

**CITY OF MIAMI BEACH EMPLOYEES' RETIREMENT PLAN**  
ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2010

ANNUAL EMPLOYER CONTRIBUTION FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2012



May 26, 2011

Board of Trustees  
City of Miami Beach Employees'  
Retirement Plan  
Miami Beach, Florida

Dear Board Members:

We are pleased to present our October 1, 2010 Actuarial Valuation Report for the Plan. The purpose of the Report is to set forth required contribution levels, to disclose plan assets and actuarial liabilities, to comment on funding progress and to provide supporting information regarding the operation of the Plan. This Report is also designed to comply with requirements of the State.

The valuation was performed on the basis of employee, retiree and financial information supplied by the City. Although we did not audit this information, it was reviewed for reasonableness and comparability to prior years.

The benefits valued are outlined at the end of the Report. Actuarial assumptions and the actuarial cost method are also described herein. Any changes in benefits, assumptions or methods are described in the first section.

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. In my opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. 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.

As indicated below, the undersigned are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the Academy of Actuaries to render the actuarial opinion herein.

We will be pleased to answer any questions pertaining to the valuation and to meet with you to review this Report.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By \_\_\_\_\_  
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**SECTION A**  
**DISCUSSION OF VALUATION RESULTS**

## DISCUSSION OF VALUATION RESULTS

### Comparison of Required Employer Contributions

The required employer contribution developed in this year's actuarial valuation compared to last year is as follows:

	Required City Contribution			Non-DROP Covered Payroll	Total Covered Payroll
	Amount	% of Non-DROP Payroll	% of Total Payroll		
For FYE 9/30/12 Based on 10/1/10 Valuation	\$ 17,583,191 *	25.54 %	24.28 %	\$ 68,844,264	\$ 72,430,076
For FYE 9/30/11 Based on 10/1/09 Valuation	14,474,678 **	20.65	19.87	70,097,549	72,835,309
Increase (Decrease)	3,108,513	4.89	4.41	(1,253,285)	(405,233)

\* This amount is to be reduced by \$466,878, which represents an overpayment by the City for the fiscal year ending September 30, 2011. This amount represents a prepaid contribution for fiscal year ending September 30, 2012.

\*\* From the 8/3/2010 Actuarial Impact Statement

The contribution has been adjusted for interest on the basis that employer contributions are made in a single payment on the first day of the fiscal year. The actual employer contribution for the year ending September 30, 2010 was \$17,137,394 compared to the minimum required payment of \$17,137,394.

### Revisions in Benefits

Ordinance No. 2010-3693 and Ordinance No. 2010-3706 amended the Plan as follows:

1. Effective 10/1/2010, FAME was changed from an averaging period of two to five years, except for members who are less than five years away from normal retirement eligibility. Members who are eligible for normal retirement in two years or less will have average earnings of two years. Members who are eligible for normal retirement in three years will have average earnings of three years. Members who are eligible for normal retirement in four years will have average earnings of four years.
2. Effective 10/1/2010, the contribution rate for Tier A employees increased from 10% to 12% of earnings and from 8% to 10% of earnings for Tier B employees.
3. The following applies to members hired after September 30, 2010:
  - a. Normal retirement date of age 55 with 30 years of service or age 62 with 5 years of service
  - b. Early retirement eligibility of "Rule of 75" with a minimum of age 55
  - c. Multiplier of 2.5%, subject to a maximum of 80% of final average monthly earnings

- d. Final average monthly earnings of five years
- e. Normal form of payment of single life annuity
- f. DROP participation for up to 5 years
- g. Cost-of-living adjustment (COLA) of 1.5% at retirement (no COLA while in the DROP)
- h. Employee contributions of 10%

### **Revisions in Actuarial Assumptions and Methods**

The investment return assumption was reduced from 8.35% last year to 8.25% this year. The investment return assumption will be 8.15% for the October 1, 2011 Valuation and 8.00% for the October 1, 2012 Valuation.

Additionally, in connection with the recent experience study, this report reflects the following changes in assumptions:

- The salary increase assumption was changed from 6.0% to the service-based table shown in the Actuarial Assumptions and Methods section of this Report.
- The retirement rates were changed to the rates shown in the Actuarial Assumptions and Methods section of this Report and are based on age and service rather than age only.
- The termination rates were changed to the rates shown in the Actuarial Assumptions and Methods section of the Report and are based on age and service rather than age only.
- The mortality table was updated from the 1983 Group Annuity Mortality Table to the RP 2000 Mortality Table with mortality improvements reflected through 2010.
- The disability rates were reduced to the rates shown in the table in the Actuarial Assumptions and Methods section of this Report.
- The assumption for the percentage of active members that are married was lowered from 100% to 85%.
- The assumption for service related deaths prior to retirement was lowered from 50% to 25%.

The above assumption changes led to an increase in the annual required contribution of 0.97% of non-DROP payroll.

### **Actuarial Experience**

There was a net actuarial loss of \$15,123,488 for the year which means actual experience was less favorable than expected. The actuarial loss was due to lower than expected return on investments, less than expected employee turnover and fewer than expected deaths among retirees. The actuarial loss translates into an increase in the employer contribution equal to 2.03% of non-DROP payroll.

### **Funded Ratio**

The funded ratio this year is 74.4% compared to 77.1% last year. This year's ratio was 75.4% before the changes in the assumptions described above.

The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability.

### **Analysis of Change in Employer Contribution**

The components of change in the required employer contribution as a percent of non-DROP payroll are as follows:

Contribution rate last year	20.65 %
Change in assumptions/methods	0.97
Payment on unfunded liability	1.45
Change in employer normal cost rate	0.36
Experience gain/loss	2.03
Change in administrative expense	<u>0.08</u>
Contribution rate this year	25.54

### **Required Contributions in Later Years**

The current calculated City contribution requirement is 25.54% of non-DROP payroll. It is important to keep in mind that under the asset smoothing method, the difference between actual and expected return is recognized over five years. As of September 30, 2010 the actuarial value of assets exceeded the market value by \$51,567,634. Once all the losses through September 30, 2010 are fully recognized in the actuarial asset values, the contribution rate will increase by roughly 6.8% of non-DROP payroll unless there are offsetting gains.

### **Relationship to Market Value**

If Market Value had been the basis for the valuation, the City contribution rate would have been 32.35% and the funded ratio would have been 65.5%. In the absence of other gains and losses, the City contribution rate should increase to that level over the next several years.



The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.

**SECTION B**  
**VALUATION RESULTS**

<b>PARTICIPANT DATA</b>			
	<b>October 1, 2010</b> <i>After Assumption Changes</i>	<b>October 1, 2010</b> <i>Before Assumption Changes</i>	<b>October 1, 2009</b>
<b>ACTIVE MEMBERS</b>			
Number (Non-DROP)	1,117	1,117	1,154
Covered Annual Non-DROP Payroll	\$ 68,844,264	\$ 68,586,818	\$ 70,097,549
Average Annual Non-DROP Pay	\$ 61,633	\$ 61,403	\$ 60,743
Total Covered Annual Payroll	\$ 72,430,076	\$ 72,159,221	\$ 72,835,309
Average Annual Pay	\$ 62,118	\$ 61,886	\$ 61,258
Average Age	44.1	44.1	43.5
Average Past Service	8.8	8.8	8.2
Average Age at Hire	35.3	35.3	35.3
<b>DROP PARTICIPANTS</b>			
Number	49	49	35
Annual Benefits	\$ 2,505,713	\$ 2,505,713	1,763,119
Average Annual Benefit	\$ 51,137	\$ 51,137	50,375
Average Age	58.6	58.6	57.9
<b>RETIRES &amp; BENEFICIARIES</b>			
Number	981	981	972
Annual Benefits	\$ 29,224,108	\$ 29,224,108	\$ 28,200,927
Average Annual Benefit	\$ 29,790	\$ 29,790	\$ 29,013
Average Age	71.3	71.3	70.8
<b>DISABILITY RETIREES</b>			
Number	40	40	41
Annual Benefits	\$ 947,329	\$ 947,329	\$ 936,354
Average Annual Benefit	\$ 23,683	\$ 23,683	\$ 22,838
Average Age	66.7	66.7	65.9
<b>TERMINATED VESTED MEMBERS</b>			
Number	75	75	79
Annual Benefits	\$ 1,423,585	\$ 1,423,585	\$ 1,373,077
Average Annual Benefit	\$ 18,981	\$ 18,981	\$ 17,381
Average Age	46.9	46.9	46.9

<b>ANNUAL REQUIRED CONTRIBUTION (ARC)</b>			
A. Valuation Date	October 1, 2010 <i>After Assumption Changes</i>	October 1, 2010 <i>Before Assumption Changes</i>	October 1, 2009 *
B. ARC to Be Paid During Fiscal Year Ending	9/30/2012	9/30/2012	9/30/2011
C. Assumed Date of Employer Contrib.	10/1/2011	10/1/2011	10/1/2010
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 8,809,653	\$ 8,379,550	\$ 6,335,300
E. Employer Normal Cost	7,433,480	7,170,534	7,023,886
F. ARC if Paid on the Valuation Date: D+E	16,243,133	15,550,084	13,359,186
G. ARC Adjusted for Frequency of Payments	17,583,191	16,848,516	14,474,678
H. ARC as % of Covered Payroll			
- Non-DROP Payroll	25.54 %	24.57 %	20.65 %
- Total Payroll	24.28 %	23.35 %	19.87 %
I. Covered Payroll for Contribution Year			
- Non-DROP Payroll	68,844,264	68,586,818	70,097,549
- Total Payroll	72,430,076	72,159,221	72,835,309

\* From the 8/3/2010 Actuarial Impact Statement

<b>ACTUARIAL VALUE OF BENEFITS AND ASSETS</b>			
A. Valuation Date	October 1, 2010 <i>After Assumption Changes</i>	October 1, 2010 <i>Before Assumption Changes</i>	October 1, 2009 *
<b>B. Actuarial Present Value of All Projected Benefits for</b>			
1. Active Members			
a. Service Retirement Benefits	\$ 285,877,010	\$ 261,377,302	\$ 255,645,788
b. Vesting Benefits	33,977,830	25,415,486	25,471,962
c. Disability Benefits	7,463,234	14,368,929	14,646,130
d. Preretirement Death Benefits	4,177,887	4,900,619	4,959,831
e. Return of Member Contributions	742,727	547,382	702,197
f. Total	<u>332,238,688</u>	<u>306,609,718</u>	<u>301,425,908</u>
2. Inactive Members			
a. Service Retirees & Beneficiaries	350,896,082	342,778,870	327,327,568
b. Disability Retirees	10,177,301	9,822,673	9,874,613
c. Terminated Vested Members	13,770,243	13,335,680	12,914,814
d. Total	<u>374,843,626</u>	<u>365,937,223</u>	<u>350,116,995</u>
3. Total for All Members	707,082,314	672,546,941	651,542,903
C. Actuarial Accrued (Past Service) Liability per GASB No. 25	580,246,165	572,184,250	545,536,965
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	534,033,829	534,103,378	504,604,698
E. Plan Assets			
1. Market Value	379,911,671	379,911,671	350,542,468
2. Actuarial Value	431,479,305	431,479,305	420,520,122
F. Unfunded Actuarial Accrued Liability: C-E2	148,766,860	140,704,945	125,016,843
G. Actuarial Present Value of Projected Covered Payroll	614,906,302	498,426,881	518,982,308
H. Actuarial Present Value of Projected Member Contributions	59,120,682	47,006,703	49,466,392

\* From the 8/3/2010 Actuarial Impact Statement

<b>CALCULATION OF EMPLOYER NORMAL COST</b>			
A. Valuation Date	October 1, 2010 <i>After Assumption Changes</i>	October 1, 2010 <i>Before Assumption Changes</i>	October 1, 2009 *
<b>B. Normal Cost for</b>			
1. Service Retirement Benefits	\$ 10,718,607	\$ 10,169,416	\$ 10,240,454
2. Vesting Benefits	2,051,157	1,576,876	1,571,795
3. Disability Benefits	524,204	1,136,714	1,136,630
4. Preretirement Death Benefits	267,300	348,929	349,892
5. Return of Member Contributions	177,450	218,306	214,559
6. Total for Future Benefits	<u>13,738,718</u>	<u>13,450,241</u>	<u>13,513,330</u>
7. Assumed Amount for Administrative Expenses	<u>690,536</u>	<u>690,536</u>	<u>657,393</u>
8. Total Normal Cost	14,429,254	14,140,777	14,170,723
% of Covered Payroll			
- Non-DROP Payroll	20.96 %	20.62 %	20.22 %
- Total Payroll	19.92 %	19.60 %	19.46
<b>C. Expected Member Contribution</b>	6,995,774	6,970,243	7,146,837
% of Covered Payroll			
- Non-DROP Payroll	10.16 %	10.16 %	10.20 %
- Total Payroll	9.66 %	9.66 %	9.81
<b>D. Employer Normal Cost: B8-C</b>	7,433,480	7,170,534	7,023,886
% of Covered Payroll			
- Non-DROP Payroll	10.80 %	10.42 %	10.02 %
- Total Payroll	10.26 %	9.94 %	9.64

\* From the 8/3/2010 Actuarial Impact Statement

## LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

<b>A. Derivation of the Current UAAL</b>	
1. Last Year's UAAL (8/3/2010 Actuarial Impact Statement)	\$ 125,016,843
2. Employer Normal Cost for Contribution Year	8,611,895
3. Last Year's Contributions	17,137,394
4. Interest at the Assumed Rate on:	
a. 1 and 2 for one year	11,158,000
b. 3 from dates paid	1,430,972
c. a - b	<u>9,727,028</u>
5. This Year's Expected UAAL Prior to Revision: 1 + 2 - 3 + 4c	126,218,372
6. This Year's Actual UAAL Prior to Revisions	141,341,860
7. This Year's Gain (Loss): 5 - 6	(15,123,488)
8. Change in UAAL Due to Plan Amendments and/or Changes in Actuarial Assumptions	8,061,915
9. Change in UAAL Due to Adjustment for Receivables from Excess Plan	(636,915)
10. This Year's Revised UAAL: 6 + 8 + 9	148,766,860
11. Gain (Loss) Due to Investments	(14,862,910)
12. Gain (Loss) Due to Other Causes	(260,578)

<b>B. UAAL Amortization Period and Payments</b>					
<b>Original UAAL</b>			<b>Current UAAL</b>		
<b>Date Established</b>	<b>Amortization Period (Years)</b>	<b>Amount</b>	<b>Years Remaining</b>	<b>Amount</b>	<b>Payment</b>
10/1/96	15	(6,757,095)	1	(1,573,503)	(1,573,503)
10/1/96	15	(1,455,487)	1	(338,935)	(338,935)
10/1/97	15	(11,502,918)	2	(2,852,891)	(1,482,955)
10/1/98	15	(9,492,383)	3	(3,081,701)	(1,109,655)
10/1/99	15	(11,197,306)	4	(4,441,033)	(1,245,551)
10/1/99	15	761,013	4	301,831	84,653
10/1/00	15	(1,184,364)	5	(542,926)	(126,445)
10/1/01	15	4,182,294	6	2,114,577	425,765
10/1/01	15	8,482,719	6	4,288,876	863,554
10/1/02	30	24,017,296	22	20,917,447	1,931,901
10/1/03	30	16,972,622	23	16,407,426	1,491,285
10/1/04	30	9,682,048	24	9,139,171	818,651
10/1/05	30	9,377,578	25	8,591,843	759,474
10/1/06	30	11,796,972	26	10,810,868	944,123
10/1/06	30	34,747,408	26	31,842,889	2,780,867
10/1/07	30	(14,036,710)	27	(12,993,502)	(1,122,256)
10/1/07	30	(12,143,754)	27	(11,241,230)	(970,911)
10/1/08	30	29,844,325	28	29,211,121	2,497,610
10/1/08	30	8,228,994	28	8,054,399	688,667
10/1/09	30	28,291,986	29	27,540,028	2,333,055
10/1/09	30	8,975,372	29	8,736,820	740,140
10/1/09	30	(7,968,884)	29	(7,757,083)	(657,142)
10/1/09	30	(6,161,412)	29	(5,997,651)	(508,091)
10/1/09	6	(1,126,404)	5	(1,555,384)	(362,241)
10/1/10	30	15,123,488	30	15,123,488	1,270,386
10/1/10	30	8,061,915	30	8,061,915	677,207
		<u>135,519,313</u>		<u>148,766,860</u>	<u>8,809,653</u>



**C. Amortization Schedule**

The UAAL is being liquidated as a level dollar amount over the number of years remaining in the amortization period. The expected amortization schedule is as follows:

<b>Amortization Schedule</b>	
<b>Year</b>	<b>Expected UAAL</b>
2010	\$ 148,766,860
2011	151,503,674
2012	152,396,064
2013	151,756,777
2014	149,863,547
2015	146,557,454
2020	128,650,320
2025	103,949,382
2030	67,233,585
2035	23,712,420
2040	-

### ACTUARIAL GAINS AND LOSSES

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. If significant long term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified.

Net actuarial gains in previous years are as follows:

Year Ended	Gain (Loss)
9/30/1990	\$ (9,106,524)
9/30/1991	2,727,904
9/30/1992	4,954,823
9/30/1993	5,370,894
9/30/1994	(1,696,061)
9/30/1995	6,661,918
9/30/1996	7,568,621
9/30/1997	13,539,264
9/30/1998	6,894,790
9/30/1999	16,168,137
9/30/2000	6,540,306
9/30/2001	(6,572,791)
9/30/2002	(32,586,068)
9/30/2003	(18,414,901)
9/30/2004	(9,682,048)
9/30/2005	(7,060,041)
9/30/2006	(11,796,971)
9/30/2007	14,036,710
9/30/2008	(29,844,325)
9/30/2009	(28,291,986)
9/30/2010	(15,123,488)

## HISTORY OF INVESTMENT RETURNS AND SALARY INCREASES

The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are consistent with the actual experience. The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for the last several years:

Year Ending	General Plan				Unclassified Plan			
	Investment Return		Salary Increases		Investment Return		Salary Increases	
	Actual	Assumed	Actual	Assumed	Actual	Assumed	Actual	Assumed
9/30/1989	11.6 %	8.0 %	1.9 %	6.0 %	14.6 %	8.0 %	3.2 %	6.0 %
9/30/1990	7.3	8.5	7.5	6.0	(2.3)	8.0	12.3	6.0
9/30/1991	8.1	8.5	3.0	6.0	21.6	8.5	3.4	6.0
9/30/1992	13.7	8.5	2.0 *	6.0	5.8	9.0	2.4	6.0
9/30/1993	11.4	8.5	3.1	6.0	14.1	9.0	6.3	6.0
9/30/1994	6.8	8.5	3.9	6.0	4.8	9.0	6.0	6.0
9/30/1995	11.4	8.5	8.8	6.0	24.1	9.0	7.6	6.0
9/30/1996	15.3	8.5	4.2	6.0	13.9	9.0	8.6	6.0
9/30/1997	13.8	8.5	6.0	6.0	19.1	9.0	7.4	6.0
9/30/1998	12.5	8.5	5.0	6.0	4.3	9.0	4.1	6.0
9/30/1999	14.4	8.5	7.3	6.0	18.8	9.0	7.1	6.0
9/30/2000	10.7	8.5	6.7	6.0	16.5	9.0	6.7	6.0
9/30/2001	7.2	8.5	9.3	6.0	9.7	9.0	7.0	6.0
9/30/2002	0.3	8.5	8.9	6.0	1.7	9.0	9.2	6.0
9/30/2003	4.3	8.5	8.1	6.0	4.6	9.0	7.5	6.0
9/30/2004	4.1	8.5	3.1	6.0	9.7	9.0	5.7	6.0
9/30/2005	4.4	8.5	4.7	6.0	10.7	9.0	6.8	6.0
9/30/2006	7.7	8.5	11.9	6.0	10.2	8.75	7.9	6.0
9/30/2007 **	12.0	8.75	(3.6)	6.0	NA	NA	NA	NA
9/30/2008 **	5.2	8.65	11.3	6.0	NA	NA	NA	NA
9/30/2009 **	1.1	8.50	4.8	6.0	NA	NA	NA	NA
9/30/2010 **	5.0	8.35	2.5	6.0	NA	NA	NA	NA
Averages	8.5 %	---	5.4 %	---	11.0 %	---	6.6 %	---

\* Approximate rate

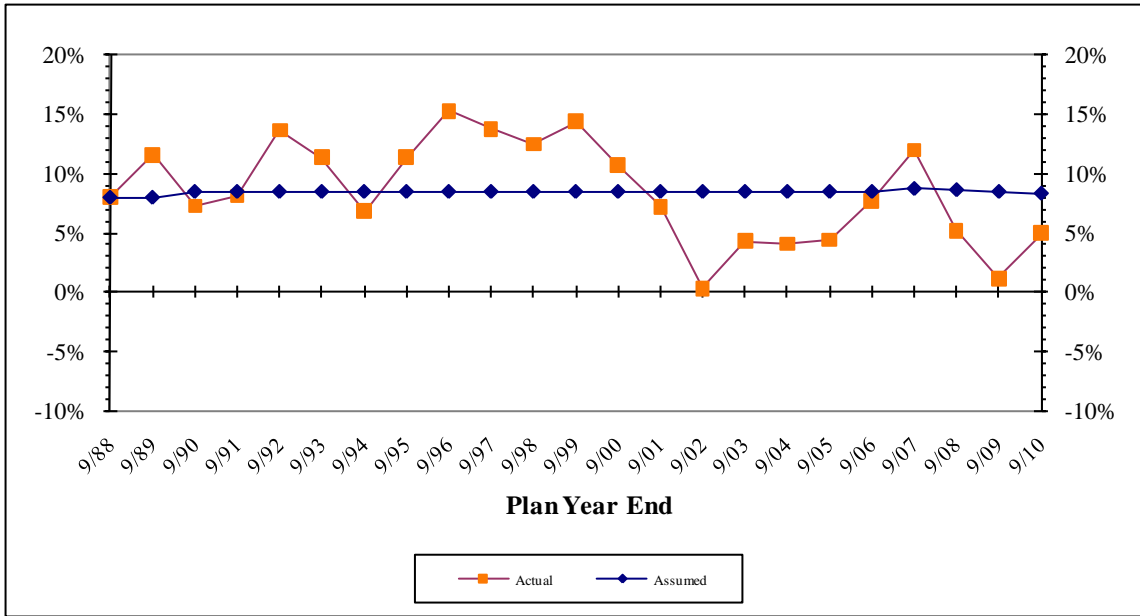
\*\* Represents salary increases and investment return for the total group

Note: Figures before 1992 were taken from Reports of Buck Consultants.

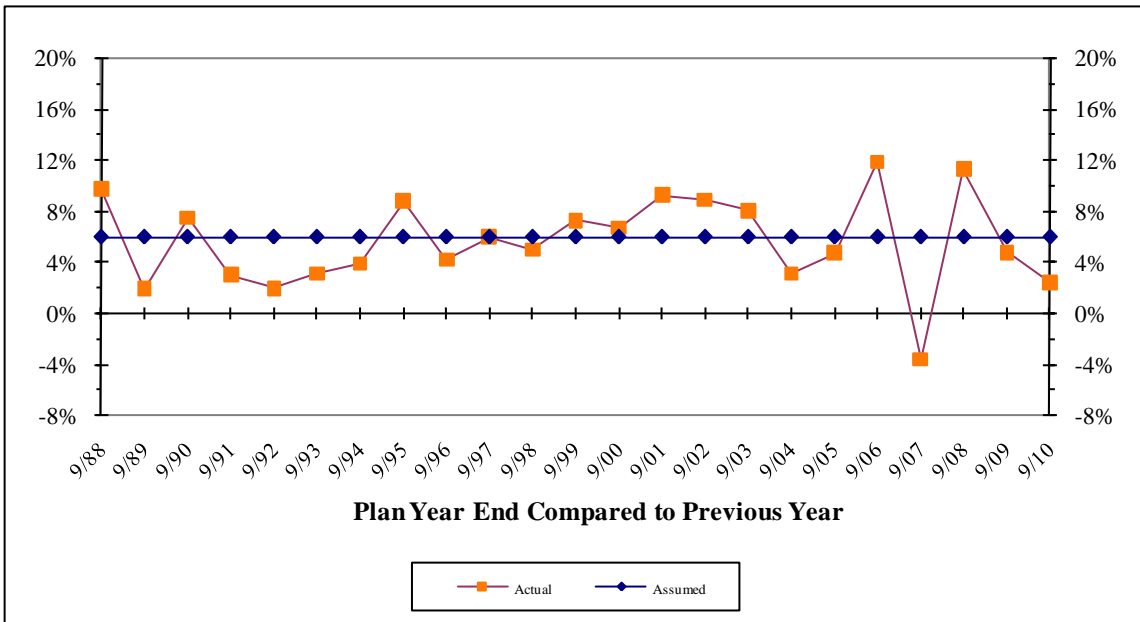
The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuation both at the beginning and the end of each period. The exhibits that follow illustrate the table above in graphic form.

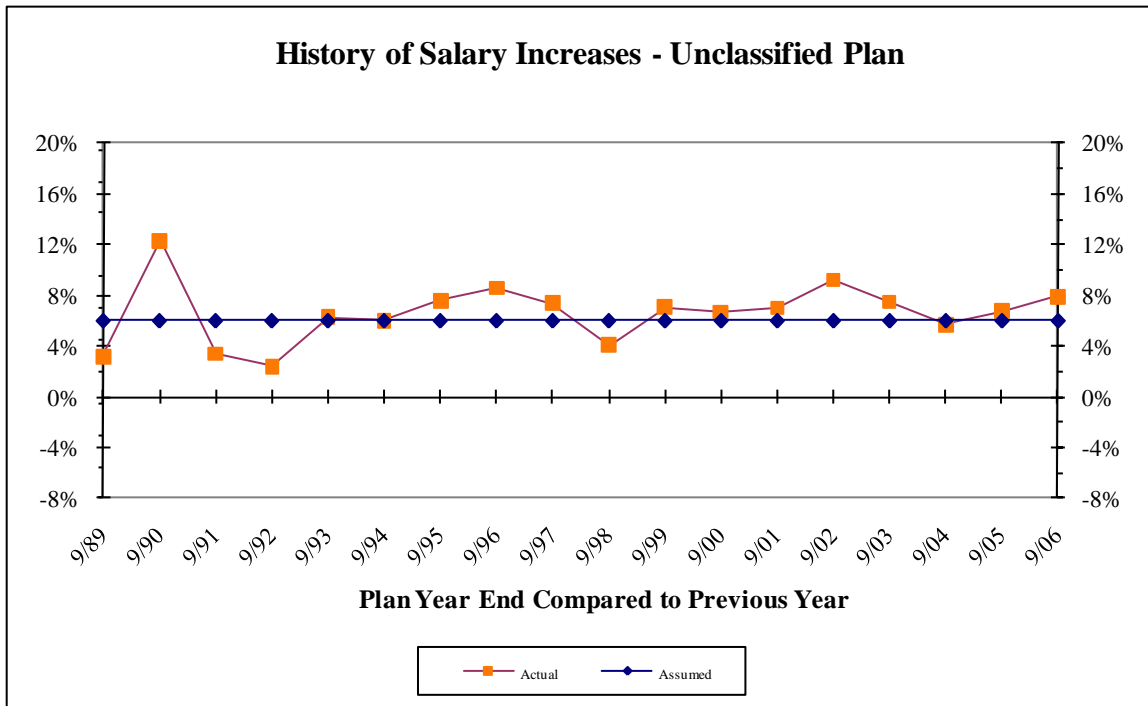
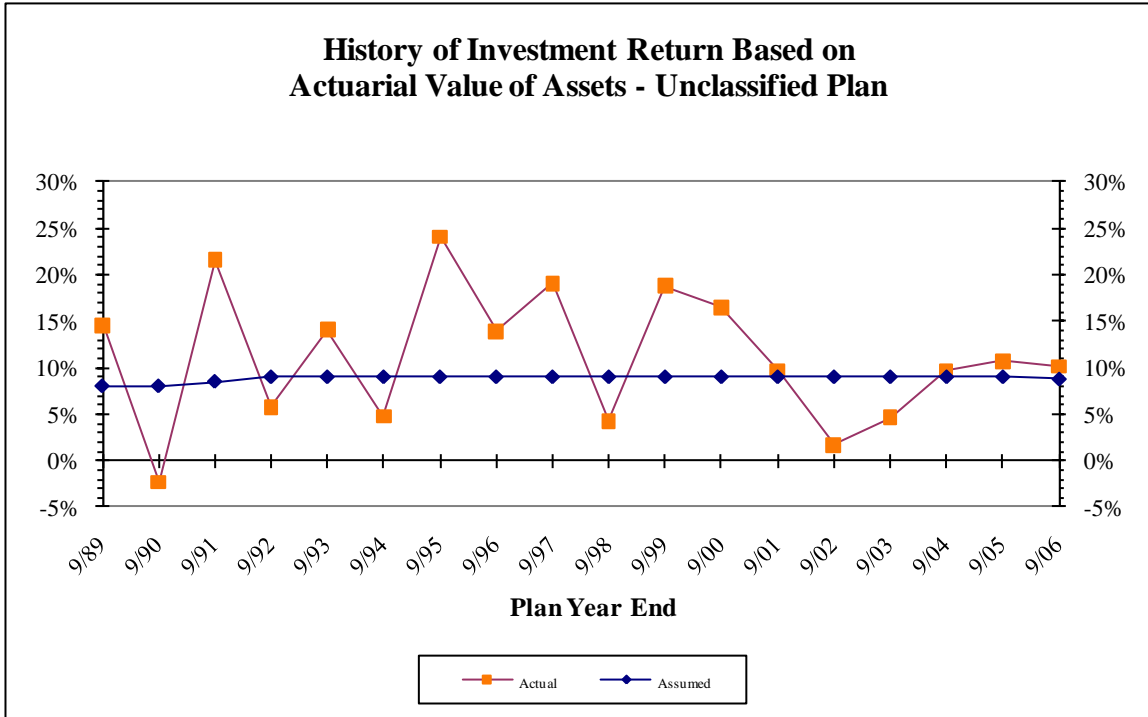
### History of Investment Return Based

**on Actuarial Value of Assets – General Plan  
and Combined Plan after 2006**



**History of Salary Increases – General Plan  
and Combined Plan after 2006**





**Actual (A) Compared to Expected (E) Decrements  
Among Active Employees**

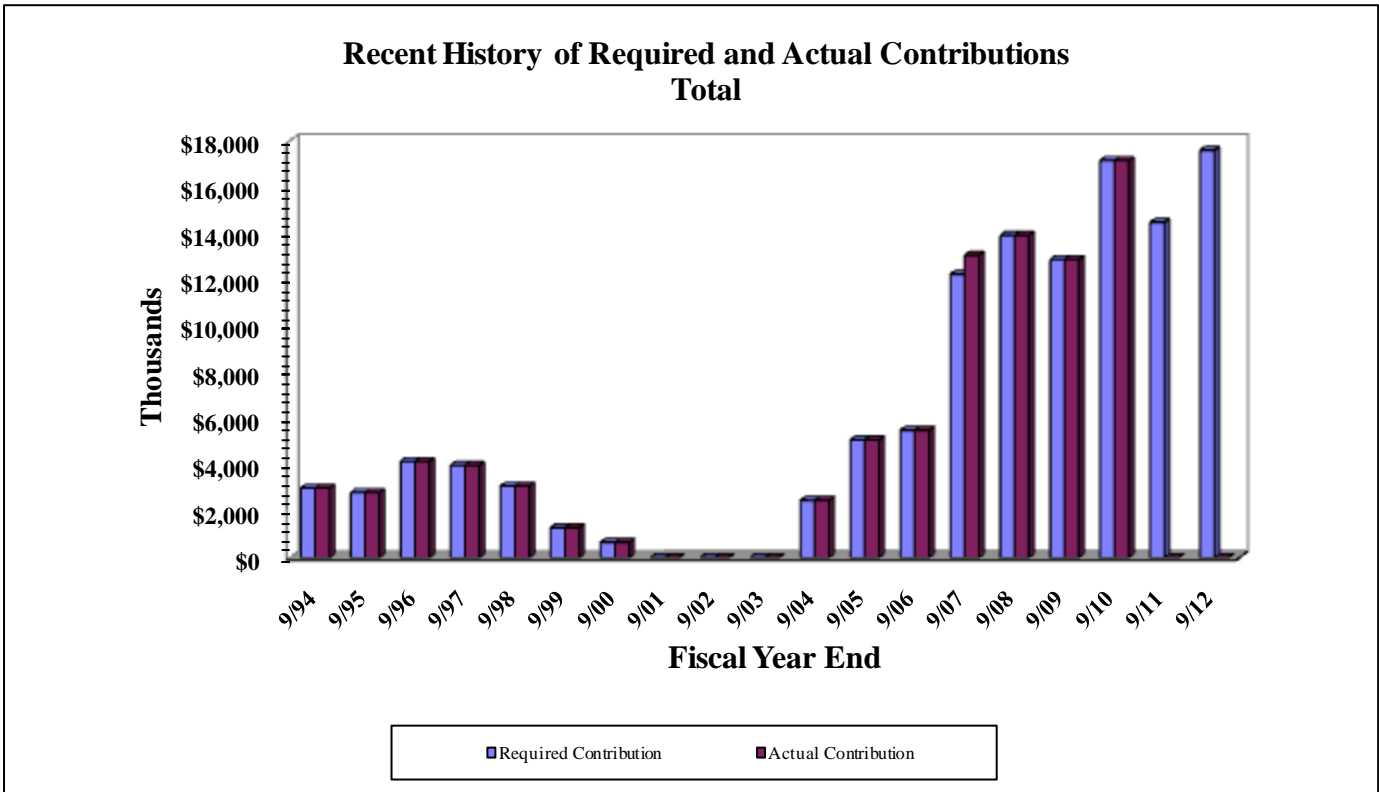
Year Ended	Number Added During Year		Service & DROP Retirement		Disability Retirement		Death		Terminations				Active Members End of Year
	A	E	A	E	A	E	A	E	Vested	Other	Totals		
											A	E	
9/30/2003	109	46	20	40	0	3	2	1	15	9	24	33	714
9/30/2004	65	54	24	37	2	3	1	1	18	9	27	35	725
9/30/2005	73	62	16	43	2	3	2	1	23	19	42	37	736
9/30/2006 *	357	75	40	40	0	3	1	1	21	13	34	37	1,018
9/30/2007	149	106	40	86	2	3	1	2	17	46	63	49	1,061
9/30/2008	182	85	29	92	1	3	1	2	24	30	54	61	1,158
9/30/2009	78	29	55	123	2	3	1	2	12	12	24	64	1,154
9/30/2010	35	72	31	114	0	3	1	2	10	30	40	69	1,117
9/30/2011				38		1		2				43	
8 Yr Totals **	1048	529	255	575	9	24	10	12	140	168	308	385	

\* Includes 401a transfers

\*\* Totals are through current Plan Year only

RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS						
Valuation Date	End of Year To Which Valuation Applies	Required Employer Contribution		Actual Employer Contribution	Expected Employee Contribution	
		Amount	% of Payroll (1)		Amount	% of Payroll
10/1/92	9/30/94	\$ 3,004,556	13.59 %	\$ 3,004,556	2,210,760	10.00 %
10/1/93	9/30/95	2,809,509	13.32	2,809,509	2,109,411	10.00
10/1/94	9/30/96	4,151,807	18.92	4,151,807	2,194,453	10.00
10/1/95	9/30/97	3,982,477	16.97	3,982,477	2,346,131	10.00
10/1/96	9/30/98	3,091,359	12.29	3,091,359	2,514,836	10.00
10/1/97	9/30/99	1,293,920	4.99	1,293,920	2,593,998	10.00
10/1/98	9/30/00	666,897	2.66	666,897	2,507,033	10.00
10/1/99	9/30/01	-	-	-	2,541,861	10.00
10/1/00	9/30/02	-	-	-	2,588,940	10.00
10/1/01	9/30/03	-	-	-	2,766,409	10.00
10/1/02	9/30/04	2,476,702	8.16	2,476,702	3,035,064	10.00
10/1/03	9/30/05	5,082,595	14.74	5,082,595	3,448,863	10.00
10/1/04	9/30/06	5,500,329	15.89	5,500,329	3,461,920	10.00
10/1/05	9/30/07	12,234,519 *	23.11	13,053,231	4,550,013 *	8.59
10/1/06	9/30/08	13,911,545	24.24	13,911,545	4,901,855	8.54
10/1/07	9/30/09	12,863,823	21.57	12,863,823	4,987,739	8.36
10/1/08	9/30/10	17,137,394	25.20	17,137,394	5,627,519	8.27
10/1/09	9/30/11	14,474,678	20.65	NA	7,146,837	10.20
10/1/10	9/30/12	17,583,191	25.54	NA	6,995,774	10.16
Average % of Payroll			13.78 %			9.69 %

\* From February 28, 2006 Actuarial Impact Statement.





## **ACTUARIAL ASSUMPTIONS AND COST METHOD**

### **Valuation Methods**

**Actuarial Cost Method** - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

**Financing of Unfunded Actuarial Accrued Liabilities** - Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) dollar contributions over a reasonable period of future years.

**Actuarial Value of Assets** - The Actuarial Value of Assets phase in the difference between the expected actuarial value and actual market value of assets at the rate of 20% per year. The Actuarial Value of Assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

### **Valuation Assumptions**

*The actuarial assumptions used* in the valuation are shown in this Section.

#### **Economic Assumptions**

**The investment return rate** assumed in the valuations is 8.25% per year, compounded annually (net after investment expenses). The assumption rate for each of the next two valuations will be 8.15% and 8.00% respectively.

The **Wage Inflation Rate** assumed in this valuation was 4.00% per year. The Wage Inflation Rate is defined to be the portion of total pay increases for an individual that are due to macro economic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

The assumed **real rate of return** over wage inflation is defined to be the portion of total investment return that is more than the assumed wage inflation rate. Considering other economic assumptions, the 8.25% investment return rate translates to an assumed real rate of return over wage inflation of 4.25%.

*Rates of salary increases* used are in accordance with the following table. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

Years of Service	% Increase in Salary		
	Merit and Seniority	Base (Economic)	Total Increase
1	4.0%	4.0%	8.0%
2	3.9%	4.0%	7.9%
3	3.8%	4.0%	7.8%
4	3.7%	4.0%	7.7%
5	3.6%	4.0%	7.6%
6	3.5%	4.0%	7.5%
7	3.0%	4.0%	7.0%
8	2.9%	4.0%	6.9%
9	2.8%	4.0%	6.8%
10	2.7%	4.0%	6.7%
11	2.6%	4.0%	6.6%
12	2.5%	4.0%	6.5%
13	2.4%	4.0%	6.4%
14	2.3%	4.0%	6.3%
15	2.2%	4.0%	6.2%
16	2.1%	4.0%	6.1%
17	2.0%	4.0%	6.0%
18	1.9%	4.0%	5.9%
19	1.8%	4.0%	5.8%
20	1.7%	4.0%	5.7%
21+	1.5%	4.0%	5.5%

#### Demographic Assumptions

*The mortality table* was the RP 2000 Mortality Table for males and females with mortality improvements projected to 2010. For disabled retirees, the regular mortality tables are set forward 5 years in ages to reflect impaired longevity. The following are the rates used at select ages.

Sample Attained Ages	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
	50	0.18 %	0.14 %	31.85
55	0.30	0.25	27.17	29.44
60	0.57	0.48	22.66	24.89
65	1.11	0.92	18.44	20.61
70	1.91	1.59	14.60	16.69
75	3.29	2.59	11.12	13.15
80	5.82	4.28	8.13	10.00

This assumption is used to measure the probabilities of each benefit being made after retirement. For active members, the probabilities of dying before retirement were based upon the same mortality table as members dying after retirement (25% of deaths are assumed to be service-connected).

*The rates of retirement* used to measure the probability of eligible members retiring during the next year are shown in the table below.

<b>Normal Retirement Rates</b>		
<b>Years of Service</b>	<b>Age</b>	<b>Assumed Rate of Retirement</b>
5-9	50-54	5.0 %
	55-59	5.0
	60-64	10.0
	65-69	20.0
	70+	100.0
10-14	50-54	5.0
	55-59	5.0
	60-64	10.0
	65-69	10.0
	70+	100.0
15-19	50-54	15.0
	55-59	15.0
	60-64	20.0
	65-69	25.0
	70+	100.0
20-24	50-54	25.0
	55-59	25.0
	60-64	35.0
	65-69	50.0
	70+	100.0
25-29	50-54	70.0
	55-59	40.0
	60-64	50.0
	65-69	50.0
	70+	100.0
30+	50-54	100.0
	55-59	100.0
	60-64	100.0
	65-69	100.0
	70+	100.0

The rate of retirement is 5% for each year of eligibility for early retirement.

*Rates of separation from active membership* were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

<b>Sample Ages</b>	<b>Years of Service</b>	<b>% of Active Members Separating Within Next Year</b>
ALL	0	9.80 %
	1	7.70
	2	6.20
	3	5.00
	4	4.00
20	5 & Over	7.00
25		6.64
30		6.16
35		5.28
40		4.20
45		3.44
50		2.84
55		2.60

*Rates of disability* among active members are shown in the table below (50% of disabilities are assumed to be service connected).

<b>Sample Ages</b>	<b>% Becoming Disabled Within Next Year</b>
25	0.03 %
30	0.03
35	0.05
40	0.07
45	0.11
50	0.17
55	0.23
60	0.37
65	0.56

### Miscellaneous and Technical Assumptions

<i>Administrative &amp; Investment Expenses</i>	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be the average of non-investment related expenses averaged over the last two years. Assumed administrative expenses are added to the Normal Cost.
<i>Benefit Service</i>	Exact fractional service is used to determine the amount of benefit payable.
<i>Decrement Operation</i>	Disability and mortality decrements operate during retirement eligibility.
<i>Decrement Timing</i>	Decrement of all types are assumed to occur at the beginning of the year.
<i>Eligibility Testing</i>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
<i>Forfeitures</i>	For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.
<i>Incidence of Contributions</i>	Employer contributions are assumed to be made in full on the first day of the fiscal year. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
<i>Marriage Assumption</i>	85% of males and 85% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.
<i>Normal Form of Benefit</i>	A 50% joint and survivor annuity is the normal form of benefit.
<i>Pay Increase Timing</i>	Middle of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
<i>Cost of Living Increase</i>	2.5% per year.
<i>Maximum Benefits</i>	Benefits calculated for valuation purposes are limited to the maximum allowable benefits under Section 415 of the Internal Revenue Code.

## GLOSSARY

<i><b>Actuarial Accrued Liability (AAL)</b></i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i><b>Actuarial Assumptions</b></i>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
<i><b>Actuarial Cost Method</b></i>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.
<i><b>Actuarial Equivalent</b></i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i><b>Actuarial Present Value (APV)</b></i>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<i><b>Actuarial Present Value of Future Benefits (APVFB)</b></i>	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<i><b>Actuarial Valuation</b></i>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 25, such as the Funded Ratio and the Annual Required Contribution (ARC).
<i><b>Actuarial Value of Assets</b></i>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution (ARC).

<b><i>Amortization Method</i></b>	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
<b><i>Amortization Payment</i></b>	That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<b><i>Amortization Period</i></b>	The period used in calculating the Amortization Payment.
<b><i>Annual Required Contribution (ARC)</i></b>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB No. 25. The ARC consists of the Employer Normal Cost and Amortization Payment.
<b><i>Closed Amortization Period</i></b>	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
<b><i>Employer Normal Cost</i></b>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<b><i>Equivalent Single Amortization Period</i></b>	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
<b><i>Experience Gain/Loss</i></b>	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

<b><i>Funded Ratio</i></b>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<b><i>GASB</i></b>	Governmental Accounting Standards Board.
<b><i>GASB No. 25 and GASB No. 27</i></b>	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 27 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 25 sets the rules for the systems themselves.
<b><i>Normal Cost</i></b>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<b><i>Open Amortization Period</i></b>	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
<b><i>Unfunded Actuarial Accrued Liability</i></b>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<b><i>Valuation Date</i></b>	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.



**SECTION C**

**PENSION FUND INFORMATION**

## STATEMENT OF PLAN ASSETS AT MARKET VALUE

Item	September 30	
	2010	2009
A. Cash and Cash Equivalents (Operating Cash)	\$ -	\$ -
B. Receivables:		
1. Member Contributions	\$ 242,998	\$ 222,637
2. Employer Contributions	-	-
3. Investment Income and Other Receivables	621,312	547,033
4. Total Receivables	<u>\$ 864,310</u>	<u>\$ 769,670</u>
C. Investments		
1. Short Term Investments	\$ 5,978,247	\$ 4,630,264
2. Domestic Equities	197,624,036	225,176,673
3. International Equities	63,879,257	29,862,002
4. Domestic Fixed Income	111,422,560	106,615,888
5. International Fixed Income	250,000	250,000
6. Real Estate	-	-
7. Private Equity	-	-
8. ICMA Account (for DROP)	2,562,537	472,207
9. Total Investments	<u>\$ 381,716,637</u>	<u>\$ 367,007,034</u>
D. Liabilities		
1. Benefits	\$ -	\$ -
2. Prepaid Employer Contribution	-	(17,137,394)
3. Expenses	(178,165)	(134,539)
4. Other	(1,017,080)	(616,500)
5. Total Liabilities	<u>\$ (1,195,245)</u>	<u>\$ (17,888,433)</u>
E. Total Market Value of Assets Available for Benefits	\$ 381,385,702	\$ 349,888,271
F. Reserves		
1. DROP Accounts	<u>\$ (2,562,537)</u>	<u>\$ (472,207)</u>
2. Total Reserves	<u>\$ (2,562,537)</u>	<u>\$ (472,207)</u>
G. Adjustments		
1. Receivables from Excess Benefit Plan	\$ 1,555,384	\$ 1,126,404
2. Prepaid for FY 10/1/2011 - 9/30/2012*	(466,878)	-
3. Total Adjustments	<u>\$ 1,088,506</u>	<u>\$ 1,126,404</u>
H. Market Value Net of Reserves and Adjustments	\$ 379,911,671	\$ 350,542,468
I. Allocation of Investments		
1. Short Term Investments	1.57%	1.26%
2. Domestic Equities	51.77%	61.35%
3. International Equities	16.73%	8.14%
4. Domestic Fixed Income	29.19%	29.05%
5. International Fixed Income	0.07%	0.07%
6. Real Estate	0.00%	0.00%
7. Private Equity	0.00%	0.00%
8. ICMA Account (for DROP)	0.67%	0.13%
9. Total Investments	<u>100.00%</u>	<u>100.00%</u>

\* This amount represents an overpayment by the city for fiscal year ending 9/30/2011.

## RECONCILIATION OF PLAN ASSETS

Item	September 30	
	2010	2009
A. Market Value of Assets at Beginning of Year	\$ 349,888,271	\$ 363,584,796
B. Revenues and Expenditures		
1. Contributions		
a. Employee Contributions	\$ 6,846,512	\$ 6,820,064
b. Employer Contributions	17,137,394	12,863,823
c. Other	-	-
d. Total	\$ 23,983,906	\$ 19,683,887
2. Investment Income		
a. Interest, Dividends, and Other Income	\$ 3,989,041	\$ 3,838,962
b. Net Realized and Unrealized Gains/(Losses)*	35,791,125	(6,201,923)
c. Investment Expenses	(791,421)	(656,864)
d. Net Investment Income	\$ 38,988,745	\$ (3,019,825)
3. Benefits and Refunds		
a. Refunds	\$ (579,709)	\$ (752,415)
b. Regular Monthly Benefits	(29,735,266)	(28,874,583)
c. DROP Disbursements	(46,599)	-
d. Other Payments (Transfers to Police & Fire Plan)	(408,164)	(57,999)
e. Total	\$ (30,769,738)	\$ (29,684,997)
4. Administrative and Miscellaneous Expenses	\$ (705,482)	\$ (675,590)
5. Transfers	\$ -	\$ -
C. Market Value of Assets at End of Year	\$ 381,385,702	\$ 349,888,271
D. Reserves		
1. DROP Accounts	\$ (2,562,537)	\$ (472,207)
2. Total Reserves	\$ (2,562,537)	\$ (472,207)
E. Adjustments		
1. Receivables from Excess Benefit Plan	\$ 1,555,384	\$ 1,126,404
2. Prepaid for FY 10/1/2011 - 9/30/2012**	(466,878)	-
3. Total Adjustments	\$ 1,088,506	\$ 1,126,404
F. Market Value Net of Reserves and Adjustments	\$ 379,911,671	\$ 350,542,468

\* We were not provided with the breakdown of this amount between realized gains/(losses) and unrealized gains/(losses).

\*\* This amount represents an overpayment by the City for fiscal year ending 9/30/2011.

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**Reconciliation of DROP Accounts**

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Value at Beginning of Year	\$	472,207
Payments Credited to Accounts		2,074,859
Investment Earnings Credited to Accounts		62,070
Withdrawals from Accounts		(46,599)
Value at End of Year		2,562,537

## DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

Valuation Date – September 30	2009	2010	2011	2012	2013
A. Actuarial Value of Assets Beginning of Year	\$ 425,714,565	\$ 428,196,370	\$ -	\$ -	\$ -
B. Market Value End of Year	349,888,271	381,385,702	-	-	-
C. Market Value Beginning of Year	363,584,796	349,888,271	-	-	-
D. Non-Investment/Administrative Net Cash Flow	(10,676,700)	(7,491,314)	-	-	-
E. Investment Income					
E1. Actual Market Total: B-C-D	(3,019,825)	38,988,745	-	-	-
E2. Assumed Rate of Return	8.50%	8.35%	8.25%	8.15%	8.00%
E3. Assumed Amount of Return	35,731,978	35,441,635	-	-	-
E4. Amount Subject to Phase-In: E1-E3	(38,751,803)	3,547,110	-	-	-
F. Phase-In Recognition of Investment Income					
F1. Current Year: 0.20 x E4	(7,750,361)	709,422	-	-	-
F2. First Prior Year	(18,624,374)	(7,750,361)	709,422	-	-
F3. Second Prior Year	2,685,676	(18,624,374)	(7,750,361)	709,422	-
F4. Third Prior Year	(213,718)	2,685,676	(18,624,374)	(7,750,361)	709,422
F5. Fourth Prior Year	1,329,304	(213,718)	2,685,676	(18,624,374)	(7,750,361)
F6. Total Phase-Ins	(22,573,473)	(23,193,355)	(22,979,637)	(25,665,313)	(7,040,939)
<b>G. Actuarial Value of Assets End of Year</b>					
G1. Preliminary Actuarial Value of Assets:	\$ 428,196,370	\$ 432,953,336	\$ -	\$ -	\$ -
G2. Upper Corridor Limit: 120% *B	419,865,925	457,662,842	-	-	-
G3. Lower Corridor Limit: 80% *B	279,910,617	305,108,562	-	-	-
G4. Funding Value End of Year	419,865,925	432,953,336	-	-	-
G5. Less: DROP Account Balances	472,207	2,562,537	-	-	-
G6. Plus: Adjustments	1,126,404	1,555,384	-	-	-
G7. Less: Prepaid Contribution	-	466,878	-	-	-
G8. Final Funding Value End of Year	420,520,122	431,479,305	-	-	-
H. Difference between Market & Actuarial Value	\$ (69,977,654)	\$ (51,567,634)	\$ -	\$ -	\$ -
<b>I. Actuarial Rate of Return</b>	1.15%	4.95%	0.00%	0.00%	0.00%
<b>J. Market Value Rate of Return</b>	-0.84%	11.26%	0.00%	0.00%	0.00%
<b>K. Ratio of Actuarial Value to Market Value</b>	120.00%	113.52%	0.00%	0.00%	0.00%

## INVESTMENT RATE OF RETURN

Year Ended	General Plan **		Unclassified Plan	
	Market Value	Actuarial Value	Market Value	Actuarial Value
9/30/89	NA %	11.6 %	14.6 %	14.6 %
9/30/90	NA	7.3	(2.3)	(2.3)
9/30/91	NA	8.1	21.6	21.6
9/30/92	12.2	13.7	5.8	5.8
9/30/93	14.6	11.4	14.6	14.1
9/30/94	1.4	6.8	5.3	4.8
9/30/95	20.0	11.4	25.9	24.1
9/30/96	9.8	15.3	22.7	13.9
9/30/97	23.0	13.8	35.2	19.1
9/30/98	8.4	12.5	(0.3)	4.3
9/30/99	13.1	14.4	19.1	18.8
9/30/00	10.8	10.7	11.5	16.5
9/30/01	(7.4)	7.2	(8.1)	9.7
9/30/02	(5.9)	0.3	(9.8)	1.7
9/30/03	17.4	4.3	16.9	4.6
9/30/04	11.4	4.1	13.0	9.7
9/30/05	12.8	4.4	13.8	10.7
9/30/06	7.4 *	7.7	7.5 *	10.2 *
9/30/07	15.3	12.0	NA	NA
9/30/08	(13.6)	5.2	NA	NA
9/30/09	(0.8)	1.1	NA	NA
9/30/10	11.3	5.0	NA	NA
Average Compounded Rate of Return for Number of Years Shown	8.1 %	8.5 %	10.9 %	11.0 %
Average Compounded Rate of Return for Last 5 Years	3.4 %	6.1 %	NA	NA

\* Note: Effective 10/1/06, the former General and Unclassified Plans were merged and assets were combined. Investment returns after this date are for the total group.

\*\* Combined Plan after 2006

**SECTION D**

**FINANCIAL ACCOUNTING INFORMATION**

<b>FASB NO. 35 INFORMATION</b>		
A. Valuation Date	October 1, 2010	October 1, 2009
<b>B. Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Vested Benefits		
a. Members Currently Receiving Payments	\$ 361,073,383	\$ 337,202,181
b. Terminated Vested Members	13,770,243	12,914,814
c. Other Members	152,837,413	144,918,774
d. Total	<u>527,681,039</u>	<u>495,035,769</u>
2. Non-Vested Benefits	6,352,790	9,568,929
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	534,033,829	504,604,698
4. Accumulated Contributions of Active Members	57,037,036	53,405,537
<b>C. Changes in the Actuarial Present Value of Accumulated Plan Benefits</b>		
1. Total Value at Beginning of Year	504,604,698	470,386,912
2. Increase (Decrease) During the Period Attributable to:		
a. Plan Amendment	(4,632,457)	0
b. Change in Actuarial Assumptions	(69,549)	3,308,439
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	64,492,711	61,008,552
d. Benefits Paid	<u>(30,361,574)</u>	<u>(30,099,205)</u>
e. Net Increase	29,429,131	34,217,786
3. Total Value at End of Period	534,033,829	504,604,698
D. Market Value of Assets	379,911,671	350,542,468
E. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods		



**SCHEDULE OF FUNDING PROGRESS**  
(GASB Statement No. 25)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) - Entry Age (b)	Unfunded AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL As % of Covered Payroll (b - a) / c
10/1/1993	\$ 185,721,855	\$ 187,130,465	\$ 1,408,610	99.2 %	\$ 21,094,111	6.7 %
10/1/1994	188,997,087	202,078,377	13,081,290	93.5	21,944,531	59.6
10/1/1995	208,877,297	213,844,465	4,967,168	97.7	23,461,309	21.2
10/1/1996	226,633,680	222,221,064	(4,412,616)	102.0	25,148,361	(17.5)
10/1/1997	251,171,973	232,871,332	(18,300,641)	107.9	25,939,981	(70.5)
10/1/1998	266,716,007	240,760,472	(25,955,535)	110.8	25,070,334	(103.5)
10/1/1999	305,344,213	263,462,059	(41,882,154)	115.9	25,418,614	(164.8)
10/1/2000	326,816,322	277,933,325	(48,882,997)	117.6	25,889,403	(188.8)
10/1/2001	336,024,366	292,748,088	(43,276,278)	114.8	27,664,085	(156.4)
10/1/2002	322,181,146	319,831,292	(2,349,854)	100.7	30,350,644	(7.7)
10/1/2003	320,053,468	338,904,200	18,850,732	94.4	34,488,630	54.7
10/1/2004	320,735,755	352,105,058	31,369,303	91.1	34,619,199	90.6
10/1/2005	325,727,087	368,096,409	42,369,322	88.5	36,680,110	115.5
10/1/2006 (b)	338,504,669	394,231,589	55,726,920	85.9	40,113,847	138.9
10/1/2006 (a)	358,458,949	448,933,278	90,474,329	79.8	57,390,894	157.6
10/1/2007 (b)	395,369,083	472,756,431	77,387,348	83.6	59,632,425	129.8
10/1/2007 (a)	412,824,235	478,067,829	65,243,594	86.4	59,632,425	109.4
10/1/2008 (b)	425,714,565	518,252,592	92,538,027	82.1	68,009,550	136.1
10/1/2008 (a)	425,714,565	526,481,586	100,767,021	80.9	68,009,550	148.2
10/1/2009 (b)	419,393,718	550,691,889	131,298,171	76.2	70,097,549	187.3
10/1/2009 (a)	420,520,122	545,536,965	125,016,843	77.1	70,097,549	178.3
10/1/2010 (b)	431,479,305	572,184,250	140,704,945	75.4	68,586,818	205.1
10/1/2010 (a)	431,479,305	580,246,165	148,766,860	74.4	68,844,264	216.1

(a) After Changes

(b) Before Changes

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**

**(GASB Statement No. 25)**

<b>Year Ended September 30</b>	<b>Annual Required Contribution</b>	<b>Actual Contribution</b>	<b>Percentage Contributed</b>
1994	\$ 3,004,556	\$ 3,004,556	100.0 %
1995	2,809,509	2,809,509	100.0
1996	4,151,807	4,151,807	100.0
1997	3,982,477	3,982,477	100.0
1998	3,091,359	3,091,359	100.0
1999	1,293,920	1,293,920	100.0
2000	666,897	666,897	100.0
2001	0	0	NA
2002	0	0	NA
2003	0	0	NA
2004	2,476,702	2,476,702	100.0
2005	5,082,595	5,082,595	100.0
2006	5,500,329	5,500,329	100.0
2007	12,234,519 *	13,053,231	106.7
2008	13,911,545	13,911,545	100.0
2009	12,863,823 *	12,863,823	100.0
2010	17,137,394	17,137,394	100.0

\* From February 28, 2006 Actuarial Impact Statement

**SECTION E**  
**MISCELLANEOUS INFORMATION**

<b>RECONCILIATION OF MEMBERSHIP DATA</b>		
	<b>From 10/1/09 To 10/1/10</b>	<b>From 10/1/08 To 10/1/09</b>
<b>A. Active Members</b>		
1. Number Included in Last Valuation	1,154	1,158
2. New Members Included in Current Valuation	35	83
3. Employment Terminations	(40)	(24)
4. Service Retirements	(13)	(19)
5. DROP Retirements	(18)	(36)
6. Disability Retirements	0	(2)
7. Deaths	(1)	(1)
8. Other - Transfers Out and Data Adjustments	<u>0</u>	<u>(5)</u>
9. Number Included in This Valuation	1,117	1,154
<b>B. Terminated Vested Members</b>		
1. Number Included in Last Valuation	79	87
2. Additions from Active Members	10	12
3. Lump Sum Payments/Refund of Contributions	(6)	(9)
4. Payments Commenced	(8)	(9)
5. Deaths	0	0
6. Other - Data Adjustments	<u>0</u>	<u>(2)</u>
7. Number Included in This Valuation	75	79
<b>C. DROP Plan Members</b>		
1. Number Included in Last Valuation	35	0
2. Additions from Active Members	18	36
3. Retirements	(4)	(1)
4. Deaths	0	0
5. Other	<u>0</u>	<u>0</u>
6. Number Included in This Valuation	49	35
<b>D. Service Retirees, Disability Retirees and Beneficiaries</b>		
1. Number Included in Last Valuation	1013	1011
2. Additions from Active Members	14	21
3. Additions from Terminated Vested Members	8	9
4. Additions from DROP Plan	4	1
5. Deaths Resulting in No Further Payments	(19)	(29)
6. Deaths Resulting in New Survivor Benefits	0	0
7. End of Certain Period - No Further Payments	0	0
8. Other	<u>1</u>	<u>0</u>
9. Number Included in This Valuation	1,021	1,013

## MIAMI BEACH EMPLOYEES' RETIREMENT PLAN - ACTIVE MEMBERS ON OCTOBER 1, 2010

Age Group	Years of Service							Totals
	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	
20-24	22							22
Total Pay	808,846							808,846
Avg Pay	36,766							36,766
25-29	93	7						100
Total Pay	3,729,214	288,115						4,017,329
Avg Pay	40,099	41,159						40,173
30-34	87	28	12	1				128
Total Pay	4,238,615	1,317,599	633,352	37,127				6,226,693
Avg Pay	48,720	47,057	52,779	37,127				48,646
35-39	56	53	33	5				147
Total Pay	2,649,161	2,808,819	2,124,385	377,882				7,960,247
Avg Pay	47,306	52,997	64,375	75,576				54,151
40-44	48	36	33	21	5	1		144
Total Pay	2,650,554	2,286,096	2,456,311	1,565,249	404,193	71,547		9,433,950
Avg Pay	55,220	63,503	74,434	74,536	80,839	71,547		65,514
45-49	52	53	57	41	23	19		245
Total Pay	2,759,235	3,429,526	3,795,592	3,103,754	1,638,077	1,576,930		16,303,114
Avg Pay	53,062	64,708	66,589	75,701	71,221	82,996		66,543
50-54	38	34	36	16	10	2		136
Total Pay	1,890,679	2,196,130	2,464,634	1,080,379	801,123	163,541		8,596,486
Avg Pay	49,755	64,592	68,462	67,524	80,112	81,771		63,209
55-59	24	20	26	21	4	1		96
Total Pay	1,329,348	1,199,803	1,872,424	1,511,255	299,024	43,572		6,255,426
Avg Pay	55,390	59,990	72,016	71,965	74,756	43,572		65,161
60-64	15	19	15	14	4	3		70
Total Pay	897,283	1,448,741	1,035,692	1,257,018	435,226	179,804		5,253,764
Avg Pay	59,819	76,250	69,046	89,787	108,807	59,935		75,054
65-99	4	5	10	7	3			29
Total Pay	232,744	216,603	564,810	545,917	173,215			1,733,289
Avg Pay	58,186	43,321	56,481	77,988	57,738			59,769
Total No.	439	255	222	126	49	26		1,117
Total Pay	21,185,679	15,191,432	14,947,200	9,478,581	3,750,858	2,035,394		66,589,144
Avg Pay	48,259	59,574	67,330	75,227	76,548	78,284		59,614

**INACTIVE MEMBERS ON OCTOBER 1, 2010**

Age	Terminated Vested		Disabled		Retirees, Beneficiaries & DROP		Grand Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	26	\$ 410,693	1	\$ 15,082	5	81,327	32	\$ 507,102
45-49	32	620,853	3	95,202	6	259,339	41	975,394
50-54	14	380,689	6	181,796	79	3,950,688	99	4,513,173
55-59	3	11,350	4	83,236	130	5,314,316	137	5,408,902
60-64	0	-	5	152,937	161	6,307,371	166	6,460,308
65-69	0	-	6	177,893	129	4,293,630	135	4,471,523
70-74	0	-	3	64,585	131	3,553,236	134	3,617,821
75-79	0	-	2	18,496	127	3,084,444	129	3,102,940
80-84	0	-	6	100,470	127	2,597,435	133	2,697,905
85-89	0	-	3	45,138	82	1,602,925	85	1,648,063
90 & Up	0	-	1	12,494	53	685,110	54	697,604
<b>Total</b>	<b>75</b>	<b>\$ 1,423,585</b>	<b>40</b>	<b>\$ 947,329</b>	<b>1030</b>	<b>\$ 31,729,821</b>	<b>1,145</b>	<b>\$ 34,100,735</b>

**SECTION F**  
**SUMMARY OF PLAN PROVISIONS**

## SUMMARY OF PLAN PROVISIONS

### **Effective Date**

September 30, 2010 under Ordinance No. 2010-3693 and Ordinance No. 2010-3706

### **Eligibility**

Each general employee who works more than 30 hours per week is eligible for membership on his date of employment

### **Creditable Service**

Service credited under the predecessor system plus service after such date with respect to which member contributions are made.

### **Earnings**

For each person who becomes a member after the Second Tier Date, base pay including longevity, but excluding overtime, shift differential or extra compensation allowances. For each person who became a member before the Second Tier Date, actual salary or wages received. Earnings do not include lump sum payments of unused sick or vacation time. Overtime pay for Tier A members is limited to 10% of regular pay.

### **Second Tier Date**

April 30, 1993 for members of AFSCME; August 1, 1993 for those classified as "Other"; and February 21, 1994 for members of MBEBA; October 18, 1992 for Unclassified members.

### **Final Average Monthly Earnings (FAME)**

One-twelfth of average annual Earnings during the two highest paid years of Creditable Service, not less than the average monthly earnings for the 12 months as of March 8, 2006 for Unclassified Tier A members

Effective September 30, 2010 averaging period is five years except for members who are less than five years away from normal retirement eligibility. Members who are eligible for normal retirement in two years or less will have average earnings of two years. Members who are eligible for normal retirement in three years will have average earnings of three years. Members who are eligible for normal retirement in four years will have average earnings of four years.

### **Normal Retirement**

#### **Eligibility**

Age 50 and five years of Creditable Service for those in Tier A.

Age 55 and five years of Creditable Service for those in Tier B.

Age 55 with 30 years of service or age 62 with 5 years of service for employees hired after September 30, 2010



**Benefit** 3% of FAME multiplied years of Creditable Service with the total not to exceed 80% of FAME. There is a 90% cap for certain Tier A members.

2.5% of FAME multiplied years of Creditable Service with the total not to exceed 80% of FAME for members hired after September 30, 2010.

**Form of Benefit** 50% joint and survivor annuity payable only to the spouse or, if no spouse, to the surviving children until age 21; other options are also available. Spouse's benefits cease upon remarriage.

Life annuity for members hired after September 30, 2010.

### Early Retirement

**Eligibility** Tier B members of the General Plan whose total of age plus service is 75, not earlier than age 50.

Members hired after September 30, 2010 whose total of age plus service is 75, not earlier than age 55.

**Benefit** Accrued pension actuarially reduced for number of years by which Early Retirement Date precedes Normal Retirement Date.

### Delayed Retirement

**Eligibility** Any time after the Normal Retirement Date.

**Benefit** Calculated in the same manner as the Normal Retirement Benefit but using the FAME and Creditable Service as of the actual retirement date.

### Disability Benefits

**Eligibility** A total and permanent disability which renders a member incapacitated, mentally or physically, for the further performance of duty. Five years of Creditable Service is also required unless the disability is service-connected.

**Benefit** Ordinary Disability: Accrued retirement benefit, without reduction, with a minimum of 35% of FAME.

Service-Connected Disability: Accrued retirement benefit without reduction, with a minimum of 65% of FAME; 75% of FAME minimum for General Tier A members.

Such amounts are reduced by workers' compensation benefits and, in certain cases, earned income will be considered in offsetting the benefit. The period of disability shall be included in Creditable Service for purposes of computing normal retirement benefits when

a disability retiree reaches normal retirement age.

### **Preretirement Death Benefits**

For a member who has at least three years of Creditable Service but who dies before commencement of retirement benefits, a monthly benefit is payable to the spouse or, if no spouse, to the children until age 21. The benefit is equal to 50% of the accrued normal retirement benefit without reduction with the result being a minimum of 30% of FAME and a maximum of 40% of FAME for General members.

### **Termination Benefits**

Any member who terminates employment and does not request a refund of his own contributions and has completed at least five years of Creditable Service will be eligible to receive his accrued benefit upon reaching his normal retirement age.

### **Post Retirement Adjustments**

Retirees receive a 2.5% increase each year. Employees hired after September 30, 2010 who retire will receive a 1.5% increase each year.

### **Contributions**

**Tier A Members**                      12% of Earnings.

**Tier B Members and  
Members Hired  
after 9/30/2010**                      10% of Earnings.

Employees who have reached the applicable benefit accrual cap (90% for General Tier A employees and 80% for all others) but have not yet reached retirement age will continue to contribute to the pension Plan, but only on the amount by which pay increases after reaching the cap

**From the City**                      The amount necessary to fund the Plan properly according to the Plan's actuary.

### **Changes Since Last Valuation**

1. Effective 10/1/2010, FAME was changed from an averaging period of two to five years, except for members who are less than five years away from normal retirement eligibility. Members who are eligible for normal retirement in two years or less will have average earnings of two years. Members who are eligible for normal retirement in three years will have average earnings of three years. Members who are eligible for normal retirement in four years will have average earnings of four years.
2. Effective 10/1/2010, the contribution rate for Tier A employees increased from 10% to 12% of earnings and from 8% to 10% of earnings for Tier B employees.
3. The following applies to members hired after September 30, 2010:

- a. Normal retirement date of age 55 with 30 years of service or age 62 with 5 years of service
- b. Early retirement eligibility of “Rule of 75” with a minimum of age 55
- c. Multiplier of 2.5%, subject to a maximum of 80% of final average monthly earnings
- d. Final average monthly earnings of five years
- e. Normal form of payment of single life annuity
- f. DROP participation for up to 5 years
- g. Cost-of-living adjustment (COLA) of 1.5% at retirement (no COLA while in the DROP)
- h. Employee contributions of 10%