

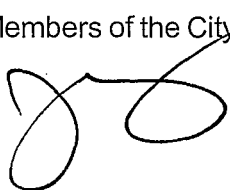


# MIAMI BEACH

OFFICE OF THE CITY MANAGER

## COMMISSION MEMORANDUM

TO: Mayor Matti Herrera Bower and Members of the City Commission

FROM: Jorge M. Gonzalez, City Manager 

DATE: March 25, 2009

SUBJECT: Unfunded Liability in the Pension Fund for Firefighters and Police Officers in the City of Miami Beach (Fire and Police Pension) and the Miami Beach Employees' Retirement Plan (MBERP)

This memorandum summarizes the status of unfunded liabilities in the two City of Miami Beach Pension Plans: (1) the Pension Fund for Firefighters and Police Officers in the City of Miami Beach (Fire and Police Pension), and (2) the Miami Beach Employees' Retirement Plan (MBERP).

### **Background**

The Fire and Police Pension Plan provides pension benefits to police officers and fire fighters, while the MBERP provides pension benefits for almost all other full-time employees. Approximately 55 current employees participate in a defined contribution 401 Plan which is no longer offered to new employees.

Each year, the City receives independent actuarial reports for each of the City's two pension plans. These reports specify the City's contribution requirement for the upcoming fiscal year. The required contribution is determined by each pension plan actuary, in accordance with State Statutes, and is based on various assumptions established by each pension plan Board in consultation with the pension plan Actuary and Investment Consultant. These assumptions include current wage data, mortality rates, retirement ages, future salary increases, pension plan expenses, and investment performance assumptions. These assumptions should mirror the actual plan experience over the long term.

The actuarial valuation of the pension plan is a mathematical determination of the financial condition of the plan, which includes the computation of the present monetary value of benefits payable to present members, and the present monetary value of future employer and employee contributions, considering the expected mortality rates among employees and retirees, rates of disability, retirement age, withdrawal from service, salary increases, investment earnings and value of assets. In contrast to the market value of the pension plan assets, the actuarial value of the pension plan assets is equal to the market value of the assets at a specific date, adjusted to reflect a five year phase-in (or smoothing) of any asset experience gain or loss. The 5-year smoothing of pension plan asset value means that only 20% of the experience gain or loss that the fund experiences in any one year is recognized immediately for the purpose of determining the actuarial value of the plan and the annual required contribution.

The market value of the plan is the total value of all plan investments as of a given point in time based on current market value on that date. Both the actuarial and market value of the pension plan assets are important indicators of the plan's condition. Using the actuarial value methodology allows the pension plan to spread the annual plan experience over a period of time (5 years). By doing this, the short term swings of the market, economic upswings or downturns, or other near-term factors can be softened over time. The market value methodology for pension plan assets gives a point-in-time assessment of the plan's assets without any smoothing. This approach typically results in more volatility in the plan assets as any short-term experience affects the plan immediately.

As part of the annual actuarial valuation for each plan based on plan data as of October 1, the Actuary evaluates how the actual data for the preceding year compared to the actuarial valuation for that year. Any differences are reflected as gains or losses in unfunded liability. The unfunded liability for a plan is the difference between the benefits earned (accrued) and the assets of the plan on a given date, and is typically amortized and funded over 30 years. The amortization methodology varies by plan. In the Fire and Police Pension Plan, the amortization is based on increased payments in proportion to assumed future payroll growth. In the MBERP, an assumption of level amortization payments is used.

### **Actuarial Accrued Liability**

The actuarial accrued liability reflects a snapshot at a point in time based on plan benefits and assumptions. For example, the actuary estimates when members of the plan will retire, how much they will get paid over their remaining lifetime once retired, and how long they will live, in order to calculate the total amount that will be paid in the future for plan members. The total value of these benefits is then "present valued" to current dollars.

As a result, the investment rate of return is significant as this affects the calculation of present value of the plan benefits, i.e. how much the plan should have on hand today, which together with investment earnings (the investment rate of return), should be sufficient to fund the plan in the future.

Each year, experience "gains" in the prior year reduces the actuarial accrued liability. Examples of experience gains would be investment earnings for the prior year in excess of plan assumptions, employees retiring later than assumed, salary growth less than assumed, etc. Experience "losses" for the prior year, conversely, increases the actuarial accrued liability.

Changes to plan benefits can also affect the actuarial accrued liability of a plan, either positively or negatively. If plan benefits are increased, the mathematical calculations will result in more benefits anticipated to be paid to plan members in the future, which will need to be recognized all at once, although payments would be amortized over the long term. Conversely, if plan benefits are reduced, all else being equal, the plan will see a reduction in the actuarial accrued liability.

### Rate of Return of Investments and Asset Value

The annual plan valuation is based on actuarial value of assets rather than market value. As noted earlier, actuarial value uses a 5-year smoothing approach. The intent of the smoothing is to mitigate the impact of significant annual changes in actual investment returns. The chart below provides an example of the impact of this methodology over time for the MBERP.

		Year Ending September 30				
		2006	2005	2004	2003	2002
<b>A. Beginning of Year Assets</b>						
1.	Market Value	\$ 251,828,270	\$ 234,113,046	\$ 223,283,174	\$ 202,952,145	\$ 228,885,931
2.	Actuarial Value	\$ 235,718,489	\$ 236,555,249	\$ 240,182,319	\$ 243,542,574	\$ 255,192,007
<b>B. Net of Contributions</b>						
	Less Disbursements	\$ (10,910,016)	\$ (10,926,283)	\$ (13,274,558)	\$ (13,495,956)	\$ (12,451,499)
<b>C. Actual Net Investment Earnings</b>		\$ 18,198,277	\$ 28,641,507	\$ 24,104,430	\$ 33,826,985	\$ (13,482,287)
<b>D. Expected Net Investment Earnings</b>		\$ 19,572,396	\$ 19,642,829	\$ 19,851,328	\$ 20,127,541	\$ 21,162,132
<b>E. Excess of Actual Over Expected Investment Earnings (C - D)</b>		\$ (1,374,119)	\$ 8,998,678	\$ 4,253,102	\$ 13,699,444	\$ (84,644,419)
<b>F. Recognition of Excess Earnings Over 5 Years (Smoothing)</b>						
1.	From This Year	\$ (274,824)	\$ 1,799,736	\$ 850,620	\$ 2,739,889	\$ (6,928,884)
2.	From One Year Ago	\$ 1,799,736	\$ 850,620	\$ 2,739,889	\$ (6,928,884)	\$ (8,014,667)
3.	From Two Years Ago	\$ 850,620	\$ 2,739,889	\$ (6,928,884)	\$ (8,014,667)	\$ 1,149,202
4.	From Three Years Ago	\$ 2,739,889	\$ (6,928,884)	\$ (8,014,667)	\$ 1,149,202	\$ 1,062,620
5.	From Four Years Ago	\$ (6,928,884)	\$ (8,014,667)	\$ 1,149,202	\$ 1,062,620	\$ 150,878
6.	Total	\$ (1,813,463)	\$ (9,553,306)	\$ (10,203,840)	\$ (9,991,840)	\$ (12,580,851)
<b>G. End of Year Assets</b>						
1.	Market Value	\$ 259,116,531	\$ 251,828,270	\$ 234,113,046	\$ 223,283,174	\$ 202,952,145
2.	Actuarial Value:					
	A2 + B + D + F6	\$ 242,567,406	\$ 235,718,489	\$ 236,555,249	\$ 240,182,319	\$ 251,321,789

If over time there are significant persistent market values in excess of actuarial value, the plan may elect to "fresh start" or "partial fresh start" to recognize some of these gains and reduce the actuarial accrued liability. The MBERP had a "partial fresh start" with the October 1, 2007 valuation. Further, were it not for the recent market decline, the Police and Fire Plan would have been able to consider either a "fresh start" or "partial fresh start" in the future as the plan's market value was considerably above the actuarial value, although there are guidelines governing a "fresh start" or "partial fresh start" that would need to be considered.

The following table reflects the market and actuarial rate of return for each of the two plans. Any year where the actuarial rate of return exceeded the 8.5% assumption for the plan year, this would have resulted in a decrease in the actuarial accrued liability, all else being equal. Conversely, any year where the actuarial rate of return was less than the 8.5% assumption for the plan year, this would have resulted in an increase in the actuarial accrued liability, all else being equal.

Year ending September 30	Fire & Police Plan		MBERP			
	Rate of Return		Rate of Return*			
	Market	Actuarial	Market		Actuarial	
			General	Unclassified	General	Unclassified
2002	-1.65%	2.39%	-5.9%	-9.8%	0.3%	1.7%
2003	15.05%	4.82%	17.4%	16.9%	4.3%	4.6%
2004	9.72%	4.52%	11.4%	13.0%	4.1%	9.7%
2005	9.99%	12.22%	12.8%	13.8%	4.4%	10.7%
2006	8.28%	5.34%	7.4%	7.5%	7.7%	10.2%
2007	14.31%	8.18%	15.3%		12.0%	

\* Prior to March 18, 2006, there were two separate pension plans for civilian employees: one for General (Classified) Employees and the other for Unclassified Employees

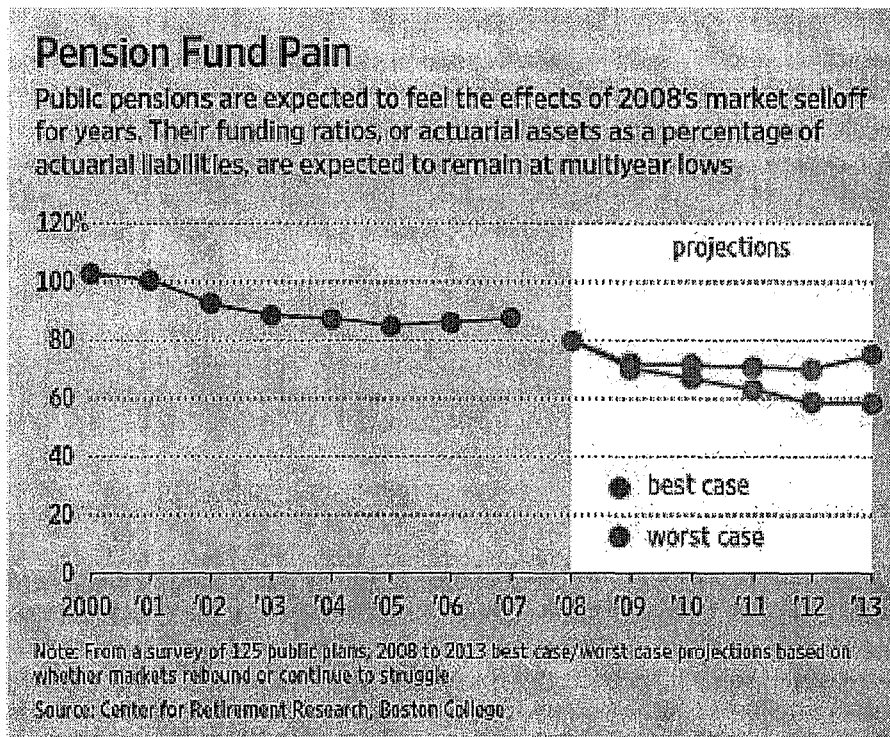
The General Plan had an average actuarial rate of return of 9.2% since September 30, 1989 through September 30, 2007; while the Unclassified Plan had an average actuarial rate of return of 11.0% from September 30, 1989 through September 30, 2006. Prior to 2000, the Fire and Police Plan had two separate components: a base plan and a supplemental plan. The Fire and Police pension returns from September 1989 through September 2007 average 9.80% (Base Plan). The returns for the Supplemental Plan for the 9 years that it was in existence averaged 11%.

However, as with most defined-benefit pension plans, both the Fire and Police Pension Plan and the MBERP experienced investment losses for Fiscal Year FY 2007/08 and during the current fiscal year.

Valuation Date	Market Value of Investments	
	Fire & Police Plan	MBERP
October 1, 2005	\$483,180,441	\$346,845,203
October 1, 2006	\$511,508,585	\$378,035,985
October 1, 2007	\$571,193,561	\$429,720,685
October 1, 2008	\$499,788,831	\$311,877,655

Although the loss as a result of the significant market decline is mitigated for the purposes of the annual actuarial valuation based on the smoothing methodology described earlier, the actuarial value of investment returns will be significantly below the actuarial assumption for each plan of 8.5% for the Fiscal Year ending September 30, 2008. Further, even if the market rebounds in the short-term, the effect of the 5-year smoothing will impact the rate of return for the next few years, and therefore, it is possible that each year will reflect actuarial rates of return below the 8.5% assumption, which could result in further increases in the unfunded liability each year.

In a recent article in the Wall Street Journal, the potential impact on the rate of return was summarized in the following table:



Graphic: Wall Street Journal, March 16, 2009

### Unfunded Actuarial Accrued Liability

The unfunded liability of the plan is the actuarial accrued liability less the plan assets. This amount is expected to have year by year fluctuations; however, if the plan's assumptions are consistent with the plans long term experience, the changes in the unfunded liability should be offsetting over the life of the plan..

In the Fire and Police Pension Plan, key drivers of the recent increases in unfunded liability have been payroll growth, retirement rates and contingency assumptions such as overtime in excess of assumptions. In the MBERP, key drivers have been salary growth in excess of assumptions and changes in pension plan benefits.

The percent of the actuarial accrued liability funded is a measure of a pension fund's fiscal health. It compares assets to pension obligations. A percentage over 100% means the fund has more money than it needs to meet its obligations at that point in time. The following tables reflect the changes in the unfunded actuarial accrued liability and the percent funded for each of the plans. Since prior to 2000, the Fire and Police Plan had two separate components: a base plan and a supplemental plan, the accrued liability and percent funded is not as readily available for those years and is being researched.

FIRE AND POLICE PENSION PLAN		USING ACTUARIAL VALUE AS OF VALUATION DATE			USING MARKET VALUE AS OF VALUATION DATE		
VALUATION DATE	ACTUARIAL ACCRUED LIABILITY	ACTUARIAL VALUE	AMOUNT UNDER-FUNDED OR (OVER-FUNDED)	% FUNDED	MARKET VALUE	AMOUNT UNDER-FUNDED OR (OVER-FUNDED)	% FUNDED
10/1/2000	389,023,008	398,732,586	(9,709,578)	102.5%	445,009,705	(55,986,697)	114.4%
10/1/2001	393,020,449	404,340,268	(11,319,819)	102.9%	393,319,577	(299,128)	100.1%
10/1/2002	424,719,584	400,898,095	23,821,489	94.4%	373,980,268	50,739,316	88.1%
10/1/2003	468,290,269	410,423,595	57,866,674	87.6%	419,972,421	48,317,848	89.7%
10/1/2004	512,038,433	418,089,222	93,949,211	81.7%	449,622,848	62,415,585	87.8%
10/1/2005	551,907,648	457,680,582	94,227,066	82.9%	483,180,441	68,727,207	87.5%
10/1/2006	582,016,296	470,603,144	111,413,152	80.9%	511,508,858	70,507,438	87.9%
10/1/2007	632,992,597	495,993,903	136,998,694	78.4%	571,193,561	61,799,036	90.2%

MBERP		USING ACTUARIAL VALUE AS OF VALUATION DATE			USING MARKET VALUE AS OF VALUATION DATE		
VALUATION DATE	ACTUARIAL ACCRUED LIABILITY	ACTUARIAL VALUE	AMOUNT UNDER-FUNDED OR (OVER-FUNDED)	% FUNDED	MARKET VALUE	AMOUNT UNDER-FUNDED OR (OVER-FUNDED)	% FUNDED
10/1/1993	187,130,465	185,721,855	1,408,610	99.2%	195,980,275	8,849,810	104.7%
10/1/1994	202,078,377	188,997,087	13,081,290	93.5%	190,650,304	(11,428,073)	94.3%
10/1/1995	213,844,465	208,877,297	4,967,168	97.7%	225,787,447	11,942,982	105.6%
10/1/1996	222,221,064	226,633,680	(4,412,616)	102.0%	244,099,139	(21,343,220)	109.6%
10/1/1997	232,871,332	251,171,973	(18,300,641)	107.9%	296,747,567	(63,876,235)	127.4%
10/1/1998	240,760,472	266,716,007	(25,955,535)	110.8%	303,512,120	(62,751,648)	126.1%
10/1/1999	263,462,059	305,344,213	(41,882,154)	115.9%	333,021,856	(81,940,172)	132.6%
10/1/2000	277,933,325	326,816,322	(48,882,997)	117.6%	353,678,188	(75,744,863)	127.3%
10/1/2001	292,748,088	336,024,366	(43,276,278)	114.8%	311,168,082	(18,419,994)	106.3%
10/1/2002	319,831,292	322,181,146	(2,349,854)	100.7%	273,619,694	46,211,598	85.6%
10/1/2003	338,904,200	320,053,468	18,850,732	94.4%	303,154,323	35,749,877	89.5%
10/1/2004	352,105,058	320,735,755	31,369,303	91.1%	320,617,610	31,487,448	91.1%
10/1/2005	368,096,409	325,727,087	42,369,322	88.5%	346,845,203	21,251,206	94.2%
10/1/2006	448,933,278	358,458,949	90,474,329	79.8%	378,035,985	70,897,293	84.2%
10/1/2007	478,067,829	412,824,235	65,243,594	86.4%	429,720,685	48,347,144	89.9%

Actuarial valuations as of October 1, 2008 have not yet been finalized, but the unfunded actuarial accrued liability is expected to increase significantly in both the Fire and Police Pension Plan and the MBERP, primarily as a result of the severe decline of the market.

### Comparison to Other Pension Funds

In a Florida Trend Magazine article, dated March 1, 2009, a summary of the status of other pension funds as of October 1, 2007 was provided, including the percent of liability funded. A complete copy of this article is included in the Commission Workshop agenda package. While it was unclear whether the information presented in the article was based on market value or actuarial value, the Miami Beach pension plans as October 1, 2007, while not among the best funded, were not among the worst funded either.

The 10 best funded defined-benefit public pension plans in Florida range from 116 percent funded as of October 1, 2007 to 173 percent funded. The 10 worst range from 19 percent funded to 50 percent funded. These compare with City of Miami Beach pension plan funded at approximately 80 to 90 percent for the same time period.

However, the impact of the recent downturn in the market will significantly impact funding ratios for all Florida defined benefit pension plans, including the Florida Retirement System and the City of Miami Beach plans.

The same article referenced critics of pension plan funding in Florida as citing overly generous benefits in some locales; lack of knowledge on the part of local pension boards and administrators; and a 1999 State law that requires Cities to provide extra benefits in order to tap into pension revenues derived from a State tax on insurance premiums.

### **Summary**

Pension plan disclosure including plan values and funding status among other information is provided in the City's annual audited Comprehensive Annual Financial Report (CAFR) each year, and the growth in the City's contribution to the pension plan has been an ongoing concern for some time, including discussion during union negotiations, at Commission retreats and meetings, and in a recent Letter to the Commission sent on November 12, 2008 (attached). For this reason, several initiatives are already underway, including the City's classification and compensation study charged with identifying methods to contain growth in salary and benefit costs which ultimately impact pension; and evaluating other pension plan alternatives, such as the Florida Retirement System, benefit changes, defined contribution plans, etc.

It is recognized that the unfunded liability for each of the City's pension plans represents a snapshot at a given point in time, which may or may not represent a longer term trend. Unfunded liabilities typically increase and decrease over time reflecting the difference between short term plan experience and long term plan assumptions. Further, it is important to remember that the unfunded liability is amortized over 30 years, and during that time, more changes are possible. This information is presented in our annual CAFR which is reviewed by the rating agencies, and is taken into consideration in their periodic reviews and as a component of maintaining our credit rating. However, it is equally important to ensure that the long term assumption of these plans accurately reflect long term actual experience so as to ensure the long term viability of the plans.

Nonetheless, the growth in the unfunded liability and the growth in the City's contribution to the pension plans is a serious concern, at the very least in the short term. The growth in the City's contribution to the pension plans was raised at the Commission retreat in May 2008, where the direction was given by the Commission for the Administration to pursue alternatives to our current pension plan. The subsequent decline in the markets and the economic outlook has made this issue much more pressing. These issues will be discussed further at the Commission Workshop on March 25, 2009, as well as subsequent opportunities with the Commission, as needed.

Attachment

JMG//KGB/PW



# MIAMI BEACH

OFFICE OF THE CITY MANAGER

NO. LTC # 277-2008

LETTER TO COMMISSION

2008 NOV 12 PM 4:38  
CITY CLERK'S OFFICE

RECEIVED

TO: Mayor Matti Bower and Members of the City Commission  
FROM: Jorge M. Gonzalez, City Manager  
DATE: November 12, 2008  
SUBJECT: Wall Street Impact on City Pensions

This Letter to Commission (LTC) is in response to Commissioner Tobin's questions regarding the type of impact the current financial crisis on Wall Street could have on city pension. Below are the questions received from the Commissioner along with the respective answers to each. The answers were reviewed for accuracy with the Pension Administrators for each of the City's Pension Funds. Attachments to this LTC will be hand-delivered.

1. At what point does the city have to use taxpayer or other monies to make up pension shortfalls?

Each year, the City receives actuarial reports for each of the City's two pension plans (Firefighters and Police Officers, and General Employees). These reports specify the City's contribution requirement for the upcoming fiscal year. The required contribution is determined in accordance with State Statutes and is based on various assumptions, including wage data, mortality rates, retirement ages, future salary increases, marriage assumptions, plan expenses, etc. as well as investment performance assumptions. The actuarial valuation of the pension plan is a mathematical determination of the financial condition of a plan which includes the computation of the present monetary value of benefits payable to present members, and the present monetary value of future employer and employee contributions, considering the expected mortality rates among employees and retirees, rates of disability, retirement, withdrawal from service, salary and interest.

As part of the October 1 valuation each year, the actuary evaluates how the actual data for the preceding year as compared to the actuarial valuation for that year. Any differences are reflected as gains or losses in unfunded liability. Any gains or losses in unfunded liability are amortized over 30 years.

Thus, any gains or losses in unfunded liability for FY 2007/08 Plan Year (as of October 1, 2008 and as compared to plan assumptions) will be taken into account as part of the City's required actuarial contribution for FY 2009/10. Gains or losses in unfunded liability for FY 2008/09 Plan Year (as of October 1, 2009 and as compared to plan assumptions) will be taken into account as part of the City's required actuarial contribution for FY 2010/11

Copies of the last set of actuarial reports will be forwarded separately for your information.



2. Is there a possibility that the city might have to contribute money this year in order for each pension recipient to receive what they are owed?

The City's required contribution for FY 2008/09 for the Pension Fund for Fire and Police Officers was provided to the City in March 2008 and is based on the actuarial valuation of the Fund. The required contribution for General Employees was provided to the City in July 2008. Both are based an October 1, 2007 actuarial valuation. These required contributions were incorporated in the FY 2008/09 budget and have been transferred from the City to each of the two pension plans. No additional contributions are required for FY 2008/09.

3. Do you see pension obligations causing a financial crisis in the city of Miami Beach? Why or why not?

As presented at several meetings with the Mayor and Commissioners (annual retreats, Finance and Citywide Committee meetings, etc.), the growth in the City's contribution for pension is indeed a concern. Annually, I have identified that the contribution reflects a growing percent of payroll, particularly for the Fire and Police Pensions.

	Firefighters & Police Officers*		General Employees	
	Pension Plan	with Pension Bonds		
FY 2003/04	27.27%	42.40%	8.71%	7.97%
FY 2004/05	36.03%	51.20%	18.71%	13.41%
FY 2005/06	42.75%	57.51%	17.28%	15.35%
FY 2006/07	46.71%	62.15%	24.65%	
FY 2007/08	47.82%	61.47%	24.24%	
FY 2008/09	50.02%	62.49%	21.57%	

\*In addition to the Annual Required Contribution determined by the Actuarial Valuation of each pension plan, the City funds approximately \$5 million per year in debt service for Fire and Police Pension Bonds.

\*\* Prior to FY 2007/08 the Unclassified and General employees had two separate pension plans. In FY 2007/08 these were combined into one plan.

For this reason, the Commission has directed us to examine methods to reduce this growth: the City's classification and compensation study currently underway is charged with identifying methods to contain growth in salary and benefit costs; and we are looking at other alternatives, such as the Florida Retirement System.

4. What type of preventive measure has the city taken to protect pensions during these tough financial times?

Each of the City's two pension plans are managed by a Board of Trustees that are responsible for the proper administration of each of the two pension systems to ensure providing benefits to participants and beneficiaries and defraying reasonable expenses of plan administration. The trustees are comprised of a combination of elected and appointed positions. Investment of funds is guided by an Investment Policy (as required by State law). Further, the investment policies for both plans require the use of professional investment manager(s) who are responsible to carryout the investment guidelines and policies. The policies include performance measurement, authorized investments, portfolio composition, and expected rate of return over the long term, etc. The performance of the plans is reviewed no less than quarterly with independent evaluators/consultants to determine if the investment guidelines have been met.

The investment objective of each plan is a long-term rate of return on assets. Investments are diversified to reduce loss resulting from over concentration on a specific maturity, issuer, instrument, etc.

Copies of the investment policies for each plan will be forwarded separately.

5. Approximately how much value have the city's pension investments lost as a result of the current financial crisis?

The market value of the assets of each fund is determined annually on October 1 and reflects the value if all the assets of the plan were liquidated on that day. The market value of both plans over the last several years has been as follows:

	Firefighters & Police Officers	General Employees
October 1, 2005	\$483,180,441	\$346,845,203
October 1, 2006	\$511,508,585	\$378,035,985
October 1, 2007	\$571,193,561	\$429,720,685
October 1, 2008*	\$499,779,000	\$311,877,655

\* The October 1, 2008 values are estimated/unaudited and include FY 2007/08

Contributions:

City	\$17,497,496	\$13,911,545
Employees	\$ 5,577,298	\$ 7,927,173

In contrast to the market value of the plan, the actuarial value of the pension plan assets is equal to the market value of the assets adjusted to reflect a five year phase-in (or smoothing) of any asset experience gain or loss. Only 20% of the experience gain or loss that the fund experiences in any one year is recognized immediately for the purpose of determining the actuarial value of the plan and the annual required contribution.

For example FY 2006/07 the Market Value Return on investments for the City Pension Fund for Fire and Police Officers was 14.31%, but the actuarial valuation of the plan calculated an Actuarial Value Return of only 8.18%, thus providing a buffer for future downturns in the market.

The historical actuarial values of the plans are as follows:

	Firefighters & Police Officers	General Employees
October 1, 2005	\$457,680,582	\$325,727,087
October 1, 2006	\$470,603,144	\$358,458,949
October 1, 2007	\$495,993,903	\$412,824,235

6. Do you see pension obligations causing a financial crisis in the city of Miami Beach? Why or why not?

See question 3 above.

Please feel free to contact me should you need any additional information or have any questions.

JMG/KGB/ias