

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

October 1, 2012 Actuarial Report

**For the Fiscal and Plan Year
October 1, 2013
through
September 30, 2014**

Prepared By:

**The Nyhart Company, Inc.
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July 3, 2013

July 3, 2013

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

October 1, 2012 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, 2012, for the fiscal year beginning October 1, 2013.

The report is based upon the terms of Ordinance No. 10002 and the Amended Final Judgment in the matter of Gates v. City of Miami, as well as Ordinance 13344 (excluding any change to the Entry Age Cost Method).

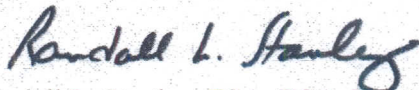
The City contribution requirement for the 2013/2014 fiscal year is \$41,827,871, compared to \$40,145,125 for the 2012/2013 fiscal year. This report reflects the impact of the increase in contributions for police officers as well as the replacement of DROP by Back DROP, effective October 1, 2012.

When expressed as a percentage of total payroll (for active members and members in forward DROP), the City contribution rate decreased from 33.70% as of October 1, 2011 to 33.53% as of October 1, 2012. The percentages of total payroll reflect the hypothetical impact on funding if there were no forward 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 a forward DROP.

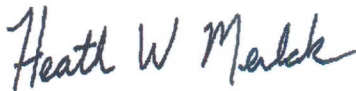
GASB Statement No. 67 is effective for the fiscal year starting 10/1/2013. Once guidance is received from GASB on various aspects of the required disclosure, we will follow up with a supplemental report reflecting GASB 67.

Respectfully submitted,

THE NYHART COMPANY, INC.



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Bound (10 copies)

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

OCTOBER 1, 2012 ACTUARIAL REPORT

Table of Contents

	-Page-
SUMMARY OF RESULTS - Regular Fund.....	1-2
SUMMARY OF RESULTS - COLA Fund	3
REVIEW OF COSTS	4-12
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
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
Application of GASB 67 and 68.....	11
COLA Fund	12
Cumulative Experience Position	12
Enrolled Actuary's Statement	13

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

OCTOBER 1, 2012 ACTUARIAL REPORT

Table of Contents

(Continued)

-Page-

EXHIBITS

1	City Contribution Requirement for 2013/2014 Fiscal Year	14
2A	Development of Actuarial Asset Value.....	16
2B	Development of Actuarial Asset Value (3 Years for COLA Transfers).....	17
2C	Calculation of Excess Investment Return	18
3	Summary of Asset Transactions	19
4	Distribution of Assets	20
5	Summary of Accounting Information	22
6	Comparison of Funding Progress	23
7	Member Statistics	24
8A	Summary of Principal System Provisions - Prior Provisions	27
8B	Summary of Principal System Provisions - Revised Provisions	33
9A	Summary of Actuarial Basis - Prior Basis	39
9B	Summary of Actuarial Basis - Revised Basis	43
10	Information Under Florida Statutes.....	47
11	Disclosure Information	50

COLA Exhibits

12	COLA Fund Increases	57
13	COLA Fund - Assets and Liabilities	59
14	Cumulative Experience Position Net of Asset Transfers	61
15	Summary of Principal COLA Provisions.....	62
16	Summary of Actuarial Basis - COLA Fund	65
17	Disclosure Information	69

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

Comparative Summary of Principal Valuation Results - Regular Fund

	Actuarial Valuation Prepared as of		
	<u>10/1/2012</u>	<u>10/1/2011</u> <u>Impact Statement</u>	<u>10/1/2011</u>
A. <u>Participant Data</u> (Ex.7)			
Active Members	1,236	1,196	1,196
Covered Payroll	\$82,205,838	\$82,164,617	\$82,164,617
Members in Forward DROP	449	481	481
DROP Payroll	\$42,524,730	\$36,943,839	\$36,943,839
Projected Total Payroll	\$124,730,568	\$119,108,456	\$119,108,456
Retired Members and Beneficiaries	2,101	2,089	2,089
Total Annualized Benefits	\$121,052,898	\$119,601,858	\$119,601,858
Disabled Members	170	178	178
Total Annualized Benefits	\$3,562,869	\$3,653,055	\$3,653,055
Terminated Vested Members	14	18	18
Total Annualized Benefits	\$398,444	\$480,262	\$480,262
B. <u>Assets</u>	-\$-	-\$-	-\$-
Actuarial Value (Ex. 2A)	1,143,606,948	1,150,323,527	1,150,323,527
Market Value (Ex. 4)	1,075,059,845	987,110,729	987,110,729
C. <u>Liabilities</u> (Excl. COLA)			
Present Value of Benefits (Ex. 1)			
Active Members - Retirement	341,843,203	335,320,411	349,219,159
Vesting	22,373,923	23,106,720	23,242,860
Disability	44,965,635	45,561,455	42,626,676
Death	6,261,069	6,214,228	3,601,943
Return of Contributions	1,805,399	1,803,932	2,199,182
Total	417,249,229	412,006,746	420,889,820
Inactive Members - Retired and Beneficiaries	1,347,162,561	1,341,405,561	1,341,422,264
Disabled	31,219,352	32,341,301	32,338,742
Terminated Vested	3,082,011	3,861,118	3,855,757
Total	1,381,463,924	1,377,607,980	1,377,616,763
Total	<u>1,798,713,153</u>	<u>1,789,614,726</u>	<u>1,798,506,583</u>
Actuarial Accrued Liability	N/A	N/A	N/A
Unfunded Actuarial Accrued Liability	N/A	N/A	N/A

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

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

		Actuarial Valuation	
		Prepared as of	
	<u>10/1/2012</u>	<u>10/1/2011</u>	<u>10/1/2011</u>
		<u>Impact Statement</u>	
D. <u>Actuarial Present Value of Accrued Benefits</u> (Exhibit 5)	-\$-	-\$-	-\$-
Vested Accrued Benefits			
Inactive Members and Beneficiaries	1,381,463,924		1,377,616,763
Active Members	<u>151,491,635</u>		<u>157,940,269</u>
Total	1,532,955,559		1,535,557,032
Non-Vested Accrued Benefits	<u>6,221,643</u>		<u>32,766,078</u>
Total	1,539,177,202		1,568,323,110
E. <u>Pension Cost</u> (Exhibit 1)			
Normal Cost	50,048,455	46,361,587	51,732,953
Payment to Amortize Unfunded Liability	N/A	N/A	N/A
Expected Plan Sponsor Contribution	41,827,871	40,145,125	45,516,491
As % of Covered Payroll	50.88%	48.86%	55.40%
As % of Total Payroll	33.53%	33.70%	38.21%
Expected Member Contribution	8,220,584	6,216,462	6,216,462
As % of Payroll	10.00%	10.00%	10.00%
F. <u>Past Contributions</u>	<u>Year Ending</u> <u>9/30/2011</u>		<u>Year Ending</u> <u>9/30/2010</u>
	-\$-		-\$-
Required Plan Sponsor Contribution	42,353,775		42,287,046
Required Member Contributions	8,390,922		7,137,824
Actual Contributions			
Plan Sponsor	42,353,775		40,058,891
Members	8,390,922		7,137,824
G. <u>Net Actuarial Gain (Loss)</u>	N/A	N/A	N/A
H. <u>Other Disclosures</u>			
Active Members:			
Present Value Future Salaries (at attained age)	1,243,531,237	1,254,333,389	1,104,448,459
Present Value Future Contributions (at attained age)	98,090,159	100,400,650	106,522,468

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

Comparative Summary of Principal Valuation Results – COLA Fund

		Actuarial Valuation Prepared as of	
		<u>10/1/2012</u>	<u>10/1/2011</u>
A. <u>Participant Data</u>			
Active Members			
Total Annual Payroll			
Retired Members and Beneficiaries		2,101	2,089
Total Annualized Benefits		\$17,727,912	\$14,157,086
Disabled Members		178	178
Total Annualized Benefits		\$3,056,099	\$2,561,808
Table		\$1,427	\$1,312
B. <u>Assets</u>		-\$-	-\$-
Actuarial Value (Ex. 13)		425,036,803	340,066,580
Market Value (Ex. 13)		350,307,706	310,033,968
C. <u>Liabilities (COLA Only)</u>			
Present Value of Benefits (Ex. 13)			
Active Members -	Reserve for Current Actives	29,909,383	30,006,601
	Reserve for Contribution Refunds	N/A	N/A
Reserve for Future Actives		<u>4,486,408</u>	<u>4,500,990</u>
Total (excl. 457 Service)		34,395,796	34,507,591
Inactive Members -	Frozen COLA I Benefits	1,105,244	1,285,953
	COLA II Benefits	<u>277,101,134</u>	<u>267,837,298</u>
	Total	278,206,378	269,123,251
Total		<u>312,602,174</u>	<u>303,630,842</u>

Comparative Summary of Total Assets - Combined

Market Value (Ex. 4)	<u>1,425,367,551</u>	<u>1,297,118,927</u>
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**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST**

REVIEW OF COSTS

Summary Discussion

This is the actuarial report for the fiscal year beginning October 1, 2013 for the City of Miami Fire Fighters' and Police Officers' Retirement Trust. This is the twenty-ninth annual actuarial report prepared by The Nyhart Company/Stanley, Holcombe & Associates, Inc. This report is intended to reflect the provisions and requirements of Ordinance No. 10002, as well as Ordinance 13344 (excluding any change to the Entry Age Cost Method).

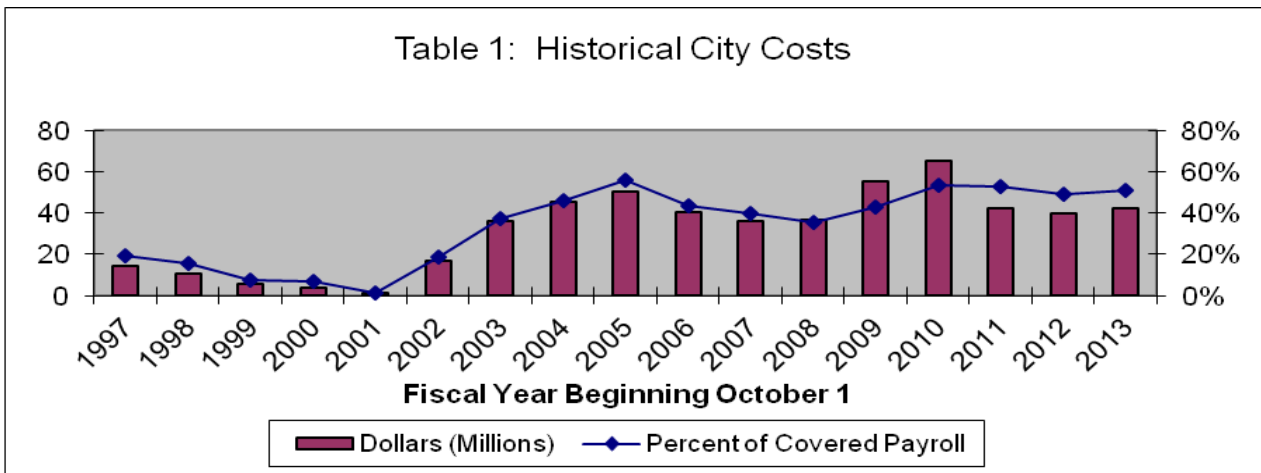
Comparison of Deposit Requirements

The City contribution requirements, and the results calculated for the 2013/2014 fiscal year, are as follows:

		<u>2012/2013</u>	
	<u>2013/2014</u>	<u>March 2013</u>	<u>Valuation</u>
	-\$-	<u>Impact Stmt.</u>	<u>Report</u>
Past Service Cost	N/A	N/A	N/A
Normal Cost	41,827,871	40,145,125	45,516,491
Payment Timing	<u>0</u>	<u>0</u>	<u>0</u>
	41,827,871	40,145,125	45,516,491
Percentage of Covered Payroll	50.88%	48.86%	55.40%
Percentage of Total Payroll	33.53%	33.70%	38.21%

The 2013/2014 deposit amount of \$41,827,871 is approximately \$1.6 million more than the \$40,145,125 for the prior year.

Table 1: Historical City Costs



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:

Table 2 – Gain/Loss Analysis of Cost Changes from October 1, 2011 to October 1, 2012 Valuations

	<u>Normal Cost</u>	
	<u>-\$-</u>	<u>-%-</u>
2011/2012 Normal Cost (Valuation Report)	45,516,491	55.40*
2011/2012 Normal Cost (Impact Stmt.) **	40,145,125	48.86*
2012/2013 Normal Cost Expected (for continuing participants)	41,369,449	47.88*
<u>Element of Experience</u>		
Salary Increases	-2,066,645	-0.03
Turnover	+94,476	+0.11
Mortality	-2,568	+0.00
Retirement	+411,416	+0.48
New Participants	+561,615	+0.68
Disability	-101,810	-0.12
Investment Return	+1,217,821	+1.49
Contribution Lag	+250,602	+0.29
Other, Data	<u>+47,693</u>	<u>+0.05</u>
Total	+412,600	+2.95
2012/2013 Normal Cost	41,782,049	50.83
Administrative Expense Assumption	45,822	0.05
2012/2013 Final Normal Cost	41,827,871	50.88*
		33.53***

* Percentage of Covered Payroll

** Includes assumption, plan provision, and valuation system changes

*** Percentage of Total Payroll

Projected Total Payroll of \$124,730,568 is equal to 100% of Covered Payroll of \$82,205,838 plus \$42,524,730 payroll for members in DROP.

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

Salary Increases - During the period October 1, 2011 through September 30, 2012, covered payroll for the continuing actives increased significantly less than expected. The combination of lower salaries and a delayed retirement assumption resulted in a decrease of \$2,066,645 in the Normal Cost. Covered payroll for continuing active participants at September 30, 2012 decreased 0.75% compared to an expected 7.43% increase.

Mortality - For active members there were no deaths, as compared to 1 expected; for inactive members there were 60 deaths (29 with survivors), as compared to 48 expected. This decreased the normal cost by \$2,568.

Disability - During the past year there were no disabilities, as compared to 5 expected. This decreased the normal cost by \$101,810.

Turnover - From October 1, 2011 to September 30, 2012, there were 8 employee terminations, as compared to 20 predicted by the actuarial assumptions. This increased the normal cost by \$94,476. Following is a comparison of the expected and actual turnover rates for the past eight years:

Table 3 – Expected and Actual Turnover by Duration

	<u>2005/2008</u>		<u>2008/2009</u>		<u>2009/2010</u>		<u>2010/2011</u>		<u>2011/2012</u>	
<u>Age</u>	<u>Exp.</u>	<u>Act.</u>	<u>Exp.</u>	<u>Act.</u>	<u>Exp.</u>	<u>Act.</u>	<u>Exp.</u>	<u>Act.</u>	<u>Exp.</u>	<u>Act.</u>
20-24	3.2	4	1.7	2	1.2	0	0.8	1	0.4	0
25-29	9.0	12	4.2	6	4.3	1	4.5	0	5.0	2
30-34	13.5	19	5.0	5	5.0	1	4.9	0	5.2	5
35-39	15.3	13	5.1	5	4.9	0	4.6	4	4.8	0
40+	<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>	<u>4.5</u>	<u>1</u>
	52.5	56	20.0	22	19.3	3	19.2	9	19.9	8

Retirement - There were 35 retirements during the period (9 firefighters, 26 police), as compared to 1 expected. This large number of retirements caused an increase in costs of 0.48% of payroll. However, the corresponding significant decline in payroll resulted in the dollar cost decreasing \$411,416.

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

Table 4 – Expected and Actual Retirements by Duration

Service*	Firefighters			Police Officers			Combined		
	Expected	Actual	A/E	Expected	Actual	A/E	Expected	Actual	A/E
0	0.70	3	4285.7%	0.00	19	0.0%	0.70	22	3142.9%
1	0.12	1	833.3%	0.03	4	13333.3%	0.15	5	3333.3%
2	0.06	0	0.0%	0.03	3	10000.0%	0.09	3	3333.3%
3	0.06	1	1666.7%	0.00	0	0.0%	0.06	1	1666.7%
4	0.12	2	1666.7%	0.00	0	0.0%	0.12	2	1666.7%
5	0.05	1	2000.0%	0.00	0	0.0%	0.05	1	2000.0%
6	0.15	1	666.7%	0.00	0	0.0%	0.15	1	666.7%
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+	<u>0.00</u>	<u>0</u>	0.0%	<u>0.00</u>	<u>0</u>	0.0%	<u>0.00</u>	<u>0</u>	0.0%
Total	1.26	9	714.3%	0.06	26	43333.3%	1.32	35	2651.5%

*After attainment of Normal Retirement Age

Investment Return - The rate of return for the year ending September 30, 2012 was 5.98% on actuarial asset value (Exhibit 2A).

As shown in Exhibit 2C, there is no COLA transfer as of January 1, 2013; there could be a transfer on January 1, 2014 of \$13,261,747 only if there were a favorable cumulative experience position as of September 30, 2013. The city minimum COLA contributions without the transfer is \$5,267,123 on January 1, 2013 and \$5,477,808 on January 1, 2014 to the COLA fund.

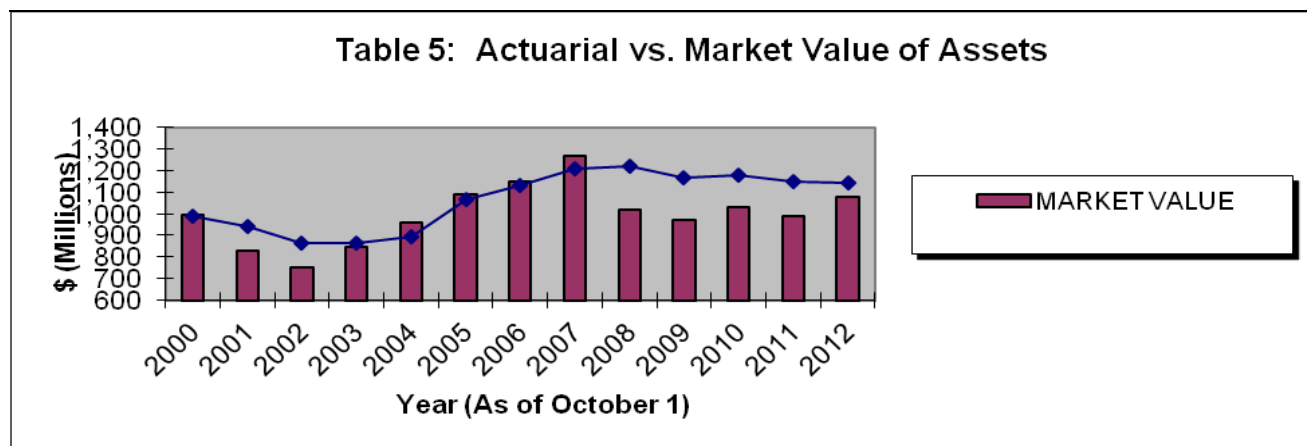
New Members – During the year there were 83 new members, who increased the City contribution percentage for the Fund by 0.68%. Last year, 31 new members decreased the rate by 1.10%.

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, 2012 was 17.4%.

The asset valuation method results in an actuarial asset value of \$1.144 billion as of October 1, 2012 (Exhibit 2A), 106% of the market value of \$1.075 billion. The rate of return on Actuarial Asset Value was 6.0%, 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, 2012 was 9.46%. This would result in a transfer of \$13,261,747 from the Regular Fund to the COLA Fund on January 1, 2014 (Exhibit 2C), if there were a favorable cumulative experience position. However, the cumulative experience position is unfavorable – a cumulative net loss of \$192 million as of October 1, 2012 (Exhibit 14).

Expected Ongoing Cost Levels

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

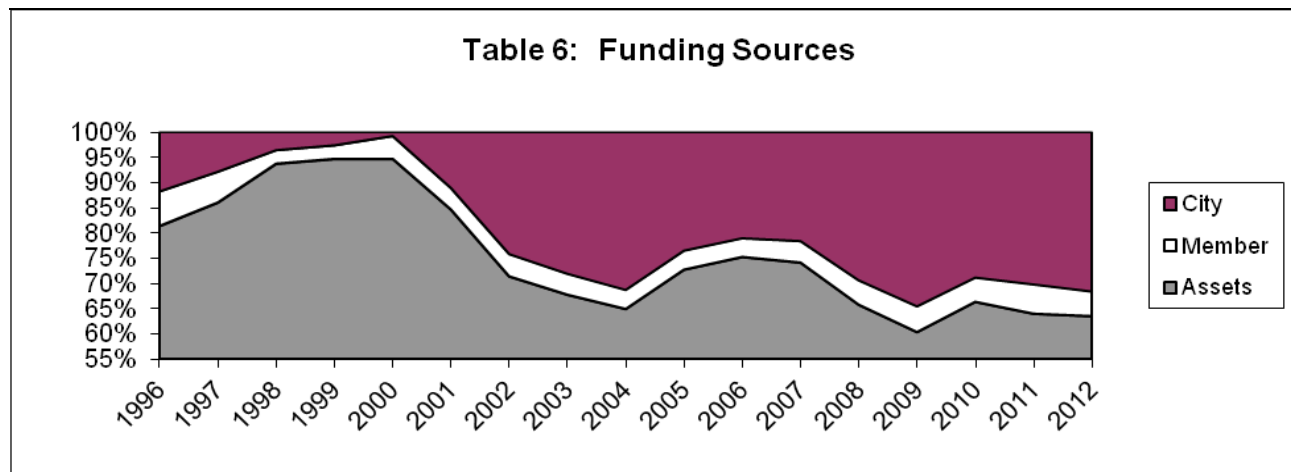
Nevertheless, it is important to distinguish between individual annual costs (which may be somewhat erratic) and expected ongoing annual costs. The following table compares the City contribution requirement as a percentage of payroll to the theoretical entry age normal City contribution percentages:

<u>Valuation Date</u>	<u>Contribution %</u>	<u>EAN %</u>
10/1/2012	51	17
10/1/2011	56	16
10/1/2010	53	18
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, 2012, the actuarial value of assets equals 64% of the present value of benefits, the present value of member contributions equals 6%, and the present value of future City normal costs equal 30% 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, 2012 is \$1,075,059,845, as compared to the value of accrued benefits of \$1,539,177,202 for a ratio of 69.8%. The ratio as of October 1, 2011 was 62.9%.

A ratio in excess of 80% typically is one indication of a well-funded program.

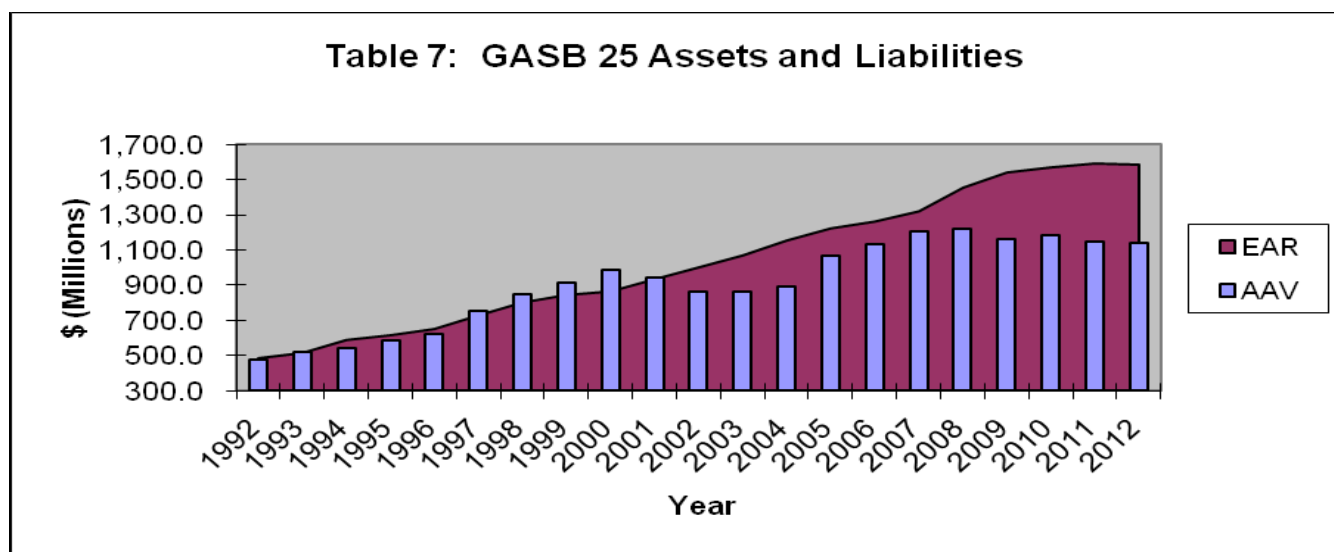
Governmental Accounting Standards

GASB issued Statement No. 25, Financial Reporting for Defined Benefit Pension Plans and Statement No. 27, Accounting for Pensions by State and Local Governmental Employers 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, 2012 the entry age reserve is \$1,573.0 million. This compares to an Actuarial Asset Value of \$1,143.6 million, for a funded ratio of 73%. Last year the funded ratio was 72%. 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 is 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.

Application of GASB 67 and 68

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

Statement No. 67 is effective for the 2013/2014 fiscal year; Statement No. 68 is effective one year later.

The final Standards are scheduled for release in January 2014.

In general, the new statements mandate:

- blended discount rates to determine the actuarial liability;
- use of the entry age normal cost method;
- assets at market values;
- balance sheet recognition of the unfunded liability;
- immediate recognition of unfunded liability changes due to benefit changes for retirees;
- for benefit changes for active members, liabilities would be recognized over future working lifetimes.

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

Allocated Contribution Requirements (2013/2014)

The Division of Retirement requires that plans covering both police and firefighters disclose the costs separately for the two groups. Since assets have not been separately maintained, this necessitates a hypothetical asset allocation. Exhibit 11 (page 55) shows this allocation, based on the Entry Age Accrued Liabilities, calculated separately for the two groups.

As shown in Exhibit 11, the asset allocation approach based on the Actuarial Accrued Liability results in allocated amounts for these two cost components that are not equal to the total components.

COLA Fund

Calculations were made based on the information provided as of 10/1/2012. The calculations reflect the approach adopted with the Amended Final Judgment in the matter of Gates vs. City of Miami.

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 1/1/2013), 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.

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. This result is the same as that for the previous year - a potential transfer eliminated due to the experience position. 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 \$157,750,436 as of October 1, 2011, to a cumulative loss of \$191,906,898 as of October 1, 2012 (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, 2013 is scheduled to be \$0 and the excess return transfer as of January 1, 2014 is \$0. Therefore, a City contribution to the COLA fund of \$5,267,123 was due as of January 1, 2013.

The excess return on the COLA Funds resulted in a \$115 increase in the COLA Table, from \$1,312 to \$1,427 (Exhibit 13).

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, 2012 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 L. Stanley

Signature

Enrolled Actuary No. 11-602

July 3, 2013

Date

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

City Contribution Requirement for 2013/2014 Fiscal Year

	<u>2013/2014</u>	<u>2012/2013</u>	
		March 2013 Actuarial <u>Impact Stmt.</u>	Valuation <u>Report</u>
	-\$-	-\$-	-\$-
I. <u>Unfunded Actuarial Accrued Liability</u>	N/A	N/A	N/A
II. <u>Normal Cost</u>			
A. Present Value of Future Benefits			
1. <u>Active Members</u>			
a. Retirement	341,843,203	335,320,411	349,219,159
b. Disability	44,965,635	45,561,455	42,626,676
c. Death	6,261,069	6,214,228	3,601,943
d. Turnover	22,373,923	23,106,720	23,242,860
e. Return of Contributions	<u>1,805,399</u>	<u>1,803,932</u>	<u>2,199,182</u>
f. Total	417,249,229	412,006,746	420,889,820
2. <u>Retired Members and Beneficiaries</u>			
a. Service Retirements and Beneficiaries	1,347,162,561	1,341,405,561	1,341,422,264
b. Disability Retirements	31,219,352	32,341,301	32,338,742
c. Terminated Vested Members	<u>3,082,011</u>	<u>3,861,118</u>	<u>3,855,757</u>
d. Total	1,381,463,924	1,377,607,980	1,377,616,763
3. Total	<u>1,798,713,153</u>	<u>1,789,614,726</u>	<u>1,798,506,583</u>

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

City Contribution Requirement for 2013/2014 Fiscal Year

	<u>2013/2014</u>	<u>2012/2013</u>	
		March 2013 Actuarial Impact Stmt.	Valuation Report
	-\$-	-\$-	-\$-
II. <u>Normal Cost</u> (Cont'd)			
A. Total Present Value of Future Benefits	1,798,713,153	1,789,614,726	1,798,506,583
B. Present Value of Future Member Contributions	98,090,159	100,400,650	106,522,468
C. Actuarial Asset Value	1,143,606,948	1,150,323,527	1,150,323,527
D. Unfunded Actuarial Accrued Liability	<u>0</u>	<u>0</u>	<u>0</u>
E. Present Value of Future Normal Costs (A-B-C-D)	557,016,046	538,890,549	541,660,588
F. Present Value of Future Payrolls	1,243,531,237	1,254,333,389	1,104,448,459
G. Administrative Expense	2,087,114	2,044,488	2,044,488
H. Current Payroll for those under Expected Retirement Age	82,205,838	82,164,617	82,164,617
I. Interest Rate	7.5%	7.5%	7.5%
J. Current Normal Cost - Payable 10/1/2013 ([(E)x(H) / (F)] + (G)) (1+(I))	41,827,871	40,145,125	45,516,491
K. Covered Payroll	82,205,838	82,164,617	82,164,617
L. Normal Cost as Percentage of Covered Payroll (J)/ (K)	50.88%	48.86%	55.40%
III. <u>Quarterly City Contribution Schedule</u>			
A. Past Service Cost	0	0	0
B. Normal Cost	41,827,871	40,145,125	45,516,491
C. Payment Timing	<u>0</u>	<u>0</u>	<u>0</u>
D. Total	<u>41,827,871</u>	<u>40,145,125</u>	<u>45,516,491</u>

**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, 2012

	-\$-
A. Actuarial Value of Assets as of 10/01/2011	1,150,323,527
B. City Contributions	42,353,775
C. Member Contributions	8,390,922
D. Benefits Paid	124,321,444
E. Contributions Refunded	765,520
F. Expected Return *	<u>84,762,464</u>
G. Expected Actuarial Value of Assets (A+B+C-D-E+F)	1,160,743,724
H. Market Value of Assets at 9/30/2012	1,075,059,845
I. Present Value of 01/01/13 COLA Transfer	0
J. Present Value of 01/01/14 COLA Transfer	0
K. Difference (H-I-J-G)	(85,683,879)
L. 20% of Difference	(17,136,776)
M. Preliminary Actuarial Asset Value (G+L)	1,143,606,948
N. Maximum Actuarial Asset Value (120% of H-I-J)	1,290,071,814
O. Minimum Actuarial Asset Value (80% of H-I-J)	860,047,876
P. Actuarial Asset Value at 10/1/2012	1,143,606,948
Q. Contribution Surplus Account Balance	0
R. Final Actuarial Value at 10/01/2012 (P – Q)	<u>1,143,606,948</u>

II. Rate of Return on Actuarial Asset Value

	-\$-
A. Actuarial Asset Value at 10/01/2011	1,150,323,527
B. Contributions	
1. City Contribution	42,353,775
2. Members	<u>8,390,922</u>
3. Total	50,744,697
C. Benefits and Refunds	125,086,964
D. Contribution Surplus	0
E. Actuarial Asset Value at 10/01/2012	1,143,606,948
F. Net Return on Investment [E+D+C-B-A]	67,625,688
G. Rate of Return (II F/I F) (.075)	5.98%

*[1,150,323,527 + 42,353,775 + (8,390,922) (2.5/4) – (124,321,444 + 765,520) (13/24)] (.075)

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

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

	<u>9/30/2012</u>	<u>9/30/2011</u>	<u>9/30/2010</u>
	<u>-\$-</u>	<u>-\$-</u>	<u>-\$-</u>
A. Book Value	982,006,300	995,657,667	992,423,802
B. Market Value	1,075,059,845	987,084,959	1,027,739,486
C. B/A	1.0947586	0.9913899	1.0355853
D. $1/3 \sum (C)$		1.0405779	
E. Adjusted Market Value at 9/30/2012 D x \$982,006,300		1,021,854,053	
F. Contribution Surplus at 9/30/2012		0	
G. 1. 80% of (Market Value – (F)) 2. 120% of (Market Value – (F))		860,047,876 1,290,071,814	
H. Preliminary Actuarial Asset Value (E – F)		1,021,854,053	
I. Present Value of 1/1/2014 COLA Transfer, discounted at 7.50%		0	
J. Actuarial Asset Value		1,021,854,053	

II. Rate of Return on Actuarial Asset Value

A. Actuarial Asset Value at 10/01/2011	-\$- 1,004,675,155
B. Contributions	
1. City Contribution	42,353,775
2. Members	8,390,922
3. Total	<u>50,744,697</u>
C. Benefits and Refunds	125,086,964
D. Present Value of 1/1/2014 COLA Transfer	0
E. Contribution Surplus	0
F. Actuarial Asset Value at 10/01/2012	1,021,854,053
G. Net Return on Investment [F+E+D+C-B-A]	91,521,165
H. Rate of Return [2 x G/ (A+F-G)]	9.46%

Calculation of Excess Investment Return
On Membership and Benefits Accounts for 2011/2012 Fiscal Year
 2014 COLA Transfer

I.	Net Actual Return on Actuarial Asset Value		- \$-
A.	Preliminary Actuarial Asset Value as of 10/1/2012		1,021,854,053
B.	Benefits Paid During Plan Year		124,321,444
C.	Contributions Refunded During Plan Year		765,520
D.	City Contributions During Plan Year (Required)		42,353,775
E.	Member Contributions During Plan Year		8,390,922
F.	Actuarial Asset Value as of 10/1/2011		<u>1,004,675,155</u>
G.	Total Actual Return During Plan year (A)+(B)-(C)-(D)-(E)-(F)-(G)		91,521,165
II.	Net Expected Return on Actuarial Asset Value		
A.	Actuarial Asset Value as of 10/1/2011		1,004,675,155
B.	Benefits Paid During Plan Year		124,321,444
C.	Contributions Refunded During Plan Year		765,520
D.	City Contributions During Plan Year (Required)		42,353,775
E.	Member Contributions During Plan Year		8,390,922
F.	Expected Rate of Return		7.50%
G.	Expected Return During Plan Year		73,838,836 *
H.	Base Amount for Expected Return (G)/.075		984,517,813
I.	Excess Return on Assets (I(G) - II(G))		17,682,329
J.	Excess Return as % of II(H)		1.796040% **
III.	Amount to be Transferred to COLA Fund		
A.	Excess Return		COLA Transfer
	%	\$	%
First	2.5	17,682,329	75
Next			50
Next			25
			--
B.	Total Transfer Amount at 1/1/2014		<u>13,261,747 ***</u>

$$[1,004,675,155 + 42,353,775 + (8,390,922) (2.5/4) - (124,321,444 + 765.520) (13/24)] (.075) =$$

***Limited to favorable cumulative experience position

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

Summary of Asset Transactions for Year Ending September 30, 2012 *

	<u>Membership and Benefits Accounts</u>	<u>COLA I Account</u>	<u>COLA II Account</u>
	-\$-	-\$-	-\$-
A. Market Value as of October 1, 2011	987,084,959	40,447,252	269,586,716
B. Book Value as of October 1, 2011	995,657,667	40,798,531	271,928,042
C. Income During Year			
1. City Contributions	42,353,775	0	5,064,541
2. Member Contributions	8,390,922	0	0
3. Other Member Contributions	0	0	0
4. Interest	20,480,487	854,428	5,615,722
5. Dividends	8,418,467	352,769	2,314,575
6. Net Realized Gains (Losses)	37,754,550	1,589,215	10,403,097
7. Securities Lending Income	653,027	27,346	179,466
8. Rental and Other Income	198,541	8,221	54,303
9. Income Transfer	0	0	0
	<u>118,249,769</u>	<u>2,831,979</u>	<u>23,631,704</u>
D. Disbursements During Years			
1. Benefit Payments	124,321,444	223,556	17,523,925
2. Contribution Refunds	765,520	421	0
3. Custodial and Investment Expenses	4,418,741	184,354	1,209,613
4. Other Expense	2,200,000	0	0
5. Securities Lending Fees	163,163	6,833	44,841
6. Building Depreciation	32,268	1,406	9,051
	<u>131,901,136</u>	<u>416,570</u>	<u>18,787,430</u>
E. Book Value as of September 30, 2012 (B)+(C)-(D)	982,006,300	43,213,940	276,772,316
F. Net Change in Unrealized Gains (Losses)	101,626,253	4,446,171	28,567,884
G. Market Value as of September 30, 2012 (A)+(C)-(D)+(F)	1,075,059,845	47,308,832	302,998,874
H. January 1, 2013 Allocation to COLA II (discounted)	<u>0</u>	<u>N/A</u>	<u>0</u>
I. Net Market Value as of September 30, 2012	1,075,059,845	47,308,832	302,998,874

* Based on unaudited financial statements.

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

Distribution of Assets as of September 30, 2012 ⁽¹⁾

Membership and Benefits and Cost-of-Living Adjustment Accounts

<u>Description</u>	<u>Market</u>	<u>Book</u>
	-\$-	-\$-
Bills, Bonds, Notes	508,402,098	480,422,088
Domestic Stocks	449,370,529	361,426,840
International Stocks	216,873,673	217,030,548
Private Equity	43,900,769	41,891,141
Money Market Funds and Time Deposits	23,072,526	21,490,439
Mutual Funds	125,109,383	121,092,927
Real Estate ⁽²⁾	1,999,913	1,999,913
Securities Lending Adjustment	<u>0</u>	<u>0</u>
A: Sub-Total	1,368,728,891	1,245,353,896
B: Cash	52,741,573	52,741,573
Receivables:		
City Contributions	13	13
Accounts Receivable	2,551	2,551
Member Contributions	0	0
Accrued Interest	4,681,425	4,681,425
Accrued Dividends	1,214,126	1,214,126
Securities Sold	<u>12,296,591</u>	<u>12,296,591</u>
C: Sub-Total	18,194,706	18,194,706
Payables:		
Budget Advance	(45,675)	(45,675)
Transfer	0	0
Tax Withheld	(675)	(675)
Accounts Payable	608,964	608,964
Securities Purchased	<u>13,735,005</u>	<u>13,735,005</u>
D: Sub-Total	<u>14,297,619</u>	<u>14,297,619</u>
E. Total (A+B+C-D)	1,425,367,551	1,301,992,556
Accounts:		
COLA I Account	47,308,832	43,213,940
COLA II Account	302,998,874	276,772,316
COLA II Transfer (1/1/2013)	0	0
F: Membership & Benefits Account	1,075,059,845	982,006,300

⁽¹⁾Based on unaudited financial statements.

⁽²⁾Reflects accumulated depreciation of \$427,258.

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

Investment Results

Yield on Mean Values for 12-Month Period Ending September 30, 2012

	-\$-	<u>Market</u> -%-	<u>Book</u> -%-
<u>Membership and Benefits Accounts*</u>			
Interest	20,480,487	2.2	2.1
Dividends	8,418,467	0.9	0.9
Rental and Other Income, less Depreciation	166,273	0.0	0.0
Realized Gains	37,754,550	4.0	3.9
Securities Lending (Net)	489,864	0.1	0.1
Increase in Unrealized Gains	101,626,253	10.7	--
Custodial and Investment Expenses	<u>(4,418,741)</u>	<u>(0.5)</u>	<u>(0.5)</u>
	164,517,153	17.4	6.5
<u>COLA I Account</u>			
Interest	854,428	2.1	2.1
Dividends	352,769	0.9	0.9
Rental and Other Income, less Depreciation	6,815	0.0	0.0
Realized Gains	1,589,215	3.9	3.9
Securities Lending (Net)	20,513	0.1	0.1
Increase in Unrealized Gains	4,446,171	11.0	--
Custodial and Investment Expenses	<u>(184,354)</u>	<u>(0.5)</u>	<u>(0.5)</u>
	7,085,557	17.5	6.5
<u>COLA II Account</u>			
Interest	5,615,722	2.1	2.1
Dividends	2,314,575	0.9	0.9
Rental and Other Income, less Depreciation	45,252	0.0	0.0
Realized Gains	10,403,097	4.0	3.9
Securities Lending (Net)	134,625	0.1	0.1
Increase in Unrealized Gains	28,567,884	10.8	--
Custodial and Investment Expenses	<u>(1,209,613)</u>	<u>(0.5)</u>	<u>(0.5)</u>
	45,871,542	17.4	6.5

*Before 1/1/2014 COLA transfer, if any

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

Summary of Accounting Information
As of October 1

	<u>2012</u>		<u>2011</u>
	<u>-\$-</u>	<u>-\$-</u>	<u>-\$-</u>
I. <u>Present Value of Vested Accrued Benefits</u>			
	(FRS 7.75%)		
A. Service Retirements and Beneficiaries	1,318,007,212	1,347,162,561	1,341,422,264
B. Disability Retirements	30,658,179	31,219,352	32,338,742
C. Vested Terminated Members	2,966,382	3,082,011	3,855,757
D. Active Members	<u>144,665,341</u>	<u>151,491,635</u>	<u>157,940,269</u>
E. Total	1,496,297,114	1,532,955,559	1,535,577,032
II. <u>Present Value of Non-Vested Accrued Benefits</u>	5,798,899	6,221,643	32,766,078
III. <u>Present Value of Accrued Benefits</u>	1,502,096,013	1,539,177,202	1,568,323,110
IV. The values of accumulated plan benefits were determined in accordance with the Academy of Actuaries Interpretations and FASB Statement No. 35, <u>Accounting and Reporting by Defined Benefit Pension Plans</u> .			
V. <u>Statement of Changes in Accrued Benefits</u>			
A. Present Value of Accrued Benefits at Beginning of Year			1,568,323,110
B. Increase (Decrease) During the Year Attributable to:			
1. Benefits Accumulated			20,599,751
2. Benefits Paid and Contributions Refunded			(125,086,964)
3. Plan Amendment (Back Drop)			(37,592,167)
4. Assumption/Method Changes (included in Plan Amendment)			0
5. Increase Due to Decrease in Discount Period			<u>112,933,472</u>
6. Net Increase			(29,145,908)
C. Present Value of Accrued Benefits at End of Year			1,539,177,202

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

Comparison of Funding Progress
(\$000)

I.	<u>Assets</u>	<u>10/1/2012</u>	<u>10/1/2011</u>	<u>10/1/2010</u>
		-\$-	-\$-	-\$-
	A. Book Value	982,006	995,683	992,424
	B. Market Value	1,075,060	987,111	1,027,740
II.	<u>Liabilities</u>			
	A. Retired and Vested	1,381,464	1,377,617	1,360,342
	B. Active			
	Employee Contributions	72,203	66,927	64,629
	Other Vested	79,288	91,013	89,805
	Non-Vested Accrued	<u>6,222</u>	<u>32,766</u>	<u>29,770</u>
	C. Total Accrued	1,539,177	1,568,323	1,544,546
III.	<u>Ratios</u>	%	%	%
	IA/IIC	63.8	63.5	64.3
	IB/IIC	69.8	62.9	66.5

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

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

Member Statistics

I. Active Members

	<u>10/1/2012</u>	<u>10/1/2011</u>	<u>10/1/2010</u>
Number of			
Males	1,064	1,023	1,039
Females	<u>172</u>	<u>173</u>	<u>188</u>
Total	1,236	1,196	1,227

Averages

Current Age	36.6	36.4	36.0
Past Service	9.6	9.5	9.1
Credited Past Service	9.6	9.5	9.1
Annual Earnings	\$66,510	\$68,700	\$65,324

II. Inactive Members

A. Retirees and Beneficiaries

Number	2,101	2,089	2,062
Average Annual Benefit	\$57,617	\$57,253	\$56,870
Average Age	62.8	62.4	62.1

B. Disabled

Number	170	178	186
Average Annual Benefit	\$20,958	\$20,523	\$20,372
Average Age	69.2	68.6	68.2

C. Vested Terminated

Number	14	18	160
Average Deferred Benefit	\$28,460	\$26,681	\$25,276
Average Age	43.2	43.9	43.6

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

Age-Service Distribution

<u>Age</u>	<u>Completed Years of Service</u>										<u>Earnings</u>	
	<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>-\$-</u>	<u>Average</u> <u>-\$-</u>
15-24	21	6	1	0	0	0	0	0	0	28	1,358,515	48,518
25-29	28	138	85	0	0	0	0	0	0	251	13,790,359	54,583
30-34	4	87	123	35	1	0	0	0	0	250	15,140,280	60,561
35-39	2	54	65	119	33	2	0	0	0	275	18,884,026	68,669
40-44	1	17	50	91	87	30	0	0	0	276	20,804,047	75,377
45-49	0	14	13	41	40	17	1	0	0	126	9,735,529	77,266
50-54	0	0	4	2	6	7	3	0	0	22	1,973,098	89,686
55-59	0	0	2	1	3	2	0	0	0	8	609,918	76,247
60-64	0	0	0	0	0	0	0	0	0	0	0	0
65+	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	56	316	343	289	170	58	4	0	0	1,236	82,205,838	66,510

Average Age: 36.6

Average Service: 9.6

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

Reconciliation of Participant Counts

	<u>Actives</u>	<u>Retirees & Beneficiaries</u>	<u>Disableds</u>	<u>Vested Terminated</u>
10/1/2011	1,196	2,089	178	18
Changes due to:				
Retirement	-35	+39		-4
Withdrawal	-8			
Disability				
Death		-52	-8	
New Beneficiary		+25		
New Hires	+83			
Data Changes				
	_____	_____	_____	_____
10/1/2012	1,236	2,101	170	14

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

Summary of Principal System Provisions – Prior Provisions

(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.

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

Summary of Principal System Provisions – Prior Provisions
(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, 2010, 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, 2010 and on or before September 30, 2011, 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, 2010 and retires on or after October 1, 2010, be less than the highest year of membership service prior to September 30, 2010.

Normal Service Age:

Age 50

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

Summary of Principal System Provisions – Prior Provisions
(Continued)

- Service Retirement: For Police Officers who have reached Rule of 64 by September 30, 2010, for Fire Fighters who had reached Rule of 64 by September 30, 2009, and for Fire Fighters who have reached Rule of 68 by September 30, 2010: 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, 2010: 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, 2010: 3% of Average Final Compensation for each year of Creditable Service; The combined percentage for service before October 1, 2010 and service after September 30, 2011 may not exceed 100% of Average Final Compensation. The final benefit may not exceed the larger of the September 30, 2010 accrued benefit and \$100,000.
- 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, 2009 and Police Officers who had 64 points by September 30, 2010. Rule of 64 also applies to the accrued benefit as of September 30, 2010 of Police Officers who were active members as of September 29, 2010.
- 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, 2009 and had attained 68 points by September 30, 2010. Rule of 68 also applies to the accrued benefit as of September 30, 2010 of Fire Fighters who were active members as of September 29, 2010.

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

Summary of Principal System Provisions – Prior Provisions
(Continued)

Rule of 70 Retirement:	Service retirement on the basis of combined age and Creditable Service equaling 70 or more, after attainment of age 50 and completion of 10 years of Creditable Service. Rule of 70 applies to all new members hired on or after October 1, 2010, as well as to all benefits accrued after September 30, 2010 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, 2010.
Disability:	<p><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.</p> <p><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.</p>
Deferred Retirement Option Plan:	Members eligible for normal retirement may elect either a BackDrop or forward DROP (maximum of 7 years).

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

Summary of Principal System Provisions – Prior Provisions
(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.
- Accidental Death: 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, 2010, for Fire Fighters who had reached Rule of 64 by September 30, 2009, and for Fire Fighters who have reached Rule of 68 by September 30, 2010: Normal Form is joint and 40% contingent survivor, with a minimum of 10 years' certain and life.

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

Summary of Principal System Provisions – Prior Provisions
(Continued)

Optional Allowances: (Continued)	<p>For all others, for benefits based on service prior to October 1, 2010: 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, 2010, Normal Form is 10 years' certain and life.</p> <p>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.</p>
Transfer of Compensated Leave Balances:	<p>Accumulated leave balances may be transferred into system immediately prior to retirement to purchase additional Creditable Service, on an actuarially equivalent basis.</p>
Transfer of 457 Balances:	<p>457 balances of Firefighters may be transferred into System at retirement to purchase additional Service for multiplier purposes.</p>
Changes Since Prior Valuation:	<p>None.</p>

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

Summary of Principal System Provisions – Revised Provisions

(Based on Ordinance No. 10002, as Amended
through Ordinance File No. 12-01048)

Effective Date:	January 1, 1940, as restated effective May 23, 1985, and amended through September 30, 2012.
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:	For Police Officers hired prior to October 1, 2012: Effective 10/1/2012: 10% Effective 9/30/2014: 7% For Police Officers hired on or after October 1, 2012, 3% more than for police officers hired prior to October 1, 2012. 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.

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

Summary of Principal System Provisions – Revised Provisions
(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, 2010, 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, 2010 and on or before September 30, 2011, the average of the highest 2 years of membership service; for members who retire on or after October 1, 2010 and on or before September 30, 2011, 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, 2010 and retires on or after October 1, 2010, be less than the highest year of membership service prior to September 30, 2010.

Normal Service Age:

Age 50

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

Summary of Principal System Provisions – Revised Provisions

(Continued)

Service Retirement:	<p>For Police Officers who have reached Rule of 64 by September 30, 2010, for Fire Fighters who had reached Rule of 64 by September 30, 2009, and for Fire Fighters who have reached Rule of 68 by September 30, 2010: 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.</p> <p>For all others, for service prior to October 1, 2010: 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, 2010: 3% of Average Final Compensation for each year of Creditable Service; The combined percentage for service before October 1, 2010 and service after September 30, 2010 may not exceed 100% of Average Final Compensation. The final benefit may not exceed the larger of the September 30, 2010 accrued benefit and \$100,000.</p>
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, 2009 and Police Officers who had 64 points by September 30, 2010. Rule of 64 also applies to the accrued benefit as of September 30, 2010 of Police Officers who were active members as of September 29, 2010.
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, 2009 and had attained 68 points by September 30, 2010. Rule of 68 also applies to the accrued benefit as of September 30, 2010 of Fire Fighters who were active members as of September 29, 2010.

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

Summary of Principal System Provisions – Revised Provisions
(Continued)

Rule of 70 Retirement:	Service retirement on the basis of combined age and Creditable Service equaling 70 or more, after attainment of age 50 and completion of 10 years of Creditable Service. Rule of 70 applies to all new members hired on or after October 1, 2010, as well as to all benefits accrued after September 30, 2010 by Fire Fighters who had not attained 68 points on September 30, 2010 and Police Officers who had not attained 64 points on September 30, 2010.
Disability:	<p><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.</p> <p><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.</p>
Deferred Retirement Option Plan:	<p>Effective January 1, 2013, members may elect the BackDROP option (maximum of 7 years), to receive:</p> <p>(a) monthly benefit based on earlier retirement date</p> <p>(b) lump sum of past payments compounded at 3%/year</p> <p>Election must be made within 10 years after eligibility for normal retirement. Members eligible for forward DROP as of January 1, 2013 or vested as of January 1, 2010 remain eligible for forward DROP.</p>

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

Summary of Principal System Provisions – Revised Provisions
(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.
- Accidental Death: 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, 2010, for Fire Fighters who had reached Rule of 64 by September 30, 2009, and for Fire Fighters who have reached Rule of 68 by September 30, 2010: Normal Form is joint and 40% contingent survivor, with a minimum of 10 years' certain and life.

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

Summary of Principal System Provisions – Revised Provisions
(Continued)

Optional Allowances: (Continued)	For all others, for benefits based on service prior to October 1, 2010: 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, 2010, 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 current Police Officers will decrease to 7% from 10% of Compensation effective 9/30/2014.
	Member Contributions for Police Officers hired on or after 10/1/12 will be 3% greater than for Police Officers hired prior to 10/1/12.
	DROP program replaced by BackDROP program effective January 1, 2013. Members eligible for forward DROP as of January 1, 2013 or vested as of October 1, 2010 remain eligible for forward DROP.

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

Summary of Actuarial Basis – Prior Basis

Valuation Date: October 1, 2012 for Fiscal Year beginning October 1, 2013.

Valuation Method: Aggregate Cost Method.

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: 7.50%, compounded annually.

Inflation: 3.25%, compounded annually.

Mortality: RP 2000 Mortality Table, Employees and Annuitants Combined, projected by scale AA to 2020, producing following specimen rates:

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.0235%	.0138%
30	.0402%	.0216%
40	.0919%	.0522%
50	.1487%	.1189%
60	.4887%	.4573%
70	1.6413%	1.5145%
80	5.7647%	3.9866%

Disabled Mortality: RP 2000 Disabled Mortality Table projected by scale AA to 2020, producing following specimen rates:

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	1.5696%	.5287%
30	2.0418%	.6093%
40	1.9221%	.5507%
50	2.0149%	.8186%
60	3.0450%	1.9756%
70	4.6257%	3.4045%
80	8.9456%	6.2834%

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

Summary of Actuarial Basis – Prior Basis
(Continued)

<u>Age</u>	<u>Disability</u>	<u>Turnover</u>	
		<u><5</u>	<u>5+</u>
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
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

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

Summary of Actuarial Basis – Prior Basis
(Continued)

Retirement: Fire Fighters who had attained 64 points by September 30, 2009 and Police Officers who had attained 64 points by September 30, 2010 are subject to the Rule of 64; Fire Fighters who had attained 68 points by September 30, 2010 are subject to the Rule of 68; all others are subject to the Rule of 70. If eligible for Retirement, the following decrements apply, based on service:

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

Members eligible for Normal Retirement are assumed to retire in accordance with these probabilities. There is no explicit assumption as to the percentage of retirements expected to enter the DROP. No distinction is necessary, since funding is calculated to expect retirement or expected DROP entry.

Salary Merit Scale:

<u>Service</u>	<u>Police</u>	<u>Fire</u>
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 \$42,524,730 in payroll for members in forward DROP during 2011/2012 year.

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

Summary of Actuarial Basis – Prior 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:	Equal to amount from previous fiscal year (\$2,044,488).
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.
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:	None.

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

Summary of Actuarial Basis – Revised Basis

Valuation Date: October 1, 2012 for Fiscal Year beginning October 1, 2013.

Valuation Method: Aggregate Cost Method.

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: 7.50%, compounded annually.

Inflation: 3.25%, compounded annually.

Mortality: RP 2000 Mortality Table, Employees and Annuitants Combined, projected by scale AA to 2020, producing following specimen rates:

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.0235%	.0138%
30	.0402%	.0216%
40	.0919%	.0522%
50	.1487%	.1189%
60	.4887%	.4573%
70	1.6413%	1.5145%
80	5.7647%	3.9866%

Disabled Mortality: RP 2000 Disabled Mortality Table projected by scale AA to 2020, producing following specimen rates:

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	1.5696%	.5287%
30	2.0418%	.6093%
40	1.9221%	.5507%
50	2.0149%	.8186%
60	3.0450%	1.9756%
70	4.6257%	3.4045%
80	8.9456%	6.2834%

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

Summary of Actuarial Basis – Revised Basis
(Continued)

<u>Age</u>	<u>Disability</u>	<u>Turnover</u>	
		<u><5</u>	<u>5+</u>
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
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

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

Summary of Actuarial Basis – Revised Basis
(Continued)

Retirement: Fire Fighters who had attained 64 points by September 30, 2009 and Police Officers who had attained 64 points by September 30, 2010 are subject to the Rule of 64; Fire Fighters who had attained 68 points by September 30, 2010 are subject to the Rule of 68; all others are subject to the Rule of 70. If eligible for Retirement, the following decrements apply, based on service:

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

All Members retire in accordance with the probabilities above. All Members are assumed to elect a five-year BackDROP when they reach five years following first retirement eligibility.

Salary Merit Scale:

<u>Service</u>	<u>Police</u>	<u>Fire</u>
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 \$42,524,730 in payroll for members in forward DROP during 2011/2012 year.

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

Summary of Actuarial Basis – Revised 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:	\$2,087,114
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:	Retirement assumptions changed to reflect assumed impact of BackDROP implementation; forward DROP discontinuation for members not eligible for Normal Retirement on January 1, 2013 or vested on September 30, 2010. Administrative expense assumption increased \$42,626 (from \$2,044,488 to \$2,087,114).

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

Information Under Florida Statutes

I. Comparison of Salary Increases

<u>Year Ending</u>	<u>Actual</u> -%-	<u>Assumed</u> -%-
9/30/12	(0.75)	7.92
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.

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

Information Under Florida Statutes

II. Comparison of Investment Returns

<u>Year Ending</u>	<u>Actual MV</u>	<u>Actual AAV*</u>	<u>Assumed</u>
-%-	-%-	-%-	-%-
9/30/12	17.4	5.98	7.50
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)	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.

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

Information Under Florida Statutes
(Continued)

III. Comparison of Payroll Growth

<u>Year Ending</u>	<u>Actual</u> -%-	<u>Assumed</u> -%-
9/30/12	0.1	N.A.
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
Average (10 years)	(1.6)	N.A.

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

Disclosure Information Under GASB 25
(Excluding COLA Fund)

I. Funding Status and Progress as of September 30, 2012 and 2011

Entry Age Accrued Liability:	<u>\$(Millions)</u>	
	<u>Sept. 30, 2012</u>	<u>Sept. 30, 2011</u>
	-\$-	-\$-
- Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	1,381.5	1,377.6
- Current employees - Accumulated employee contributions including interest	72.2	66.9
Employer - financed vested	79.3	91.0
Employer - financed nonvested	<u>40.0</u>	<u>54.9</u>
Total Actuarial Accrued Liability	1,573.0	1,590.4
Net assets available for benefits (market value)	<u>1,075.1</u>	<u>987.1</u>
Unfunded Actuarial Accrued Liability	497.9	603.3

The actuarial accrued liability was determined as part of actuarial valuations at September 30, 2012 and September 30, 2011. 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.

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

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 \$50,744,697 (\$42,353,775 employer and \$8,390,922 employee) were made for the year ending September 30, 2012. These contributions consisted of (a) \$50,744,697 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)

<u>Fiscal Year</u>	(1) <u>Actuarial Asset Value</u> (\$)	(2) <u>Entry Age Reserve</u> (\$)	(3) <u>Percent Funded</u> (%)	(4) <u>Unfunded EAR (2)-(1)</u> (\$)	(5) <u>Annual Covered Payroll</u> (\$)	(4)/(5) (%)
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)
1998	850.7	800.7	106	(50.0)	74.3	(67)
1999	911.7	843.2	108	(68.5)	77.7	(88)
2000	988.8	863.4	115	(125.4)	84.3	(149)
2001	941.8	932.7	101	(9.1)	89.7	(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
2008	1,219.6	1,452.5	85	222.9	129.4	172
2009	1,165.0	1,539.3	76	374.4	122.2	306
2010	1,180.6	1,568.3	75	387.7	80.2	483
2011	1,150.3	1,590.5	72	440.2	82.2	536
2012	1,143.6	1,573.0	73	429.4	82.2	522

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

(Excluding COLA Fund)

IV. Revenues and Expenses

<u>Fiscal Year</u> (\$)	<u>Revenues by Source</u>			
	<u>Employee Contributions</u> (\$)	<u>Employer Contributions</u> (\$)	<u>Investment Income</u> (\$)	<u>Total</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
2012	8,390,922	42,353,775	67,505,092	118,249,769

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

(Excluding COLA Fund)

IV. Revenues and Expenses (Continued)

Fiscal Year	Expenses by Type			
	Benefits	Administrative Expenses	Refunds	Total
	(\$)	(\$)	(\$)	(\$)
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
2012	124,321,444	6,814,172	765,520	131,901,136

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

(Excluding COLA Fund)

V. Schedule of Employer Contributions

<u>Fiscal Year</u>	<u>Annual Pension Cost (APC) (\$)</u>	<u>Amount Contributed (\$)</u>	<u>Percentage Contributed (%)</u>	<u>Net Pension Obligation (\$)</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	54,342,926	54,342,926	100	0
2011	42,287,046*	40,058,891	95	2,228,155
2012	42,353,775	42,353,775	100	2,395,267
2013	40,145,125			

*After 9/30/2010 Impact Statement Changes

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

Hypothetical City Contribution Requirement for 2013/2014 Fiscal Year

	2013/2014		
	<u>Total</u>	<u>Police</u>	<u>Fire</u>
	<u>-\$-</u>	<u>-\$-</u>	<u>-\$-</u>
I. <u>Unfunded Actuarial Accrued Liability</u>	N/A	N/A	N/A
II. <u>Normal Cost</u>			
A. Present Value of Future Benefits			
1. <u>Active Members</u>			
a. Retirement	341,843,203	202,583,470	139,259,733
b. Disability	44,965,635	26,648,807	18,316,828
c. Death	6,261,069	3,175,556	3,085,513
d. Turnover	22,373,923	12,130,416	10,243,507
e. Return of Contributions	<u>1,805,309</u>	<u>979,704</u>	<u>825,695</u>
f. Total	417,249,229	245,517,953	171,731,276
2. <u>Retired Members and Beneficiaries</u>			
a. Service Retirements + Beneficiaries	1,347,162,561	732,538,914	614,623,647
b. Disability Retirements	31,219,352	26,842,124	4,377,228
c. Terminated Vested Members	<u>3,082,011</u>	<u>2,509,294</u>	<u>572,717</u>
d. Total	1,381,463,924	761,890,332	619,573,592
3. Total	<u>1,798,713,153</u>	<u>1,007,408,285</u>	<u>791,304,868</u>
Entry Age Reserve			
1. Active	191,576,351	110,968,456	80,607,895
2. Inactive	<u>1,381,463,924</u>	<u>761,890,332</u>	<u>619,573,592</u>
3. Total	1,573,040,275	872,858,788	700,181,487
Actuarial Asset Value*	1,143,606,948	634,572,039	509,034,909

*Allocated based on Entry Age Reserve

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

Hypothetical City Contribution Requirement for 2013/2014 Fiscal Year

	2013/2014		
	<u>Total</u>	<u>Police</u>	<u>Fire</u>
	<u>-\$-</u>	<u>-\$-</u>	<u>-\$-</u>
II. <u>Normal Cost</u> (Cont'd)			
A. Total Present Value of Future Benefits	1,798,713,153	1,007,408,285	791,304,868
B. Present Value of Future Member Contributions	98,090,159	44,821,694	53,268,465
C. Actuarial Asset Value*	1,143,606,948	634,572,039	509,034,909
D. Unfunded Actuarial Accrued Liability	<u>0</u>	<u>0</u>	<u>0</u>
E. Present Value of Future Normal Costs (A-B-C-D)	557,016,046	328,014,552	229,001,494
F. Present Value of Future Payrolls	1,243,531,237	664,310,434	579,220,803
G. Administrative Expense*	2,087,114	1,158,112	929,002
H. Current Payroll for those under Expected Retirement Age	82,205,838	45,740,549	36,465,289
I. Interest Rate	7.5%	7.5%	7.5%
J. Current Normal Cost - Payable 10/1/2013 ([(E)x(H) / (F)] + (G)) (1+(I))	41,827,871	25,524,031	16,496,914
K. Covered Payroll	82,205,838	45,740,549	36,465,289
L. Normal Cost as Percentage of Covered Payroll (J)/ (K)	50.88%	55.80%	45.24%
III. <u>Quarterly City Contribution Schedule</u>			
A. Past Service Cost	0	0	0
B. Normal Cost	41,827,871	25,524,031	16,496,914
C. Payment Timing	<u>0</u>	<u>0</u>	<u>0</u>
D. Total	<u>41,827,871</u>	<u>25,524,031</u>	<u>16,496,914</u>

*Allocated based on Entry Age Reserve

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

(COLA Fund)

I. COLA Increases by Duration Since Retirement

<u>Years Retired</u>	<u>No.</u>	<u>FIPO Benefits</u>	<u>COLA Benefits</u>	<u>%</u>
		<u>-\$-</u>	<u>-\$-</u>	
0 - 5	589	4,431,063	274	0.0
5 -10	497	2,859,021	69,271	2.4
10-15	172	714,325	80,124	11.2
15-20	278	1,081,418	224,546	20.8
20-25	221	691,392	265,393	38.4
25-30	147	307,293	218,618	71.1
30-35	172	171,832	260,391	151.5
35-40	135	95,233	205,319	215.6
40-45	40	22,549	72,946	323.5
45-50	16	8,306	35,353	425.6
50+	4	2,215	10,168	459.0
Total	<u>2,271</u>	<u>10,384,647</u>	<u>1,442,403</u>	<u>13.9</u>

II. COLA Increases by Attained Age (2012 Table)

<u>Age</u>	<u>No.</u>	<u>FIPO Benefits</u>	<u>COLA Benefits</u>	<u>%</u>
		<u>-\$-</u>	<u>-\$-</u>	
<45	35	167,620	1,126	0.7
45-50	204	1,309,619	512	0.0
50-54	445	2,913,467	25,433	0.9
55-59	362	2,262,845	62,206	2.7
60-64	321	1,532,534	154,402	10.1
65-69	265	1,023,796	225,077	22.0
70-74	186	519,985	213,507	41.1
75-79	153	302,488	218,576	72.3
80-84	169	226,009	295,878	130.9
85-89	105	107,667	190,320	176.8
>90	26	18,617	55,366	297.4
Total	<u>2,271</u>	<u>10,384,647</u>	<u>1,442,403</u>	<u>13.9</u>

CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST
(COLA Fund)

III. COLA Increases vs. CPI

<u>Years Retired</u>	<u>No.</u>	<u>COLA</u> <u>-%-</u>	<u>CPI</u> <u>-%-</u>	<u>COLA/CPI</u> <u>%</u>
0 - 5	589	0.0	5.2	0.1
5 -10	497	2.4	18.0	13.4
10-15	172	11.2	34.1	32.9
15-20	278	20.8	48.0	43.2
20-25	221	38.4	70.0	54.9
25-30	147	71.1	109.9	64.8
30-35	172	151.5	178.0	85.1
35-40	135	215.6	308.5	69.9
40-45	40	323.5	475.1	68.1
45-50	16	425.6	611.6	69.6
50+	4	459.0	657.8	69.8
Total	2,271	13.9	29.9	46.5

IV. Consumer Price Index (CPI-U)

<u>Year</u>	<u>December Index</u>	<u>Annual</u> <u>%</u>	<u>Year</u>	<u>December Index</u>	<u>Annual</u> <u>%</u>
1956	27.600	2.9	1986	110.500	1.1
1957	28.400	3.0	1987	115.400	4.4
1958	28.900	1.8	1988	120.500	4.4
1959	29.400	1.5	1989	126.100	4.6
1960	29.800	1.5	1990	133.800	6.2
1961	30.000	0.7	1991	137.900	3.0
1962	30.400	1.2	1992	141.900	2.9
1963	30.900	1.6	1993	145.800	2.7
1964	31.200	1.2	1994	149.700	2.7
1965	31.800	1.9	1995	153.500	2.5
1966	32.900	3.4	1996	158.600	3.3
1967	33.900	3.0	1997	161.300	1.7
1968	35.500	4.7	1998	163.900	1.6
1969	37.700	6.1	1999	168.300	2.7
1970	39.800	5.5	2000	174.000	3.4
1971	41.100	3.4	2001	176.700	1.6
1972	42.500	3.4	2002	180.900	2.4
1973	46.200	8.7	2003	184.300	1.9
1974	51.900	12.2	2004	190.300	3.3
1975	55.500	7.0	2005	196.800	3.4
1976	58.200	4.8	2006	201.800	2.5
1977	62.100	6.8	2007	210.036	4.1
1978	67.700	9.0	2008	210.228	0.1
1979	76.700	13.3	2009	215.949	2.7
1980	86.300	12.4	2010	219.179	1.5
1981	94.000	8.9	2011	225.672	3.0
1982	97.600	3.9	2012	229.601	1.7
1983	101.300	3.8			
1984	105.300	4.0			
1985	109.300	3.8			

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

(COLA Fund)

I. Summary of Assets Available for Benefits at October 1, 2012

	-\$-
A. COLA Accounts (Exhibit 4)	
1. COLA I Account at 9/30/2012	47,308,832
2. COLA II Account at 9/30/2012	302,998,874
B. Transfers of Excess Investment Income	
1. \$0 due on 1/1/2013	0
2. \$0 due on 1/1/2014	0
C. Minimum City Contributions ⁽¹⁾ \$5,696,920 beginning 1/1/2015 permanent, discounted	64,552,016
D. City Contribution	
1. Contribution of \$5,267,123 due on 1/1/2013, discounted	5,172,748
2. Contribution of \$5,477,808 due on 1/1/2014, discounted	5,004,333
E. Assets Available for COLA Benefits	<u>425,036,803</u>

II. COLA Fund Liabilities for Benefits at October 1, 2012 ⁽³⁾

A. Present Value of Existing COLA Benefits for inactives	
1. Frozen COLA I benefits	1,105,244
2. COLA II benefits	<u>277,101,134</u>
3. Total inactive COLA benefits	278,206,378
B. Present Value of Projected COLA Benefits for Actives	
1. Reserve for current actives	29,909,388
2. Reserve for future actives (15% of B1)	<u>4,486,408</u>
3. Total	34,395,796
C. Total Liability Allocated (A3+B4)	312,602,174
D. Contingency Reserve [20% of I(E)-I(B)(2)]	85,007,361
E. Unallocated Reserve ⁽²⁾	<u>27,427,268</u>
F. Total Liability for COLA Benefits	425,036,803

Notes: (1) $(1/1.0750)^{2.25} \ddot{a}_{\infty} = 11.3310379$
(2) For \$1,312 Table, II(D)+II(E) = \$112,434,629
(3) Service for COLA excludes 457 buyback service.

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

(COLA Fund)

III. Derivation of Increase in Table as of January 1, 2013

	-\$-
A. Liability based on current \$1,312 table	
1. Inactive COLA II Benefits	277,101,134
2. Present Value of Projected COLA benefits for current actives	29,909,388
3. Reserve for future actives [15% of (2)]	<u>4,486,408</u>
4. Total	311,496,930
B. Assets available to increase table	
1. Total assets available for COLA Benefits	425,036,803
2. Total Liability Allocated (current \$1,312 table)	312,602,174
3. Contingency Reserve II(D)	<u>85,007,361</u>
4. Available Assets [(1)-(2)-(3)]	27,427,268
5. \$0 due on 1/1/2014, discounted	<u>0</u>
6. Net Available Assets [(4)-(5)]	27,427,268
7. Increase ratio [(B6)/ (A4)]	0.088050
8. Table increase [\$1,312x (7)]	115
9. New table amount [\$1,312+ (8)]	1,427
10. Actual new table amount	1,427

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST
(COLA Fund)**

Cumulative Experience Position Net of Asset Transfers

I.	<u>Calculation of Expected Unfunded Actuarial Accrued Liability at 10/1/2012</u>	
		-\$-
A.	Expected Unfunded Actuarial Accrued Liability at 10/1/2011	282,408,808
B.	Entry Age Normal Cost for 2011/2012 Year Paid or Payable by Employer	7,900,505
C.	Interest on (A) and (B) at 7.50%	21,773,198
D.	Contributions for 2011/2012 Year Paid or Payable by Employer (Required)	42,353,775
E.	Interest on (D) at 7.50%	<u>3,176,533</u>
F.	Expected Unfunded Actuarial Accrued Liability at 9/30/2012	266,552,203
G.	Additional Unfunded Actuarial Accrued Liability due to	
	1. Assumption Changes and Plan Amendments	(26,602,681)
	2. Plan Amendment	<u>0</u>
H.	Final Expected Unfunded Actuarial Accrued Liability at 9/30/2012	239,949,522
II.	<u>Determination of Net Cumulative Experience Position at 10/1/2012 (Preliminary)</u>	
A.	Expected Unfunded Actuarial Liability as of September 30, 2012	239,949,522
B.	Entry Age Reserve - Actives	191,576,351
	- Inactives	<u>1,381,463,924</u>
	- Total	1,573,040,275
C.	Actuarial Asset Value	1,141,183,855
D.	Actual Unfunded Actuarial Liability (B)-(C)	<u>431,856,420</u>
E.	Cumulative Experience Gain (Loss) (A)-(D)	(191,906,898)
III.	<u>Future Transfers of Excess Investment Income at 10/1/2012</u>	
A.	\$0 due on 1/1/2013, discounted	0
B.	\$13,261,747 due on 1/1/2014, discounted	<u>12,115,467*</u>
C.	Total Future Transfers at 10/1/2012 (A)+(B)	12,115,467

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

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

(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, 2012, plus present value of \$2.5 million minimum guarantee. The 4% future annual increases is not pre-allocated. A contingency reserve of 20% has been established for adverse experience.
COLA Benefits:	<p>In addition to prior COLA, benefits are based on attached table, with \$1,427 monthly benefit for 25 years of creditable service and 22 completed years of retirement (after age 46). The \$1,427 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.</p> <p>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.</p> <p>Service-incurred and accidental disabilities and deaths receive benefits based on the greater of 25 years or actual creditable service.</p>
Changes from Prior Year Valuation:	The radix of the COLA table was increased from \$1,312 to \$1,427.

Miami Firefighters' and Police Officers' Retirement Trust
2013 Monthly Retirement Supplements (\$1427 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
YEARS	10	0	0	0	36	54	71	89	107	125	143	161	178	196	214	232	250	268	285	303	321	339	357	375	392	410
	11	0	0	0	43	64	86	107	128	150	171	193	214	235	257	278	300	321	342	364	385	407	428	450	471	492
	12	0	0	0	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	474	499	524	549	574
	13	0	0	0	57	86	114	143	171	200	228	257	285	314	342	371	400	428	457	485	514	542	571	599	628	656
	14	0	0	0	64	96	128	161	193	225	257	289	321	353	385	417	450	482	514	546	578	610	642	674	706	738
O	15	0	0	0	71	107	143	178	214	250	285	321	357	392	428	464	499	535	571	606	642	678	714	749	785	821
	16	0	0	0	78	118	157	196	235	275	314	353	392	432	471	510	549	589	628	667	706	746	785	824	863	903
	17	0	0	0	86	128	171	214	257	300	342	385	428	471	514	557	599	642	685	728	771	813	856	899	942	985
	18	0	0	0	93	139	186	232	278	325	371	417	464	510	557	603	649	696	742	788	835	881	928	974	1020	1067
	19	0	0	0	100	150	200	250	300	350	400	450	499	549	599	649	699	749	799	849	899	949	999	1049	1099	1149
F	20	0	0	0	107	161	214	268	321	375	428	482	535	589	642	696	749	803	856	910	963	1017	1070	1124	1177	1231
	21	0	0	0	114	171	228	285	342	400	457	514	571	628	685	742	799	856	913	970	1027	1085	1142	1199	1256	1313
	22	0	0	0	121	182	243	303	364	425	485	546	606	667	728	788	849	910	970	1031	1092	1152	1213	1274	1334	1395
	23	0	0	0	128	193	257	321	385	450	514	578	642	706	771	835	899	963	1027	1092	1156	1220	1284	1349	1413	1477
	24	0	0	0	136	203	271	339	407	474	542	610	678	746	813	881	949	1017	1085	1152	1220	1288	1356	1423	1491	1559
C	25	0	0	0	143	214	285	357	428	499	571	642	714	785	856	928	999	1070	1142	1213	1284	1356	1427	1498	1570	1641
	26	0	0	0	150	225	300	375	450	524	599	674	749	824	899	974	1049	1124	1199	1274	1349	1423	1498	1573	1648	1723
	27	0	0	0	157	235	314	392	471	549	628	706	785	863	942	1020	1099	1177	1256	1334	1413	1491	1570	1648	1727	1805
	28	0	0	0	164	246	328	410	492	574	656	738	821	903	985	1067	1149	1231	1313	1395	1477	1559	1641	1723	1805	1887
	29	0	0	0	171	257	342	428	514	599	685	771	856	942	1027	1113	1199	1284	1370	1456	1541	1627	1712	1798	1884	1969
I	30	0	0	0	178	268	357	446	535	624	714	803	892	981	1070	1159	1249	1338	1427	1516	1605	1695	1784	1873	1962	2051
	31	0	0	0	186	278	371	464	557	649	742	835	928	1020	1113	1206	1299	1391	1484	1577	1670	1762	1855	1948	2041	2133
	32	0	0	0	193	289	385	482	578	674	771	867	963	1060	1156	1252	1349	1445	1541	1637	1734	1830	1926	2023	2119	2215
	33	0	0	0	200	300	400	499	599	699	799	899	999	1099	1199	1299	1398	1498	1598	1698	1798	1898	1998	2098	2198	2297
	34	0	0	0	207	310	414	517	621	724	828	931	1035	1138	1241	1345	1448	1552	1655	1759	1862	1966	2069	2173	2276	2380
E	35	0	0	0	214	321	428	535	642	749	856	963	1070	1177	1284	1391	1498	1605	1712	1819	1926	2033	2141	2248	2355	2462
	36	0	0	0	221	332	442	553	664	774	885	995	1106	1217	1327	1438	1548	1659	1769	1880	1991	2101	2212	2322	2433	2544
	37	0	0	0	228	342	457	571	685	799	913	1027	1142	1256	1370	1484	1598	1712	1827	1941	2055	2169	2283	2397	2512	2626
	38	0	0	0	235	353	471	589	706	824	942	1060	1177	1295	1413	1530	1648	1766	1884	2001	2119	2237	2355	2472	2590	2708
	39	0	0	0	243	364	485	606	728	849	970	1092	1213	1334	1456	1577	1698	1819	1941	2062	2183	2305	2426	2547	2668	2790
V	40	0	0	0	250	375	499	624	749	874	999	1124	1249	1373	1498	1623	1748	1873	1998	2123	2248	2372	2497	2622	2747	2872
	41	0	0	0	257	385	514	642	771	899	1027	1156	1284	1413	1541	1670	1798	1926	2055	2183	2312	2440	2569	2697	2825	2954
	42	0	0	0	264	396	528	660	792	924	1056	1188	1320	1452	1584	1716	1848	1980	2112	2244	2376	2508	2640	2772	2904	3036
	43	0	0	0	271	407	542	678	813	949	1085	1220	1356	1491	1627	1762	1898	2033	2169	2305	2440	2576	2711	2847	2982	3118
	44	0	0	0	278	417	557	696	835	974	1113	1252	1391	1530	1670	1809	1948	2087	2226	2365	2504	2644	2783	2922	3061	3200
I	45	0	0	0	285	428	571	714	856	999	1142	1284	1427	1570	1712	1855	1998	2141	2283	2426	2569	2711	2854	2997	3139	3282
	46	0	0	0	293	439	585	731	878	1024	1170	1316	1463	1609	1755	1901	2048	2194	2340	2487	2633	2779	2925	3072	3218	3364
	47	0	0	0	300	450	599	749	899	1049	1199	1349	1498	1648	1798	1948	2098	2248	2397	2547	2697	2847	2997	3147	3296	3446
	48	0	0	0	307	460	614	767	920	1074	1227	1381	1534	1687	1841	1994	2148	2301	2454	2608	2761	2915	3068	3221	3375	3528
	49	0	0	0	314	471	628	785	942	1099	1256	1413	1570	1727	1884	2041	2198	2355	2512	2668	2825	2982	3139	3296	3453	3610
E	50	0	0	0	321	482	642	803	963	1124	1284	1445	1605	1766	1926	2087	2248	2408	2569	2729	2890	3050	3211	3371	3532	3692

Miami Firefighters' and Police Officers' Retirement Trust
2013 Monthly Retirement Supplements (\$1427 Table)

		Completed Years of Retirement (after age 46)																											
		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			
Y E A R S	10	428	446	464	482	499	517	535	553	571	589	606	624	642	660	678	696	714	731	749	767	785	803	821	838	856			
	11	514	535	557	578	599	621	642	664	685	706	728	749	771	792	813	835	856	878	899	920	942	963	985	1006	1027			
	12	599	624	649	674	699	724	749	774	799	824	849	874	899	924	949	974	999	1024	1049	1074	1099	1124	1149	1174	1199			
	13	685	714	742	771	799	828	856	885	913	942	970	999	1027	1056	1085	1113	1142	1170	1199	1227	1256	1284	1313	1341	1370			
	14	771	803	835	867	899	931	963	995	1027	1060	1092	1124	1156	1188	1220	1252	1284	1316	1349	1381	1413	1445	1477	1509	1541			
O F F I C E	15	856	892	928	963	999	1035	1070	1106	1142	1177	1213	1249	1284	1320	1356	1391	1427	1463	1498	1534	1570	1605	1641	1677	1712			
	16	942	981	1020	1060	1099	1138	1177	1217	1256	1295	1334	1373	1413	1452	1491	1530	1570	1609	1648	1687	1727	1766	1805	1844	1884			
	17	1027	1070	1113	1156	1199	1241	1284	1327	1370	1413	1456	1498	1541	1584	1627	1670	1712	1755	1798	1841	1884	1926	1969	2012	2055			
	18	1113	1159	1206	1252	1299	1345	1391	1438	1484	1530	1577	1623	1670	1716	1762	1809	1855	1901	1948	1994	2041	2087	2133	2180	2226			
	19	1199	1249	1299	1349	1398	1448	1498	1548	1598	1648	1698	1748	1798	1848	1898	1948	1998	2048	2098	2148	2198	2248	2297	2347	2397			
C O M P L E T E D	20	1284	1338	1391	1445	1498	1552	1605	1659	1712	1766	1819	1873	1926	1980	2033	2087	2141	2194	2248	2301	2355	2408	2462	2515	2569			
	21	1370	1427	1484	1541	1598	1655	1712	1769	1827	1884	1941	1998	2055	2112	2169	2226	2283	2340	2397	2454	2512	2569	2626	2683	2740			
	22	1456	1516	1577	1637	1698	1759	1819	1880	1941	2001	2062	2123	2183	2244	2305	2365	2426	2487	2547	2608	2668	2729	2790	2850	2911			
	23	1541	1605	1670	1734	1798	1862	1926	1991	2055	2119	2183	2248	2312	2376	2440	2504	2569	2633	2697	2761	2825	2890	2954	3018	3082			
	24	1627	1695	1762	1830	1898	1966	2033	2101	2169	2237	2305	2372	2440	2508	2576	2644	2711	2779	2847	2915	2982	3050	3118	3186	3254			
R E T I R E D	25	1712	1784	1855	1926	1998	2069	2141	2212	2283	2355	2426	2497	2569	2640	2711	2783	2854	2925	2997	3068	3139	3211	3282	3353	3425			
	26	1798	1873	1948	2023	2098	2173	2248	2322	2397	2472	2547	2622	2697	2772	2847	2922	2997	3072	3147	3221	3296	3371	3446	3521	3596			
	27	1884	1962	2041	2119	2198	2276	2355	2433	2512	2590	2668	2747	2825	2904	2982	3061	3139	3218	3296	3375	3453	3532	3610	3689	3767			
	28	1969	2051	2133	2215	2297	2380	2462	2544	2626	2708	2790	2872	2954	3036	3118	3200	3282	3364	3446	3528	3610	3692	3774	3856	3939			
	29	2055	2141	2226	2312	2397	2483	2569	2654	2740	2825	2911	2997	3082	3168	3254	3339	3425	3510	3596	3682	3767	3853	3939	4024	4110			
I N T E R M E D I A T E	30	2141	2230	2319	2408	2497	2586	2676	2765	2854	2943	3032	3122	3211	3300	3389	3478	3568	3657	3746	3835	3924	4013	4103	4192	4281			
	31	2226	2319	2412	2504	2597	2690	2783	2875	2968	3061	3154	3246	3339	3432	3525	3617	3710	3803	3896	3988	4081	4174	4267	4359	4452			
	32	2312	2408	2504	2601	2697	2793	2890	2986	3082	3179	3275	3371	3468	3564	3660	3757	3853	3949	4046	4142	4238	4335	4431	4527	4623			
	33	2397	2497	2597	2697	2797	2897	2997	3097	3196	3296	3396	3496	3596	3696	3796	3896	3996	4095	4195	4295	4395	4495	4595	4695	4795			
	34	2483	2586	2690	2793	2897	3000	3104	3207	3311	3414	3518	3621	3724	3828	3931	4035	4138	4242	4345	4449	4552	4656	4759	4863	4966			
E X P E C T E D	35	2569	2676	2783	2890	2997	3104	3211	3318	3425	3532	3639	3746	3853	3960	4067	4174	4281	4388	4495	4602	4709	4816	4923	5030	5137			
	36	2654	2765	2875	2986	3097	3207	3318	3428	3539	3650	3760	3871	3981	4092	4203	4313	4424	4534	4645	4755	4866	4977	5087	5198	5308			
	37	2740	2854	2968	3082	3196	3311	3425	3539	3653	3767	3881	3996	4110	4224	4338	4452	4566	4681	4795	4909	5023	5137	5251	5366	5480			
	38	2825	2943	3061	3179	3296	3414	3532	3650	3767	3885	4003	4120	4238	4356	4474	4591	4709	4827	4945	5062	5180	5298	5415	5533	5651			
	39	2911	3032	3154	3275	3396	3518	3639	3760	3881	4003	4124	4245	4367	4488	4609	4731	4852	4973	5094	5216	5337	5458	5580	5701	5822			
V O L U N T A R Y	40	2997	3122	3246	3371	3496	3621	3746	3871	3996	4120	4245	4370	4495	4620	4745	4870	4995	5119	5244	5369	5494	5619	5744	5869	5993			
	41	3082	3211	3339	3468	3596	3724	3853	3981	4110	4238	4367	4495	4623	4752	4880	5009	5137	5266	5394	5522	5651	5779	5908	6036	6165			
	42	3168	3300	3432	3564	3696	3828	3960	4092	4224	4356	4488	4620	4752	4884	5016	5148	5280	5412	5544	5676	5808	5940	6072	6204	6336			
	43	3254	3389	3525	3660	3796	3931	4067	4203	4338	4474	4609	4745	4880	5016	5151	5287	5423	5558	5694	5829	5965	6100	6236	6372	6507			
	44	3339	3478	3617	3757	3896	4035	4174	4313	4452	4591	4731	4870	5009	5148	5287	5426	5565	5704	5844	5983	6122	6261	6400	6539	6678			
A N T I C I P A T O R Y	45	3425	3568	3710	3853	3996	4138	4281	4424	4566	4709	4852	4995	5137	5280	5423	5565	5708	5851	5993	6136	6279	6421	6564	6707	6850			
	46	3510	3657	3803	3949	4095	4242	4388	4534	4681	4827	4973	5119	5266	5412	5558	5704	5851	5997	6143	6290	6436	6582	6728	6875	7021			
	47	3596	3746	3896	4046	4195	4345	4495	4645	4795	4945	5094	5244	5394	5544	5694	5844	5993	6143	6293	6443	6593	6743	6892	7042	7192			
	48	3682	3835	3988	4142	4295	4449	4602	4755	4909	5062	5216	5369	5522	5676	5829	5983	6136	6290	6443	6596	6750	6903	7057	7210	7363			
	49	3767	3924	4081	4238	4395	4552	4709	4866	5023	5180	5337	5494	5651	5808	5965	6122	6279	6436	6593	6750	6907	7064	7221	7378	7535			
	50	3853	4013	4174	4335	4495	4656	4816	4977	5137	5298	5458	5619	5779	5940	6100	6261	6422	6582	6743	6903	7064	7224	7385	7545	7706			

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

(COLA Fund)

Summary of Actuarial Basis

Valuation Date: January 1, 2013.

Valuation Method: Accrued Benefit Cost Method, based on benefits granted to date.

Asset Valuation Method: Market Value, plus present value of future minimum City contributions.

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:

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	.0235%	.0138%
30	.0402%	.0216%
40	.0919%	.0522%
50	.1487%	.1189%
60	.4887%	.4573%
70	1.6413%	1.5145%
80	5.7647%	3.9866%

Disabled Mortality: RP 2000 Disabled Mortality Table projected by scale AA to 2020, producing following specimen rates:

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	1.5696%	.5287%
30	2.0418%	.6093%
40	1.9221%	.5507%
50	2.0149%	.8186%
60	3.0450%	1.9756%
70	4.6257%	3.4045%
80	8.9456%	6.2834%

**CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST
(COLA Fund)**

Summary of Actuarial Basis
(Continued)

<u>Age</u>	<u>Disability</u>	<u>Turnover</u>	
		<u><5</u>	<u>5+</u>
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

CITY OF MIAMI
FIRE FIGHTERS' AND POLICE OFFICERS'
RETIREMENT TRUST
(COLA Fund)

Summary of Actuarial Basis
(Continued)

<u>Age</u>	<u>Disability</u>	<u>Turnover</u>	
		<u>< 5</u>	<u>5+</u>
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 had attained 64 points by September 30, 2009 and Police Officers who had attained 64 points by September 30, 2010 are subject to the Rule of 64; Fire Fighters who had attained 68 points by September 30, 2010 are subject to the Rule of 68; all others are subject to the Rule of 70. If eligible for Retirement, the following decrements apply, based on service.

<u>Years of Service</u>	<u>Police %</u>	<u>Fire %</u>
<20	0	0
20-24	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.

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

(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.
Marital 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.
Changes from Prior Year Valuation:	None.

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

Disclosure Information Under GASB 5
(COLA Fund)
(Based on 01/01/2012 \$1,312 Table)

I. Funding Status and Progress as of September 30, 2012 and 2011

Pension benefit obligation:	<u>\$(Millions)</u>	
	<u>2012</u>	<u>2011</u>
- Retirees and beneficiaries currently receiving prior COLA benefits	1.1	1.3
- Retirees and beneficiaries receiving COLA tabular benefits (beginning January 1) and terminated employees not yet receiving tabular benefits	277.1	267.8
- Current Employees Accumulated employee contributions including interest	0.1	0.2
Employer - financed vested	0.0	0.0
Employer - financed non-vested	<u>34.3</u>	<u>34.3</u>
- Total pension benefit obligation	312.6	303.6
Net assets available for benefits	<u>350.3</u>	<u>310.0</u>
Unfunded pension benefit (obligation)/asset	37.7	6.4

The pension benefit obligations were determined as part of actuarial valuations at January 1, 2013 and January 1, 2012, based on data and asset information at September 30, 2012 and September 30, 2011. 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, 2012 and January 1, 2011.

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

Disclosure Information Under GASB 5
(COLA Fund)
(Based on 01/01/2012 \$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. Analysis of funding Progress (\$ Millions)

Fiscal Year	(1) Net Assets Available for <u>Benefits*</u>	(2) Pension Benefit <u>Obligation**</u>	(3) Percent <u>Funded</u>	(4) Unfunded PBO <u>(2)-(1)</u>	(5) Annual Covered <u>Payroll</u>	(4)/(5)
	(\$)	(\$)	(%)	(\$)	(\$)	(%)
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)
2012	350.3	312.6	112	(37.7)	82.2	(46)

* Excluding future City minimum contributions.

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

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

Disclosure Information Under GASB 5
(COLA Fund)

IV. Revenues and Expenses

<u>Fiscal Year</u>	<u>Revenues by Source</u>			
	<u>Employee</u>	<u>Employer</u>	<u>Investment</u>	<u>Total</u>
	<u>Contributions</u>	<u>Contributions</u>	<u>Income</u>	
	(\$)	(\$)	(\$)	(\$)
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
2012	0	5,064,541	21,399,142	26,463,683

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

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

IV. Revenues and Expenses (Continued)

Fiscal Year	Expenses by Type			
	Benefits	Administrative 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
2012	17,747,481	1,456,098	421	19,204,000