

CITY OF ANN ARBOR EMPLOYEES' RETIREMENT SYSTEM
ACTUARIAL VALUATION REPORT-REVISED
AS OF JUNE 30, 2009

October 26, 2009

The Board of Trustees
City of Ann Arbor Employees' Retirement System
Ann Arbor, Michigan

Dear Board Members:

Submitted in this report are the revised results of the Sixty-Third Annual Actuarial Valuation of the assets, benefit values, reserves and contribution requirements associated with benefits provided by the City of Ann Arbor Employees Retirement System.

Also included in this report are the revised results of the Twenty-Seventh Annual Projection Study of financial activity of the Retirement System.

The valuation and projection were based on information, furnished by your Executive Director and the staff of the Retirement System, concerning financial records and individual members, retirants and beneficiaries. The information was checked for internal and year-to-year consistency, but was not otherwise audited.

The date of the valuation was June 30, 2009. The projection study covers the period July 1, 2009 through June 30, 2019.

The report is divided into 6 sections, as follows:

- Section A - Executive Summary Plus Basic Financial Objective and Operation of the Retirement System
- Section B - Valuation Results
- Section C - Ten-Year Projection Study
- Section D - Summary of Benefit Provisions and Valuation Data
- Section E - Summary of Valuation Methods and Assumptions
- Section F - Disclosures Required by the Governmental Accounting Standards Board

To the best of our knowledge, this report is complete and accurate and was made in accordance with prescribed actuarial methods.

One or more of the actuaries submitting this report is a Member of the American Academy of Actuaries (MAAA) as indicated, and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Respectfully submitted,



Brad Lee Armstrong, ASA, EA, MAAA, FCA



David T. Kausch, FSA, EA, MAAA

BLA:sac

SECTION A

**EXECUTIVE SUMMARY PLUS BASIC FINANCIAL
OBJECTIVE AND OPERATION OF THE RETIREMENT
SYSTEM**

EXECUTIVE SUMMARY

Funding Objective

The funding objective of the Retirement System is to establish and receive contributions, expressed as percents of active member payroll, which will remain approximately level from year-to-year and will not have to be increased for future generations of citizens.

Contribution Rates

The Retirement System is supported by member contributions, City contributions and investment income from Retirement System assets.

Contributions which satisfy the funding objective as well as Section 20m of Michigan Public Act No. 728 of 2002 are determined by the annual actuarial valuation and are sufficient to:

- (1) Cover the actuarial present value of benefits allocated to the current year (the normal cost) by the actuarial cost method described in Section E; and
- (2) Finance over a period of future years the actuarial present value of benefits not covered by valuation assets and anticipated future normal costs (unfunded actuarial accrued liability).

Computed contribution rates for the fiscal years beginning July 1 are shown below:

	<u>2010</u>	<u>2009</u>
City's Total Contribution Rate	16.46%	13.76%
City's Total Dollar Contribution	\$ 9,005,858	\$ 7,559,781

The contribution rate for 2010 uses a 30-year amortization adopted by the Board at the October 15, 2009 Board meeting. The contribution rate for 2009 used a 15-year amortization.

For additional details, please see Page B-1 of this report.

EXECUTIVE SUMMARY

Funded Status

Actuarial Accrued Liability and Funding Value of assets as of the June 30 valuation dates are shown below:

	<u>June 30, 2009</u>	<u>June 30, 2008</u>
Actuarial Accrued Liabilities	\$ 455,219,372	\$ 430,437,634
Valuation Assets	426,282,727	428,688,617
Unfunded Actuarial Accrued Liabilities	\$ 28,936,645	\$ 1,749,017
Funded Ratio (Assets/Liabilities)	93.6%	99.6%
Rate of return on market value of assets	(20.0%)	(5.7%)
Rate of return on valuation assets	1.3%	7.2%

The Funded Ratio has decreased since the last valuation. This is due to an experience loss for the year ended June 30, 2009.

For additional details, please see Section B of this report.

BASIC FINANCIAL PRINCIPLES AND OPERATION OF THE RETIREMENT SYSTEM

Benefit Promises Made Which Must Be Paid For. A retirement program is an orderly means of handing out, keeping track of, and financing contingent pension promises to a group of employees. As each member of the retirement program acquires a unit of service credit he is, in effect, handed an "IOU" which reads: "The Employees Retirement System promises to pay you one unit of retirement benefits, payments in cash commencing when you retire."

The principal related financial question is: ***When shall the money required to cover the "IOU" be contributed?*** This year, when the benefit of the member's service is received? Or, some future year when the "IOU" becomes a cash demand?

The Constitution of the State of Michigan answers these questions with the following requirement:

"Financial benefits arising on account of service rendered in each fiscal year shall be funded during that year and such funding shall not be used for financing unfunded accrued liabilities."

The majority of public employers meet this constitutional requirement by level percent-of-payroll contributions.

Translated into actuarial terminology, a level percent-of-payroll contribution objective means that the contribution rate must be at least:

Normal Cost (the actuarial present value of benefits likely to be paid on account of members' service being rendered in the current year).

. . . plus . . .

Unrealized Investment Income on Unfunded Actuarial Accrued Liability (unfunded actuarial accrued liability is the difference between (i) the actuarial present value of benefits likely to be paid on account of service rendered prior to the current year, and (ii) the accrued assets of the retirement program).

If contributions to the retirement program are less than the preceding amount, the difference, *plus investment earnings not realized thereon*, will have to be contributed at some later time, or, benefits will have to be reduced, to satisfy the fundamental fiscal equation under which all retirement programs must operate:

$$B = C + I - E$$

The aggregate amount of Benefit payments to any group of members and their beneficiaries cannot exceed the sum of:

The aggregate amount of Contributions received on behalf of the group.

. . . plus . . .

Investment earnings on contributions received and not required for immediate cash payments of benefits;

. . . minus . . .

The Expenses of operating the program.

There are retirement programs designed to defer the bulk of contributions far into the future. Lured by artificially low present contributions, the inevitable consequence of a relentlessly increasing contribution rate -- to a level which may be greatly in excess of the level percent-of-payroll rate -- is often ignored.

This method of financing is prohibited in Michigan by the state constitution.

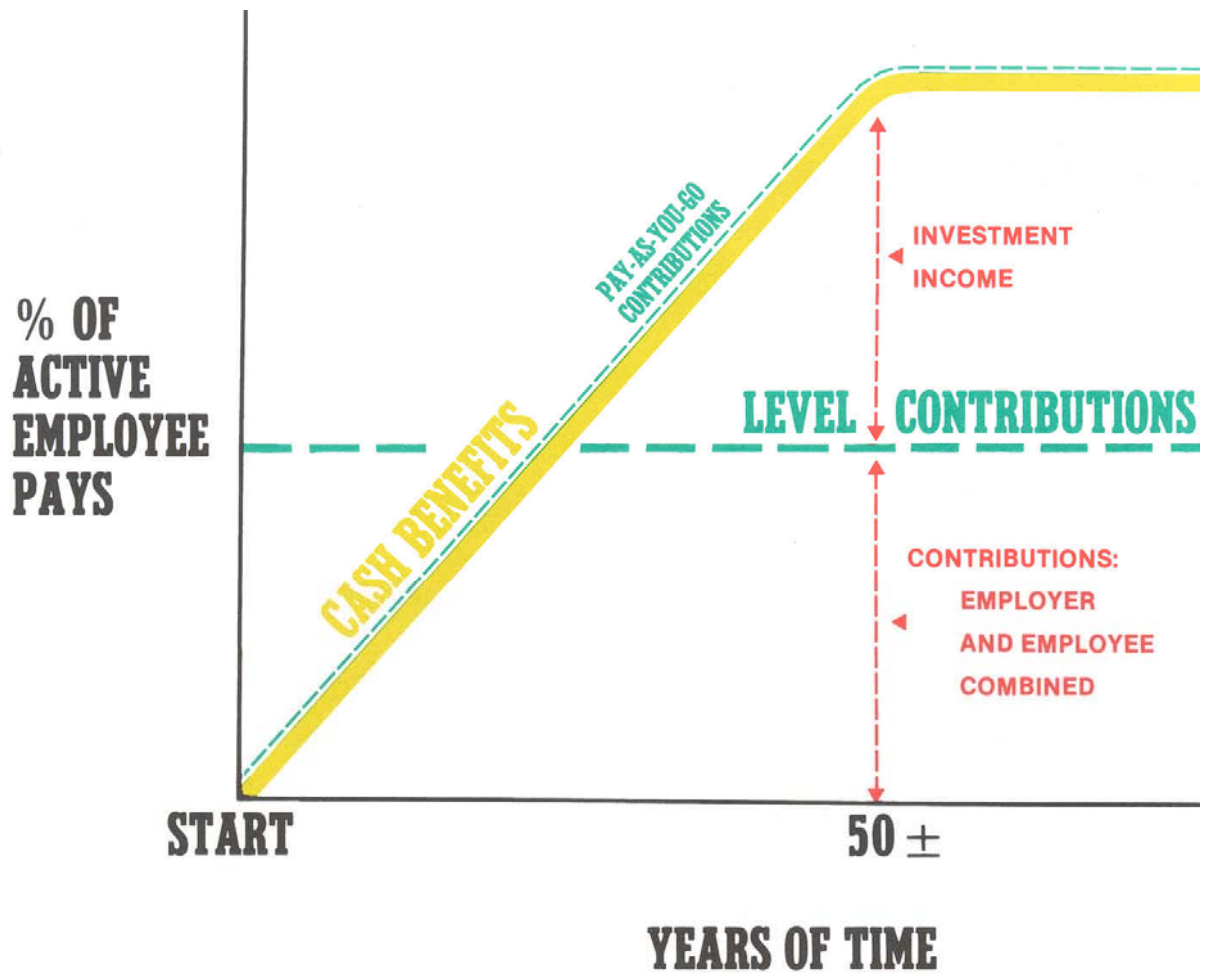
Computed Contribution Rate Needed to Finance Benefits. From a given schedule of benefits and from the data furnished him, the actuary calculates the contribution rate *by means of an actuarial valuation* - the technique of assigning monetary values to the risks assumed in operating a retirement program.

The principal areas of risk assumption are:

- (i) long-term rates of investment income likely to be generated by the assets of the retirement program -- this includes both realized and unrealized appreciation and depreciation
- (ii) rates of mortality among members, retirants and beneficiaries
- (iii) rates of withdrawal of active members without entitlement to a deferred retirement benefit
- (iv) rates of disability among members and their subsequent rates of recovery
- (v) patterns of salary increases to be experienced by members
- (vi) the age and service distribution of actual retirements

In making a valuation the actuary must project the monetary value of each risk assumption, for each distinct coverage group, for the next year and for each year over the next half-century or longer. Once actual risk experience has occurred and been observed, it will not coincide exactly with assumed risk experience, regardless of the skill of the actuary, the completeness of data, and/or the precision of the calculations made. Each valuation provides a complete recalculation of assumed future risk experience and takes into account the monetary effect of all past differences between actual and assumed risk experience. The result is a continual series of small adjustments to the computed contribution rate.

From time to time it becomes necessary to adjust the risk assumptions to reflect basic experience trends -- but not random year-to-year fluctuations. Changes are noted in the actuarial valuation report.



CASH BENEFITS LINE. This relentlessly increasing line is the fundamental reality of retirement plan financing. It happens each time a new benefit is added for future retirements (and happens regardless of the design for contributing for benefits).

LEVEL CONTRIBUTION LINE. Determining the level contribution line requires detailed assumptions concerning a variety of experiences in future decades, including:

Economic Risk Areas

- Rates of investment return
- Rates of pay increase
- Changes in active member group size

Non-Economic Risk Areas

- Ages at actual retirement
- Rates of mortality
- Rates of withdrawal of active members (turnover)
- Rates of disability

SECTION B

VALUATION RESULTS

**CITY'S COMPUTED CONTRIBUTIONS TO THE RETIREMENT SYSTEM
FOR THE FISCAL YEAR BEGINNING JULY 1, 2010**

	City's Contributions Expressed as Percents and Dollars Based on Valuation Payroll			
	General Members	Police Members	Fire Members	Totals
Normal Cost				
Age & service	13.16%	20.67%	19.76%	
Disability	0.52	0.69	0.18	
Pre-retirement survivor	0.40	0.43	0.53	
Termination				
Deferred service benefits	2.34	0.50	0.76	
Refunds of member contrib.	0.30	0.11	0.05	
Total Normal Cost	16.72	22.40	21.28	
Members' Contributions	5.00	5.00	5.00	
City's Normal Cost - %	11.72	17.40	16.28	13.53%
- \$**				\$ 7,401,213
Unfunded Actuarial Accrued Liabilities				
Retirants and beneficiaries				0.00
Active members*				<u>2.93</u>
Total - %				2.93%
- \$***				\$ 1,604,645
City's Contribution Rate - %				16.46%
- \$**				\$ 9,005,858

* *Financed as a level percent-of-payroll. Unfunded actuarial accrued liabilities were amortized over a 30-year amortization period.*

** *City's dollar contribution includes a payroll projection factor of 1.0712 for General and Fire to project active member payroll to the applicable fiscal year. Police's payroll has been adjusted to reflect a permanent reduction in positions.*

CITY'S COMPUTED CONTRIBUTIONS - COMPARATIVE SCHEDULE

Fiscal Year	Valuation	-----As Percents of Valuation Payroll-----				Valuation Payroll	- - - -Dollar Contribution- - - -	
	Date June 30	General Division	Police Division	Fire Division	Weighted Average		Recommended	Actual
1996-97	1995	5.90%	11.27%	11.31%	7.79%	\$36,443,571	\$3,037,681	\$3,037,681
1997-98	1996	5.47	10.84	10.87	7.45	39,426,082	3,142,850	3,143,595
1998-99	1997	4.02	9.40	9.41	6.01	41,257,005	2,653,114	2,667,198
1999-00	1998	1.13	5.99	5.91	2.90	42,419,256	1,316,270	1,327,426
2000-01	1999	(2.28)	2.61	2.47	(0.48)	43,621,055	0	0
2000-01	1999 @ +	(14.88)	(9.23)	(9.52)	(12.81)	43,621,055	0	0
2000-01	1999 *	(11.66)	(5.61)	(5.91)	(9.45)	43,621,055	0	0
2001-02	2000	(14.86)	(8.84)	(9.12)	(12.69)	44,092,030	0	0
2002-03	2001	(12.60)	(6.54)	(6.78)	(10.40)	47,449,008	0	0
2002-03	2001 *	(8.89)	(2.69)	(3.18)	(6.67)	47,449,008	0	0
2003-04	2002	(3.89)	2.18	1.76	(1.54)	46,744,055	0	0
2004-05	2003	(0.17)	5.86	5.46	2.09	46,212,713	1,044,659	1,044,659
2005-06	2004 @	3.26	10.50	8.92	5.69	47,109,470	2,871,450	2,897,639
2006-07	2005	7.57	14.85	13.27	9.96	47,224,565	5,038,578	5,103,346
2007-08	2006	11.75	18.92	17.39	14.14	49,626,746	7,517,024	7,517,024
2008-09	2007	10.38	17.48	15.94	12.70	50,677,914	6,894,506	14,725,702
2009-10	2008 @*	11.93	17.56	16.45	13.76	51,287,330	7,559,781	
2010-11	2009	16.27	21.95	20.83	18.19	52,559,496	10,239,566	
2010-11	2009 *^	14.65	20.33	19.21	16.46	51,075,730	9,005,858	

* The Retirement System was amended to provide additional benefits.

@ Reflects a change in valuation assumptions and/or methods.

+ After change in asset valuation method.

^ Adjusted for elimination of 18 Police positions.

FUNDING PROGRESS - COMPARATIVE SCHEDULE

Valuation Date June 30	Actuarial Accrued Liability (AAL)	Valuation Assets	Funded Ratio	Unfunded Actuarial Accrued Liability	
				Dollar Amount	% of Member Payroll
(\$ in thousands)					
1990	\$ 139,144	\$ 167,913	120.7%	\$ (28,769)	-
1990 *	147,988	167,913	113.5	(19,925)	-
1991	161,629	182,924	113.2	(21,295)	-
1991 *	161,837	182,924	113.0	(21,087)	-
1992	168,162	193,497	115.1	(25,335)	-
1992 +	168,162	190,491	113.3	(22,779)	-
1993	177,952	200,401	112.6	(22,449)	-
1994	190,574	208,998	109.7	(18,424)	-
1994 @	182,791	208,998	114.3	(26,207)	-
1995	195,407	222,441	113.8	(27,034)	-
1996	206,174	240,054	116.4	(33,880)	-
1997	218,339	262,191	120.1	(43,852)	-
1998	226,727	290,178	128.0	(63,451)	-
1999	239,420	325,527	136.0	(86,107)	-
1999 @+	238,535	377,462	158.2	(138,927)	-
1999 *	249,242	377,462	151.4	(128,220)	-
2000	258,286	407,468	157.8	(149,182)	-
2001	285,482	425,536	149.1	(140,054)	-
2001 *	304,349	425,536	139.8	(121,187)	-
2002	336,340	426,440	126.8	(90,100)	-
2003	352,296	417,623	118.5	(65,327)	-
2004 @	370,409	409,324	110.5	(38,916)	-
2005	384,369	398,690	103.7	(14,322)	-
2006	407,302	398,258	97.8	9,045	18.2
2007	413,490	413,712	100.1	(222)	-
2008 @*	430,438	428,689	99.6	1,749	3.4
2009	452,536	423,770	93.6	28,766	54.7
2009 *	455,219	426,283	93.6	28,937	56.7

* The Retirement System was amended to provide additional benefits.

@ Reflects a change in valuation assumptions.

+ After change in asset valuation method.

COMMENTS

COMMENT A: The Retirement System's financial experience was unfavorable during the year ending June 30, 2009. The experience loss was primarily the result of lower than expected investment return. Other sources of losses included lower turnover than expected and higher rates of retirement. The results of the experience are shown in the comparative schedules on pages B-2 and B-3. The computed City contribution rate increased this year and the funded percentage decreased. Due to unrecognized investment losses scheduled to be phased in over the next four years, the contribution rate is likely to increase in the absence of market investment returns significantly above 7%. Valuation assets are currently 132.7% of market value. Based on the market value of assets, the funded ratio would be approximately 23% lower and the contribution rate would be approximately 11% of payroll higher.

COMMENT B: As a result of the May 31, 1994 amendment to Section 1:580 of the Retirement System Ordinance, the Retirement System has "first call" on the millage revenue.

COMMENT C: At the October 15, 2009 Board meeting, the amortization period was changed to a 30-year closed amortization period rolling down to 25 years. The amortization period will be revisited each year.

COMMENT D: There were no retiree health care expenses paid out of the Retirement System during the last three years. The City contributed \$5,318,375 in the year ending June 30, 2009 for corrective transfers of retiree health premiums.

COMMENT E: The city enacted an Early Retirement Window for Police which closed June 30, 2009. Members electing to retire under the window were granted two additional years of service with the option of purchasing a third year and had to retire by July 1, 2009. The City contributed \$2,512,821 on June 30, 2009 to fund the estimated increase in actuarial accrued liability attributable to the window. Members electing to retire under the window were reported and are shown as active members as of June 30, 2009. For purposes of this valuation, the net increase in actuarial accrued liability for those retiring on July 1, 2009 under the window was reflected in the actuarial accrued liability for active members. In conjunction with the early retirement window, the City eliminated 18 Police positions. The reduction in the number of Police positions is reflected in the annual required contribution.

CONCLUSION: The employer contribution requirement to the Retirement System for the fiscal year beginning July 1, 2010 is \$9,005,858 as indicated on page B-1. The employer contributions as shown DO NOT include any provision for the payment of federal social security taxes. It is the actuary's opinion that the required contribution rates determined by the most recent actuarial valuation are sufficient to meet the System's financial objective, presuming continued timely receipt of required contributions.

SUMMARY STATEMENT OF SYSTEM RESOURCES AND OBLIGATIONS
JUNE 30, 2009

	General	Police	Fire	Total
PRESENT RESOURCES AND EXPECTED FUTURE RESOURCES				
A. Present valuation assets:				
1. Net assets from system financial statements at market value				\$321,164,113
2. Valuation asset adjustment to market related				105,118,614
3. Valuation assets				<u>426,282,727</u>
B. Actuarial present value of expected future employer contributions:				
1. For normal costs	\$28,897,386	\$15,011,704	\$9,537,400	53,446,490
2. For unfunded actuarial accrued liability				28,936,645
3. Total				<u>82,383,135</u>
C. Actuarial present value of expected future member contributions	12,328,237	4,313,708	2,929,177	<u>19,571,122</u>
D. Total Present and Expected Future Resources				<u><u>\$528,236,984</u></u>
ACTUARIAL PRESENT VALUE OF EXPECTED FUTURE BENEFIT PAYMENTS				
A. To retirants and beneficiaries:				
1. Reserve for Retired Benefit Payments (excluding the PCA and PAA) for the year ended June 30, 2009				\$267,863,145
2. Expected July 1, 2009 Transfer				1,221,771
3. Annual pensions	\$133,107,769	\$68,356,676	\$67,620,471	<u>269,084,916</u>
B. To vested terminated members	6,773,185	608,396	242,005	7,623,586
C. To present active members:				
1. Allocated to service rendered prior to valuation date	94,619,939	59,842,481	24,048,450	178,510,870
2. Allocated to service likely to be rendered after valuation date	41,225,623	19,325,412	12,466,577	73,017,612
3. Total	<u>135,845,562</u>	<u>79,167,893</u>	<u>36,515,027</u>	<u>251,528,482</u>
D. Total Actuarial Present Value of Expected Future Benefit Payments				<u><u>\$528,236,984</u></u>
Total Vested Liabilities:				
1. Retirants and beneficiaries	\$133,107,769	\$68,356,676	\$67,620,471	\$269,084,916
2. Vested terminated members	6,773,185	608,396	242,005	7,623,586
3. Active members	67,918,378	29,038,586	11,897,429	108,854,393
4. Total	<u><u>\$207,799,332</u></u>	<u><u>\$98,003,658</u></u>	<u><u>\$79,759,905</u></u>	<u><u>\$385,562,895</u></u>

RETIRANT AND BENEFICIARY EXPERIENCE GAIN (LOSS)
YEAR ENDED JUNE 30, 2009

DERIVATION

	(\$ in thousands)
(1) Expected AAL at end of year (derived from 6-30-08 valuation results)	\$ 259,154
(2) Effect of cost of living adjustments	617
(3) Effect of assumption changes	0
(4) AAL for new retirees	8,977
(5) AAL due to Adhoc changes	0
(6) Expected AAL: (1)+(2)+(3)+(4)+(5)	268,748
(7) Actual AAL	269,085
(8) Gain (Loss): (6)-(7)	\$ (337)

AAL represents Actuarial Accrued Liabilities - the actuarial present value of expected future benefit payments to present retirants and beneficiaries.

COMMENT: The market value of assets are \$321 million as of June 30, 2009. The retired liability of \$269 million plus the active accumulated employee contributions of \$60 million now exceed the market value of assets by about \$8 million.

RECOMMENDATION: We recommend a reserve transfer of \$884,856 from the employer contribution reserve to the Reserve for Retirees as of June 30, 2009. Within the Reserve for Retirees, a transfer of \$ 336,916 from the Pension Adjustment Account to the Regular Account is required to adjust for the loss on retiree mortality.

	Regular Account	Pension Adjustment Account	Total Retiree Reserve
Reported as of June 30, 2009	\$267,863,144	\$78,825	\$267,941,969
Recommended transfer from ER Contribution Reserve	884,856	0	884,856
Transfer for Retiree Mortality Experience	336,916	(336,916)	0
Recommended balance as of June 30, 2009	269,084,916	(258,091)	268,826,825

TOTAL EXPERIENCE GAIN (LOSS)
YEAR ENDED JUNE 30, 2009

DERIVATION

(\$ in thousands)

(1) UAAL at start of year	- active	\$	(2,355)
	- retired		4,104
	- TOTAL		1,749
(2) Employer normal cost			7,138
(3) Actual employer contributions			14,726
(4) Interest accrual			(143)
(5) Expected UAAL before changes: (1) + (2) - (3) + (4)			(5,982)
(6) Effect of other benefit changes			2,683
(7) Effect of changes in methods or assumptions			0
(8) Expected UAAL after changes: (5) + (6) + (7)			(3,299)
(9) Actual UAAL (active + retired)			28,937
(10) Gain (loss): (8) - (9)		\$	(32,236)

		As a % of Last Year's AAL
Source of Gain (loss):		
(a) Investment return below 7%	\$ (24,056)	(5.6%)
(b) Retired life mortality	(337)	(0.1%)
(c) Data changes	(202)	(0.0%)
(d) Active salary increases	(1,023)	(0.2%)
(e) Effect of cost of living adjustments	(617)	(0.1%)
(f) Other (turnover, retirement ages, service purchase, etc.)	(6,001)	(1.4%)
Total	\$ (32,236)	(7.5%)

UAAL represents Unfunded Actuarial Accrued Liabilities.

SECTION C

TEN-YEAR PROJECTION STUDY

PURPOSE OF THE PROJECTION

BACKGROUND

The Retirement System is financially supported by City contributions, member contributions and investment income from Retirement System assets.

The recommended employer contributions from the last 10 valuations are shown below:

Fiscal Year	Recommended Employer Contribution
2001/2002	\$ 0
2002/2003	0
2003/2004	0
2004/2005	1,044,659
2005/2006	2,871,450
2006/2007	5,038,578
2007/2008	7,517,024
2008/2009	6,894,506
2009/2010	7,559,781
2010/2011	9,005,858

Beginning July 1, 1995, future City contributions should always match the actuarially recommended amount. This is based on the City's commitment, in the May 31, 1994 amendment to Section 1:580 of the Retirement System Ordinance, to fund the actuarial requirements of the System before using millage revenue to pay for other benefits.

QUESTIONS

How will the Retirement System be affected by recent market experience?

How will the funded ratio and contributions of the Retirement System be projected to change over the next 10 years?

PURPOSE OF PROJECTION STUDY

The answers to these questions fall outside of the realm of the traditional actuarial valuation. Actuarial valuations are not particularly useful in showing changes in contribution requirements or financial position over time, or changes due to unusual events disturbing the normally assumed stable environment. Projections are a tool which actuaries use to better demonstrate the impact of variations in future experience.

The 2009-2019 projection study illustrates the operation of the chosen funding method for the pension benefits.

Each year since 1984 the Board of Trustees has requested that the actuary complete projections in order to anticipate what the Retirement System's financial condition will be in future years, given the commitment of City and member contributions and the present investment climate.

JUNE 30, 2019 ACTUARIAL VALUATION

An actuarial valuation was performed at the end of the 10-year projection period. The purpose of the valuation is to determine the projected financial position at that time and the level of the computed City contribution for years after 2019. The actuarial assumptions used are the same as the present actuarial assumptions (see Section E), plus additional actuarial assumptions as described on pages C-6 and C-7 of this section.

PROJECTION OF FINANCIAL ACTIVITY

Year	Recommended Employer Contribution*	Member Contributions	Investment Income#	Benefit Payments	Contribution Refunds @	Year-End Balance
(\$ in thousands)						
2008/2009						\$426,283
2009/2010	\$ 7,560	\$2,643	\$3,320	\$26,210	\$ 890	412,705
2010/2011	9,006	2,736	121	27,187	884	396,498
2011/2012	10,966	2,831	(9,313)	28,260	889	371,833
2012/2013	13,193	2,931	(686)	29,478	899	356,894
2013/2014	16,056	3,033	20,394	30,686	924	364,767
2014/2015	18,502	3,139	22,392	31,961	957	375,881
2015/2016	19,697	3,249	24,344	33,331	992	388,849
2016/2017	20,489	3,363	26,114	34,901	1,028	402,886
2017/2018	21,217	3,481	27,520	36,417	1,065	417,622
2018/2019	21,934	3,602	28,648	37,746	1,103	432,958

* Actuarially determined contribution.

7% annual return, net of investment and administrative expenses, plus 20% of the unrecognized investment gains/losses from this year and each of the prior 4 years.

@ Includes refunds of contributions to retiring members under the "Annuity Withdrawal" provision.

PROJECTED FINANCIAL CONDITION AND COMPUTED CONTRIBUTIONS

	6/30/2009	6/30/2019
Valuation Assets	\$426.3 million	\$433.0 million
Actuarial Accrued Liabilities	\$455.2 million	\$642.1 million
Funded Ratio	93.6%	67.4%
Actuarially Computed City Contribution Rate	16.46%	30.33%

Please refer to the Comments on the following page.

COMMENTS

COMMENT 1: To model the effect of the market since the valuation date, the assumed rate of return on market value of assets is 7% for FYE 2010 and thereafter. If the assumptions of the projection prove valid, the present City contribution rate will increase to 30% of payroll over the 10-year projection period, and the funded ratio will decrease from 94% to roughly 67%.

COMMENT 2: A separate actuarial report covering the Retiree Health Care Benefits Plan will provide additional information concerning the contribution requirements, assets and liabilities associated with the Retiree Health Care Benefits Plan.

COMMENT 3: This projection does not reflect any potential contributions made to the system in excess of the ARC (e.g. corrective retiree health care transfers). If the City contributes amounts in excess of the ARC early on in the projection period, the funded status of the system will improve more quickly and future contribution requirements will be reduced.

COMMENT 4: This projection assumes the amortization period is 30-year closed rolling down to 25 years open.

PROJECTION ASSUMPTIONS

PROJECTED INVESTMENT RETURN

Projected annual recognized investment return on the market value of assets used in the projections is 7% for FYE 2009 and thereafter. For comparison, the actual 2008/2009 rate of return was -20.0% on the market value of assets. The present valuation assumption is 7%.

PROJECTED PAY INCREASES

The across-the-board portion of pay increases was assumed to equal 3.5% in all years, the present valuation assumption. This 3.5% represents the portion of pay increases attributable to inflation. An age-dependent merit and longevity scale of pay increases is additional (see page E-4).

LEVEL OF EMPLOYMENT

It is assumed that the number of active employees remains constant during the 10-year period. For the June 30, 2009 projection, the number of active Police employees was assumed to decrease by 18 positions and remain level thereafter.

NEW EMPLOYEE ASSUMPTION

An assumption about replacement employees is not explicitly required in traditional actuarial valuation work. The implicit assumption is that new employees have the same characteristics as the present employees.

An explicit new employee assumption is required for a projection study. The assumption used for this study is shown below, and was based on the entry patterns of the current employees. The proportion of persons hired at various ages is shown below, in 5-year age groups:

Age Group	Proportion Hired at Given Age		
	General	Police	Fire
Under 20	0%	0%	0%
20-24	0	13	7
25-29	25	33	20
30-34	15	27	39
35-39	20	20	20
40-44	20	0	7
45-49	10	0	0
50-54	5	7	0
55-59	0	0	0
60 & over	5	0	7

PROJECTION ASSUMPTIONS (CONCLUDED)

POST-RETIREMENT BENEFIT INCREASES

It is assumed that benefits to retirants and beneficiaries will not be increased.

All other assumptions and methods are the same as those used in the valuation as described in Section E.

SECTION D

SUMMARY OF BENEFIT PROVISIONS AND VALUATION DATA

BRIEF SUMMARY OF BENEFIT PROVISIONS - (JUNE 30, 2009)

REGULAR RETIREMENT (NO REDUCTION FACTOR FOR AGE):

Eligibility - General: Age 50 with 25 years of service, or age 60 with 5 years of service.

Police-Fire: 25 years of service, or age 55 with 5 years of service.

Mandatory Retirement Age - None.

Annual Amount - General: Total service times 2.5% of final average compensation.

Police-Fire: Total service times 2.75% of final average compensation.

A member may elect to receive all or a portion of his accumulated contributions in a lump sum at retirement and receive a lesser benefit.

Type of Final Average Compensation - Highest 3 consecutive years out of last 10. Some lump sums included.

EARLY RETIREMENT (AGE REDUCTION FACTOR USED):

Eligibility - General: Age 50 with 20 years of service.

Police-Fire: Age 50 with 20 years of service.

Annual Amount - Computed as regular retirement but the pension portion of the allowance is reduced by .33% for each month by which retirement precedes:

General: Earlier of a) age 60, or b) the age the member would have had 25 years of service.

Police-Fire: Earlier of a) age 55 or b) the age the member would have had 25 years of service.

The annuity portion of the allowance is unreduced.

DEFERRED RETIREMENT (VESTED BENEFIT):

Eligibility - 5 years of service. Payable at age 60.

Annual Amount - Same as regular retirement but based upon service and final average compensation at termination. (A member may elect to receive all or a portion of his accumulated contributions at termination, if the member's age plus service total at least 50, and receive a lesser benefit at age 60).

DUTY DISABILITY RETIREMENT:

Eligibility - No age or service requirement.

Annual Amount - General: Computed as regular retirement. Minimum to age 60 is 18% of final average compensation. Minimum after age 60 is sum of a) 12% of the portion of final average compensation not in excess of Social Security base, plus b) 18% of final average compensation in excess of Social Security base. Upon termination of worker's compensation, additional service credit is granted for period in receipt of worker's compensation and benefit is recomputed.

Police-Fire: Computed as regular retirement. Minimum benefit is 25% of final average compensation. Upon termination of worker's compensation, additional service credit is granted for period in receipt of worker's compensation and benefit is recomputed.

NON-DUTY DISABILITY RETIREMENT:

Eligibility - 5 or more years of service.

Annual Amount - General: Computed as regular retirement. Minimum to age 60 is 18% of final average compensation. Minimum after age 60 is sum of a) 12% of the portion of final average compensation not in excess of Social Security base, plus b) 18% of final average compensation in excess of Social Security base.

Police-Fire: Computed as regular retirement. Minimum benefit is 25% of final average compensation.

DUTY DEATH BEFORE RETIREMENT:

Eligibility – No age and service requirement.

Annual Amount – Computed as regular retirement but actuarially reduced in accordance with a 100% joint and survivor election. If the member had less than 25 years of service at time of death, a minimum of 25 years of service will be used to compute the benefits. Worker's compensation payments made to the member's beneficiary will offset the benefits paid by the Retirement System. Upon termination of worker's compensation payments the amount paid to the beneficiary will be the greater of the annual worker's compensation payment and the computed 100% joint and survivor retirement benefit.

NON-DUTY DEATH BEFORE RETIREMENT:

Eligibility - 5 years of service.

Annual Amount - Computed as regular retirement but actuarially reduced in accordance with a 100% joint and survivor election. If there is no named beneficiary, a lump sum will be payable to the estate.

POST-RETIREMENT ADJUSTMENTS: Adjustments are made every July 1 to retirants and beneficiaries on the rolls at least 12 months. Adjustments are funded by financial gains, and are not guaranteed.

MEMBER CONTRIBUTIONS:

General: 5% of annual compensation.

Police-Fire: 5% of annual compensation.

LEDGER BALANCES OF RESERVE FUNDS

The ledger balances (market value) of the Retirement System, as of June 30, 2009, were reported to the actuary to total \$321,164,113 , as follows:

Account	Ledger Balance	
	6/30/2009	6/30/2008
Reserve for Employee Contributions	\$ 60,124,637	\$ 55,236,591
Reserve for Employer Contributions	(6,902,493)	93,842,212
Reserve for Retired Benefit Payments	267,941,969	261,352,162
Reserve for Undistributed Investment Income	<u>0</u>	<u>0</u>
Totals	\$ 321,164,113	\$ 410,430,965

The Analysis of Changes in Reserves is shown on pages D-6 and D-7.

Valuation assets are equal to reported market value of assets, except that 20% of the difference between the market rate of return and the projected rate of return is recognized each year. Such spreading reduces the fluctuation in the City's computed contribution rate which might otherwise be caused by market value fluctuations. The details of the spreading technique are shown on pages D-8 and D-9. The present method was adopted for the June 30, 1999 actuarial valuation. The valuation assets as of June 30, 2009 total \$426,282,727.

ACCOUNTING INFORMATION SUBMITTED FOR VALUATION

Market Value of Assets

	6/30/2009	6/30/2008
Cash	\$ 3,721,341	\$ 7,087,152
Receivables (less payables)	(1,890,002)	(203,126)
Certificates of deposit & savings	0	0
Other short-term	13,935,235	2,198
Bonds - government/GIC	39,236,896	55,864,589
- corporate	41,843,407	36,800,303
Stocks - common	195,365,581	264,890,660
- preferred	none	none
Mortgages	1,706,606	12,473,276
Real Estate	27,245,049	33,515,913
Total Assets	\$ 321,164,113	\$ 410,430,965

Revenues and Expenses

	Year Ended 6/30/2009	Year Ended 6/30/2008
REVENUES:		
a. Member Contributions	\$ 2,815,347	\$ 2,725,883
b. Employer Contributions	14,725,702	7,517,024
c. Investment Income		
1. Interest and Dividends	14,415,099	977,323
2. Realized and Unrealized Gains and (Losses)	(93,890,086)	(24,466,149)
3. Other	21,285	-
Total Investment Income	(79,453,702)	(23,488,826)
d. Total Revenues	(61,912,653)	(13,245,919)
EXPENSES:		
a. Refunds of Member Contributions	\$ 632,944	\$ 375,563
b. Benefits Paid	24,983,516	23,975,916
c. Investment and Administrative Expenses	1,737,739	1,887,328
d. Total Expenses	27,354,199	26,238,807
RESERVE INCREASE:		
Total Revenues Minus Total Expenses	\$ (89,266,852)	\$ (39,484,726)

REVENUES AND EXPENSES

Year Ended June 30	Member Contrib.	Employer Contrib.	Investment Income	Ret. Ben. Paid	Health/Life Insurance Paid	Refunds of Member Contrib.	Invest. Expenses	Non- Invest. Expenses	Adjust. From Book to Market	Market* Value of Assets
1985										\$ 78,234,203
1986	\$1,270,184	\$4,302,921	\$ 12,993,694	\$2,664,393	\$ 0	\$ 895,854	\$ 249,247	\$ 0		92,991,508
1987	1,283,656	4,385,278	14,114,358	3,040,364	0	842,604	381,844	0		108,509,988
1988	1,387,600	3,922,269	12,436,420	3,330,798	0	464,443	325,760	49,096		122,086,180
1989	1,450,226	4,293,518	14,082,443	3,719,410	433,840	719,974	387,052	71,061		136,581,030
1990	1,438,036	5,215,748	14,409,015	3,988,139	399,350	786,980	501,140	22,342		151,945,878
1991	1,554,108	4,906,002	15,198,953	4,591,072	1,118,996	486,328	531,640	42,314		166,834,591
1992	1,705,843	3,931,766	14,890,230	5,595,108	706,950	4,227,853	616,128	82,212		176,134,179
1993	1,690,677	2,290,057	22,185,134	6,796,710	0	1,155,512	597,730	138,932		193,611,163
1994	1,762,250	2,745,356	16,755,137	7,001,857	0	1,287,343	765,853	198,937		205,619,916
1995	1,935,813	3,030,162	11,800,889	7,684,654	0	2,238,477	654,255	232,716		211,576,678
1996	1,934,863	3,059,260	40,034,981	8,088,122	0	2,316,937	1,100,921	210,589		244,889,213
1997	2,048,689	3,037,681	42,143,403	9,034,094	0	2,029,596	1,432,569	342,837		279,279,890
1998	2,100,383	3,143,595	38,823,261	9,489,471	0	1,469,333	1,635,067	420,360		310,332,898
1999	2,250,960	2,667,198	25,879,497	10,341,398	2,130,765	2,538,523	1,661,737	373,435		324,084,695
2000	2,305,227	1,327,426	54,268,739	11,167,196	2,675,342	2,242,264	2,101,789	525,389		363,274,107
2001	2,876,836	0	942,244	13,442,362	3,047,107	1,955,926	1,456,661	758,532		346,432,599
2002	2,934,023	0	6,485,719	16,451,905	3,759,370	4,803,313	1,390,848	789,899		328,657,006
2003	2,622,573	0	14,351,337	19,922,151	5,574,372	1,814,475	1,510,293	488,657		316,320,968
2004	2,639,091	0	49,192,932	20,616,839	6,083,674	952,347	1,589,732	488,439	\$37,744,215 #	376,166,175
2005	2,779,981	1,044,659	35,183,719	21,510,124	2,974,644	515,496	1,657,944	496,725		388,019,601
2006	2,951,544	2,897,639	41,848,833	22,567,344	6,997,668	611,444	1,759,178	511,213		403,270,771
2007	2,653,369	5,103,346	66,810,940	24,505,435	0	1,023,624	1,801,665	592,011		449,915,691
2008	2,725,883	7,517,024	(23,488,826)	23,975,916	0	375,563	1,267,679	619,649		410,430,965
2009	2,815,347	14,725,702	(79,453,702)	24,983,516	0	632,944	1,097,266	640,473		321,164,113

* For valuation years 2003 and prior, book value of assets are reported. For valuation years 2004 and greater, market value is reported.

Includes prior year adjustment of \$1,102.

ANALYSIS OF CHANGES IN RESERVES FOR THE YEAR ENDED JUNE 30, 2009

- - - Reserve for Employer Contributions - - -

	Reserve for Employee Contributions	Regular Account	Undistributed Investment Income	Total	Reserve for Retired Benefit Payments	Total Reserves
Balance June 30, 2008	\$55,236,591	\$ 93,842,212	\$ 0	\$ 93,842,212	\$261,352,162	\$410,430,965
Miscellaneous Adjustments					4,395,138	4,395,138
Additions:						
Employee contributions	2,815,347			0		2,815,347
Employer contributions		14,725,702		14,725,702		14,725,702
Investment income			(79,453,701)	(79,453,701)		(\$79,453,701)
Transfers:						
Board Transfers		0		0	0	0
Allowances awarded	(2,749,615)	(6,381,108)		(6,381,108)	9,130,723	0
7/1/08 Mark to Market		(4,395,138)		(4,395,138)		(4,395,138)
Deductions:						
Benefits paid					(24,983,517)	(24,983,517)
Refunds	(632,944)					(632,944)
Investment and admin. services			(1,737,739)	(1,737,739)		(1,737,739)
Insurance payments			0	0		0
Investment income distributed:						
Regular	5,455,258	6,640,343	(30,143,064)	(23,502,721)	18,047,463	0
Extra interest			0	0	0	0
Closing entry		(111,334,504)	111,334,504	0		0
Balance June 30, 2009	\$60,124,637	(\$6,902,493)	\$ 0	(\$6,902,493)	\$267,941,969	\$321,164,113

RESERVE FOR RETIRED BENEFIT PAYMENTS
ANALYSIS OF CHANGES IN RESERVES FOR THE YEAR ENDED JUNE 30, 2009

-----Reserve for Retired Benefits Payments-----				
	Regular Account	Pension Contingency Account	Pension Adjustment Account	Total
Balance June 30, 2008	\$261,213,548	\$ 0	\$138,614	\$261,352,162
Beginning of Year Adjustments:				
Special Transfers (per Board action)	4,395,138			4,395,138
Per 6/30/08 Actuarial Valuation	(291,054)		291,054	0
Transfer for 7/1/08 Benefit Increase	356,000	0	(356,000)	0
Balance July 1, 2008	265,673,632	0	73,668	265,747,300
Transfers for New Retirees:				
Employer assets	6,381,108			6,381,108
Member contributions	2,749,615			2,749,615
Deductions:				
Benefits Paid	(24,983,517)			(24,983,517)
Miscellaneous adjustment:	0	0		0
Investment Income Credited:				
Regular	18,042,306	*	5,157	18,047,463
Extra Interest	*	*	0	0
End of Year Adjustments:				
Special Transfers (per Board action)	0	0	0	0
Balance June 30, 2009	\$267,863,144	\$ 0	\$78,825	\$267,941,969

* Credited to Pension Adjustment Account.

DERIVATION OF VALUATION ASSETS
MARKET VALUE WITH 20% RECOGNITION OF THE DIFFERENCE BETWEEN
THE MARKET RATE OF RETURN AND THE PROJECTED RATE OF RETURN

	Year Ended June 30				
	2002	2003	2004	2005	2006
Beginning of Year:					
(1) Market Value	\$404,973,455	\$371,085,012	\$354,065,184	\$376,166,175	\$388,019,601
(2) Valuation Assets	425,536,429	426,440,031	417,623,450	409,324,165	398,690,350
End of Year:					
(3) Market Value	371,085,012	354,065,184	376,166,175	388,019,601	403,270,771
(4) Net Additions to Assets, Excluding Invest. Inc., Expenses, and Health Prem.	(18,321,195)	(19,114,053)	(18,930,096)	(18,200,979)	(17,329,605)
(5) Total Investment Income =(3)-(1)-(4)	(15,567,248)	2,094,225	41,031,087	30,054,405	32,580,775
(6) Projected Rate of Return	7.00%	7.00%	7.00%	7.00%	7.00%
(7) Projected Investment Income =(6)x[(2)+.5x(4)]	29,146,308	29,181,810	28,571,088	28,015,657	27,301,788
(8) Investment Income In Excess of Projected Income =(5)-(7)	(44,713,556)	(27,087,585)	12,459,999	2,038,748	5,278,987
(9) Excess Investment Income Recognized This Year (5 year recognition)					
(9a) From This Year	(8,942,711)	(5,417,517)	2,492,000	407,750	1,055,797
(9b) From One Year Ago	(8,988,015)	(8,942,711)	(5,417,517)	2,492,000	407,750
(9c) From Two Years Ago	2,915,964	(8,988,015)	(8,942,711)	(5,417,517)	2,492,000
(9d) From Three Years Ago	1,547,943	2,915,964	(8,988,015)	(8,942,711)	(5,417,517)
(9e) From Four Years Ago	3,545,308	1,547,941	2,915,966	(8,988,015)	(8,942,712)
(10) Change in Valuation Assets =(4)+(7)+9[a..e]	903,602	(8,816,581)	(8,299,285)	(10,633,815)	(432,499)
End of Year:					
(3) Market Value	371,085,012	354,065,184	376,166,175	388,019,601	403,270,771
(11) Valuation Assets = (2)+(10)	426,440,031	417,623,450	409,324,165	398,690,350	398,257,851
(12) Recognized Rate of Return	4.6%	2.5%	2.6%	1.9%	4.3%
(13) Market Rate of Return	(3.9)%	0.6%	11.9%	8.2%	8.6%
(14) Ratio of Funding Value to Market Value	114.9%	118.0%	108.8%	102.8%	98.8%

DERIVATION OF VALUATION ASSETS
MARKET VALUE WITH 20% RECOGNITION OF THE DIFFERENCE BETWEEN
THE MARKET RATE OF RETURN AND THE PROJECTED RATE OF RETURN

	Year Ended June 30						
	2007	2008	2009	2010	2011	2012	2013
Beginning of Year:							
(1) Market Value	\$403,270,771	\$449,915,691	\$410,430,965				
(2) Valuation Assets	398,257,851	413,711,804	428,688,617				
End of Year:							
(3) Market Value	449,915,691	410,430,965	321,164,113				
(4) Net Additions to Assets, Excluding Invest. Inc., Expenses, and Health Prem.	(17,772,344)	(14,108,572)	(8,075,411)				
(5) Total Investment Income =(3)-(1)-(4)	64,417,264	(25,376,154)	(81,191,441)				
(6) Projected Rate of Return	7.00%	7.00%	7.00%				
(7) Projected Investment Income =(6)x[(2)+.5x(4)]	27,256,018	28,466,026	29,725,564				
(8) Investment Income In Excess of Projected Income =(5)-(7)	37,161,246	(53,842,180)	(110,917,005)				
(9) Excess Investment Income Recognized This Year (5 year recognition)							
(9a) From This Year	7,432,249	(10,768,436)	(22,183,401)				
(9b) From One Year Ago	1,055,797	7,432,249	(10,768,436)	(\$22,183,401)			
(9c) From Two Years Ago	407,750	1,055,797	7,432,249	(10,768,436)	(\$22,183,401)		
(9d) From Three Years Ago	2,492,000	407,750	1,055,797	7,432,249	(10,768,436)	(\$22,183,401)	
(9e) From Four Years Ago	(5,417,517)	2,491,999	407,748	1,055,799	7,432,250	(10,768,436)	(\$22,183,401)
(10) Change in Valuation Assets =(4)+(7)+9[a..e]	15,453,953	14,976,813	(2,405,890)				
End of Year:							
(3) Market Value	449,915,691	410,430,965	321,164,113				
(11) Valuation Assets = (2)+(10)	413,711,804	428,688,617	426,282,727				
(12) Recognized Rate of Return	8.5%	7.2%	1.3%				
(13) Market Rate of Return	16.3%	(5.7)%	(20.0)%				
(14) Ratio of Funding Value to Market Value	92.0%	104.4%	132.7%				

In financing the actuarial accrued liabilities, the valuation assets of \$426,282,727 were applied as shown below:

	Reserves for				Totals
	Employee Contributions	Employer Contributions	Retired Benefit Payments	Valuation Asset Adjustment	
Member Actuarial Accrued Liabilities	\$ 60,124,637	\$ (6,902,493)	\$ 0	\$ 105,118,614	\$ 158,340,758
Retirant and Beneficiary Liabilities		1,142,947	267,941,969		269,084,916
Reserves	<u> </u>	<u>(1,142,947)</u>	<u>0</u>	<u> </u>	<u>(1,142,947)</u>
Totals	\$ 60,124,637	\$ (6,902,493)	\$ 267,941,969	\$ 105,118,614	\$ 426,282,727

Retirants and beneficiaries included in the valuation totaled 834, involving annual retirement allowances of \$24,609,645, distributed as follows:

	No.	Active Per Retired	- - - - Annual Allowances - - - - Dollars	% of Active Pay
General members	539	1.0	\$ 12,470,708	37.3%
Police members	150	1.0	6,014,981	49.3
Fire members	<u>145</u>	0.6	<u>6,123,956</u>	88.8
Totals	834	0.9	\$ 24,609,645	46.8%

RETIRANTS AND BENEFICIARIES COMPARATIVE SCHEDULE

Year Ended	Added		Removed		Recipients End of Year				% Incr. in Annual Allow.	Average Allow.	Discounted Value of Allow.	Expected Removals	
	No.	Annual Allow.	No.	Annual Allow.	No.	Act. Memb. Per Recip.	Amount of Allowances					No.	Allow.
							Dollars	% of Act. Memb. Pays					
1984	30	\$ 341,122	15	\$ 63,685	298	2.8	\$2,275,237	9.4%	13.9%	\$ 7,635	\$ 23,212,177	10	\$ 45,613
1985	28	261,287 #	16	61,386	310	2.7	2,475,138	9.8	10.9	7,984	25,259,317	10	52,795
1986	29	357,974	10	76,795	329	2.6	2,756,317	10.6	11.4	8,378	28,384,603	10	58,009
1988	27	433,120 #	23	161,250	349	2.5	3,416,935	12.1	8.6	9,791	35,146,250	12	74,742
1989	25	491,162 #	11	104,299	363	2.4	3,803,798	12.9	11.3	10,479	39,078,250	12	84,345
1990	30	467,578	7	74,920	386	2.2	4,196,456	14.2	10.3	10,872	43,816,942	12	86,848
1991	34	764,432 #	16	133,678	404	2.2	4,827,210	15.1	15.0	11,949	50,639,125	13	98,554
1992	65	1,442,164	4	95,676	465	1.9	6,173,698	18.6	27.9	13,277	65,759,461	13	108,950
1993	27	626,749 #	22	141,300	470	2.0	6,659,147	19.0	7.9	14,168	70,917,541	15	129,481
1994	37	638,137	11	124,672	496	1.9	7,172,612	20.0	7.7	14,461	76,287,645	15	141,004
1995	41	978,128 #	17	201,794	520	1.7	7,948,946	20.9	10.8	15,286	85,300,063	16	156,448
1996	37	789,321	27	310,363	530	1.8	8,427,904	21.4	6.0	15,902	90,790,475	17	170,870
1997	40	1,138,524 #	22	296,293	548	1.7	9,270,135	22.5	10.0	16,916	99,260,333	17	179,473
1998	35	688,374	25	256,730	558	1.7	9,701,779	22.9	4.7	17,387	103,333,152	17	200,049
1999	38	1,233,449 #	18	248,168	578	1.7	10,687,060	24.5	10.2	18,490	113,847,961	17	213,236
2000	43	1,114,162 #	18	157,558	603	1.6	11,643,664	26.4	9.0	19,310	124,222,101	18	241,129
2001	39	2,217,173 #	17	229,723	625	1.5	13,631,114	28.7	17.1	21,810	142,559,253	19	261,899
2002	95	4,495,444 #	15	195,653	705	1.3	17,930,905	38.4	31.5	25,434	194,159,962	20	340,039
2003	65	2,692,828 #	25	444,199	745	1.2	20,179,534	43.7	12.5	27,087	220,413,689	22	392,499
2004	37	1,043,055 #	25	502,722	757	1.1	20,719,867	44.0	2.7	27,371	232,122,946	22	418,937
2005	35	1,359,454 #	22	356,969	770	1.1	21,722,352	46.0	4.8	28,211	238,238,069	21	394,872
2006	65	2,289,292 #	18	356,266	817	1.0	23,655,378	47.7	8.9	28,954	260,980,336	22	424,239
2007	26	781,783 #	23	545,506	820	1.0	23,891,655	47.1	1.0	29,136	261,353,159	23	460,948
2008	21	587,394	21	434,680	820	1.0	24,044,369	46.9	0.6	29,322	265,317,632	24	478,373
2009	35	1,058,152	21	492,876	834	0.9	24,609,645	48.2	2.4	29,508	269,084,916	27	524,907

Includes post-retirement increases to certain retirants and beneficiaries.

RETIRANTS AND BENEFICIARIES JUNE 30, 2009
TABULATED BY TYPE OF ALLOWANCES BEING PAID

Type of Allowances Being Paid	No.	Annual Retirement Allowances
Age and Service Allowances		
Regular allowance - benefit terminating at death of retiree	212	\$ 5,544,919
Option I allowance - cash refund annuity plus pension terminating at death of retiree	18	652,361
Option II allowance - joint and survivor benefit	303	10,324,351
Option III allowance - modified joint and survivor benefit	137	5,051,831
Allowance to survivor beneficiary of deceased age and service retiree	<u>111</u>	<u>2,203,190</u>
Total age and service allowances	781	23,776,652
Casualty Allowances		
Duty disability		
Straight Life	1	12,438
Option I	1	14,291
Option II	7	137,146
Option III	<u>2</u>	<u>20,965</u>
Totals	11	184,840
Non-duty disability		
Straight Life	6	68,904
Option I	1	11,701
Option II	<u>11</u>	<u>193,982</u>
Totals	18	274,587
Allowance to survivor beneficiary of deceased disability retiree - spouse	4	35,826
Allowance to survivor beneficiary of deceased member		
Duty death - spouse	0	0
Non-duty death - spouse	<u>20</u>	<u>337,740</u>
Total casualty allowances	53	832,993
Total Allowances Being Paid	834	\$ 24,609,645

RETIRANTS AND BENEFICIARIES JUNE 30, 2009

TABULATED BY ATTAINED AGES

Attained Ages	Age and Service		Casualty		Totals	
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
30-34	-	\$ -	1	\$ 8,836	1	\$ 8,836
35-39	1	38,460	1	20,975	2	59,435
40-44	1	9,226	1	17,767	2	26,993
45-49	5	162,711	1	16,181	6	178,892
50-54	70	3,136,193	3	35,822	73	3,172,015
55-59	130	5,814,125	10	173,240	140	5,987,365
60-64	163	5,357,047	10	188,339	173	5,545,386
65-69	130	3,599,078	6	112,295	136	3,711,373
70-74	88	2,214,884	3	79,898	91	2,294,782
75	12	262,332	1	16,862	13	279,194
76	17	370,202	3	24,124	20	394,326
77	22	472,994	3	38,313	25	511,307
78	14	268,919	1	6,893	15	275,812
79	11	219,335	-	-	11	219,335
80	13	241,628	-	-	13	241,628
81	13	213,305	-	-	13	213,305
82	11	180,527	1	7,877	12	188,404
83	9	135,963	1	8,706	10	144,669
84	11	192,377	2	24,876	13	217,253
85	12	226,244	1	12,438	13	238,682
86	12	153,081	2	21,982	14	175,063
87	6	105,761	-	-	6	105,761
88	4	79,901	1	11,350	5	91,251
89	3	32,428	1	6,219	4	38,647
90	7	97,345	-	-	7	97,345
91	4	49,484	-	-	4	49,484
92	2	31,783	-	-	2	31,783
93	2	20,215	-	-	2	20,215
94	3	24,147	-	-	3	24,147
95	1	33,219	-	-	1	33,219
96	2	17,050	-	-	2	17,050
98	1	7,748	-	-	1	7,748
100	1	8,940	-	-	1	8,940
Totals	781	\$ 23,776,652	53	\$ 832,993	834	\$ 24,609,645

INACTIVE MEMBERS JUNE 30, 2009
TABULATED BY ATTAINED AGES

Attained Ages	No.	Estimated Annual Allowances
31	1	\$ 8,955
33	4	33,526
34	2	9,880
36	2	11,804
37	3	25,816
38	4	29,954
39	4	64,273
40	2	35,319
41	6	119,097
42	5	61,655
43	1	16,302
44	7	107,589
45	3	23,818
46	4	54,344
47	4	37,748
48	7	143,929
49	3	53,925
50	8	82,496
51	3	22,922
52	5	21,303
53	3	55,545
54	4	31,616
55	10	112,096
56	4	46,920
57	6	47,288
58	2	4,142
59	4	63,259
60	5	23,386
61	7	30,264
62	1	10,192
63	1	2,196
64	1	6,098
Totals	126	\$1,397,657

ACTIVE MEMBERS JUNE 30, 2009
TABULATED BY VALUATION DIVISIONS

Valuation Divisions	No.	Annual Payroll
General members	547	\$ 33,465,740
Police members	148	12,199,851
Fire members	91	6,893,905
Total active members	786	\$ 52,559,496

Active Members
Comparative Schedule

Val. Date	--- Valuation Division ---				Valuation	-----Average-----			
June 30	Gen.	Pol.	Fire	Total	Payroll	Age	Service	Pay	% Inc.
1983	568	149	119	836	\$22,719,608	39.9 yrs.	10.8 yrs.	\$27,177	10.1%
1984	562	147	118	827	24,153,223	40.3	11.2	29,206	7.5
1985	577	154	116	847	25,210,649	40.5	11.3	29,765	1.9
1986	576	149	118	843	25,898,357	40.5	11.6	30,722	3.2
1987	585	158	116	859	26,697,327	40.4	11.6	31,080	1.2
1988	600	163	112	875	28,329,677	40.5	11.8	32,377	4.2
1989	606	162	106	874	29,390,978	40.8	12.0	33,628	3.9
1990	592	170	106	868	29,455,430	40.9	12.2	33,935	0.9
1991	621	171	110	902	31,968,984	40.7	11.9	35,442	4.4
1992	619	176	110	905	33,174,983	39.9	11.0	36,657	3.4
1993	643	180	106	929	35,018,157	40.2	11.1	37,694	2.8
1994	644	175	107	926	35,828,594	40.3	11.2	38,692	2.6
1995	634	166	94	894	37,962,053	40.7	11.5	42,463	9.7
1996	645	176	109	930	39,426,082	40.6	11.0	42,394	(0.2)
1997	647	184	112	943	41,257,005	40.6	11.1	43,751	3.2
1998	655	186	117	958	42,419,256	41.0	11.2	44,279	1.2
1999	650	188	118	956	43,621,055	41.1	11.2	45,629	3.0
2000	670	186	121	977	44,092,030	41.2	11.0	45,130	(1.1)
2001	661	183	115	959	47,449,008	41.5	11.3	49,478	9.6
2002	614	177	109	900	46,744,055	41.1	10.2	51,938	5.0
2003	582	174	102	858	46,212,713	41.4	10.4	53,861	3.7
2004	581	161	100	842	47,109,470	42.1	10.9	55,949	3.9
2005	571	152	91	814	47,224,565	42.8	11.4	58,015	3.7
2006	554	154	88	796	49,626,748	42.7	11.0	62,345	7.5
2007	561	151	89	801	50,677,914	43.5	11.4	63,268	1.5
2008	564	149	92	805	51,287,330	44.2	11.8	63,711	0.7
2009	547	148	91	786	52,559,496	44.7	12.4	66,870	5.0

ACTIVE MEMBERS JUNE 30, 2009
NUMBER ADDED TO AND REMOVED FROM ACTIVE MEMBERSHIP

Year Ended June 30	Number Added During Year		Terminations During Year										Active Members End of Year
			Age & Service Retirement		Disability Retirement		Died-in Service		Withdrawals				
	A	E	A	E	A	E	A	E	A	A	Total		
											A	E	
GENERAL MEMBERS													
2005	39	49	14	15.8	0	1.0	0	1.1	9	26	35	27.3	571
2006	54	71	42	16.6	1	1.0	1	1.1	9	18	27	25.5	554
2007	35	28	6	13.0	0	1.0	0	1.1	13	9	22	26.7	561
2008	36	33	9	16.9	1	1.0	0	1.2	9	14	23	26.4	564
2009	21	38	<u>23</u>	<u>21.6</u>	<u>1</u>	<u>1.0</u>	<u>0</u>	<u>0.7</u>	8	6	<u>14</u>	<u>24.1</u>	547
5-Yr. Totals			94	83.9	3	5.0	1	5.2			121	130.0	
POLICE MEMBERS													
2005	0	9	5	5.1	0	0.2	0	0.2	1	3	4	1.9	152
2006	7	5	3	3.2	0	0.3	0	0.2	1	1	2	1.6	154
2007	1	4	1	2.8	0	0.3	0	0.2	2	1	3	1.9	151
2008	0	2	2	3.5	0	0.3	0	0.2	0	0	0	1.4	149
2009	0	1	<u>0</u>	<u>5.9</u>	<u>0</u>	<u>0.3</u>	<u>1</u>	<u>0.1</u>	0	0	<u>0</u>	<u>1.2</u>	148
5-Yr. Totals			11	20.5	0	1.4	1	0.9			9	8.0	
FIRE MEMBERS													
2005	0	9	2	2.3	1	0.0	0	0.2	1	5	6	1.0	91
2006	7	10	8	4.0	0	0.0	1	0.2	1	0	1	0.8	88
2007	4	3	3	1.7	0	0.0	0	0.1	0	0	0	0.9	89
2008	4	1	1	1.2	0	0.0	0	0.1	0	0	0	0.9	92
2009	0	1	<u>0</u>	<u>1.6</u>	<u>0</u>	<u>0.0</u>	<u>0</u>	<u>0.1</u>	0	1	<u>1</u>	<u>1.1</u>	91
5-Yr. Totals			14	10.8	1	0.0	1	0.7			8	4.7	

A represents actual number.
E represents expected number.
 * Balancing item.

GENERAL MEMBERS JUNE 30, 2009
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	-----Years of Service to Valuation Date-----							-----Totals-----	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	1							1	\$ 41,391
25-29	13	3						16	594,093
30-34	35	20	3					58	2,985,332
35-39	32	16	11	5				64	3,576,311
40-44	24	24	23	20	7			98	6,095,238
45-49	19	22	16	20	28	1		106	6,645,884
50-54	16	17	14	24	30	3	3	107	7,092,423
55-59	6	16	12	14	12	6		66	4,312,717
60		1	2	3	1		1	8	574,672
61	3		1	3				7	434,542
62	3	1		3	1			8	426,473
63		2					1	3	340,761
64		1						1	84,248
65		2					1	3	174,988
66	1							1	86,667
Totals	153	125	82	92	79	10	6	547	\$ 33,465,740

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 45.8 years
Service: 11.4 years
Annual Pay: \$61,181

POLICE MEMBERS JUNE 30, 2009
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	-----Years of Service to Valuation Date-----							-----Totals-----	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
25-29	1							1	\$ 55,977
30-34	2	8	5					15	1,080,441
35-39		5	30	2				37	2,790,570
40-44	1	2	10	22	2			37	3,117,955
45-49			7	10	19	4		40	3,566,642
50-54			2	2	8	2		14	1,191,273
55-59	1				1	2		4	396,993
Totals	5	15	54	36	30	8		148	\$ 12,199,851

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 42.4 years
Service: 15.7 years
Annual Pay: \$82,431

FIRE MEMBERS JUNE 30, 2009
BY ATTAINED AGE AND YEARS OF SERVICE

Attained Age	-----Years of Service to Valuation Date-----							-----Totals-----	
	0-4	5-9	10-14	15-19	20-24	25-29	30 Plus	No.	Valuation Payroll
20-24	1							1	\$ 55,589
25-29	1	1						2	112,957
30-34	2	5	2					9	642,494
35-39	7	4	15	1				27	1,899,842
40-44	1		9	11				21	1,632,871
45-49		1	4	9	1	1		16	1,248,889
50-54			2	8	1	1		12	1,009,787
55-59				1	1			2	174,360
66	1							1	117,116
Totals	13	11	32	30	3	2		91	\$ 6,893,905

While not used in the financial computations, the following group averages are computed and shown because of their general interest.

Age: 41.8 years
Service: 13.0 years
Annual Pay: \$75,757

SECTION E

SUMMARY OF VALUATION METHODS AND ASSUMPTIONS

ACTUARIAL COST METHODS USED FOR THE VALUATION

Normal Costs. 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:

- (i) the annual normal costs for each individual active member, payable from the member's actual date of employment to projected date of retirement, are 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.
- (iii) the normal costs are computed on the basis of the benefit provisions affecting new entrants - - namely that lump sum payments are not included in the calculation of final average compensation.

Actuarial Accrued Liabilities. The total actuarial present value of future benefits and future payroll were computed using the benefit provisions applicable to the present active members, retirants and beneficiaries. Lump sum redemption factors are assumed to be:

Members hired before July 1, 1982:

General - 10%

Members hired after June 30, 1982: 0%

Subtracting the present value of future normal costs results in the actuarial accrued liability.

Amortization of Unfunded Actuarial Accrued Liabilities. Unfunded actuarial accrued liabilities were amortized by level (principal & interest combined) percent-of-payroll contributions over 15 years. Active member payroll was assumed to increase 3.50% a year for the purpose of determining the level percent contributions.

Funding Value of Assets. The valuation assets used for funding purposes is derived as follows: prior year valuation assets are increased by contributions and expected investment income and reduced by refunds, benefit payments and expenses. To this amount, 20% of the difference between expected and actual investment income net of expenses for each of the previous five years is added.

VALUATION ASSUMPTIONS

The rate of investment return, net of expenses, (regular interest) used in making the valuation was 7.0% per annum, compounded annually. This assumption is established by the Board of Trustees as provided in the Retirement System Ordinance, and was first used for the June 30, 1982 actuarial valuation. This rate consists of a real rate of return of 3.5% a year plus a long-term rate of wage inflation of 3.5% a year. This wage inflation assumption was first used in the June 30, 2004 actuarial valuation. Approximate internal rates of investment return, for the purposes of comparisons with assumed rates, have been as follows:

	Year Ended June 30					5 Year Arithmetic Average
	2009	2008	2007	2006	2005	
1) Nominal rate*	(20.0)%	(5.7)%	16.3%	8.6%	8.2%	
2) Valuation Asset Adjustment	21.3	12.9	(7.8)	(4.3)	(6.3)	
3) Total rate	1.3	7.2	8.5	4.3	1.9	4.6%
4) Increase in CPI	(1.4)	5.0	2.7	4.3	2.5	2.6%
5) Average salary increase	5.0	0.7	1.5	7.5	3.7	3.6%
6) Real return						
- investment purposes (3)-(4)	2.7	2.2	5.8	0.0	(0.6)	2.0%
- funding purposes (3)-(5)	(3.7)	6.5	7.0	(3.2)	(1.8)	0.9%
- assumption	3.5	3.5	3.5	3.5	3.5	3.5%

* *The nominal rate of return was computed using the approximate formula $i = I$ divided by $1/2 (A+B-I)$, where I is realized investment income net of expenses, A is the beginning of year asset value, and B is the end of year asset value.*

The mortality table used to measure post-retirement mortality was the RP 2000 Combined Table projected to 2007 set forward 2 years for males and set back 3 years for females. Disabled mortality rates are the standard post-retirement mortality rates set forward 10 years. These tables first used for the June 30, 2008 actuarial valuation. Pre-retirement mortality rates are assumed to be 75% of post-retirement mortality rates. For Police and Fire 50% of deaths-in-service are assumed to be duty related.

Sample Ages	Single Life Retirement Values							
	Present Value of \$1 Monthly for Life				Future Life Expectancy (Years)			
	Men	Women	Disabled Men	Disabled Women	Men	Women	Disabled Men	Disabled Women
45	\$154.56	\$162.55	\$137.10	\$150.64	34.35	41.65	25.03	32.07
50	146.96	157.43	125.03	141.84	29.63	36.83	20.64	27.41
55	137.10	150.64	111.12	131.02	25.03	32.07	16.60	22.96
60	125.03	141.84	95.53	118.50	20.64	27.41	12.94	18.83
65	111.12	131.02	78.54	104.38	16.60	22.96	9.69	15.06
70	95.53	118.50	61.51	88.93	12.94	18.83	6.97	11.69
75	78.54	104.38	46.26	72.57	9.69	15.06	4.88	8.75
80	61.51	88.93	34.49	56.52	6.97	11.69	3.44	6.32

Probabilities of retirement for members eligible to retire were:

Retirement Age	Age Based						Service Based		
	General		Police		Fire		Years of Service	Police	Fire
	Normal	Early	Normal	Early	Normal	Early			
50	40 %	15 %		25 %		25 %	25	55 %	50 %
51	30	10		25		25	26	45	35
52	30	10		25		25	27	45	35
53	30	10		25		25	28	50	35
54	30	12		25		25	29	50	25
55	30	20	75 %			24 %	30	75	25
56	30	28	75			24	31	75	25
57	30	28	75			24	32	75	25
58	25	28	75			24	33	75	25
59	25	28	75			34	34	75	25
60	35		100			100	35	100	100
61	30								
62	30								
63	30								
64	30								
65	45								
66	30								
67	30								
68	30								
69	30								
70	100								

The assumed conditions for retirement were:

Group	Eligibility Conditions for Retirement
General	50 years of age with 20 or more years of service (reduced); or 50 years of age with 25 or more years of service; or, 60 years of age with 5 or more years of service.
Police-Fire	50 years of age with 20 or more years of service (reduced); or 25 or more years of service; or, 55 years of age with 5 or more years of service.

These assumptions were first used for the June 30, 2008 actuarial valuation.

**Salary Adjustment Factors for
Projections of Current Salaries to FAC**

Sample Ages	Percent Increase in Salary During Next Year			
	Base	Merit & Longevity		
		General	Police	Fire
20	3.50 %	4.0 %	6.0 %	5.8 %
25	3.50	3.6	5.1	5.0
30	3.50	2.8	3.2	3.4
35	3.50	2.1	1.9	1.9
40	3.50	1.8	1.2	1.2
45	3.50	1.5	0.9	0.9
50	3.50	1.0	0.7	0.7
55	3.50	0.7	0.5	0.5
60	3.50	0.5	0.3	0.4

Sample Ages	Probabilities of Becoming Disabled Percent Becoming Disabled Within Next Year		
	General	Police	Fire
25	0.06	0.08	0.02
30	0.06	0.08	0.02
35	0.06	0.08	0.02
40	0.10	0.14	0.03
45	0.24	0.32	0.08
50	0.42	0.56	0.14
55	0.65	0.86	0.22
60	0.86	1.14	0.29

*Percent of disabilities assumed to be duty related :
General: 25%, Police and Fire: 50%*

**Sample Rates of Separation From Active Employment
Before Retirement, Death, or Disability**

Sample Ages	Years of Service	% of Active Members Separating Within Next Year			
		General		Police	Fire
		Male	Female		
ALL	0	12.00 %	15.00 %	12.00 %	2.25 %
	1	9.60	12.00	6.00	2.00
	2	8.00	10.00	4.00	1.80
	3	6.40	8.00	3.00	1.80
	4	4.80	6.00	2.50	1.80
20	5 and Over	3.60	5.40	2.40	1.80
25		3.60	5.40	2.40	1.80
30		3.60	5.40	2.40	1.50
35		2.80	4.20	1.52	1.20
40		2.80	4.20	0.64	1.20
45		2.80	4.20	0.32	0.90
50		2.80	4.20	0.32	0.60
55		2.80	4.20	0.32	0.60
60		2.80	4.20	0.32	0.60
65		2.80	4.20	0.32	0.60

The interest rate credited on refunds of accumulated contributions paid to terminating members was assumed to be 8.0% per annum, compounded quarterly.

The above assumptions were first used for the June 30, 2008 actuarial valuation.

**SUMMARY OF ASSUMPTIONS USED
JUNE 30, 2009**

Pensions in an Inflationary Environment

**Value of \$1,000/month Retirement Benefit
To an Individual Who Retires at Age 50
In an Environment of 3.50% Inflation**

<u>Age</u>	<u>Value</u>
50	\$1,000
51	966
52	933
53	901
54	871
55	842
60	708
65	596
70	502
75	423
80	357
85	300

The life expectancy of a 50-year old male retiree is age 80. The life expectancy for a 50-year old female retiree is age 87. Half of the people will outlive their life expectancy. The effects of even moderate amounts of inflation can be significant for those who live to an advanced age.

SUMMARY OF ASSUMPTIONS USED MISCELLANEOUS AND TECHNICAL ASSUMPTIONS

Marriage Assumption:	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits.
Pay Increase Timing:	Middle of (Fiscal) year.
Decrement Timing:	Decrements of all types are assumed to occur mid-year.
Eligibility Testing:	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.
Benefit Service:	Exact fractional service is used to determine the amount of benefit payable.
Decrement Relativity:	Decrement rates are used without adjustment for multiple decrement table effects.
Decrement Operation:	Disability and mortality decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during retirement eligibility.
Normal Form of Benefit:	The assumed normal form of benefit is straight life.
Incidence of Contributions:	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. New entrant normal cost contributions are applied to the funding of new entrant benefits.

GLOSSARY

Actuarial Accrued Liability - The difference between (i) the actuarial present value of future plan benefits, and (ii) the actuarial present value of future normal cost. Sometimes referred to as "accrued liability" or "past service liability".

Accrued Service - The service credited under the plan which was rendered before the date of the actuarial valuation.

Actuarial Assumptions - Estimates of future plan experience with respect to rates of mortality, disability, turnover, retirement, rate or rates of investment income and salary increases. Demographic assumptions (rates of mortality, disability, turnover and retirement) are generally based on past experience, often modified for projected changes in conditions. Economic assumptions (salary increases and investment income) consist of an underlying rate in an inflation-free environment plus a provision for a long-term average rate of inflation.

Actuarial Cost Method - A mathematical budgeting procedure for allocating the dollar amount of the "actuarial present value of future plan benefits" between the actuarial present value of future normal cost and the actuarial accrued liability. Sometimes referred to as the "actuarial funding method".

Actuarial Equivalent - A single amount or series of amounts of equal value to another single amount or series of amounts, computed on the basis of the rate(s) of interest and mortality tables used by the plan.

Actuarial Present Value - The amount of funds presently required to provide a payment or series of payments in the future. It is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Amortization - Paying off an interest-bearing liability by means of periodic payments of interest and principal, as opposed to paying it off with a lump sum payment.

Experience Gain (Loss) - A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions during the period between two actuarial valuation dates, in accordance with the actuarial cost method being used.

Normal Cost - The annual cost assigned, under the actuarial funding method, to current and subsequent plan years. Sometimes referred to as "current service cost". Any payment toward the unfunded actuarial accrued liability is not part of the normal cost.

Plan Termination Liability - The actuarial present value of future plan benefits based on the assumption that there will be no further accruals for the future service and salary. The termination liability will generally be less than the liabilities computed on a "going concern" basis and is not normally determined in a routine actuarial valuation.

Reserve Account - An account used to indicate that funds have been set aside for a specific purpose and are not generally available for other uses.

Unfunded Actuarial Accrued Liability - The difference between the actuarial accrued liability and valuation assets. Sometimes referred to as "unfunded accrued liability".

Funding Value of Assets - Also referred to as actuarial value of assets, smoothed market value of assets, or valuation assets.

Valuation assets recognize assumed investment return fully each year. Differences between actual and assumed investment return are phased-in over a closed 5-year period. During periods when investment performance exceeds the assumed rate, valuation assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, valuation assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, valuation assets will become equal to market value.

SECTION F

DISCLOSURES REQUIRED BY THE GOVERNMENTAL ACCOUNTING STANDARDS BOARD

This information is presented in draft form for review by the System's auditor. Please let us know if there are any items that the auditor changes so that we may maintain consistency with the System's financial statements.

ACTUARIAL ACCRUED LIABILITY

The actuarial accrued liability is a measure intended to help users assess (i) a pension fund's funded status on a going concern basis, and (ii) progress being made toward accumulating the assets needed to pay benefits as due. Allocation of the actuarial present value of projected benefits between past and future service was based on the individual entry-age actuarial cost method. Assumptions, including projected pay increases, were the same as used to determine the Retirement System's level percent-of-payroll annual required contribution between entry-age and assumed exit age. Entry-age was established by subtracting credited service from current age on the valuation date.

The preceding methods comply with the financial reporting standards established by the Governmental Accounting Standards Board.

The entry age actuarial accrued liability was determined as part of an actuarial valuation of the plan as of June 30, 2009. Significant actuarial assumptions used in determining the entry age actuarial accrued liability include (a) a rate of return on the investment of present and future assets of 7.0% per year compounded annually, (b) projected salary increases of 3.50% per year compounded annually, attributable to inflation, (c) additional projected salary increases ranging from 0.4% to 6.0% per year, depending on age, attributable to seniority/merit and (d) the assumption that benefits will not increase after retirement.

At June 30, 2009, the unfunded actuarial accrued liability was \$28,936,645, determined as follows:

Actuarial Accrued Liability (excluding the contingency reserve)

Active participants (615 vested and 171 non-vested)	\$ 178,510,870
Retired participants and beneficiaries currently receiving benefits (834 recipients)	269,084,916
Vested terminated participants not yet receiving benefits (126 vested)	<u>7,623,586</u>
Total Actuarial Accrued Liability	455,219,372
Actuarial Value of Assets (smoothed market value)	<u>426,282,727</u>
Unfunded Actuarial Accrued Liability	<u><u>\$ 28,936,645</u></u>

During the period from June 30, 2008 to June 30, 2009 the System experienced a net change of \$24,781,738 in the actuarial accrued liability. There were no material changes in benefit provisions during the year.

**REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS**

Actuarial Valuation Date June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age# (b)	Unfunded AAL (b)-(a)	Funded Ratio (a)/(b)	Active Member Covered Payroll (c)	Unfunded AAL as a Percentage of Active Member Covered Payroll ((b-a)/c)
(\$ amounts in thousands)						
1994	\$208,998	\$182,791	\$ (26,207)	114.3%	\$35,829	- %
1995	222,441	195,407	(27,034)	113.8	37,962	-
1996	240,054	206,174	(33,880)	116.4	39,426	-
1997	262,191	218,339	(43,852)	120.1	41,257	-
1998	290,178	226,727	(63,451)	128.0	42,419	-
1999	377,462	249,242	(128,220)	151.4	43,621	-
2000	407,468	258,286	(149,182)	157.8	44,092	-
2001	425,536	304,349	(121,187)	139.8	47,449	-
2002	426,440	336,340	(90,100)	126.8	46,744	-
2003	417,623	352,296	(65,327)	118.5	46,213	-
2004	409,324	370,409	(38,916)	110.5	47,109	-
2005	398,690	384,369	(14,322)	103.7	47,225	-
2006	398,258	407,302	9,045	97.8	49,627	18
2007	413,712	413,490	(222)	100.1	50,678	-
2008	428,689	430,438	1,749	99.6	51,287	3
2009	426,283	455,219	28,937	93.6	51,076	^ 57

Excluding the contingency reserves in the Reserve for Retired Benefit Payments.

^ Adjusted for elimination of 18 Police positions.

Analysis of the dollar amounts of actuarial value of assets, actuarial accrued liability, or unfunded actuarial accrued liability in isolation can be misleading. Expressing the actuarial value of assets as a percentage of the actuarial accrued liability provides one indication of the system's funded status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the plan. The unfunded actuarial accrued liability and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liability as a percentage of covered payroll approximately adjusts for the effects of inflation and aids analysis of the progress being made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the plan.

CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

The Retirement System's financial objective provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are designed to accumulate sufficient assets to pay benefits when due. The normal cost and amortization payment for the year ended June 30, 2009 were determined using an entry age actuarial funding method. Unfunded actuarial accrued liabilities were amortized as a level percent-of-payroll over an open 30-year closed period rolling down to 25 years.

During the year ended June 30, 2009 contributions totaling \$17,541,049 -- \$14,725,702 employer and \$2,815,347 employee -- were made in accordance with contribution requirements determined by an actuarial valuation of the plan as of June 30, 2007. The Annual Required Contribution consisted of \$7,285,509 for normal cost and (\$391,003) for amortization of the unfunded actuarial accrued liability. The actual employer contribution included \$2,512,821 for the Police Early Retirement window and an additional \$5,318,375 for corrective transfers of retiree health premiums. Employer contributions represented 27.13% of projected covered payroll (projected payroll is equal to 1.0712 times June 30, 2007 valuation payroll).

Significant actuarial assumptions used to compute contribution requirements were the same as those used to compute the standardized measure of the actuarial accrued liability.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Valuation Date June 30	Annual Required Contribution	Percentage Contributed
(\$ In Thousands)			
1999	1997	\$2,653	100%
2000	1998	1,316	100
2001	1999	0	100
2002	2000	0	100
2003	2001	0	100
2004	2002	0	100
2005	2003	1,045	100
2006	2004	2,871	100
2007	2005	5,039	100
2008	2006	7,517	100
2009	2007	6,895	214
2010	2008	7,560	
2011	2009	9,006	

October 26, 2009


Mr. Willie J. Powell
Executive Director
City of Ann Arbor Employees' Retirement System
532 S. Maple Road
Ann Arbor, Michigan 48103

Dear Willie:

Enclosed are 16 copies of the Revised June 30, 2009 Annual Actuarial Valuation, including the 2009-2019 Ten Year Projection Study, for the City of Ann Arbor Employees' Retirement System.

Please contact me with any questions.

Sincerely,



Brad Lee Armstrong, ASA, EA, MAAA, FCA

BLA:mrh
Enclosure

cc: Alan Panter, Abraham & Gaffney, P.C. (+ report copy)