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City of Meriden
Fire Employers'
Pension Plan

Actuarial Valuation Report

July 1, 2008

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April 23, 2009

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Executive Summary		
	2008	2006
Number of participants		
Active	76	84
Terminated vested	0	0
Vested in employee contributions only	0	0
Retired Disabled and Beneficiaries	<u>105</u>	<u>99</u>
Total	181	183
Total annual plan salaries	\$4,696,251	\$4,971,096
Average plan salary	61,792	59,180
Actuarial accrued liability	70,302,239	65,036,368
Asset value		
Market	50,657,660	43,041,422
Actuarial	51,281,856	46,026,189
Unfunded actuarial accrued liability	19,020,383	19,010,179
Funded Ratio	73%	71%
Normal cost - City	517,303	588,222
Contributions for next two fiscal years		
1 st Fiscal Year	2,419,234	2,435,594
2 nd Fiscal Year	2,441,615	2,464,361

Introduction

Purpose of the Valuation

The purpose of the valuation is to determine the funded status of the plan as well as the recommended cash contribution for the plan year.

The ultimate cost of a pension plan is based primarily on the level of benefits promised by the plan. The pension fund's investment earnings service to reduce the cost of plan benefits and expenses. Thus,

<i>City's ultimate cost</i>	=	<i>benefits paid</i>	+	<i>expenses incurred</i>	-	<i>investment return</i>	-	<i>employee contributions</i>
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The actuarial cost method distributes this ultimate cost over the working lifetime of current plan participants. By means of this budgeting process, costs are allocated to both past and future years, and a cost is assigned to the current year. The current year's allocated cost, or normal cost, is the building block upon which the range of annual cash contributions is developed.

Information Available in the Valuation Report

The Executive Summary and Introduction are intended to emphasize the notable results of the valuation from the perspective of the Plan Sponsor. Supporting technical detail is documented in Valuation Results and Actuarial Basis. A concise summary of the principal provisions of the Plan is outlined in Summary of Plan Provisions.

Contribution for 2010 and 2011 Fiscal Years

The actuarial valuation as of July 1, 2008 produces the contribution for the City's 2010 and 2011 fiscal years. The actuarially calculated contribution payable (after allowing for employee contributions) is as follows:

Fiscal Year Ending	
2010	2011
Amount	Amount
\$2,419,234	\$2,441,615

Introduction

(continued)

Asset Performance

The plan's assets provided the following rates of return on plan assets during the past two fiscal years.

	Fiscal Year Ending	
	2007	2008
Market Value Basis	15.3%	6.7%
Actuarial Value Basis	7.9%	7.7%

The Actuarial Value of assets, rather than the Market Value, is used to determine plan contributions. The Actuarial Value spreads the asset volatility over five years, thereby smoothing out fluctuations that are inherent in the Market Value.

The valuation uses a long-term investment return assumption of 8.00% on the Actuarial Value of assets. Because the actual return in 2007 and 2008 was less than this assumption, there was an actuarial loss from assets.

Participant Data

The valuation incorporates assumptions anticipating changes in the demographics of the participant population. Actual experience will produce greater or smaller than expected increases in the actuarial liabilities.

There were some liability losses which combined with the asset losses caused an increase in the contribution.

Plan Changes

There have been no changes since the last valuation.

Assumption and Cost Method Changes

There have been no changes since the last valuation.

Changes Since The Last Valuation

None.

Certification

This report presents the results, as of July 1, 2008, of the annual actuarial valuation for the City of Meriden Fire Employees' Pension Plan. The valuation has been performed in accordance with generally accepted actuarial principles and practices.

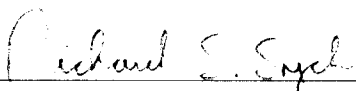
In preparing this valuation, we have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Plan Sponsor. We have audited neither the employee data nor the financial information, although we have reviewed them for reasonableness.

The results in this valuation report are based on the Plan as summarized in the Plan Provisions section of this report.

The valuation report does not reflect any local ordinances, or other agreements, that require a minimum or maximum funding amount.

In our opinion, this valuation fairly reflects the actuarial position of the Plan. We certify that the funding methods and assumptions that are the basis of this valuation are reasonable, and that the assumptions represent our best estimate of anticipated experience under the Plan.

We are members of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.



Richard S. Sych, FSA, MAAA,
Enrolled Actuary



Timothy Ryor, FSPA, FCA, MAAA,
Enrolled Actuary

April 23, 2009

Valuation Results

A. Actuarial Balance Sheet and Funded Ratio

	July 1, 2008	July 1, 2006
Actuarial Liabilities		
Accrued Liability for:		
Active Employees	\$23,201,293	\$24,089,202
Retirees Disabled and Beneficiaries	47,100,946	40,947,166
Terminated Vested Employees	<u>0</u>	<u>0</u>
Total	70,302,239	65,036,368
Source of Funds		
Plan Assets	\$51,281,856	\$46,026,189
Unfunded Accrued Liability	<u>19,020,383</u>	<u>19,010,179</u>
Total	\$70,302,239	65,036,368
Funded Ratio		
Plan Assets divided by Actuarial Accrued Liability	73%	71%

Valuation Results

(continued)

B. Valuation Results – July 1, 2008 and Employer Contribution For Fiscal 2010 and 2011

Based on the employee data and asset information furnished us, the actuarial methods and assumptions and the plan provisions, the results of the July 1, 2008 valuation are:

	Fire Plan
1. a. Total normal cost	817,572
b. Employee contributions	(300,269)
c. Town normal cost	517,303
2. Accrued liability	
a. Active	23,201,293
b. Vested	-
c. Retirees, Beneficiaries, Disabled	47,100,946
d. Total accrued liability	70,302,239
3. Actuarial value of assets	51,281,856
4. Unfunded accrued liability: (2d) - (3)	19,020,383
5. Payment on unfunded accrued liability	
a. Interest rate	8.00%
b. Amortization years	21
c. Payment	1,758,192
6. Estimated administrative expenses	30,000
7. Annual town cost, adjusted for timing	2,397,714
8. Payroll	4,696,251
a. Cost as a percentage of payroll	51.06%
9. Budget for Fiscal Year ending June 30, 2010	
a. Normal cost	537,995
b. Amortization	1,758,192
c. Expenses	30,000
d. Total, adjusted for timing	2,419,234
10. Budget for Fiscal Year ending June 30, 2011	
a. Total, adjusted for timing	2,441,615

Valuation Results

(continued)

C. Assets

Development of Asset Market Values

Summary of Fund Activity		
	7/01/06 - 6/30/07	7/01/07 - 6/30/08
1. Beginning value	\$ 43,041,422	\$ 48,694,179
2. Contributions		
a. City contributions during year	2,615,076	2,435,400
a. Employee contributions during year	365,035	357,634
c. Total for plan year	2,980,111	2,793,034
3. Disbursements		
a. Benefit payments during year	3,777,025	3,975,490
b. Administrative expenses during year	42,385	42,385
c. Other	20,927	20,710
d. Total for plan year	3,840,337	4,038,585
4. Net investment return		
a. Interest and dividends	1,082,253	1,044,800
b. Realized and unrealized gain (loss)	5,668,791	2,400,736
c. Investment-related expenses	(238,061)	(236,504)
d. Total	6,512,983	3,209,032
5. Ending value	48,694,179	50,657,660
6. Approximate rate of return	15.3%	6.7%

Valuation Results
(continued)

C. Assets

The Actuarial Value of assets is used in the determination of plan contributions. It phases in differences between the Market Value and the Expected Actuarial Value by recognizing 20% of the difference each year. A method of smoothing is used because the Market Value can swing widely from one year to the next, resulting in undesirable fluctuations in pension contributions

Determination of the Actuarial Value of Assets	
1. Actuarial value of assets at July 1, 2006	\$46,026,189
2. Employer and employee contributions for 2007	2,980,111
3. Disbursements during 2007	(3,819,410)
4. Expected return during 2007	<u>3,648,523</u>
5. Expected actuarial asset value at July 1, 2007	48,835,413
6. Market value July 1, 2007	48,694,179
7. Appreciation (depreciation) recognized 20% x [(6) – (5)]	(28,247)
8. Actuarial asset value at July 1, 2007 (5) + (7)	48,807,166
9. Contributions for 2008	2,793,034
10. Disbursements during 2008	(4,017,875)
11. Expected return during 2008	<u>3,855,580</u>
12. Expected actuarial asset value at July 1, 2008	51,437,905
13. Market value July 1, 2008	50,657,660
14. Appreciation (depreciation) recognized 20% x [(13) – (12)]	(156,049)
15. Actuarial asset value at July 1, 2008	51,281,856
16. Actuarial value as a percent of market value	101.2%
06-07 Year return on Act. Val. Assets	7.9%
07-08 Year return on Act. Val. Assets	7.7%

Valuation Results

(continued)

D. Membership Data

Employee Participation: July 1, 2006 – July 1, 2008

Participant Data					
	Active	Terminated Vested With Monthly Benefit Contributions Only		Retired Disabled and Beneficiaries	Total
Total Participants 7/01/06	84	0	0	99	183
Adjustments	0	0	0	0	0
Retirements non disabled	-4	0	N/A	4	0
Disability Retirement	-3	N/A	N/A	3	0
Terminations					
With vested benefit	0	0	N/A	N/A	0
Vested in contributions only	0	N/A	0	N/A	0
Lump sum settlements	0	0	0	0	0
Deaths					
Without beneficiary	0	0	0	-2	-2
With beneficiary	-1	0	0	-1	2
New beneficiaries	N/A	0	0	2	2
Rehires	0	0	0	0	0
New entrants	N/A	N/A	N/A	N/A	N/A
Total Participants 7/01/08	76	0	0	105	181
Average age					
7/1/2006	45.1				
7/1/2008	45.7				
Average service					
7/1/2006	18.8				
7/1/2008	19.6				
Total annual plan salaries					
7/1/2006	\$4,971,096				
7/1/2008	4,696,251				
Total monthly benefits					
7/1/2006		\$0		\$291,636	
7/1/2008		0		344,872	

Actuarial Basis

A. Actuarial Cost Methods

Asset Valuation Method

The Actuarial Value of assets used in the development of plan contributions phases in differences between the Market Value and the Expected Actuarial Value by recognizing 20% of the difference each year.

Actuarial Funding Method

The actuarial valuation method used in the cost calculations is the Entry Age Normal Actuarial Cost Method. Recommended annual contributions until the actuarial accrued liability is completely funded will consist of two pieces:

- a. Normal Cost - The actuarial cost to fund benefit units earned during the year.
- b. Amortization Payments of Unfunded Actuarial Accrued Liability - The actuarial cost to amortize the unfunded portion of the actuarial liability.

Process

The valuation is performed as of the first day of a plan year. The valuation is used to determine the City contributions for the following two fiscal years. To accomplish this objective, we apply the City's Normal Cost Accrual Rate from the valuation year, to the estimated payroll for the target year to determine the Normal Cost for that year. We assume the dollar amount of the amortization payments on the unfunded liability will remain unchanged between the two years.

Actuarial Basis
(continued)

B. Actuarial Assumptions

The actuarial assumptions used in the determination of costs and liabilities are as follows:

Interest: 8% compounded annually, net of investment expenses.

Salary Scale: It is assumed that salaries will increase by 4% per annum (compounded).

Mortality: RP-2000 Combined Healthy Blue Collar. 25% of deaths prior to retirement are considered service connected.

Termination prior to retirement: Sample rates are as follows:

<u>Age</u>	<u>Disability*</u>	<u>Withdrawal</u>
20	0.06%	0.00%
25	0.09	0.00
30	0.11	0.00
35	0.15	0.00
40	0.22	0.00
45	0.36	0.00
50	0.61	0.00
55	1.01	0.00
60	1.63	0.00

**100% of disabilities with less than 10 years of service are considered service connected.*

Actuarial Basis
(continued)

B. Actuarial Assumptions (continued)

Retirement Rates: Sample rates are as follows:

<u>Years of</u> <u>Service</u>	<u>Retirement</u>
25	20%
26-29	10
30	25
31-34	15
35	100

Percent Married: 75%.

Age of Spouse: Males are assumed to be three years older than their spouses.

Administrative Expense: We have included estimated administrative expenses in the development of the normal cost.

Cost of Living: Retirement date prior to April 1, 2003: 3.75%
Retirement date on or after April 1, 2003: 3.00%

Portion of benefit due to
Emoluments: Active liabilities are loaded 7.3% to reflect the portion of future benefits based on 50% of emoluments.

Summary of Plan Provisions

This summary outlines the major features of the Plan. It does not give full details or cover all aspects of the Plan. The actual terms and conditions of the Plan are stated documents with the City.

Effective date	Originally effective June 6, 1913. Amended and restated as of July 1, 2006.
Eligibility for Participation	Regular full-time firefighters hired prior to March 18, 2003, covered under the IAFF, Local 1148 collective bargaining agreement.
Years of Service	Completed whole years of employment during which employee has made required contributions.
Base Rate of Pay	Salary or wages including elective deferrals under 401(k) or Sec. 125, limited by IRC 401(a)(17).
Emoluments	Longevity payments, holiday pay, life insurance and health insurance minus cost share.
Accrued Benefit	2.2% of Base Pay x Years of Service up to 30 Years, plus 50% of current Emoluments.
Normal Retirement	
Age & Service Requirements	Earlier of <ul style="list-style-type: none"> • 25 Years of Service • age 65
Benefit	Accrued Benefit
Termination	
Prior to completion of 25 Years of Service	Return of employee contributions plus regular interest.
After completion of 10 Years of Service	Accrued Benefit, payable when Member would have completed 20 Years.

Disability	
Eligibility	None if service-related; otherwise completion of 10 Years of Service
Benefit	50% of Base Pay plus Emoluments.
Death Prior to Retirement	<p>Non-service related: Return of employee contributions plus regular interest.</p> <p>Service-related: Surviving spouse receives 100% of Accrued Benefit as if Officer had 25 Years of Service. Upon attainment of date Officer would have attained 25 Years, spouse's benefit decreases to 50% of the pension amount. Payable until death or remarriage.</p>
Post-retirement Death Benefit	Surviving spouse receives one-half of amount Member was receiving at time of death. Payable until death or remarriage.
Normal Form of Retirement Benefit	Single life annuity.
Employee Contributions	6½% of Base Pay plus Emoluments. (In addition, 1% is contributed to the Retiree Health Insurance Fund.)
COLA	<p>Retirement prior to January 1, 2003: based on increases in Base Pay for the rank held at retirement.</p> <p>Retirement after January 1, 2003: active members retiring with at least 25 Years of Service: 3% of Base Pay, excluding Emoluments</p>