October 1, 2011 Actuarial Report

For the Fiscal and Plan Year October 1, 2012 through September 30, 2013

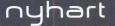
Prepared By:

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June 22, 2012

nyhart



June 22, 2012

Board of Trustees City of Miami Fire Fighters' and Police Officers' Retirement Trust 1895 SW 3 Avenue Miami, FL 33129-1456

October 1, 2011 Actuarial Report

Dear Board Members:

Enclosed is our report on the actuarial valuation of the City of Miami Fire Fighters' and Police Officers' Retirement Trust as of October 1, 2011, for the fiscal year beginning October 1, 2012.

The report is based upon the terms of Ordinance No. 10002 and the Amended Final Judgment in the matter of <u>Gates v. City of Miami</u>, as well as ordinance 13202, as applicable. This report reflects 10% member contributions from Fire Fighters and Police Officers as well as the 70 point retirement eligibility requirement for Fire Fighters who had not attained 68 points as of September 30, 2010.

The City contribution requirement for the 2012/2013 fiscal year is \$45,516,491, compared to \$42,353,775 for the 2011/2012 fiscal year. This report reflects the impact of the increase in contributions for police officers and the adjustment in the administrative expenses assumption, effective October 1, 2011.

When expressed as a percentage of total payroll (for active members and members in DROP), the City contribution rate increased from 29.89% as of October 1, 2010 to 38.21% as of October 1, 2011. The percentages of total payroll reflect the hypothetical impact on funding if there were no DROP, since members who are presently in DROP could well be more likely to be retired and replaced with active members. The ordinance and State law do not permit funding after members enter DROP.

Respectfully submitted,

THE NYHART COMPANY, INC.

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OCTOBER 1, 2011 ACTUARIAL REPORT

Table of Contents

SUMMARY OF RESULTS - Regular Fund	1-2
SUMMARY OF RESULTS - COLA Fund	3
REVIEW OF COSTS	-12
Summary Discussion	4
Comparison of Deposit Requirements	4
Table 1 – Historical City Costs	4
Analysis of Cost Changes	5
Table 2 – Gain/Loss Analysis	5
Table 3 – Expected and Actual Turnover by Duration	6
Table 4 – Expected and Actual Retirements by Duration	7
Experience Study	7
Plan Assets	8
Table 5 – Actuarial vs. Market Value of Assets	8
Expected Ongoing Cost Levels	9
Sources of Benefit Funding	9
Table 6 – Funding Sources	9
Funding Progress	10
Governmental Accounting Standards	10
Table 7 – GASB 25 Assets and Liabilities	10
Application of GASB 27	11
COLA Fund	12
Cumulative Experience Position	12
Enrolled Actuary's Statement	13

OCTOBER 1, 2011 ACTUARIAL REPORT

Table of Contents (Continued)

EXHIBITS

1 2A 2B2C3 4 5 6 7 8A **8**B 9 10 11

COLA Exhibits

12	COLA Fund Increases	51
13	COLA Fund - Assets and Liabilities	53
14	Cumulative Experience Position Net of Asset Transfers	55
15	Summary of Principal COLA Provisions	56
16	Summary of Actuarial Basis - COLA Fund	59
17	Disclosure Information	63

-Page-

Comparative Summary of Principal Valuation Results - Regular Fund

			Prepa	l Valuation ared as of
A.	Participant Data (Ex	.7)	10/1/2011	10/1/2010
	Active Members Covered Payroll		1,196 \$82,164,617	1,227 \$80,152,355
	Members in DROP DROP Payroll Projected Total Payr	oll	481 \$36,943,839 \$119,108,456	549 \$61,549,206 \$141,701,561
	Retired Members an Total Annualized Be		2,089 \$119,601,858	2,062 \$117,265,525
	Disabled Members Total Annualized Be	enefits	178 \$3,653,055	186 \$3,789,189
	Terminated Vested M Total Annualized Be		18 \$480,262	16 \$404,409
B.	<u>Assets</u>		-\$-	-\$-
	Actuarial Value (Ex. Market Value (Ex. 4	,	1,150,323,527 987,110,729	1,180,649,632 1,027,739,486
C.	Liabilities (Excl. CO	LA)		
	Present Value of Ber	nefits (Ex. 1)		
	Active Members -	Retirement Vesting Disability Death Return of Contributions Total	349,219,159 23,242,860 42,626,676 3,601,943 <u>2,199,182</u> 420,889,820	$\begin{array}{r} 348,453,640\\ 23,446,447\\ 42,403,883\\ 3,564,506\\ \underline{2,041,068}\\ 419,909,544\end{array}$
	Inactive Members -	Retired and Beneficiaries Disabled Terminated Vested Total	1,341,422,26432,338,7423,855,7571,377,616,763	$1,323,426,300 \\ 33,684,331 \\ \underline{3,231,775} \\ 1,360,342,406$
	Total		<u>1,798,506,583</u>	<u>1,780,251,950</u>
	Actuarial Accrued L Unfunded Actuarial		N/A N/A	N/A N/A

Comparative Summary of Principal Valuation Results - Regular Fund (Continued)

			Valuation ed as of
		10/1/2011	10/1/2010
D.	<u>Actuarial Present Value of Accrued Benefits</u> (Exhibit 5)	-\$-	-\$-
	Vested Accrued Benefits Inactive Members and Beneficiaries Active Members Total Non-Vested Accrued Benefits Total	1,377,616,763 $157,940,269$ $1,535,557,032$ $32,766,078$ $1,568,323,110$	$1,360,342,406$ $\underline{154,433,888}$ $1,514,776,294$ $\underline{29,769,852}$ $1,544,546,146$
E.	Pension Cost (Exhibit 1)		
	Normal Cost Payment to Amortize Unfunded Liability Expected Plan Sponsor Contribution As % of Covered Payroll As % of Total Payroll Expected Member Contribution As % of Payroll	51,732,953 N/A 45,516,491 55.40% 38.21% 6,216,462 10.00%	48,958,986 N/A 42,353,775 52.84% 29.89% 6,605,211 8.24%
F.	Past Contributions	Year Ending <u>9/30/2010</u> -\$-	Year Ending <u>9/30/2009</u> -\$-
	Required Plan Sponsor Contribution Required Member Contributions Actual Contributions Plan Sponsor Members	42,287,046 7,137,824 40,058,891 7,137,824	-5- 55,095,791 10,436,367 54,342,926 10,436,367
G.	Net Actuarial Gain (Loss)	N/A	N/A
H.	Other Disclosures		
	Active Members: Present Value Future Salaries (at attained age) Present Value Future Contributions (at attained age)	1,104,448,459 106,522,468	1,103,177,771 87,615,425

Comparative Summary of Principal Valuation Results - COLA Fund

				l Valuation ared as of
			10/1/2011	10/1/2010
A.	Participant Data			
	Active Members Total Annual Payroll			
	Retired Members and Benef		2,089 \$14,157,086	2,062 15,732,846
	Disabled Members Total Annualized Benef	its	178 \$2,561,808	186 2,740,960
	Table		\$1,312	\$1,312
B.	Assets		-\$-	-\$-
	Actuarial Value (Ex. 13) Market Value (Ex. 13))	340,066,580 310,033,968	343,766,397 311,770,987
C.	Liabilities (COLA Only	2		
	Present Value of Benefit	ts (Ex. 13)		
	Active Members -	Reserve for Current Actives Reserve for Contribution Refunds	30,006,601 N/A	29,956,033 N/A
	Total (excl. 457 Service	Reserve for Future Actives e)	<u>4,500,990</u> 34,507,591	<u>4,493,405</u> 34,449,438
	Inactive Members -	Frozen COLA I Benefits COLA II Benefits Total	1,285,953 <u>267,837,298</u> 269,123,251	1,464,977 <u>279,732,820</u> 281,197,797
	Total		303,630,842	315,647,235
	<u>Co</u>	mparative Summary of Total Assets - C	Combined	
	Market Value (Ex. 4)		<u>1,297,118,927</u>	<u>1,339,510,472</u>

REVIEW OF COSTS

Summary Discussion

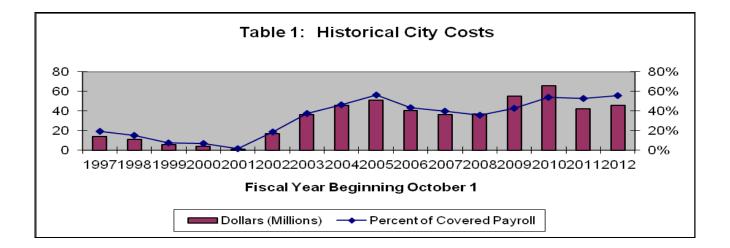
This is the actuarial report for the fiscal year beginning October 1, 2012 for the City of Miami Fire Fighters' and Police Officers' Retirement Trust. This is the twenty-eighth annual actuarial report prepared by The Nyhart Company, previously Stanley, Holcombe & Associates, Inc. This report is intended to reflect the provisions and requirements of Ordinance No. 10002, as well as Ordinance 13202, As Applicable.

Comparison of Deposit Requirements

The City contribution requirements, and the results calculated for the 2012/2013 fiscal year, are as follows:

	2012/2013		
	Revised	Prior	2011/2012
	Provisions	Provisions	
	-\$-	-\$-	-\$-
Past Service Cost	N/A	N/A	N/A
Normal Cost	45,516,491	47,083,250	42,353,775
Payment Timing	0	0	0
	45,516,419	47,083,250	42,353,775
Percentage of Covered Payroll	55.40%	57.30%	52.84%
Percentage of Total Payroll	38.21%	39.53%	29.89%

The 2012/2013 deposit amount of \$45,516,491 is approximately \$3.2 million more than the \$42,353,775 for the prior year. In addition, the outstanding minimum contribution as of October 1, 2011 for the 2010/2011 year is \$25,770.



Analysis of Cost Changes

The Normal Cost element of FIPO costs is expected to remain level as a percentage of covered payroll, if the actual Plan experience is the same as the actuarial assumptions and there are no Plan or assumption changes. In the absence of Plan or assumption changes, an increase in the Normal Cost rate indicates that experience has been less favorable than assumed, while a decrease indicates more favorable experience.

Quantification of the reasons for the changes is as follows:

	Normal Cost	
	-\$-	-%-
2010/2011 Normal Cost		
Including 9% Firefighter Contributions	42,353,775	52.84*
2011/2012 Normal Cost Expected		
(for continuing participants)	44,520,495	52.98
Element of Experience		
Salary Increases	-61,514	-0.09
Turnover	+142,261	-0.23
Mortality	-742,294	-0.96
Retirement	-243,930	+2.26
New Participants	-168,841	-1.10
Disability	-166,215	-0.38
Investment Return	+3,263,600	+3.97
Contribution Lag	+203,537	+0.25
Other, Data	+336,151	+0.42
Total	+2,562,755	+4.32
2011/2012 Normal Cost	47,083,250	57.30
Change in Plan Provisions	-1,399,583	(1.70)
Administrative Expense Assumption	-167,176	(0.20)
2011/2012 Final Normal Cost	45,516,491	55.40*
	· ·	38.21**

* Percentage of Covered Payroll

** Percentage of Total Payroll
Projected Total Payroll of \$119,108,456 is equal to 100% of Covered Payroll of \$82,164,617 plus
\$36,943,839 payroll for members in DROP.

Following is a more detailed description of the elements of experience:

<u>Salary Increases</u> - During the period October 1, 2010 through September 30, 2011, covered payroll for the continuing actives increased less than expected, resulting in a decrease of \$61,514 in the Normal Cost. Covered payroll for continuing active participants at September 30, 2011 increased 7.14% compared to an expected 7.48% increase.

<u>Mortality</u> - For active members there were no deaths, as compared to 1 expected; for inactive members there were 61 deaths (28 with survivors), as compared to 46 expected. This decreased the normal cost by \$742,294.

<u>Disability</u> - During the past year there was one disability, as compared to 5 expected. This decreased the normal cost by \$166,215.

<u>Turnover</u> - From October 1, 2010 to September 30, 2011, there were 9 employee terminations, as compared to 19 predicted by the actuarial assumptions. This increased the normal cost by \$142,261. Following is a comparison of the expected and actual turnover rates for the past nine years:

Table 3 – Expected and Actual Turnover by Duration										
	<u>2002/</u>	2005	<u>2005/</u> ;	<u>2008</u>	<u>2008</u>	/2009	<u>2009</u>	<u>9/2010</u>	<u>2010/</u> 2	<u>2011</u>
<u>Age</u>	Exp.	Act.	<u>Exp.</u>	Act.	<u>Exp.</u>	<u>Act.</u>	<u>Exp.</u>	Act.	<u>Exp.</u>	<u>Act.</u>
20-24	1.3	0	3.2	4	1.7	2	1.2	0	0.8	1
25-29	9.8	12	9.0	12	4.2	6	4.3	1	4.5	0
30-34	15.7	26	13.5	19	5.0	5	5.0	1	4.9	0
35-39	15.7	10	15.3	13	5.1	5	4.9	0	4.6	4
40+	<u>13.5</u>	<u>18</u>	<u>11.5</u>	<u>8</u>	<u>4.0</u>	<u>4</u>	<u>3.9</u>	<u>1</u>	<u>4.4</u>	<u>4</u>
	56.0	66	52.5	56	20.0	22	19.3	3	19.2	9

<u>Retirement</u> - There were 51 retirements during the period (7 firefighters, 44 police), as compared to 1 expected. This large number of retirements caused an increase in costs of 2.26% of payroll. However, the corresponding significant decline in payroll resulted in the dollar cost decreasing \$243,930.

Following is a comparison of the expected and actual retirements during the past year:

	F	irefighter	S	Po	lice Offic	ers		Combine	d
Service*	Expected	Actual	<u>A/E</u>	Expected	<u>Actual</u>	<u>A/E</u>	Expected	<u>Actual</u>	<u>A/E</u>
0	0.10	3	3000.0%	0.20	32	16000.0%	0.30	35	11666.7%
1	0.05	0	0.0%	0.00	12	0.0%	0.05	12	24000.0%
2	0.00	0	0.0%	0.00	0	0.0%	0.00	0	0.0%
3	0.10	0	0.0%	0.00	0	0.0%	0.10	0	0.0%
4	0.00	2	0.0%	0.00	0	0.0%	0.00	2	0.0%
5	0.50	1	200.0%	0.00	0	0.0%	0.50	1	200.0%
6	0.50	1	200.0%	0.00	0	0.0%	0.50	1	200.0%
7	0.00	0	0.0%	0.00	0	0.0%	0.00	0	0.0%
8	0.00	0	0.0%	0.00	0	0.0%	0.00	0	0.0%
9	0.00	0	0.0%	0.00	0	0.0%	0.00	0	0.0%
10 +	0.00	0	0.0%	0.00	0	0.0%	0.00	0	0.0%
Total	1.25	7	560.0%	0.20	44	22000.0%	1.45	51	3517.2%

<u>Investment Return</u> - The rate of return for the year ending September 30, 2011 was 3.98% on actuarial asset value (Exhibit 2A).

As shown in Exhibit 2C, there will not be a COLA transfer as of January 1, 2012; there could be a transfer on January 1, 2013 of \$5,683,400 only if there were a favorable cumulative experience position as of September 30, 2012. The city minimum COLA contributions without the transfer shall be \$5,064,541 on January 1, 2012 and \$5,267,123 on January 1, 2013 due to the COLA fund.

<u>New Members</u> – During the year there were 31 new members, who decreased the City contribution percentage for the Fund by 1.10%. Last year, 32 new members decreased the rate by 1.06%.

Experience Study

The 2008-2011 Experience Study dated December 28, 2011 suggested changes be made to the disability assumption and the marriage assumption.

The current disability assumption has been in place since 1992 or earlier. Over the past 20 years there were 69 disabilities, as compared to 101.2 expected. The average annual cost impact of this assumption was a gain of \$63,500, which would be just over one tenth of one percent of the annual contribution requirement. Since the average impact is a small gain, we recommend that no change be made to this assumption.

Experience Study (continued)

The current marriage assumption states that all employees are assumed to be married. Note that for members currently receiving benefits, actual spouse's information is provided. The normal form of benefit is a 40% contingent annuitant benefit. For members who are not married at retirement, or who elect a life annuity, the benefit is increased to 105% of the accrued benefit, to reflect the fact that there will not be a contingent annuitant. This approximates the actuarial equivalence of the 40% contingent annuitant benefit fairly closely. Therefore, there is no need to change the marriage assumption.

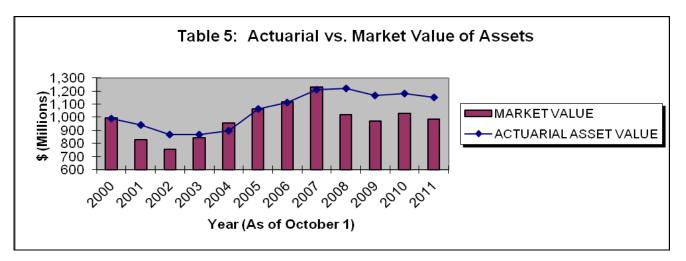
There were no recommendations for changes to any other assumptions in the Experience Study.

Plan Assets

Exhibits 3 and 4 show the asset transactions and investment results during the year. The rate of return on mean market value for the period ending September 30, 2011 was 3.6%.

The asset valuation method results in an actuarial asset value of \$1.150 billion as of October 1, 2011 (Exhibit 2A), 117% of the market value of \$987 million. The rate of return on Actuarial Asset Value was 4.0%, as compared to the 7.5% assumption (Exhibit 2A).

Table 5 illustrates the effect of using the asset smoothing methodology. The volatility of the market value of assets can be seen in the columns, while the actuarial value is illustrated by the line. The actuarial asset value line reflects the 20% Write-Up Method from September 30, 2005.



For COLA transfer purposes, the actuarial asset valuation method utilizes a 3-year moving average (Exhibit 2B). Under this method, the rate of return for the year ending September 30, 2011 was 8.41%. This would result in a transfer of \$5,683,400 from the Regular Fund to the COLA Fund on January 1, 2013 (Exhibit 2C), if there were a favorable cumulative experience position. However, the cumulative experience position is unfavorable – a cumulative net loss of \$157 million as of October 1, 2011 (Exhibit 14).

Expected Ongoing Cost Levels

System costs have varied dramatically over the past several years, due almost exclusively to asset performance. Since the City's contribution requirement is the primary variable, it has been significantly impacted.

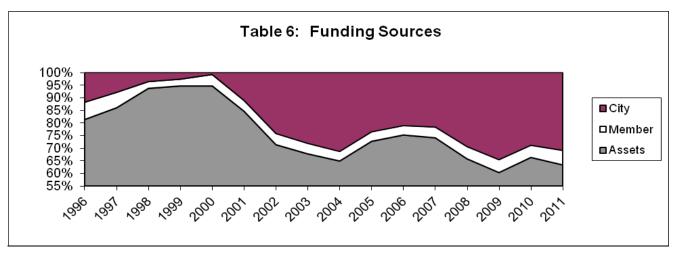
Nevertheless, it is important to distinguish between individual annual costs (which may be somewhat erratic) and expected ongoing annual costs. The following table compares the City contribution requirement as a percentage of payroll to the theoretical entry age normal <u>City</u> contribution percentages:

Valuation Date	Contribution %	EAN %
10/1/2011	56	9
10/1/2010	53	12
10/1/2009	54	21
10/1/2008	43	21
10/1/2007	36	22
10/1/2006	40	23
10/1/2005 (Revised AAV)	44	23
10/1/2005 (Prior AAV)	60	23
10/1/2004	57	23
10/1/2003	46	21
10/1/2002	45	17
10/1/2001	20	19
10/1/2000	1	16
10/1/1999	5	17

As will be noted, contribution requirements in the two years before the 10/1/2002 valuation were below the System's theoretical contribution level. This was due to the System having accumulated more assets than expected. During the 2001-2005 period the contribution requirement (under the prior actuarial asset valuation method) had increased dramatically, due to erosion of assets and the delayed effect of asset smoothing.

Sources of Benefit Funding

Table 6 compares the sources of benefit funding for the past 15 years. 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 (city).



As seen in the table, the city portion of future benefit responsibility decreased as asset values climbed during the late nineties. When asset values started to decline, the city portion increased. As of October 1, 2011, the actuarial value of assets equals 63% of the present value of benefits, the present value of member contributions equals 6%, and the present value of future City normal costs equal 31% of the present value of future benefits.

Funding Progress

The comparison of the present values of vested and accrued benefits to FIPO assets from one year to the next, or over a period of time, is a measure of interim funding progress and the degree of benefit security.

Exhibit 6 contains the result of this comparison for the past three years. The market value of assets on October 1, 2011 is \$987,110,729, as compared to the value of accrued benefits of \$1,568,323,110 for a ratio of 62.9%. The ratio as of October 1, 2010 was 66.5%.

A ratio in excess of 100% typically is one indication of a well-funded program.

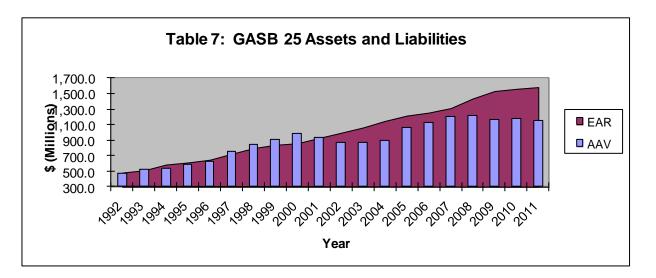
Governmental Accounting Standards

GASB issued Statement No. 25, <u>Financial Reporting for Defined Benefit Pension Plans</u> and Statement No. 27, <u>Accounting for Pensions by State and Local Governmental Employers</u> in 1994. Statement No. 25 provides parameters for financial reporting and comparison of actual contributions to "actuarially required contributions." Statement No. 27 provides standards for the financial reports of the state and local governmental employers. Statement No. 25 was effective for periods beginning after June 15, 1996; Statement No. 27, for periods beginning after June 15, 1997.

The Statements do not directly impact funding, although they do require calculation of an "actuarially required contribution," or "ARC" and amortization of any deficiency or excess of actual contributions made in relation to the ARC.

Since the FIPO Trust uses the Aggregate Cost Method, technically no Schedule of Funding Progress is required. However, such a Schedule of Funding Progress may be prepared using another acceptable cost method. The Schedule of Funding Progress in this report is prepared using the Entry Age Normal Actuarial Accrued Liability, which is one of the acceptable measures under GASB 25. This Schedule is shown in Exhibit 11, Section III.

As of October 1, 2011 the entry age reserve is \$1,590.5 million. This compares to an Actuarial Asset Value of \$1,150.3 million, for a funded ratio of 72%. Last year the funded ratio was 75%. These amounts, together with other disclosures, are contained in Exhibit 11 and illustrated in the following Table 7:



As recommended in the 1997 report, and reviewed by FIPO auditors, the employer contributions made in accordance with the requirements of the Florida Division of Retirement should be used as the Actuarially Required Contribution (ARC), since an exact calculation of the ARC would not differ materially from the required contribution amount. On this basis, a Schedule of Employer Contributions in included in Exhibit 11 in order to comply with the reporting requirements of GASB 25.

These calculations are made for GASB 25. It should be understood that they are only one approach to the measurement of funding progress. They should not be used for any other purpose, such as determination of compliance with City ordinances or State Statutes or the current or future solvency of the FIPO Trust.

Application of GASB 27

The provisions of GASB 27 are virtually identical to those of GASB 25. It is our understanding that the schedules used for GASB 25 disclosure may also be used for GASB 27 purposes.

COLA Fund

Calculations were made based on the information provided as of 10/1/2011. The calculations reflect the approach adopted with the Amended Final Judgment in the matter of <u>Gates vs. City of Miami</u>.

Exhibit 12, parts I and II, illustrate the general impact of the COLA increases which have been provided thus far (under the \$1,312 table as of 1/1/2012), by duration since retirement and by age, respectively.

As discussed in earlier reports, there is probably no completely acceptable index for measuring the impact of inflation on retirees' benefits. Although the CPI is the most widely used inflation index, it is generally considered to distort inflation for retirees, since it includes components which are not typically germane to them, such as home purchases. In the absence of a suitable alternative, a percentage of the CPI is often used as a target. If the cumulative CPI were used as a target, the current COLA averages 47% of the target. A comparison of COLA increases to the CPI is shown in Exhibit 12, part III. Historical data on the CPI is shown in Exhibit 12, part IV.

Exhibit 13 reflects the recent attorneys' opinion that the minimum City contributions apply for future years when there is no excess investment return. This modification increases the Unallocated Reserve from (\$36,744,626) to (\$3,286,792).

Cumulative Experience Position

Ordinance Section 40-204(C) (4) provides that transfers of excess investment return from the Regular Fund to the COLA Fund may be made only if the System remains in a net positive experience position on a cumulative basis from October 1, 1982. Since the aggregate cost method is used for determining funding requirements, the determination of the experience position is measured under the entry age normal method.

The cumulative experience loss increased from \$94,457,166 as of October 1, 2010, to a cumulative loss of \$157,750,436 as of October 1, 2011 (Exhibit 14).

COLA Transfer Calculations

Exhibit 2C shows the transfer calculations as of this valuation. As will be noted, the excess return transfer as of January 1, 2012 is scheduled to be \$0 and the excess return transfer as of January 1, 2013 is \$5,702,977. Therefore, there will be City contributions to the COLA fund of \$5,064,541 as of January 1, 2012.

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 Miami Fire Fighters' and Police Officers' Retirement Trust as of October 1, 2011 for the Retirement Fund and for the COLA Fund.

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.

Randell I. Stanly Signature

Enrolled Actuary No. 11-602

June 22, 2012 Date

City Contribution Requirement for 2012/2013 Fiscal Year

	2012	/2013	2011/2012
	Revised <u>Provisions</u> -\$-	Prior <u>Provisions</u> -\$-	-\$-
I. Unfunded Actuarial Accrued Liability	N/A	N/A	N/A
II. <u>Normal Cost</u>			
A. Present Value of Future Benefits			
1. Active Members			
a. Retirement	349,219,159	349,219,159	348,453,640
b. Disability	42,626,676	42,626,676	42,403,883
c. Death	3,601,943	3,601,943	3,564,506
d. Turnover	23,242,860	23,242,860	23,446,447
e. Return of Contributions	2,199,182	2,017,685	2,041,068
f. Total	420,889,820	420,708,323	419,909,544
2. <u>Retired Members and Beneficiaries</u>			
a. Service Retirements +			
Beneficiaries	1,341,422,264	1,341,422,264	1,323,426,300
b. Disability Retirements	32,338,742	32,338,742	33,684,331
c. Terminated Vested Members	3,855,757	3,855,757	3,231,775
d. Total	1,377,616,763	1,377,616,763	1,360,342,406
3. Total	1,798,506,583	1,798,325,086	1,780,251,950

City Contribution Requirement for 2012/2013 Fiscal Year

	2012/	2011/2012	
	Revised <u>Provisions</u> -\$-	Prior <u>Provisions</u> -\$-	-\$-
II. <u>Normal Cost</u> (Cont'd)	Ŷ	Ŷ	Ŷ
A. Total Present Value of Future Benefits	1,798,506,583	1,798,325,086	1,780,251,950
B. Present Value of Future Member Contributions	106,522,468	88,840,453	87,615,425
C. Actuarial Asset Value	1,150,323,527	1,150,323,527	1,180,649,632
D. Unfunded Actuarial Accrued Liability	0	0	0
E. Present Value of Future Normal Costs (A-B-C-D)	541,660,588	559,166,106	511,986,893
F. Present Value of Future Payrolls	1,104,448,459	1,104,448,459	1,103,177,771
G. Administrative Expense	2,044,488	2,200,000	2,200,000
H. Current Payroll for those under Expected Retirement Age	82,164,617	82,164,617	80,152,355
I. Interest Rate	7.5%	7.5%	7.5%
J. Current Normal Cost - Payable 10/1/2012 ([(E)x(H) / (F)] + (G)) (1+(I))	45,516,491	47,083,250	42,353,775
K. Covered Payroll	82,164,617	82,164,617	80,152,355
L. Normal Cost as Percentage of Covered Pay (J)/ (K)	roll 55.60%	57.30%	52.84%
III. Quarterly City Contribution Schedule			
A. Past Service Cost	0	0	0
B. Normal Cost	45,516,491	47,083,250	42,353,775
C. Payment Timing	0	0	0
D. Total	<u>45,516,491</u>	47,083,250	42,353,775

-\$-

CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' RETIREMENT TRUST

Actuarial Asset Value - 20% Write Up Method

I. Determination of Actuarial Asset Value as of October 1, 2011

II.

A. Actuarial Value of Assets as of 10/01/2010 1,180,649,632 40,058,891 B. City Contributions C. Member Contributions 7,137,824 D. Benefits Paid 123,360,907 E. Contributions Refunded 225,732 F. Expected Return * 86,867,018 1,191,126,726 G. Expected Actuarial Value of Assets (A+B+C-D-E+F) H. Market Value of Assets at 9/30/2011 987,110,729 I. Present Value of 01/01/12 COLA Transfer 0 J. Present Value of 01/01/13 COLA Transfer 0 K. Difference (H-I-J-G) (204,015,997)L. 20% of Difference (40,803,199)M. Preliminary Actuarial Asset Value (G+L) 1,150,323,527 N. Maximum Actuarial Asset Value (120% of H-I-J) 1,184,532,875 O. Minimum Actuarial Asset Value (80% of H-I-J) 789,688,583 P. Actuarial Asset Value at 10/1/2011 1,150,323,527 O. Contribution Surplus Account Balance 0 R. Final Actuarial Value at 10/01/2011 (P – Q) 1,150,323,527 Rate of Return on Actuarial Asset Value -\$-A. Actuarial Asset Value at 10/01/2010 1,180,649,632 B. Contributions 1. City 40,058,891 2. Members 7,137,824 3. Total 47,196,715 C. Benefits and Refunds 123,586,639 D. Contribution Surplus 0 E. Actuarial Asset Value at 10/01/2011 1,150,323,527 F. Net Return on Investment [E+D+C-B-A] 46.063.819 G. Rate of Return (II F/I F) (.075)3.98%

*[1,180,649,632 + 40,058,891 + (7,137,824) (2.5/4) - (123,360,907 + 225,732) (13/24)] (.075)

I. Development of Actuarial Asset Value (3 Years, for COLA Transfer Purposes)

	-		-	
		9/30/2011	9/30/2010	9/30/2009
A.	Book Value	-\$- 995,683,437	-\$- 992,423,802	- 5 - 970,698,193
B.	Market Value	987,110,729	1,027,739,486	970,811,437
C.	B/A	.9913901	1.0355853	1.0001167
D.	1/3 ∑ (C)		1.0090307	
E.	Adjusted Market Value at 9/30/202 D x \$995,683,437	11	1,004,675,155	
F.	Contribution Surplus at 9/30/2011		0	
G.	 80% of Market Value 120% of Market Value 		789,688,583 1,184,532,875	
H.	Preliminary Actuarial Asset Value		1,004,675,155	
I.	Present Value of 1/1/2012 COLA Transfer, discounted at 7.50	%	0	
J.	Actuarial Asset Value (H-I)		1,004,675,155	
Rat	e of Return on Actuarial Asset Value	<u>e</u>		-\$-
A.	Actuarial Asset Value at 10/01/201	10		1,000,132,851
B.	Contributions 1. City 2. Members 3. Total			40,058,891 <u>7,137,824</u> 47,196,715
C.	Benefits and Refunds			123,586,639
D.	Present Value of 1/1/2012 COLA Transfer			0
E.	Contribution Surplus			0
F.	Actuarial Asset Value at 10/01/201	11		1,004,675,155
G.	Net Return on Investment [F+E+D	P+C-B-A]		80,932,228
H.	Rate of Return [2 x G/ (A+F-G)]			8.41%

II.

Calculation of Excess Investment Return On Membership and Benefits Accounts for 2010/2011 Fiscal Year 2013 COLA Transfer

 Net Actual Return on Actuarial Asset Value A. Preliminary Actuarial Asset Value as of 10/1/2011 B. Benefits Paid During Plan Year C. Contributions Refunded During Plan Year D. City Contributions During Plan Year (Required) E. Member Contributions During Plan Year F. Actuarial Asset Value as of 10/1/2010 G. Total Actual Return During Plan year (A)+(B)+(C)-(D)-(E)-(F) 	-\$- 1,004,675,155 123,360,907 225,732 40,058,891 7,137,824 <u>1,000,132,851</u> 80,932,228
Net Expected Return on Actuarial Asset Value	
 A. Actuarial Asset Value as of 10/1/2010 B. Benefits Paid During Plan Year C. Contributions Refunded During Plan Year D. City Contributions During Plan Year E. Member Contributions During Plan Year F. Expected Rate of Return (Lesser of 7.75% or Valuation G. Expected Return During Plan Year H. Base Amount for Expected Return (G)/.075 I. Excess Return on Assets (I(G) - II(G)) J. Excess Return as % of II(H) 	73,328,259 * 977,710,120 7,603,969 0.777732%**
A. Excess Return	COLA Transfer
First2.57,603,969Next2.50	$ \begin{array}{ccccc} \% & & -\$-\\ 75 & 5,702,977\\ 50 & & 0\\ 25 & & 0\\ 0 & & & 0\\ & & & & \\ 5,702,977 *** \end{array} $
	A. Preliminary Actuarial Asset Value as of $10/1/2011$ B. Benefits Paid During Plan Year C. Contributions Refunded During Plan Year D. City Contributions During Plan Year (Required) E. Member Contributions During Plan Year F. Actuarial Asset Value as of $10/1/2010$ G. Total Actual Return During Plan year (A)+(B)+(C)-(D)-(E)-(F) Net Expected Return on Actuarial Asset Value A. Actuarial Asset Value as of $10/1/2010$ B. Benefits Paid During Plan Year C. Contributions Refunded During Plan Year D. City Contributions During Plan Year E. Member Contributions During Plan Year F. Expected Rate of Return (Lesser of 7.75% or Valuation G. Expected Return During Plan Year H. Base Amount for Expected Return (G)/.075 I. Excess Return on Assets (I(G) - II(G)) J. Excess Return as % of II(H) Amount to be Transferred to COLA Fund A. <u>Excess Return</u> $\frac{\%}{\%}$ First 2.5 7,603,969 Next 2.5 0 Next 2.5 0 Remainder 0

*Assumes Uniform Quarterly Contributions and Monthly Benefits [1,000,132,851 + 40,058,891 + (7,137,824) (2.5/4) - (123,360,907 +225,732) (13/24)](.075) =

** Before 1/1/2012 COLA Transfer

***Limited to favorable cumulative experience position

73,328,259

Summary of Asset Transactions for Year Ending September 30, 2011 *

A. Market Value as of October 1, 2010	Membership and <u>Benefits Accounts</u> -\$- 1,027,739,486	COLA I <u>Account</u> -\$- 39,331,727	COLA II <u>Account</u> -\$- 272,439,260
A. Market value as of October 1, 2010	1,027,739,480	39,331,727	272,439,200
B. Book Value as of October 1, 2010	992,423,802	37,980,191	263,077,569
C. Income During Year			
 City Contributions Member Contributions Other Member Contributions 	40,058,891 7,137,824 0		4,869,751
 Interest Dividends 	21,092,563 7,867,993	775,902 354,405	5,298,528 2,417,507
 Net Realized Gains (Losses) Securities Lending Income 	54,212,521 555,386	2,074,539 21,715	14,325,155 148,129
8. Rental and Other Income	223,456	8,757	59,590
9. COLA Transfer at January 1, 2011	$\frac{0}{131,148,634}$	3,235,318	27,118,660
D. Disbursements During Years			
 Benefit Payments Contribution Refunds 	123,360,907 225,732	248,193 0	17,115,648 0
 Custodial and Investment Expenses Administrative Expense 	4,156,839	162,038	1,106,690
5. Securities Lending Fees	138,735	5,425	37,002
6. Building Depreciation	$\frac{32,556}{127,914,769}$	$\tfrac{1,322}{416,978}$	$\frac{8,847}{18,268,187}$
E. Book Value as of 9/30/2011			
(B)+(C)-(D)	995,657,667	40,798,531	271,928,042
F. Net Change in Unrealized Gains (Losses)	(43,888,392)	(1,702,815)	(11,703,017)
G. Market Value as of September 30, 2011 (A)+(C)-(D)+(F)	987,084,959	40,447,252	269,586,716
H. January 1, 2012 Allocation to COLA II (discounted)	0	N/A	0
I. City Contribution Receivable (Exh. 18, p.3)	25,770	<u>N/A</u>	N/A
J. Net Market Value as of September 30, 2011	987,110,729	40,447,252	269,586,716

*Based on unaudited financial statements.

Distribution of Assets as of September 30, 2011⁽¹⁾

Membership and Benefits and Cost-of-Living Adjustment Accounts

Description	<u>Market</u> -\$-	<u>Book</u> -\$-
Bills, Bonds, Notes Domestic Stocks International Stocks Private Equity Money Market Funds and Time Deposits Mutual Funds Real Estate ⁽²⁾ Securities Lending Adjustment	460,334,779 414,939,501 184,938,922 41,208,816 16,358,391 109,187,178 2,042,639 <u>0</u>	440,526,866 405,865,258 215,225,559 37,918,987 15,778,599 122,917,631 2,042,639 0
A: Sub-Total	1,229,010,226	1,240,275,539
B: Cash Receivables: City Contributions ⁽³⁾ Accounts Receivable Member Contributions Accrued Interest Accrued Dividends Securities Proceeds	68,529,636 (176,466) 2,551 0 4,712,222 1,056,148 <u>3,756,806</u>	68,529,636 (176,466) 2,551 0 4,712,222 1,056,148 <u>3,756,806</u>
C: Sub-Total	9,351,261	9,351,261
Payables: Budget Advance Transfer Tax Withheld Accounts Payable Securities Purchased	50,341 0 (877) 170,750 <u>9,526,212</u>	50,341 0 (877) 170,750 <u>9,526,212</u>
D: Sub-Total	9,746,426	9,746,426
E. Total (A+B+C-D)	1,297,144,697	1,308,410,010
Accounts: COLA I Account COLA II Account COLA II Transfer (1/1/2011) F: Membership & Benefits Account	40,447,252 269,586,716 0 987,110,729	40,798,531 271,928,042 0 995,683,437

⁽¹⁾Based on unaudited financial statements.
 ⁽²⁾Reflects accumulated depreciation of \$384,532.
 ⁽³⁾Reflects \$25,770 City Contribution Receivable from Exhibit 18, page 3.

Investment Results

Yield on Mean Values for 12-Month Period Ending September 30, 2011

	-\$-	<u>Market</u> -%-	<u>Book</u> -%-
Membership and Benefits Accounts*			
Interest	21,092,563	2.1	2.2
Dividends	7,867,993	0.8	0.8
Rental and Other Income, less Depreciation	190,900	0.0	0.0
Realized Gains	54,212,521	5.5	5.7
Securities Lending (Net)	416,651	0.0	0.0
Increase in Unrealized Gains	(43,888,392)	(4.4)	
Custodial and Investment Expenses	(4,156,839)	(0.4)	(0.4)
Real Estate Adjustment to Appraised Value	0	0.0	
	35,735,397	3.6	8.3
COLA I Account			
Interest	775,902	2.0	2.1
Dividends	354,405	0.9	0.9
Rental and Other Income, less Depreciation	7,435	0.0	0.0
Realized Gains	2,074,539	5.3	5.5
Securities Lending (Net)	16,290	0.0	0.0
Increase in Unrealized Gains	(1,702,815)	(4.3)	
Custodial and Investment Expenses	(162,038)	(0.4)	(0.4)
	1,363,718	3.5	8.1
COLA II Account			
Interest	5,298,528	2.0	2.1
Dividends	2,417,507	0.9	0.9
Rental and Other Income, less Depreciation	50,743	0.0	0.0
Realized Gains	14,325,155	5.4	5.6
Securities Lending (Net)	111,127	0.0	0.0
Increase in Unrealized Gains	(11,703,017)	(4.4)	
Custodial and Investment Expenses	(1,106,690)	(0.4)	<u>(0.4)</u>
	9,393,353	3.5	8.2

*Before 1/1/2011 COLA transfer

Summary of Accounting Information As of October 1

				2	011	2010	
				-\$-	-\$-	-\$-	
I.	Pre	sent	Value of Vested Accrued Benefits	$(\mathbf{EDC} = \mathbf{Z} = \mathbf{Z} \in \mathcal{O}(\mathbf{X})$	(EIDO 7.50)		
	٨	Car	nice Detinements and Demeticianies	(FRS 7.75%)	(FIPO 7.5%)	1 222 426 200	
			vice Retirements and Beneficiaries		1,341,422,264	1,323,426,300	
	В. С.		sability Retirements sted Terminated Members	31,750,022	32,338,742	33,684,331	
	C. D.		tive Members	3,717,613	3,855,757	3,231,775	
				151,036,248	157,940,269	154,433,888	
	E.	Tot	lai	1,498,019,332	1,535,557,032	1,514,776,294	
II.	Pre	sent	Value of Non-Vested Accrued Benefits	31,351,970	32,766,078	29,769,852	
III.	Pre	sent	Value of Accrued Benefits	1,529,971,302	1,568,323,110	1,544,546,146	
IV.	V. The values of accumulated plan benefits were determined in accordance with the Academy of Actuaries Interpretations and FASB Statement No. 35, <u>Accounting and</u> <u>Reporting by Defined Benefit Pension Plans</u> .						
V.	<u>Sta</u>	teme	ent of Changes in Accrued Benefits				
	A. Present Value of Accrued Benefits at Beginning of Year1,544,546,14						
	B. Increase (Decrease) During the Year Attributable to:						
		1.	Benefits Accumulated			36,157,141	
		2. Benefits Paid and Contributions Refunded (123,586,639					
	3. Plan Amendment 0						
		4. Assumption/Method Changes 0					
		5. Increase Due to Decrease in Discount Period					
		6.	Net Increase			23,776,964	
	C	P		,		1 5 60 000 110	
	C.	. Present Value of Accrued Benefits at End of Year 1,568,323,110					

Comparison of Funding Progress
(\$000)

I.	Ass	<u>sets</u>	<u>10/1/2011</u> -\$-	<u>10/1/2010</u> -\$-	<u>10/1/2009</u> -\$-
	A.	Book Value	995,683	992,424	970,698
	B.	Market Value	987,111	1,027,740	970,811
II.	Lia	<u>bilities</u>			
	A.	Retired and Vested	1,377,617	1,360,342	945,370
	B.	Active			
		Employee Contributions	66,927	64,629	117,247
		Other Vested	91,013	89,805	299,363
		Non-Vested Accrued	32,766	29,770	29,207
	C.	Total Accrued	1,568,323	1,544,546	1,391,187
III.	<u>Rat</u>	ios	%	%	%
	IA/ IB/		63.5 62.9	64.3 66.5	69.8 69.8

Note: Item II amounts are present values of accrued benefits.

Member Statistics

I.	Active Members	10/1/2011	<u>10/1/2010</u>	10/1/2009	
	Number of	10/1/2011	10/1/2010	10/1/2009	
	Males	1,023	1,039	1,288	
	Females	173	188	229	
	Total	1,196	1,227	1,517	
	Averages				
	Current Age	36.4	36.0	38.1	
	Past Service	9.5	9.1	11.4	
	Credited Past Service	9.5	9.1	11.4	
	Annual Earnings	\$68,700	\$65,324	\$80,562	
II.	Inactive Members				
	A. Retirees and Beneficiaries				
	Number	2,089	2,062	1,758	
	Average Annual Benefit	\$57,253	\$56,870	\$49,004	
	Average Age	62.4	62.1	63.7	
	B. Disabled				
	Number	178	186	196	
	Average Annual Benefit	\$20,523	\$20,372	\$19,900	
	Average Age	68.6	68.2	67.7	
	C. Vested Terminated				
	Number	18	16	20	
	Average Deferred Benefit	\$26,681	\$25,276	\$25,617	
	Average Age	43.9	43.6	44.0	

Age-Service Distribution

Completed Years of Service								<u>Earnir</u>	<u>igs</u>			
Age	<u>0-1</u>	<u>2-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35+</u>	<u>Total</u>	<u>Total</u> -\$-	<u>Average</u> -\$-
15-24	5	26	0	0	0	0	0	0	0	31	1,617,102	52,165
25-29	11	152	78	1	0	0	0	0	0	242	13,672,369	56,497
30-34	10	74	116	52	0	0	0	0	0	252	16,248,282	64,477
35-39	1	42	72	110	47	3	0	0	0	275	19,657,200	71,481
40-44	0	26	38	93	78	26	0	0	0	261	19,943,333	76,411
45-49	0	10	12	38	29	18	4	0	0	111	9,069,777	81,710
50-54	0	1	3	3	6	6	0	0	0	19	1,587,379	83,546
55-59	0	0	1	1	1	2	0	0	0	5	369,174	73,835
60-64	0	0	0	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	_0	_0	0	0	0	0
Total	27	331	320	298	161	55	4	0	0	1,196	82,164,617	68,700

Average Age: 36.4 Ave

Average Service: 9.5

Reconciliation of Participant Counts

	Actives	Retirees & <u>Beneficiaries</u>	Disableds	Vested <u>Terminated</u>
10/1/2010	1,227	2,062	186	16
Changes due to: Retirement	-51	+51		
Withdrawal	-10			+2
Disability	-1		+1	
Death		-52	-9	
New Beneficiary		+28		
New Hires	+31			
Data Changes				
10/1/2011	1,196	2,089	178	18

Summary of Principal System Provisions - Prior Basis

(Based on Ordinance No. 10002, as Amended through Ordinance No. 13202)

Effective Date:	January 1, 1940, as restated effective May 23, 1985, and amended through September 30, 2011.				
Fiscal Year:	October 1 - September 30.				
Membership:	Police officers and fire fighters.				
Covered 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.				
Contributions:	Members: 7% of Compensation for Police Officers, 10% for Fire Fighters. City: Balance, as actuarially determined.				
Creditable Service:	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.				

<u>Summary of Principal System Provisions – Prior Basis</u> (continued)

Average Final Compensation:

For members who retire or terminate employment with ten or more years of creditable service prior to October 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. Effective September 30, 2010, for members who retire on or after October 1, 2011, average final compensation shall mean the average of the highest 5 years of service, to be phased in over the next 4 years as follows: for members who retire on or after October 1, 2011 and on or before September 30, 2012, the average of the highest 2 years of membership service; for members who retire on or after October 1, 2011 and on or before September 30, 2012, the average of the highest 3 years of membership service; for members who retire on or after October 1, 2012 and on or before September 30, 2013, the average of the highest 4 years of membership service; and for members who retire on or after October 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 firefighter on September 30, 2011 and retires on or after October 1, 2011, be less than the highest year of membership service prior to September 30, 2011.

Normal Service Age: Age 50

<u>Summary of Principal System Provisions – Prior Basis</u> (Continued)

Service Retirement:	For Police Officers who have reached Rule of 64 by September 30, 2011, for Fire Fighters who had reached Rule of 64 by September 30, 2010, and for Fire Fighters who have reached Rule of 68 by September 30, 2011: 3% of Average Final Compensation for each of the first fifteen years of Creditable Service plus 3.5% of Average Final Compensation for each year of Creditable Service after the fifteenth year; maximum of 100% of Average Final Compensation.
	For all others, for service prior to October 1, 2011: 3% of Average Final Compensation for each of the first fifteen years of Creditable Service plus 3.5% of Average Final Compensation for each of Creditable Service after the fifteenth year; for service after September 30, 2011: 3% of Average Final Compensation for each year of Creditable Service; The combined percentage for service before October 1, 2011 and service after September 30, 2011 may not exceed 100% of Average Final Compensation.
Early Service	
Retirement:	After 20 years of Creditable Service. Benefits are based on Average Final Compensation and Creditable Service at retirement date. Actuarial equivalence for early commencement.
Rule of 64 Retirement:	Service retirement on the basis of combined age and Creditable Service equaling 64 or more. Rule of 64 applies to Fire Fighters who had obtained 64 points by September 30, 2010 and Police Officers who had 64 points by September 30, 2011. Rule of 64 also applies to the accrued benefit as of September 30, 2011 of Police Officers who were active members as of September 29, 2011.
Rule of 68 Retirement:	Service retirement on the basis of combined age and Creditable Service equaling 68 or more. Rule of 68 applies to Fire Fighters who had not attained 64 points by September 30, 2010 and had attained 68 points by September 30, 2011. Rule of 68 also applies to the accrued benefit as of September 30, 2011 of Fire Fighters who were active members as of September 29, 2011.

<u>Summary of Principal System Provisions – Prior Basis</u> (Continued)

Rule of 70 Retirement:	Service retirement on the basis of combined age and Creditable Service equaling 70 or more. Rule of 70 applies to all new members hired on or after October 1, 2011, as well as to all benefits accrued after September 30, 2011 by Fire Fighters who had not attained 68 points on September 30, 2011 and Police Officers who had not attained 64 points on September 30, 2011.
Disability:	<u>Ordinary Disability</u> : After 10 or more years of Creditable Service, and not eligible for service retirement. Not incurred as accident in performance of duties. 90% of benefit rate times Average Final Compensation times Creditable Service, with a minimum benefit of 30% of Average Final Compensation; 10 years' certain and life normal form.
	<u>Accidental Disability</u> : Incurred as accident in performance of duties. 66 2/3% of Average Final Compensation, or 66 2/3% of Final Compensation, whichever is greater. 40% joint & survivor normal form, with a minimum of 10 years' certain and life.
Deferred Retirement	
Option Plan:	Members who are eligible for Service Retirement or Rule of 64 Retirement after September 1998 may elect self-directed Deferred Retirement Option Plan, for a maximum of 4 years. An actuarially equivalent Back DROP option (maximum of 4 years) may be elected prior to DROP entry; combined years of DROP may not exceed 4.

<u>Summary of Principal System Provisions – Prior Basis</u> (Continued)

Death: Ordinary Death: (a) Between 3 and 10 years of Creditable Service, and death not accidentally incurred in performance of duties: Lump sum benefit equal to 50% of Compensation received in year preceding death. (b) 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. (c) 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.

> <u>Accidental Death</u>: Incurred in performance of duties. (a) 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 until attainment of age 18. If no spouse or no children under 18, benefit is payable to dependent parents. (b) 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 deferral period or 10 years' certain period.

- Employment Termination: After 10 years of Creditable Service, based on Creditable Service and Average Final Compensation at termination date. If Member contributions are withdrawn, benefit is forfeited. Benefits are deferred to Normal Retirement Age.
- Optional Allowances: Normal Form: For Police Officers who have reached Rule of 64 by September 30, 2011, for Fire Fighters who had reached Rule of 64 by September 30, 2010, and for Fire Fighters who have reached Rule of 68 by September 30, 2011: Normal Form is joint and 40% contingent survivor, with a minimum of 10 years' certain and life.

<u>Summary of Principal System Provisions – Prior Basis</u> (Continued)

Optional Allowances: (Continued)	For all others, for benefits based on service prior to October 1, 2011: Normal Form is joint and 40% contingent survivor, with a minimum of 10 years' certain and life; for benefits based on service after September 30, 2011, Normal Form is 10 years' certain and life.	
	Option 1 is cash refund annuity, based on present value at retirement. Option 2 is joint and 100% survivor. Option 3 is joint and 50% contingent survivor. Option 4 is open option. Option 5 is determined by Board due to incapacity of Member. Option 6 is withdrawal of member contributions with credited interest; monthly benefit is $\frac{1}{2}$ of normal level.	
Transfer of Compensated		
Leave Balances:	Accumulated leave balances may be transferred into system immediately prior to retirement to purchase additional Creditable Service, on an actuarially equivalent basis.	
Transfer of 457 Balances:	457 balances of Firefighters may be transferred into System at retirement to purchase additional Service for multiplier purposes.	
Changes Since Prior		
Valuation:	None.	

Summary of Principal System Provisions - Revised Basis

(Based on Ordinance No. 10002, as Amended through Ordinance No. 13202)

Effective Date:	January 1, 1940, as restated effective May 23, 1985, and amended through September 30, 2011.		
Fiscal Year:	October 1 - September 30.		
Membership:	Police officers and fire fighters.		
Covered 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.		
Contributions:	Members: 10% of Compensation for Police Officers , 10% for Fire Fighters. City: Balance, as actuarially determined.		
Creditable Service:	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.		

<u>Summary of Principal System Provisions – Revised Basis</u> (continued)

Average Final Compensation:

For members who retire or terminate employment with ten or more years of creditable service prior to October 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. Effective September 30, 2010, for members who retire on or after October 1, 2011, average final compensation shall mean the average of the highest 5 years of service, to be phased in over the next 4 years as follows: for members who retire on or after October 1, 2011 and on or before September 30, 2012, the average of the highest 2 years of membership service; for members who retire on or after October 1, 2011 and on or before September 30, 2012, the average of the highest 3 years of membership service; for members who retire on or after October 1, 2012 and on or before September 30, 2013, the average of the highest 4 years of membership service; and for members who retire on or after October 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 firefighter on September 30, 2011 and retires on or after October 1, 2011, be less than the highest year of membership service prior to September 30, 2011.

Normal Service Age: Age 50

<u>Summary of Principal System Provisions – Revised Basis</u> (Continued)

Service Retirement:	For Police Officers who have reached Rule of 64 by September 30, 2011, for Fire Fighters who had reached Rule of 64 by September 30, 2010, and for Fire Fighters who have reached Rule of 68 by September 30, 2011: 3% of Average Final Compensation for each of the first fifteen years of Creditable Service plus 3.5% of Average Final Compensation for each year of Creditable Service after the fifteenth year; maximum of 100% of Average Final Compensation.
	For all others, for service prior to October 1, 2011: 3% of Average Final Compensation for each of the first fifteen years of Creditable Service plus 3.5% of Average Final Compensation for each of Creditable Service after the fifteenth year; for service after September 30, 2011: 3% of Average Final Compensation for each year of Creditable Service; The combined percentage for service before October 1, 2011 and service after September 30, 2011 may not exceed 100% of Average Final Compensation.
Early Service	
Retirement:	After 20 years of Creditable Service. Benefits are based on Average Final Compensation and Creditable Service at retirement date. Actuarial equivalence for early commencement.
Rule of 64 Retirement:	Service retirement on the basis of combined age and Creditable Service equaling 64 or more. Rule of 64 applies to Fire Fighters who had obtained 64 points by September 30, 2010 and Police Officers who had 64 points by September 30, 2011. Rule of 64 also applies to the accrued benefit as of September 30, 2011 of Police Officers who were active members as of September 29, 2011.
Rule of 68 Retirement:	Service retirement on the basis of combined age and Creditable Service equaling 68 or more. Rule of 68 applies to Fire Fighters who had not attained 64 points by September 30, 2010 and had attained 68 points by September 30, 2011. Rule of 68 also applies to the accrued benefit as of September 30, 2011 of Fire Fighters who were active members as of September 29, 2011.

<u>Summary of Principal System Provisions – Revised Basis</u> (Continued)

Rule of 70 Retirement:	Service retirement on the basis of combined age and Creditable Service equaling 70 or more. Rule of 70 applies to all new members hired on or after October 1, 2011, as well as to all benefits accrued after September 30, 2011 by Fire Fighters who had not attained 68 points on September 30, 2011 and Police Officers who had not attained 64 points on September 30, 2011.
Disability:	<u>Ordinary Disability</u> : After 10 or more years of Creditable Service, and not eligible for service retirement. Not incurred as accident in performance of duties. 90% of benefit rate times Average Final Compensation times Creditable Service, with a minimum benefit of 30% of Average Final Compensation; 10 years' certain and life normal form.
	<u>Accidental Disability</u> : Incurred as accident in performance of duties. 66 2/3% of Average Final Compensation, or 66 2/3% of Final Compensation, whichever is greater. 40% joint & survivor normal form, with a minimum of 10 years' certain and life.
Deferred Retirement	
Option Plan:	Members who are eligible for Service Retirement or Rule of 64 Retirement after September 1998 may elect self-directed Deferred Retirement Option Plan, for a maximum of 4 years. An actuarially equivalent Back DROP option (maximum of 4 years) may be elected prior to DROP entry; combined years of DROP may not exceed 4.

<u>Summary of Principal System Provisions – Revised Basis</u> (Continued)

Death:

Ordinary Death: (a) Between 3 and 10 years of Creditable Service, and death not accidentally incurred in performance of duties: Lump sum benefit equal to 50% of Compensation received in year preceding death. (b) 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. (c) 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.

<u>Accidental Death</u>: Incurred in performance of duties. (a) 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 until attainment of age 18. If no spouse or no children under 18, benefit is payable to dependent parents. (b) 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 deferral period or 10 years' certain period.

- Employment Termination: After 10 years of Creditable Service, based on Creditable Service and Average Final Compensation at termination date. If Member contributions are withdrawn, benefit is forfeited. Benefits are deferred to Normal Retirement Age.
- Optional Allowances: Normal Form: For Police Officers who have reached Rule of 64 by September 30, 2011, for Fire Fighters who had reached Rule of 64 by September 30, 2010, and for Fire Fighters who have reached Rule of 68 by September 30, 2011: Normal Form is joint and 40% contingent survivor, with a minimum of 10 years' certain and life.

<u>Summary of Principal System Provisions – Revised Basis</u> (Continued)

Optional Allowances: (Continued)	For all others, for benefits based on service prior to October 1, 2011: Normal Form is joint and 40% contingent survivor, with a minimum of 10 years' certain and life; for benefits based on service after September 30, 2011, Normal Form is 10 years' certain and life.		
	Option 1 is cash refund annuity, based on present value at retirement. Option 2 is joint and 100% survivor. Option 3 is joint and 50% contingent survivor. Option 4 is open option. Option 5 is determined by Board due to incapacity of Member. Option 6 is withdrawal of member contributions with credited interest; monthly benefit is ½ of normal level.		
Transfer of Compensated			
Leave Balances:	Accumulated leave balances may be transferred into system immediately prior to retirement to purchase additional Creditable Service, on an actuarially equivalent basis.		
Transfer of 457 Balances:	457 balances of Firefighters may be transferred into System at retirement to purchase additional Service for multiplier purposes.		
Changes Since Prior			
Valuation:	Member Contributions for Police Officers increased from 7% to 10% of Compensation.		

Summary of Actuarial Basis

Valuation Date:	October 1, 2010 for Fiscal Year beginning October 1, 2011.		
Valuation Method:	Aggregate Cost Method. Percentage of actual payroll, if greater than dollar amount calculated under the provision of <u>Gates</u> .		
Asset Valuation Method:	20% Write-Up Method: Expected value is based on the Interest Discount/Investment Return rate applied to the actuarial asset value as of previous valuation date and cash flow during the year. 20% of the difference between the Expected Value and the Market Value (net of pending transfers to the COLA Fund) is added to the Expected Value.		
	The result cannot be greater than 120% of market value or less than 80% of market value (net of pending COLA transfers).		
Actuarial Assumptions:			
Interest Discount/ Investment Return: Inflation:	7.50%, compounded annually.3.25%, compounded annually.		
Mortality:	RP 2000 Mortality Table, Employees and Annuitants Combined, projected by scale AA to 2020, producing following specimen rates:		
	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		
Disabled Mortality:	RP 2000 Disabled Mortality Table projected by scale AA to producing following specimen rates:	2020,	
	Age Male Female 20 1.5696% .5287% 30 2.0418% .6093% 40 1.9221% .5507% 50 2.0149% .8186% 60 3.0450% 1.9756%		

4.6257%

8.9456%

3.4045%

6.2834%

70

80

Summary of Actuarial Basis (Continued)

Age	Disability	Т	urnover
		<5	5+
21	00200	0240	0102
31 32	.00200 .00220	.0240 .0240	.0192
32 33	.00220	.0240	.0192 .0192
33 34	.00245	.0240	.0192
34 35	.00285	.0240	.0192
35 36	.00285	.0240	.0192
30 37	.00305	.0228	.0182
38	.00345	.0204	.0163
39	.00370	.0192	.0154
40	.00390	.0192	.0144
40	.00470	.0168	.0134
42	.00555	.0156	.0125
43	.00635	.0144	.0115
44	.00720	.0132	.0106
45	.00800	.0120	.0096
46	.00880	.0096	.0077
47	.00965	.0072	.0057
48	.01045	.0048	.0038
49	.01130	.0024	.0019
50	.01210	.0000	.0000
51	.01295	.0000	.0000
52	.01375	.0000	.0000
53	.01455	.0000	.0000
54	.01540	.0000	.0000
55	.01620	.0000	.0000
56	.01785	.0000	.0000
57	.01870	.0000	.0000
58	.01950	.0000	.0000
59	.02030	.0000	.0000
60	.00000	.0000	.0000

Summary of Actuarial Basis (Continued)

Retirement: Fire Fighters who have attained 64 points by September 30, 2011 and all Police Officers are subject to the Rule of 64; the rest of the Fire Fighters are subject to the Rule of 68. If eligible for Retirement, the following decrements apply, based on service:

Years of Service	Police %	Fire %
<20	0	0
20-24	40	5
25-29	50	25
30-31	100	25
32		100

There is no explicit assumption on the percentage of retirements expected to enter the DROP. No distinction is necessary, since funding is calculated to expected retirement or expected DROP entry.

Salary Merit Scale:	le:	Scal	Merit	Salary
---------------------	-----	------	-------	--------

10.		
Service	Police	Fire
0	.0500	.0500
1	.0500	.0500
2	.0500	.0500
3	.0500	.0500
4	.0500	.0500
5	.0500	.0500
6	.0500	.0500
7	.0250	.0500
8	.0500	.0500
9	.0500	.0500
10	.0100	.0000
11	.0100	.0000
12	.0100	.0000
13	.0100	.0000
14	.0100	.0000
15	.0125	.0250
16	.0125	.0250
17	.0100	.0100
18	.0100	.0100
19	.0100	.0100
20	.0100	.0100
21	.0100	.0100
22 +	.0000	.0000

Salary Merit Scale is combined with 3.25% inflation and 1.5% for promotions and other increases. There is no additional increase at retirement.

Projected Total Payroll: Covered Payroll plus \$36,943,839 estimated payroll for members in DROP in 2010/2011 year.

Summary of Actuarial Basis (Continued)

Type of Disability:	100% of the disabilities are expected to be accidental disabilities.
Recovery:	No probabilities of recovery are used.
Type of Death:	100% of the assumed deaths are expected to be ordinary deaths.
Remarriage:	No probabilities of remarriage are used.
Spouse's Ages:	Females are assumed to be 3 years younger than males.
Marital Status:	All employees are assumed to be married. For Members currently receiving benefits, actual spouse's information is provided.
Investment Expenses:	The investment return assumption of 7.5% is net of investment expenses.
Administration Expenses:	\$2,044,488 for 2012/2013 fiscal year.
Withdrawal of Employee Contributions:	It is assumed that employees do not withdraw their contribution balances upon employment termination or retirement.
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.
Adjustments from Valuation Date:	One year's interest is added to the calculated deposit to reflect ordinance provision. For purposes of minimum City contributions as specified by State Division of Retirement (Exhibit 18), additional interest discount is included to reflect monthly contributions.
Sources of Data:	Asset data is from unaudited financial statements and includes an appraised value for the real estate to be used for Market Value. Membership data was furnished by Administrator. Member compensation used is final bi-weekly pay in the year, annualized, with estimated reductions for each active member as of October 1, 2011 based on approach summarized in Tables 2 and 3 in September 24, 2011 Actuarial Impact Statement.
Changes Since Prior Valuation:	Administrative expense assumption changed from \$2.2 million to \$2,044,488 for 2012/2013 fiscal year.

Information Under Florida Statutes

I. Comparison of Salary Increases

Year Ending	Actual	Assumed
	-%-	-%-
9/30/11	7.14	7.48
9/30/10	(9.33)	7.51
9/30/09	6.35	7.26
9/30/08	18.20	7.17
9/30/07	18.19*	5.81
9/30/06	2.84	5.79
9/30/05	8.15	5.77
9/30/04	10.20	5.78
9/30/03	5.38	4.00
9/30/02	2.43	2.00
9/30/01	4.79	2.00
9/30/00	7.12	2.00
9/30/99	0.52	2.75
9/30/98	(1.35)	2.75
9/30/97	(1.07)	2.75
9/30/96	0.76	2.75
9/30/95	5.50	2.75
9/30/94	2.86	3.00
9/30/93	6.37	6.80
9/30/92	3.48	6.80
9/30/91	2.65	6.80
9/30/90	2.79	7.00
9/30/89	8.64	7.00
9/30/88	6.05	7.00
9/30/87	7.45	7.50
9/30/86	7.49	7.50
9/30/85	14.28	7.50
9/30/84	11.53	7.50

* Including impact of change in valuation pay definition.

Information Under Florida Statutes

II. Comparison of Investment Returns

Year Ending	Actual MV	Actual AAV*	Assumed
-%-	-%-	-%-	-%-
9/30/11	3.6	3.98	7.50
9/30/10	9.8	4.48	7.75
9/30/09	(0.3)	(1.31)	7.75
9/30/08	(14.3)	3.65	7.75
9/30/07	14.2	8.27	7.75
9/30/06	9.1	7.57	7.75
9/30/05 (Revised	l) 15.6	7.83	7.75
9/30/05 (Prior)	15.6	8.43	7.75
9/30/04	12.9	4.29	7.75
9/30/03	15.7	3.26	7.75
9/30/02	(5.5)	(3.93)	7.75
9/30/01	(10.6)	(1.29)	7.75
9/30/00	12.7	16.01	7.75
9/30/99	13.8	13.40	7.75
9/30/98	6.9	19.45	7.75
9/30/97	28.3	26.34	8.00
9/30/96	13.2	11.27	8.00
9/30/95	21.0	12.86	7.75
9/30/94	(1.7)	5.18	7.75
9/30/93	15.8	13.73	7.75
9/30/92	9.9	12.48	7.75
9/30/91	25.9	20.93	7.75
9/30/90	0.4	1.89	7.50
9/30/89	N.A.	16.09	7.50
9/30/88	N.A.	0.08	7.50
9/30/87	N.A.	22.64	7.00
9/30/86	N.A.	21.66	7.00

* Based on mean actuarial asset values for periods ending 9/30. Rates of return on AAV prior to 9/30/05 are based on prior asset valuation methods, with COLA transfers treated as cash flow.

Information Under Florida Statutes (Continued)

III. Comparison of Payroll Growth

Year Ending	Actual	Assumed
	-%-	-%-
9/30/11	2.5	N.A.
9/30/10	(34.4)	N.A.
9/30/09	(5.5)	N.A.
9/30/08	24.8	N.A.
9/30/07	14.7	N.A.
9/30/06	(1.3)	N.A.
9/30/05	2.6	N.A.
9/30/04	(9.9)	N.A.
9/30/03	2.1	N.A.
9/30/02	8.1	N.A.
9/30/01	6.3	N.A.
9/30/00	8.5	N.A.
9/30/99	4.6	N.A.
9/30/98	6.8	N.A.
9/30/97	(4.5)	N.A.
9/30/96	1.9	N.A.
9/30/95	(1.9)	N.A.
9/30/94	1.1	N.A.
9/30/93	7.5	N.A.
9/30/92	2.1	N.A.
9/30/91	(7.6)	5.00
9/30/90	(0.8)	5.00
9/30/89	9.5	5.00
9/30/88	3.4	5.00
9/30/87	5.9	5.00
9/30/86	5.8	5.00
9/30/85	7.8	5.00
9/30/84	9.7	5.00

Disclosure Information Under GASB 25 (Excluding COLA Fund)

I. Funding Status and Progress as of September 30, 2011 and 2010

Entry Age Accrued Liability:	_\$(N	lillions)
	Sept. 30, 2011	<u>Sept. 30, 2010</u>
	-\$-	-\$-
 Retirees and beneficiaries currently receiving benefits and terminated 		
employees not yet receiving benefits	1,377.6	1,360.3
- Current employees -		
Accumulated employee contributions including interest	66.9	64.6
Employer - financed vested	91.0	89.8
Employer - financed nonvested	54.9	177.3
Total Actuarial Accrued Liability	1,590.5	1,568.3
Net assets available for benefits (market value) Unfunded Actuarial Accrued Liability	<u>987.1</u> 603.4	<u>1,027.7</u> 540.6

The actuarial accrued liability was determined as part of actuarial valuations at September 30, 2011 and September 30, 2010. Significant actuarial assumptions used include (a) a rate of return on the investment of present and future assets of 7.50 percent per year compounded annually, (b) projected salary increases of 3.25 percent per year compounded annually, attributable to inflation, (c) additional projected salary increases of 0.0 percent to 5.0 percent per year, attributable to seniority/merit and (d) 1.5% for promotions and other increases.

Disclosure Information Under GASB 25 (Excluding COLA Fund)

II. Contributions Required and Contributions Made

The funding policy provides for periodic employer contributions at actuarially determined rates that are sufficient to pay benefits when due. Contributions for normal costs are determined using the aggregate actuarial cost method. This cost method does not provide for an unfunded actuarial accrued liability.

Contributions totaling \$47,196,715 (\$40,058,891 employer and \$7,137,824 employee) were made for the year ending September 30, 2011. These contributions consisted of (a) \$47,196,175 normal cost, (b) \$0 amortization of the unfunded actuarial accrued liability, and (c) \$0 noninvestment expenses.

Significant actuarial assumptions used to compute contribution requirements are the same as those used to compute the standardized measure of the pension obligation as of the beginning of the preceding year.

III. Analysis of Funding Progress (\$ Millions)

Fiscal Year	(1) Actuarial Asset <u>Value</u> (\$)	(2) Entry Age <u>Reserve</u> (\$)	(3) Percent <u>Funded</u> (%)	(4) Unfunded EAR (2)-(1) (\$)	(5) Annual Covered <u>Payroll</u> (\$)	<u>(4)/(5)</u> (%)
	(Ψ)	(Ψ)	(70)	(Ψ)	(Ψ)	(70)
1992	476.6	483.7	99	7.1	67.1	11
1993	523.0	513.4	102	(9.6)	72.0	(13)
1994	540.3	587.5	92	47.2	72.9	65
1995	585.6	614.4	95	28.8	71.5	40
1996	626.0	650.0	96	24.0	72.9	33
1997	750.9	727.1	103	(23.8)	69.6	(34)
1997	850.7	800.7	105	(23.8) (50.0)	74.3	(67)
1998	911.7	843.2	100	(50.0) (68.5)	74.3	(88)
2000	988.8	863.4	115	(125.4)	84.3	(149)
2000	941.8	932.7	101	(125.4) (9.1)	89.7	(14) (10)
2001	741.0)52.1	101	().1)	07.1	(10)
2002	865.5	999.8	87	134.3	96.9	139
2003	865.8	1,067.9	81	202.1	98.9	204
2004	894.6	1,152.8	78	258.2	89.2	289
2005	1,064.9	1,221.6	87	156.7	91.5	171
2006	1,133.0	1,260.5	90	127.5	90.4	141
2007	1,208.8	1,318.4	92	109.6	103.6	106
2007	1,219.6	1,452.5	85	222.9	129.4	172
2008	1,165.0	1,539.3	76	374.4	122.2	306
2009	1,180.6	1,568.3	75	387.7	80.2	483
2010	1,150.3	1,590.5	72	440.2	82.2	536
2011	1,100.0	1,0000	,	110.2	02.2	550

(Excluding COLA Fund)

IV. <u>Revenues and Expenses</u>

	Revenues by Source			
Fiscal <u>Year</u> (\$)	Employee <u>Contributions</u> (\$)	Employer <u>Contributions</u> (\$)	Investment Income (\$)	<u> </u>
1992	6,115,655	10,029,747	44,569,353	60,714,755
1993	6,455,623	10,442,881	50,309,468	67,207,972
1994	7,435,034	9,296,175	36,915,202	53,646,411
1995	8,318,833	10,880,346	38,919,229	58,118,408
1996	7,852,469	16,547,235	55,421,603	79,821,307
1997	7,664,034	14,377,032	83,180,597	105,221,663
1998	7,692,571	14,155,472	96,007,011	117,855,054
1999	8,556,140	10,376,473	66,039,984	84,972,597
2000	6,257,588	5,400,784	129,752,337	141,410,709
2001	6,336,918	5,481,599	17,717,791	29,536,308
2002	6,721,236	5,400,784	(27,704,711)	(15,582,691)
2003	7,193,936	15,024,366	30,466,098	52,684,400
2004	24,415,150	32,959,003	53,963,150	111,337,303
2005	18,607,681	45,545,130	71,904,910	136,057,721
2006	7,698,594	50,635,213	71,669,124	130,002,931
2007	14,702,629	40,542,078	82,937,630	138,182,337
2008	9,719,896	36,040,251	62,728,078	108,488,225
2009	9,769,139	36,993,395	(58,111,291)	(11,348,757)
2010	10,436,367	54,342,926	62,459,916	127,239,209
2011	7,137,824	40,058,891	83,951,919	131,148,634

(Excluding COLA Fund)

IV. <u>Revenues and Expenses</u> (Continued)

		Expenses by 7	Гуре	
Fiscal <u>Year</u>	Benefits (\$)	Administrative <u>Expenses</u> (\$)	<u>Refunds</u> (\$)	<u> </u>
1992	22,345,166	1,137,047	751,088	24,233,301
1993	22,735,888	1,314,925	672,376	24,723,189
1994	23,787,091	1,420,693	510,074	25,717,858
1995	25,846,564	1,567,841	703,269	28,117,674
1996	29,506,924	1,870,188	822,497	32,199,609
1997	33,841,809	2,079,183	1,225,239	37,146,231
1998	35,593,108	2,543,855	391,524	38,537,297
1999	36,900,501	2,689,079	258,383	39,847,963
2000	41,237,423	2,710,752	258,804	44,206,979
2001	41,386,774	2,933,939	481,746	44,802,459
2002	42,766,860	2,825,903	364,256	45,957,019
2003	46,083,206	2,922,537	429,225	49,434,968
2004	53,249,450	3,334,460	301,580	56,885,490
2005	66,518,783	3,865,995	257,859	70,642,637
2006	69,825,105	4,687,601	573,228	75,085,934
2007	72,378,966	5,143,290	307,545	77,829,801
2008	77,794,816	5,469,431	664,235	83,928,482
2009	85,094,354	3,898,278	336,755	89,329,387
2010	101,438,423	3,900,819	174,358	105,513,600
2011	123,360,907	4,328,130	225,732	127,914,769

(Excluding COLA Fund)

V. <u>Schedule of Employer Contributions</u>

Fiscal Year	Annual Pension <u>Cost (APC)</u> <u>(\$)</u>	Amount <u>Contributed</u> <u>(\$)</u>	Percentage <u>Contributed</u> <u>(%)</u>	Net Pension <u>Obligation</u> <u>(\$)</u>
1994	9,296,175		100	0
1995	10,880,346		100	0
1996	16,547,235		100	0
1997	14,377,032		100	0
1998	14,155,472		100	0
1999	10,376,473		100	0
2000	5,400,784		100	0
2001	4,003,892		100	0
2002	1,051,629		100	0
2003	18,163,588		100	0
2004	36,341,515		100	0
2005	45,545,130		100	0
2006	50,635,213		100	0
2007	40,542,078		100	0
2008	36,040,251		100	0
2009	36,993,395		100	0
2010	55,095,791	54,342,926	99	752,865
2011 2012	42,287,046* 42,353,775	40,058,891	95	3,037,485

*After 9/30/2010 Impact Statement Changes

(COLA Fund)

I. COLA Increases by Duration Since Retirement

Years		FIPO	COLA	
Retired	<u>No.</u>	Benefits	Benefits	
		<u>-\$-</u>	<u>-\$-</u>	<u>%</u>
0 - 5	610	4,588,383	387	0.0
5 -10	454	2,576,264	44,787	1.7
10-15	198	820,040	93,253	11.4
15-20	254	962,204	191,735	19.9
20-25	244	759,982	295,024	38.8
25-30	139	261,360	201,733	77.2
30-35	198	194,265	305,830	157.4
35-40	124	84,141	194,555	231.2
40-45	28	15,475	53,728	347.2
45-50	17	8,564	36,026	420.6
50+	1	565	2,624	464.1
Total	2,267	10,271,243	1,419,682	13.8

II. COLA Increases by Attained Age (2012 Table)

		FIPO	COLA	
Age	<u>No.</u>	Benefits	Benefits	
		<u>-\$-</u>	<u>-\$-</u>	<u>%</u>
<45	45	252,993	1,041	0.4
45-50	246	1,658,754	341	0.0
50-54	441	2,866,986	21,200	0.7
55-59	331	2,008,755	58,138	2.9
60-64	317	1,421,982	151,478	10.7
65-69	258	960,436	222,270	23.1
70-74	177	457,349	197,006	43.1
75-79	161	311,278	242,629	77.9
80-84	181	231,379	314,484	135.9
85-89	91	86,718	168,772	194.6
>90	19	14,613	42,323	289.6
Total	2,267	10,271,243	1,419,682	13.8

(COLA Fund)

III. COLA Increases vs. CPI)

Years <u>Retired</u>	<u>No.</u>	COLA	<u></u>	COLA/CPI %
0 - 5	610	$0.0 \\ 1.7 \\ 11.4$	4.3	0.2
5 -10	454		17.8	9.8
10-15	198		34.3	33.1
15-20	254	19.9	47.4	42.1
20-25	244	38.8	71.0	54.7
25-30	139	77.2	112.9	68.4
30-35	198	157.4	196.2	80.2
35-40	124	231.2	337.6	68.5
40-45	28	347.2	511.0	67.9
45-50	17	420.6	616.7	68.2
50+	1	464.1	654.7	70.9
Total	2,267	13.8	29.5	46.9

IV. Consumer Price Index (CPI-U)

Year	December Index	Annual	<u>Year</u>	December Index	<u>Annual</u>
1956 1957 1958 1959 1960 1961 1962 1963 1964 1965	$\begin{array}{c} 27.600\\ 28.400\\ 28.900\\ 29.400\\ 29.800\\ 30.000\\ 30.400\\ 30.900\\ 31.200\\ 31.800\end{array}$	% 2.9 3.0 1.8 1.5 1.5 0.7 1.2 1.6 1.2 1.9	1981 1982 1983 1984 1985 1986 1987 1988 1989 1990	$\begin{array}{c} 94.000\\ 97.600\\ 101.300\\ 105.300\\ 109.300\\ 110.500\\ 115.400\\ 120.500\\ 126.100\\ 133.800\end{array}$	$ \frac{\%}{8.9} 3.9 3.8 4.0 3.8 1.1 4.4 4.4 4.6 6.2 $
1966 1967 1968 1969 1970 1971 1972 1973 1974 1975	$\begin{array}{c} 32.900 \\ 33.900 \\ 35.500 \\ 37.700 \\ 39.800 \\ 41.100 \\ 42.500 \\ 46.200 \\ 51.900 \\ 55.500 \end{array}$	3.4 3.0 4.7 6.1 5.5 3.4 3.4 8.7 12.2 7.0	1991 1992 1993 1994 1995 1996 1997 1998 1999 2000	$\begin{array}{c} 137.900\\ 141.900\\ 145.800\\ 149.700\\ 153.500\\ 158.600\\ 161.300\\ 163.900\\ 168.300\\ 174.000\end{array}$	$\begin{array}{c} 3.0 \\ 2.9 \\ 2.7 \\ 2.7 \\ 2.5 \\ 3.3 \\ 1.7 \\ 1.6 \\ 2.7 \\ 3.4 \end{array}$
1976 1977 1978 1979 1980	58.200 62.100 67.700 76.700 86.300	4.8 6.8 9.0 13.3 12.4	2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011	$\begin{array}{c} 176.700 \\ 180.900 \\ 184.300 \\ 190.300 \\ 196.800 \\ 201.800 \\ 210.036 \\ 210.228 \\ 215.949 \\ 219.179 \\ 226.421 * \end{array}$	1.62.41.93.33.42.54.10.12.71.5

*October 2011

(COLA Fund)

I.	<u>Sun</u>	nmary of Assets Available for Benefits at October 1, 2011	
	A.	COLA Accounts (Exhibit 2)	-\$-
		1. COLA I Account at 9/30/2011	40,447,252
		2. COLA II Account at 9/30/2011	269,586,716
	B.	 Transfers of Excess Investment Income \$0 due on 1/1/2012 \$0 due on 1/1/2013 	0 0
	C.	Minimum City Contributions ⁽¹⁾ \$5,477,808 beginning 1/1/2014 permanent, discounted	62,069,250
	D.	City Contribution 1. Contribution of \$5,064,541 due on 1/1/2012, discounted 2. Contribution of \$5,267,123 due on 1/1/2013, discounted	4,973,796 4,811,859
	E.	Assets Available for COLA Benefits	381,888,873
II.	CO	LA Fund Liabilities for Benefits at October 1, 2010 ⁽³⁾	
	A.	 Present Value of Existing COLA Benefits for inactives 1. Frozen COLA I benefits 2. COLA II benefits 3. Total inactive COLA benefits 	1,285,953 <u>272,916,617</u> 274,202,570
	B.	 Present Value of Projected COLA Benefits for Actives Reserve for current actives Reserve for future actives (15% of B1) Total 	30,082,887 <u>4,512,433</u> 34,595,320
	C.	Total Liability Allocated (A3+B4)	308,797,890
	D.	Contingency Reserve [20% of I(E)-I(B)(2)]	76,377,775
	E.	Unallocated Reserve ⁽²⁾	(3,286,792)
	F.	Total Liability for COLA Benefits	381,888,873

(1) $(1/1.0750)^{2.25}$ $\overline{a_{\infty}}$ = 11.3310379 Notes:

- (2) For 1,312 Table, II(D)+II(E) = 31,268,690
- (3) Service for COLA excludes 457 buyback service.

(COLA Fund)

III. Derivation of Increase in Table as of January 1, 2012

			-\$-
A.	Lia	bility based on current \$1,312 table	
	1.	Inactive COLA II Benefits	272,916,617
	2.	Present Value of Projected COLA	
		benefits for current actives	30,082,887
	3.	Reserve for future actives	
		[15% of (2)]	4,512,433
	4.	Total	307,511,937
B.	Ass	sets available to increase table	
	1.	Total assets available for	
		COLA Benefits	381,888,873
	2.	Total Liability Allocated	
		(current \$1,312 table)	308,797,890
	3.	Contingency Reserve II(D)	76,377,775
	4.	Available Assets [(1)-(2)-(3)]	(3,286,792)
	5.	\$0 due on 1/1/2012,	
		discounted	0
	6.	Net Available Assets [(4)-(5)]	(3,286,792)
	7.	Increase ratio [(B6)/(A4)]	0
	8.	Table increase [\$1,312x (7)]	0
	9.	New table amount $[\$1,312+(8)]$	1,312
	10.	Actual new table amount	1,312

Cumulative Ex	perience Position Net of Asset Transfers
	•

I. <u>Calculation of Expected Unfunded Actuarial Accrued Liability at 10/1/2011</u>

		-\$-
A.	Expected Unfunded Actuarial Accrued Liability at 10/1/2010	293,212,567
B.	Entry Age Normal Cost for 2010/2011 Year Paid or Payable by Employer	9,520,156
C.	Interest on (A) and (B) at 7.50%	22,704,954
D.	Contributions for 2010/2011Year Paid or Payable by Employer (Required)	40,058,891
E.	Interest on (D) at 7.50%	3,004,417
F.	Expected Unfunded Actuarial Accrued Liability at 9/30/2011	282,374,369
G.	Additional Unfunded Actuarial Accrued Liability due to1. Assumption Changes2. Plan Amendment	0 34,439
H.	Final Expected Unfunded Actuarial Accrued Liability at 9/30/2011	282,408,808
Det	ermination of Net Cumulative Experience Position at 10/1/2011(Preli	minary)
A.	Expected Unfunded Actuarial Liability as of September 30, 2011	282,408,808
B.	Entry Age Reserve - Actives - Inactives - Total	212,866,008 <u>1,377,616,763</u> 1,590,482,771
C.	Actuarial Asset Value	1,150,323,527
D.	Actual Unfunded Actuarial Liability (B)-(C)	440,159,244
E.	Cumulative Experience Gain (Loss) (A)-(D)	(157,750,436)
Fut	ure Transfers of Excess Investment Income at 10/1/2011	
A. B.	\$0 due on $1/1/2012$, discounted \$0 due on $1/1/2013$, discounted Tratal Fature Transform of $10/1/2011$ (A) (D)	0 <u>5,702,977</u> *

II.

III.

C. Total Future Transfers at 10/1/2011 (A)+(B) 5,702,977

*No transfer permitted unless cumulative experience is positive at the valuation date preceding transfer

EXHIBIT 15

CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' <u>RETIREMENT TRUST</u>

(COLA Fund)

Summary of Principal COLA Provisions

Effective Date:	January 1, 1994, amended January 1, 1995.
Eligibility:	All inactive members in Miami Fire Fighters' and Police Officers' Retirement Trust.
Prior COLA:	Benefits granted through 1993 continue to be paid, in addition to benefits to be granted in the future.
Available Assets:	Existing COLA assets as of January 1, 1995; beginning with the 1991/92 fiscal year, a percentage of excess investment return on FIPO assets (75% of first 2.5%, 50% of next 2.5%, 25% of next 2.5%), subject to a minimum City contribution of \$2.5 million, increasing 4% annually.
Allocated Assets:	Current COLA assets as of September 30, 2009, plus present value of \$2.5 million minimum guarantee. The 4% future annual increases is not pre- allocated. A contingency reserve of 9% has been established for adverse experience.
COLA Benefits:	In addition to prior COLA, benefits are based on attached table, with \$1,312 monthly benefit for 25 years of creditable service and 22 completed years of retirement (after age 46). The \$1,312 amount is reduced by 5% for each year of retirement less than 22 and each year of creditable service less than 25 and increased similarly for years of retirement greater than 22 and years of creditable service greater than 25.
	Benefits are based on the FIPO option elected. Tabular amounts are adjusted, based on the FIPO adjustments at the time of FIPO benefit commencement, for options other than Option 8 (Joint & 40%). Surviving spouses receive the percentage of the table amount determined under the FIPO election.
	Service-incurred and accidental disabilities and deaths receive benefits based on the greater of 25 years or actual creditable service.
Changes from Prior Year Valuation:	None.

Miami Firefighters' and Police Officers' Retirement Trust 2012 Monthly Retirement Supplements (\$1312 Table)

	Completed Years of Retirement (after age 46)																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	10	0	0	0	33	49	66	82	98	115	131	148	164	180	197	213	230	246	262	279	295	312	328	344	361	377
	11	0	0	0	39	59	79	98	118	138	157	177	197	216	236	256	276	295	315	335	354	374	394	413	433	453
	12	0	0	0	46	69	92	115	138	161	184	207	230	253	276	298	321	344	367	390	413	436	459	482	505	528
	13	0	0	0	52	79	105	131	157	184	210	236	262	289	315	341	367	394	420	446	472	499	525	551	577	604
	14	0	0	0	59	89	118	148	177	207	236	266	295	325	354	384	413	443	472	502	531	561	590	620	649	679
	15	0	0	0	66	98	131	164	197	230	262	295	328	361	394	426	459	492	525	558	590	623	656	689	722	754
	16	0	0	0	72	108	144	180	216	253	289	325	361	397	433	469	505	541	577	613	649	686	722	758	794	830
Y	17	0	0	0	79	118	157	197	236	276	315	354	394	433	472	512	551	590	630	669	708	748	787	827	866	905
Е	18	0	0	0	85	128	171	213	256	298	341	384	426	469	512	554	597	640	682	725	768	810	853	895	938	981
A	19	0	0	0	92	138	184	230	276	321	367	413	459	505	551	597	643	689	735	781	827	872	918	964	1010	1056
R	20	0	0	0	98	148	197	246	295	344	394	443	492	541	590	640	689	738	787	836	886	935	984	1033	1082	1132
S	21	0	0	0	105	157	210	262	315	367	420	472	525	577	630	682	735	787	840	892	945	997		1102		1207
	22	0	0	0	112	167	223	279	335	390	446	502	558	613	669	725	781	836	892	948	1004		1115		1227	1282
0	23	0	0	0	118	177	236	295	354	413	472	531	590	649	708	768	827	886	945	1004	1063	1122		1240	1299	1358
F	24	0	0	0	125	187	249	312	374	436	499	561	623	686	748	810	872	935	997	1059		1184		1309	1371	1433
0	25	0	0	0	131	197	262	328	394	459	525	590	656	722	787	853	918	984	1050		1181		1312	1378	1443	1509
С	26	0	0	0	138	207 216	276	344	413	482	551	620	689 700	758 794	827	895	964		1102	1171	1240 1299		1378	1446	1515	1584
R E	27 28	0 0	0	0 0	144 151	216 226	289 302	361 377	433 453	505 528	577 604	649 679	722 754	794 830	866 905	938 981	1010 1056	1082 1132	1155 1207	1227	1299	1371 1433	1443 1509	1515 1584	1588 1660	1660 1735
E D	20 29		0 0	0	157	220	302 315	394	453 472	526 551	630	708	754 787	866	905 945	1023	1102	1181	1207	1202		1433	1509	1653	1732	1811
L L	29 30	0 0	0	0	164	230 246	315	394 410	472	574	656	708	820	902	945 984	1023	1148		1200		1417	1558	1640		1804	1886
' T	31	0	0	0	171	240 256	320 341	410	492 512	597	682	768	853	902 938	1023	1100	1194		1364		1535		1706	1722	1876	1961
A	32	0	0	0	177	266	354	443	531	620	708	700	886	974	1023	1151	1240	1328		1506	1594	1683	1771	1860	1948	2037
В	33	0	0	0	184	276	367	459	551	643	735	827	918			1194	1286		1469	1561	1653	1745	1837	1929	2020	2112
L	34	0	0	0	190	285	380	476	571	666	761	856	951		1141	1237	1332			1617	1712		1902	1998	2093	2188
Е	35	0	0	0	197	295	394	492	590	689	787	886	984	1082	1181	1279	1378	1476	1574		1771	1870	1968	2066	2165	2263
	36	0	0	0	203	305	407	508	610	712	813	915	1017	1118	1220	1322	1424	1525	1627	1729	1830	1932	2034	2135	2237	2339
S	37	0	0	0	210	315	420	525	630	735	840	945	1050	1155	1260	1364	1469	1574	1679	1784	1889	1994	2099	2204	2309	2414
Е	38	0	0	0	216	325	433	541	649	758	866	974	1082	1191	1299	1407	1515	1624	1732	1840	1948	2057	2165	2273	2381	2490
R	39	0	0	0	223	335	446	558	669	781	892	1004	1115	1227	1338	1450	1561	1673	1784	1896	2007	2119	2230	2342	2453	2565
V	40	0	0	0	230	344	459	574	689	804	918	1033	1148	1263	1378	1492	1607	1722	1837	1952	2066	2181	2296	2411	2526	2640
Т	41	0	0	0	236	354	472	590	708	827	945	1063	1181	1299	1417	1535	1653	1771	1889	2007	2125	2244	2362	2480	2598	2716
С	42	0	0	0	243	364	485	607	728	850	971	1092	1214	1335	1456	1578	1699	1820	1942	2063	2184	2306	2427	2549	2670	2791
Е	43	0	0	0	249	374	499	623	748	872	997	1122	1246	1371	1496	1620	1745	1870	1994	2119	2244	2368	2493	2617	2742	2867
	44	0	0	0	256	384	512	640	768	895	1023	1151	1279	1407	1535	1663	1791	1919	2047	2175	2303	2430	2558	2686	2814	2942
	45	0	0	0	262	394	525	656	787	918	1050	1181	1312	1443	1574	1706	1837	1968	2099	2230	2362	2493	2624	2755	2886	3018
	46	0	0	0	269	403	538	672	807	941	1076	1210	1345	1479	1614	1748	1883	2017	2152	2286	2421	2555	2690	2824	2959	3093
	47	0	0	0	276	413	551	689	827	964	1102	1240	1378	1515	1653	1791	1929	2066	2204	2342	2480	2617	2755	2893	3031	3168
	48	0	0	0	282	423	564	705	846	987	1128		1410	1551	1692	1834	1975	2116	2257	2398	2539	2680	2821	2962	3103	3244
	49	0	0	0	289	433	577	722	866	1010	1155	1299	1443	1588	1732	1876	2020	2165	2309	2453	2598	2742	2886	3031	3175	3319
	50	0	0	0	295	443	590	738	886	1033	1181	1328	1476	1624	1771	1919	2066	2214	2362	2509	2657	2804	2952	3100	3247	3395

Miami Firefighters' and Police Officers' Retirement Trust 2012 Monthly Retirement Supplements (\$1312 Table)

Completed Years of Retirement (after age 46)

		00	07	00	00	00	04	00	00	0.4		pleted t				-		40	40		45	40	47	40	40	50
	-	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	10	394	410	426	443	459	476	492	508	525	541	558	574	590	607	623	640	656	672	689	705	722	738	754	771	787
	11	472	492	512	531	551	571	590	610	630	649	669	689	708	728	748	768	787	807	827	846	866	886	905	925	945
	12	551	574	597	620	643	666	689	712	735	758	781	804	827	850	872	895	918	941	964		1010			1079	1102
	13	630	656	682	708	735	761	787	813	840	866	892	918	945	971		1023	1050						1207		1260
	14	708	738	768	797	827	856	886	915	945		1004	1033	1063		1122		1181		1240	1269	1299	1328		1387	1417
	15	787	820	853	886	918	951	984	1017		1082					1246					1410				1542	1574
	16	866	902	938	974	1010	1046		1118		1191					1371							1624	1660	1696	1732
Y	17	945	984	1023			1141				1299		1378						1614			1732		1811	1850	1889
E	18	1023	1066	1109			1237		1322				1492		1578		1663		1748					1961	2004	2047
A	19	1102	1148	1194	1240	1286	1332					1561					1791			1929		2020		2112		2204
R	20	1181	1230	1279	1328	1378	1427	1476	1525	1574	1624	1673	1722	1771	1820	1870	1919	1968	2017	2066	2116	2165	2214	2263	2312	2362
S	21	1260	1312	1364	1417	1469	1522	1574	1627	1679	1732	1784	1837	1889	1942	1994	2047	2099	2152	2204	2257	2309	2362	2414	2467	2519
	22	1338	1394	1450	1506	1561	1617	1673	1729	1784	1840	1896	1952	2007	2063	2119	2175	2230	2286	2342	2398	2453	2509	2565	2621	2676
0	23	1417	1476	1535	1594	1653	1712	1771	1830	1889	1948	2007	2066	2125	2184	2244	2303	2362	2421	2480	2539	2598	2657	2716	2775	2834
F	24	1496	1558	1620	1683	1745	1807	1870	1932	1994	2057	2119	2181	2244	2306	2368	2430	2493	2555	2617	2680	2742	2804	2867	2929	2991
	25	1574	1640	1706	1771	1837	1902	1968	2034	2099	2165	2230	2296	2362	2427	2493	2558	2624	2690	2755	2821	2886	2952	3018	3083	3149
С	26	1653	1722	1791	1860	1929	1998	2066	2135	2204	2273	2342	2411	2480	2549	2617	2686	2755	2824	2893	2962	3031	3100	3168	3237	3306
R	27	1732	1804	1876	1948	2020		2165	2237	2309	2381	2453	2526	2598	2670	2742	2814	2886	2959	3031	3103	3175	3247	3319	3392	3464
Е	28	1811	1886	1961	2037	2112	2188	2263	2339	2414	2490	2565	2640	2716	2791	2867	2942	3018	3093	3168	3244	3319	3395	3470	3546	3621
D	29	1889	1968	2047	2125	2204	2283	2362	2440	2519	2598	2676	2755	2834	2913	2991	3070	3149	3228	3306	3385	3464	3542	3621	3700	3779
Ι	30	1968	2050	2132	2214	2296	2378	2460	2542	2624	2706	2788	2870	2952	3034	3116	3198	3280	3362	3444	3526	3608	3690	3772	3854	3936
Т	31	2047	2132	2217	2303	2388	2473	2558	2644	2729	2814	2900	2985	3070	3155	3241	3326	3411	3496	3582	3667	3752	3838	3923	4008	4093
А	32	2125	2214	2303	2391	2480	2568	2657	2745	2834	2922	3011	3100	3188	3277	3365	3454	3542	3631	3720	3808	3897	3985	4074	4162	4251
В	33	2204	2296	2388	2480	2572	2663	2755	2847	2939	3031	3123	3214	3306	3398	3490	3582	3674	3765	3857	3949	4041	4133	4225	4316	4408
L	34	2283	2378	2473	2568	2663	2758	2854	2949	3044	3139	3234	3329	3424	3519	3615	3710	3805	3900	3995	4090	4185	4280	4376	4471	4566
Е	35	2362	2460	2558	2657	2755	2854	2952	3050	3149	3247	3346	3444	3542	3641	3739	3838	3936	4034	4133	4231	4330	4428	4526	4625	4723
	36	2440	2542	2644	2745	2847	2949	3050	3152	3254	3355	3457	3559	3660	3762	3864	3966	4067	4169	4271	4372	4474	4576	4677	4779	4881
S	37	2519	2624	2729	2834	2939	3044	3149	3254	3359	3464	3569	3674	3779	3884	3988	4093	4198	4303	4408	4513	4618	4723	4828	4933	5038
Е	38	2598	2706	2814	2922	3031	3139	3247	3355	3464	3572	3680	3788	3897	4005	4113	4221	4330	4438	4546	4654	4763	4871	4979	5087	5196
R	39	2676	2788	2900	3011	3123	3234	3346	3457	3569	3680	3792	3903	4015	4126	4238	4349	4461	4572	4684	4795	4907	5018	5130	5241	5353
V	40	2755	2870	2985	3100	3214	3329	3444	3559	3674	3788	3903	4018	4133	4248	4362	4477	4592	4707	4822	4936	5051	5166	5281	5396	5510
I	41	2834	2952	3070	3188	3306	3424	3542	3660	3779	3897	4015	4133	4251	4369	4487	4605	4723	4841	4959	5077	5196	5314	5432	5550	5668
С	42	2913	3034	3155	3277	3398	3519	3641	3762	3884	4005	4126	4248	4369	4490	4612	4733	4854	4976	5097	5218	5340	5461	5583	5704	5825
Е	43	2991	3116	3241	3365	3490	3615	3739	3864	3988	4113	4238	4362	4487	4612	4736	4861	4986	5110	5235	5360	5484	5609	5733	5858	5983
	44	3070	3198	3326	3454	3582	3710	3838	3966	4093	4221	4349	4477	4605	4733	4861	4989	5117	5245	5373	5501	5628	5756	5884	6012	6140
	45	3149	3280	3411	3542	3674	3805	3936	4067	4198	4330	4461	4592	4723	4854	4986	5117	5248	5379	5510	5642	5773	5904	6035	6166	6298
	46	3228	3362	3496	3631	3765	3900	4034	4169	4303	4438	4572	4707	4841	4976	5110	5245	5379	5514	5648	5783	5917	6052	6186	6321	6455
	47	3306	3444	3582	3720	3857	3995	4133	4271	4408	4546	4684	4822	4959	5097	5235	5373	5510	5648	5786	5924	6061	6199	6337	6475	6612
	48	3385	3526	3667	3808	3949	4090	4231	4372	4513	4654	4795	4936	5077	5218	5360	5501	5642	5783	5924	6065	6206	6347	6488	6629	6770
	49	3464	3608	3752	3897	4041	4185	4330	4474	4618	4763	4907	5051	5196	5340	5484	5628	5773	5917	6061	6206	6350	6494	6639	6783	6927
	50	3542	3690	3838	3985	4133	4280	4428	4576	4723	4871	5018	5166	5314	5461	5609	5756	5904	6052	6199	6347	6494	6642	6790	6937	7085

(COLA Fund)

Summary of Actuarial Basis

Valuation Date:	January 1, 2012.							
Valuation Method:	Accrued Benefit Cost Method, based on benefits granted to date.							
Asset Valuation Method:	Market Value, plus present value contributions.	of future minimum City						
Actuarial Assumptions:								
Investment Return:	7.50%, compounded annually.							
Mortality:	RP 2000 Mortality Table, Employees and Annuitants Combined, projected by scale AA to 2020, producing following specimen rates:							
	$\begin{array}{c c} \underline{Age} & \underline{Male} \\ 20 & .0235\% \\ 30 & .0402\% \\ 40 & .0919\% \\ 50 & .1487\% \\ 60 & .4887\% \\ 70 & 1.6413\% \\ 80 & 5.7647\% \end{array}$	<u>Female</u> .0138% .0216% .0522% .1189% .4573% 1.5145% 3.9866%						
Disabled Mortality:	RP 2000 Disabled Mortality Ta producing following specimen ra	ble projected by scale AA to 2020,						
	$\begin{array}{c c} \underline{Age} & \underline{Male} \\ 20 & 1.5696\% \\ 30 & 2.0418\% \\ 40 & 1.9221\% \\ 50 & 2.0149\% \\ 60 & 3.0450\% \\ 70 & 4.6257\% \\ 80 & 8.9456\% \end{array}$	<u>Female</u> .5287% .6093% .5507% .8186% 1.9756% 3.4045% 6.2834%						

Summary of Actuarial Basis (Continued)

Age	Disability	Turno	ver
		<5	5+
20	.00085	.0240	.0192
21	.00095	.0240	.0192
22	.00105	.0240	.0192
23	.00110	.0240	.0192
24	.00125	.0240	.0192
25	.00130	.0240	.0192
26	.00140	.0240	.0192
27	.00150	.0240	.0192
28	.00160	.0240	.0192
29	.00170	.0240	.0192
30	.00180	.0240	.0192
31	.00200	.0240	.0192
32	.00220	.0240	.0192
33	.00245	.0240	.0192
34	.00265	.0240	.0192
35	.00285	.0240	.0192
36	.00305	.0228	.0182
37	.00325	.0216	.0173
38	.00345	.0204	.0163
39	.00370	.0192	.0154
40	.00390	.0180	.0144
41	.00470	.0168	.0134
42	.00555	.0156	.0125
43	.00635	.0144	.0115
44	.00720	.0132	.0106
45	.00800	.0120	.0096
46	.00880	.0096	.0077
47	.00965	.0072	.0057
48	.01045	.0048	.0038
49	.01130	.0024	.0019
50	.01210	.0000	.0000

EXHIBIT 16 Page 3

CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' <u>RETIREMENT TRUST</u> (COLA Fund)

Summary of Actuarial Basis (Continued)

Age	<u>Disability</u>	Turnover					
-	-	< 5	5+				
51	.01295	.0000	.0000				
52	.01375	.0000	.0000				
53	.01455	.0000	.0000				
54	.01540	.0000	.0000				
55	.01620	.0000	.0000				
56	.01785	.0000	.0000				
57	.01870	.0000	.0000				
58	.01950	.0000	.0000				
59	.02030	.0000	.0000				
60	.00000	.0000	.0000				
61	.00000	.0000	.0000				
62	.00000	.0000	.0000				
63	.00000	.0000	.0000				
64	.00000	.0000	.0000				
65	.00000	.0000	.0000				

Retirement: Fire Fighters who have attained 64 points by September 30, 2010 and all Police Officers are subject to the Rule of 64; the rest of the Fire Fighters are subject to the Rule of 68. If eligible for Retirement, the following decrements apply, based on service.

Years of Service	Police %	<u>Fire %</u>
<20	0	0
20-24	40	5
25-29	50	25
30-31	100	25
32	0	100

There is no explicit assumption on the percentage of retirements expected to enter the DROP. No distinction is necessary, since funding is calculated to expected retirement or expected DROP entry.

EXHIBIT 16 Page 4

CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' <u>RETIREMENT TRUST</u>

(COLA Fund)

Summary of Actuarial Basis (Continued)

Type of Disability:	100% of the disabilities are expected to be accidental disabilities.
Recovery:	No probabilities of recovery are used.
Type of Death:	100% of the assumed deaths are expected to be ordinary deaths.
Remarriage:	No probabilities of remarriage are used.
Spouse's Ages:	Females are assumed to be 3 years younger than males.
Martial Status:	All employees are assumed to be married.
Investment Expenses:	Not provided for.
Withdrawal of Employee Contributions:	It is assumed that employees do not withdraw their contribution balances upon employment termination or retirement.
Adjustments from Valuation Date:	Liabilities are discounted for 3 months at the Investment Return assumption.
	-
Sources of Data:	Asset data is from unaudited financial statements. Membership data was furnished by Administrator.

EXHIBIT 17 Page 1

CITY OF MIAMI FIRE FIGHTERS' AND POLICE OFFICERS' <u>RETIREMENT TRUST</u>

Disclosure Information Under GASB 5 (COLA Fund) (Based on 01/01/2011 \$1,312 Table)

I. Funding Status and Progress as of September 30, 2011 and 2010

Pension benefit obligation:	\$(Millions)			
- Retirees and beneficiaries currently receiving prior COLA benefits	<u>2011</u> 1.3	<u>2010</u> 1.5		
- Retirees and beneficiaries receiving COLA tabular benefits (beginning January 1) and terminated employees not yet receiving tabular benefits	267.8	279.7		
- Current Employees Accumulated employee contributions including interest	0.2	0.3		
Employer - financed vested Employer - financed non-vested	0.0 <u>34.3</u>	0.0 <u>34.1</u>		
- Total pension benefit obligation	303.6	315.6		
Net assets available for benefits Unfunded pension benefit	<u>310.0</u>	<u>311.8</u>		
(obligation)/asset	6.4	(3.8)		

The pension benefit obligations were determined as part of actuarial valuations at January 1, 2012 and January 1, 2011, based on data and asset information at September 30, 2011 and September 30, 2010. Significant actuarial assumptions used include (a) a rate of return on the investment of present and future assets of 7.50% per year compounded annually, (b) post retirement COLA benefits based on the table in effect at January 1, 2011 and January 1, 2010.

Disclosure Information Under GASB 5 (COLA Fund) (Based on 01/01/2011 \$1,312 Table)

II. Contributions Required and Contributions Made

The funding policy provides for annual employer contributions for 25 years 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 7.50 percent assumption.

III. <u>Analysis of funding Progress</u> (\$ Millions)

	(1)	(2)	(3)	(4)	(5)	
	Net Assets					
	Available	Pension		Unfunded	Annual	
Fiscal	for	Benefit	Percent	PBO	Covered	
Year	Benefits*	Obligation**	Funded	<u>(2)-(1)</u>	Payroll	<u>(4)/(5)</u>
	(\$)	(\$)	(%)	(\$)	(\$)	(%)
1993	40.8	32.5	126	(8.3)	72.0	(12)
1994	42.6	51.5	83	8.9	72.9	12
1995	63.8	52.0	123	(11.8)	71.5	(17)
1996	83.9	65.7	128	(18.1)	72.9	(25)
1997	117.7	70.8	166	(46.9)	69.6	(67)
1998	144.2	90.9	159	(53.3)	74.3	(72)
1999	180.7	116.3	155	(64.4)	77.7	(83)
2000	220.5	137.0	161	(83.5)	84.3	(99)
2001	195.0	158.4	123	(36.6)	89.7	(41)
2002	174.1	164.5	106	(9.6)	96.9	(10)
2003	194.8	165.1	118	(29.7)	98.9	(30)
2004	210.3	185.7	113	(24.7)	89.2	(28)
2005	231.6	195.0	119	(36.6)	91.5	(40)
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)

* Excluding future City minimum contributions.

** Excluding new increment, contingency reserves, and reserves for future actives.

Disclosure Information Under GASB 5 (COLA Fund)

IV. <u>Revenues and Expenses</u>

	Revenues by Source				
Fiscal	Employee	Employer	Investment		
Year	Contributions	Contributions	Income	Total	
	(\$)	(\$)	(\$)	(\$)	
1987	1,246,688	298,682	871,969	2,417,339	
1988	1,272,000	0	393,935	1,665,935	
1989	1,381,407	0	686,477	2,067,884	
1990	1,457,451	0	694,749	2,152,200	
1991	1,505,015	0	1,024,972	2,529,987	
1992	1,422,192	0	1,031,806	2,453,998	
1993	1,493,735	0	1,151,821	2,645,556	
1994	474,233	9,481,546	1,313,750	11,269,529	
1995	506	16,818,431	3,754,787	20,573,724	
1996	0	2,622,149	3,795,508	6,417,657	
1997	4,226	12,736,609	7,724,214	20,465,049	
1998	1,094	14,344,834	10,325,730	24,671,658	
1999	11,792	17,020,337	9,278,121	26,310,250	
2000	293	23,437,048	18,932,095	42,369,436	
2001	0	28,380,385	6,709,796	35,090,181	
2002	0	32,080,031	571,271	32,651,302	
2003	0	3,558,280	6,649,841	10,208,121	
2004	0	3,700,611	9,923,222	13,623,833	
2005	0	3,848,635	12,516,741	16,365,377	
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	44,696,486	
2010	0	4,682,453	18,493,888	23,176,341	
2011	0	4,869,751	25,484,227	30,353,978	

Disclosure Information Under GASB 5 (COLA Fund) (Continued)

IV. <u>Revenues and Expenses</u> (Continued)

		Expenses by Type				
Fiscal		Administrative				
Year	Benefits	Expenses	Refunds	Total		
	(\$)	(\$)	(\$)	(\$)		
1987	183,548	7,301	36,679	227,528		
1988	321,908	387	68,950	391,245		
1989	430,185	0	46,021	476,206		
1990	534,058	0	85,067	619,125		
1991	578,758	0	76,730	655,488		
1992	628,793	20,956	78,054	727,803		
1993	665,938	27,288	84,945	778,171		
1994	1,657,947	7,430	72,595	1,737,972		
1995	2,706,830	0	101,814	2,808,644		
1996	3,051,315	0	84,143	3,135,458		
1997	3,676,801	0	124,925	3,801,726		
1998	4,695,927	0	30,136	4,726,063		
1999	5,765,042	295,708	17,974	6,078,724		
2000	7,016,378	334,588	13,932	7,364,898		
2001	8,225,910	445,723	16,796	8,688,429		
2002	8,943,616	437,703	11,101	9,392,420		
2003	9,332,318	590,842	9,806	9,932,966		
2004	9,916,255	609,251	6,313	10,531,819		
2005	10,614,510	672,938	1,182	11,288,630		
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		