

May 19, 2008

The Board of Trustees
City of Livonia Employees Retirement System
Livonia, Michigan 48154

Dear Board Members:

The purpose of the annual actuarial valuation of the City of Livonia Employees Retirement System as of November 30, 2007, is to:

- Compute the present value of future benefits likely to be paid on behalf of current retired and active members of the Retirement System, and
- Compute the City's recommended contribution rate for the Fiscal Year beginning December 1, 2007.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. Data concerning active members, retirees, beneficiaries and assets was provided by the City of Livonia. This data has been reviewed for reasonableness, but no attempt has been made to audit such information. The valuation was based on the provisions of the Retirement System as amended through November 30, 2007. The actuarial assumptions used in this valuation are reasonably related to the past experience of the System and represent reasonable expectations of future experience under the System.

Respectfully submitted,



Sandra W. Rodwan
Member, American Academy of Actuaries

City of Livonia
Employees Retirement System

Actuarial Valuation as of November 30, 2007

Table of Contents

Section One: Valuation Summary

Valuation Summary.....	1
------------------------	---

Section Two: Actuarial Calculations – Funding

Computed Contribution Rates.....	4
----------------------------------	---

Unfunded Actuarial Accrued Liability.....	7
---	---

Section Three: Retirement System Benefit Provisions

Benefit Provision Summary	9
---------------------------------	---

Section Four: Actuarial Assumptions and Methods

Actuarial Assumptions	14
-----------------------------	----

Actuarial Methods	18
-------------------------	----

Section Five: Valuation Data

Asset Summary.....	19
--------------------	----

Participant Summary	22
---------------------------	----

Section Six: Accounting Disclosures

Information for GASB Statements No. 25 and No. 27.....	29
--	----

Information for GASB Statement No. 26	32
---	----





Section One:
Valuation Summary



Purpose of Valuation

The purpose of the annual actuarial valuation of the City of Livonia Retirement System as of November 30, 2007 is to:

- ❖ Compute the present value of future benefits likely to be paid on behalf of current retired and active members of the Retirement System,
- ❖ Compute the City's recommended contribution rate for the Fiscal Year beginning December 1, 2008.

Funding Value of Assets

A smoothed market value of assets was used for the November 30, 2007, valuation. This method, which is unchanged from prior years, spreads the difference between actual and expected investment return over five years.

City's Computed Contribution Rate

The City's contribution rate for the fiscal year beginning December 1, 2008 has been computed to be 0.00% of active member payroll for the General, Police and Fire divisions. These contribution rates were computed using the aggregate actuarial cost method, the same method as used in last year's valuation. This method is appropriate for retirement systems which are closed to new hires.

The aggregate method produces a contribution rate for the City which, together with current assets, investment earnings and future member contributions, can be expected to accumulate to the value of the benefits payable at retirement.

The actuarial accrued liability under this method is defined to be the current actuarial value of assets.

Retirement System Experience

The overall experience of the Retirement System was reasonably close to expected experience based on the long-term assumptions.

The actual nominal rate of investment return during the year based on market value exceeded the assumed rate. However, the recognized rate of investment return on the smoothed market value was slightly less than the 8.25% assumed rate (7.8% vs. 8.25%) due to the 5 year smoothing.

There were 22 new retirees during the year compared with 13 last year. Twenty-two retirees were removed (compared with 13 last year).

Benefit Provision Changes

General members: Post retirement increases changed from \$20 per month for the first six years of retirement to \$25 per month for the first ten years of retirement, effective for retirements on or after December 1, 2007.

Fire members: Post-retirement increases changed from \$20 per month for the first 6 years of retirement to \$20 per month for the first 10 years of retirement on or after December 1, 2007.

Assumption and Method Changes

There were no changes in assumptions or methods used for the valuation.

Participant Data

	<u>11/30/2007</u>	<u>11/30/2006</u>
Active Members		
- General	95	112
- Police	97	98
- Fire	<u>51</u>	<u>52</u>
Total	243	262
Active Member Payroll		
- General	\$5,036,574	\$5,622,247
- Police	6,866,037	6,850,282
- Fire	<u>3,754,787</u>	<u>3,662,089</u>
Total	\$15,657,398	\$16,134,618
Retirees and Beneficiaries		
- General	323	320
- Police	125	125
- Fire	<u>99</u>	<u>97</u>
Total	547*	542*
Annual Pensions		
- General	\$5,278,045	\$4,979,428
- Police	3,743,420	3,756,681
- Fire	<u>2,790,598</u>	<u>2,726,336</u>
Total	\$11,812,063	\$11,462,445

**Includes 4 General, 4 Police and 2 Fire alternate payees who are receiving benefits under eligible domestic relations orders.*

Financial Data

	<u>11/30/2007</u>	<u>11/30/2006</u>
Market Value of Assets	\$224,862,829	\$218,656,333
Smoothed Valuation Assets	\$215,675,096	\$205,101,046

Conclusion

The accrued funding condition of the Retirement System continues to be very good.



Section Two:

***Actuarial Calculations –
Funding***



Recommended City Contribution Rate for Fiscal Year beginning December 1, 2008

The City’s computed contribution rate for the year beginning December 1, 2008 has been computed to be 0.00% of payroll for the General division, 0.00% for the Police division and 0.00% for the Fire division.

	<u>General</u>	<u>Police</u>	<u>Fire</u>
1. Actuarial Present Value of all Future Benefits			
Active Members:			
Regular Retirement	\$24,108,705	\$35,215,313	\$20,017,354
Pre-Retirement death	779,971	850,035	475,365
Disability	469,769	2,515,679	1,226,767
Withdrawal	1,141,482	1,730,230	162,619
Inactive Members	1,357,525	114,641	354,201
Retirees and Beneficiaries	<u>45,396,729</u>	<u>36,129,134</u>	<u>25,880,114</u>
Total	73,254,181	76,555,032	48,116,420
2. Smoothed Valuation Assets	83,918,961	81,009,801	50,746,334
3. Present Value of Future Member Contributions	1,015,821	1,760,710	968,293
4. Unfunded Present Value of Benefits: 1. – 2. – 3.	None	None	None
5. Present Value of Future Pay	\$35,797,112	\$62,859,708	\$3,998,385
6. City Contribution as a percent of Payroll: 4. / 5.	0.00%	0.00%	0.00%
7. City Contribution – Dollars Based on Valuation Payroll	\$0	\$0	\$0

Computed Normal Cost Contribution Rates as of November 30, 2007

Based on Entry Age Actuarial Cost Method

For Illustration Purposes Only

The normal cost contribution rate based on the entry age actuarial cost method is shown for illustration purposes only and for comparison to prior years' normal costs. Last year the computed entry age normal cost for the City was 12.48% for General members, 16.90% for Police members and 17.14% for Fire members.

The aggregate cost method used to compute the City's recommended contribution rate shown on page 4 is the appropriate method for a plan closed to new hires.

	<u>General</u>	<u>Percent of Payroll</u>	
		<u>Police</u>	<u>Fire</u>
Normal Cost			
Regular Retirement	13.04%	15.60%	17.01%
Pre-Retirement Death	0.61	0.51	0.63
Disability	0.59	1.93	2.08
Withdrawal	<u>2.05</u>	<u>2.03</u>	<u>0.61</u>
Total Normal Cost	16.29	20.07	20.33
Member portion	3.61	3.25	3.56
City's Entry Age Normal Cost	12.68%	16.82%	16.77%

Recommended and Actual City Contributions

Valuation Date Nov. 30	Fiscal Year Ending Nov. 30	Recommended % of Payroll Contributions (Excluding Health)			Actual Dollar Contributions
		General	Police	Fire	
1989#	1991	17.07%	14.76%	24.57%	\$6,016,634
1990@	1992	13.32	10.00	23.38	5,619,344
1991	1993	12.36	9.64	21.53	5,700,236
1992#	1994	11.29	8.98	19.93	5,832,111
1993	1995	10.20	9.67	18.81	6,309,592
1994	1996	10.71	8.68	18.40	6,698,329
1995#	1997	9.59	9.29	19.15	-
1995@	1997	10.78	10.56	20.73	6,698,329
1996#	1998	10.53	11.62	20.14	5,054,261
1997#	1999	1.48	10.90	22.32	-
1997@&	1999	0.00	1.71	19.06	1,456,023
1998#	2000	0.00	4.42	18.79	
1999#@	2001	0.00	1.15	15.20	
2000	2002	0.00	0.00	9.73	
2001#	2003	0.00	0.00	9.50	392,639
2002	2004	0.00	0.00	12.70	-
2003	2005	0.00	0.00	0.00	-
2004	2006	0.00	0.00	0.00	-
2005	2007	0.00	0.00	0.00	-
2006	2008	0.00	0.00	0.00	-
2007	2009	0.00	0.00	0.00	-

After changes in benefit provisions.

@ After changes in actuarial assumptions or methods.

& After removal of contribution for post-retirement health insurance benefits.

Note: Results prior to 2003 are based on reports provided by previous actuarial firm.

History of Assets and Accrued Liabilities

Valuation Date	Valuation Assets	Actuarial Accrued Liabilities#	Funded Ratio	Unfunded Actuarial Accrued Liabilities
1993	\$132,136	\$122,975	107.4%	\$ (9,161)
1994	140,037	130,496	107.3	(9,541)
1995	152,456	142,053	107.3	(10,403)
1996	167,361	151,870	110.2	(15,491)
1997	168,884	148,806	113.5	(20,078)
1998	177,035	151,085	117.2	(25,950)
1999	184,782	149,052	124.0	(35,730)
2000	192,477	148,670	129.5	(43,807)
2001	200,937	151,438	132.7	(49,499)
2002	199,627	159,272	125.3	(40,355)
2003	203,505	159,900	127.3	(43,605)
2004	199,578	164,378	121.4	(35,200)
2005	200,005	167,226	119.6	(32,779)
2006	205,101	169,506	121.0	(35,595)
2007	215,675	173,486	124.3	(42,189)

Results shown throughout this report, for years prior to 2003, were prepared by the previous actuarial firm.

Based on entry age actuarial accrued liability for comparison to prior years. The entry age accrued liability has not been used to compute contribution requirements after the 1998 valuation. Under the aggregate cost method used to compute contributions beginning in 1999, the accrued liability is defined to be equal to the accrued assets.

The ratio of valuation assets plus future employee contributions to the total present value of future benefits was 110.9% as of November 30, 2007. This is an increase from 106.8% in the prior year.

Comment and Conclusion

Comment: The overall experience of the Retirement System during the year ended November 30, 2007 was reasonably close to expected based on the long-term assumptions. The nominal rate of return on the market value of assets exceeded the 8.25% long term assumption. However, the nominal rate of return based on the smoothed market value of assets, 7.8%, was less than the 8.25% assumed. The market value of assets exceeded the funding value of assets as of November 30, 2007 by \$9.2 million.

Conclusion: The accrued actuarial condition of the Retirement System continues to be very good.



Section Three:

***Retirement System
Benefit Provisions***



Benefit Provision Summary

Membership Requirements

Membership includes all persons in the classified and unclassified service of the City who perform services on a permanent part-time or full-time basis. New employees do not become members in this Retirement System.

Voluntary Retirement Eligibility

General Members: 30 years of service regardless of age, or age 55 with 10 years of service. Permanent part-time General members need only 10 calendar years of membership instead of 10 years of credited service.

Police Members: 25 years of service regardless of age, or age 52 with 10 years of service. (Age 50 with 10 years but less than 25 years of service early retirement with reduced benefit benefit reduced ½% per month below age 52).
(except Lieutenants & Sergeants and Administrators):

Police Lieutenants & Sergeants and Administrators: 27 years of service regardless of age, or age 50 with 10 years of service. (Age 48 with 10 years but less than 27 years of service early retirement with reduced benefit benefit reduced 1/2 % per month below age 50).

Fire Members: 27 years of service regardless of age, or age 52 with 10 years of service (age 50 with 10 years of service early retirement with reduced benefit – benefit reduced ½% per month below age 52).

Normal Pension Amount

General Members: 2.5% of the member's average final compensation (AFC) times years of credited service (maximum is 75% of AFC).

Police Members (except Lieutenants & Sergeants and Administrator): 2.8% of the member's average final compensation (AFC) times the first 24 years of credited service, plus 7.8% of AFC for the 25th year of credited service (maximum is 75% of AFC).

Police Lieutenants & Sergeants and Administrators Members: 2.8% of the member's average final compensation (AFC) times years of credited service (maximum is 75% of AFC).

Fire Members: 2.8% of the member's average final compensation (AFC) times years of credited service (maximum is 75% of AFC).

Average Final Compensation

The average of the highest annual compensations received during any 3 years of service contained within the 10 years of service immediately preceding retirement, including base salary, longevity, shift differential, paid time off, holiday pay, and payment of accumulated vacation time up to the limits established by the respective bargaining agreements. In addition, merit pay is included for Police members and Paramedic/EMT or ALS bonuses are included for firefighters.

Deferred Pension (Vesting)

Eligibility: Termination of City employment, other than by death or disability, prior to attaining voluntary retirement age but after completing at least 10 full years of credited service.

Amount: A monthly pension, payable beginning at voluntary retirement age (or early retirement age with a reduced benefit), computed in the same manner as a Normal Pension but based on credited service and AFC at time of termination of City employment.

Disability Retirement

Eligibility: Termination of City employment by reason of total and permanent disability after completing at least 10 full years of credited service, except that in the event of a duty disability the 10 year service requirement is waived.

Amount: (1) Disability incurred after age 55: A monthly pension computed in the same manner as a Normal Pension but based on credited service and AFC at the time of termination. (2) Disability incurred before age 55: A monthly pension computed in the same manner as a Normal Pension but based on AFC at time of termination and the credited service the member would have completed had employment continued until age 55, provided that in the event of a duty disability the pension payable to age 55 shall not be less than 75% of AFC. Worker’s compensation benefits are deducted. For non-duty disability cases, the following limitations apply:

<u>Actual Years of Service</u>	<u>Maximum Total Years Used to Compute Benefit</u>	<u>Maximum Benefit As a Percent of AFC</u>
10-15	20	50.0%
16-20	25	62.5
over 20	30- or actual service if greater	75.0

Non-Duty Death

Eligibility: Death after completing 10 years of credited service, but before termination of City employment. If member had not attained age 55 at the time of death, the death benefit shall commence at the time they would have attained voluntary retirement age. Member must either: (1) have elected Option A and named a beneficiary, or (2) leave a surviving spouse in the event Option A was not elected.

Amount: Monthly pension the beneficiary would have received had the member retired the day before death (notwithstanding that he might not have attained his voluntary retirement age) and elected the 100% joint and survivor Option A.

Duty Death

Eligibility: Death from causes arising solely and exclusively out of and in the course of a member's City employment.

Amount: Surviving spouse, or unmarried children under age 18 (if no surviving spouse), or dependent parents (if no surviving spouse or children) shall receive a monthly pension equal to the pension payable if the member had become duty disabled, elected the 100% survivor option and subsequently died. The option factor for children or parents is assumed to equal 80%. The benefit shall continue until: (a) death in the case of the widow, (b) death, marriage, adoption or attainment of age 18 in the case of the children. Worker's compensation benefits are deducted.

Employee Contributions

General - Local 1917	3.66% of compensation.
- Others	3.10% of compensation.
Police - LPOA, Cadets	2.55% of compensation.
- Lts. & Sgts., Administrators	5.21% of compensation.
Fire	3.56% of compensation.

Upon voluntary, mandatory or disability retirement (or early or deferred retirement, in the case of General members), a member may withdraw his accumulated contributions with interest and receive an actuarially reduced lifetime benefit.

Cost-of-Living Allowance

An additional cost-of-living allowance will be paid to all retirees. The monthly amount is determined as follows:

(1) Members retired before December 1, 1979:

- (a) \$20 per month for one year period commencing one year after retirement.
- (b) \$40 per month for one year period commencing two years after retirement.
- (c) \$40 per month for one year period commencing three years after retirement.
- (d) \$60 per month for one year period commencing four years after retirement.
- (e) \$80 per month commencing five years after retirement.

(2) Members retiring on or after December 1, 1979 and before December 1, 1986:

- (a) \$20 per month for one year period commencing one year after retirement.
- (b) \$40 per month for one year period commencing two years after retirement.
- (c) \$60 per month for one year period commencing three years after retirement.
- (d) \$80 per month commencing four years after retirement.

(3) Members retiring on or after December 1, 1986:

- (a) \$20 per month for one year period commencing one year after retirement.
- (b) \$40 per month for one year period commencing two years after retirement.
- (c) \$60 per month for one year period commencing three years after retirement.
- (d) \$80 per month for one year period commencing four years after retirement.
- (e) \$100 per month for one year period commencing five years after retirement.
- (f) \$120 per month commencing six years after retirement.

(4) General members retiring on or after December 1, 2007:

- (a) \$25 per month for one year period commencing one year after retirement.
- (b) \$50 per month for one year period commencing two years after retirement.
- (c) \$75 per month for one year period commencing three years after retirement.
- (d) \$100 per month for one year period commencing four years after retirement.
- (e) \$125 per month for one year period commencing five years after retirement.
- (f) \$150 per month for one year period commencing six years after retirement.
- (g) \$175 per month for one year period commencing seven years after retirement.
- (h) \$200 per month for one year period commencing eight years after retirement.
- (i) \$275 per month for one year period commencing nine years after retirement.
- (j) \$250 per month commencing ten years after retirement.

(5) Fire members retiring on or after December 1, 2007:

- (a) \$20 per month for one year period commencing one year after retirement.
- (b) \$40 per month for one year period commencing two years after retirement.
- (c) \$60 per month for one year period commencing three years after retirement.
- (d) \$80 per month for one year period commencing four years after retirement.
- (e) \$100 per month for one year period commencing five years after retirement.
- (f) \$120 per month for one year period commencing six years after retirement.
- (g) \$140 per month for one year period commencing seven years after retirement.
- (h) \$160 per month for one year period commencing eight years after retirement.
- (i) \$180 per month for one year period commencing nine years after retirement.
- (j) \$200 per month commencing ten years after retirement

For Police retirees retiring before December 1, 1991 and for Fire retirees retiring before December 1, 1993 the maximum increase is \$80 per month.

Section Four:

***Actuarial Assumptions
And Methods***



Actuarial Assumptions

Economic Assumptions

- (i) Interest Rate 8.25% (net of expenses)

- (ii) Salary Increases
 - Across-the-Board 4.75%
 - Merit and Longevity Age-related rates

Sample Annual Rates of Salary Increase

Age	Across-the-Board	Merit and Longevity	Total
20	4.75%	7.92%	12.67%
25	4.75	5.75	10.50
30	4.75	3.98	8.73
35	4.75	2.89	7.64
40	4.75	2.10	6.85
45	4.75	1.48	6.23
50	4.75	0.96	5.71
55	4.75	0.53	5.28
60	4.75	0.15	4.90
65	4.75	0.00	4.75

Demographic Assumptions

(i) Mortality

1983 Group Annuity Mortality Table

Sample Ages	Value of \$1 Monthly for Life		Future Life Expectancy (Years)	
	Men	Women	Men	Women
50	\$129.26	\$137.15	29.20	34.93
55	122.10	131.79	24.84	30.25
60	112.96	124.67	20.66	25.69
65	101.61	115.46	16.71	21.30
70	88.92	103.82	13.20	17.15
75	75.49	90.28	10.15	13.39
80	62.02	76.23	7.66	10.22

(ii) Rates of Disability

Sample Ages	Percent Becoming Disabled Within Next Year	
	General	Police-Fire
20	0.02%	0.07%
25	0.04	0.12
30	0.07	0.24
35	0.11	0.40
40	0.16	0.55
45	0.20	0.71
50	0.25	0.87
55	0.30	1.03

(iii) Termination of Employment

Service related rates for first 5 years of employment. Age related rates after first 5 years of employment

Sample Ages	Years of Service	% of Active Members Separating Within Next Year		
		General	Police	Fire
All	0	12.00%	13.00%	9.00%
	1	9.50	6.00	6.00
	2	8.50	5.50	5.55
	3	7.50	5.00	4.00
	4	4.00	3.50	3.00
25	5 & Over	4.00	3.50	1.62
30		3.50	3.02	1.40
35		3.25	2.25	0.83
40		2.00	1.44	0.32
45		1.25	0.80	0.18
50		1.25	0.50	0.18
55	0.75	0.50	0.18	
60	0.50	0.50	0.18	

(iv) Retirement Rates

Age-related rates

**Percent of Active Members Retiring within Year
Following Attainment of Indicated Retirement Age or Service**

Retirement Ages	Age Based			Service Based		
	General	Police	Fire	Service	LPOA	Fire
46	-%	50%	-%	25	50%	
47	45	25	-	26	50	
48	45	25	-	27	50	50%
49	45	25	-	28	50	50
50	45	40	-	29	50	50
51	45	40	-	30 & up	100	100
52	45	25	50			
53	45	25	50			
54	45	25	50			
55	45	25	50			
56	45	25	50			
57	20	25	50			
58	20	25	50			
59	10	25	50			
60	10	100	100			
61	25	100	100			
62	20	100	100			
63	20	100	100			
64	20	100	100			
65	15	100	100			
66	20	100	100			
67	20	100	100			
68	40	100	100			
69 & Up	100	100	100			

Actuarial Method Used for the Valuation

Aggregate Cost Method. This method spreads the unfunded present value of future benefits as of the valuation date over the expected future working lifetimes of the remaining active members. Characteristics of this method are as follows:

- ❖ The aggregate annual normal costs payable from the valuation date to the group's projected dates of retirement, disability or death are expected to accumulate to the actuarial present value of the group's benefit at date of retirement, disability or death.

- ❖ By definition, the accrued liability is equal to the actuarial funding value of assets.



Section Five:
Valuation Data



Summary of Asset Information Submitted for the Valuation

Statement of Assets

As of November 30, 2007, the market value of Retirement System assets was reported to be \$224,862,829.

Revenues and Expenses for the Year Ended November 31, 2007

(a) Revenues

(i) Member Contributions	\$ 545,624
(ii) Employer Contributions	0
(iii) Investment Income (Net of Expenses)	17,408,114
(iv) Other income	<u>254,549</u>
(v) Total Income	18,208,287

b. Expenses

(i) Pensions	11,485,635
(ii) Refunds and annuity withdrawal	343,783
(iii) Post Retirement Health Benefits	0
(iv) Non-Investment Expenses	<u>172,374</u>
(v) Total Expenses	\$12,001,792

Investment Allocation

The reported asset allocation at market value was as follows:

a. Cash and Short Term	
(i) Cash (incl. Checking/Savings Accounts)	\$ 71,435
(ii) Accruals and Receivables	1,779,444
(iii) Money Market Funds	4,277,857
b. Fixed Income	
(i) U.S. Government/Agency Bond	7,665,849
(ii) Corporate Bonds	15,719,812
(iii) Asset Backed Securities	5,109,375
(iv) Inflation Index Bonds	0
(v) Mortgage Backed Securities	37,650,660
(vi) Collateralized Mortgage Obligations	10,205,756
(vii) Fixed Income mutual funds	5,401,174
(viii) Other: Foreign Bonds & Notes	1,107,411
c. Equities	
(i) Common Stock	101,078,095
(ii) Closely held equity	81,592
(iii) Stock mutual funds	14,431,752
(iii) Other: Foreign	2,656,587
American Depository Receipts	4,148,587
General Growth RTS	10,000,000
d. Real Estate:	
(i) Real estate investment funds	5,547,137
e. Other Assets:	0
f. Less accounts payable	2,069,694
g. Total Market Value of Assets as of November 30, 2007	\$224,862,829

Funding Value of Assets

	Year Ended 11/30/2006	Year Ended 11/30/2007
A. Funding Value Beginning of Year	\$203,057,043	\$205,101,046
B. Market Value End of Year	218,656,333	224,862,829
C. Market Value Beginning of Year	205,811,380	218,656,333
D. Non-Investment Income Net Cash Flow	(14,195,427)	(11,445,791)
E. Investment Income		
E1. Market Total B-C-D	27,040,380	17,652,287
E2. Amount for Immediate Recognition	16,166,645	16,448,697
E3. Amount for Phased-In Recognition E1 – E2	10,873,735	1,203,590
F. Phased-In Recognition of Investment Income		
F1. From the Current Year 0.20 x E3	2,174,747	240,718
F2. First Prior Year	840,103	2,174,747
F3. Second Prior Year	1,483,726	840,103
F4. Third Prior Year	831,850	1,483,726
F5. Fourth Prior Year	(5,257,642)	831,850
F6. Total Recognized Investment Gain	72,785	5,571,144
G. Gross Funding Value end of Year A + D + E2 + F6	205,101,046	215,675,096
H. Health Insurance Reserve	0	0
I. Net Funding Value	205,101,046	215,675,096
J. Difference Between Market and Funding Value	13,555,287	9,187,733
K. Market Rate of Return	12.3%	11.0%
L. Recognized Rate of Return	8.3%	7.8%

Reported Reserve Balances

	<u>11/30/2006</u>	<u>11/30/2007</u>
Reserve for Employees' Contributions	\$ 9,726,425	\$10,257,842
Reserve for Employer Contributions	140,875,422	150,557,366
Reserve for Retired Benefit Payments	68,054,486	64,047,621
Reserve for Health Insurance	0	0
Total	\$218,656,333	\$224,862,829

Participant Summary

Retirees and Beneficiaries Included in the Valuation

There were 547 retirees and beneficiaries included in the valuation, with annual pensions totaling \$11,812,063. There were 22 new retirees and 5 new survivor beneficiaries added during the year and 22 were removed (not including alternate payees).

Pensions Being Paid

Valuation Date	No.	Annual Pensions	% of Active Payroll	Average Pension	Discounted Value of Pensions	
					Total	Average
1980	131	\$ 795,472	5.5%	\$ 6,072	\$ 8,740,469	\$ 66,721
1981	154	1,056,344	7.5	6,859	11,948,103	77,474
1982	179	1,372,590	9.4	7,668	15,531,447	86,768
1983	213	1,831,672	13.0	8,599	21,242,051	99,728
1984	232	2,115,483	14.2	9,118	24,304,481	104,761
1985	248	2,438,598	16.0	9,833	26,147,989	105,435
1986	285	3,045,379	18.0	10,686	32,753,337	114,924
1987	298	3,360,383	18.8	11,276	35,993,277	120,783
1988	308	3,586,869	18.3	11,646	37,993,837	123,357
1989	331	4,122,475	19.8	12,455	43,437,508	131,231
1990	344	4,426,535	19.8	12,868	43,526,995	126,532
1991	362	4,941,277	21.6	13,650	48,403,086	133,710
1992	388	5,487,251	23.0	14,142	52,852,822	136,219
1993	396	5,795,349	24.1	14,635	56,746,560	143,299
1994	416	6,466,603	25.3	15,545	63,150,428	151,804
1995	433	6,915,782	27.1	15,972	66,978,476	154,685
1996	450	7,503,958	26.8	16,675	72,267,650	160,595
1997	468	8,030,733	39.0	17,161	76,656,612	163,796
1998	483	8,444,938	40.9	17,484	80,195,707	166,037
1999	493	8,948,784	47.9	18,152	84,683,874	171,773
2000	502	9,357,146	54.6	18,640	88,078,816	175,456
2001	515	9,671,679	57.8	18,780	90,253,559	175,250
2002	519	9,961,049	57.6	19,193	92,404,782	178,044
2003	524	10,308,740	60.3	19,673	95,345,963	181,958
2004	538	10,967,097	68.2	20,385	101,737,860	189,104
2005	536	11,135,810	70.1	20,776	102,438,312	191,116
2006	542	11,462,445	71.0	21,148	104,737,223	193,242
2007	547	11,812,063	75.4	21,594	107,405,977	196,355

Retirees and Beneficiaries - November 30, 2007

Attained Age	General		Police		Fire		Totals	
	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions	No.	Annual Pensions
40-44		\$ -	2	\$ 74,657		\$ -	2	\$ 74,657
45-49			10	513,342			10	513,342
50-54	5	155,552	6	184,769	9	415,560	20	755,881
55-59	37	931,265	12	357,941	12	517,334	61	1,806,540
60-64	42	1,005,001	25	841,685	17	619,703	84	2,466,389
65-69	43	674,161	30	904,202	16	389,695	89	1,968,058
70-74	40	670,925	21	531,390	13	267,569	74	1,469,884
75-79	68	1,014,556	11	255,895	21	393,765	100	1,664,216
80-84	47	520,520	8	79,539	10	172,223	65	772,282
85-89	28	229,102			1	14,749	29	243,851
90-94	10	67,806					10	67,806
95-99	3	9,157					3	9,157
Totals	323	\$5,278,045	125	\$3,743,420	99	\$2,790,598	547	\$11,812,063

There were 26 inactive vested members with estimated annual benefits of \$269,802 included in the valuation.

**Inactive Vested Members -
November 30, 2007**

Attained Age	General		Police		Fire		Totals	
	No.	Estimated Annual Pensions	No.	Estimated Annual Pensions	No.	Estimated Annual Pensions	No.	Estimated Annual Pensions
40-44	3	\$ 20,506		\$ -	1	\$11,314	4	\$ 31,820
45-49	10	114,400			2	40,159	12	154,559
50-54	6	65,759	1	5,822			7	71,581
55-59	1	2,042					1	2,042
65-69			1	7,000			1	7,000
90-94	1	2,800					1	2,800
Totals	21	\$205,507	2	\$12,822	3	\$51,473	26	\$ 269,802

Total Active Members - November 30, 2007
Age and Service Distribution

Attained Age	Service						Totals		
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
30-34		7	5					12	\$ 782,627
35-39		8	29	7	1			45	2,950,036
40-44		2	10	42	14			68	4,564,129
45-49		1	6	18	25	5		55	3,765,351
50-54			4	10	13	9	1	37	2,235,539
55-59			4	7	7	2		20	1,034,878
60-64			1	2				3	162,646
65-69				1	1			2	120,757
70-74				1				1	41,435
Total		18	59	88	61	16	1	243	\$15,657,398

Group Averages:

Age: 45.4 years
Service: 17.5 years
Annual Pay: \$64,434

**Active General Members - November 30, 2007
Age and Service Distribution**

Attained Age	Service							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
35-39			3					3	\$132,751
40-44			2	11	4			17	891,082
45-49			3	8	9	2		22	1,235,137
50-54			4	8	8	8	1	29	1,583,818
55-59			4	7	5	2		18	868,948
60-64			1	2				3	162,646
65-69				1	1			2	120,757
70-74				1				1	41,435
Total			17	38	27	12	1	95	\$5,036,574

Group Averages:

Age: 50.6 years
 Service: 19.2 years
 Annual Pay: \$53,017

Active Police Members - November 30, 2007
Age and Service Distribution

Attained Age	Service							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
30-34		7	4					11	\$ 716,363
35-39		5	16	6	1			28	1,890,876
40-44			5	22	10			37	2,669,828
45-49		1	1	7	7	3		19	1,449,274
50-54				1	1			2	139,696
Total		13	26	36	19	3		97	\$6,866,037

Group Averages:

Age: 41.0 years
Service: 16.2 years
Annual Pay: \$70,784

Active Fire Members - November 30, 2007
Age and Service Distribution

Attained Age	Service							Totals	
	0-4	5-9	10-14	15-19	20-24	25-29	Over 30	No.	Payroll
30-34			1					1	\$ 66,264
35-39		3	10	1				14	926,409
40-44		2	3	9				14	1,003,214
45-49			2	3	9			14	1,080,940
50-54				1	4	1		6	512,030
55-59					2			2	165,930
Total		5	16	14	15	1		51	\$3,754,787

Group Averages:

Age: 44.0 years
Service: 16.9 years
Annual Pay: \$73,623

Active Members – Three Year Comparison

	November 31,		
	2007	2006	2005
Active Members	243	262	275
Average Age (yrs.)	45.4	45.4	44.9
Average Service (yrs.)	17.5	16.8	17.0
Average Pay	\$64,434	\$61,583	\$57,765

Active Members by Division – November 30, 2007

Valuation Division	No.	Annual Payroll	Average Age	Average Service	Average Pay
General - Court	2	\$ 90,112	43.5	17.3	\$45,056
- Dispatchers	3	161,058	45.0	18.0	53,686
- Local 192 – FT	56	2,688,597	50.3	18.7	48,011
- Local 1917	6	379,818	47.2	24.1	63,303
- Other	<u>28</u>	<u>1,716,989</u>	53.1	19.3	61,321
Total	95	\$5,036,574	50.6	19.2	\$53,017
Police – LPOA	77	\$5,197,401	40.4	15.1	\$67,499
- Lts. & Sgts.	19	1,568,676	43.4	19.8	82,562
- Administration	<u>1</u>	<u>99,960</u>	47.9	28.5	99,960
Total	97	\$6,866,037	41.0	16.2	\$70,784
Fire – 56 Hours	47	\$3,392,386	43.7	16.4	\$72,178
- 40 Hours	<u>4</u>	<u>362,401</u>	48.1	21.0	90,600
Total	51	\$3,754,787	44.0	16.9	\$73,623
Totals	243	\$15,657,398	45.4	17.5	\$64,434



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:	November 30, 2007
Actuarial Cost Method:	Aggregate
Amortization method:	Level percent of payroll, closed
Remaining amortization period:	Expected future working lifetime
Asset valuation method:	Closed 5-year smoothed market value
Actuarial assumptions:	
Investment rate of return	8.25%
Projected salary increases*	0.0% - 7.9%
* Includes inflation at	4.75%

Membership data as of November 30, 2007, is indicated in Section Five of this report.

**GASB Statement Nos. 25 and 27
Required Supplementary Actuarial Information**

Analysis of Funding Progress

Valuation Date	(1) Valuation 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
1993	\$132,136	\$122,975	107.4%	\$ (9,161)	\$24,039	-%
1994	140,037	130,496	107.3	(9,541)	35,538	-
1995	152,456	142,053	107.3	(10,403)	35,510	-
1996	167,361	151,870	110.2	(15,491)	28,003	-
1997	168,884	148,806	113.5	(20,078)	20,598	-
1998	177,035	151,085	117.2	(25,950)	20,653	-
1999	184,782	149,052	124.0	(35,730)	18,684	-
2000	192,477	148,670	129.5	(43,807)	17,132	-
2001	200,937	151,438	132.7	(49,499)	16,721	-
2002	199,627	159,272	125.3	(40,355)	17,285	-
2003	203,505	159,900	127.3	(43,605)	17,109	-
2004	199,578	164,378	121.4	(35,200)	16,070	-
2005	200,005	167,226	119.6	(32,779)	15,885	-
2006	205,101	169,506	121.0	(35,595)	16,135	-
2007	215,675	173,486	124.3	(42,189)	15,657	-

Based on the Entry Age Normal Actuarial cost-method.

Note: Results prior to 2003 are based on reports provided by previous actuarial firm.

Required Supplementary Information
Schedule of Employer Contributions

Fiscal Year Ended November 30,	Actual Required Contribution*			Percent Contributed
	<u>General</u>	<u>Police</u>	<u>Fire</u>	
1995	10.20%	9.67%	18.81%	100%
1996	10.71	8.68	18.40	100
1997	10.78	10.56	20.73	100
1998	10.53	11.62	20.14	100
1999	0.00	1.71	19.06	100
2000	0.00	2.91	17.06	100
2001	0.00	1.15	15.20	100
2002	0.00	0.00	9.73	100
2003	0.00	0.00	9.50	100
2004	0.00	0.00	12.70	100
2005	0.00	0.00	0.00	100
2006	0.00	0.00	0.00	100
2007	0.00	0.00	0.00	100
2008	0.00	0.00	0.00	100
2009	0.00	0.00	0.00	100

*Based on actual payroll.

Note: Results prior to 2003 are based on reports provided by previous actuarial firm.

**GASB Statement No. 26
Required Supplementary Information
Statement of Reported Plan Assets November 30, 2007**

Market Value of Assets:

Cash and equivalents	\$71,435
Accruals & Receivables	<u>6,057,301</u>
Total	6,128,736

Investments at market value:

Stocks	132,396,613
Bonds	82,860,037
Real Estate	<u>5,547,137</u>
Total Investments	220,803,787

Total Assets 226,923,523

Less accounts payable 2,069,694

Net assets held in trust for pension benefits \$224,862,829

GASB Statement No. 26
Required Supplementary Information
Statement of Changes in Plan Net Assets
For The Fiscal Year Ended
November 30, 2007

	Pension	Retiree Health	Total
Additions:			
Contributions			
Employer	\$ 0	\$ 0	\$ 0
Members	545,624		545,624
Total	545,624		545,624
Investment Income (net)			17,408,114
Miscellaneous			254,549
Total Additions			18,208,287
Deductions:			
Benefits Paid	11,485,635		11,485,635
Refund of Contributions	343,783		343,783
Health Premiums		0	0
Administrative Expenses	172,374		172,374
Total Deductions	12,001,792		12,001,792
Net Increase			6,206,495
Net assets held in Trust Fund:			
Beginning of year			\$218,656,333
End of year			\$224,862,829