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City of Meriden
Employees
Retirement
System

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	641	636
Terminated vested	46	54
Vested in employee contributions only	54	54
Retired and Beneficiaries	<u>427</u>	<u>400</u>
Total	1,168	1,144
Total annual plan salaries	\$31,405,160	\$30,170,844
Average plan salary	48,994	47,438
Actuarial accrued liability	123,480,133	114,597,050
Asset value		
Market	141,626,518	123,031,492
Actuarial	140,853,728	128,680,666
Unfunded actuarial accrued liability	(17,373,594)	(14,083,616)
Funded Ratio	114%	112%
Normal cost - City	2,300,354	2,041,138
Contributions for next two fiscal years		
1 st Fiscal Year	354,382	649,414
2 nd Fiscal Year	479,981	764,137

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 serve to reduce the cost of plan benefits and expenses. Thus,

<i>City's ultimate</i>	=	<i>benefits</i>	+	<i>expenses</i>	-	<i>investment</i>	-	<i>employee</i>
<i>cost</i>		<i>paid</i>		<i>incurred</i>		<i>return</i>		<i>contributions</i>

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
\$354,382	\$479,981

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	16.9%	6.0%
Actuarial Value Basis	8.7%	8.1%

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 greater than this assumption, there was an actuarial gain 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 small liability losses which were offset by the asset gains and the net result caused a decrease 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 Employees' Retirement System. The valuation has been performed in accordance with generally accepted actuarial principles and practices.

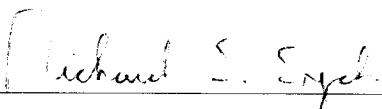
In preparing this valuation, we have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Plan Sponsor. We have audited neither the employee data nor the financial information, although we have reviewed them for reasonableness.

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	\$65,360,167	\$93,674,279
Retirees and Beneficiaries	56,323,990	46,439,632
Terminated Vested Employees	<u>1,795,975</u>	<u>2,660,714</u>
Total	123,480,133	114,597,050
Source of Funds		
Plan Assets	\$140,853,727	\$128,680,666
Unfunded Accrued Liability	<u>(17,373,594)</u>	<u>(14,083,616)</u>
Total	\$123,480,133	\$114,597,050
Funded Ratio		
Plan Assets divided by Actuarial Accrued Liability	114%	112%

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:

	City Plan			
	City	Fire	Police	Total
1. a. Total normal cost	2,923,528	163,564	415,033	3,502,125
b. Employee contributions	1,055,366	45,252	101,153	1,201,771
c. Town normal cost	1,868,162	118,312	313,880	2,300,354
2. Accrued liability				
a. Active	64,026,351	399,293	934,524	65,360,167
b. Vested	56,323,990	-	-	56,323,990
c. Retirees, Beneficiaries, Disabled	1,793,208	-	2,768	1,795,975
d. Total accrued liability	122,143,549	399,293	937,291	123,480,133
3. Actuarial value of assets	139,329,087	455,473	1,069,167	140,853,727
4. Unfunded accrued liability: (2d) - (3)	(17,185,538)	(56,180)	(131,876)	(17,373,594)
5. Payment on unfunded accrued liability				
a. Interest rate	8.00%	8.00%	8.00%	8.00%
b. Amortization years	12	12	12	12
c. Payment	(2,111,514)	(6,903)	(16,203)	(2,134,620)
6. Estimated administrative expenses	50,087	2,802	7,111	60,000
7. Annual town cost, adjusted for timing	(200,995)	118,779	316,980	234,764
8. Payroll	27,745,028	1,131,303	2,528,829	31,405,160
a. Cost as a percentage of payroll	-0.72%	10.50%	12.53%	0.75%
9. Budget for Fiscal Year ending June 30, 2010				
a. Normal cost	1,961,570	124,227	329,574	2,415,372
b. Amortization	(2,111,514)	(6,903)	(16,203)	(2,134,620)
c. Expenses	50,087	2,802	7,111	60,000
d. Total, adjusted for timing	(103,851)	124,931	333,301	354,382
10. Budget for Fiscal Year ending June 30, 2011				
a. Total, adjusted for timing	(1,849)	131,391	350,439	479,981

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	\$ 123,031,492	\$ 138,412,433
2. Contributions		
a. City contributions during year	195,528	659,542
a. Employee contributions during year	<u>1,236,368</u>	<u>1,290,393</u>
c. Total for plan year	1,431,896	1,949,935
3. Disbursements		
a. Benefit payments during year	5,099,215	5,885,488
b. Administrative expenses during year	748,691	729,375
c. Other	<u>546,968</u>	<u>215,090</u>
d. Total for plan year	6,394,874	6,829,953
4. Net investment return		
a. Interest and dividends	2,950,203	2,992,445
b. Realized and unrealized gain (loss)	17,393,716	5,101,658
c. Investment-related expenses	<u>0</u>	<u>0</u>
d. Total	20,343,919	8,094,103
5. Ending value	138,412,433	141,626,518
6. Approximate rate of return	16.9%	6.0%

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	\$ 128,680,666
2. Employer and employee contributions for 2007	1,431,896
3. Disbursements during 2007	(6,394,874)
4. Expected return during 2007	<u>10,095,934</u>
5. Expected actuarial asset value at July 1, 2007	133,813,622
6. Market value July 1, 2007	138,412,433
7. Appreciation (depreciation) recognized 20% x [(6) – (5)]	919,762
8. Actuarial asset value at July 1, 2007 (5) + (7)	134,733,384
9. Contributions for 2008	1,949,935
10. Disbursements during 2008	(6,614,863)
11. Expected return during 2008	<u>10,592,074</u>
12. Expected actuarial asset value at July 1, 2008	140,660,530
13. Market value July 1, 2008	141,626,518
14. Appreciation (depreciation) recognized 20% x [(13) – (12)]	193,198
15. Actuarial asset value at July 1, 2008	140,853,728
16. Actuarial value as a percent of market value	99.5%
06-07 Year return on Act. Val. Assets	8.7%
07-08 Year return on Act. Val. Assets	8.1%

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 and Beneficiaries	Total
Total Participants 7/01/06	636*	54	54	400	1,144
Adjustments	0	0	0	0	-2
Retirements	-49	-7	-7	56	0
Terminations					
With vested benefit	-3	3	3	0	0
Vested in contributions only	-7	N/A	N/A	0	0
Lump sum settlements	-19	-4	-4	0	-31
Deaths					
Without beneficiary	-1	0	0	-29	-30
With beneficiary	0	0	0	-5	-5
New beneficiaries	0	0	0	5	5
Rehires	0	0	0	0	0
New entrants	84	N/A	N/A	0	87
Total Participants 7/01/08	641*	46	54	427	1,168
Average age					
7/1/2006	48.4				
7/1/2008	48.1				
Average service					
7/1/2006	11.5				
7/1/2008	12.3				
Total annual plan salaries					
7/1/2006	\$30,170,844				
7/1/2008	31,405,160				
Total monthly benefits					
7/1/2006		\$26,780		\$414,907	
7/1/2008		27,796		497,341	

* As of 7/01/06: 606 City, 10 Fire, 20 Police
As of 7/01/08: 587 city, 18 Fire, 36 Police

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 5% per annum (compounded).

Mortality: 1994 Group Annuity Mortality Table.

Termination prior to retirement:

City Employees Sample rates are as follows:

<u>Age</u>	<u>Disability*</u>	<u>Withdrawal</u>
20	0.03%	5.44%
25	0.03	5.29
30	0.03	5.07
35	0.03	4.07
40	0.05	4.19
45	0.09	3.54
50	0.20	2.48
55	0.43	0.00
60	0.87	0.00

**25% of disabilities are considered service connected*

Actuarial Basis
(continued)

B. Actuarial Assumptions (continued)

Fire

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 deaths prior to retirement and 100% of disabilities are considered service connected*

Police

Sample rates are as follows:

<u>Age</u>	<u>Disability*</u>	<u>Withdrawal</u>
20	0.12%	0.00%
25	0.17	0.00
30	0.22	0.00
35	0.29	0.00
40	0.44	0.00
45	0.72	0.00
50	1.21	0.00
55	2.02	0.00
60	3.25	0.00

**100% of deaths prior to retirement and 100% of disabilities are considered service connected*

Actuarial Basis
(continued)

B. Actuarial Assumptions (continued)

Retirement Rates:

City Employees

Sample rates are as follows:

<u>Age</u>	<u>Retirement</u>
55	10%
56	2
57	3
58	4
59	3
60	6
61	7
62	13
63	9
64	9
65	100

Fire

Sample rates are as follows:

<u>Age</u>	<u>Retirement</u>
50	23%
51	5
52	5
53	8
54	3
55	10
56	8
57	3
58	10
59	3
60	5
61	5
62	2
63	3
64	2
65	100

Actuarial Basis
(continued)

B. Actuarial Assumptions (continued)

Police

Sample rates are as follows:

<u>Age</u>	<u>Retirement</u>
50	30%
51	5
52	5
53	11
54	2
55	14
56	11
57	5
58	2
59	2
60	2
61	3
62	3
63	3
64	2
65	100

Percent Married:

75% of male participants and 65% of female participants.

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.

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 in documents with the City.

Effective date	Originally effective July, 1972. Amended March 18, 2003 and May 1, 2003, respectively, to include police officers and firefighters hired after those dates. Amended and restated as of July 1, 2006.
Eligibility for Participation	Regular full-time employees (other than Members of the State Teachers' Retirement System), including elected and appointed officials, are eligible at hire.
Years of Service	Year and months (rounded) of employment during which employee has made required contributions.
Pay	Salary or wages including elective deferrals under 401(k) or Sec. 125, limited by IRC 401(a)(17).
Average Annual Pay	Average of three highest paid calendar years out of the last ten years.
Accrued Benefit	2% of Average Final Pay times Years of Service
Normal Retirement	
Age & Service Requirements	City Employees: Earlier of <ul style="list-style-type: none">• later of 10 Years of Service and age 65• any combination of Years of Service and age equaling 80, with a minimum of 10 Years of Service Police Officers: Earlier of <ul style="list-style-type: none">• completion of 25 Years of Service• any combination of Years of Service and age equaling 80, with a minimum of 10 Years of Service• age 65

	Firefighters: Earlier of <ul style="list-style-type: none"> • completion of 25 Years of Service • age 65
Benefit	Accrued Benefit
Early Retirement Eligibility	City and Police: completion of 10 Years of Service and age 55 Firefighters: None
Benefit	Accrued Benefit reduced by the following percentages: <ul style="list-style-type: none"> • City: 6.67% per year for each year between 65 and 60, plus 3.33% for each year between 60 and 55. • Police: 5% per year for years between early retirement date and date Member would have completed 25 Years of Service.
Termination	
Prior to completion of 10 Years of Service	Return of employee contributions plus regular interest.
After completion of 10 Years of Service	Member may elect to receive either <ul style="list-style-type: none"> • Return of employee contributions plus regular interest, or • Accrued Benefit.
Disability	
Eligibility	None if service-related; otherwise completion of 10 Years of Service
Benefit	City and Firefighters: <ul style="list-style-type: none"> • Service-related: greater of Accrued Benefit, or 50% of annual rate of Pay at time of disability. • Non-Service related: Accrued Benefit.

Police:

- Service-related – if disabled from employment as police officer: 50% of annual rate of Pay at time of disability.
- Service-related – if disabled from any gainful employment: Accrued Benefit as if Officer had no less than 25 Years of Service.
- Non-Service related: Accrued Benefit as if Officer had no less than 20 Years of Service.

Death Prior to Retirement

Prior to completion of 10 Years of Service

Return of employee contributions plus regular interest.

City Employees after eligibility for Early or Normal Retirement

Surviving spouse may elect to receive either

- Return of employee contributions plus regular interest, or
- 50% of benefit Member would have received if retired day before death and elected 50% Joint and Survivor option.

Police Officer and Firefighter Service-related death

Surviving spouse receives 100% of Accrued Benefit as if Officer had at least 25 Years of Service. Upon attainment of date Officer or Firefighter would have attained 25 Years, spouse's benefit decreases to 50% of the pension amount. Payable until death or remarriage.

Death After Retirement and after age 65

\$1000 lump sum payable to beneficiary in addition to any other benefits under plan.

Normal Form of Retirement Benefit

Single life annuity.

Optional Forms of Benefits

Actuarial equivalent of Normal Form paid as

- Ten year certain and continuous annuity
- Joint and Survivor annuity with 100%, 66-2/3%, or 50% of pension continued to designated beneficiary

Employee Contributions

4% of Pay. (In addition, 2% of Pay is contributed to the Retiree Health Insurance Fund.)

COLA

Retirement prior to July 1, 1989: none

Retirement after July 1, 1989 and prior to July 1, 2000: 3% every other year, beginning after the later of 3 years from retirement date or age 65.

Retirement after July 1, 2000: 2% every year, beginning after the later of 2 years from retirement date or age 62. For Police and Firefighters with 25 Years of Service, beginning 1 year from retirement.

Lifetime cap of 50% of original pension.

Retirement windows

Retirement windows were offered in 1999 and 2007.