

October 12, 2011

The Retirement Board
City of Phoenix Employees' Retirement Plan
Phoenix, Arizona

Dear Board Members:

The purpose of the annual actuarial valuation of the City of Phoenix Employees' Retirement Plan as of June 30, 2011, is to:

- Compute the liabilities associated with benefits likely to be paid on behalf of current retired, active and vested inactive members of the Retirement Plan,
- Compare accrued assets with accrued liabilities to assess the funded condition of the Retirement Plan, and
- Compute the City's recommended contribution rate for the Fiscal Year beginning July 1, 2012.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices in compliance with the provisions of the City Charter. Data concerning Retirement Plan benefits, financial transactions and individual members, terminated members, retirees and beneficiaries was provided by your Retirement Program Administrator. This data has been reviewed for reasonableness, but no attempt has been made to audit such information. The actuarial assumptions used in the valuation produce results which we believe are reasonable. This valuation has been prepared under the supervision of a Member of the American Academy of Actuaries who meets the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Respectfully submitted,



Denise M. Jones
Senior Consultant



Sandra W. Rodwan
Member, American Academy of Actuaries

***City of Phoenix
Employees' Retirement Plan***

Annual Actuarial Valuation as of June 30, 2011

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Section One:
Valuation Summary



Purpose of Valuation

The purpose of the annual actuarial valuation of the City of Phoenix Employees' Retirement Plan, as of June 30, 2011, is to:

- ❖ Compute the liabilities associated with benefits likely to be paid on behalf of current retired, active and vested inactive members of the Retirement Plan,
- ❖ Compare accrued assets with accrued liabilities to assess the funded condition of the Retirement Plan, and
- ❖ Compute the City's recommended contribution rate for the Fiscal Year beginning July 1, 2012.

Liabilities and Funded Condition of Retirement Plan

Accrued liabilities of the Retirement Plan as of June 30, 2011 were computed to be \$2,752,909,049. The funding value of assets was \$1,834,620,284. The ratio of the funding value of assets to accrued liabilities was 66.7%. The market value of the assets was \$1,824,206,986. The ratio of the market value of assets to accrued liabilities was 66.3%.

Funding Value of Assets

A smoothed market value of assets was used for the June 30, 2011 valuation. This method, which is unchanged from last year, spreads the difference between the actual and expected investment return over four years.

City's Computed City Contribution Rate

The City's normal cost contribution rate was computed to be 9.16% of member payroll. Unfunded actuarial accrued liability was amortized over 20 years, producing an amortization payment of 10.99% of member payroll. The net contribution for FY 2012/2013 was therefore computed to be 20.15% of member payroll.

Retirement Plan Experience

The overall experience of the Retirement Plan during the year ended June 30, 2011 was less favorable than expected experience based on long-term assumptions. The recognized rate of return on the smoothed funding value of assets was less than the long term assumed rate and was the primary source of the unfavorable experience. The smoothed funding value of assets includes the phase-in of experience losses/gains over a four year period. Salary increases which were lower than assumed partially offset the unfavorable experience.

Benefit Provision Changes

There were no changes in benefit provisions during the year.

Assumption and Method Changes

There were no changes in assumptions or methods during the year.

Participant Data

	<u>6/30/2011</u>	<u>6/30/2010</u>
Active Members	8,569	8,896
Active Member Payroll	\$513,321,633	\$550,174,824
Retirees and Beneficiaries	5,191*	4,931
Annual Pensions	\$149,949,894	\$138,272,993
Vested/Inactive	680	708
Estimated Annual Pensions	\$7,811,158	\$8,016,621

*Also included in the valuation were 103 alternate payees with annual benefits totaling \$1,206,050.

Financial Data

	<u>6/30/2011</u>	<u>6/30/2010</u>
Market Value of Assets	\$1,824,206,986	\$1,535,173,679
Smoothed Valuation Assets	\$1,835,185,304	\$1,868,636,402
Pension Equalization Reserve	565,020	543,289
Net Smoothed Valuation Assets	\$1,834,620,284	\$1,868,093,113

Conclusion

The Retirement Plan is funding benefits as they accrue in accordance with a sound level percent of payroll funding objective.



Section Two:

***Actuarial Calculations –
Funding***



Computed Contribution Rates for Fiscal Year Beginning July 1, 2012

The contribution rates shown below are expressed as percents of active member payroll.

The normal cost can be viewed as the long-term ongoing cost of the Retirement Plan.

Unfunded actuarial accrued liability was amortized over 20 years as a level percent of payroll. The 20 year open period was adopted by the Board effective for the fiscal year beginning July 1, 2003.

The City’s net computed contribution rate for FY 2012/2013 is 20.15% of active member payroll.

Contribution Recommendation:

	<u>Percent of Payroll</u>
Normal Cost	
Service Pensions	10.59%
Pre-Retirement Death	0.54
Disability	0.81
Withdrawal	<u>2.22</u>
Total Normal Cost	14.16
Unfunded Actuarial Accrued Liability	10.99
Total Computed Contribution	25.15
Member portion	5.00
City’s Net Computed Contribution Rate	20.15%
City’s Computed Dollar Contribution	\$110,094,257

Unfunded Actuarial Accrued Liability

	<u>June 30, 2011</u>	<u>June 30, 2010</u>
Actuarial accrued liability	\$2,752,909,049	\$2,697,287,660
Assets allocated to funding	<u>1,834,620,284</u>	<u>1,868,093,113</u>
Unfunded actuarial accrued liability	\$918,288,765	\$829,194,547

History of Recommended City Contributions

Valuation Date: June 30	Fiscal Year	Computed City Dollar Contributions	Percent of Payroll
1980*	81/82	\$8,022,758	8.86%
1985	86/87	12,366,739	8.25
1990	91/92	19,582,694	8.69
1995	96/97	23,208,480	8.30
2000	01/02	28,294,889	7.24
2001	02/03	27,819,507	6.86
2002	03/04	39,563,747	9.17#
2003	04/05	44,274,921	9.97
2004	05/06	53,093,606	11.20
2005	06/07	58,151,324	11.66
2006(b)	07/08	63,244,698	11.94
2006(a)	07/08	64,198,136	12.12
2007	08/09	67,152,987	11.78
2008(c)	09/10	75,910,874	12.58
2008(d)	09/10	86,591,498	14.35
2009	10/11	92,145,262	16.04
2010	11/12	106,483,325	18.18
2011	12/13	110,094,257	20.15

*Valuation date 12/31

#Adoption of a 20 year amortization period for unfunded actuarial accrued liability decreased the computed City contribution rate to 9.17% from 10.22% based on 11 year amortization.

- (a) After changes in assumptions.
- (b) Before changes in assumptions.
- (c) Before method changes.
- (d) After method changes.

Note: Results prior to 2000 are based on reports provided by previous actuarial firm.

**History of Assets and Accrued Liabilities
(\$+000)**

Valuation Date June 30	Valuation Assets	Actuarial Accrued Liabilities	Funded Ratio	Unfunded Actuarial Accrued Liabilities
1975*	\$51,025	\$69,625	73.3%	\$18,600
1980*	101,832	120,262	84.7	18,430
1985	207,015	215,926	95.9	8,911
1990	399,413	399,089	100.1	(324)
1995(a)	663,593	652,266	101.7	(11,327)
1996(a)	742,076	758,107	97.9	16,031
1997	840,539	824,604	101.9	(15,935)
1998	984,501	907,471	108.5	(77,030)
1999	1,117,497	989,371	113.0	(128,126)
2000(a)	1,219,892	1,199,871	101.7	(20,021)
2001	1,291,338	1,259,564	102.5	(31,774)
2002	1,273,731	1,390,273	91.6	116,542
2003	1,330,584	1,504,125	88.5	173,541
2004	1,417,774	1,684,795	84.2	267,021
2005	1,511,553	1,795,514	84.2	283,961
2006(b)	1,626,741	1,951,295	83.4	324,554
2006(a)	1,626,741	2,000,346	81.3	373,605
2007	1,816,508	2,166,119	83.9	349,611
2008(c)	1,908,414	2,338,826	81.6	430,412
2008(d)	1,908,414	2,413,365	79.1	504,951
2009	1,895,148	2,518,094	75.3	622,946
2010	1,868,093	2,697,288	69.3	829,195
2011	1,834,620	2,752,909	66.7	918,289

*Valuation date 12/30

- (a) After changes in benefit provisions and/or actuarial assumption and valuation methods.
 (b) Before changes in benefit provisions and/or actuarial assumption and valuation methods.
 (c) Before method changes.
 (d) After method changes.

Note: Results prior to 2000 are based on reports provided by previous actuarial firm.

Experience Gain/Loss

	Year Ended June 30, 2011
(1) UAAL* at Start of Year	\$829,194,547
(2) Normal Cost	80,099,294
(3) Contributions	119,613,179
(4) Assumed Investment Income on (1), (2) and (3)	64,652,552
(5) Expected UAAL Before Changes	854,333,214
(6) Effect of Method Changes	-
(7) Effect of Benefit Changes	-
(8) Expected UAAL After Changes	854,333,214
(9) Actual UAAL	918,288,765
(10) Gain(Loss) (8) – (9)	(63,955,551)
(11) Percent of AAL** at Start of Year	(2.4)%

*Unfunded Actuarial Accrued Liability

**Actuarial Accrued Liability

Actuarial Balance Sheet June 30, 2011**Actuarial Assets**

Funding value of Plan assets		
Market value from Plan financial statements	\$1,824,206,986	
Pension Equalization Reserve	(565,020)	
Smoothed funding value adjustment	<u>10,978,318</u>	
Funding value of assets		\$1,834,620,284
Prospective assets (computed value)		
For normal costs	621,271,590	
For unfunded actuarial accrued liability	<u>918,288,765</u>	
Total prospective assets		<u>1,539,560,355</u>
Total Actuarial Assets		<u><u>\$3,374,180,639</u></u>

Actuarial Present Values (Liability)

Pensions in payment status		\$1,431,877,432*
Vested terminated members		35,326,495
Present active members		
Allocated to service prior to valuation date	\$1,285,705,122	
Allocated to service after valuation date	<u>621,271,590</u>	
Total		<u>1,906,976,712</u>
Total Actuarial Present Values (Liability)		<u><u>\$3,374,180,639</u></u>

*Includes \$127,148 attributable to pensions being paid to minors.

Comments, Conclusion and Certification

Comment 1: The aggregate experience of the Retirement Plan during the year ended June 30, 2011 was less favorable than expected based upon the long-term assumptions. Although the rate of return on the market value of assets was greater than assumed, the recognized rate of investment return based on the smoothed funding value of assets was less than assumed due to carry-forwards of prior years' losses. Salary increases at rates less than assumed partially offset the unfavorable experience. The increase in the City's computed contribution rate as a percent of payroll reflects the overall experience and the decrease in the number of active members.

Comment 2: Unfunded actuarial accrued liability was amortized over an open period of 20 years, as adopted by the Board for contributions beginning with the 2003/2004 fiscal year.

Conclusion: The Retirement Plan is funding benefits as they accrue in accordance with a sound level percent of payroll funding objective.

Certification: This valuation has been conducted in accordance with generally accepted actuarial principles and practices in compliance with the provisions of the City Charter. Data concerning Retirement Plan benefits, financial transactions and individual members, terminated members, retirees and beneficiaries was provided by your Retirement Program Administrator. This data has been reviewed for reasonableness, but no attempt has been made to audit such information. The actuarial assumptions used in this valuation are reasonably related to the past experience of the Plan and represent reasonable expectations of long-term future experience under the Plan.



Section Three:

***Retirement Plan
Benefit Provisions***



Benefit Provision Summary

Voluntary Retirement (no reduction for age)

Eligibility:

Sum of age and credited service equals 80 or more, age 60 with 10 or more years of credited service or age 62 with 5 or more years of credited service.

Annual Benefit:

Unused sick leave service multiplied by 2% of final average compensation (FAC) plus 2% of FAC times credited service up to 32.5 years plus 1% of FAC times service in excess of 32.5 years plus ½% of FAC times service in excess of 35.5 years. Minimum monthly pension is \$250 (\$500 if member has 15 or more years of service).

Final Average Compensation (FAC)

Average of annual compensation for the period of 3 consecutive years producing the highest average and contained within the last 10 years preceding retirement.

Deferred Retirement

Eligibility:

Termination of City employment prior to age 62 with 5 or more years of credited service.

Annual Benefit:

Accrued regular retirement amount based on credited services, unused sick leave service, and FAC at time of termination, payable beginning at age 62.

Duty Disability Retirement

Eligibility:

Total and permanent disability incurred in line of duty with the City.

Annual Benefit:

Computed in the same manner as the regular retirement amount based on FAC and credited service at time of disability retirement. Minimum is 15% of FAC. Maximum during worker's compensation period is difference between final compensation and annualized workers compensation. At expiration of worker's compensation period, amount is recomputed to include years during which workers compensation was paid.

Non-Duty Disability

Eligibility:

Total and permanent disability after 10 or more years of credited service.

Annual Benefit:

Computed in the same manner as regular retirement amount based on FAC and credited service at time of disability retirement.

Duty Death Before Retirement

Eligibility:

Death in line of duty with the City and compensable under worker's compensation.

Annual Benefit:

To the spouse: Joint and 100% survivor actuarial equivalent of accrued regular retirement amount based on FAC and credited service and unused sick leave service at time of death. Minimum of 10 years of service is credited. To the children of a deceased member with 10 or more years of credited service: each child shall receive a monthly pension of \$200 until adoption, marriage, death or attainment of age 18.

Non-Duty Death Before Retirement

Eligibility:

10 or more years of credited service.

Annual Benefit:

Same as Duty Death Before Retirement.

Pension Equalization Program: On January 1 of each year, persons in receipt of a pension for at least 36 months receive a percentage increase based on the lesser of A) and B):

A) Phoenix area Consumer Price Index; or

B) The amount the balance in the Pension Equalization can fully fund.

The increase, if available, is payable beginning with the April 1 payment each year, retroactive to January 1 of the same year.

Member Contributions

5% of pay

City Contributions

Actuarially determined amounts which, together with member contributions, are sufficient to cover both (i) normal costs of the plan, and (ii) financing of unfunded accrued actuarial costs over a selected period of future years.

Section Four:

***Actuarial Assumptions
And Methods***



Actuarial Assumptions

Economic Assumptions

- (i) Interest Rate 8.0% (net of expenses)

- (ii) Salary Increases
 - Across-the-Board 5.0%
 - Merit and Longevity Age-related rates

Sample Annual Rates of Salary Increase

Age	Base (Inflation)	Competition/ Productivity	Merit and Longevity	Total
20	4.5%	0.5%	3.8%	8.8%
25	4.5%	0.5%	3.1%	8.1%
30	4.5%	0.5%	2.7%	7.7%
35	4.5%	0.5%	2.4%	7.4%
40	4.5%	0.5%	2.2%	7.2%
45	4.5%	0.5%	1.6%	6.6%
50	4.5%	0.5%	1.1%	6.1%
55	4.5%	0.5%	0.6%	5.6%
60	4.5%	0.5%	0.1%	5.1%
65	4.5%	0.5%	0.0%	5.0%

Demographic Assumptions

(i) Mortality

RP 2000 Mortality Table Combined
Healthy

Sample Ages	Value of \$1 Annually for Life		Future Life Expectancy (Years)	
	Men	Women	Men	Women
50	\$11.34	\$11.61	30.8	33.6
55	10.72	11.10	26.2	29.0
60	9.92	10.37	21.8	24.4
65	8.96	9.53	17.6	20.2
70	7.86	8.55	13.9	16.3
75	6.65	7.44	10.6	12.8
80	5.37	6.34	7.8	9.7

These rates were first used for the June 30, 2006 valuation.

(ii) Rates of Disability

Age-related rates

Sample Ages	Percent of Active Members Becoming Disabled Within Next Year
20	0.03
25	0.03
30	0.04
35	0.05
40	0.12
45	0.20
50	0.40
55	0.80
60	1.00

These rates were first used for the June 30, 2006 valuation.

(iii) Termination of Employment

Service related rates for first five years of employment. Age-related rates for after first five years of employment

Sample Ages	Years of Service	% of Active Members Separating Within Next Year
ALL	0	20.0%
	1	18.0
	2	12.0
	3	9.0
	4	8.0
25	5 & Over	7.0
30		6.0
35		5.0
40		3.0
45		3.0
50		2.5
55		2.5
60		2.5
65		2.5

These rates were first used for the June 30, 2006 valuation.

(iv) Retirement Rates

Age-related rates

**Percent of Active Members Retiring Within Year
Following Attainment of Indicated Retirement Age**

Retirement Age	Percent Retiring
50	25
51	25
52	25
53	25
54	25
55	35
56	25
57	25
58	25
59	25
60	25
61	20
62	35
63	30
64	25
65	45
66	30
67	30
68	30
69	30
70	100

These rates were first used for the June 30, 2006 valuation.

Active members were assumed to be eligible for an unreduced pension when the sum of age and credited service equals 80 or more, after attaining age 60 with 10 or more years of service, or after attaining age 62 with 5 or more years of service.

Compensatory service credits and lump sum payments for unused vacation and compensatory time were assumed to increase the present value of normal retirement benefits by 9.0%.

Percent married. Ninety percent of active members were assumed to be married. Spouses of males were assumed to be 3 years younger; spouses of females were assumed to be 3 years older.

Actuarial Method Used for the Valuation

Normal Cost. Normal cost and the allocation of actuarial present values between service rendered before and after the valuation date were determined using an individual entry-age actuarial cost method having the following characteristics:

- ❖ The annual normal costs for each individual active member, payable from date of hire to date of retirement, are sufficient to accumulate the value of the member's benefit at the time of retirement;
- ❖ Each annual normal cost is a constant percentage of the member's year-by-year projected covered pay.

Financing of Unfunded Actuarial Accrued Liability. The actuarial accrued liability was amortized as a level percent-of-payroll over 20 years and added to the computed normal cost.



Section Five:
Valuation Data



Asset Summary**Statement of Assets**

As of June 30, 2011, the market value was reported to be \$1,824,206,986.

Reconciliation of the Book Value of Assets

a. Book Value as of June 30, 2010	\$1,641,664,057
b. Income	
(i) Member Contributions	28,647,917
(ii) Employer Contributions	90,965,262
(iii) Investment Income (Net of Expenses)	137,355,841
(iv) Inter-System Transfers	<u>4,998,865</u>
(v) Total Income	261,967,885
c. Disbursements to Members	
(i) Pensions	145,922,384
(ii) Refunds of Member Contributions	2,469,584
(iii) Inter-System Transfers	2,870,528
(iv) Administrative expense	<u>0</u>
(v) Total Disbursements to Members	151,262,496
d. Book Value as of June 30, 2011	\$1,752,369,446

Investment Allocation

The reported asset allocation based on market value was as follows:

a. Cash and Short Term	\$114,792,080
b. Fixed Income	349,425,931
c. Equity	1,255,178,002
d. Real Estate	<u>182,745,622</u>
e. Total Market Value of Assets as of June 30, 2011	1,902,141,635
f. Less: Accounts Payable	<u>77,934,649</u>
g. Market Value of Assets as of June 30, 2011	\$1,824,206,986

Funding Value of Assets

As of June 30, 2011, the market value of assets was reported to be \$1,824,206,986 and the net funding value of assets (smoothed market value) was \$1,834,620,284 (the gross funding value before deducting the Pension Equalization Reserve was \$1,835,185,304). The funding value spreads the difference between the actual and expected 8% investment return over a four year period.

Funding Value of Assets	6/30/2010	6/30/2011
A. Gross Funding Value Beginning of Year	\$1,896,271,626	\$1,868,636,402
B. Market Value End of Year	1,535,173,679	1,824,206,986
C. Market Value Beginning of Year	1,409,558,244	1,535,173,679
D. Non-investment Net Cash Flow	(16,998,841)	(26,650,452)
E. Investment Income		
E1. Market Total B-C-D	142,614,276	315,683,759
E2. Amount for Immediate Recognition	151,021,776	148,424,894
E3. Amount for Phased-In Recognition: E1-E2	(8,407,500)	167,258,865
F. Phased-In Recognition of Investment Income		
F1. Current Year: 0.25 x E3	(2,101,875)	41,814,716
F2. First Prior Year	(132,218,717)	(2,101,875)
F3. Second Prior Year	(62,719,664)	(132,218,717)
F4. Third Prior Year	35,382,096	(62,719,664)
F5. Total Phased-In Amount	(161,658,160)	(155,225,540)
H. Initial Adjustment*	n/a	n/a
I. Gross Funding Value End of Year: A+D+E2+F5+H	1,868,636,402	1,835,185,304
J. Pension Equalization Reserve	543,289	565,020
K. Net Funding Value End of Year: I-J	1,868,093,113	1,834,620,284
L. Difference Between Market and Gross Funding Value	\$(333,462,723)	\$(10,978,318)
*25% of the difference between beginning of year market value and funding value for FY 02/03. Last installment was 6/30/2006.		

Reserve Balances – (Book Value)

Reserves (Book Value)	<u>June 30, 2011</u>	<u>June 30, 2010</u>
Employees’ Savings Fund	\$446,455,872	\$445,141,268
Pension Accumulation Fund	(39,033,119)	(32,003,737)
Pension Reserve Fund	1,344,381,673	1,227,983,237
Pension Equalization Fund	<u>565,020</u>	<u>543,289</u>
Retirement Plan Totals	\$1,752,369,446	\$1,641,664,057

Participant Summary

Retirees and Beneficiaries Included in the Valuation

There were 5,191 retirees and beneficiaries included in the valuation, with annual pensions totaling \$149,949,894.

Retirees and Beneficiaries - June 30, 2011

Attained Age	Age & Service		Disability and Death-In-Service		Totals	
	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions
Under 20	1	\$5,944	14	\$34,877	15	\$40,821
20-24	1	12,551			1	12,551
25-29	1	12,552			1	12,552
30-34	1	9,364	1	18,427	2	27,791
35-39	4	41,717			4	41,717
40-44	5	68,771	3	39,998	8	108,769
45-49	4	100,400	19	299,365	23	399,765
50-54	166	8,119,980	46	792,233	212	8,912,213
55-59	522	24,066,764	80	1,368,518	602	25,435,282
60-64	991	35,584,171	75	1,333,434	1,066	36,917,605
65-69	959	28,643,443	53	826,574	1,012	29,470,017
70-74	777	19,373,582	47	751,534	824	20,125,116
75-79	523	11,904,095	31	442,436	554	12,346,531
80-84	438	9,077,488	11	193,280	449	9,270,768
85-89	265	4,603,372	13	156,362	278	4,759,734
90-94	104	1,611,163	11	110,634	115	1,721,797
95-99	22	308,370	1	14,363	23	322,733
Over 100	2	24,132			2	24,132
Totals	4,786	\$143,567,859	405	\$6,382,035	5,191	\$149,949,894

Also included in the valuation were 103 alternate payees with annual benefits totaling \$1,206,050.

Pensions Being Paid

Valuation Date June 30	No.	Annual Pension Payroll	Average Pension	Discounted Value of Pensions	
				Total	Average
1970	340	\$ 473,361	\$ 1,392	\$ 5,037,596	\$14,816
1975	659	1,677,417	2,545	16,531,074	25,085
1980	1,081	3,945,764	3,650	38,592,913	35,701
1985	1,595	8,628,828	5,410	78,069,444	48,946
1990	2,153	18,450,025	8,569	165,804,947	77,011
1991	2,253	20,161,971	8,949	179,021,242	79,459
1992	2,344	22,555,546	9,627	203,512,080	86,823
1993	2,441	24,578,907	10,069	213,689,712	87,542
1994	2,517	26,631,668	10,581	231,490,008	91,971
1995	2,603	29,283,567	11,250	253,370,388	97,338
1996	2,678	32,202,770	12,025	278,600,868	104,033
1997	2,777	35,873,253	12,918	312,952,740	112,695
1998	2,881	40,123,813	13,927	351,548,940	122,023
1999	2,998	44,211,408	14,747	389,427,924	129,896
2000	3,171	52,881,149	16,676	477,415,704	150,557
2001	3,328	60,274,419	18,111	549,592,898	165,142
2002	3,457	66,370,134	19,199	605,227,344	175,073
2003	3,592	72,221,170	20,106	659,633,613	183,640
2004	3,743	79,318,123	21,191	737,683,525	197,083
2005	3,907	85,717,799	21,940	798,413,514	204,355
2006	4,069	94,797,214	23,297	892,122,786	219,249
2007	4,217	102,356,444	24,272	964,006,083	228,600
2008	4,417	113,433,365	25,681	1,066,886,398	241,536
2009	4,669	126,219,565	27,034	1,193,391,096	255,599
2010	4,931	138,272,993	28,042	1,311,929,414	266,057
2011	5,191	149,949,894	28,887	1,431,877,432	270,742

Note: 1970-1975 Valuations are as of December 31

Schedule of Retirees and Beneficiaries Added To and Removed From Rolls

<u>Year Ended</u>	<u>Added</u>			<u>Removed</u>		<u>Rolls End of Year</u>		<u>Average Annual Pensions</u>	<u>% Increase In Annual Pensions</u>
	<u>No.</u>	<u>Annual Pensions</u>		<u>No.</u>	<u>Annual Pensions (+000)</u>	<u>No.</u>	<u>Annual Pensions (+000)</u>		
		<u>New (+000)</u>	<u>PEP* (+000)</u>						
2011	444	\$15,251	\$0	184	\$3,574	5,191	\$149,950	\$28,887	8.4%
2010	432	15,139	120	170	3,206	4,931	138,273	28,042	9.5
2009	426	14,195	1,594	174	3,002	4,669	126,220	27,034	11.3
2008	348	10,935	2,874	148	2,732	4,417	113,433	25,681	10.8
2007	290	8,205	1,519	142	2,165	4,217	102,356	24,272	8.0
2006	309	9,247	1,976	147	2,144	4,069	94,797	23,297	9.0
2005	314	7,795	1,159	150	2,554	3,907	85,718	21,940	8.1
2004	296	7,610	1,727	145	2,122	3,743	79,318	21,191	9.1
2003	259	6,720	1,066	124	1,935	3,592	72,221	20,106	8.8
2002	264	5,999	1,786	135	1,689	3,457	66,370	19,199	10.1
2001	240	6,665	1,559	83	831	3,328	60,274	18,111	14.0
2000	276	8,661	1,056	102	1,047	3,171	52,881	16,671	13.1
1999	194	4,173	719	77	805	2,998	44,211	14,747	10.2
1998	220	3,985	1,461	116	1,205	2,881	40,124	13,927	11.8
1997	213	3,753	1,180	114	1,262	2,777	35,873	12,918	11.4
1996	204	2,754	1,266	129	1,100	2,678	32,203	12,025	10.0
1995	188	2,569	913	102	830	2,603	29,284	11,250	10.0
1994	167	2,265	628	91	841	2,517	26,632	10,581	8.4
1993	183	2,265	525	86	788	2,441	24,579	10,069	9.0
1992	183	2,580	367	92	554	2,344	22,556	9,627	11.9
1991	165	2,159		65	447	2,253	20,162	8,949	9.3

**Pension Equalization Increase*

Retirees and Beneficiaries - June 30, 2011
Type of Pensions

Type of Pensions	No.	Annual Pensions
Age and Service Pensions		
Straight Life	1,602	\$49,432,566
100% Joint and Survivor	1,264	41,326,432
50% Joint and Survivor	198	6,927,373
10 Years Certain and Life	204	5,977,850
100% Joint and Survivor with Pop-Up	555	16,897,597
50% Joint and Survivor with Pop-Up	374	12,746,375
Total Age and Service Pensions	4,197	133,308,193
Disability Pensions		
Straight Life	51	811,836
100% Joint and Survivor	65	1,040,406
50% Joint and Survivor	6	92,307
10 Years Certain and Life	18	259,723
100% Joint and Survivor with Pop-Up	39	496,924
50% Joint and Survivor with Pop-Up	7	147,107
Duty Disability Pensions		
Straight Life	13	165,873
100% Joint and Survivor	22	224,921
50% Joint and Survivor	2	34,083
10 Years Certain and Life	5	26,687
100% Joint and Survivor with Pop-Up	17	216,390
50% Joint and Survivor with Pop-Up	2	29,656
Total Disability Pensions	247	3,545,913
Death-In-Service		
Spouses - Death-In-Service	138	2,714,478
Children - Death-In-Service	14	34,877
Total Death-In-Service	152	2,749,355
Beneficiaries		
Age & Service Beneficiaries	589	10,259,666
Disability Beneficiaries	6	86,767
Total Beneficiaries	595	10,346,433
Total Pensions Paid	5,191	\$149,949,894

Active Member Summary

Active Members, June 30, 2011 - Age and Service Distribution

Age	Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	
Under 20	2							2
20-24	110	13						123
25-29	294	175	8					477
30-34	262	376	156	6				800
35-39	239	365	355	97	5			1,061
40-44	222	349	337	229	129	17		1,283
45-49	179	318	284	265	295	191	13	1,545
50-54	157	252	257	235	302	245	63	1,511
55-59	94	180	235	198	219	119	61	1,106
60-64	51	105	112	109	87	55	31	550
Over 65	16	26	23	13	13	15	5	111
Totals	1,626	2,159	1,767	1,152	1,050	642	173	8,569

Active Members – Three-Year Summary

	2011	2010	2009
Active Members	8,569	8,896	9,317
Valuation Payroll	\$513,312,633	\$550,174,824	\$539,468,175
Average Compensation	\$59,904	\$61,845	\$57,901
Average Age (yrs.)	46.1	45.7	45.3
Average Service (yrs.)	12.8	12.4	11.9

Inactive Vested Members - June 30, 2011

Attained Age	No.	Estimated Annual Benefit
25-29	5	\$26,550
30-34	33	233,102
35-39	83	742,120
40-44	123	1,326,556
45-49	109	1,489,964
50-54	144	1,758,104
55-59	128	1,626,017
60-64	55	608,745
Totals	680	\$7,811,158



Section Six:
Accounting Disclosures



GASB Statement No. 25 Supplementary Information

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:

Valuation Date:	June 30, 2011
Actuarial Cost Method:	Individual Entry Age
Amortization method:	Level percent of payroll, open
Remaining amortization period:	20 years
Asset valuation method:	Four-year smoothed market value
Actuarial assumptions:	
Investment rate of return	8.0%
Projected salary increases*	5.0%-8.8%
* Includes inflation at	4.5%

Membership data as of June 30, 2011 is indicated in Section Five of this report.

Actuarial Accrued Liability as of June 30, 2011:

Actuarial Accrued Liability

Active members	\$1,285,705,122
Retirees and beneficiaries	1,431,877,432
Vested terminated members	<u>35,326,495</u>
Total Actuarial Accrued Liability	2,752,909,049
Actuarial Value of Assets	1,834,620,284
Unfunded Actuarial Accrued Liability	\$918,288,765

Analysis of Funding Progress
(\$ amounts +000)

Valuation Date June 30	(1) Funding Value of Assets	(2) Actuarial Accrued Liability	(3) Percent Funded (1)/(2)	(4) Unfunded AAL (2)-(1)	(5) Annual Covered Payroll	(6) UAAL As a % Of Covered Payroll (4)/(5)
1997	\$ 840,539	\$ 888,968	94.6%	\$ 48,429	\$ 294,678	16.4%
1998	984,501	973,048	101.2	(11,453)	322,475	-
1999	1,117,497	1,044,425	107.0	(73,072)	336,153	-
2000	1,219,892	1,199,871	101.7	(20,021)	360,654	-
2001	1,291,338	1,259,564	102.5	(31,774)	376,913	
2002	1,273,731	1,390,273	91.6	116,542	404,414	28.8
2003	1,330,584	1,504,125	88.5	173,541	416,472	41.7
2004	1,417,774	1,684,795	84.2	267,021	445,348	60.0
2005	1,511,553	1,795,514	84.2	283,962	467,998	60.7
2006	1,626,741	2,000,346	81.3	373,605	497,105	75.2
2007	1,816,508	2,166,119	83.9	349,611	535,079	65.3
2008	1,908,414	2,413,365	79.1	504,951	566,512	89.1
2009	1,895,148	2,518,094	75.3	622,946	539,468	115.5
2010	1,868,093	2,697,288	69.3	829,195	550,175	150.7
2011	1,834,620	2,752,909	66.7	918,289	513,322	178.9

Schedule of Employer Contributions

Valuation Date June 30	Fiscal Year Ended June 30	Annual Required Contribution	Actual Annual Contribution
1990	1992	\$19,582,694	100%
1991	1993	21,023,444	100
1992	1994	21,495,978	100
1993	1995	20,607,423	100
1994	1996	21,218,199	100
1995	1997	23,208,480	100
1996	1998	30,123,972	100
1997	1999	29,185,895	100
1998	2000	26,802,219	100
1999	2001	22,329,387	100
2000	2002	28,294,889	100
2001	2003	27,819,507	100
2002	2004	39,563,747	100
2003	2005	43,374,921*	100
2004	2006	52,973,606*	100
2005	2007	58,151,324	100
2006	2008	64,198,136	100
2007	2009	66,382,987*	100
2008	2010	86,241,498*	100
2009	2011	90,965,262*	100
2010	2012	106,483,325	
2011	2013	110,094,257	

**Excluding amount allocated to Excess Benefit Arrangement.*