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Confidential

June 3, 2011

Mr. Michael Lupkas Director of Finance City of Meriden 142 East Main Street Meriden, CT 06450

Re: City of Meriden Fire Employees' Pension Plan

Dear Mike:

It is a pleasure to present our review of the City of Meriden Fire Employees' Pension Plan as of July 1, 2010. Enclosed are twenty copies of the report.

This valuation develops the contribution for the fiscal years ending June 30, 2012 and June 30, 2013.

The important issues for you are summarized in the Executive Summary. All of the technical material is located at the end of the report. We hope you will find that this format addresses all the necessary issues in a manner that you and your advisors can easily work with.

I would be happy to meet with you to discuss this report in detail. Please let me know if you wish to do so, or if you would find it more convenient to discuss questions by telephone.

Sincerely,

Timothy Ryor, FSPA, FCA, MAAA, EA Senior Vice President and Consulting Actuary

/mmh Enclosure

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City of Meriden Fire Employees' Pension Plan

Actuarial Valuation Report July 1, 2010

Timothy Ryor, FCA, MAAA, EA Consulting Actuary

Brian Middendorf Pension Analyst

Table of Contents

	Page
Executive Summary	. 1
Introduction	2
Purposes of the Valuation	2
Information Available in the Valuation Report	2
Contribution for Fiscal Year 2012 and 2013	2
Asset Performance	3
Participant Data	3
Plan Changes	3
Assumption and Cost method Changes	3
Changes since the Last Valuation	3
Certification	4
Valuation Results	
A. Actuarial Balance Sheet	5
B. Valuation Results – July 1, 2010 and Employer Contribution for Fiscal Years 2012 and 2013	6
C. Assets	7
D. Membership Data	9
Actuarial Basis	
A. Actuarial Cost Methods	10
B. Actuarial Assumptions	11
Summary of Plan Provisions	13

Executive	Summary	
	2010	2008
Number of participants		
Active	70	76
Terminated vested	0	0
Vested in employee contributions only	0	0
Retired, Disabled and Beneficiaries	<u>106</u>	105
Total	176	181
Total annual plan salaries	\$4,800,571	\$4,696,251
Average plan salary	68,580	61,792
Actuarial accrued liability	74,993,738	70,302,239
Asset value		
Market	43,199,620	50,657,660
Actuarial	51,296,883	51,281,856
Unfunded actuarial accrued liability	23,696,855	19,020,383
Funded Ratio	68%	73%
Normal cost - City	520,280	517,303
Contributions for next two fiscal years		
1 st Fiscal Year	2,620,905	2,419,234
2 nd Fiscal Year	2,643,414	2,441,615

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,

City's ultimate	=	benefits	-4-	expenses	_	investment	_	employee	
cost		paid	'	incurred		return		contributions	

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 2012 and 2013 Fiscal Years

The actuarial valuation as of July 1, 2010 produces the contribution for the City's 2012 and 2013 fiscal years. The actuarially calculated contribution payable (after allowing for employee contributions) is as follows:

Fiscal Year Ending			
2012 2013			
Amount	Amount		
\$2,620,905	\$2,643,414		

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	
	2009	2010
Market Value Basis	-19.6%	14.3%
Actuarial Value Basis	2.2%	4.0%

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 2009 and 2010 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 has been a change to the mortality assumptions in conjunction with a change to retirement rates.

Changes Since The Last Valuation

The amortization period used to develop the contribution amounts has been changed to 30 years.

Certification

This report presents the results of the July 1, 2010 Actuarial Valuation for the City of Meriden Fire Employees' Pension Plan (the Plan) for the purpose of estimating the funded status of the Plan and determining the Annual Required Contribution (ARC) for the fiscal years ending June 30, 2012 and June 30, 2013. This report is intended to satisfy the requirements of Connecticut General Statute 7-450a. This report may not be appropriate for any other purpose.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

I certify that the actuarial assumptions and methods that were selected by me and represent my best estimate of anticipated actuarial experience under the Plan.

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

The results in this valuation report are based on the Plan as summarized in the *Summary of Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Actuarial Basis* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

I am a member of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.

Timothy Ryor, FSPA, FCA, MAAA, Enrolled Actuary

11-05126

June 3, 2011

A. Actuarial Balance Sheet and Funded Ratio

	July 1, 2010	July 1, 2008
Actuarial Liabilities Accrued Liability for: Active Employees Retirees, Disabled and Beneficiaries Terminated Vested Employees	\$26,342,865 48,650,873 0	\$23,201,293 47,100,946 <u>0</u>
Total	74,993,738	70,302,239
Source of Funds Plan Assets Unfunded Accrued Liability Total	\$51,296,883 <u>23,696,855</u> \$74,993,738	\$51,281,856 <u>19,020,383</u> \$70,302,239
Funded Ratio	600/	720/
Plan Assets divided by Actuarial Accrued Liability	68%	73%

(continued)

B. Valuation Results - July 1, 2010 and Employer Contribution For Fiscal 2012 and 2013

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, 2010 valuation are:

		Fire Plan
1. a. Total no	rmal cost	826,828
b. Employe	ee contributions	306,548
c. Town no	ormal cost	520,280
2. Accrued liabi	lity	
a. Active		26,342,865
b. Vested		-
c. Retirees,	Beneficiaries, Disabled	48,650,873
d. Total acc	crued liabilitity	74,993,738
3. Market value	of assets	43,199,620
4. Actuarial valu	ue of assets	51,296,883
5. Unfunded acc	crued liability: (2d) - (4)	23,696,855
6. Payment on u	infunded accrued liabilty	
a. Interest i	ate	8.00%
b. Amortiza	ation years	30
c. Payment		1,949,010
	ministrative expenses	30,000
8. Annual town	cost, adjusted for timing	2,599,262
9. Expected Pay	roll	4,800,571
a. Cost as a	percentage of payroll	54.14%
10. Budget for Fi	scal Year ending June 30, 2012	
a. Normal	cost	541,091
b. Amortiza	ation	1,949,010
c. Expense:	S	30,000
d. Total, ad	ljusted for timing	2,620,905
11. Budget for Fi	scal Year ending June 30, 2013	
a. Total, ad	ljusted for timing	2,643,414

(continued)

C. Assets

Development of Asset Market Values

Summary of	Fund Activity	
	7/01/08 - 6/30/09	7/01/09 - 6/30/10
 Beginning value Contributions City contributions during year 	\$ 50,657,660 2,464,361	\$ 39,327,842 2,419,234
a. Employee contributions during year c. Total for plan year	301,099 2,765,460	
 3. Disbursements a. Benefit payments during year b. Administrative expenses during year c. Transfers to OPEB d. Other e. Total for plan year 4. Net investment return a. Interest and dividends 	4,205,152 24,603 75,551 11,366 4,316,672 1,130,710	25,801 0 1,447 4,400,343 1,046,367
b. Realized and unrealized gain (loss)c. Investment-related expensesd. Total 5. Ending value	(10,750,739) (158,577) (9,778,606) 39,327,842	(257,895)
6. Approximate rate of return	-19.6	% 14.3%

(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 Ass	ets
1.	Actuarial value of assets at July 1, 2008	\$51,281,856
2.	Employer and employee contributions for 2009	2,765,460
3.	Disbursements during 2009	(4,229,755)
4.	Expected return during 2009	4,043,977
5.	Expected actuarial asset value at July 1, 2009	53,861,538
6.	Market value July 1, 2009	39,327,842
7.	Appreciation (depreciation) recognized $20\% \times [(6) - (5)]$	(2,906,739)
8.	Actuarial asset value at July 1, 2009 (5) + (7)	50,954,799
9.	Contributions for 2010	2,754,681
10.	Disbursements during 2010	(4,398,896)
11.	Expected return during 2010	4,010,615
12.	Expected actuarial asset value at July 1, 2010	53,321,199
13.	Market value July 1, 2010	43,199,620
14.	Appreciation (depreciation) recognized 20% x [(13) – (12)]	(2,024,316)
15.	Actuarial asset value at July 1, 2010	51,296,883
16.	Actuarial value as a percent of market value	118.7%
Andrew State of the State of th	08-09 Year return on Act. Val. Assets 09-10 Year return on Act. Val. Assets	2.2% 4.0%

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D. Membership Data

Employee Participation: July 1, 2008 – July 1, 2010

	Partic	ipant Data			
	Active	Terminated V Monthly I Contributio	Benefit	Retired Disabled and Beneficiaries	Total
Total Participants 7/01/08	76	0	0	105	181
Adjustments	0	0	0	0	0
Retirements – non disabled	-1	0	N/A	+1	0
Disability Retirement Terminations	-5	N/A	N/A	+5	0
With vested benefit	0	0	N/A	N/A	0
Vested in contributions only	0	N/A	N/A 0	N/A N/A	0
		0	0	0	0
Lump sum settlements Deaths	U	U	o l	U	U
Without beneficiary	0	0	0	- 5	-5
With beneficiary	0	0	0	-3	-3
New beneficiaries	N/A	0	0	+3	+3
Rehires	0	0	0	0	0
New entrants	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Total Participants 7/01/10	70	0	0	106	176
Average age					
7/1/2008	45.7				
7/1/2010	47.3				
Average service					
7/1/2008	19.6				
7/1/2010	21.1				
Total annual plan salaries				and the second s	
7/1/2008	\$4,696,251				
7/1/2010	4,800,571				
Total monthly benefits					
7/1/2008		\$0		\$344,872	
7/1/2010		0		366,642	

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. The amortization period was increased to 30 years effective with this July 1, 2010 valuation.

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:

Current: RP-2000 Blue Collar Fully Projected. 25% of

deaths prior to retirement are considered service

connected (Non-disabled). RP-2000 Disabled Mortality

(Disabled).

Previous: RP-2000 Combined Health Blue Collar. 25%

of deaths prior to retirement are considered service

connected.

Termination prior to retirement:

Sample rates are as follows:

<u>Age</u>	Disability*	<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:

Current: Sample rates are as follows:

Years of	
<u>Service</u>	Retirement
25	10%
26-29	5
30	40
31-34	20
35	100

Previous: Sample rates are as follows:

Years of	
<u>Service</u>	Retirement
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

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

Non-service related: Return of employee

contributions plus regular interest.

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.

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

Retirement prior to January 1, 2003: based on

increases in Base Pay for the rank held at

retirement.

Retirement after January 1, 2003: active members retiring with at least 25 Years of Service: 3% of

Base Pay, excluding Emoluments

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