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***City of Livonia
Employees Retirement System***

Actuarial Valuation as of November 30, 2008



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May 21, 2009

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, 2008, 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, 2009.

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, 2008. 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,

Denise M. Jones
Senior Consultant

Sandra W. Rodwan
Member, American Academy of Actuaries

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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, 2008 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, 2009.

Funding Value of Assets

A smoothed market value of assets was used for the November 30, 2008, 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, 2009 has been computed to be 0.00% of active member payroll for the General and Police divisions. The City's contribution rate for the fiscal year beginning December 1, 2009 has been computed to be 1.84% of active member payroll for the Fire division. 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 less favorable than expected based on the long-term assumptions. The unfavorable experience was primarily attributable to the recognized rate of investment return on the funding value of assets which was less than the assumed rate (3.3% recognized rate of return vs. 8.25% assumed).

There were 8 new retirees during the year compared with 22 last year. Eleven retirees were removed (compared with 22 last year).

Benefit Provision Changes

LPOA and Fire members: Post-retirement increases changed from \$20 per month for the first 10 years of retirement to \$25 per month for the first 10 years of retirement for members who retire after December 1, 2008.

Assumption and Method Changes

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

Participant Data

	<u>11/30/2008</u>	<u>11/30/2007</u>
Active Members		
- General	92	95
- Police	97	97
- Fire	<u>47</u>	<u>51</u>
Total	236	243
Active Member Payroll		
- General	\$4,944,477	\$5,036,574
- Police	7,118,214	6,866,037
- Fire	<u>3,991,872</u>	<u>3,754,787</u>
Total	\$16,054,563	\$15,657,398
Retirees and Beneficiaries		
- General	318	323
- Police	126	125
- Fire	<u>102</u>	<u>99</u>
Total	546*	547*
Annual Pensions		
- General	\$5,259,783	\$5,278,045
- Police	3,734,167	3,743,420
- Fire	<u>2,987,982</u>	<u>2,790,598</u>
Total	\$11,981,932	\$11,812,063

**Includes 4 General, 5 Police and 2 Fire alternate payees who are receiving benefits under eligible domestic relations orders.*

Financial Data

	<u>11/30/2008</u>	<u>11/30/2007</u>
Market Value of Assets	\$154,380,064	\$224,862,829
Smoothed Valuation Assets	\$210,518,968	\$215,675,096

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, 2009

The City's computed contribution rate for the year beginning December 1, 2009 has been computed to be 0.00% of payroll for the General division, 0.00% for the Police division and 1.84% 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	\$24,546,230	\$38,062,653	\$21,185,646
Pre-Retirement death	765,512	872,945	502,873
Disability	437,879	2,502,743	1,282,802
Withdrawal	1,024,655	1,641,011	165,923
Inactive Members	1,555,316	112,404	384,498
Retirees and Beneficiaries	<u>44,719,696</u>	<u>35,278,485</u>	<u>27,773,020</u>
Total	73,049,288	78,470,241	51,294,762
2. Smoothed Valuation Assets	79,052,236	81,740,731	49,726,001
3. Present Value of Future Member Contributions	935,221	1,706,463	998,734
4. Unfunded Present Value of Benefits: 1. - 2. - 3.	None	None	570,027
5. Present Value of Future Pay	\$32,825,416	\$60,134,995	\$30,998,162
6. City Contribution as a percent of Payroll: 4. / 5.	0.00%	0.00%	1.84%
7. City Contribution - Dollars Based on Valuation Payroll	\$0	\$0	\$73,450

Computed Normal Cost Contribution Rates as of November 30, 2008

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 12.68% for General members, 16.82% for Police members and 16.77% 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	13.11%	15.44%	17.26%
Pre-Retirement Death	0.62	0.53	0.62
Disability	0.61	1.99	2.03
Withdrawal	<u>2.18</u>	<u>2.10</u>	<u>0.59</u>
Total Normal Cost	16.52	20.06	20.50
Member portion*	3.16	3.24	3.56
City's Entry Age Normal Cost	13.36%	16.82%	16.94%

*Weighted average.

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 ^{2.91} ?	18.79 ^{17.06} ?	837,116 ?
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	-
2008#	2010	0.00	0.00	1.84	73,450

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)
2008	210,519	179,096	117.5	(31,423)

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 105.7% as of November 30, 2008. This is a decrease from 110.9% in the prior year.

Comment and Conclusion

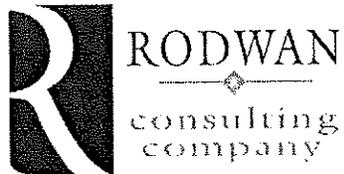
Comment: The overall experience of the Retirement System during the year ended November 30, 2008 was less than what was expected based on the long-term assumptions. The recognized nominal rate of return based on the funding value of assets, 3.3%, was less than the 8.25% assumed. The funding value of assets exceeded the market value of assets as of November 30, 2008 by \$56.1 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 (except Lieutenants & Sergeants and Administrators): with 10 years but less than 25 years of service early retirement with reduced benefit benefit reduced ½% per month below age 52).
- 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:

Actual Years of Service	Maximum Total Years Used to Compute Benefit	Maximum Benefit As a Percent of AFC
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 and before December 1, 2008:

- (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

(6) Fire members retiring on or after December 1, 2008:

- (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) \$225 per month for one year period commencing nine years after retirement.
- (j) \$250 per month commencing ten years after retirement

(7) LPOA members retiring on or after December 1, 2008:

- 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) \$225 per month for one year period commencing nine years after retirement.
- j) \$250 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

**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

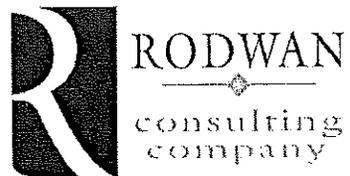
Aggregate Cost Method. This method spreads the unfunded present value of future benefits as of the valuation date over the expected future working lifetimes of the remaining active members. Characteristics of this method are as follows:

- ❖ 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, 2008, the market value of Retirement System assets was reported to be \$154,380,064.

Revenues and Expenses for the Year Ended November 31, 2008

(a) Revenues	
(i) Member Contributions	\$ 539,591
(ii) Employer Contributions	0
(iii) Investment Income (Net of Expenses)	(58,549,300)
(iv) Other income	<u>111,463</u>
(v) Total Income	(57,898,246)
b. Expenses	
(i) Pensions	11,863,219
(ii) Refunds and annuity withdrawal	483,396
(iii) Post Retirement Health Benefits	0
(iv) Non-Investment Expenses	<u>237,904</u>
(v) Total Expenses	\$12,584,519

Investment Allocation

The reported asset allocation at market value was as follows:

a. Cash and Short Term	
(i) Cash (incl. Checking/Savings Accounts)	\$ 72,138
(ii) Accruals and Receivables	986,489
(iii) Money Market Funds	3,144,946
b. Fixed Income	
(i) U.S. Government/Agency Bond	3,623,767
(ii) Corporate Bonds	23,480,393
(iii) Asset Backed Securities	6,966,781
(iv) Inflation Index Bonds	0
(v) Mortgage Backed Securities	22,537,060
(vi) Collateralized Mortgage Obligations	8,265,709
(vii) Fixed Income mutual funds	4,878,646
(viii) Other: Foreign Bonds & Notes	1,867,553
c. Equities	
(i) Common Stock	55,482,563
(ii) Closely held equity	70,001
(iii) Stock mutual funds	10,880,188
(iii) Other: Foreign	1,122,295
American Depository Receipts	3,616,698
General Growth RTS	7,700,000
d. Real Estate:	
(i) Real estate investment funds	391,930
e. Other Assets:	9,552,100
f. Less accounts payable	10,259,193
g. Total Market Value of Assets as of November 30, 2008	\$154,380,064

Funding Value of Assets

	Year Ended 11/30/2007	Year Ended 11/30/2008
A. Funding Value Beginning of Year	\$205,101,046	\$215,675,096
B. Market Value End of Year	224,862,829	154,380,064
C. Market Value Beginning of Year	218,656,333	224,862,829
D. Non-Investment Income Net Cash Flow	(11,445,791)	(12,044,928)
E. Investment Income		
E1. Market Total B-C-D	17,652,287	(58,437,837)
E2. Amount for Immediate Recognition	16,448,697	17,296,342
E3. Amount for Phased-In Recognition E1 – E2	1,203,590	(75,734,179)
F. Phased-In Recognition of Investment Income		
F1. From the Current Year 0.20 x E3	240,718	(15,146,836)
F2. First Prior Year	2,174,747	240,718
F3. Second Prior Year	840,103	2,174,747
F4. Third Prior Year	1,483,726	840,103
F5. Fourth Prior Year	831,850	1,483,726
F6. Total Recognized Investment Gain	5,571,144	(10,407,542)
G. Gross Funding Value end of Year A + D + E2 + F6	215,675,096	210,518,968
H. Health Insurance Reserve	0	0
I. Net Funding Value	215,675,096	210,518,968
J. Difference Between Market and Funding Value	9,187,733	(56,138,904)
K. Market Rate of Return	7.8%	(29.9)%
L. Recognized Rate of Return	11.0%	3.3%

Reported Reserve Balances

	11/30/2007	11/30/2008
Reserve for Employees' Contributions	\$10,257,842	\$10,449,317
Reserve for Employer Contributions	150,557,366	84,419,217
Reserve for Retired Benefit Payments	64,047,621	59,511,530
Reserve for Health Insurance	0	0
Total	\$224,862,829	\$154,380,064

Participant Summary

Retirees and Beneficiaries Included in the Valuation

There were 546 retirees and beneficiaries included in the valuation, with annual pensions totaling \$11,981,932. There were 8 new retirees and 1 new survivor beneficiary added during the year and 11 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
2008	546	11,981,932	74.6	21,945	107,771,201	197,383

Retirees and Beneficiaries - November 30, 2008

Attained Age	General		Police		Fire		Totals	
	No.	Annual Pensions						
40-44		\$ -	1	\$3,562		\$ -	1	\$3,562
45-49			11	534,238			11	534,238
50-54	2	66,752	6	232,318	10	492,662	18	791,732
55-59	31	779,240	11	287,486	12	533,653	54	1,600,379
60-64	47	1,168,861	18	606,701	13	492,523	78	2,268,085
65-69	35	591,654	36	1,129,168	18	525,493	89	2,246,315
70-74	44	741,807	24	605,260	16	315,684	84	1,662,751
75-79	64	955,895	7	168,467	18	366,806	89	1,491,168
80-84	49	611,165	10	158,715	12	213,595	71	983,475
85-89	33	267,428	2	8,252	3	47,568	38	323,248
90-94	8	61,412					8	61,412
95-99	5	15,567					5	15,567
Totals	318	\$5,259,781	126	\$3,734,167	102	\$2,987,984	546	\$11,981,932

There were 25 inactive vested members with estimated annual benefits of \$282,851 included in the valuation.

**Inactive Vested Members -
November 30, 2008**

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		\$ -		\$ -	3	\$ 20,506
45-49	9	109,456			3	51,473	12	160,929
50-54	6	70,958	1	5,822			7	76,780
55-59	1	14,836					1	14,836
65-69			1	7,000			1	7,000
90-94	1	2,800					1	2,800
Totals	20	\$218,556	2	\$12,822	3	\$51,473	25	\$282,851

Total Active Members - November 30, 2008
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		4	5					9	\$631,668
35-39		3	33	5				41	2,897,972
40-44			13	32	16			61	4,507,312
45-49		1	7	15	34	6		63	4,393,478
50-54			3	13	10	10	1	37	2,328,510
55-59			2	6	9	1		18	910,889
60-64				4				4	223,830
65-69				1	1			2	119,797
70-74				1				1	41,107
Total		8	63	77	70	17	1	236	\$16,054,563

Group Averages:

Age: 46.1 years
Service: 18.2 years
Annual Pay: \$68,028

Active General Members - November 30, 2008
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	\$142,427
40-44			1	5	3			9	490,854
45-49			4	7	13	2		26	1,403,365
50-54			3	11	7	8	1	30	1,708,664
55-59			2	6	8	1		17	814,433
60-64				4				4	223,830
65-69				1	1			2	119,797
70-74				1				1	41,107
Total			13	35	32	11	1	92	\$4,944,477

Group Averages:

Age: 51.5 years
Service: 20.1 years
Annual Pay: \$53,744

Active Police Members - November 30, 2008
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		4	4					8	\$553,719
35-39		2	20	4				26	1,835,274
40-44			6	18	13			37	2,754,032
45-49		1	1	7	12	3		24	1,828,007
50-54					2			2	147,182
Total		7	31	29	27	3		97	\$7,118,214

Group Averages:

Age: 42.0 years
Service: 17.2 years
Annual Pay: \$73,384

Active Fire Members - November 30, 2008
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	\$77,949
35-39		1	10	1				12	920,271
40-44			6	9				15	1,262,423
45-49			2	1	9	1		13	1,162,106
50-54				2	1	2		5	472,667
55-59					1			1	96,456
Total		1	19	13	11	3		47	\$3,991,872

Group Averages:

Age: 44.1 years
Service: 17.1 years
Annual Pay: \$84,833

Active Members – Three Year Comparison

	November 31,		
	2008	2007	2006
Active Members	236	243	262
Average Age (yrs.)	46.1	45.4	45.4
Average Service (yrs.)	18.2	17.5	16.8
Average Pay	\$68,028	\$64,434	\$61,583

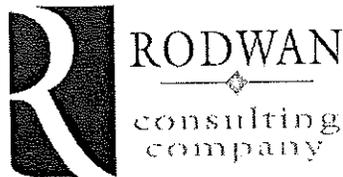
Active Members by Division – November 30, 2008

Valuation Division	No.	Annual Payroll	Average Age	Average Service	Average Pay
General - Court	2	\$91,271	44.5	17.8	\$45,635
- Dispatchers	3	170,302	46.0	19.0	56,767
- Local 192 – FT	49	2,352,081	51.4	19.8	48,002
- Local 1917	9	555,314	47.5	23.1	61,701
- Other	29	1,775,509	53.8	19.9	61,224
Total	92	\$4,944,477	51.5	20.1	\$53,744
Police – LPOA	74	\$5,266,869	41.5	16.1	\$71,174
- Lts. & Sgts.	22	1,754,684	43.6	20.3	79,758
- Administration	1	96,661	48.9	29.5	96,661
Total	97	\$7,118,214	42.0	17.2	\$73,384
Fire – 56 Hours	43	\$3,559,598	43.7	16.8	\$82,781
- 40 Hours	4	432,274	48.5	19.9	108,068
Total	47	\$3,991,872	44.0	16.9	\$73,623
Totals	236	\$16,054,563	46.1	18.2	\$68,028



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, 2008
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*	4.75% - 12.67%
* Includes inflation at	4.75%

Membership data as of November 30, 2008, 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	-
2008	210,519	179,096	117.5	(31,423)	16,055	-

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
2010	0.00	0.00	1.84	

*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, 2008**

Market Value of Assets:

Cash and equivalents	\$72,138
Accruals & Receivables	<u>4,131,435</u>
Total	4,203,573

Investments at market value:

Stocks & Other Equities	78,871,745
Bonds & Other Fixed Income	71,619,909
Real Estate	<u>391,930</u>
Total Investments	150,883,584
Other Assets	9,552,100
Total Assets	160,435,684
Less accounts payable	<u>10,259,193</u>
Net assets held in trust for pension benefits	\$154,380,064

GASB Statement No. 26
Required Supplementary Information
Statement of Changes in Plan Net Assets
For The Fiscal Year Ended
November 30, 2008

	Pension	Retiree Health	Total
Additions:			
Contributions			
Employer	\$ 0	\$ 0	\$ 0
Members	539,591		539,591
Total	539,591		539,591
Investment Income (net)			(58,549,300)
Miscellaneous			111,463
Total Additions			(57,898,246)
Deductions:			
Benefits Paid	11,863,219		11,863,219
Refund of Contributions	483,396		483,396
Health Premiums		0	0
Administrative Expenses	237,904		237,904
Total Deductions	12,584,519		12,584,519
Net Increase			(70,482,765)
Net assets held in Trust Fund:			
Beginning of year			\$224,862,829
End of year			\$154,380,064