net change in pension liability	466,451	2,235,249	606,861	(420,762)
	Total pension liability – beginning of year	3,014,630	3,014,630	3,014,630	3,014,630
	Total pension liability – end of year	3,481,081	5,249,879	3,621,491	2,593,868
II.	Plan fiduciary net position				
	Contributions – Employer	69,826	69,826	69,826	69,826
	Contributions – State	58,208	58,208	58,208	58,208
	Contributions – Member	193,515	193,515	193,515	193,515
	Net investment income	417,331	417,331	417,331	417,331
	Benefit payments	(17,052)	(17,052)	(17,052)	(17,052)
	Contribution refunds	0	0	0	0
	Administrative expense	(35,373)	(35,373)	(35,373)	(35,373)
	Other	0	0	0	0
	Net change in plan fiduciary net position	686,455	686,455	686,455	686,455
	Plan fiduciary net position – beginning of year	4,764,790	4,764,790	4,764,790	4,764,790
	Plan fiduciary net position – end of year	5,451,245	5,451,245	5,451,245	5,451,245
III	. Net Pension Liability/(Asset)	(1,970,164)	(201,366)	(1,829,754)	(2,857,377)
IV.	. Funded Ratio	156.60%	103.84%	150.52%	210.16%
V.	Years that Assets support expected				
	benefit payments	27	22	27	100+
VI.	. Estimated City Contribution				
	- Annual Dollar Value	317,409	840,283	354,828	32,716
	- Percentage of Payroll	22.47%	59.48%	25.12%	2.32%

⁽¹⁾ This information is based on the assumptions noted in Exhibit 9.

This information is based on the assumptions noted in Exhibit 9 except for the interest rate as noted above and the mortality table of RP 2000 with generational projection using Scale AA.

Sustainment of Expected Benefit Payments

Mortality: Valuation Interest: 7.50%

Year	Market Value of Assets	Investment Return	Benefit Payments
<u> 1 Cai</u>	<u> </u>	<u>-\$-</u>	<u>1 ayments</u> -\$-
1	5,451,245	407,595	33,897
2	5,824,943	436,139	19,871
3	6,241,211	467,348	20,169
4	6,688,390	500,875	20,472
5	7,168,793	536,894	20,779
6	7,684,908	575,591	21,091
7	8,239,408	616,515	39,117
8	8,816,806	659,798	39,704
9	9,436,900	706,284	40,300
10	10,102,884	749,063	234,991
11	10,616,956	785,177	301,309
12	11,100,824	821,313	305,504
13	11,616,633	855,096	438,649
14	12,033,080	877,181	687,101
15	12,223,160	884,488	875,806
16	12,231,842	874,618	1,161,549
17	11,944,911	852,532	1,176,908
18	11,620,535	827,586	1,193,700
19	11,254,421	798,904	1,226,904
20	10,826,421	755,803	1,525,734
21	10,056,488	694,710	1,616,600
22	9,134,598	624,812	1,637,140
23	8,122,270	548,365	1,651,320
24	7,019,315	465,238	1,662,332
25	5,822,221	375,050	1,673,366
26	4,523,905	277,350	1,682,229
27	3,119,026	171,494	1,695,522
28	1,594,998		1,707,673

Sustainment of Expected Benefit Payments

Mortality: SB534 Interest: 5.50%

	Market Value	Investment	Benefit
Year	of Assets	Return	<u>Payments</u>
	-\$-	-\$-	-\$-
1	5,451,245	298,899	33,897
2	5,716,247	313,854	19,871
3	6,010,230	330,015	20,169
4	6,320,076	347,049	20,472
5	6,646,653	365,002	20,779
6	6,990,876	383,926	21,091
7	7,353,711	403,393	39,117
8	7,717,987	423,412	39,704
9	8,101,695	444,500	40,300
10	8,505,895	461,448	234,991
11	8,732,352	472,091	301,816
12	8,902,627	481,339	306,104
13	9,077,862	487,362	439,357
14	9,125,867	483,258	687,928
15	8,921,197	466,878	876,763
16	8,511,312	436,574	1,162,760
17	7,785,126	396,198	1,178,812
18	7,002,512	352,691	1,195,890
19	6,159,313	305,405	1,229,437
20	5,235,281	246,402	1,530,987
21	3,950,696	173,218	1,624,290
22	2,499,624	92,819	1,646,049
23	946,394		1,664,357

Sustainment of Expected Benefit Payments

Mortality: SB534 Interest: 7.50%

	Market Value	Investment	Benefit
Year	of Assets	Return	Payments
	-\$-	-\$-	-\$-
1	5,451,245	407,595	33,897
2	5,824,943	436,139	19,871
3	6,241,211	467,348	20,169
4	6,688,390	500,875	20,472
5	7,168,793	536,894	20,779
6	7,684,908	575,591	21,091
7	8,239,408	616,515	39,117
8	8,816,806	659,798	39,704
9	9,436,900	706,284	40,300
10	10,102,884	749,063	234,991
11	10,616,956	785,158	301,816
12	11,100,298	821,251	306,104
13	11,615,445	854,980	439,357
14	12,031,068	876,999	687,928
15	12,220,139	884,226	876,763
16	12,227,602	874,255	1,162,760
17	11,939,097	852,026	1,178,812
18	11,612,311	826,888	1,195,890
19	11,243,309	797,978	1,229,437
20	10,811,850	754,515	1,530,987
21	10,035,378	692,844	1,624,290
22	9,103,932	622,184	1,646,049
23	8,080,067	544,720	1,664,357
24	6,960,430	460,138	1,680,911
25	5,739,657	367,969	1,697,490
26	4,410,136	267,685	1,712,978
27	2,964,843	158,622	1,731,050
28	1,392,415		1,748,552

Sustainment of Expected Benefit Payments

Mortality: SB534 Interest: 9.50%

	Market Value	Investment	Benefit
Year	of Assets	Return	Payments
	-\$-	-\$-	-\$-
1	5,451,245	516,295	33,897
2	5,933,643	562,774	19,871
3	6,476,546	614,336	20,169
4	7,070,713	670,767	20,472
5	7,721,008	732,531	20,779
6	8,432,760	800,133	21,091
7	9,211,802	873,305	39,117
8	10,045,990	952,526	39,704
9	10,958,812	1,039,216	40,300
10	11,957,728	1,125,075	234,991
11	12,847,812	1,206,531	301,816
12	13,752,527	1,292,280	306,104
13	14,738,703	1,379,781	439,357
14	15,679,127	1,457,582	687,928
15	16,448,781	1,521,933	876,763
16	17,093,951	1,569,947	1,162,760
17	17,501,138	1,607,885	1,178,812
18	17,930,211	1,647,854	1,195,890
19	18,382,175	1,689,233	1,229,437
20	18,841,971	1,718,915	1,530,987
21	19,029,899	1,732,437	1,624,290
22	19,138,046	1,741,701	1,646,049
23	19,233,698	1,749,938	1,664,357
24	19,319,279	1,757,299	1,680,911
25	19,395,667	1,763,787	1,697,490
26	19,461,964	1,769,366	1,712,978
27	19,518,352	1,773,884	1,731,050
28	19,561,186	1,777,141	1,748,552
29	19,589,775	1,779,076	1,765,374
30	$19,603,477^{(1)}$	1,779,874	1,776,207

 $^{^{\}left(1\right)}$ The market value supports the benefit payments for the life of the plan.