

**CITY OF NORTH MIAMI BEACH
RETIREMENT PLAN FOR
POLICE OFFICERS & FIREFIGHTERS**

**ACTUARIAL VALUATION
AS OF
OCTOBER 1, 2010**

(To determine the employer cost for the year starting October 1, 2011)



Bolton Partners, Inc.
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March 24, 2011

Marty Lebowitz
City of North Miami Beach
17011 NE 19th Ave.
Room #428
North Miami Beach, Florida 33162

*Re: Police Officers & Firefighters 2010
Valuation*

Dear Mr. Lebowitz:

The following report sets forth the actuarial valuation as of October 1, 2010 of the City of North Miami Beach Retirement Plan for Police Officers and Firefighters, for the plan year beginning on that date. The valuation is based on participant data as submitted by the Retirement administrator and asset data as submitted by the Auditor.

INVESTMENT PERFORMANCE

The market value of plan assets as of September 30, 2010 was \$62,884,072. The average investment return for the fund on a market basis for the year ended September 30, 2010 was 10.15% and 3.05% on an actuarial basis (smoothed).

The plan utilizes an actuarial averaging method to smooth out swings in investment performance and thus in asset values from year to year. Under this method, investment gains or losses outside of the 8% gross return assumption are phased in over a five-year period. As of September 30, 2010, the actuarial value of assets was \$68,869,580. Details of the development of the actuarial value of assets are set forth later in this report.

PRINCIPAL RESULTS

The principal purpose of the valuation is to set forth the City's contributions for the fiscal year ending September 30, 2012. In addition, the report sets forth the information on the plan for the City's financial statements and for the plan's own financial statements.

The total recommended employer (City) contribution for the firefighter portion of the plan for FY12 is \$56,560. This contribution amount for last year (FY11) was \$4,890. The increase is partly due to the addition of investment expenses to the City's contribution and partly due to investment losses.

Bolton Partners, Inc.

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Actuarial, Benefit and Investment Consultants

Mr. Marty Lebowitz
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The basic recommended employer contribution for the police portion of the plan for FY12 is \$5,005,108. For FY11, the recommended employer contribution for the police portion of the plan was \$4,627,683. The cost as a percentage of payroll increased from 49.5% to 55.3%. The increase in the percentage can be broken down to the following material factors, some of which are described in more detail below.

Prior Valuation Result	49.5%
Investment Results	2.2%
Change in Assumptions	2.4%
Plan Change	0.0%
Other Sources	1.2%
Current Valuation Results	55.3%

The increase for “other sources” is a reflection of the expected dollar growth in the amortization payment while the actual (non-DROP) payroll declined for the third year. The Normal Cost also declined slightly.

In addition to what we have referred to as the “basic” contribution, Ordinance 2010-22 requires a minimum additional annual contribution to bring the expected funded percentage to 70% by October 1, 2020. The City ordinance requires at least an extra \$750,000 for FY12. The \$750,000 minimum is expected to be sufficient to reach the 70% goal by 2020. This \$750,000 amount will bring the total contribution for the police to \$5,755,108.

The overall funded ratio for the plan increased from 59.2% to 61.6% (57.7% to 60.6% for Police and 85.3% to 80.7% for Firefighters).

One key purpose of this report is to determine the contribution for the fiscal year beginning on October 1, 2011. However, the valuation date is as of a year earlier. Therefore some methodology must be used to adjust for this timing difference. The methodology that has been in place is to use the dollar cost for the year beginning October 1, 2010 and add 4% to adjust for payroll and contribution growth to the year ending on September 30, 2012. This means that the dollar amount of the annual required contribution for FY12 will be the \$5,061,668 (police and fire) amount shown in this report plus the \$750,000 additional annual contribution (a total of **\$5,811,668**). This contribution is based on monthly payments covering the \$5,061,688 base contribution. We understand that the City would like to make base contributions at the beginning of each quarter. This will lower the \$5,811,688 contribution to \$5,749,099 (\$4,999,099 base plus \$750,000 additional).

COMPENSATION INFORMATION AND PAYROLL GROWTH ASSUMPTION

The amortization of the unfunded liability for police is based on the selection of (1) the number of years over which the unfunded liability is amortized, (2) the interest assumption and (3) the growth in total covered payroll. The assumption for total payroll increase was decreased to 4% as of 10/01/2010. The payroll growth assumption for the prior year was 5%.

The unfunded liability for Firefighters is amortized as a level percentage of payroll over the expected future lifetime of the remaining retirees in the plan.

In this valuation report we show an estimated FY11 payroll of \$8,798,930. This is the expected payroll for the 88 active police officers. It is based on the actual FY10 payroll (including overtime) for these same individuals plus one year's assumed pay increase. For those hired in FY10, the FY10 pay was first annualized. There is no one who will reach the age at which the retirement assumption is 100% in the coming year, therefore the active payroll for participants under the 100% retirement assumption is \$8,798,930. In the prior year's report the estimated FY10 covered payroll for 92 police officers was \$8,915,551. Last year the City's cost as a percentage of payroll was 49.5% and based on the \$8,915,551 payroll figure. This year the cost is 55.3% and based on the \$8,798,930 amount. We have been asked to also express the FY12 contribution as a percentage of payroll including the salaries for those in DROP. On this basis, the percentage would be reduced from 55.3% to 41.8%.

INFORMATION ON PAY RAISES AND INVESTMENT RETURN OVER THE LAST FIVE YEARS

The following compares the actual and expected increases in pay and investments over the last five years. These are two of the more important assumptions used to determine the City's cost. For this purpose, pay raises are measured excluding new hires and those who left during the year.

Year	Assumed Investment Return	Actual (MV) Investment Return	Assumed Average Pay Raise	Actual Average Pay Raise
FY10	8.0%	10.2%	6.9%	6.1%
FY09	8.0%	2.5%	7.7%	3.3%
FY08	8.0%	(14.9)%	7.5%	5.6%
FY07	8.0%	13.9%	7.4%	9.0%
FY06	8.0%	7.0%	7.6%	9.2%

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STATE CONTRIBUTIONS

Details of the State contribution balances are shown at the end of the report. For the Police portion of the plan, the cumulative balance is \$64,795. This is the same as in the prior year. The \$64,795 balance cannot be accessed unless another benefit improvement is made. We understand that the full balance can be used to offset the extra liability associated with a benefit improvement but this was not done when the prior improvement was made.

For the Firefighters portion, the State contribution balance for 2009 was \$11,693. The cumulative balance for 2010 is \$49,450. The following points should be noted:

1. The 2001 retiree increase of 9.5% will continue to be paid and funded from excess State contributions. To the extent that there are no excess contributions, the payments will stop.
2. A portion of the basic state contribution (\$155,242) had been allocated to pay a 2% COLA each year to certain retirees. Future 2% COLAs will no longer be paid and the money that would have been allocated to the COLA will be added to the share plan allocation.

This valuation does reflect assumption changes made as a result of an experience study. One of the changes was to change the 8% investment assumption from a net return assumption to a gross return assumption by adding an investment expense load.

The balance of this report sets forth details of changes in participation in the plan and the results of the valuation. A statement of funding progress under GASB 25 is also included.

Sincerely,

BOLTON PARTNERS, INC.



Thomas B. Lowman, FSA

Trust Fund Asset Statement

**TRUST FUND ASSET STATEMENT FOR
YEAR ENDED SEPTEMBER 30, 2010**

Original Market Value at 9/30/2009	\$ 53,640,052
<u>Receipts</u>	
State Contributions	\$ 547,235
City Contributions	7,571,660
Employee Contributions	1,224,972
Investment Income including Gain/(Loss)	5,431,554
Other Income	<u>198,535</u>
Total Receipts	\$ 14,973,956
<u>Disbursements</u>	
Benefit Payments	\$ 5,195,348
Return of Employee Contributions	5,619
Lump Sum Death Benefits	0
Investment Advisory Fees	296,395
Administrative Expenses	<u>232,574</u>
Total Disbursements	\$ 5,729,936
Net Increase/(Decrease)	\$ 9,244,020
Market Value at 9/30/2010	\$ 62,884,072
Adjustment for Excess Police Monies	0
Market Value at 9/30/2010	\$ 62,884,072
Estimated Gross Rate of Return	10.15%

INVESTMENTS AS OF SEPTEMBER 30, 2010

Cash	\$ 2,382
Money Market Funds	3,315,297
US Government Securities	10,148,738
Corporate Bonds	14,033,787
Corporate Stocks	35,599,490
Other Receivables	420,605
Due for Securities Purchased	(455,516)
Excess State Monies	(64,795)
Accounts Payable	<u>(115,916)</u>
Net Assets	\$62,884,072

**Development of Actuarial
Value of Assets**

ACTUARIAL VALUE OF ASSETS

<u>Development of Gain/(Loss) on Assets</u>	<u>10/01/2009 Valuation</u>	<u>10/01/10 Valuation</u>
(1) Beginning of Year Market Value	\$51,978,183	\$53,640,052
(2) Expected Interest on Assets (8.00% x (1))	4,158,255	4,291,204
(3) Total Plan Contributions	6,092,978	9,343,867
(4) Total Benefit Payouts	(5,318,712)	(5,200,967)
(5) Administrative Expenses	(166,706)	(232,574)
(6) Interest on (3), (4), and (5)	<u>23,835</u>	<u>153,404</u>
(7) Expected End of Year Market Value	\$56,767,833	\$61,994,986
(8) Actual End of Year Market Value	\$53,704,847	\$62,884,072
(9) Gain/(Loss) on Assets ((8) - (7))	(\$3,062,986)	\$889,086
 <u>Development of Actuarial Value of Assets</u>		
(1) End of Year Market Value	\$53,704,847	\$62,884,072
(2) Phase-in of Gain or (Loss)		
(a) Excess/(Deficiency) During Valuation Year	(\$3,062,986)	\$889,086
(b) Excess/(Deficiency) During Valuation Year - 1	(13,998,198)	(3,062,986)
(c) Excess/(Deficiency) During Valuation Year - 2	2,950,127	(13,998,198)
(d) Excess/(Deficiency) During Valuation Year - 3	<u>(633,906)</u>	<u>2,950,127</u>
(e) Total Adjustment	(\$9,796,038)	(\$6,135,777)
[80% x (a) + 60% x (b) + 40% x (c) + 20% x (d)]		
(3) Preliminary Actuarial Asset Value as of Valuation Date	\$63,500,885	\$69,019,849
(4) 80% of Market Value	\$42,963,878	\$50,307,258
(5) 120% of Market Value	\$64,445,816	\$75,460,886
(6) Adjusted Actuarial Asset Value as of Valuation Date	\$63,500,885	\$69,019,849
[(3), but not less than (4) or more than (5)]		
(7) Amounts Excluded		
a. Excess State Contributions/Share Payments	(227,849)	(150,269)
(8) Final Actuarial Asset Value as of Valuation Date	\$63,273,036	\$68,869,580
[(6) + (7a)]		

Participant Schedules

PARTICIPANT SUMMARY

	Active Participant	DROP	Inactive Participants			Total
			Terminated Vested	Retirees & Beneficiaries	Disabled	
Participants as of October 1, 2009	92	19	0	100	9	220
Retired	-	-	-	-	-	-
Terminated Vested	-	-	-	-	-	-
Terminated Non-Vested/Paid Lump Sum	(2)	-	-	-	-	(2)
Disabled	-	-	-	-	-	-
Refunds	-	-	-	-	-	-
Deceased without Beneficiary	-	-	-	(1)	-	(1)
Rehired	-	-	-	-	-	-
Transfers In	-	-	-	-	-	-
Transfers Out	-	-	-	-	-	-
New Hires	5	-	-	-	-	5
DROP	(7)	7	-	-	-	-
Data Adjustment	-	-	-	1	-	1
Net Change	(4)	7	-	-	-	3
Participants as of October 1, 2010	88	26	0	100	9	223

Service - Age Distribution

AGE, SERVICE AND AVERAGE SALARY DISTRIBUTION

Age as of 10/1/2010	Years of Service							Total
	Under 1	01 - 04	05 - 09	10 - 14	15 - 19	20 - 24	25 & up	
Under 25	1 51,793	3 87,927	0 0	0 0	0 0	0 0	0 0	4 78,894
25 - 29	1 48,392	7 86,047	1 133,952	0 0	0 0	0 0	0 0	9 87,186
30 - 34	0 0	6 99,166	1 92,580	5 109,977	1 144,236	0 0	0 0	13 106,285
35 - 39	1 41,148	3 89,942	7 93,180	13 106,831	7 105,553	0 0	0 0	31 99,707
40 - 44	0 0	2 96,766	2 82,319	6 104,436	10 119,622	0 0	0 0	20 109,050
45 - 49	0 0	2 85,563	2 83,684	0 0	6 99,839	0 0	0 0	10 93,753
50 - 54	0 0	0 0	0 0	0 0	1 107,540	0 0	0 0	1 107,540
55 - 59	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
60 - 64	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
65 - 70	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
70 & up	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Totals	3 47,111	23 91,113	13 93,138	24 106,888	25 111,436	0 0	0 0	88 99,988

Average Age: 37.74

Average Service: 9.95

Average Salary: \$99,988

Actuarial Costs

ACTUARIAL COSTS (Police and Firefighters)

	<u>As of</u> <u>10/01/2009</u>	<u>As of</u> <u>10/01/2010</u>
Participants		
Active	92	88
DROP	19	26
Terminated Vested	0	0
Disabled	9	9
Retirees & Beneficiaries	<u>100</u>	<u>100</u>
Total	220	223
Active Payroll	\$ 8,915,551	\$ 8,798,930
Actuarial Liability		
Active Participants	\$ 29,945,712	\$ 27,753,115
DROP ¹	18,352,842	24,025,066
Terminated Vested Participants	0	0
Disabilities	1,266,760	1,249,224
Retirees & Beneficiaries ²	<u>\$ 57,294,878</u>	<u>\$ 58,738,243</u>
Total	\$106,860,192	\$111,765,648
Actuarial Value of Assets	\$ 63,273,036	\$ 68,869,580
Unfunded Actuarial Liability	\$ 43,587,156	\$ 42,896,069
Funded Percentage	59.2%	61.6%

¹ Includes \$3,641,687 for DROP accounts in 2010 and \$2,140,089 in 2009.

² Includes \$5,589,489 of retired fire liability in 2010 and \$5,798,470 in 2009.

DETERMINATION OF CITY CONTRIBUTION

The City's contribution is based on (1) the Normal Cost plus (2) an amortization payment less (3) expected Employee and State contributions. The police plan amortization amounts are based on a "level percentage of pay" method which assumes payments (and covered payroll) increase by 4% each year. The firefighter plan amortization is based on the expected life of the remaining retirees. This valuation determines the employer contribution for the year ending September 30, 2012. The prior year's amounts are shown for comparison. The amounts required by Ordinance 2010-22 are not shown on this page.

	10/01/2009				10/01/2010			
	<u>Police</u>	<u>Fire</u>	<u>Total</u>	<u>Percent of Payroll</u>	<u>Police</u>	<u>Fire</u>	<u>Total</u>	<u>Percent of Payroll</u>
(A) Total Normal Cost	\$2,811,966	\$12,496	\$2,824,462	31.7%	\$2,886,402	\$32,969	\$2,919,370	33.2%
(B) Amortization Amount	<u>2,626,439</u>	<u>41,954</u>	<u>2,668,393</u>	29.9%	<u>2,914,362</u>	<u>71,730</u>	<u>2,986,092</u>	33.9%
(C) Total (A + B)	\$5,438,405	\$54,450	\$5,492,855	61.6%	\$5,800,764	\$104,699	\$5,905,463	67.1%
(D) Interest for Monthly Payments	\$213,351	\$2,136	\$215,487	2.4%	\$227,567	\$4,107	\$231,674	2.6%
(E) Total Minimum Contribution (C + D)	\$5,651,756	\$56,586	\$5,708,342	64.0%	\$6,028,331	\$108,806	\$6,137,137	69.7%
(F) Expected Employee Contributions	\$979,543	\$0	\$979,543	11.0%	\$976,681	\$0	\$976,681	11.1%
(G) Expected State Funding	<u>264,896</u>	<u>51,929</u>	<u>316,825</u>	3.6%	<u>239,046</u>	<u>54,421</u>	<u>293,467</u>	3.3%
(H) Net City Contributions [(E – F – G), not less than 0]	\$4,407,317	\$4,657	\$4,411,974	49.5%	\$4,812,604	\$54,385	\$4,866,989	55.3%
(I) Required City Contributions for the Following Fiscal Year ((H) x 1.04)	\$4,627,683	\$4,890	\$4,632,573	N/A	\$5,005,108	\$56,560	\$5,061,668	N/A

Firefighter Liabilities

FIREFIGHTER FUNDED POSITION

All of the firefighters covered by this plan are retired. We measure their benefits two different ways: (1) with payment of the October 1, 2001 9.5% increase and (2) without payment of the October 1, 2001 9.5% increase. Unlike in prior years, there is no future COLA considered.

Method 1: The funded percentage for firefighters as of October 1, 2010 with future payment of the October 1, 2001 9.5% increase is shown in the following table. Our understanding is that State funding continues as long as there is an unfunded liability on this basis. In addition, State funding may continue to provide for the lump sum payments to retirees. This is based on our conversations with the State's actuaries. However, at some point (after this liability is 100% funded) the Board will need to decide when the funding is such that it must report to the State that no further State contributions should be made. We are not aware of a "bright line" test that would apply.

<u>Firefighter Liability</u>	<u>Allocated Valuation Assets</u>	<u>Funded Percentage</u>
\$5,589,489	\$4,512,994	80.7%

Method 2: The funded percentage for firefighters as of October 1, 2009, assuming no 9.5% COLA, is shown in the following table. This is the basis to determine the amortization cost on page 11.

<u>Firefighter Liability</u>	<u>Allocated Valuation Assets</u>	<u>Funded Percentage</u>
\$5,155,607	\$4,512,994	87.5%

Assumptions and Methods

ASSUMPTIONS AND METHODS

Funding Method:

The Entry Age Normal Cost method has been used to develop the funding requirements for the plan. The contribution equals the sum of the normal cost and the amount necessary to amortize the unfunded actuarial liabilities and any actuarial gains or losses over a period of 30 years for police and the average of expected future lifetime for firefighters. Amortization payments increase 5.0% annually. The Normal Cost includes estimated expenses.

Actuarial Asset Method:

Asset smoothing method. Spreading the market value investment gains or losses in excess of the assumed return over a 5-year period. The Actuarial Value of assets cannot be less than 80%, or greater than 120% of market value. Actuarial Value of assets are adjusted not to include reserve for future benefit improvements such as excess State premium tax monies.

Valuation Rate/

Investment Return Rate:

8% compounded annually. Effective with the 2010 valuation, investment fees of 50 basis points were added to the normal cost.

COLA Increases:

Benefits are assumed to increase by 2.5% of the current benefit each year for police participants. Firefighter benefits are not expected to increase.

Salary Increases:

The following graded schedule is used:

For the current year (effective with 2010 valuation):

Years of <u>Service</u>	Salary Scale <u>Increase</u>
0 – 4	12.00%/yr
5 – 9	6.00%
10 – 12	5.50%
13 – 19	4.00%
20 +	3.00%

For the prior year:

Years of <u>Service</u>	Salary Scale <u>Increase</u>
0 – 12	8.70%/yr
13 +	5.50%

ASSUMPTIONS AND METHODS

(cont.)

Payroll Growth: Salary increases for total payroll are 4.0% per year (was 5.0% for the 2009 valuation).

Inflation: 3.0% compounded annually (was 4.0% for the 2009 valuation).

Mortality: *Healthy:* Generational RP-2000 Combined Mortality Table for males and females projected using scale AA.

Disabled: PBGC Disabled Life Mortality Tables (III & IV). RP-2000 for disabled retirees blended 15% female and 85% male.

Termination of Employment: Termination rates are based on service only. Sample rates are as follows:

For Current Year (Effective with the 2010 valuation):

<u>Years of Service</u>	Police Termination <u>Rates</u>
0 – 1	12.00%
1 – 5	6.00%
5+	0.50%

For Prior Year:

<u>Years of Service</u>	Police Termination <u>Rates</u>
0 – 1	12.00%
1 – 5	6.00%
5+	0.75%

Retirement Rates: 75% of participants retire upon reaching the later of age 40 and 20 years of service. Participants continue retiring at a rate of 50% each year until age 52 or 25 years of service. Upon reaching age 52 or 25 years of service, 100% retirement is assumed.

ASSUMPTIONS AND METHODS

(cont.)

50% of retirements are assumed to join DROP. Joining DROP is treated like a retirement. Those joining DROP are assumed to stay in DROP for five years (this impacts when the 2.5% COLA starts).

Disability Rates:

Triple the rates in the 1985 class (1) disability study rates. Rates are as follows:

Disabilities per 10,000 members

<u>Age</u>	<u>Disability</u>	<u>Age</u>	<u>Disability</u>
20	9	37	26
21	9	38	29
22	10	39	32
23	10	40	35
24	11	41	39
25	11	42	44
26	12	43	49
27	13	44	55
28	13	45	61
29	14	46	68
30	14	47	77
31	15	48	86
32	16	49	96
33	17	50	107
34	19	51	122
35	21	52	140
36	23		

Marital Status:

100% of active members are assumed to be married with wife 3 years younger than husband.

Plan Provisions

PLAN PROVISIONS

Eligibility Requirements:

Full-time employment with the City as a sworn police officer or former firefighter. Participants enter the plan on the first day of employment or January 1, 1990 for any employee who was a participant in the Retirement Plan for Employees of the City of North Miami Beach (effective October 1, 1965).

Final Monthly Compensation (FMC):

Average monthly compensation from the City or County for the 60 consecutive months for police officers and 18 consecutive months for firefighters, out of 120 months which gives the highest average monthly rate of compensation for the participant.

Compensation means, as per the State Statute, the total cash remuneration paid to a police officer for services rendered.

Credited Service:

Completed calendar months, from the date of employment until the first day of the month coincident with or next following a participant's date of retirement or termination.

NORMAL RETIREMENT

Normal Form of Benefit:

Life Annuity for at least a 10 year period.

Normal Retirement Date:

First of the month coincident with or immediately following the earliest of:

- (a) Attainment of age 52
- (b) For police: 20 years of service
For firefighters: 22 years of service

Normal Retirement Benefit:

For Police: 3% of final monthly compensation multiplied by years of credited service.

PLAN PROVISIONS

(cont.)

For Firefighters: 3.3% of final monthly compensation multiplied by years of credited service.

Maximum Benefit: 100% of average final compensation, for members who entered the plan after 1979.

COLA:

For Police: COLA increase is 2.50% per year and is payable annually (on October 1st) to any retiree or beneficiary who has been retired for at least 3 years, and has retired on or after December 30, 1988, or retired under the Early Retirement Incentive.

For Firefighters: In lieu of the cost of living adjustments previously provided, a lump sum will be paid to all firefighter retirees and pensioners alive as of each October 1st prior to the payment of this benefit. The amount is based upon the undistributed premium tax income received during the previous calendar year, or if the payment of a year's premium tax income is delayed until after December 31st of that year then payment of the supplemental retirement benefit shall be paid within 90 days after receipt.

EARLY RETIREMENT

Normal Form of Benefit:

Life Annuity for at least a 10 year period.

Early Retirement Date:

The earlier of age 45 with 15 years of service, or the attainment of age 50 with 10 years of service.

Early Retirement Benefit:

Normal retirement benefit reduced 3% each year the employee's age at early retirement precedes their age at normal retirement.

PLAN PROVISIONS

(cont.)

COLA: COLA increase is 2.50% per year and is payable annually (on October 1st) to any police officer who retired on or after December 30, 1998 and who has been retired for at least 3 years, attained age 52, and completed 20 or more years of credited service. Surviving beneficiaries receive a COLA on the same date the participant would have become eligible.

DEFERRED RETIREMENT OPTION PROVISIONS (DROP)

Normal Form of DROP Account: Lump Sum

Normal Form of DROP Benefit: Life Annuity for at least a 10 year period.

DROP Retirement Date: The earlier of age 52 with 15 years of service or the attainment of 20 years of service.

Maximum DROP Period: Eight years.

Interest Rate Credited to DROP Account: Valuation Interest Rate

DROP Benefit: Same as normal retirement benefit with FMC and service determined at entry in DROP.

COLA: COLA increase is 2.50% per year and is payable annually (on October 1st) to any police officer who has terminated active service and has been collecting benefits for at least 3 years.

DISABILITY RETIREMENT

Normal Form of Benefit: Life Annuity

Disability Retirement Date: Total and permanent disability

Disability Retirement: The greater of 60% of FMC, or the participants accrued benefit at date of disability.

PLAN PROVISIONS

(cont.)

COLA:

COLA increase is 2.50% per year and is payable annually (on October 1st) to any police officer who retired on or after December 30, 1998 and who has been retired for at least 3 years and attained age 52.

Death Benefit:

In the event that the death of a disabled participant occurs after date of disability but prior to normal retirement date, the beneficiary will receive the actuarial equivalent of the greater of (A) and (B) below:

(A) The value of the deferred monthly benefit commencing at normal retirement that the member would have accrued if they remained in active service from date of disability to date of death.

(B) The smaller of:

a. 24 times FMC immediately preceding disability

b. 100 times the participant's anticipated monthly retirement benefit commencing on normal retirement that would have been payable if the participant had remained in service at the same rate of pay from date of disablement to date of death.

This benefit is paid as a Life Annuity and is guaranteed for at least a 10 year period

DEATH BENEFIT

Normal Form of Benefit:

Life Annuity for at least a 10 year period.

PLAN PROVISIONS

(cont.)

Death Benefit

The monthly retirement income payable upon the death of a participant who is survived by a spouse and/or dependent is the actuarial equivalent of the greater of (A) and (B) below:

- (A) The single-sum value of the accrued deferred benefit commencing on Normal Retirement Date, accrued to date of death.
- (B) The smaller of:
 - a. 24 times the monthly pay on October 1 preceding the participants date of death
 - b. 100 times the anticipated monthly retirement income commencing on Normal Retirement Date.

COLA:

None.

WITHDRAWAL BENEFIT – LESS THAN 10 YEARS OF SERVICE

Form of Benefit:

Lump Sum, payable immediately.

Withdrawal Date:

First day of service, up to 10 years of credited service.

Termination Benefits:

Accumulated Employee Contributions with 3% interest.

WITHDRAWAL BENEFIT – MORE THAN 10 AND LESS THAN 20 YEARS OF SERVICE

Form of Benefit:

Lump Sum paid immediately or Life Annuity for at least a 10 year period, payable at age 52.

Withdrawal Date:

At least 10 years of credited service, but less than 20 years of credited service.

PLAN PROVISIONS

(cont.)

Termination Benefits:

The greater of:

- (A) Same as normal retirement benefit with FMC and service determined at date of termination.
- (B) Accumulated Employee Contributions with 3% interest.

EMPLOYEE CONTRIBUTIONS

Employee Contributions:

Participants contribute to the plan:

11.1% of Compensation (pre-tax) for police officers.

- Ordinance 2005-6 stated in the event that the additional tax revenues provided under Section 185 of Florida statutes are insufficient to fund the service related death benefit created by Ordinance 2005-6, employee contributions will increase from 10.5% to 11.1% of payroll, unless changed through collective bargaining.
- Interest credited at 3% per year.

Accounting Information

**STATEMENT NO. 25 OF THE
GOVERNMENTAL ACCOUNTING STANDARDS BOARD**

Schedule of Funding Progress
(*\$ in thousands*)

Actuarial Valuation Date	(1) Actuarial Value of Assets	(2) Actuarial Accrued Liability	(3) Funded Ratio (1) / (2)	(4) Unfunded Actuarial Accrued Liability (2) – (1)	(5) Covered Payroll	(6) UAAL as a Percentage of Covered Payroll ((2 – 1)/5)
10/01/2001	\$48,495	\$59,272	81.8%	\$10,777	\$6,909	156.0%
10/01/2002	\$42,552	\$62,481	68.1%	\$19,929	\$7,656	260.3%
10/01/2003	\$46,360	\$70,330	65.9%	\$23,970	\$7,767	308.6%
10/01/2004	\$46,762	\$77,714	60.2%	\$30,952	\$8,137	380.4%
10/01/2005	\$47,170	\$84,260	56.0%	\$37,090	\$8,115	457.1%
10/01/2006	\$50,986	\$90,872	56.1%	\$39,886	\$8,571	465.4%
10/01/2007	\$57,040	\$95,564	59.7%	\$38,524	\$9,609	400.9%
10/01/2008	\$61,127	\$101,075	60.5%	\$39,948	\$9,286	430.2%
10/01/2009	\$63,273	\$106,860	59.2%	\$43,587	\$8,916	488.9%
10/01/2010	\$68,870	\$111,766	61.6%	\$42,896	\$8,799	487.5%

Schedule of Employer Cost

Fiscal Year Ended	Annual Pension Cost (APC)	Employer Contribution	Percentage of APC Contributed	Net Pension Obligation (Asset)
2002	1,160,069	1,300,000	112%	(503,422)
2003	1,878,968	1,900,000	101%	(524,454)
2004	2,726,316	2,740,000	101%	(538,138)
2005	2,679,197	2,586,679	97%	(445,621)
2006	3,305,870	3,315,767	100%	(455,517)
2007	3,609,105	3,656,025	101%	(502,437)
2008	4,126,588 ¹	4,338,288	105%	(714,137)
2009	4,346,525 ¹	4,561,594	105%	(929,206)
2010	4,503,329 ¹	7,571,660	168%	(3,997,537)
2011	4,558,457 ¹	TBD	TBD	TBD

¹ Excludes extra contributions associated with Ordinance 2010-22. Also the APC is not the same as the ARC since the NPO is not zero.

**STATEMENT NO. 25 OF THE
GOVERNMENTAL ACCOUNTING STANDARDS BOARD**
(cont.)

Schedule of Employer Contributions

Fiscal Year Ended September 30	Annual Required Contribution (ARC)	Employer Contribution	Percentage Contributed
2001	1,128,814	1,128,814	100%
2002	1,168,322	1,300,000	111%
2003	1,891,578	1,900,000	100%
2004	2,738,675	2,740,000	100%
2005	2,691,879	2,586,679	96%
2006	3,315,767	3,315,767	100%
2007	3,620,765	3,656,025	101%
2008	4,138,280	4,338,288	105%
2009	4,361,589	4,561,594	105%
2010	4,521,657	7,571,660	167%

Development of Net Pension Obligation

Fiscal Year Ending September 30	<u>2011</u>	<u>2010</u>	<u>2009</u>
Annual Required Contribution (ARC)	\$4,632,573	\$4,521,657	\$4,361,589
Interest on Net Pension Obligation (Asset)	(319,803)	(74,336)	(57,131)
Adjustment to ARC	<u>245,687</u>	<u>56,008</u>	<u>42,067</u>
Annual Pension Cost	4,558,457	4,503,329	4,346,525
Contributions Made	TBD	<u>7,571,660</u>	<u>4,561,594</u>
Increase (decrease) in Net Pension Obligation (Asset)	TBD	(3,068,331)	(215,069)
Net Pension Obligation (Asset) Beginning of Year	TBD	<u>(929,206)</u>	<u>(714,137)</u>
Net Pension Obligation (Asset) End of Year	TBD	(3,997,537)	(929,206)

**STATEMENT NO. 25 OF THE
GOVERNMENTAL ACCOUNTING STANDARDS BOARD
 (cont.)**

PARTICIPANTS IN THE OCTOBER 2010 VALUATION

Active Vested	49
Active Non Vested	39
DROP	26
Terminated Vested	0
Disabled	9
Retirees and Beneficiaries	<u>100</u>
Total	223

ASSUMPTIONS AND METHODS

The information presented in the required supplementary schedules was determined as part of the actuarial valuations at the dates indicated. Additional information as of the latest actuarial valuation follows.

Actuarial cost method	Entry Age Normal
Amortization method	Level percent of pay (4% increase/year)
Remaining amortization period	Police: Remaining Amortization periods range from 9 to 30 years. Fire: Amortization period is based on the average future lifetime of the remaining retirees.
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Investment rate of return	8.0% (after expenses)
Projected salary increases	Varies by service
Post Retirement Cost-of-living adjustments	2.5% per year, compounded (police only)

State Required Exhibits

**CUMULATIVE BALANCE
 OF STATE CONTRIBUTIONS**

POLICE

Year Ending 9/30	Police State Contributions	Benefit Changes	Base Plus Benefit Improvements	Excess Contributions Total	Cumulative Balance
2010	\$239,046	\$ -	\$308,312	\$ -	\$64,795
2009	264,896	-	308,312	-	64,795
2008	273,052	-	308,312	-	64,795
2007	273,052	-	308,312	-	64,795
2006	273,148	-	308,312	-	64,795
2005	273,052	42,869	308,312	-	64,795
2004	330,238	-	265,443	64,795	64,795
2003	253,218	-	265,443	-	-
2002	237,243	-	265,443	-	-
2001	226,942	-	265,443	-	-
2000	210,181	-	265,443	-	-
1999	240,327	-	265,443	-	-
1998	265,443	-	265,443	-	-

**CUMULATIVE BALANCE
OF STATE CONTRIBUTIONS
 (cont.)**

FIRE

In 2009, the plan began reporting contributions on an accrual basis.

On 9/30/2010 there was an unallocated balance of \$49,450.

The amount reported to the State as a one time payment from excess funds equals (1) the funds spent on the pay-as-you-go cost for the 9.5% COLA (\$55,450) plus (2) the amount of the share payments (\$163,054) paid in January 2009 less (3) the portion of the Basic payment that represented the cost of a 2% COLA (\$103,313).

Year Ending 9/30	Regular Fire State Contributions	Supplemental Fire State Contributions	Benefit Improvements	Base Amount	Excess Contributions Total	Cumulative Balance
2010	\$206,470	\$101,720	\$115,191	\$155,242	(\$10,291)	\$49,450
2009	177,000	308,103	500,290	203,291	(170,430)	11,693
2008	272,418	168,630	56,295	155,242	229,511	230,170
2007						\$659

UNFUNDED LIABILITY AMORTIZATION SCHEDULES

Date of Origin	Source	10/01/2010			10/01/2010		
		Total Balance	Police	Fire	Total Payments	Police	Fire
10/01/1989	Unfunded Liability	3,641,674	3,648,656	(6,982)	468,339	469,237	N/A
10/01/1990	Actuarial (Gain)/Loss	2,794,063	2,799,420	(5,357)	329,188	329,820	N/A
10/01/1991	Actuarial (Gain)/Loss	(4,537,300)	(4,546,002)	8,702	(494,616)	(495,565)	N/A
10/01/1992	Actuarial (Gain)/Loss	(1,141,353)	(1,143,543)	2,190	(116,066)	(116,289)	N/A
10/01/1993	Actuarial (Gain)/Loss	(2,200,248)	(2,204,468)	4,220	(210,160)	(210,563)	N/A
10/01/1994	Actuarial (Gain)/Loss	2,731,400	2,736,640	(5,240)	246,480	246,952	N/A
10/01/1994	Plan Amendment	934,437	936,231	(1,794)	84,323	84,485	N/A
10/01/1995	Actuarial (Gain)/Loss	(4,189,763)	(4,197,796)	8,033	(358,982)	(359,671)	N/A
10/01/1995	Assumption Change	1,647,759	1,650,918	(3,159)	141,181	141,452	N/A
10/01/1996	Actuarial (Gain)/Loss	(449,644)	(450,506)	862	(36,739)	(36,809)	N/A
10/01/1996	Assumption Change	(206,222)	(206,619)	397	(16,850)	(16,882)	N/A
10/01/1996	Plan Amendment	11,757,916	11,780,461	(22,545)	960,696	962,539	N/A
10/01/1997	Actuarial (Gain)/Loss	(1,752,816)	(1,756,179)	3,363	(137,092)	(137,355)	N/A
10/01/1997	Plan Amendment	4,457,339	4,465,887	(8,548)	348,620	349,289	N/A
10/01/1997	Assumption Change	(7,712,359)	(7,727,148)	14,789	(603,204)	(604,361)	N/A
10/01/1998	Actuarial (Gain)/Loss	364,947	365,646	(699)	27,415	27,467	N/A
10/01/1998	Plan Amendment	1,510,320	1,513,217	(2,897)	113,455	113,672	N/A
10/01/1999	Actuarial (Gain)/Loss	(1,171,237)	(1,173,483)	2,246	(84,755)	(84,918)	N/A
10/01/2000	Actuarial (Gain)/Loss	1,635,658	1,638,796	(3,138)	114,324	114,543	N/A
10/01/2001	Actuarial (Gain)/Loss	14,133,330	14,160,433	(27,103)	956,418	958,252	N/A
10/01/2001	Assumption Change	1,937,312	1,941,025	(3,713)	131,100	131,351	N/A
10/01/2001	Methodology Change	(12,618,149)	(12,642,345)	24,196	(853,884)	(855,521)	N/A
10/01/2001	Plan Amendment - Police	(107,402)	(107,402)	0	(7,268)	(7,268)	N/A
10/01/2001	Plan Amendment - Fire	1,491,395	0	1,491,395	100,924	0	N/A

UNFUNDED LIABILITY AMORTIZATION SCHEDULES

(cont.)

Date of Origin	Source	10/01/2010			10/01/2010		
		Total Balance	Police	Fire	Payments	Police	Fire
10/01/2002	Actuarial (Gain)/Loss	9,490,930	9,509,128	(18,198)	623,171	624,366	N/A
10/01/2002	Assumption Change	4,375,422	4,383,812	(8,390)	287,289	287,840	N/A
10/01/2003	Actuarial (Gain)/Loss	(1,722,433)	(1,486,334)	(236,099)	(109,947)	(94,877)	N/A
10/01/2003	Plan Amendment - Police	1,571,819	1,571,819	0	100,333	100,333	N/A
10/01/2004	Plan Amendment - Police	238,910	238,910	0	14,852	14,852	N/A
10/01/2004	Plan Amendment - Police	480,277	480,277	0	29,857	29,857	N/A
10/01/2004	Assumption Change	724,597	724,597	0	45,046	45,046	N/A
10/01/2004	Actuarial (Gain)/Loss	7,424,391	6,830,455	593,936	461,551	424,628	N/A
10/01/2005	Actuarial (Gain)/Loss	3,613,554	3,016,835	596,719	219,136	182,950	N/A
10/01/2005	Methodology Change	1,080,666	932,975	147,691	65,535	56,578	N/A
10/01/2006	Assumption Change	636,902	636,902	0	37,733	37,733	N/A
10/01/2006	Actuarial (Gain)/Loss	1,627,950	1,905,147	(277,197)	96,447	112,869	N/A
10/01/2007	Assumption Change	(392,342)	(392,342)	0	(22,739)	(22,739)	N/A
10/01/2007	Actuarial (Gain)/Loss	(3,672,502)	(1,383,453)	(2,289,049)	(212,848)	(80,181)	N/A
10/01/2008	Actuarial (Gain)/Loss	2,124,330	1,975,607	148,723	120,597	112,154	N/A
10/01/2009	Actuarial (Gain)/Loss	3,159,833	2,890,431	269,402	175,911	160,913	N/A
10/01/2010	Actuarial (Gain)/Loss	(207,842)	(453,706)	245,864	(11,359)	(24,796)	N/A
10/01/2010	Assumption Change	(1,043,328)	(1,043,328)	0	(57,021)	(57,021)	N/A
	Total	42,462,191	41,819,571	642,620	2,966,391	2,914,362	71,730*

Note: Bases are amortized as a level percent of payroll each year. Total payroll is assumed to increase 4.0% annually.

* The entire firefighter unfunded liability is amortized over the average future lifetime of the remaining retirees.

PAYROLL ASSUMPTION GROWTH

Note: This calculation is needed to justify the 4.00% assumption used to determine amortization payments (which are assumed to increase with covered payroll). The number of active members excludes those in DROP (there was no DROP in 2000).

<u>Date</u>	<u>Annual Rate of Pay</u>	<u>Number of Actives</u>	<u>Average</u>
10/1/2000	\$5,781,502	98	\$58,995
10/1/2010	\$8,798,930	88	\$99,988
		Ratio over 10 years	169%
		Average Increase	5.42%

LIABILITY BREAKDOWN

There were no plan changes to the plan this year. The assumptions were updated for Termination and Salary Scale based on the Experience study completed 09/15/2010. Below describes the Present Value of Future Benefits associated with the plan. All values are at an 8% discount rate.

<u>Present Value of Future Benefits</u>	<u>Pre Assumption Change</u>	<u>Pre Plan Change</u>	<u>Final Valuation</u>
Actives			
a) Retirement	\$49,314,504	\$44,756,637	\$44,756,637
b) Termination	958,808	632,993	632,993
c) Death	904,672	864,158	864,158
d) Disability	1,496,388	1,420,508	1,420,508
e) Amount Owed for Purchases	<u>(181,664)</u>	<u>(181,664)</u>	<u>(181,664)</u>
Total Actives	\$52,492,708	\$47,492,632	\$47,492,632
Inactive			
a) DROP Participants	\$24,025,066	\$24,025,066	\$24,025,066
b) Terminated Vested Participants	0	0	0
c) Disabilities	1,249,224	1,249,224	1,249,224
d) Retirees/Beneficiaries	<u>58,738,243</u>	<u>58,738,243</u>	<u>58,738,243</u>
Total Inactive	\$84,012,533	\$84,012,533	\$84,012,533
Total Present Value of Future Benefits¹	\$136,505,241	\$131,505,165	\$131,505,165

¹ The valuation includes all service purchases which members are paying for. Credits for the present value of extra future employee contributions to pay for a portion of the purchases are shown as a credit against plan liabilities.

LIABILITY BREAKDOWN

(cont.)

There were no plan changes to the plan this year. The assumptions were updated for Termination and Salary Scale based on the Experience study completed 09/15/2010. Below describes the Actuarial Accrued Liability, Normal Cost, Salary, and Contributions associated with the plan.

<u>Actuarial Accrued Liability</u>	<u>Pre Assumption Change</u>	<u>Pre Plan Change</u>	<u>Final Valuation</u>
Actives			
a) Retirement	\$27,884,077	\$26,929,826	\$26,929,826
b) Termination	399,213	258,731	258,731
c) Death	203,467	229,903	229,903
d) Disability	491,350	516,319	516,319
e) Amount Owed for Purchases	<u>(181,664)</u>	<u>(181,664)</u>	<u>(181,664)</u>
Total Actives	\$28,796,443	\$27,753,115	\$27,753,115
Inactive			
a) DROP Participants	\$24,025,066	\$18,352,842	\$18,352,842
b) Terminated Vested Participants	0	0	0
c) Disabilities	1,249,224	1,266,760	1,266,760
d) Retirees/Beneficiaries	<u>58,738,243</u>	<u>57,294,878</u>	<u>57,294,878</u>
Total Inactive	\$84,012,533	\$76,914,480	\$76,914,480
Total Actuarial Accrued Liability	\$112,808,976	\$111,765,648	\$111,765,648
Normal Cost			
a) Retirement	\$2,423,292	\$2,164,995	\$2,164,995
b) Termination	83,976	60,426	60,426
c) Death	81,463	77,638	77,638
d) Disability	119,231	113,204	113,204
e) Amount Owed for Purchases	0	0	0
f) Expense Load	<u>188,687</u>	<u>188,687</u>	<u>188,687</u>
Total Actives	\$2,896,649	\$2,604,950	\$2,604,950
Present Value of Future Salary	\$80,239,876	\$74,194,435	\$74,194,435
Present Value of Future Employee Contributions	\$8,906,626	\$8,235,582	\$8,235,582
Required Contributions ²	\$5,634,256	\$5,811,668	\$5,811,668

² Includes extra \$750,000 contribution to get to 70% funded by FY2020.

PRESENT VALUE OF ACCUMULATED BENEFITS

There were no plan changes to the plan this year. The assumptions were updated for Termination and Salary Scale based on the Experience study completed 09/15/2010. Below describes the Present Value of Accumulated Benefits associated with the plan.

<u>Present Value of Accumulated Benefits</u>	<u>Final Valuation</u>
Actives	
a) Retirement	\$18,428,479
b) Termination	344,489
c) Death	594,373
d) Disability	681,528
e) Amount Owed for Purchases	<u>(181,664)</u>
Total Actives	\$19,867,205
Inactive	
a) DROP Participants	\$24,025,066
b) Terminated Vested Participants	0
c) Disabilities	1,249,224
d) Retirees/Beneficiaries	<u>58,738,243</u>
Total Inactive	\$84,012,533
Total Present Value of Accumulated Benefits	\$103,879,738

EMPLOYER CONTRIBUTIONS

Employer FY10 Contributions

Required Employer Contribution (ARC)	\$4,521,657
Actual Employer Contribution	\$7,571,660

RECONCILIATION OF UNFUNDED ACCRUED LIABILITY

(1) Unfunded Accrued Liability as of 10/01/2009	\$43,587,156
(2) Normal Cost	2,824,462
(3) Interest on (1) and (2)	3,712,929
(4) Plan Sponsor Contribution	(8,118,895)
(5) Interest on (4)	(318,508)
(6) Changes due to	
(a) Assumptions	(1,043,328)
(b) Funding	0
(c) Plan Amendments	0
(d) Actuarial Gain/Loss	2,252,252
(7) Total Unfunded Accrued Liability as of 10/01/2010	\$42,896,069

ACCUMULATED EMPLOYEE CONTRIBUTIONS WITH INTEREST

Employee Contributions	\$8,007,504
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RECONCILIATION OF DROP ACCOUNT BALANCE

Reconciliation of DROP Account Balance

a) Total Account Balance as of 09/30/2009	\$2,140,089
b) Principal	1,279,456
c) Interest on Account Balance	222,142
d) Withdrawal for extra benefits purchased	0
Total Account Balance as of 09/30/2010	\$3,641,687
a) Amount Owed for purchases	0
Total Account Balance as of 09/30/2010	\$3,641,687

DROP members who purchased additional service or benefits prior to joining DROP are allowed to pay for these purchases from their DROP account. There are no purchases currently being paid from through the DROP.

FUTURE BENEFIT PAYOUTS

<u>Plan Year</u>	<u>Amount</u>
2010	7,169,614
2011	5,793,989
2012	7,888,677
2013	8,865,660
2014	10,088,633
2015	7,726,219
2016	7,941,618
2017	8,214,495
2018	8,528,680
2019	8,851,375
2020	9,027,536
2021	9,200,457
2022	9,297,147
2023	9,362,189
2024	9,418,735

The 10.15% investment return calculated is net of investment and administrative expenses.

Actuarial Certification

CERTIFICATION

This actuarial valuation and cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.



Thomas B. Lowman, FSA, EA, MAAA
Chief Actuary
Enrollment number 08-3201