

**CITY OF EVANSTON  
FIREFIGHTERS' PENSION FUND**

**ACTUARIAL VALUATION  
AS OF JANUARY 1, 2012 FOR THE  
FISCAL YEAR ENDING DECEMBER 31, 2012**

**May 25, 2012**

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**Tepfer Consulting Group, Ltd.** was retained by the **City of Evanston and City of Evanston Firefighters' Pension Fund** to perform an independent actuarial valuation for the Firefighters' Pension Fund. This valuation is permitted under 40 ILCS 5/22, Section 503.2.

The actuarial valuation was performed for the year ended December 31, 2012 and indicates a **statutorily required contribution in accordance with 40 ILCS 5/4, Section 118 of \$4,412,942 or 47.71% of member payroll, a recommended minimum contribution of \$6,126,383 or 66.24% of payroll, and an Annual Required Contribution in accordance with paragraph 36f of Statement No. 25 of the Governmental Accounting Standards Board of \$5,729,977 or 61.95% of payroll.** These contributions are net of contributions made by active member firefighters during the fiscal year.


The results shown in this report have been calculated under the supervision of a qualified Actuary as defined in appropriate State statutes. All results are based upon demographic data submitted by the Firefighters' Pension Fund, financial data submitted by the Firefighters' Pension Fund, applications of actuarial assumptions, and generally accepted actuarial methods.

In our opinion, all calculations and procedures are in conformity with generally accepted actuarial principles and practices; and the results presented comply with the requirements of the applicable State statute, Actuarial Standards Board, or Statements of Governmental Accounting Standards, as applicable.

In our opinion, the actuarial assumptions used are reasonable, taking into account the experience of the plan and future expectations, and represent a reasonable and adequate approach to the financing of the retirement program. The costs, actuarial liabilities and other information presented in this report, in our opinion, fully and fairly disclose the actuarial position of the plan.

I, Arthur H. Tepfer, am an Enrolled Actuary in good standing under the Employee Retirement Income Security Act of 1974. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. I certify that the results presented in this report are accurate and correct to the best of my knowledge.

**TEPFER CONSULTING GROUP, LTD.**



Arthur H. Tepfer, A.S.A., M.A.A.A.  
Enrolled Actuary #11-02352

May 25, 2012

### VALUATION OBJECTIVES

The **City of Evanston Firefighters' Pension Fund** provides benefits to members when they retire, die, become disabled or terminate employment. As with any plan providing these types of benefits, an appropriate budgeting pattern must be established to enable appropriate funds to be accumulated to meet all payments when due. The actual cost of the plan can best be expressed in the following simplistic manner:

$$\begin{array}{r} \text{ACTUAL COST EQUALS} \\ \text{Benefits Paid} \\ \text{Plus} \\ \text{Expenses Paid} \\ \text{Less} \\ \text{Investment Income Earned} \end{array}$$

If the actual cost is incurred on a "pay as you go" basis, then the future generations of members will be paying for the benefits of current plan participants. Proper financial planning calls for budgeting the actual cost of the plan over the working lifetime of current plan membership in order to establish an equitable allocation. An actuarial valuation is the procedure used to determine an appropriate amount to be contributed to the pension plan each year in order to attain this equity.

An actuarial valuation is an estimate at a particular point in time of the predicted incidence of the future benefit costs. Since the actual cost of the plan is essentially unknown, pre-funding (budgeting for future benefit costs) requires certain assumptions about future events. Assumptions are made for such things as salary increases, terminations of participants, disablement of participants, death of participants and anticipated investment earnings. These assumptions although not affecting the actual costs of the plan will affect the incidence of predicted future costs. For proper funding, it is required that the Actuary select assumptions which are appropriate in light of the economic, demographic, and legislative environment as they relate to the pension program. The assumptions we have made concerning these future events are described more fully in Appendix 2 of this report. Based on these assumptions, a projection of future benefits was made and a current contribution level sufficient to provide the anticipated benefit payments was determined through the use of an actuarial cost method.

VALUATION OBJECTIVES  
(Continued)

Selection of the Actuarial Cost Method

An actuarial cost method, sometimes called a “funding method”, therefore, is essentially an approach to budgeting the estimated future costs. There are many actuarial cost methods which are available to the actuary and each method operates differently. However, all funding methods accomplish the same objective—to assign to each fiscal year of the employer the portion assumed to have accrued in that year. The portion of the actuarial value of benefits assigned to a particular year in respect of an individual participant or the fund as a whole is called the **normal cost**. All funding methods are described by how the normal cost is calculated.

The actuarial cost method prescribed by the State statutes to determine the **statutorily minimum required contribution** for periods on or after January 1, 2011 is the Projected Unit Credit Cost Method. Under this actuarial cost method, the ongoing cost as a percentage of total payroll will increase. In this method, the normal cost is determined by first calculating the projected dollar amount of each participant’s accumulated benefit under the plan as of both the first day of the fiscal year and as of the last day of the fiscal year and then determining the difference between these two amounts. The second step in deriving the normal cost for a given participant is to multiply the dollar amount of this difference by the actuarial present value of \$1 of benefit.

The actuarial cost method selected by our firm to determine the **recommended plan contribution** is the Entry Age Normal Cost Method. Under this actuarial cost method, ideally, the ongoing cost as a percentage of total payroll should remain fairly stable. In this method, the normal cost is determined by assuming each participant covered by the plan entered the plan under the same conditions that will apply to future plan entrants. The annual normal cost assigned to each year of an employee’s career is calculated as a level percentage of the employees assumed earnings each year. These normal costs accumulate to the present value of the employee’s benefit at retirement age.

Under both the Entry Age Normal Cost Method and the Projected Unit Credit Cost Method, the total funding of projected benefit costs is allocated between an **unfunded liability**, representing past benefit history, and future normal costs. This allocation is based on the assumption that the municipality will pay the normal cost for each plan year on a regular basis. It should be noted that although the term “unfunded liability” is applied to both funding methods, the resulting amount is different because of the method of calculation. Another feature of these methods is that only the unfunded liability is affected by the experience of the plan, and therefore any adjustments are made in the future amortization payments.

In addition to the methodology changes described above, P.A. 96-1495 also addressed the valuation of pension fund assets—the second component in the determination of the unfunded liability. The statute now provides that the actuarial value of a pension fund’s assets be set equal to the market value of the assets on March 30, 2011 and that, in determining the actuarial value of assets after that date, any actuarial gains or losses from investment returns incurred in a fiscal year be recognized in equal amounts over the 5-year period following that fiscal year.

VALUATION OBJECTIVES  
(Continued)

The actuarial valuation process is usually repeated each year and is to a certain extent self-correcting. As part of these actuarial cost methods, any deviation of actual experience from the chosen actuarial assumptions will be reflected in future contributions. A complete description of these actuarial cost methods is explained in Appendix 4 of this report.

Appendix 3 of this report contains a summary of the principal provisions of the applicable statute.

Despite the statutory language which requires an application of the Projected Unit Credit method, we feel that funding under this method as a **level percentage of payroll** severely undermines the benefit security of the retirement system and transfers the payment for currently earned pensions to future generations of taxpayers. For these reasons, our valuation report presents a recommended minimum contribution which will operate to maintain the fundamental fiscal soundness of the retirement program, although a statutorily required contribution has also been calculated. The calculation of the recommended minimum contribution is based upon an amortization payment of 90% of any unfunded accrued liabilities as a **level dollar amount** over 30 years from January 1, 2011, the effective date of P.A. 96-1495. The calculation of the statutorily required contribution is based upon an amortization payment of 90% of any unfunded accrued liabilities as a **level percentage of payroll** over 30 years from January 1, 2011, the effective date of P.L. 96-1495.

Although, I do not agree with the statutorily required level percentage of payroll methodology of determining the amortization of the unfunded accrued liability, I would be remiss if I did not advise my funds as to a "statutorily" acceptable calculation under the State law. *I patently consider the calculation methodology under the statute to be actuarially unsound for funding of municipal retirement programs.*

Effective for periods beginning after June 15, 1996, the Governmental Accounting Standards Board has issued Statement No. 25 "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans". This Statement establishes a financial reporting framework for defined benefit pension plans that distinguishes between two categories of information: (a) current financial information about plan assets and financial activities and (b) actuarially determined information, from a long-term perspective, about the funded status of the plan and the progress being made in accumulating sufficient assets to pay benefits when due. The calculation of the Annual Required Contribution (ARC) is described in paragraph 36f of the Statement and is based upon an amortization payment of any unfunded accrued liabilities as either a level dollar amount or a level percentage of total payroll over a maximum of 40 years from the effective date of the Statement. Any significant increase in the total unfunded actuarial liability resulting from a change in actuarial methodology should be amortized over a period not less than 10 years.

Actuarial experience since the last actuarial valuation

As part of the actuarial valuation process, it is helpful to examine the actual experience of the fund as compared to the experience which is expected by the actuarial assumptions. The measurement of any deviations of actual to expected experience is commonly referred to as a

**VALUATION OBJECTIVES  
(Continued)**

"Gain and Loss Analysis". In performing this analysis, the actuary analyzes each actuarial assumption used in the valuation process. It is highly unlikely that actual experience will follow expected experience on a year-by-year basis. It is hoped that over the long term, if the actuarial assumptions are "reasonable", the total gains and losses will offset each other.

A "gain and loss analysis" is a useful tool to examine whether the actuarial assumptions used to determine the municipal tax levy are suitable. Care must be taken in placing too much credibility in a short-term analysis as the assumptions are more appropriately measured over the long term. Nonetheless, an annual evaluation of the actuarial assumptions will assist in identifying trends which, if unnoticed, can lead to inappropriate conclusions. When these trends are recognized, it is the actuary's responsibility to modify one or more of the assumptions to better anticipate future experience.

Some assumptions are easier to measure than others. In small plans, credible analysis can generally be made regarding the economic (financial) assumptions. These primarily include investment and salary increase assumptions. Unfortunately, it is often impossible to establish credible long term analysis of demographic assumptions (rates of termination, disability, retirement and mortality). Therefore, in choosing demographic assumptions, the actuary generally relies upon standardized tabular assumptions modified only by fund-specific characteristics.

The actuarial gain and loss analysis for the current year is presented in Exhibit 3-C and 3-D of the report. Exhibit 3-C shows the impact of the actuarial gains or losses on the statutorily required contribution through a reconciliation of this contribution from the end of the prior valuation year to the end of the current valuation year. Exhibit 3-D derives the actuarial gain or loss in total as well as separating the individual financial and demographic components.

The overall experience gain (loss) for the year was \$ (1,044,758) or 0.86% of the accrued liability at the beginning of the plan year. The dollar amount for the plan's current statutorily required contribution is 96.01% of the prior year's contribution. When measured as a percentage of payroll, the contribution level has changed from approximately 51.28% to 47.71%.

Factors Influencing the Choice of Actuarial Assumptions

As part of the consulting process, it is our policy to talk with selected members of the Board of Trustees and the Sponsor's representatives for the **City of Evanston Firefighters' Pension Fund** in order to obtain information which will enable the Actuary to properly choose the actuarial assumptions which are most appropriate for the current cost determination for the pension fund.

**VALUATION OBJECTIVES  
(Continued)**

Prior to the meeting, statistics are compiled concerning historical investment returns, salary increases, retirement incidence and other factors which are influential in the actuarial assumption setting process. Based upon an analysis of the specifics as they relate to the **City of Evanston Firefighters' Pension Fund** and a general understanding of the inter-relationships of the actuarial assumptions, the Board, the Sponsor and the Actuary reach a mutual agreement as to the assumptions which will be used in the current actuarial valuation.

Published statistics regarding experience for police and firefighters are available from the State of Illinois Department of Insurance. These statistics form the basis of the actuarial assumptions selected by the State Actuary in the valuation of pension funds covered under the Downstate Pension System. We have found in our consulting, that whenever appropriate, the actuarial assumptions used by the State Actuary are relied upon as a starting point. However, in order to make the calculations more "***Evanston-sensitive***", the analysis of the actual historical performance is carefully examined.

Experience Analysis

As discussed earlier, each year the actuarial process examines the experience of the fund. General parameters indicate that a variance of less than 3% of the unfunded liability is acceptable to assure that the assumptions used remain suitable. The measurement compares the actual unfunded liability to the expected unfunded liability. The total gain and loss developed is then analyzed by individual assumption to assure appropriateness. Based upon the results of this year's analysis, both in aggregate and individually, we have determined that the chosen assumptions remain suitable for continued use. Please see the section regarding change in fiscal year to further explain the change in the annual contribution.

Demographic considerations

For this valuation it was noted that the force continues to remain stable as to its size and demographic composition. In the current valuation, it was observed that the number of inactive participants (142, exclusive of terminated participants who are due a refund of their contributions) as compared to active participants (106) in the Fund is slightly higher than the State average (57% of the total participants are inactive as compared to a State average of 39%); on a liability basis the Fund is also slightly higher than the State averages. Nonetheless, the average age and service of the active participating group is essentially at the State average.

Of further concern, is the fact that there are currently 18 firefighters who are eligible to retire and 11 firefighters who will become eligible in the next 5 years. This represents about 27% of the current active group. Additionally, pension payments have been escalating. Nonetheless, absent a large growth in the active force, with proper funding, the fund's position should become more favorable for the foreseeable future and although improving the fund is still not in a strong financial condition.

As would be expected in this situation, a very large portion of the assets available for investment has been committed to provide benefits for existing pensioners and beneficiaries. Essentially



**VALUATION OBJECTIVES  
(Continued)**

then, all of the assets in the plan are already dedicated to cover the liabilities for the currently retired participants. Additionally, pension disbursements on an annual basis total approximately \$6.8 million and investment earnings are currently insufficient to provide for these payments on an ongoing basis and generally have been for the past few years.

As indicated last year, municipal contributions and contributions by active firefighters are being used to pay current expenses. These funds are generally the major source of new funds for investment purposes to accumulate reserves. Even with improved investment returns, the maturing of the employee group requires that the fund be carefully monitored during the next few years to assure that an orderly funding progress is maintained. If investment income remains insufficient to pay the existing pensioners, then City and participant contributions will continue to be used.

The Trustees should be advised that this is a potentially dangerous situation regarding the fund. Nonetheless, the fund currently is modestly growing and is clearly on a path to recovery.

Financial considerations

In these uncertain times, the fund continues to experience very limited short-term investment growth as can be noted in the charts in Section 5B and 5C of this valuation. Nonetheless, the fund continues to maintain adequate funded ratios. The fund has earned marginal rates of return over the short term. As shown in Exhibit 5-C of our report, the composite rate of return for the fund since 2009 is 2.96%, however longer term results indicate a sounder overall rate of return. The investment smoothing method adopted initially by the fund and now mandated by statute serves to level the contribution and shield against annual investment volatility. However, it is not unnoticed that annual pension payments far exceed the investment income and an annual investment return of over 12% would be needed to cover the outgoing benefit expenses. Clearly municipal contributions will remain at high levels until the fund can annually increase its investment return.

Effect of change in fiscal year

P.A. 96-1495, effective January 1, 2011 provided the following language relating to amortization payments:

“...an annual amount sufficient to bring the total assets of the pension fund up to 90% of the total actuarial liabilities of the pension fund by the end of municipal fiscal year 2040, as annually updated and determined by an enrolled actuary...”

There has been speculation as to what constitutes municipal fiscal year 2040 for funds which maintain off calendar years. We took a conservative view last year and assumed the final amortization payment would occur on February 28, 2040. With the change in fiscal year we now assume that the final amortization payment will occur on December 31, 2040 which has a positive effect of extending the amortization period and thereby lowering the amortization cost in the current fiscal year. This anomaly should not occur in future years.

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## RESULTS OF VALUATION

The following exhibits present the results of our actuarial valuation of the **City of Evanston Firefighters' Pension Fund** for the fiscal year January 1, 2012 through December 31, 2012.

Exhibit 1 indicates that the recommended minimum contribution, calculated using the Entry Age Normal Cost method (EANC), from the City is \$6,126,383 or 66.24% of total participating payroll. **Under the Entry Age Normal actuarial cost method selected, this percentage of payroll should remain reasonably level over the lifetime of the plan.**

Exhibit 1 also indicates that the statutory minimum contribution, calculated using the Projected Unit Credit method (PUC), from the City is \$4,412,942 or 47.71% of total participating payroll. **Under the Projected Unit Credit actuarial cost method selected, this percentage of payroll should increase over the lifetime of the plan.**

Exhibits 2 and 3 provide specific information used to develop the recommended minimum and statutorily required City contribution.

Exhibit 4 presents a brief description of the demographic characteristics of the current member group.

Exhibit 5 shows information relating to the pension assets.

Appendix 1 provides information in accordance with the Governmental Accounting Standards Board relating to financial disclosure of pension costs in the auditor's report.

GENERAL VALUATION RESULTS FOR FISCAL YEAR  
JANUARY 1, 2012 THROUGH DECEMBER 31, 2012

Recommended Minimum Contribution

1.	Entry Age Normal Cost:	\$ 2,367,316
2.	Unfunded Actuarial Accrued Liability (or Surplus):	66,610,442
3.	Actuarial Value of Assets:	55,082,975
4.	Annual Salaries of Active Firefighters:	8,893,000
5.	Recommended Minimum Contribution from the City:	6,126,383
	Contribution Percentage:	66.24%*

Statutory Minimum Contribution

1.	Projected Unit Credit Normal Cost:	\$ 2,380,843
2.	Unfunded Actuarial Accrued Liability (or Surplus):	62,413,316
3.	Actuarial Value of Assets:	55,082,975
4.	Annual Salaries of Active Firefighters:	8,893,000
5.	Statutory Minimum Contribution from the City:	4,412,942
	Contribution Percentage:	47.71%*

\* Projected for the fiscal year ending December 31, 2012.

SUMMARY OF SPECIFIC VALUATION RESULTS

	<u>Number</u>	<u>Actuarial Present Value of Projected Benefits</u>	<u>Entry Age Normal Cost</u>	<u>Projected Unit Credit Normal Cost</u>
1. Active Firefighters:	106			
Retirement Pension:		\$48,568,323	\$1,585,007	\$1,631,720
Survivors Pension:		2,251,067	120,616	116,401
Disability Pension:		12,098,692	612,848	595,119
Withdrawal Pension:		543,341	48,845	37,603
		<u>                    </u>	<u>                    </u>	<u>                    </u>
TOTAL . . . . .	106	\$63,461,423	\$2,367,316	\$2,380,843
2. Inactive Firefighters and Survivors:				
Normal Retirees:	88	\$57,282,818		
Widows (Survivors):	30	7,918,032		
Children (Survivors):	0	0		
Disabled Retirees:	24	17,894,519		
Deferred Vested:	0	0		
Terminated/Separated:	<u>  3</u>	<u>  66,864</u>		
		<u>                    </u>		
TOTAL . . . . .	145	\$83,162,233		

SUMMARY OF SPECIFIC VALUATION RESULTS  
 (Continued)

	<u>Entry Age Normal (EAN)</u>	<u>Projected Unit Credit (PUC)</u>
3. Total Actuarial Present Value of Projected Benefits:	\$146,623,656	N/A
4. Actuarial Present Value of Future Normal Costs:	24,930,239	N/A
5. Actuarial Accrued Liability: [(3) - (4)]	121,693,417	117,496,291
6. Actuarial Value of Assets:	55,082,975	55,082,975
7. Unfunded Actuarial Accrued Liability (or Surplus): [(5) - (6)]	66,610,442	62,413,316
8. Funded Ratio Percentage: [(6) ÷ (5)] x 100	45.26%	46.88%

HISTORY OF FUNDED PERCENTAGES

For the Year beginning March 1	<u>Valuation Assets</u>	<u>EAN Accrued Liabilities</u>	<u>EAN Funded Percentage</u>	<u>PUC Accrued Liabilities</u>	<u>PUC Funded Percentage</u>
2012*	\$55,082,975	\$121,693,417	45.26%	\$117,496,291	46.88%
2011	54,214,525	119,011,406	45.55	115,204,015.	47.06
2010	52,021,778	129,493,139	40.17	N/A	N/A
2009	49,410,755	119,852,896	41.23	N/A	N/A
2008	47,006,917	111,696,236	42.09	N/A	N/A

\* Fiscal year changed to January 1.

DEVELOPMENT OF RECOMMENDED MINIMUM CITY CONTRIBUTION

	Fiscal Year January 1, 2012 through <u>December 31, 2012</u>
1. Entry Age Normal Cost:	\$2,367,316
Interest to December 31, 2012:	<u>165,712</u>
(a) Total	\$2,533,028
(b) 17½% of Projected Payroll	1,556,275
(c) Minimum Cost Payable, greater of (a) and (b):	\$2,533,028
2. Recommended Minimum Payment to Amortize 90 % of the Entry Age Normal Unfunded Accrued Liability <u>as a level dollar amount</u> over 28.99932 Years from January 1, 2012 with interest to December 31, 2012 :	4,434,188
3. Credit for Surplus:	0
4. Initial Recommended Minimum Contribution for Fiscal Year 2012: [(1) + (2) + (3)]	6,967,216
5. Statutory Minimum Contribution (Exhibit 3B line 5)	5,253,775
6. Total Recommended Minimum Contribution for Fiscal Year 2012: [Greater of Line 4 and Line 5]	6,967,216
7. Active Member Contributions (9.91% of Salaries):	840,833
8. Net Recommended Minimum City Contribution: [(6) - (7)]	6,126,383

**DEVELOPMENT OF STATUTORILY REQUIRED CITY CONTRIBUTION**  
 (NOTE THAT THIS CONTRIBUTION CALCULATION IS NOT RECOMMENDED)

	Fiscal Year January 1, 2012 through <u>December 31, 2012</u>
1. Projected Unit Credit Normal Cost:	\$2,380,843
Interest to December 31, 2012:	<u>166,659</u>
(a) Total	\$2,547,502
(b) 17½% of Projected Payroll	1,556,275
(c) Minimum Cost Payable, greater of (a) and (b):	\$2,547,502
2. Minimum Payment to Amortize 90% of the Projected Unit Credit Unfunded Accrued Liability <u>as a level percentage of payroll</u> over 28.99932 Years from January 1, 2012 with interest to December 31, 2012:	2,706,273
3. Credit for Surplus:	0
4. Total Statutorily Required Contribution for Fiscal Year December 31, 2012: [(1) + (2) + (3)]	5,253,775
5. Active Member Contributions (9.455% of Salaries):	840,833
6. Statutorily Required City Contribution: [(4) - (5)]	4,412,942

**RECONCILIATION OF THE CHANGE  
IN THE STATUTORILY REQUIRED CITY CONTRIBUTION**

1.	Statutorily Required Contribution for Year ending December 31, 2011:	\$4,596,235
2.	Increase in Normal Cost and Amortization Payment due to anticipated pay changes:	198,955
3.	Increase/(Decrease) in Normal Cost resulting from actual pay changes:	( 7,532)
4.	Effect of Asset Smoothing:	16,613
5.	Increase/(Decrease) resulting from changes in assumptions:	0
6.	Increase/(Decrease) resulting from other demographic and financial sources (retirements, deaths, new entrants, salary changes, etc.):	(391,329)
7..	Statutorily Required Contribution for Year ending December 31, 2012:	\$4,412,942



DERIVATION OF EXPERIENCE GAIN(LOSS) AND COST METHOD CHANGE  
AS OF JANUARY 1, 2012

1.	PUC Unfunded Actuarial Accrued Liability at March 1, 2011	\$60,989,490
2.	PUC Normal Cost Due at 3/1/2011:	1,953,375
3.	Interest on (1) and (2) to January 1, 2012 (at 7.00% per year):	3,671,668
4.	Contributions made for the prior year with interest to January 1, 2012:	5,245,974
5.	Expected PUC Unfunded Actuarial Accrued Liability at January 1, 2012 Before Assumption Changes [(1) + (2) + (3) - (4)]:	61,368,559
6.	Change in PUC Unfunded Actuarial Accrued Liability due to Assumptions Change at January 1, 2012:	0
7.	Expected Unfunded Actuarial Accrued Liability at January 1, 2012 [(5) + (6)]:	61,368,559
8.	Actual PUC Unfunded Actuarial Accrued Liability at January 1, 2012:	62,413,316
9.	Gain (Loss) for the prior Plan Year [(7) - (8)]:	<b><u>\$ (1,044,758)</u></b>

DERIVATION OF EXPERIENCE GAIN(LOSS) AS OF JANUARY 1, 2012

The experience gain (loss) reported above is the net result of the following:

1.	<u>FINANCIAL SOURCES</u>	
	a) Investment experience (based upon market value of assets):	\$ (1,174,603)
	b) Contribution experience:	(334,364)
	c) Benefit Payments experience:	419,866
	d) Salary increases (greater)/lower than expected:	<u>70,486</u>
	Total from Financial Sources:	(1,018,615)
2.	<u>DEMOGRAPHIC SOURCES</u>	
	Mortality, retirement, disability, termination, etc.:	382,761
3.	<u>ACTUARIAL ADJUSTMENTS</u>	
	Market value adjustment for asset smoothing, including expenses	(408,903)
4.	<u>GAIN (LOSS) ALL SOURCES</u>	
	Total Gain (Loss) for the prior Plan Year [(1) + (2) + (3)]	\$ (1,044,758)

SUMMARY OF DEMOGRAPHIC INFORMATION AS OF JANUARY 1, 2012

	<u>Number</u>	<u>Projected Annual Salaries (Fiscal Year 2012)</u>
Active Firefighters:	106	\$8,893,000

	<u>Number</u>	<u>Total Monthly Benefits</u>
Normal Retirees:	88	\$389,194
Survivors (Widows):	30	89,293
Survivors (Children):	0	0
Disabled Retirees:	24	96,505
Deferred Vested:	0	0
Terminated/Separated:	3	66,864 *

\* Return of Contributions

The actuarial valuation was performed as of January 1, 2012 to determine contribution requirements for fiscal year 2012.

AGE AND SERVICE DISTRIBUTION

Attained Age	COMPLETED YEARS OF SERVICE											Total	Average Salaries				
	0-1	2-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+							
15-19																	
20-24	1																55,342
25-29	8	14															68,124
30-34	1	9	3	1													78,774
35-39	2	4	7	4													79,498
40-44		1	6	9	3												85,440
45-49			2	0	2	7											102,830
50-54				1	2	4	4	2									98,762
55-59				1		1	1	3	1								89,838
60-64																	109,242
65+																	
<b>TOTAL</b>	<b>12</b>	<b>28</b>	<b>18</b>	<b>16</b>	<b>7</b>	<b>12</b>	<b>5</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>106</b>	<b>\$83,896</b>					

Age = 39.83 Years

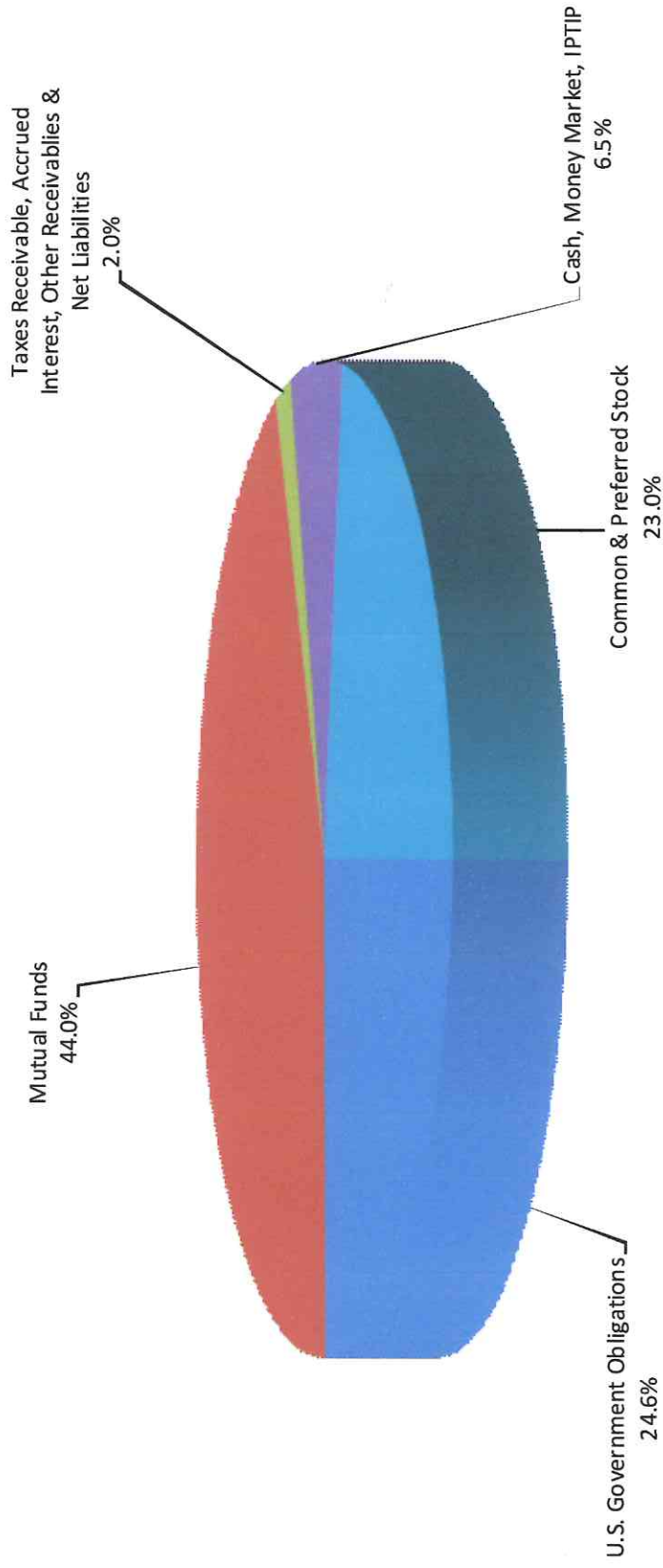
Service = 11.93 Years

ASSET INFORMATION

Cash, Money Market, IPTIP	\$3,572,681
Certificates of Deposit	0
State and Local Obligations	0
U.S. Government Obligations	13,458,593
Insurance Company Contracts	0
Pooled Investment Accounts	0
Mutual Funds	24,101,512
Common & Preferred Stock	12,609,091
Taxes Receivable	881,740
Accrued Interest	95,038
Other Receivables	106,396
Net Liabilities	(6,781)
	<hr/>
Net Present Assets at Market Value	\$54,818,370

The chart on the following page shows a percentage of invested assets.

### ASSET INFORMATION



DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS

	Item	Amount	Weight for Timing	Weighted Amount
1.	Market Value of Assets, March 1, 2011*			\$54,358,822
2.	Actual Income and Disbursements in prior year weighted for timing			
	Contributions Received During 12/31/11 fye	5,109,503	50.00%	2,554,752
	Miscellaneous Revenue	0	50.00%	0
	Benefit Payments and Expenses Made During 12/31/11 fye	5,854,015	(50.00)%	<u>(2,927,008)</u>
	Total			( 372,256)
3.	Market Value of assets adjusted for actual income disbursements [(1) + 2(d)]*			\$53,986,566
4.	Assumed rate of return on plan assets for the year		7.00%	
5.	Expected return on assets [(3) x (4)]			\$ 3,149,216
6.	Market Value of Assets, March 1, 2011*			<u>\$54,358,822</u>
7.	Income (less investment income) for prior year			5,109,503
8.	Disbursements paid in prior year			5,854,015
9.	Market Value of Assets, January 1, 2012*			\$54,818,370
10.	Actual Return [(9) + (8) - (7) - (6)]			1,204,060
11.	Investment Gain/(Loss) for Prior Year [(10) - (5)]			\$ (1,945,156)

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS  
 (Continued)

12. Market Value of Assets, January 1, 2012:*				\$54,818,370
13. Deferred investment gains and (losses) for last 4 years:				
	<u>Plan Year Beginning</u>	<u>Gain/(Loss)</u>	<u>Percent Deferred</u>	<u>Deferred Amount</u>
a)	2011**	\$ (1,945,156)	80%	\$ (1,556,125)
b)	2010	785,005	60%	471,003
c)	2009	3,282,070	25%	820,518
d)	Total	\$ 2,121,919		\$ ( 264,605)
14. Actuarial value of plan assets for GASB reporting, January 1, 2012: Item (12) less item 13(e)*				\$55,082,975
15. Taxes receivable:				0
16. Actuarial value of plan assets for funding January 1, 2012 :				\$55,082,975

Notes: \* excluding taxes receivable

\*\*The calculated value is determined by adjusting the market value of assets to reflect investment gains and losses (the difference between the actual investment return and the expected investment return) during years prior to 2010 at 25%per year and during years following 2009 at 20%per year..

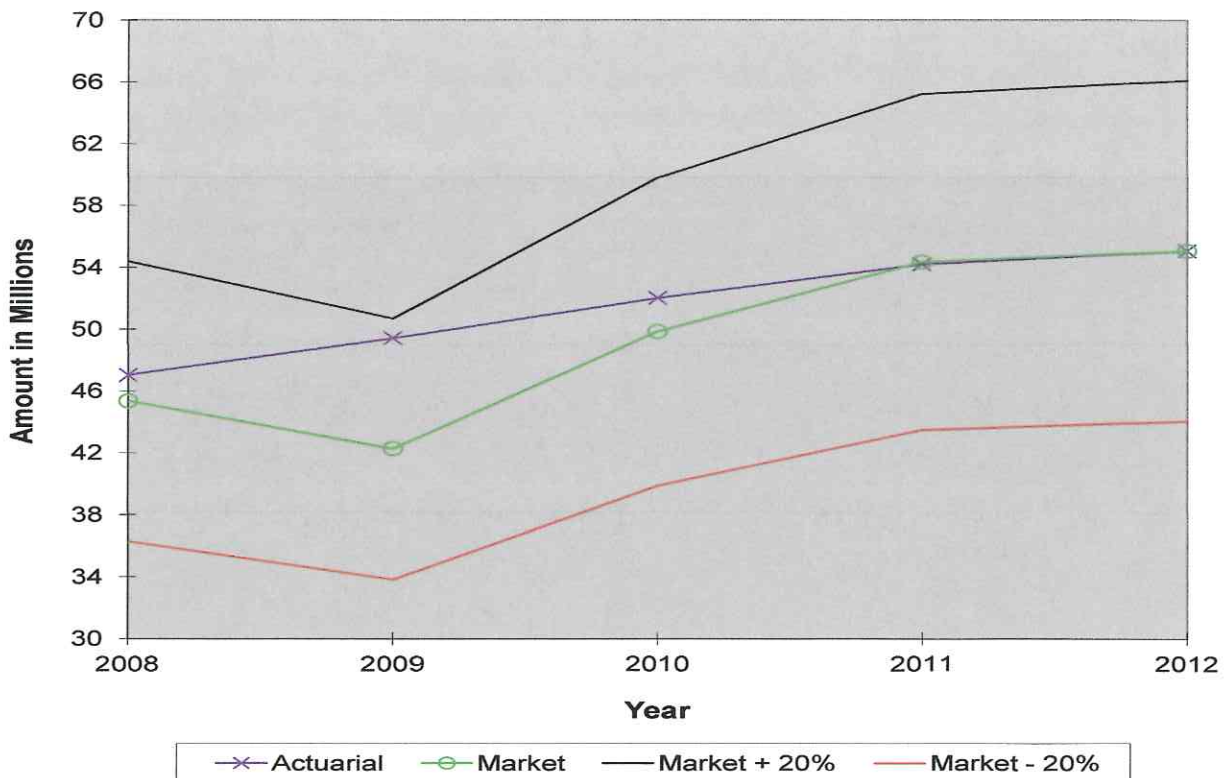


**ASSET HISTORY**

<u>For the Year beginning March 1</u>	<u>Actuarial Value of Assets</u>	<u>Market Value of Assets</u>
2012*	\$55,082,975	\$54,818,370
2011	54,214,525	54,358,823
2010	52,021,778	49,840,345
2009	49,410,755	42,249,545
2008	47,006,917	45,343,765

In 2012 the fiscal year was changed to January 1

The chart below presents a comparison between the Actuarial Value of Assets and the Market Value of Assets for the current year and the five preceding years. The chart also illustrates a corridor 20% above and 20% below the Market Value of Assets.

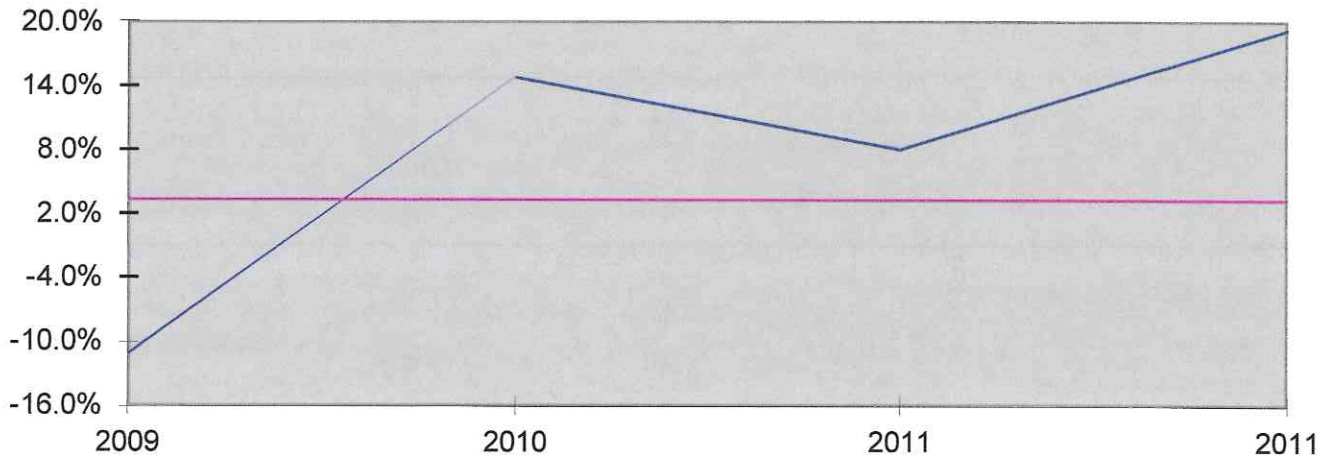


**ANALYSIS OF INVESTMENT RETURN**

<u>Fiscal Year Ending February 28</u>	<u>Annual Rate of Return</u>
2011*	1.91%
2011	8.10
2010	14.83
2009	-11.18
<u>Composite</u>	
2009-2011	2.96%

\*Fiscal Year changed to December 31

The following chart presents a progression of these percentages in graphical form.



THIRTY - YEAR PROJECTION OF PAYMENTS

Year	Termination		Payouts from Active Group Upon		Retirement	Disability	Payouts from		Total
	Lump Sum	Deferred Pension	Death	Retired Group			Deferred Pensioners		
2011	11,089	0	29,059	274,040	55,061	6,899,920	66,864	7,336,033	
2012	8,398	0	41,906	509,784	107,902	6,774,961	0	7,442,951	
2013	7,831	0	42,541	726,649	158,512	6,693,839	0	7,629,372	
2014	4,819	0	56,736	952,319	210,152	6,595,918	0	7,819,944	
2015	4,218	0	69,106	1,151,212	265,869	6,513,119	0	8,003,524	
2016	3,693	0	82,868	1,337,593	323,923	6,432,578	0	8,180,655	
2017	1,448	0	93,921	1,529,461	378,396	6,335,709	0	8,338,935	
2018	0	0	107,500	1,754,182	436,786	6,255,510	0	8,553,978	
2019	0	0	120,553	1,961,185	495,083	6,168,271	0	8,745,092	
2020	0	0	132,976	2,164,493	554,953	6,066,333	0	8,918,755	
2021	0	0	145,937	2,397,894	614,454	5,959,053	0	9,117,338	
2022	0	0	158,878	2,620,034	674,934	5,867,308	0	9,321,154	
2023	0	0	172,694	2,833,920	737,646	5,744,804	0	9,489,064	
2024	0	0	185,740	3,061,236	802,060	5,611,587	0	9,660,623	
2025	0	0	198,772	3,314,282	868,413	5,465,994	0	9,847,461	
2026	0	0	211,467	3,558,758	937,471	5,306,360	0	10,014,056	
2027	0	0	224,143	3,813,310	1,007,712	5,131,821	0	10,176,986	
2028	0	0	235,600	4,050,370	1,080,102	4,941,882	0	10,307,954	
2029	0	0	247,826	4,322,397	1,148,850	4,736,019	0	10,455,092	
2030	0	0	256,645	4,592,254	1,221,476	4,514,428	0	10,584,803	
2031	0	0	268,392	4,873,768	1,295,544	4,278,055	0	10,715,759	
2032	0	0	275,252	5,184,620	1,362,969	4,027,929	0	10,850,770	
2033	0	0	285,911	5,534,652	1,429,598	3,765,463	0	11,015,624	
2034	0	0	291,276	5,829,807	1,495,564	3,552,920	0	11,169,567	
2035	0	0	299,800	6,080,952	1,562,439	3,274,617	0	11,217,808	
2036	0	0	302,940	6,310,021	1,621,143	2,991,730	0	11,225,834	
2037	0	0	308,547	6,530,662	1,679,998	2,707,880	0	11,227,087	
2038	0	0	303,331	6,765,763	1,729,846	2,426,898	0	11,225,838	
2039	0	0	306,494	6,967,306	1,781,864	2,152,996	0	11,208,660	
2040	0	0	300,502	7,138,161	1,821,565	1,890,009	0	11,150,237	

GASB STATEMENT NO. 25 DISCLOSURE INFORMATION

DEVELOPMENT OF THE ANNUAL REQUIRED CONTRIBUTION OF THE MUNICIPALITY

	Fiscal Year January 1, 2012 through <u>December 31, 2012</u>
1. Entry Age Normal Cost	\$2,367,316
2. Actuarial Accrued Liability	121,693,417
3. Actuarial Value of Assets*	55,082,975
4. Unfunded Actuarial Accrued Liability	66,610,442
5. Payment to Amortize Unfunded Actuarial Accrued Liability Over 40 Years from the Effective Date of Application of GASB 25 (21 years remaining)	4,203,494
6. Total Annual Required Contribution for Fiscal Year December 31, 2012: [(1) + (5)]	6,570,810
7. Active Member Contributions (9.455% of Salaries):	840,833
8. <b>Annual Required Contribution (ARC) payable at the beginning of the current fiscal year: [(6) - (7)]</b>	<b>5,729,977</b>

\*Excluding Contributions Receivable

**GASB STATEMENT NO. 25 DISCLOSURE INFORMATION**  
**(Continued)**

NOTES:

- The Annual Required Contribution as of January 1, 2012 has been determined under the Governmental Accounting Standards Board Statement No. 25 and is required disclosure for the fiscal year ending December 31, 2012. The Entry Age Normal Cost and the Actuarial Accrued Liability were determined using the Entry Age Normal Cost Actuarial Cost Method.
- The Entry Age Normal Cost has been determined as a level percentage of projected payroll of the active members of the group. The amortization method for the Unfunded Actuarial Accrued Liability is determined as a level percentage of payroll amount over a closed Amortization Period as permitted in Governmental Accounting Standards Board Statement No. 25.
- All values were determined on the basis of the actuarial assumptions and methods as more fully described in Appendix 2 of this report.

**ACTUARIAL ASSUMPTIONS**  
*(Economic)*

***Investment Return***

7.00% per annum, compounded annually (net of expenses).

***Salary Increases***

Representative values of assumed salary increases are as follows:

<u>Age</u>	<u>Increase %</u>
25	4.8611
30	2.9848
35	2.0341
40	1.5239
45	1.3083
50	1.1846
55	1.1220

An additional inflation allowance of 2.50% per year is added to the above.

***Payroll Growth***

It was assumed that payroll will grow 4.00% per year.

***Actuarial Asset Basis***

The Pension Fund previously used an actuarial value of assets for both government accounting and funding purposes which recognized future gains and losses based on a 4-year smoothed market method. Starting with the actuarial valuation as of March 1, 2011, the actuarial value of assets recognizes future gains and losses based on a 5-year smoothed market method.

In a 5-year smoothed market method, the current market value of assets is reduced (increased) for the current year and each of three succeeding years, by a portion of the gain/(loss) in market value during the prior year. Such gain/(loss) is determined as the excess/(deficit) of the current market value of assets over the market value of assets as of the prior year, increased to reflect interest at the actuarial rate and adjusted to reflect contributions and benefit payments during the prior year. The portion of such gain/(loss) by which the current market value of assets is reduced (increased) shall be 80% in the current year, 60% in the first succeeding year, 40% in the second succeeding year and 20% in the third succeeding year.

Additionally, in accordance with government accounting standards, the actuarial value of assets is adjusted to remove any contributions receivable on the reporting date.

**ACTUARIAL ASSUMPTIONS  
(Demographic)**

Effective March 1, 2013, a 5-year cumulative analysis of the actuarial value of assets will be made. If the final actuarial value differentiates by more than 10% (plus or minus) from the market value of assets, the final actuarial value of assets will be further adjusted to equal 90% or 110% of the market value of assets.

***Mortality***

**Active Lives**

RP-2000 Combined Healthy Mortality Table (male) with blue collar adjustment and with a 200% load for participants under age 50 and 125% for participants age 50 and over. Five percent (5%) of deaths amongst active firefighters are assumed to be in the performance of their duty.

**Non-Active Lives**

RP-2000 Combined Healthy Mortality Table (male) with blue collar adjustment and with a 200% load for participants under age 50 and 125% for participants age 50 and over.

***Termination***

Illustrative rates of withdrawal from the plan for reasons other than death or disability are as follows:

<u>Age</u>	<u>Rate of Withdrawal</u>
20	.0397
25	.0250
30	.0146
35	.0079
40	.0042
45	.0029
50	---

It is assumed that terminated firefighters will not be rehired.

**ACTUARIAL ASSUMPTIONS  
 (Demographic)**

***Disability Rates***

Incidence of disability amongst firefighters eligible for disability benefits:

<u>Age</u>	<u>Rate</u>
25	.0009
30	.0025
35	.0046
40	.0065
45	.0097
50	.0166
55	.0314

15% of disabilities amongst active firefighters are assumed to be in the performance of their duty.

***Retirement Rates***

Retirements are assumed to occur between the ages of 50 and 69 in accordance with the following table:

<u>Age</u>	<u>Rate of Retirement</u>	<u>Age</u>	<u>Rate of Retirement</u>
50	.19	60	.28
51	.12	61	.36
52	.04	62	.44
53	.06	63	.52
54	.09	64	.60
55	.12	65	.68
56	.15	66	.76
57	.19	67	.84
58	.22	68	.92
59	.25	69	1.00

***Marital Status***

85% of firefighters are assumed to be married.



**ACTUARIAL ASSUMPTIONS  
(Demographic)**

***Spouse's Age***

Wives are assumed to be 3 years younger than their husbands.

**ACTUARIAL ASSUMPTIONS  
(Additional)**

***Expenses***

None assumed.

***Actuarial Cost Method***

Projected Unit Credit for statutory minimum  
Entry Age Normal for recommended and GASB reporting

## SUMMARY OF PRINCIPAL PLAN PROVISIONS

### Definitions

**Tier 1 – For Firefighters first entering Article 4 prior to January 1, 2011**

**Tier 2 – For Firefighters first entering Article 4 after December 31, 2010**

**Firefighter (4-106):** Any person employed in the municipality's fire service as a firefighter, fire engineer, marine engineer, fire pilot, bomb technician or scuba diver.

**Creditable Service (4-108):** Time served by a firefighter, excluding furloughs and leaves of absence in excess of 30 days, but including leaves of absence for illness or accident and periods of disability where no disability pension payments are received and also including up to 3 years during which disability payments have been received provided contributions are made.

Creditable Service from other specified agencies is also included. Combined service credit option is available on a voluntary basis.

### Pension (4-109)

#### **Normal Pension Age**

**Tier 1 -** Age 50 with 20 or more years of creditable service.

**Tier 2 -** Age 55 with 10 or more years of creditable service.

#### **Normal Pension Amount**

**Tier 1 -** 50% of the greater of the annual salary held in the year preceding retirement or the annual salary held on the last day of service, plus 2½% of such annual salary for service from 20 to 30 year (maximum 25%).

**Tier 2 -** 2½% of Final Average salary for each year of service. Final Average Salary is the highest salary based on the highest consecutive 96 months of the final 120 months of service

Early Retirement at age 50 with 10 or more years of service but with a penalty of ½% for each month prior to age 55.

Annual Salary capped at \$106,800 increased yearly by the lesser of ½ of the Consumer Price Index- Urban (CPI-U) or 3%.

Minimum Monthly Benefit: \$1,000

**SUMMARY OF PRINCIPAL PLAN PROVISIONS  
(Continued)**

Maximum Benefit Percentage: 75% of salary

Minimum Monthly Benefit: Annual step rate increases from \$1,030.00 to \$1,159.27.

Maximum Benefit Percentage: 75% of salary except line of duty.

***Termination Pension Amount***

Any firefighter who retires or is separated from service with at least 10, but less than 20 years of credited service, shall be entitled to a monthly pension commencing at age 60 equal to the monthly rate of compensation based on rank at separation multiplied by the applicable percentage below:

<u>Years of Credited Service</u>	<u>Applicable Percentage</u>
10	15.0 %
11	17.6
12	20.4
13	23.4
14	26.6
15	30.0
16	33.6
17	37.4
18	41.4
19	45.6

***Pension Increase***

**Non-Disabled**

**Tier 1** - 3% increase of the original pension amount after attainment of age 55 for each year elapsed since retirement, followed by an additional 3% of the original pension amount on each January thereafter. Effective July 1, 1993, 3% of the amount of pension payable at the time of the increase including increases previously granted, rather than 3% of the originally granted pension amount.

**Tier 2** - The lesser of ½ of the Consumer Price Index- Urban (CPI-U) or 3% increase of the original pension amount after attainment of age 60, followed by an additional 3% of the original pension amount on each January 1 thereafter.

For firefighters who retire after January 1, 1986, 3% increase of the original pension amount after attainment of age 55 for each year elapsed since retirement, followed by an additional 3% in each January thereafter.

SUMMARY OF PRINCIPAL PLAN PROVISIONS  
(Continued)

For firefighters who retire prior to January 1, 1986, but after July 1, 1971, the 3% increase commences at age 60, and for firefighters who retire before July 1, 1971, the 3% increase commences at age 65.

**Disabled**

3% increase of the original pension amount after attainment of age 60, followed by an additional 3% of the original pension amount in each January thereafter.

**Pension to Survivors (4-114)**

**Eligibility**

Death of a firefighter:

- (1) on active duty as a result of any illness or accident;
- (2) on disability retirement;
- (3) on retirement with 20 years of service;
- (4) as a terminated member who has rights to a benefit at age 60; and
- (5) as a deferred pensioner.

**Death Benefit**

**Tier 1** - 54% of annual salary based on attained rank at date of separation of service to surviving spouse, plus 12% of such salary to dependent children under 18.

100% of annual salary if death occurs in the line of duty.

Depending upon the survival of the spouse, dependent children benefits may increase to a level of 20% of firefighter's salary.

Greater of 100% of monthly retirement benefit or 54% of annual salary if completed 20 years of service or on disability retirement.

**Tier 2** – 66 2/3% of pension amount to surviving spouse (or dependent children), subject to the following increase: the lesser of ½ of the Consumer Price Index- Urban (CPI-U) or 3% increase of the original pension amount after attainment of age 60, followed by an additional 3% of the original pension amount on each January 1 thereafter.

**Minimum Monthly Survivor Pension**

Annual step rate increases from \$1,030.00 to \$1,159.27.

**Maximum Survivor Pension**

75% of such firefighter's salary.

SUMMARY OF PRINCIPAL PLAN PROVISIONS  
(Continued)

**Disability Pension - Line of Duty (4-110)**

***Eligibility***

Suspension or retirement from fire service due to sickness, accident or injury while on duty.

***Pension***

Greater of 65% of salary attached to rank at date of suspension or retirement and the retirement pension available.

Minimum Monthly Benefit: Annual step rate increases from \$1,030.00 to \$1,159.27.

For each dependent child under 18, an additional \$20 per month increased annually is granted each disabled member. Maximum total benefit is 75% of salary.

**Disability Pension - Not on Duty (4-111)**

***Eligibility***

Suspension or retirement from fire service for any cause other than while on duty. Member must have at least 7 years of credited service.

***Pension***

50% of salary attached to rank at date of suspension or retirement.

**Disability Pension - Occupational Disease (4-110.1)**

***Eligibility***

Suspension or retirement from service after 5 years of service from causes of heart disease, cancer, tuberculosis or other lung disease.

***Pension***

Same pension as in line of duty.

SUMMARY OF PRINCIPAL PLAN PROVISIONS  
(Continued)

**Disability Pension Option A (4-113(a))**

***Eligibility***

Member receiving a disabled pension who attains age 50 and whose years of creditable service and years of disablement total 20 years.

***Pension Option***

Eligible for pension increase upon conversion to retirement. Pension amount remains the same at date of conversion but subject to annual pension increases.

**Disability Pension Option B (4-113(b))**

***Eligibility***

Member receiving disability pension who attains age 50 and who had 20 years of creditable service at date of disablement.

***Pension Option***

Convert to normal pension based upon years of service at disablement and salary attached to rank on date of election.

**Other Provisions**

***Refund (4-116)***

At death with no survivors, contributions are returned to estate.

At termination with less than 20 years of service, contributions are refunded upon request.

***Contributions by Firefighters (4.118.1)***

9.455% of salary, including longevity, but excluding overtime pay, holiday pay, bonus pay, merit pay or other cash benefit. Additional 1% of salary if combined service credit option is selected.

## GLOSSARY

### ***Actuarial Accrued Liability***

See *Entry Age Normal Cost Method* and *Projected Unit Credit Cost Method*.

### ***Actuarial Assumptions***

The economic and demographic predictions used to estimate the present value of the plan's future obligations. They include estimates of investment earnings, salary increases, mortality, withdrawal and other related items. The *Actuarial Assumptions* are used in connection with the *Actuarial Cost Method* to allocate plan costs over the working lifetimes of plan participants.

### ***Actuarial Cost Method***

The method used to allocate the projected obligations of the plan over the working lifetimes of the plan participants. Also referred to as an *Actuarial Funding Method*.

### ***Actuarial Funding Method***

See *Actuarial Cost Method*

### ***Actuarial Gain (Loss)***

The excess of the actual *Unfunded Actuarial Accrued Liability* over the expected *Unfunded Actuarial Accrued Liability* represents an *Actuarial Loss*. If the expected *Unfunded Actuarial Accrued Liability* is greater, an *Actuarial Gain* has occurred.

### ***Actuarial Present Value***

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of *Actuarial Assumptions*.

### ***Actuarial Value of Assets***

The asset value derived by using the plan's *Asset Valuation Method*.

### ***Asset Valuation Method***

A valuation method designed to smooth random fluctuations in asset values. The objective underlying the use of an asset valuation method is to provide for the long-term stability of employer contributions.

### ***Employee Retirement Income Security Act of 1974 (ERISA)***

The primary federal legislative act establishing funding, participation, vesting, benefit accrual, reporting, and disclosure standards for pension and welfare plans.

**GLOSSARY  
(Continued)**

***Entry Age Normal Cost Method***

One of the standard actuarial funding methods in which the *Present Value of Projected Plan Benefits* of each individual included in the *Actuarial Valuation* is allocated on a level basis over the earnings of the individual between entry age and assumed exit age(s). The portion of this *Actuarial Present Value* allocated to a valuation year is called the *Normal Cost*. The portion of this *Actuarial Present Value* not provided for at a valuation date by the *Actuarial Present Value* of future *Normal Costs* is called the *Actuarial Accrued Liability*.

***Normal Cost***

The portion of the *Present Value of Projected Plan Benefits* that is allocated to a particular plan year by the *Actuarial Cost Method*. See *Entry Age Normal Cost Method* for a description of the *Normal Cost* under the *Entry Age Normal Cost Method*. See *Projected Unit Credit Cost Method* for a description of the *Normal Cost* under the *Projected Unit Credit Cost Method*.

***Present Value of Future Normal Costs***

The present value of future normal costs determined based on the *Actuarial Cost Method* for the plan. Under the *Entry Age Normal Cost Method*, this amount is equal to the excess of the *Present Value of Projected Plan Benefits* over the sum of the *Actuarial Value of Assets* and *Unfunded Actuarial Accrued Liability*.

***Present Value of Projected Plan Benefits***

The present value of future plan benefits reflecting projected credited service and salaries. The present value is determined based on the plan's actuarial assumptions.

***Projected Unit Credit Cost Method***

One of the standard actuarial funding methods in which the *Present Value of Projected Plan Benefits* of each individual included in the *Actuarial Valuation* is allocated by a consistent formula to valuation years. The *Actuarial Present Value* allocated to a valuation year is called the *Normal Cost*. The *Actuarial Present Value* of benefits allocated to all periods prior to a valuation year is called the *Actuarial Accrued Liability*.

***Statement No. 25 of the Governmental Accounting Standards Board (GASB No. 25)***

The accounting statement that established the standards of financial accounting and reporting for the financial statements of defined benefit pension plans.

***Unfunded Actuarial Accrued Liability***

The excess of the *Actuarial Accrued Liability* over the *Actuarial Value of Assets*.