

**CITY PENSION FUND FOR FIREFIGHTERS AND POLICE OFFICERS
IN THE CITY OF MIAMI BEACH**

ACTUARIAL VALUATION AS OF OCTOBER 1, 2014

This Valuation Determines the Annual Contribution for the Fund Year October 1, 2015 through September 30, 2016 to be paid in Fiscal Year October 1, 2015 to September 30, 2016

June 10, 2015

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

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June 10, 2015

Ms. Donna Brito
Executive Director
City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach
1691 Michigan Avenue, Suite 355
Miami Beach, Florida 33139

Dear Donna:

October 1, 2014 Actuarial Valuation

We are pleased to present our October 1, 2014 Actuarial Valuation for the City Pension Fund for Firefighters and Police Officers in the City of Miami Beach. The purpose of this report is to indicate appropriate contribution levels, comment on the actuarial stability of the Fund and to satisfy State requirements. The Board of Trustees has retained Gabriel, Roeder, Smith and Company (GRS) to prepare an annual actuarial valuation under Section 63 of the Fund Ordinance.

This report consists of this commentary, detailed Tables I through XVIII and the State Required Exhibit on Table XIX. The Tables contain basic Fund cost figures plus significant details on the benefits, liabilities and experience of the Fund. We suggest that you thoroughly review the report at your convenience and contact us with any questions that may arise.

Retirement Fund Costs

Our Actuarial Valuation develops the required minimum Retirement Fund payment under the Florida Protection of Public Employee Retirement Benefits Act and for Fire and Police Retirement Chapters 175 and 185. The minimum payment consists of payment of annual normal costs including amortization of the components of the unfunded actuarial accrued liability over various periods as prescribed by law. The **minimum required contribution for fiscal year ending September 30, 2016 is \$40,029,217 (79.3% / 66.2%)**. The figures in parentheses is the Fund cost expressed as a percentage of projected annual pensionable payroll excluding DROP payroll (\$50,491,405) and projected annual pensionable payroll including DROP payroll (\$60,464,591) respectively for fiscal year ending September 30, 2016.

This total cost is to be met by member, City and State (Share Plan) contributions. We anticipate member contributions will be **\$5,058,576 (10.0% / 8.4%)**, the State (Share Plan) will contribute **\$120,549 (0.2% / 0.2%)** and the resulting minimum required City contribution will be **\$34,850,092 (69.0% / 57.6%)**. The City contribution does not include an interest adjustment and must be increased if State contributions are less than \$120,549.

The City contribution requirements reflect an annual City payment at the beginning of the fiscal year.

Changes in Actuarial Assumptions, Methods and Fund Benefits

Fund provisions remain unchanged from the Fund provisions considered in the October 1, 2013 Actuarial Valuation. Fund provisions are summarized on Table IX.

Assumed investment return has been updated to 7.95%, net of investment expenses, compounded annually.

The payroll growth assumption is limited to the ten-year average payroll growth - 2.3% for the current year.

The remaining actuarial assumptions and methods are unchanged from the actuarial assumptions and methods utilized in the October 1, 2013 Actuarial Valuation. The actuarial assumptions and methods are outlined on Table X.

Comparison of October 1, 2013 and October 1, 2014 Valuation Results

Table II of our report provides information of a comparative nature. The left columns of the Table indicate the costs as calculated for October 1, 2013. The center right columns indicate the costs as calculated for October 1, 2014, prior to the update in actuarial assumptions. The right columns indicate the costs as calculated for October 1, 2014, after the update in actuarial assumptions.

Comparing the left and center columns of Table II shows the effect of Fund experience during the year. The number of active participants increased by approximately 6%. Projected pensionable payroll increased by approximately 8%. Total Fund membership increased by approximately 3%. Total normal cost increased as a dollar amount but decreased as a percentage of projected covered payroll. The unfunded actuarial accrued liability decreased both as a dollar amount and as a percentage of projected covered payroll. The net City minimum funding requirement also decreased both as a dollar amount and as a percentage of projected covered payroll.

Comparing the center and right columns of Table II shows the effect of the update of the actuarial assumptions. The unfunded actuarial liability and minimum funding requirement increased both as a dollar amount and as a percentage of projected covered payroll.

The value of vested accrued benefits exceeds Fund assets, resulting in a Vested Benefit Security Ratio (VBSR) of 80.9% which is an increase from 78.8% as of the October 1, 2013 Actuarial Valuation Report. The VBSR is measured on a market value of assets basis.

Fund Experience

The Fund experienced an actuarial gain in the amount of \$5,882,483 this year. This indicates net Fund experience was more favorable than expected based upon the actuarial assumptions.

Table XVI (salary, turnover, mortality and investment yield) provides figures on recent Fund experience. Salary experience indicates actual salary increases averaged approximately 4.0% for Fund Year ended September 30, 2014. The average salary increase assumption was 3.7%. Salary

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increase experience was generally an offsetting source of actuarial loss. Three, five and ten-year average annual salary increases are 4.5%, 3.9% and 5.9%, respectively.

Employee turnover this year was approximately 80% of the assumed turnover and was generally an additional offsetting source of actuarial loss.

Mortality this year was approximately 110% of the assumed mortality, however, due to disabled mortality being lower than expected, mortality was generally a small additional offsetting source of actuarial loss.

Data corrections were a significant offsetting source of actuarial loss.

This year's smoothed value investment return of 10.9% was more than the Fund's investment return assumption of 8.0%. Smoothed investment return was a significant source of actuarial gain during the year. Three, five and ten-year average annual investment returns are 7.7%, 6.0% and 6.5%, respectively on a smoothed actuarial value basis. Average annual market value returns for the one, three, five and ten-year periods have been 10.3%, 14.5%, 10.6% and 7.4%, respectively.

Member Census and Financial Data

The Board submitted the Member census data as of October 1, 2014 used for this actuarial valuation to us. This information contains name, Social Security number, date of birth, date of hire, October 1, 2014 rate of pay and member contributions for the previous year. Dates of termination and retirement are provided where applicable. The Board updated information on inactive participants including retirees, beneficiaries and vested terminees.

We received financial information as of September 30, 2014 concerning Fund assets from the Fund Auditors. We do not audit the Member census data and asset information that is provided to us. However, we perform certain reasonableness checks and on this basis we believe that the information that we received is reliable.

Summary

In our opinion the benefits provided for under the current Plan will be sufficiently funded through the payment of the amount as indicated in this and future Actuarial Valuation reports. We will continue to update you on the future payment requirements for the Plan through our actuarial reports. These reports will also continue to monitor the future experience of the Plan.

The actuarial assumptions used in this Actuarial Valuation are as adopted by the Board. The demographic actuarial assumptions are based on the results of an actuarial experience study for the period October 1, 2003 – September 30, 2009. The investment return assumption is based upon a Capital Market Assumption Study completed in 2014. Each assumption represents an estimate of future Plan experience.

If all actuarial assumptions are met and if all future minimum required contributions are paid, Plan assets will be sufficient to pay all Plan benefits. Plan minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee

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Retirement Benefits Act with normal cost determined as a level percent of covered payroll and a level percent amortization payment using an initial closed amortization period of 30 years.

The VBSR may be appropriate for assessing the sufficiency of Fund assets to meet the estimated cost of settling benefit obligations based upon funding assumptions but may not be appropriate for assessing the need for or the amount of future contributions.

The GASB Plan Fiduciary Net Position as a Percentage of Total Pension Liability may not be appropriate for assessing the sufficiency of Fund assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: Plan experience differing from anticipated under the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period) and changes in Plan provisions or applicable law. Due to the limited scope of the actuary's assignment, the actuary did not perform an analysis of the potential range of such future measurements.

This report should not be relied on for any purpose other than the purpose described in the primary communication. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board and with applicable statutes.

This report may be provided to parties other than the Board only in its entirety and only with the permission of an approved representative of the Board.

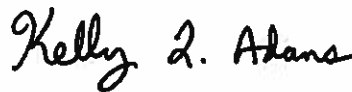
The signing actuaries are independent of the Plan sponsor.

The undersigned are Members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. We are available to respond to any questions with regards to matters covered in this report.

Very truly yours,



Lawrence F. Wilson, A.S.A.
Senior Consultant and Actuary



Kelly L. Adams, A.S.A.
Consultant and Actuary

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Summary of Retirement Plan Costs as of October 1, 2014

	Prior Assumptions		Current Assumptions	
	<u>Cost Data</u>	<u>% of Projected Pensionable Payroll</u>	<u>Cost Data</u>	<u>% of Projected Pensionable Payroll</u>
A. Participant Data Summary (Table III)				
1. Active Employees	487	N/A	487	N/A
2. Terminated Vested	16	N/A	16	N/A
3. Receiving Benefits (including DROPs)	707	N/A	707	N/A
4. Total Annual Base Payroll ¹	\$ 42,548,459	83.3%	\$ 42,548,459	84.3%
5. Annual Pensionable Payroll ²	49,356,212	96.6%	49,356,212	97.8%
6. Projected Annual Pensionable Payroll ³	51,083,680	100.0%	50,491,405	100.0%
7. Projected Annual Pensionable Payroll including DROP ⁴	61,173,853	119.8%	60,464,591	119.8%
B. Total Normal Costs				
1. Age Retirement Benefits	\$ 13,046,932	26.4%	\$ 13,201,450	26.1%
2. Termination Benefits	614,090	1.2%	621,359	1.2%
3. Death Benefits	470,326	1.0%	473,706	0.9%
4. Disability Benefits	1,788,015	3.6%	1,802,045	3.6%
5. Estimated Expenses	905,130	1.8%	905,130	1.8%
6. Total Annual Normal Costs	\$ 16,824,493	34.1%	\$ 17,003,690	33.7%
C. Total Actuarial Accrued Liability				
1. Age Retirement Benefits Active Employees	\$ 205,865,567	403.0%	\$ 207,506,328	411.0%
2. Termination Benefits Active Employees	1,652,685	3.2%	1,661,991	3.3%
3. Death Benefits Active Employees	1,193,143	2.3%	1,199,270	2.4%
4. Disability Benefits Active Employees	9,680,500	19.0%	9,739,252	19.3%
5. Retired or Terminated Vested Participants Receiving Benefits (including DROPs)	707,918,859	1385.8%	711,541,488	1409.2%
6. Terminated Vested Participants Entitled to Future Benefits	3,003,375	5.9%	3,027,059	6.0%
7. Deceased Participants Whose Beneficiaries are Receiving Benefits	32,065,116	62.8%	32,192,094	63.8%
8. Disabled Participants Receiving Benefits	42,555,321	83.3%	42,753,280	84.7%
9. Miscellaneous Liability (Refunds in Process)	0	0.0%	0	0.0%
10. Total Actuarial Accrued Liability	\$ 1,003,934,566	1965.3%	\$ 1,009,620,762	1999.6%

¹ Total Annual Base Payroll - Participant's base pay (including salary, premiums and longevity) at snapshot date of September 30th increased by assumed salary scale to reflect pay increases that are usually granted in October. Premiums are any salary or pay on which longevity is calculated.

² Annual Pensionable Payroll - Annual Base Payroll loaded 16% to reflect estimated other pays included in pensionable pay.

³ Projected Annual Pensionable Payroll - Annual Pensionable Payroll projected to the end of year (and beginning of fiscal year for which the city contributions are determined) by assuming an aggregate increase in payroll of 3.5% under the prior assumptions and 2.3% under the current assumptions.

⁴ Projected Annual Pensionable Payroll including DROP - Projected Annual Pensionable Payroll plus DROP participants pay at snapshot date of September 30th increased by assumed salary scale to reflect pay increases that are usually granted in October and then projected to the end of the year assuming an aggregate increase in payroll of 3.5% under the prior assumptions and 2.3% under the current assumptions.

City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach

Summary of Retirement Plan Costs as of October 1, 2014

	Prior Assumptions		Current Assumptions	
	Cost Data	% of Projected Pensionable Payroll	Cost Data	% of Projected Pensionable Payroll
D. Assets (Table V)				
1. Smoothed Actuarial Value of Assets	\$ 721,567,277	1412.5%	\$ 721,567,277	1429.1%
2. Market Value of Assets	\$ 769,298,572	1506.0%	\$ 769,298,572	1523.6%
E. Unfunded Actuarial Accrued Liability (C. - D.1.)	\$ 282,367,289	552.8%	\$ 288,053,485	570.5%
F. Preliminary Minimum Required Contribution				
1. Total Normal Cost (including expenses)	\$ 16,824,493	32.9%	\$ 17,003,690	33.7%
2. Amortization of Unfunded Liability	19,477,717	38.1%	21,803,554	43.2%
3. Interest Adjustment	189,552	0.4%	186,270	0.4%
4. Expected Service Buyback	135,730	0.3%	135,730	0.3%
5. Total Preliminary Minimum Required Contribution	\$ 36,627,492	71.7%	\$ 39,129,244	77.5%
G. Expected Payroll of Active Employees for 2015-2016 Fund Year (A.6)	\$ 51,083,680	100.0%	\$ 50,491,405	100.0%
H. Contribution Sources for Fiscal Year Ending September 30, 2016				
1. City	\$ 32,670,991	64.0%	\$ 34,850,092	69.0%
2. State	\$ 120,549	0.2%	\$ 120,549	0.2%
3. Member	\$ 5,117,914	10.0%	\$ 5,058,576	10.0%
I. City Contribution (Percent of Pensionable DROP payroll)	\$ 32,670,991	53.4%	\$ 34,850,092	57.6%
J. Actuarial Gain / (Loss)	\$ 5,882,483	11.5%	\$ 5,882,483	11.7%
K. Actuarial Present Value of Vested Accrued Benefits				
1. Retired, Terminated Vested, Beneficiaries and Disabled Receiving Benefits (including DROPs)	\$ 782,539,296	1531.9%	\$ 786,486,862	1557.7%
2. Terminated Vested Participants Entitled to Future Benefits and Miscellaneous	3,003,375	5.9%	3,027,059	6.0%
3. Active Participants Entitled to Future Benefits	159,995,594	313.2%	161,395,161	319.6%
4. Total Actuarial Present Value of Vested Accrued Benefits	\$ 945,538,265	1851.0%	\$ 950,909,082	1883.3%
L. Unfunded Actuarial Present Value of Vested Accrued Benefits (K. - D.2., not less than zero)	\$ 176,239,693	345.0%	\$ 181,610,510	359.7%
M. Vested Benefit Security Ratio (D.2. ÷ K.)	81.4%	N/A	80.9%	N/A

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Comparison of Cost Data of October 1, 2013 and October 1, 2014 Valuations

	Actuarial Valuation October 1, 2013			Prior Assumptions October 1, 2014			Current Assumptions October 1, 2014		
	Cost Data	% of Projected Pensionable Payroll		Cost Data	% of Projected Pensionable Payroll		Cost Data	% of Projected Pensionable Payroll	
A. Participants									
1. Active Employees	458	N/A		487	N/A		487	N/A	
2. Terminated Vested	15	N/A		16	N/A		16	N/A	
3. Receiving Benefits (including DROPs)	697	N/A		707	N/A		707	N/A	
4. Projected Annual Pensionable Payroll	\$ 47,164,032	100.0%	\$ 51,083,680	\$ 51,083,680	100.0%	\$ 50,491,405	\$ 50,491,405	100.0%	
5. Projected Annual Pensionable Payroll (including DROPs)	\$ 57,851,961	122.7%	\$ 61,173,853	\$ 61,173,853	119.8%	\$ 60,464,591	\$ 60,464,591	119.8%	
B. Present Value of Future Benefits	\$ 1,096,504,276	2324.9%	\$ 1,157,901,984	\$ 1,157,901,984	2266.7%	\$ 1,165,796,444	\$ 1,165,796,444	2308.9%	
C. Total Normal Costs	\$ 15,569,514	33.0%	\$ 16,824,493	\$ 16,824,493	32.9%	\$ 17,003,690	\$ 17,003,690	33.7%	
D. Actuarial Accrued Liability (EAN)	\$ 955,238,606	2025.4%	\$ 1,003,934,566	\$ 1,003,934,566	1965.3%	\$ 1,009,620,762	\$ 1,009,620,762	1999.6%	
E. Smoothed Actuarial Value of Assets	\$ 663,233,454	1406.2%	\$ 721,567,277	\$ 721,567,277	1412.5%	\$ 721,567,277	\$ 721,567,277	1429.1%	
F. Unfunded Actuarial Accrued Liability (EAN)	\$ 292,005,152	619.1%	\$ 282,367,289	\$ 282,367,289	552.8%	\$ 288,053,485	\$ 288,053,485	570.5%	
G. City Minimum Funding Payment (% of Projected Annual Payroll including DROP)	\$ 33,028,839	70.0%	\$ 32,670,991	\$ 32,670,991	64.0%	\$ 34,850,092	\$ 34,850,092	69.0%	
		57.1%			53.4%			57.6%	
H. Vested Benefit Security Ratio	78.8%	N/A	81.4%	81.4%	N/A	80.9%	80.9%	N/A	

Table III

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

**Characteristics of Participants in
Actuarial Valuation as of October 1, 2014**

A. Active Plan Participants Summary

1. Active participants fully vested	354
2. Active participants partially vested	0
3. Active participants non-vested	133
4. Total active participants	487
5. Total Annual Base Payroll	\$ 42,548,459
6. Annual Pensionable Payroll	\$ 49,356,212
7. Projected Annual Pensionable Payroll	\$ 50,491,405
8. Projected Annual Pensionable Payroll (Including DROPs)	\$ 60,464,591

B. Retired and Terminated Vested Participant Summary

1. Retired or terminated vested participants receiving benefits (including DROPs)	543
2. Terminated vested participants entitled to future benefits	16
3. Beneficiaries receiving benefits	107
4. Disabled participants receiving benefits	57

C. Projected Annual Retirement Benefits

1. Retired or terminated vested receiving benefits (including DROPs)	\$ 50,628,192
2. Terminated vested entitled to future benefits	\$ 280,123
3. Beneficiaries of deceased participants	\$ 3,586,109
4. Disabled participants	\$ 3,636,108

Table IV

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Statement of Assets as of October 1, 2014

<u>Assets</u>	<u>Market Value</u>
A. <u>Cash and Cash Equivalents</u>	\$ 659,346
B. <u>General Investments</u>	
1. Short Term Investments	\$ 22,803,566
2. U.S. Government Securities	20,122,576
3. Common Stocks	320,417,690
4. Domestic Equity Fund	63,728,334
5. International Equity Fund	34,416,123
6. Domestic Corporate Bonds	201,231,499
7. International Fixed Income	52,010,673
8. Real Estate Fund	36,892,451
9. Mutual Funds Self-Directed DROP Participants	15,135,801
C. <u>Receivables</u>	
1. Accrued Interest	\$ 2,334,730
2. Due from Broker	40,955
3. Member Buybacks	0
D. <u>Payables</u>	
1. Accounts Payable	\$ 414,791
2. Due to Broker	80,381
E. <u>Total Assets</u> (A. + B. + C. - D.)	\$ 769,298,572

Table V

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Reconciliation of Plan Assets

A. <u>Market Value of Assets as of October 1, 2013</u>		\$ 710,329,822
B. <u>Receipts During Period</u>		
1. Contributions		
a. Member	\$ 5,076,394	
b. Buybacks	182,580	
c. City	35,839,777	
d. State (Share Plan)	120,549	
e. Total	<u>\$ 41,219,300</u>	
2. Investment Income		
a. Interest and dividends	\$ 15,844,449	
b. Realized gains	48,304,980	
c. Unrealized gains	11,410,487	
d. Investment expenses	(3,300,242)	
e. Net investment income	<u>\$ 72,259,674</u>	
3. Total receipts during period		\$ 113,478,974
C. <u>Disbursements During Period</u>		
1. Pension payments	\$ 48,525,424	
2. DROP distributions	5,079,670	
3. Contribution refunds	0	
4. Administrative expenses	905,130	
5. Total disbursements during period	<u>\$ 54,510,224</u>	
D. <u>Market Value of Assets as of September 30, 2014</u>		\$ 769,298,572
E. <u>Reconciliation of DROP Account Balances</u>		
1. DROP Accounts Balance as of October 1, 2013	\$ 11,807,256	
2. Benefit Payments into DROP Accounts during Year	7,705,655	
3. Investment Gains/ (Losses) during Year	702,560	
4. Distributions from DROP Accounts during Year	(5,079,670)	
5. DROP Accounts Balance as of September 30, 2014	<u>\$ 15,135,801</u>	

City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach

Development of Smoothed Value of Assets as of September 30

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
A. Preliminary smoothed value of assets prior year	\$ 611,357,122	\$ 663,233,454	\$ 721,567,277			
B. Market value of assets beginning of year	631,816,817	710,329,822	769,298,572			
C. Market value of assets end of year	710,329,822	769,298,572				
D. Non-investment net cash flow	(3,701,138)	(13,290,924)				
E. Investment return						
1. Market value return: C. - B. - D.	82,214,143	72,259,674				
2. Amount for immediate recognition (8.0%)	50,397,300	56,294,749				
3. Amount for phased-in recognition: E.1. - E.2.	31,816,843	15,964,925				
F. Phased-in recognition of investment return						
1. Current year: 20% of E.3.	6,363,369	3,192,985				
2. First prior year	12,585,137	6,363,369	3,192,985			
3. Second prior year	(9,301,024)	12,585,137	6,363,369	3,192,985		
4. Third prior year	2,489,530	(9,301,024)	12,585,137	6,363,369	3,192,985	
5. Fourth prior year	(6,956,842)	2,489,531	(9,301,024)	12,585,137	6,363,367	3,192,985
6. Total phased-in recognition of investment return	5,180,170	15,329,998	12,840,467	22,141,491	9,556,352	3,192,985
G. Smoothed value of assets end of year						
1. Preliminary smoothed value of assets end of year:						
A. + D. + E.2. + F.6.	663,233,454	721,567,277				
2. Upper corridor limit: 120% of C.	852,395,786	923,158,286				
3. Lower corridor limit: 80% of C.	568,263,858	615,438,858				
4. Smoothed value of assets end of year:						
G.1., not more than G.2., nor less than G.3.	663,233,454	721,567,277				
H. Difference - market value less smoothed value	47,096,368	47,731,295				
I. Smoothed value rate of return	9.1%	10.9%				
J. Market value rate of return	13.1%	10.3%				

Table VI

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

**Actuarial Gain / (Loss) for Plan Year
Ended September 30, 2014**

A. <u>Derivation of Actuarial Gain / (Loss)</u>	
1. Employer normal cost previous actuarial valuation	\$ 10,853,111
2. Unfunded actuarial accrued liability previous actuarial valuation	\$ 292,005,152
3. Employer contributions previous year:	
(a) City	\$ 35,839,777
(b) State	120,549
(c) Total	<u>\$ 35,960,326</u>
4. Interest on:	
(a) Employer normal cost	\$ 868,249
(b) Unfunded actuarial accrued liability	23,360,412
(c) Employer contributions	2,876,826
(d) Net total: (a) + (b) - (c)	<u>\$ 21,351,835</u>
5. Increase (decrease) due to assumption changes	\$ 5,686,196
6. Expected unfunded actuarial liability current year: (1. + 2. - 3. + 4. + 5.)	\$ 293,935,968
7. Actual unfunded actuarial liability current year	<u>288,053,485</u>
8. Actuarial gain / (loss): (6. - 7.)	<u>\$ 5,882,483</u>
B. <u>Approximate Portion of Gain / (Loss) Due to Investments</u>	
1. Smoothed actuarial value of assets previous year	\$ 663,233,454
2. Contributions during period	41,219,300
3. Benefits, refunds and administrative expenses during period	54,510,224
4. Expected net appreciation for period	53,965,452
5. Expected smoothed actuarial value assets current year: (1. + 2. - 3. + 4.)	\$ 703,907,982
6. Actual smoothed actuarial value of assets current year	\$ 721,567,277
7. Approximate gain / (loss) due to investments: (6. - 5.)	\$ 17,659,295
C. <u>Approximate Portion of Gain / (Loss) due to Liabilities: (A. - B.)</u>	\$ (11,776,812)

Table VII

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Amortization of Unfunded Actuarial Accrued Liability

A. Unfunded Actuarial Accrued Liability

<u>Date</u>	<u>Unfunded Liability</u>	<u>Amortization Payment</u>
October 1, 2014	\$ 288,053,485	\$ 21,803,554
October 1, 2015	\$ 287,416,804	\$ 22,305,034
October 1, 2016	\$ 286,188,156	\$ 22,818,051
October 1, 2017	\$ 284,308,030	\$ 23,342,868
October 1, 2018	\$ 281,711,891	\$ 23,879,753
October 1, 2019	\$ 278,329,792	\$ 24,428,985
October 1, 2020	\$ 274,085,923	\$ 24,990,852
October 1, 2021	\$ 268,898,131	\$ 25,565,645
October 1, 2022	\$ 262,677,419	\$ 26,153,655
October 1, 2023	\$ 255,327,405	\$ 26,755,191
October 1, 2024	\$ 246,743,705	\$ 27,370,562
October 1, 2025	\$ 236,813,308	\$ 28,000,084
October 1, 2026	\$ 225,413,875	\$ 28,644,084
October 1, 2027	\$ 212,412,989	\$ 29,302,896
October 1, 2028	\$ 197,667,346	\$ 29,976,865
October 1, 2029	\$ 181,021,876	\$ 30,666,332
October 1, 2030	\$ 162,308,810	\$ 31,371,685
October 1, 2031	\$ 141,346,624	\$ 30,545,011
October 1, 2032	\$ 119,610,343	\$ 29,512,986
October 1, 2033	\$ 97,260,095	\$ 25,589,355
October 1, 2034	\$ 77,368,565	\$ 21,439,377
October 1, 2035	\$ 60,375,560	\$ 22,149,358
October 1, 2036	\$ 41,265,184	\$ 20,577,409
October 1, 2037	\$ 22,332,452	\$ 17,903,100
October 1, 2038	\$ 4,781,484	\$ 13,431,061
October 1, 2039	\$ (9,337,217)	\$ 2,326,072
October 1, 2040	\$ (12,590,521)	\$ (349,365)
October 1, 2041	\$ (13,214,327)	\$ (5,934,421)
October 1, 2042	\$ (7,858,658)	\$ (7,835,685)
October 1, 2043	\$ (24,799)	\$ (24,799)
October 1, 2044	\$ 0	\$ 0

**Table VII
(Cont'd)**

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

B. Covered Payroll History

<u>Year Ending</u>	<u>Pensionable Payroll</u>	<u>Annual Increase</u>
September 30, 2014	\$ 50,740,542	7.6%
September 30, 2013	\$ 47,164,030	(11.5%)
September 30, 2012	\$ 53,273,735	8.6%
September 30, 2011	\$ 49,041,435	(0.2%)
September 30, 2010	\$ 49,144,179	(2.5%)
September 30, 2009	\$ 50,393,490	2.4%
September 30, 2008	\$ 49,192,010	5.4%
September 30, 2007	\$ 46,668,370	6.5%
September 30, 2006	\$ 43,816,180	7.4%
September 30, 2005	\$ 40,809,330	1.3%
September 30, 2004	\$ 40,293,970	N/A
Ten-Year Average Annual Increase		2.3%

Table VIII

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Accounting Disclosure Exhibit

	<u>10/01/2013</u>	<u>Prior Assumptions 10/01/2014</u>	<u>Current Assumptions 10/01/2014</u>
I. <u>Number of Plan Members</u>			
a. Retirees and beneficiaries receiving benefits	697	707	707
b. Terminated plan members entitled to but not yet receiving benefits	15	16	16
c. Active plan members	458	487	487
d. Total	<u>1,170</u>	<u>1,210</u>	<u>1,210</u>
II. <u>Financial Accounting Standards Board Allocation as of October 1, 2014</u>			
A. <u>Statement of Accumulated Plan Benefits</u>			
1. Actuarial present value of accumulated vested plan benefits			
a. Participants currently receiving benefits	\$ 747,713,183	\$ 782,539,296	\$ 786,486,862
b. Other participants	153,856,823	162,998,969	164,422,220
c. Total	<u>\$ 901,570,006</u>	<u>\$ 945,538,265</u>	<u>\$ 950,909,082</u>
2. Actuarial present value of accumulated non-vested plan benefits	<u>\$ 7,401,076</u>	<u>\$ 7,498,647</u>	<u>\$ 7,556,368</u>
3. Total actuarial present value of accumulated plan benefits	<u>\$ 908,971,082</u>	<u>\$ 953,036,912</u>	<u>\$ 958,465,450</u>
B. <u>Statement of Change in Accumulated Plan Benefits</u>			
1. Actuarial present value of accumulated plan benefits as of October 1, 2013			\$ 908,971,082
2. Increase (decrease) during year attributable to:			
a. Plan amendment			\$ 0
b. Change in actuarial assumptions			5,428,538
c. Benefits paid including refunds			(53,605,094)
d. Other, including benefits accumulated, increase for interest due to decrease in the discount period			<u>97,670,924</u>
e. Net increase			<u>\$ 49,494,368</u>
3. Actuarial present value of accumulated plan benefits as of October 1, 2014			\$ 958,465,450
C. <u>Significant Matters Affecting Calculations</u>			
1. Assumed rate of return used in determining actuarial present values			7.95%
2. Change in plan provisions			None.
3. Change in actuarial assumptions and methods			See Table X, Item O.

**Table VIII
(Cont'd)**

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Accounting Disclosure Exhibit

III. Net Pension Liability and Related Ratios (GASB No. 67)

Measurement date	Actual 9/30/2014	Projected 9/30/2015*
A. <u>Total Pension Liability (TPL)</u>		
Service Cost	\$ 14,763,595	\$ 16,098,560
Interest	75,108,912	79,291,293
Benefit Changes	0	0
Difference Between Actual and Expected Experience	7,685,043	12,428,547
Assumption Changes	0	5,686,196
Benefit Payments, including Refunds of Member Contributions	(53,605,094)	(56,689,125)
Net Change in Total Pension Liability	\$ 43,952,456	\$ 56,815,471
Total Pension Liability (TPL) - (beginning of year)	947,553,563	991,506,019
Total Pension Liability (TPL) - (end of year)	<u>\$ 991,506,019</u>	<u>\$ 1,048,321,490</u>
B. <u>Plan Fiduciary Net Position</u>		
Contributions - City and State	\$ 35,960,326	\$ 33,149,388
Contributions - Member	5,258,974	5,058,576
Net Investment Income	72,259,674	61,706,320
Benefit Payments, including Refunds of Member Contributions	(53,605,094)	(56,689,125)
Administrative Expenses	(905,130)	(905,130)
Other	0	0
Net Change in Plan Fiduciary Net Position	\$ 58,968,750	\$ 42,320,029
Plan Fiduciary Net Position - (beginning of year)	710,329,822	769,298,572
Plan Fiduciary Net Position - (end of year)	<u>\$ 769,298,572</u>	<u>\$ 811,618,601</u>
C. <u>Net Pension Liability (NPL) - (end of year): (A) - (B)</u>	\$ 222,207,447	\$ 236,702,889
D. <u>Plan Fiduciary Net Position as a Percentage of TPL: (B) / (A)</u>	77.59 %	77.42 %
E. <u>Covered Employee Payroll**</u>	\$ 57,545,593	\$ 60,464,591
F. <u>NPL as a Percentage of Covered Employee Payroll: (C) / (E)</u>	386.14 %	391.47 %
G. <u>Notes to Schedule:</u>		
Valuation Date	10/01/2013	10/01/2014
Update procedures used to roll forward TPL excluding DROP account balances to the measurement dates - actual DROP account balances as of measurement dates included in TPL.		
See Table X., Item O. for assumption and/or method changes during the year.		
No benefit changes during the year.		

* Projected - actual amounts will be available after fiscal year end

** Projected pensionable payroll (including DROPs) - GASB No. 67 references total payroll

**Table VIII
(Cont'd)**

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Accounting Disclosure Exhibit

IV. Schedule of Employer Contributions (GASB No. 67)

<u>Fiscal Year Ended 9/30</u>	<u>Actuarially Determined Contribution</u>	<u>Actual Contribution</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Payroll**</u>	<u>Actual Contribution as a % of Covered Payroll</u>
2005	\$ 11,978,155	\$ 11,978,155	\$ 0	33,870,768	35.36%
2006	14,601,836	14,601,836	0	32,354,015	45.13%
2007	15,231,417	15,231,417	0	36,592,193	41.62%
2008	17,618,045	17,618,045	0	40,060,096	43.98%
2009	20,159,995	20,159,995	0	53,153,934	37.93%
2010	23,403,818	23,403,818	0	51,636,070	45.32%
2011	32,811,570	32,811,570	0	49,718,966	65.99%
2012	36,297,459	36,297,459	0	49,186,724	73.80%
2013	39,492,050	39,492,050	0	46,313,650	85.27%
2014	35,960,326	35,960,326	0	57,545,593	62.49%
2015*	33,149,388	33,149,388	0	60,464,591	54.82%

* Projected - actual amounts will be available after fiscal year end

** Covered payroll prior to FYE 2014 as reported by prior actuary. FYE 2014 covered payroll based upon bi-weekly pay as of September 30, 2014 increased by 16% for additional pension pay plus actual DROP payroll. FYE 2015 projected pensionable payroll including projected DROP payroll. GASB No. 67 references total payroll.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Accounting Disclosure Exhibit

V. Notes to Schedule of Contributions (GASB No. 67)

Valuation Date: Actuarially determined contributions are calculated as of October 1st - two years prior the fiscal year end in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method Entry Age Normal

Amortization Method Level Percentage, Closed

Amortization Period 30 years

Asset Valuation Method 5-year smoothed market

Inflation 3.0%

Payroll Growth 3.5%

Salary Increases 2.87% - 9.87%

Investment Rate of Return 8.00%

Retirement Age Experience-based table of rates that are specific to the type of eligibility condition

Mortality For healthy participants, the RP-2000 Combined Mortality Table with Blue Collar Adjustment projected 15 years from valuation date for pre-retirement mortality and 7 years from valuation date for post-retirement mortality was used.

For disabled participants, the RP-2000 Disabled Mortality Table was used.

Cost-of-Living Increases 1.5%, 2.0% or 2.5%

Other Information:

Benefit Changes

In 2013, participants were categorized into different tiers: tier 1 - members hired prior to July 14, 2010, tier 2 - members hired on or after July 14, 2010 but prior to September 30, 2013 and tier 3 - members hired on or after September 30, 2013. Final average monthly earnings (FAME) were updated to the greater of the average of the 2 highest paid years prior to date of retirement or the 2 last paid years after taking into consideration the overtime limit (Tier 1 and eligible to retire prior to September 30, 2015), the greater of the average of the 3 highest paid years prior to date of retirement or the 3 last paid years after taking into consideration the overtime limit (Tier 1 and eligible to retire on or after September 30, 2015), the greater of the average of the 3 highest paid years prior to date of retirement or the 3 last paid years after taking into consideration the overtime limit (Tier 2) and the greater of the average of the 5 highest paid years prior to date of retirement or the 5 last paid years after taking into consideration the overtime limit (Tier 3). Normal retirement eligibility was updated to the earlier of attainment of age 50 or Rule of 70 (Tier 1 and eligible to retire prior to September 30, 2013), the earlier of attainment of age 50 or Rule of 70 and attainment of age 47 (Tier 1 and eligible to retire on or after September 30, 2013) and the earlier of attainment of age 50 or Rule of 70 and attainment of age 48 (Tier 2 and 3). Benefits were updated to not exceed 85% of FAME (if eligible to retire on or after September 30, 2013) unless exceeded 85% as of September 30, 2013 (Tier 1 and eligible to retire on or after September 30, 2013 but prior to September 30, 2015). Pensionable salary was updated to exclude overtime pay in excess of 300 hours per calendar year, withdrawal benefit eligibility was updated to any age prior to 50 with at least 5 years of service for members who terminate employment on or after September 30, 2013, member contributions were updated to 10% of salary per year for members hired prior to September 30, 2013 and 10.5% of salary per year for members hired on or after September 30, 2013, members will no longer be able to purchase an additional multiplier or pre-employment public safety service as a police officer or firefighter and overtime for police officer's was limited in each year to an amount that is equal to 11% of highest annualized pay rate for the same salary rank that the member is in at the time of retirement.

**City Pension Fund for Firefighters and Police Officers
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Other Information:

Benefit Changes (cont'd)

In 2010, for new hires on or after September 1, 2012, the pension multiplier was updated to 3% for each year of service up to 20 years and 4% for each year of service thereafter (subject to a maximum of 90%), the Rule of 70 retirement was updated to state that members must attain age 48 to be eligible, final average salary was updated to the three highest paid years of last three years prior to retirement and the cost of living adjustment was updated to 1.5% annually. In 2010, for members who enter the DROP on or after September 1, 2012, the DROP period was updated to a maximum of 60 months and a 2.5% COLA will be paid annually on the anniversary date of the member's retirement. Pensionable pay was updated to include off-duty pay, overtime for police officers was limited in each year to an amount that is equal to 70% of the difference between the member's annualized pay rate at retirement and the highest annualized pay rate for the next higher salary rank, overtime for firefighters was limited in each year to an amount that is equal to 11% of highest annualized pay rate for the same salary rank that the member is in at the time of retirement and members with ten or more years of service were allowed to purchase up to four years of pre-employment military service, up to two years pre-employment public safety service, or either 3% or 6% additional benefit multiplier.

Assumption Changes

In 2014, investment return was decreased from 8.00% to 7.95% - this change does not affect the contribution until the fiscal year ending September 30, 2016. In 2013, the asset valuation method was updated to phase in the deviation between the expected and actual return on assets at the rate of 20% per year and the load for projected pensionable payroll was decreased to 16%. In 2012, investment return was updated to 8.0%, expected salary increases for final years 2013 and 2014 were reduced by 2.17% and increased by 3.0% respectively, contingency compensation load for overtime and other pays was decreased to 16% and contingency pre-employment service load was decreased to 0.275%. In 2011, investment return was updated to 8.1%, mortality tables for healthy pre and post retirement participants were projected 15 and 7 years from the valuation date and the contingency compensation load for overtime and other pays was increased to 18%. In 2010, investment return was updated to 8.2% and the freeze on the cost of living increase component of the salary scale was extended to March 31, 2012. In 2009, investment return was updated to 8.3%, mortality rates were changed to the RP-2000 Combined Mortality Table with a blue collar adjustment for healthy lives and the RP-2000 Disabled Mortality table for disabled participants, a 20% load was added to the projected base payroll, retirement and withdrawal rates were updated to reflect the results of the October 1, 2003 through October 1, 2008 experience study, salary increase rates were updated to 3.83% for plan year 2009 and 6.0% for all subsequent plan years and the load for overtime and other pays was updated to 16%. In 2008, investment return was updated to 8.5%, the salary scale was reduced by 50 basis points, loadings for contingencies were increased by 100 basis points and the retirement assumption was updated to reflect an increase in the level of retirements starting at age 45. In 2005, the "fresh start" method was applied, retirement rates were increased to reflect actual retirement experience and loadings for contingencies and pre-employment service was updated to 7.0% and 5.5% respectively.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Accounting Disclosure Exhibit

VI. Discount Rate (GASB No. 67)

A discount rate of 7.95% was used to measure the projected 9/30/2015 TPL. This discount rate was based on the expected rate of return on Fund investments of 7.95%. The projection of cash flows used to determine this discount rate assumed member contributions will be made at the current contribution rate and employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension Fund's fiduciary net position was projected to be available to make all projected future expected benefit payments of current Fund members. Therefore, the long-term expected rate of return on Fund investments was applied to all periods of projected benefit payments to determine the TPL.

VII. Sensitivity of the NPL to the Discount Rate Assumption (GASB No. 67)

Measurement date: 9/30/2014

	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
Discount Rate	7.0%	8.0%	9.0%
NPL	\$ 345,519,095	\$ 222,207,447	\$ 120,722,501

Measurement date: 9/30/2015 *

	<u>1% Decrease</u>	<u>Current Discount Rate</u>	<u>1% Increase</u>
Discount Rate	6.95%	7.95%	8.95%
NPL	\$ 366,394,748	\$ 236,702,889	\$ 129,900,858

* Projected - actual amounts will be available after fiscal year end

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Outline of Principal Provisions of the Retirement Plan

A. Relevant Provisions:

The Plan was created under Chapter 23414, Laws of Florida, Special Act of 1945, as amended by Ordinance No. 2014-3848 adopted March 5, 2014.

B. Eligibility Requirements:

Any full-time employee of the City who is certified as a Firefighter or Police Officer as a condition of employment.

C. Membership Tiers:

Tier 1 - Members hired prior to July 14, 2010

Tier 2 - Members hired on or after July 14, 2010 but prior to September 30, 2013

Tier 3 - Members hired on or after September 30, 2013

D. Credited Service:

All periods of employment as an Employee for which contributions have been made to the Fund together with all service in the uniformed services of the United States required to be included.

E. Pre-Employment Service:

Effective September 30, 2013 members with at least 5 years of service may contribute an additional amount of 10% for those hired prior to September 30, 2013 and 10.5% for those hired on or after September 30, 2013 to receive credit for pre-employment military service. A member may purchase up to 2 total years of additional service credit at the 3% accrual rate for time spent on active military duty. The total of all combinations of pre-employment benefit purchased cannot exceed a 12% increase in accrual.

Pre-employment benefit service must be purchased within 36 months following September 30, 2013, or upon completion of 5 years of creditable pension service under the pension plan, whichever occurs later.

Effective September 30, 2013, members will no longer be able to purchase an increase in benefit multiplier or pre-employee public safety service credit as a Police Officer or Firefighter.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Outline of Principal Provisions of the Retirement Plan

F. Pensionable Pay:

Salary is defined as base pay, longevity pay, overtime, shift differential and extra compensation allowance such as uniform allowance and any pays which are negotiated as pensionable. Effective July 14, 2010, off-duty pay is pensionable for any member who is eligible for overtime and receives off-duty compensation through the City. Effective September 30, 2013, overtime is limited to 300 hours a year.

1. Overtime and Off-Duty pay included in pension computation for Police Officers:

- Off-Duty and overtime pay not exceeding 300 hours per calendar year is limited in each year to an amount that is equal to 11% of highest annualized pay rate for the same salary rank that the member is in at time of retirement.
- The 11% limitation shall not apply to any member who holds the rank of sergeant or lieutenant on September 30, 2013, or any Police Officer promoted to the rank of sergeant prior to the date the 2013 Certified Police Sergeant Promotional Register expires in 2015. For these members, the inclusion of overtime and/or off duty in the member's salary for the 2 highest paid years, or the last 2 paid years, as the case may be, shall be limited in each year to an amount which is equal to 70% of the difference between the member's annualized pay rate at retirement and the highest annualized pay rate for the next higher salary rank.

2. Overtime and Off-Duty pay included in pension computation for Firefighters:

- Off-Duty and overtime pay not exceeding 300 hours per calendar year is limited in each year to an amount that is equal to 11% of highest annualized pay rate for the same salary rank that the member is in at time of retirement.

G. Final Average Monthly Earnings (FAME):

Tier 1 and eligible to retire prior to September 30, 2015 - the greater of the average of the 2 highest paid years prior to date of retirement or the 2 last paid years after taking into consideration the overtime limit.

Tier 1 and eligible to retire on or after September 30, 2015 - the greater of the average of the 3 highest paid years prior to date of retirement or the 3 last paid years after taking into consideration the overtime limit.

Tier 2 - the greater of the average of the 3 highest paid years prior to date of retirement or the 3 last paid years after taking into consideration the overtime limit.

Tier 3 - the greater of the average of the 5 highest paid years prior to date of retirement or the 5 last paid years after taking into consideration the overtime limit.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Outline of Principal Provisions of the Retirement Plan

H. Normal Retirement:

1. Eligibility:

Tier 1 and eligible to retire prior to September 30, 2013 - the earlier of attainment of age 50 or Rule of 70

Tier 1 and eligible to retire on or after September 30, 2013 - the earlier of attainment of age 50 or Rule of 70 (must attain age 47)

Tier 2 and Tier 3 - the earlier of attainment of age 50 or Rule of 70 (must attain age 48)

2. Benefit:

Tier 1 and eligible to retire prior to September 30, 2013:

3% x FAME x Credited Service up to 15 years + 4% x Credited Service after 15 years
Benefit shall not exceed 90% of FAME.

Tier 1 and eligible to retire on or after September 30, 2013 but prior to September 30, 2015:

3% x FAME x Credited Service up to 20 years + 4% x Credited Service after 20 years
Benefit shall not exceed 85% of FAME (exception if exceeded 85% as of September 30, 2013).

Tier 1 and eligible to retire on or after September 30, 2015, Tier 2 and Tier 3:

3% x FAME x Credited Service up to 20 years + 4% x Credited Service after 20 years
Benefit shall not exceed 85% of FAME.

A member's benefit multiplier for credited service earned before October 1, 2013 shall not be reduced.

I. Deferred Retirement:

1. Eligibility:

Any first day of a month past Normal Retirement Date.

2. Benefit:

Benefit calculated as for Normal Retirement based upon service and pay to Deferred Retirement Date.

J. Disability Retirement:

1. Eligibility:

Totally and permanently disabled meaning incapacity to perform regular duty as Firefighter or Police Officer (and completion of at least 5 years of Credited Service for non-service incurred disability).

2. Benefit:

Accrued benefit (minimum of 85% of current salary at time of disability for service incurred disability).

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Outline of Principal Provisions of the Retirement Plan

K. Death Benefit:

1. Service Incurred:

Greater of accrued benefit and 85% of compensation payable as a monthly benefit to the widow until death or remarriage, to a Domestic Partner until death, marriage or entry into another Domestic Partnership, to unmarried children in equal shares until age 18 (until age 22 if a full-time student or until recovery from handicap if handicapped), or to dependent parents in equal shares.

2. Non-Service Incurred:

For members with at least 5 years of service, accrued benefit is payable for the first 12 months after death and 75% of the accrued benefit is payable thereafter (with a minimum benefit of 25% of average monthly salary); Benefits are payable to the widow until death or remarriage, to a Domestic Partner until death, marriage or entry into another Domestic Partnership, to unmarried children in equal shares until age 18 (until age 22 if a full-time student or until recovery from handicap or until marriage if handicapped), or to dependent parents in equal shares. However, if the member has been married for less than 10 years, benefits are payable to the spouse only for the life expectancy of the deceased member at time of death.

L. Withdrawal Benefit:

1. Eligibility:

Any age prior to 50 with at least 5 years of service for members who terminate employment on or after September 30, 2013.

2. Benefit:

Return of employee contributions or accrued benefit upon attainment of age 50. If a member withdraws with less than 10 years of service and passes away prior to the normal retirement date the return of employee contributions is the only benefit.

M. Employee Contributions:

10% of salary per year (on a pre-tax basis) for members hired prior to September 30, 2013 and 10.5% of salary per year (on a pre-tax basis) for members hired on or after September 30, 2013; If contributions are refunded to the member or to his beneficiaries, then interest is credited at the rate of 3% per annum.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Outline of Principal Provisions of the Retirement Plan

N. Normal Form of Payment of Retirement Income:

For members except those retiring prior to November 5, 2003, the normal form of payment is a 75% joint and survivor annuity with a specified beneficiary as provided under the plan. The specified beneficiary will receive a survivor annuity equal to 100% of the total benefit for one year following the death of the member and thereafter the greater of 75% of the total benefit or 25% of the average monthly salary for the two highest paid years. However, upon death, if the member has been married for less than 10 years, the survivor annuity is payable only for the life expectancy of the deceased member at time of death.

The members may also elect the actuarial equivalent of the 10 year certain and life annuity, with a designated beneficiary, any of the following optional forms of payment:

- 75% joint and contingent survivor annuity with a designated beneficiary
- 66 2/3% joint and contingent annuity with a designated beneficiary
- 50% joint and contingent annuity with a designated beneficiary
- 25% joint and contingent annuity with a designated beneficiary
- 10 year certain and life annuity with a designated beneficiary

Members who retired prior to November 5, 2003 were subject to different normal and optional forms of payment.

O. Deferred Retirement Option Program (DROP):

Police Officers and Firefighters are eligible to participate in a Deferred Retirement Option Program (DROP) upon meeting any one of the following criteria:

- the attainment of age 50 or
- the sum of the member's age and creditable service equal to at least 70 (minimum age may apply)

Operations of the DROP:

- The member's monthly retirement benefit, based on final average earnings and service, will be calculated as of the date prior to them entering the DROP.
- The member's monthly pension will be deposited into the selected investment vehicles.
- The member will cease to accrue additional pension benefits (with the exception of the COLA under the pension plan).
- The member will no longer be eligible for Disability or Service Connected Death benefits from the Pension Plan.
- Member contributions to the Pension Plan will cease upon entering the DROP.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Outline of Principal Provisions of the Retirement Plan

- Upon entering the DROP, the member will select the length of the DROP period. The maximum period of participation in the DROP is 36 months for members who enter the DROP prior to September 1, 2012 and 60 months for members who enter the DROP on or after September 1, 2012. Notwithstanding the above, participation may not continue beyond the date when the member's combined years of creditable service and time in the DROP equals 352 months for members who enter the DROP prior to September 1, 2012 and 408 for members who enter the DROP on or after September 1, 2012.
- The member will not have access or be able to borrow against any of the funds accumulated in their DROP account.
- The member may sever employment with the City at any time during the DROP period. Such separation will terminate their participation in the DROP.
- No payment will be made from the DROP account until the member severs employment with the City.
- Following severance of employment, the funds in the DROP will be paid under the options the member selected. The member will also start receiving their monthly pension which was previously being deposited in the DROP.
- A 2.5% COLA (1.5% per year for participants hired on or after July 14, 2010) is paid annually on the anniversary date of the member's retirement. For members who enter the DROP after September 1, 2012 and before September 30, 2013 - no cost of living adjustment for the third and fourth annual anniversary date, if the member participates in the DROP for six months or longer. Any member who exits the DROP within 6 months following the date of DROP entry, shall be eligible for the 2.5% COLA annually on the anniversary date of the member's retirement.

P. Cost-of-Living Adjustment:

Effective October 1, 2010, benefits are increased by 2.5% per year (1.5% per year for participants hired on or after July 14, 2010), compounded annually, on the anniversary date of each member's retirement. Members whose grandfathered Base Plan benefit is greater than the benefit otherwise provided by this plan will receive the applicable cost-of-living adjustment on that basis (2% a year beginning the October three years after retirement) until such time as the benefit from this plan with 2.5% cost-of-living exceeds that comparable grandfathered Base Plan benefit.

For members retired prior to October 1, 2010, benefit increases occur on the first of October each year.

Q. Changes Since Previous Actuarial Valuation

None.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

**Actuarial Assumptions and Actuarial Cost Methods
Used in the Valuation**

A. Mortality

For healthy participants, the RP-2000 Combined Mortality Table with Blue Collar Adjustment projected 15 years from valuation date for pre-retirement mortality and 7 years from valuation date for post-retirement mortality with Scale AA was used.

For disabled participants, the RP-2000 Disabled Mortality Table was used without projection for future mortality improvement.

B. Investment Return

7.95%, compounded annually, net of investment expenses.

C. Expenses

Prior year's actual administrative expenses.

D. Employee Withdrawal Rates

Representative values of the assumed annual rates of withdrawal among members in active service are as follows:

<u>Age</u>	<u>Withdrawal Rate</u>	<u>Age</u>	<u>Withdrawal Rate</u>
20	0.50%	35	1.50%
25	1.00%	40	0.75%
30	1.25%	45	0.25%

E. Disability Rates

Representative values of the assumed annual rates of disability among members in active service are as follows:

<u>Age</u>	<u>Disability Rates</u>	<u>Age</u>	<u>Disability Rate</u>
20	0.0007	45	0.0058
25	0.0011	50	0.0099
30	0.0016	55	0.0142
35	0.0022	60	0.0200
40	0.0032	64	0.0269

55% of disabilities are assumed to be ordinary - 45% accidental.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

**Actuarial Assumptions and Actuarial Cost Methods
Used in the Valuation**

F. Salary Increase Factors

Representative values of the assumed annual rates of future salary increase are as follows:

<u>Age</u>	<u>Salary Increase</u>	<u>Age</u>	<u>Salary Increase</u>
20	5.88%	45	4.88%
25	9.89%	50	4.88%
30	8.89%	55	4.88%
35	5.88%	60	3.88%
40	4.88%	64	2.88%

The average assumed salary increase rates shown above are reduced by the expected cost of living increases of 2.18% for FY 2014 and increased by a 3.0% cost of living increase in FY 2015.

G. Payroll Increase Assumption

The aggregate compensation used to compute the accrued liability contribution rate was assumed to increase at a rate of 3.50% per year - not greater than historical 10-year average (2.30% as of October 1, 2014).

H. Loadings for Contingencies

Compensation: Salary rates have been increased by 16.00% to load for overtime and other pays.

Pre-Employment Service: A City contribution of 0.275% of loaded compensation is assumed sufficient to provide for the purchase (or *buyback*) of pre-employment service by the membership.

I. Loading for Projected Pensionable Payroll

The Projected Base Pay is loaded by 16.00% to estimate the projected pensionable payroll used to determine expected member contributions.

J. Marital Assumptions

1. 77% of members are assumed married or entitled to benefits for dependents, including registered domestic partners.
2. Male spouses are assumed to be three years older than female spouses.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

**Actuarial Assumptions and Actuarial Cost Methods
Used in the Valuation**

K. Retirement

All members are assumed to retire at age 50 with 26.25 years of service, but not later than age 65. Members under age 50 meeting the Rule of 70 are assumed to retire at the rate of 40% per year. Otherwise, retirement is assumed to occur in accordance with the following rates:

Service	Rate of Retirement	
	Meeting Rule of 70	Not Meeting Rule of 70
Less than 20	20%	2%
20	30%	5%
21	50%	10%
22	30%	10%
23	30%	20%
24	45%	60%
25	65%	60%
26	100%	100%
More than 26	100%	100%

L. DROP Assumption

It is assumed that upon retirement 80% of all active participants will participate in the DROP.

M. Smoothed Asset Valuation Method

The method used for determining the smoothed actuarial value of assets phases in the deviation between the expected and actual return on assets at the rate of 20% per year. The smoothed actuarial value of assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the fair market value of plan assets and whose upper limit is 120% of the fair market value of plan assets.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

**Actuarial Assumptions and Actuarial Cost Methods
Used in the Valuation**

N. Actuarial Cost Method

Normal Retirement, Termination, Disability, and Death Benefits: Entry-Age-Actuarial Cost Method.

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his age at hire to his assumed retirement age to fund his estimated benefits, assuming the Plan had always been in effect. The normal cost for the Plan is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the Plan is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over the smoothed actuarial value of assets of the Plan.

O. Changes Since Previous Actuarial Valuation

Investment Return was:

8.0%, compounded annually, net of investment expenses.

Payroll Increase Assumption was:

The aggregate compensation used to compute the accrued liability contribution rate was assumed to increase at a rate of 3.50% per year.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Assumption Change History

A. Effective October 1, 2002:

The actuarial cost method was changed from frozen initial liability to entry age.

The amortization of the unfunded accrued liability was changed from level dollar to level percentage of pay, with aggregate payroll assumed to increase at 3.50% per year.

B. Effective October 1, 2005:

The "fresh start" method was applied to the actuarial value of assets to begin a new five-year phase-in of realized and unrealized gains and losses.

The retirement rates were increased to reflect retirement experience for participants meeting the age 50 and "Rule of 70" eligibility criteria.

The loadings for contingencies and pre-employment service were increased from 5.00% to 7.00% and from 4.50% to 5.50% respectively.

C. Effective October 1, 2006:

The actuarial valuation system used by Buck Consultants was upgraded effective October 1, 2006. The gain resulting from this upgrade was amortized over 30 years.

D. Effective October 1, 2008:

The interest rate used to calculate all liabilities was reduced to 8.40% from 8.50%.

The salary scale used to project future pay increases was reduced by 50 basis points at each age to reflect the current and projected economic climate.

The loadings for contingencies were increased by 100 basis points (50 basis points for salary rates and 50 basis points for buybacks).

The retirement assumption was updated to reflect an increase in the level of retirements starting at age 45.

E. Effective October 1, 2009:

The interest rate used to calculate all liabilities was reduced from 8.40% to 8.30%.

The mortality rates were changed from the 1983 Group Annuity Mortality Table to the RP-2000 Combined Mortality Table with a blue collar adjustment for healthy lives and the RP-2000 Disabled Mortality Table for disabled participants.

A load of 20% was added to the projected base payroll to estimate the projected pensionable payroll used to determine the expected member contributions.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Assumption Change History

E. Effective October 1, 2009 (cont'd):

An experience study was performed on the plan over the 5 year period October 1, 2003 through October 1, 2008 and the following assumptions were changed to more accurately reflect the plans experience:

- **Retirement Rates:** The retirement assumption was changed to reflect the results of the experience study.
- **Withdrawal Rates:** The withdrawal assumption was changed to reflect the results of the experience study.
- **Salary Increase Rates:** The salary increase assumption was changed to an average increase of 3.83% for plan year 2009 to reflect the freeze on COLA for the plan year and to an average increase of 6.00% for all subsequent plan years.
- **Load for Overtime and Other Pays:** The load for overtime and other pays was changed from 7.50% to 16.00% to reflect the results of the experience study.

F. Effective October 1, 2010:

The interest rate used to calculate all liabilities was reduced from 8.30% to 8.20%.

The freeze on the cost of living increase component of the salary scale was extended to March 31, 2012.

G. Effective October 1, 2011:

The interest rate used to calculate all liabilities was reduced from 8.20% to 8.10%.

The mortality tables for healthy pre and post retirement participants was projected 15 and 7 years respectively from the valuation date to reflect mortality improvements.

The contingency compensation load for overtime and other pays was increased from 16% to 18% to account for the expected increase in pensionable pay due to the inclusion of off duty pay in the computation of pensionable pay.

H. Effective October 1, 2012:

The interest rate used to calculate all liabilities was reduced from 8.10% to 8.00%.

The expected salary increases for FY2013 and 2014 were reduced by 2.17% to reflect a freeze in the cost of living increases and increased by 3.0% to reflect a 3.0% cost of living increase in FY2015.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Assumption Change History

H. Effective October 1, 2012 (cont'd):

The contingency compensation load for overtime and other pays was decreased from 18% to 16% to account for the expected decrease in pensionable pay due to the cap on overtime hours in the computation of pensionable pay.

The contingency pre-employment service load was decreased from 6.000% to 0.275% to account for the elimination of certain buybacks.

The expected salary increases were adjusted to account for the extension of ranges for Firefighter I, Police Officer, Sergeant of Police and Police Lieutenant effective April 1, 2015.

I. Effective October 1, 2013:

The asset valuation method was updated to phase in the deviation between the expected and actual return on assets at the rate of 20% per year - further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the fair market value of plan assets and whose upper limit is 120% of the fair market value of plan assets.

The load for projected pensionable payroll was decreased from 20% to 16% to account for the expected decrease in pensionable pay due to the cap on overtime hours in the computation of pensionable pay.

J. Effective October 1, 2014:

The interest rate used to calculate all liabilities was reduced from 8.00% to 7.95%. Payroll growth assumption is limited to 10 year average.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach
Distribution by Attained Age Groups
and Service Groups as of October 1, 2014**

<u>Attained Age Group</u>	<u>Active Firefighters</u>							<u>Total</u>
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30 & Over</u>	
Under 25	2	-	-	-	-	-	-	2
25-29	21	7	-	-	-	-	-	28
30-34	14	17	7	-	-	-	-	38
35-39	7	14	9	3	-	-	-	33
40-44	4	3	9	5	1	-	-	22
45-49	1	3	4	5	9	-	-	22
50-54	2	-	1	4	5	-	-	12
55-59	-	-	-	-	-	-	-	0
60-64	1	-	-	-	1	-	-	2
65 & Over	-	-	-	-	-	-	-	0
TOTAL	52	44	30	17	16	0	0	159

Average Attained Age	<u>10/01/2013</u>	<u>10/01/2014</u>
Average Hire Age	36.99 years	37.73 years
Average Base Pay	27.89 years	28.51 years
Percent Female	\$ 94,067	\$ 100,017
	6.4%	6.9%

**Table XII
(Cont'd)**

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach
Distribution by Attained Age Groups
and Service Groups as of October 1, 2014**

<u>Attained Age Group</u>	<u>Active Police Officers</u>							<u>Total</u>
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30 & Over</u>	
Under 25	7	-	-	-	-	-	-	7
25-29	23	10	-	-	-	-	-	33
30-34	17	26	2	-	-	-	-	45
35-39	17	19	16	5	-	-	-	57
40-44	12	14	29	29	6	-	-	90
45-49	2	7	15	28	13	-	-	65
50-54	1	1	1	13	5	1	-	22
55-59	2	-	3	4	-	-	-	9
60-64	-	-	-	-	-	-	-	0
65 & Over	-	-	-	-	-	-	-	0
TOTAL	81	77	66	79	24	1	0	328

Average Attained Age	<u>10/01/2013</u>	<u>10/01/2014</u>
Average Hire Age	40.45 years	40.29 years
Average Base Pay	28.71 years	29.04 years
Percent Female	\$ 81,488	\$ 81,237
	13.2%	13.4%

**Table XII
(Cont'd)**

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach
Distribution by Attained Age Groups
and Service Groups as of October 1, 2014**

<u>Attained Age Group</u>	<u>All Active Members</u>							<u>Total</u>
	<u>COMPLETED YEARS OF SERVICE</u>							
	<u>0-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30 & Over</u>	
Under 25	9	-	-	-	-	-	-	9
25-29	44	17	-	-	-	-	-	61
30-34	31	43	9	-	-	-	-	83
35-39	24	33	25	8	-	-	-	90
40-44	16	17	38	34	7	-	-	112
45-49	3	10	19	33	22	-	-	87
50-54	3	1	2	17	10	1	-	34
55-59	2	-	3	4	-	-	-	9
60-64	1	-	-	-	1	-	-	2
65 & Over	-	-	-	-	-	-	-	0
TOTAL	133	121	96	96	40	1	0	487

Average Attained Age	<u>10/01/2013</u>	<u>10/01/2014</u>
Average Hire Age	39.27 years	39.45 years
Average Base Pay	28.43 years	28.86 years
Percent Female	\$ 85,772	\$ 87,368
	10.9%	11.3%

Table XIII

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

**Statistics for Participants Entitled to Deferred Benefits
and Participants Receiving Benefits**

A. Entitled to Deferred Benefits*

<u>Current Age Group</u>	<u>Count</u>	<u>Total Annual Benefit</u>	<u>Average Annual Benefit</u>
Less than 40	3	\$ 103,583	\$ 34,528
40-44	2	70,042	35,021
45-49	3	76,788	25,596
50-54	1	29,711	29,711
55-59	-	-	-
60-64	-	-	-
65 & Over	-	-	-
TOTAL	9	\$ 280,123	\$ 31,125

* Excludes 7 dormant members

B. Receiving Benefits (including DROPs)

<u>Current Age Group</u>	<u>Count</u>	<u>Total Annual Benefit</u>	<u>Average Annual Benefit</u>
Less than 50	49	\$ 4,643,579	\$ 94,767
50-54	128	13,642,731	106,584
55-59	124	12,023,442	96,963
60-64	115	9,363,974	81,426
65-69	86	6,824,896	79,359
70-74	56	4,159,655	74,280
75 & Over	149	7,192,132	48,269
TOTAL	707	\$ 57,850,409	\$ 81,825

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Reconciliation of Employee Data

A. <u>Active Participants</u>	
1. Active participants previous year	458
2. Retired during year	(1)
3. Entered DROP	(13)
4. Died during year	(1)
5. Disabled during year	(1)
6. Terminated during year	(1)
7. New active participants	47
8. Rehired during year	1
9. Dormant during the year	(2)
10. Data Correction	0
11. Active participants current year	<u>487</u>
B. <u>Participants Receiving Benefits</u>	
1. Participants receiving benefits previous year	628
2. New retired participants	1
3. New terminated vested receiving benefits	1
4. New disabled receiving benefits	1
5. New beneficiaries receiving benefits	13
6. Former DROPs now receiving benefits	17
7. Died or ceased payment during year	(19)
8. Data Correction	0
9. Retired or terminated vested receiving benefits current year	<u>642</u>
C. <u>DROP Participants</u>	
1. DROP participants previous year	69
2. Died during year	0
3. Became disabled during year	0
4. Employment terminated and retired during year	(17)
5. Entered DROP during year	13
6. DROP participants current year	<u>65</u>
D. <u>Terminated Vested Participants Entitled to Future Benefits</u>	
1. Terminated vested entitled previous year	15
2. Died during year	0
3. Commenced receiving benefits during year	(1)
4. Rehired during the year	(1)
5. New terminated vested	3
6. Terminated vested paid lump sum	0
7. Terminated vested entitled current year	<u>16</u>

Table XV**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach****Projected Retirement Benefits**

<u>Fiscal Year</u>	<u>Projected Total Annual Payout</u>
2015	\$ 58,869,871
2016	\$ 60,630,782
2017	\$ 62,874,687
2018	\$ 65,417,908
2019	\$ 68,691,157
2020	\$ 71,902,356
2021	\$ 75,133,520
2022	\$ 78,241,573
2023	\$ 81,366,526
2024	\$ 84,586,063

The above projected payout of Plan benefits during the next ten years is based on assumptions involving all decrements. Actual payouts may differ from the above estimates depending upon the death, salary and retirement experience of the Plan. However, since the projected payment is recomputed each valuation date, there is an automatic correction to the extent that actual experience varies from expected experience.

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Analysis of Investment Yield as of October 1, 2014

This Table sets forth the results of an analysis made of investment yields on the assets held under the City Pension Fund for Firefighters and Police Officers in the City of Miami Beach.

The basic sources for this analysis were the Statements produced by the Plan Auditors.

The basic data was initially checked for internal consistency. Since no difficulties were encountered with the data, yield rates were calculated directly from the transaction information submitted. A summary of the transaction information is set forth on the following page.

**Table XVI
(Cont'd)**

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Summary of Transaction Information

Year Ending	Benefits Paid ¹	Administrative Expenses	Employee Contributions ²	City Contributions	State Contributions	Smoothed Actuarial Value ³
09/30/2014	\$ 53,605,094	\$ 905,130	\$ 5,258,974	\$ 35,839,777	\$ 120,549	\$ 721,567,277
09/30/2013	52,104,605	805,919	9,717,336	39,371,501	120,549	663,233,454
09/30/2012	48,725,783	859,125	7,504,966	36,176,910	120,549	545,067,653
09/30/2011	44,934,423	971,906	5,783,503	32,691,021	120,549	531,821,181
09/30/2010	42,314,959	697,141	5,989,852	23,283,269	120,549	525,709,407
09/30/2009	38,195,186	767,484	6,542,597	20,039,446	120,549	517,602,834
09/30/2008	35,014,659	641,844	5,577,298	17,497,496	120,549	507,363,812
09/30/2007	32,367,302	646,588	5,194,282	15,110,868	120,549	495,993,903
09/30/2006	30,109,229	633,113	4,915,270	14,481,287	120,549	470,603,144
09/30/2005	27,202,700	581,953	4,982,579	11,857,606	120,549	457,680,582
09/30/2004	24,173,338	564,532	4,588,390	9,387,091	107,000	418,089,222
09/30/2003	22,072,374	521,173	4,437,529	8,577,326	0	410,423,595

¹ Includes DROP distributions and contribution refunds

² Includes buybacks

³ Effective for fiscal year ending on or after September 30, 2013, includes DROP account balances

Table XVI
(Cont'd)

City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach

Recent Compensation, Termination, Mortality and Investment Return Experience

Valuation Date	Compensation		Termination		Mortality *		Investment Return	
	% Increase (Decrease)	Assumed Increase	Ratio of Actual to Expected	Ratio of Actual to Expected	Market Value Yield	Smoothed Actuarial Value Yield	Assumed Rate of Return	
10/01/2014	4.0%	3.7%	0.8	1.1	10.3%	10.9%	8.0%	
10/01/2013	3.9%	3.8%	1.1	N/A	13.1%	8.8%	8.0%	
10/01/2012	5.6%	3.9%	N/A	N/A	20.2%	3.6%	8.1%	
10/01/2011	3.4%	3.9%	N/A	N/A	(0.6%)	2.6%	8.2%	
10/01/2010	2.7%	3.8%	N/A	N/A	10.9%	4.3%	8.3%	
10/01/2009	7.9%	4.4%	N/A	N/A	1.4%	4.5%	8.4%	
10/01/2008	8.8%	4.9%	N/A	N/A	(10.4%)	4.9%	8.5%	
10/01/2007	9.5%	4.9%	N/A	N/A	14.3%	8.2%	8.5%	
10/01/2006	7.9%	4.8%	N/A	N/A	8.3%	5.3%	8.5%	
10/01/2005	5.7%	4.8%	N/A	N/A	10.0%	12.2%	8.5%	
Last 3 Years	4.5%	3.8%	N/A	N/A	14.5%	7.7%	8.0%	
Last 5 Years	3.9%	3.8%	N/A	N/A	10.6%	6.0%	8.1%	
Last 10 Years	5.9%	4.3%	N/A	N/A	7.4%	6.5%	8.3%	

* Does not include beneficiaries of members currently alive

Table XVII

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Employer Contribution Information

<u>Valuation Date</u>	<u>Contribution Fiscal Year End</u>	<u>Minimum Required Employer Contributions</u>	<u>Actual City Contributions Made</u>	<u>Actual State Contributions Made</u>	<u>Actual Employer Contributions Made</u>
10/01/2014	09/30/2016	\$ 34,970,641	N/A	N/A	N/A
10/01/2013	09/30/2015	\$ 33,149,388	N/A	N/A	N/A
10/01/2012	09/30/2014	\$ 35,960,326	\$ 35,839,777	\$ 120,549	\$ 35,960,326
10/01/2011	09/30/2013	\$ 39,492,050	\$ 39,371,501	\$ 120,549	\$ 39,492,050
10/01/2010	09/30/2012	\$ 36,296,459	\$ 36,176,910	\$ 120,549	\$ 36,297,459
10/01/2009	09/30/2011	\$ 34,537,068	\$ 32,691,021	\$ 120,549	\$ 32,811,570
10/01/2008	09/30/2010	\$ 23,403,818	\$ 23,283,269	\$ 120,549	\$ 23,403,818
10/01/2007	09/30/2009	\$ 20,159,995	\$ 20,039,446	\$ 120,549	\$ 20,159,995

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

20 Year Projections

Throughout the forecast period, new members are assumed to be hired each year at a rate sufficient to maintain a constant active employee headcount – stationary population. Newly employed members are assumed to have the same average demographic characteristics (age, gender, salary – adjusted each year for inflation) as those of members hired during the past five (5) years. State (Share Plan) contributions are projected to remain \$120,549 during the projection period.

Projections are deterministic – assume all actuarial assumptions are realized - reflect investment return assumption decreasing by 0.05% each year until 7.75% for contribution fiscal year 2019-2020. Payroll growth is assumed to remain the same as current year (2.3%) for all projection years.

Contribution Fiscal Year	Projected Annual Pensionable Payroll	Projected Net City Required Contribution Amount	% of Pay
2015 - 2016	50,491,405	34,850,092	69.0%
2016 - 2017	53,274,710	35,365,733	66.4%
2017 - 2018	55,462,009	35,103,514	63.3%
2018 - 2019	57,548,553	35,722,086	62.1%
2019 - 2020	59,425,724	36,801,261	61.9%
2020 - 2021	60,805,647	37,158,799	61.1%
2021 - 2022	61,995,087	37,749,907	60.9%
2022 - 2023	63,423,080	38,458,218	60.6%
2023 - 2024	64,904,397	39,064,392	60.2%
2024 - 2025	66,300,912	39,731,309	59.9%
2025 - 2026	67,589,544	40,309,711	59.6%
2026 - 2027	68,949,217	40,717,150	59.1%
2027 - 2028	70,091,284	41,342,117	59.0%
2028 - 2029	71,304,369	42,131,495	59.1%
2029 - 2030	72,569,294	42,759,274	58.9%
2030 - 2031	73,282,179	42,910,253	58.6%
2031 - 2032	73,255,877	43,447,622	59.3%
2032 - 2033	73,368,851	42,076,667	57.3%
2033 - 2034	73,451,017	40,437,759	55.1%
2034 - 2035	73,389,467	35,870,946	48.9%
5 Year Totals	276,202,401	177,842,686	64.4%
10 Year Totals	593,631,524	370,005,311	62.3%
20 Year Totals	1,310,882,623	782,008,305	59.7%

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Actuarial Valuation as of October 1, 2014

State Required Exhibit - All Members

	<u>10/01/2013</u>	<u>Prior Assumptions 10/01/2014</u>	<u>Current Assumptions 10/01/2014</u>
A. <u>Participant Data</u>			
1. Active participants	458	487	487
2. Retired participants and beneficiaries receiving benefits (including DROPs)	639	650	650
3. Disabled participants receiving benefits	58	57	57
4. Terminated vested participants	15	16	16
5. Total Annual Base Payroll	\$ 39,283,718	\$ 42,548,459	\$ 42,548,459
6. Annual Pensionable Payroll	\$ 45,569,113	\$ 49,356,212	\$ 49,356,212
7. Projected Annual Pensionable Payroll	\$ 47,164,032	\$ 51,083,680	\$ 50,491,405
8. Annual benefits payable to those currently receiving benefits (including DROPs)	\$ 55,636,578	\$ 57,850,409	\$ 57,850,409
B. <u>Value of Assets</u>			
1. Smoothed Actuarial Value	\$ 663,233,454	\$ 721,567,277	\$ 721,567,277
2. Market Value	\$ 710,329,822	\$ 769,298,572	\$ 769,298,572
C. <u>Liabilities</u>			
1. Actuarial present value of future expected benefit payments for active members			
a. Retirement benefits	\$ 309,472,252	\$ 332,907,211	\$ 336,443,744
b. Vesting benefits	7,265,218	7,669,525	7,768,794
c. Death benefits	4,984,571	5,545,444	5,595,613
d. Disability benefits	23,971,219	26,237,133	26,474,372
e. Total	\$ 345,693,260	\$ 372,359,313	\$ 376,282,523
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 3,097,833	\$ 3,003,375	\$ 3,027,059
3. Actuarial present value of future expected benefit payments for members currently receiving benefits			
a. Service retired (includes DROPs)	\$ 676,822,574	\$ 707,918,859	\$ 711,541,488
b. Beneficiaries	30,280,652	32,065,116	32,192,094
c. Disability retired	40,609,957	42,555,321	42,753,280
d. Miscellaneous	0	0	0
e. Total	\$ 747,713,183	\$ 782,539,296	\$ 786,486,862

City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach

Actuarial Valuation as of October 1, 2014

State Required Exhibit - All Members

	<u>10/01/2013</u>	<u>Prior Assumptions 10/01/2014</u>	<u>Current Assumptions 10/01/2014</u>
4. Total actuarial present value of future expected benefit payments	\$ 1,096,504,276	\$ 1,157,901,984	\$ 1,165,796,444
5. Actuarial accrued liabilities (EAN)	\$ 955,238,606	\$ 1,003,934,566	\$ 1,009,620,762
6. Unfunded actuarial liabilities (EAN)	\$ 292,005,152	\$ 282,367,289	\$ 288,053,485
D. <u>Statement of Accumulated Plan Benefits</u>			
1. Actuarial present value of accumulated vested benefits			
a. Participants currently receiving benefits	\$ 747,713,183	\$ 782,539,296	\$ 786,486,862
b. Other participants	153,856,823	162,998,969	164,422,220
c. Total	\$ 901,570,006	\$ 945,538,265	\$ 950,909,082
2. Actuarial present value of accumulated non-vested plan benefits	7,401,076	7,498,647	7,556,368
3. Total actuarial present value of accumulated plan benefits	\$ 908,971,082	\$ 953,036,912	\$ 958,465,450
E. <u>Pension Cost</u>			
1. Total normal cost (including admin expenses)	\$ 15,569,514	\$ 16,824,493	\$ 17,003,690
2. Payment required to amortize unfunded liability	19,548,224	19,477,717	21,803,554
3. Interest adjustment	2,618,352	189,552	186,270
4. Expected service buyback	129,701	135,730	135,730
5. Total required contribution	\$ 37,865,791	\$ 36,627,492	\$ 39,129,244
6. Item 5 as a percentage of projected pensionable payroll	80.3%	71.7%	77.5%
7. Estimated employee contributions	\$ 4,716,403	\$ 5,117,914	\$ 5,058,576
8. Item 7 as a percentage of projected pensionable payroll	10.0%	10.0%	10.0%
9. Estimated State contributions	\$ 120,549	\$ 120,549	\$ 120,549
10. Item 9 as a percentage of projected pensionable payroll	0.3%	0.2%	0.2%
11. Net amount payable by City	\$ 33,028,839	\$ 32,670,991	\$ 34,850,092
12. Item 11 as a percentage of projected pensionable payroll	70.0%	64.0%	69.0%

City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach

Actuarial Valuation as of October 1, 2014

State Required Exhibit - All Members

	<u>10/01/2013</u>	<u>Prior Assumptions 10/01/2014</u>	<u>Current Assumptions 10/01/2014</u>
F. Past Contributions			
1. Total contribution required (impact statement / prior valuation)	\$ 40,591,691	\$ 37,865,791	\$ 37,865,791
2. Actual contributions made:			
a. Members	\$ 5,076,394	N/A	N/A
b. City	35,839,777	N/A	N/A
c. State	120,549	N/A	N/A
d. Total	<u>\$ 41,036,720</u>	N/A	N/A
G. Disclosure of Following Items:			
1. Actuarial present value of future salaries excluding DROP payroll - attained age	\$ 380,032,386	\$ 418,312,044	\$ 419,556,845
2. Actuarial present value of future employee contributions - attained age	\$ 38,003,239	\$ 41,831,204	\$ 41,955,685
3. Actuarial present value of future contributions from other sources	N/A	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 49,479,668	\$ 52,202,964	\$ 52,202,964
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A	N/A

City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach

Actuarial Valuation as of October 1, 2014

State Required Exhibit - Firefighters

	<u>10/01/2013</u>	<u>Prior Assumptions 10/01/2014</u>	<u>Current Assumptions 10/01/2014</u>
A. <u>Participant Data</u>			
1. Active participants	156	159	159
2. Retired participants and beneficiaries receiving benefits (including DROPs)	270	272	272
3. Disabled participants receiving benefits	8	8	8
4. Terminated vested participants	4	5	5
5. Total Annual Base Payroll	\$ 14,674,485	\$ 15,902,683	\$ 15,902,683
6. Annual Pensionable Payroll	\$ 17,022,403	\$ 16,459,277	\$ 16,268,445
7. Projected Annual Pensionable Payroll	\$ 17,618,187	\$ 19,092,761	\$ 18,871,396
8. Annual benefits payable to those currently receiving benefits (including DROPs)	\$ 23,173,062	\$ 24,106,607	\$ 24,106,607
B. <u>Liabilities</u>			
1. Actuarial present value of future expected benefit payments for active members			
a. Retirement benefits	\$ 112,054,354	\$ 120,907,719	\$ 122,261,937
b. Vesting benefits	3,231,721	3,405,995	3,451,978
c. Death benefits	1,941,794	2,175,122	2,195,339
d. Disability benefits	8,724,437	9,628,276	9,717,969
e. Total	<u>\$ 125,952,306</u>	<u>\$ 136,117,112</u>	<u>\$ 137,627,223</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 885,160	\$ 918,551	\$ 926,219
3. Actuarial present value of future expected benefit payments for members currently receiving benefits			
a. Service retired (includes DROPs)	\$ 296,861,942	\$ 311,430,450	\$ 313,031,121
b. Beneficiaries	14,569,676	13,945,010	14,002,933
c. Disability retired	6,338,290	6,698,728	6,727,408
d. Miscellaneous	0	0	0
e. Total	<u>\$ 317,769,908</u>	<u>\$ 332,074,188</u>	<u>\$ 333,761,462</u>

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Actuarial Valuation as of October 1, 2014

State Required Exhibit - Firefighters

	<u>10/01/2013</u>	<u>Prior Assumptions 10/01/2014</u>	<u>Current Assumptions 10/01/2014</u>
4. Total actuarial present value of future expected benefit payments	\$ 444,607,374	\$ 469,109,851	\$ 472,314,904
5. Actuarial accrued liabilities (EAN)	\$ 386,248,242	\$ 406,911,517	\$ 409,206,577
C. <u>Statement of Accumulated Plan Benefits</u>			
1. Actuarial present value of accumulated vested benefits			
a. Participants currently receiving benefits	\$ 317,769,908	\$ 332,074,188	\$ 333,761,462
b. Other participants	48,895,673	52,240,321	52,707,267
c. Total	<u>\$ 366,665,581</u>	<u>\$ 384,314,509</u>	<u>\$ 386,468,729</u>
2. Actuarial present value of accumulated non-vested plan benefits	<u>\$ 2,759,415</u>	<u>2,660,163</u>	<u>2,686,175</u>
3. Total actuarial present value of accumulated plan benefits	\$ 369,424,996	\$ 386,974,672	\$ 389,154,904
D. <u>Disclosure of Following Items:</u>			
1. Actuarial present value of future salaries - attained age	\$ 157,017,926	\$ 167,922,541	\$ 168,443,517
2. Actuarial present value of future employee contributions - attained age	\$ 15,701,793	\$ 16,792,254	\$ 16,844,352
3. Actuarial present value of future contributions from other sources	N/A	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 14,364,312	\$ 15,045,934	\$ 15,045,934
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A	N/A

City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach

Actuarial Valuation as of October 1, 2014

State Required Exhibit - Police Officers

	<u>10/01/2013</u>	<u>Prior Assumptions 10/01/2014</u>	<u>Current Assumptions 10/01/2014</u>
A. <u>Participant Data</u>			
1. Active participants	302	328	328
2. Retired participants and beneficiaries receiving benefits (including DROPs)	369	378	378
3. Disabled participants receiving benefits	50	49	49
4. Terminated vested participants	11	11	11
5. Total Annual Base Payroll	\$ 24,609,233	\$ 26,645,776	\$ 26,645,776
6. Annual Pensionable Payroll	\$ 28,546,710	\$ 27,578,378	\$ 27,258,629
7. Projected Annual Pensionable Payroll	\$ 29,545,845	\$ 31,990,919	\$ 31,620,009
8. Annual benefits payable to those currently receiving benefits (including DROPs)	\$ 32,463,516	\$ 33,716,059	\$ 33,716,059
B. <u>Liabilities</u>			
1. Actuarial present value of future expected benefit payments for active members			
a. Retirement benefits	\$ 197,417,898	\$ 211,999,492	\$ 214,181,807
b. Vesting benefits	4,033,497	4,263,530	4,316,816
c. Death benefits	3,042,777	3,370,322	3,400,274
d. Disability benefits	15,246,782	16,608,857	16,756,403
e. Total	<u>\$ 219,740,954</u>	<u>\$ 236,242,201</u>	<u>\$ 238,655,300</u>
2. Actuarial present value of future expected benefit payments for terminated vested members	\$ 2,212,673	\$ 2,084,824	\$ 2,100,840
3. Actuarial present value of future expected benefit payments for members currently receiving benefits			
a. Service retired (includes DROPs)	\$ 379,960,632	\$ 396,488,409	\$ 398,510,367
b. Beneficiaries	15,710,976	18,120,106	18,189,161
c. Disability retired	34,271,667	35,856,593	36,025,872
d. Miscellaneous	0	0	0
e. Total	<u>\$ 429,943,275</u>	<u>\$ 450,465,108</u>	<u>\$ 452,725,400</u>

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

Actuarial Valuation as of October 1, 2014

State Required Exhibit - Police Officers

	<u>10/01/2013</u>	<u>Prior Assumptions 10/01/2014</u>	<u>Current Assumptions 10/01/2014</u>
4. Total actuarial present value of future expected benefit payments	\$ 651,896,902	\$ 688,792,133	\$ 693,481,540
5. Actuarial accrued liabilities (EAN)	\$ 568,990,364	\$ 597,023,049	\$ 600,414,185
C. <u>Statement of Accumulated Plan Benefits</u>			
1. Actuarial present value of accumulated vested benefits			
a. Participants currently receiving benefits	\$ 429,943,275	\$ 450,465,108	\$ 452,725,400
b. Other participants	\$ 104,961,150	110,758,648	111,714,953
c. Total	<u>\$ 534,904,425</u>	<u>\$ 561,223,756</u>	<u>\$ 564,440,353</u>
2. Actuarial present value of accumulated non-vested plan benefits	<u>\$ 4,641,661</u>	<u>4,838,484</u>	<u>4,870,193</u>
3. Total actuarial present value of accumulated plan benefits	\$ 539,546,086	\$ 566,062,240	\$ 569,310,546
D. <u>Disclosure of Following Items:</u>			
1. Actuarial present value of future salaries - attained age	\$ 223,014,460	\$ 250,389,503	\$ 251,113,328
2. Actuarial present value of future employee contributions - attained age	\$ 22,301,446	\$ 25,038,950	\$ 25,111,333
3. Actuarial present value of future contributions from other sources	N/A	N/A	N/A
4. Amount of active members' accumulated contributions	\$ 35,115,356	\$ 37,157,030	\$ 37,157,030
5. Actuarial present value of future salaries and future benefits at entry age	N/A	N/A	N/A
6. Actuarial present value of future employee contributions at entry age	N/A	N/A	N/A

**City Pension Fund for Firefighters and Police Officers
in the City of Miami Beach**

State Required Exhibit

Amortization balances are written down in proportion to amortization payments.

	<u>Unfunded Actuarial Accrued Liabilities</u>	<u>Current Unfunded Liabilities</u>	<u>Prior Assumptions Amortization Payment</u>	<u>Current Assumptions Amortization Payment</u>	<u>Remaining Funding Period</u>
10/01/2001	Initial Unfunded Liability	\$ 12,038,678	\$ 974,088	\$ 1,051,837	17 years
10/01/2002	Method Change	13,645,910	1,062,438	1,151,909	18 years
10/01/2003	Plan Amendment	1,174,307	88,235	96,048	19 years
10/01/2003	Actuarial (Gain) / Loss	35,355,861	2,656,578	2,891,784	19 years
10/01/2004	Actuarial (Gain) / Loss	37,846,476	2,751,618	3,006,934	20 years
10/01/2005	Method Change	(33,495,283)	(2,361,955)	(2,590,982)	21 years
10/01/2005	Assumption Change	6,737,252	475,084	521,151	21 years
10/01/2005	Actuarial (Gain) / Loss	25,018,853	1,764,230	1,935,299	21 years
10/01/2006	Method Change	(5,024,223)	(344,354)	(379,157)	22 years
10/01/2006	Actuarial (Gain) / Loss	21,748,853	1,490,639	1,641,297	22 years
10/01/2007	Actuarial (Gain) / Loss	25,293,112	1,688,193	1,865,621	23 years
10/01/2008	Assumption Change	6,010,626	391,365	434,046	24 years
10/01/2008	Actuarial (Gain) / Loss	33,175,314	2,160,119	2,395,695	24 years
10/01/2009	Assumption Change	23,543,225	1,497,835	1,667,001	25 years
10/01/2009	Actuarial (Gain) / Loss	67,758,290	4,310,825	4,797,691	25 years
10/01/2010	Assumption Change	4,547,266	283,085	316,136	26 years
10/01/2010	Actuarial (Gain) / Loss	17,183,948	1,069,768	1,194,664	26 years
10/01/2011	Plan Amendment	(3,078,131)	(187,760)	(210,383)	27 years
10/01/2011	Assumption Change	16,999,039	1,036,909	1,161,845	27 years
10/01/2011	Actuarial (Gain) / Loss	30,238,124	1,844,469	2,066,706	27 years
10/01/2012	Assumption Change	7,738,225	463,065	520,556	28 years
10/01/2012	Actuarial (Gain) / Loss	26,053,631	1,559,083	1,752,648	28 years
10/01/2012	Plan Amendment	(19,912,706)	(1,191,602)	(1,339,543)	28 years
10/01/2013	Actuarial (Gain) / Loss	1,539,997	90,510	102,073	29 years
10/01/2013	Method Change	(63,886,872)	(3,754,831)	(4,234,491)	29 years
10/01/2014	Actuarial (Gain) / Loss	(5,882,483)	(339,917)	(384,536)	30 years
10/01/2014	Assumption Change	5,686,196	N/A	371,705	30 years
	TOTAL	\$ 288,053,485	\$ 19,477,717	\$ 21,803,554	

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 other wise provided for in the valuation. All known events or trends which may require material increase in plan costs or required contribution rates have been taken into account in the valuation.

Enrollment Number: 14-02802

Dated: June 10, 2015



Lawrence F. Wilson, A.S.A.