

65 LaSalle Road
West Hartford, CT 06107-2397

860-521-8400 tel
860-521-3742 fax
www.hhconsultants.com

City of Menden
Police
Employees'
Pension Plan

Actuarial Valuation Report

July 1, 2008

Elizabeth J. Churney, FSA
Consulting Actuary

Richard S. Sych, FSA
Consulting Actuary

Timothy Ryor, FCA
Consulting Actuary

April 23, 2009

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 2010 and 2011	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, 2008 and Employer Contribution for Fiscal Years 2010 and 2011	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		
	2008	2006
Number of participants		
Active	75	96
Terminated vested	1	1
Vested in employee contributions only	0	0
Retired Disabled and Beneficiaries	<u>132</u>	<u>120</u>
Total	208	217
Total annual plan salaries	\$ 5,030,979	\$ 5,940,009
Average plan salary	67,080	61,875
Actuarial accrued liability	89,709,424	79,947,211
Asset value		
Market	60,822,224	50,951,375
Actuarial	60,974,656	53,745,820
Unfunded actuarial accrued liability	28,734,768	26,201,391
Funded Ratio	68%	67%
Normal cost - City	786,977	962,253
Contributions for next two fiscal years		
1 st Fiscal Year	3,646,850	3,509,801
2 nd Fiscal Year	3,683,113	3,556,861

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 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
\$3,646,850	\$3,383,113

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	15.6%	6.7%
Actuarial Value Basis	8.3%	7.9%

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 total return for 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 liability losses which were offset by small asset gains and the net result caused a slight 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 Police Pension Plan. The valuation has been performed in accordance with generally accepted actuarial principles and practices.

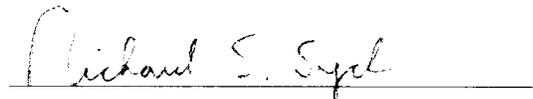
In preparing this valuation, we have relied on employee data provided by the Plan Sponsor, and on asset and contribution information provided by the Plan Sponsor. We have audited neither the employee data nor the financial information, although we have reviewed them for reasonableness.

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	\$21,705,670	\$26,948,767
Retirees Disabled and Beneficiaries	67,969,491	52,973,975
Terminated Vested Employees	<u>34,263</u>	<u>24,469</u>
Total	89,709,424	79,947,211
Source of Funds		
Plan Assets	\$60,974,656	\$53,745,820
Unfunded Accrued Liability	<u>28,734,768</u>	<u>26,201,391</u>
Total	\$89,709,427	79,947,211
Funded Ratio		
Plan Assets divided by Actuarial Accrued Liability	68%	67%

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:

	Police Plan
1. a. Total normal cost	1,052,231
b. Employee contributions	(265,254)
c. Town normal cost	786,977
2. Accrued liability	
a. Active	21,705,670
b. Vested	34,263
c. Retirees, Beneficiaries, Disabled	67,969,491
d. Total accrued liability	89,709,424
3. Actuarial value of assets	60,974,656
4. Unfunded accrued liability: (2d) - (3)	28,734,768
5. Payment on unfunded accrued liability	
a. Interest rate	8.00%
b. Amortization years	21
c. Payment	2,656,163
6. Estimated administrative expenses	30,000
7. Annual town cost, adjusted for timing	3,612,066
8. Payroll	5,030,979
a. Cost as a percentage of payroll	71.80%
9. Budget for Fiscal Year ending June 30, 2010	
a. Normal cost	820,424
b. Amortization	2,656,163
c. Expenses	30,000
d. Total, adjusted for timing	3,646,850
10. Budget for Fiscal Year ending June 30, 2011	
a. Total, adjusted for timing	3,683,113

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	\$ 50,951,375	\$ 57,941,719
2. Contributions		
a. City contributions during year	3,611,172	3,509,592
a. Employee contributions during year	331,969	321,614
c. Total for plan year	3,943,141	3,831,206
3. Disbursements		
a. Benefit payments during year	4,652,468	4,729,673
b. Administrative expenses during year	42,386	42,386
c. Other	127,558	15,982
d. Total for plan year	4,822,412	4,788,041
4. Net investment return		
a. Interest and dividends	1,285,125	1,244,360
b. Realized and unrealized gain (loss)	6,871,440	2,875,893
c. Investment-related expenses	(286,950)	(282,913)
d. Total	7,869,615	3,837,340
5. Ending value	57,941,719	60,822,224
6. Approximate rate of return	15.6%	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	\$ 53,745,820
2. Employer and employee contributions for 2007	3,943,141
3. Disbursements during 2007	(4,694,854)
4. Expected return during 2007	<u>4,269,597</u>
5. Expected actuarial asset value at July 1, 2007	57,263,704
6. Market value July 1, 2007	57,941,719
7. Appreciation (depreciation) recognized 20% x [(6) – (5)]	135,603
8. Actuarial asset value at July 1, 2007 (5) + (7)	57,399,307
9. Contributions for 2008	3,831,206
10. Disbursements during 2008	(4,772,059)
11. Expected return during 2008	<u>4,554,310</u>
12. Expected actuarial asset value at July 1, 2008	61,012,764
13. Market value July 1, 2008	60,822,224
14. Appreciation (depreciation) recognized 20% x [(13) – (12)]	(38,108)
15. Actuarial asset value at July 1, 2008	60,974,656
16. Actuarial value as a percent of market value	100.3%
06-07 Year return on Act. Val. Assets	8.3%
07-08 Year return on Act. Val. Assets	7.9%

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	96	0	1	120	217
Adjustments	0	0	0	0	0
Retirements non disabled	-17	0	0	17	0
Disability Retirements	-1	0	0	1	0
Terminations					
With vested benefit	0	0	N/A	0	0
Vested in contributions only	-1	N/A	1	N/A	0
Lump sum settlements	0	0	-1	N/A	-1
Deaths					
Without beneficiary	-2	0	0	-6	-8
With beneficiary	0	0	0	-5	5
New beneficiaries	N/A	0	0	5	5
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 7/01/08	75	0	1	132	208
Average age					
7/1/2006	41.8				
7/1/2008	42.9				
Average service					
7/1/2006	15.5				
7/1/2008	16.0				
Total annual plan salaries					
7/1/2006	\$5,940,009				
7/1/2008	5,030,979				
Total monthly benefits					
7/1/2006		\$0		\$368,682	
7/1/2008		0		439,485	

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 4.25% 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	0.12%	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 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 Service</u>	<u>Retirement</u>
20	10%
21-24	5
25	10
26-29	5
30	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 July 1, 2002: 3.75%
 Retirement date on or after July 1, 2002:
 25 or more years of service: 3%
 Less than 25 years of service: 2%

Portion of benefit due to
Emolument: Active liabilities are loaded 6.7% 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 in documents with the City.

Effective date	Originally effective June 13, 1913. Amended and restated as of July 1, 2006.
Eligibility for Participation	Regular full-time police officers hired prior to March 18, 2003, covered under Local 1016 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% of Base Pay times Years of Service up to 20 Years, plus 1.6% of Base Pay times Years of Service in excess of 20 Years and less than 30 Years, plus 50% of current Emoluments.
Normal Retirement	
Age & Service Requirements	Earlier of <ul style="list-style-type: none"> • 20 Years of Service • age 65 and 10 Years of Service
Benefit	Accrued Benefit
Termination	
Prior to completion of 10 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

- Service-related – if disabled from employment as police officer: Accrued Benefit as if Officer had no less than 20 Years of Service.
- 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 20 Years of Service Non-service related: Return of employee contributions plus regular interest.

Service-related: Surviving spouse receives 100% of Accrued Benefit as if Officer had 20 Years of Service. Upon attainment of date Officer would have attained 20 Years, spouse's benefit decreases to 50% of the pension amount. Payable until death or remarriage.

After completion of 20 Years of Service Surviving spouse receives one-half of Accrued Benefit. 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 5½% of Base Pay plus Emoluments. (In addition, 2% 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
- active members retiring with at least 20 but fewer than 25 Years of Service: 2% of Base Pay, excluding Emoluments
- active members retiring on a Disability Pension: 2% of Base Pay, excluding Emoluments
- active members retiring with less than 20 Years of Service: none.