City of Meriden Fire Pension Fund

Actuarial Valuation and Review as of July 1, 2006

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December 14, 2006

Mr. John Ivers City of Meriden Fire Pension Fund 142 East Main Street Meriden, CT 06450

Dear Mr. Ivers:

We are pleased to submit this Actuarial Valuation and Review as of July 1, 2006. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal years ending June 30, 2008 and June 30, 2009 and analyzes the actuarial experience between July 1, 2004 and June 30, 2006.

The census information on which our calculations were based was prepared by the City of Meriden Fire Pension Fund and the financial information was provided by the City. That assistance is gratefully acknowledged. The actuarial calculations were completed by the persons listed below.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

THE SEGAL COMPANY

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SECTION 1: Valuation Summary for the City of Meriden Fire Pension Fund

Purpose

This report has been prepared by The Segal Company to present a valuation of the City of Meriden Fire Pension Fund as of July 1, 2006. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- > The benefit provisions of the Pension Plan, as administered by the City;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of July 1, 2006, provided by the City;
- The assets of the Plan as of June 30, 2006, provided by the City;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

Significant Issues in Valuation Year

The following key findings were the result of this actuarial valuation:

- The annual required contribution (ARC) for the years ending June 30, 2008 and June 30, 2009 is \$2,435,594 and \$2,464,361, respectively. See page 24 for the development of these amounts. The ARC for the fiscal year ending June 30, 2007 was developed with the prior valuation and remains \$2,605,081.
- > The actuarial valuation report as of July 1, 2006 is based on financial information as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected. Declines in asset values will increase the actuarial cost of the Plan, while increases will decrease the actuarial cost of the Plan. For example, a 10% change in the current year's actuarial value of assets would produce a \$427,357 change in the recommended contribution level. Because the actuarial value of assets involves a smoothing method, a 10% change in market value would not be fully reflected immediately in the actuarial value of assets. Rather, that effect would be spread over a period of years. We have shown the full impact immediately so as to indicate the sensitivity of costs to market fluctuations.
- As indicated in Section 2, Subsection B of this report, the total unrecognized investment loss as of June 30, 2005 is \$2,984,767. This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years, to the extent it is not offset by recognition of investment gains derived from future experience. This implies that earning the assumed rate of investment return of 8.00% per year on a **market value** basis will

SECTION 1: Valuation Summary for the City of Meriden Fire Pension Fund

result in investment losses on the actuarial value of assets in the next few years. Therefore, if the actual market return is equal to the assumed 8.00% rate and all other actuarial assumptions are met, the contribution requirements would still increase in each of the next few years.

> The salary increase assumption has been changed to 4.00% this year. The prior assumption was:

Prior Assump	<u>tion</u>
2005	3.00%
2006	3.00%
2007	4.25%
2008 and later	5.25%

- ➤ In addition, the expense assumption was increased from \$20,000 per year to \$30,000 per year, and the mortality table was changed from the 1993 Group Annuity Morality Table (GAM) to the RP2000 Healthy Blue Collar Table.
- > The retirement assumption was changed from age 52 and 30 years of service to the following rates:

Retirement Probability
20%
10
25
15
100

The new retirement rates produce an expected retirement age of 56. Age 56 is the average age retirement for the existing retirees.

SECTION 1: Valuation Summary for the City of Meriden Fire Pension Fund

Summary of Key Valuation Results		
	2006	2004
Contributions for plan year beginning July 1:		****
Valuation	\$2,408,065	\$2,544,651
Actual		1,675,200
Funding elements for plan year beginning July 1:		
Normal cost, including administrative expenses	\$923.849	\$929,783
Market value of assets	43,041,422	36,892,666
Actuarial value of assets	46,026,189	43,396.288
Actuarial accrued liability	65,036,368	64.094,542
Unfunded actuarial accrued liability	19,010.179	20,698,254
GASB 25/27 for plan year beginning July 1:	***************************************	
Annual required contributions	\$2,605,081*	\$1,906.328
Actual contributions		1.906,320
Percentage contributed		100.00%
Funded ratio	70.77%	67.71%
Covered payroll	\$4,971,096	\$5,134,902
Demographic data for plan year beginning July 1:		
Number of retired participants and beneficiaries	99	98
Number of vested former participants	~ ~	• •
Number of active participants	84	92
Total payroll	\$4,971,096	\$5,134,902
Average payroll	59,180	55,814

^{*}Developed in July 1, 2004 Actuarial Report

A. PARTICIPANT DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered participants, including active participants, vested terminated participants, retired participants and beneficiaries. This section presents a summary of significant statistical data on these participant groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

With the Plan being closed to new entrants, the ratio of retirees to active participants has been increasing.

A historical perspective of how the participant population has changed over the past five valuations can be seen in this chart.

CHART 1
Participant Population: 1999 – 2006

Year Ended June 30	Active Participants	Retired Participants and Beneficiaries	Ratio of Non-Actives to Actives
1999	97	94	0.97
2000	96	95	0.99
2002	98	96	0.98
2004	92	98	1.07
2006	84	99	1.18

Active Participants

Plan costs are affected by the age, years of service and payroll of active participants. In this year's valuation, there were 84 active participants with an average age of 45.1, average years of service of 18.8 years and average payroll of \$59,180. The 92 active participants in the prior valuation had an average age of 44.5, average service of 18.5 years and average payroll of \$55,814.

Among the active participants, there were no participants with unknown age or service information.

Inactive Participants

In this year's valuation, there were no participants with a vested right to a deferred or immediate vested benefit.

These graphs show a distribution of active participants by age and by years of service.

CHART 2

Distribution of Active Participants by Age as of June 30, 2006

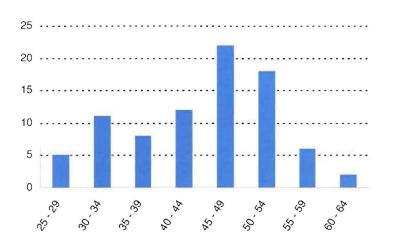
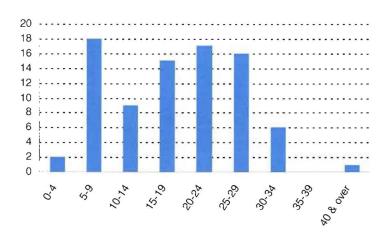


CHART 3

Distribution of Active Participants by Years of Service as of June 30, 2006



Retired Participants and Beneficiaries

As of June 30, 2006, 78 retired participants and 21 beneficiaries were receiving total monthly benefits of \$291,636. For comparison, in the previous valuation, there were 74 retired participants and 24 beneficiaries receiving monthly benefits of \$256,606. Of the 78 current retired participants, 33 were disabled retirees.

These graphs show a distribution of the current retired participants based on their monthly amount and age, by type of pension.

■ Disability ■ Regular

CHART 4

Distribution of Retired Participants by Type and by Monthly Amount as of June 30, 2006

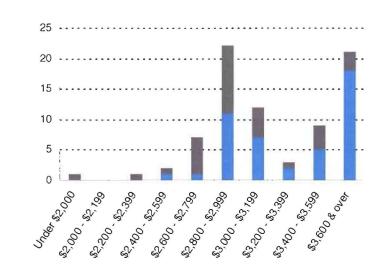
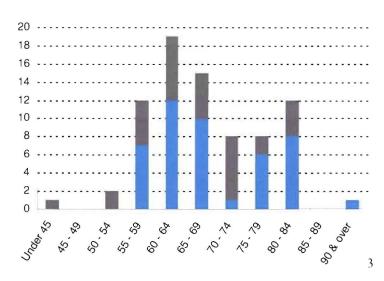


CHART 5

Distribution of Retired Participants by Type and by Age as of June 30, 2006



Valuation Results for the City of Meriden Fire Pension Fund **SECTION 2:**

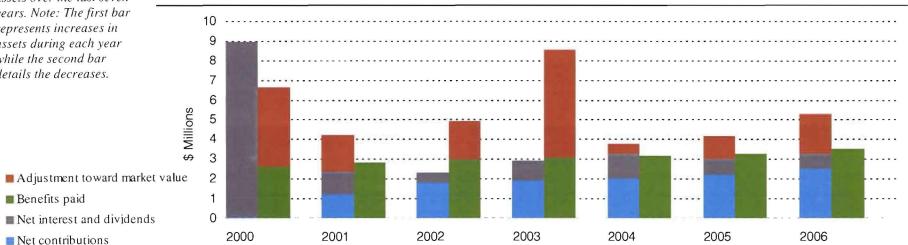
B. FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both net contributions (less administrative expenses) and net investment earnings (less investment fees) will be needed to cover benefit payments.

Retirement plan assets change as a result of the net impact of these income and expense components. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D, E and F.

The chart depicts the components of changes in the actuarial value of assets over the last seven years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

CHART 6 Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended June 30, 2000 - 2006





It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable.

The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

The chart shows the determination of the actuarial value of assets as of the valuation date.

CHART 7

Determination of Actuarial Value of Assets

	Year I	Year Ended	
	June 30, 2006	June 30, 2005	
Actuarial value of assets at beginning of year	\$44,272,319	\$43,396.288	
2. Total contributions	2,557,109	2,254,275	
3. Total benefit payments and expenses	3.558,767	3,324,484	
4. Average asset value: $(1) + 0.5 \times [(2) - (3)]$	43,771,490	42,861,184	
5a. Expected investment income: .08 x (4)	3,501,719	3.428.895	
5b. Expected end of year assets: $(1) + (2) - (3) + (5a)$	46,772,380	45,754,974	
6. Market value of assets at end of year	43,041,422	38,341,701	
7. Smoothing adjustment: 20% x [(6) – (5b)]	-746,191	-1.482,655	
8. Actuarial value of assets at end of year: (5b) + (7), but not less than 80% of (6), nor more than 120% of (6)	46,026,189	44,272,319	
9. Actuarial value as a percentage of market value: (8)/(6)	106.93%	115.47%	

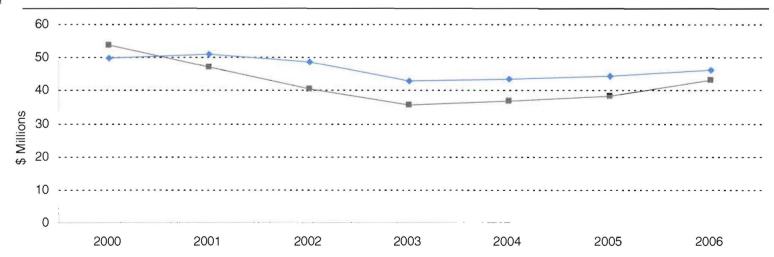
Both the actuarial value and market value of assets are representations of the City of Meriden Fire Pension Fund's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The actuarial asset value is significant because the City of Meriden Fire Pension Fund's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.

From June 30, 2004 to June 30, 2006, there was a significant reduction in the unrecognized asset loss. As of June 30, 2004 it was approximately \$6,504,000. As of June 30, 2006, the unrecognized loss is approximately \$2,985,000. The closing of this gap is noted on the graph below.

This chart shows the change in the actuarial value of assets versus the market value over the past seven years.

CHART 8

Actuarial Value of Assets vs. Market Value of Assets as of June 30, 2000 – 2006



Actuarial Value

Market Value

C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term

development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total gain/(loss) is (\$1,583,352), (\$2,228,846) from investments and \$645,494 from all other sources. The net experience variation from individual sources other than investments was 1.0% of the actuarial accrued liability. A discussion of the major components of the actuarial experience is on the following pages.

This chart provides a summary of the actuarial experience over the past two years.

CHART 9 Actuarial Experience for Two-Year Period Ended June 30, 2006

1.	Net gain/(loss) from investments*	-\$2,228.846
2.	Net gain/(loss) from administrative expenses	-50,668
3.	Net gain/(loss) from other experience**	696,162
4.	Net experience gain/(loss): $(1) + (2) + (3)$	-\$1,583,352

^{*} Details in Chart 10

^{**} Details in Chart 12

Investment Rate of Return

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the City of Meriden Fire Pension Fund's investment policy. For valuation purposes, the assumed rate of return on the actuarial value of assets is 8.00%. The rate of return on an actuarial basis for the 2006 plan year was 6.30% and 4.54% for the 2005 year. In comparison, the market value return for the last two years was 15.07% and 6.93%, respectively.

Since the smoothed return for the year was less than the assumed return, the City of Meriden Fire Pension Fund experienced an actuarial loss during the two-year period ending June 30, 2006 with regard to its investments.

This chart shows the gain/(loss) due to investment experience.

CHART 10
Actuarial Value Investment Experience

		Year Ended	
		June 30, 2006	June 30, 2005
1. /	Actual return	\$2,755.528	\$1,946,240
2	Average value of assets	43,771,490	42,861,184
3.	Actual rate of return: $(1) \div (2)$	6.30%	4.54%
4.	Assumed rate of return	8.00%	8.00%
5. 1	Expected return: (2) x (4)	\$3,501,719	\$3,428,895
6	Actuarial gain/(loss): (1) – (5)	-\$746.191	<u>-\$1,482,655</u>

Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.

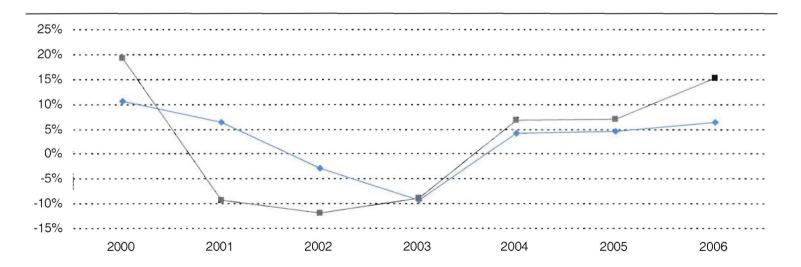
Administrative Expenses

Administrative expenses for the years, ended June 30, 2006 and 2005 totaled \$90,391 compared to the assumption of \$40,000 (\$20,000 per year). This resulted in a loss of \$50,668 for the two years including an adjustment for interest. We have increased the assumption to \$30,000 per year. If the trend of higher than expected expenses continues, we will need to continue increasing the expense assumption.

This chart illustrates how this leveling effect has actually worked over the years 2000 - 2006.

CHART 11

Market and Actuarial Rates of Return for Years Ended June 30, 2000 - 2006



Actuarial Value

Market Value

Other Experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- > the extent of turnover among the participants,
- retirement experience (earlier or later than expected),
- > mortality (more or fewer deaths than expected),

- > the number of disability retirements, and
- > salary increases different than assumed.

The net gain from this other experience for the two-year period ending June 30, 2006 amounted to \$696,162 which is 1.1% of the actuarial accrued liability.

A brief summary of the demographic gain/(loss) experience of the City of Meriden Fire Pension Fund for the two-year period ending June 30, 2006 is shown in the chart below.

The chart shows elements of the experience gain/(loss) for the most recent years.

CHART 12 Experience Due to Changes in Demographics for Two-Year Period Ended June 30, 2006

1.	Mortality and COLA for retirees and beneficiaries	\$777,869
2.	Salary increases more than expected for continuing actives	-318,359
3.	Miscellaneous	236,652
4.	Total	\$696,162

D. VALUATION CONTRIBUTION

The amount of annual contribution required to fund the Plan is comprised of an employer normal cost payment and a payment on the unfunded actuarial accrued liability. This total amount is then divided by the projected payroll for active members to determine the funding rate of 48.44% of payroll.

The valuation contribution is based on a 30-year amortization of the unfunded actuarial accrued liability as specified in the law governing the System. As of July 1, 2006, there are 23 years remaining on this schedule.

The chart compares this valuation's recommended contribution with the prior valuation.

CHART 13

Recommended Contribution

		Year Beginning July 1				
		2006		2004		
		Amount	% of Payroll	Amount	% of Payroll	
1.	Total normal cost	\$893,849	17.98%	\$909,783	17.72%	
2.	Administrative expenses	30.000	0.60%	20,000	0.39%	
3.	Expected employee contributions	<u>-305,627</u>	<u>-6.14%</u>	<u>-278,362</u>	<u>-5.42%</u>	
4.	Employer normal cost: $(1) + (2) + (3)$	\$618.222	12.44%	\$651,421	12.69%	
5.	Actuarial accrued liability	65,036,368		64,094,542		
6.	Actuarial value of assets	46,026,189		43,396,288		
7.	Unfunded actuarial accrued liability: (5) - (6)	\$19.010,179		\$20,698,254		
8.	Payment on unfunded actuarial accrued liability	1,697,225	34.14%	1,795,358	34.96%	
9.	Total recommended contribution: (4) + (8), adjusted for timing*	\$2,408, <u>065</u>	48,44%	\$2,544,651	49.56%	
10.	Projected payroll	\$4,971,096		\$5.134.902		

^{*}Recommended contributions are assumed to be paid at the middle of every year.

The contribution rates as of July 1, 2006 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions.

Reconciliation of Valuation Contribution

The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation.

The chart reconciles the contribution from the prior valuation to the amount determined in this valuation.

CHART 14 Reconciliation of Valuation Contribution from July 1, 2004 to July 1, 2006

Valuation Contribution as of July 1, 2004	\$2.544,651
Effect of change in administrative expense assumption	\$10,400
Effect of change in other actuarial assumptions	-424,332
Effect of contributions (more)/less than recommended contribution	100,585
Effect of investment (gain)/loss	206,951
Effect of other gains and losses on accrued liability	-59,935
Effect of net other changes	<u>29,745</u>
Total change	<u>-\$136.586</u>
Valuation Contribution as of July 1, 2006	\$2,408,065

E. INFORMATION REQUIRED BY THE GASB

Governmental Accounting Standards Board (GASB) reporting information provides standardized information for comparative purposes of governmental pension plans. This information allows a reader of the financial statements to compare the funding status of one governmental plan to another on relatively equal terms.

Critical information to GASB is the historical comparison of the GASB required contribution to the actual contributions. This comparison demonstrates whether a plan is being funded on an actuarially sound basis and in accordance with the GASB funding requirements. Chart 15 below presents a graphical representation of this information for the Plan.

The other critical piece of information regarding the Plan's financial status is the funded ratio. This ratio compares the

actuarial value of assets to the actuarial accrued liabilities of the plan as calculated under GASB. High ratios indicate a well-funded plan with assets sufficient to pay most benefits. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset performance, or a variety of other changes.

Although GASB requires that the actuarial value of assets be used to determine the funded ratio, Chart 16 shows the funded ratio calculated using both the actuarial value of assets and the market value of assets.

The details regarding the calculations of these values and other GASB numbers may be found in Section 4, Exhibits II, III, and IV.

These graphs show key GASB factors.

CHART 15
Required Versus Actual Contributions

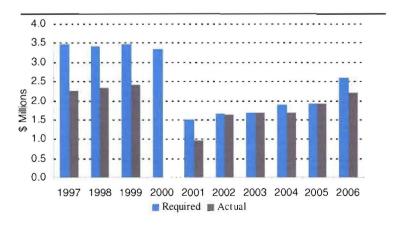
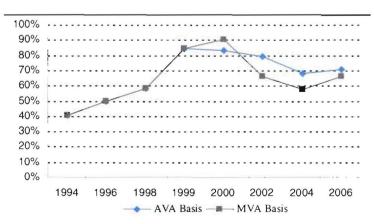


CHART 16 Funded Ratio



SECTION 3: Supplemental Information for the City of Meriden Fire Pension Fund

EXHIBIT B
Participants in Active Service as of June 30, 2006
By Age, Years of Service, and Average Payroll

	Years of Service									
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25		- *								
		A6 95		* *		~ ~	* *		as w.	
25 - 29	5		5				~ -			
	56,520		56,520							
30 - 34	11	2	7	2					pa. var	
	55,983	54,163	56,559	55,788						~ ~
35 - 39	8		5	3			× =			
	56,741		56,223	57,603						
40 - 44	12			4	7	1				
	58,502			57.149	58,886	61,232				
45 - 49	22		1		6	10	5			
	59,981		55,788		58,281	59,794	63,233			
50 - 54	18				2	5	10	1		
	61.954	w w			63,255	62.028	62,273	55,788		
55 - 59	6			* *		I	1	4		
	60.430					55.788	61.187	61.401		
60 - 64	2							1		1
	59,702						* =	59,702		59,702
Total	84	2	18	9	15	17	16	6		j
	\$59,180	\$54,163	\$56,412	\$56,998	\$59,226	\$60,300	\$62,505	\$60,182	\$0	\$59,702

EXHIBIT C
Reconciliation of Participant Data

	Active Participants	Vested Former Participants	Disableds	Retired Participants	Beneficiaries	Total
Number as of July 1, 2004	92	0	35	39	24	190
Retirements	-6	0	N/A	6	N/A	0
New disabilities	-2	0	2	N/A	N/A	0
Died with beneficiary	0	0	-1	0	1	0
Died without beneficiary	0	0	-3	0	-4	-7
Number as of July 1, 2006	84	0	33	45	21	183

EXHIBIT D Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended Ju	ne 30, 2006	Year Ended June 30, 2005	
Contribution income:	<u> </u>			
Employer contributions	\$2,206,320		\$1,906,320	
Employee contributions	350,789		347.955	
Less administrative expenses	<u>-51,901</u>		<u>-38,490</u>	
Net contribution income		\$2,505,208		\$2,215,785
Investment income:				
Interest, dividends and other income	\$949,435		\$1,092,865	
Adjustment toward market value	2,012,560		1,124,581	
Less investment fees	<u>-206,467</u>		<u>-271.206</u>	
Net investment income		<u>2,755,528</u>		1,946,240
Total income available for benefits		\$5.260,736		\$4,162.025
Less benefit payments	######################################	\$3,506,866		\$3,285,994
Change in reserve for future benefits		\$1,753.870		\$876,031

EXHIBIT E

Table of Financial Information

	Year Ended June 30, 2006	Year Ended June 30, 2005	
Cash equivalents	\$7,874,990	\$1,174.727	
Accounts receivable	220,880	189,311	
Investments	<u>34.947.586</u>	<u>36,978,772</u>	
Total assets	\$43,043,456	\$38,342,810	
Less accounts payable	\$2,034	\$1,109	
Net assets at market value	\$43.04 <u>1.4</u> 22	\$38.341,701	
Net assets at actuarial value	\$46,026,189	<u>\$44.272.319</u>	

SECTION 3: Supplemental Information for the City of Meriden Fire Pension Fund

EXHIBIT F
Development of the Fund Through June 30, 2006

Year Ended June 30	Employer Contributions	Employee Contributions	Net Investment Return*	Administrative Expenses	Benefit Payments	Actuarial Value of Assets at End of Year
2000	\$0	\$243.530	\$4.813,886	\$171.096	\$2,590,586	\$49,656,109
2001	955,772	243,995	3.042,423	0	2,816,847	51,081.452
2002	1,632,000	259,457	-1,481,353	60,464	2,951,805	48,479,287
2003	1,675,200	309,461	-4,504,580	60,734	3,077,000	42,821,634
2004	1,675,200	351,204	1,752,703	27,756	3,176,697	43,396.288
2005	1,906,320	347,955	1,946,240	38.490	3,285,994	44.272.319
2006	2,206,320	350,789	2,755,528	51,901	3,506.866	46,026.189

^{*} Net of investment fees

EXHIBIT G

Development of Unfunded Actuarial Accrued Liability

			Year E	nded	
		June 30), 2006	June 30	0, 2005
1.	Unfunded/(overfunded) actuarial accrued liability at beginning of year		\$21.015.171		\$20,698,254
2.	Normal cost at beginning of year		971,623		929,783
3.	Total contributions		-2.557,109		-2,254,275
4.	Interest				
	(a) For whole year on $(1) + (2)$	\$1,758,944		\$1,730,243	
	(b) For half year on (3)	<u>-100,937</u>		<u>-88,834</u>	
	(c) Total interest		1,658,007		1,641,409
5.	Expected unfunded actuarial accrued liability		\$21,087,692		\$21,015,171
6.	Changes due to:				
	(a) (Gain)/loss	\$1.583,352		~ =	
	(b) Assumptions	-3,660,865			
	(c) Total changes		-2.077,513		
7.	Unfunded actuarial accrued liability at end of year		\$19,010,179		\$21,015,171

EXHIBIT H

Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader:

Assumptions or Actuarial Assumptions:

The estimates on which the cost of the Plan is calculated including:

- (a) <u>Investment return</u> the rate of investment yield that the Plan will earn over the long-term future;
- (b) <u>Mortality rates</u> the death rates of employees and pensioners; life expectancy is based on these rates;
- (c) <u>Retirement rates</u> the rate or probability of retirement at a given age;
- (d) <u>Turnover rates</u> the rates at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement.

Normal Cost:

The amount of contributions required to fund the benefit allocated to the current year of service.

Actuarial Accrued Liability For Actives:

The equivalent of the accumulated normal costs allocated to the years before the valuation date.

Actuarial Accrued Liability For Pensioners:

The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability:

The extent to which the actuarial accrued liability of the Plan exceeds the assets of the Plan. There is a wide range of approaches to paying off the unfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.

Amortization of the Unfunded

Actuarial Accrued Liability: Payments made over a period of years equal in value to the Plan's unfunded actuarial

accrued liability.

Investment Return: The rate of earnings of the Plan from its investments, including interest, dividends and

capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one

year to the next.

E)	(HIBIT I		
Su	ımmary of Actuarial Valuation Results		
Th	ne valuation was made with respect to the following data supplied to us:	***************************************	<u></u>
1.	Retired participants as of the valuation date (including 21 beneficiaries in pay status)		99
2.	Participants inactive during year ended June 30, 2006 with vested rights		0
3.	Participants active during the year ended June 30, 2006		84
	Fully vested	23	
	Not vested	61	
Th	ne actuarial factors as of the valuation date are as follows:		
١.	Normal cost, including administrative expenses		\$923,849
2.	Actuarial accrued liability		65,036,368
	Retired participants and beneficiaries	\$40,947.166	
	Inactive participants with vested rights	0	
	Active participants	24,089,202	
3.	Actuarial value of assets (\$43,041,422 at market value as reported by the City)		46,026,189
4.	Unfunded actuarial accrued liability		\$19,010,179

EXHIBIT I (continued)

Summary of Actuarial Valuation Results

The determination of the recommended contribution is as follows:	
Total normal cost	\$893,849
2. Administrative expenses	30,000
3. Expected employee contributions	<u>-305,627</u>
4. Employer normal cost: $(1) + (2) + (3)$	\$618,222
5. Payment on unfunded actuarial accrued liability	1,697.225
6. Total valuation contribution: (4) + (5), adjusted for timing	\$2,408,065
7. Projected City normal cost as of July 1, 2007: [(1) + (3)] x 1.045 + (2)	644.692
8. Recommended contributions for fiscal year ending June 30, 2008: (5) + (7), adjusted for interest	\$2,435,594
9. Projected City normal cost as of July 1, 2008: [(1) + (3)] x 1.045 x 1.045 + (2)	672,353
10. Recommended contributions for fiscal year ending June 30, 2009: (5) + (9), adjusted for interest	\$2,464,361

EXHIBIT II
Supplementary Information Required by the GASB – Schedule of Employer Contributions

Plan Year Ended June 30	Annual Required Contributions	Actual Contributions	Percentage Contributed	
1997	\$3,457,500	\$2,244,200	64.9%	
1998	3,405.500	2,323,600	68.2%	
1999	3,450,800	2,391,167	69.3%	
2000	3.334,200	0	0.0%	
2001	1,494,200	955,772	64.0%	
2002	1,647,793	1,632,000	99.0%	
2003	1,682,036	1.675,200	99.6%	
2004	1,872,975	1,675,200	89.4%	
2005	1,906.328	1.906,320	100.0%	
2006	2,574,201	2,206,320	85.7%	
2007	2,605,081	~~ -		
2008	2,435,594			
2009	2,464,361		**	

EXHIBIT III

Supplementary Information Required by the GASB – Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll* [(b) - (a)] / (c)
07/01/1994	\$17,700,700	\$43,481.200	\$25,780,500	40.71%	\$4,080,000	631.88%
07/01/1995	N/A	N/A	N/A	N/A	N/A	N/A
07/01/1996	25,622,500	51.562,800	25.940,300	49.69%	4,251,800	610.10%
07/01/1997	N/A	N/A	N/A	N/A	N/A	N/A
07/01/1998	32,626,200	56,236,600	23.610,400	58.02%	4,462,500	529.08%
07/01/1999	47,360,400	56.017,200	8.656,800	84.55%	4,600,200	188.18%
07/01/2000	49,656,109	59,676,621	10,020,512	83.21%	4,463,535	224.50%
07/01/2001	N/A	N/A	N/A	N/A	N/A	N/A
07/01/2002	48,479,287	61,095,615	12,616,328	79.35%	5,147,294	245.11%
07/01/2003	N/A	N/A	N/A	N/A	N/A	N/A
07/01/2004	43.396,288	64,094,542	20,698,254	67.71%	5,134,902	403.09%
07/01/2005	N/A	N/A	N/A	N/A	N/A	N/A
07/01/2006	46,026,189	65,036,368	19,010,179	70.77%	4,971,096	382.41%

^{*} Not less than zero

EXHIBIT IV Supplementary Information Required by the GASB

Valuation date	July 1, 2006	
Actuarial cost method Entry Age Normal Cost Method		
Amortization method	Level dollar closed	
Remaining amortization period	23 years remaining as of July 1, 2006	
Asset valuation method	5 year smoothing of investment return greater/(less) than expected	
Actuarial assumptions:		
Investment rate of return	8.00%	
Projected salary increases	4.00%	
Plan membership:		
Retired participants and beneficiaries receiving benefits	99	
Terminated participants entitled to, but not yet receiving benefits	0	
Active participants	<u>84</u>	
Total	183	

SECTION 4: Reporting Information for the City of Meriden Fire Pension Fund

EXHIBIT V

Development of the Net Pension Obligation and the Annual Pension Cost Pursuant to GASB 27

Plan Year Ended June 30	Employer Annual Required Contribution (a)	Employer Amount Contributed* (b)	Interest on NPO (h)* 8.00% (c)	ARC Adjustment (h) / (e) (d)	Amortization Factor (e)	Pension Cost (a) + (c) - (d) (f)	Change in NPO (f) – (b) (g)	NPO Balance NPO + (g) (h)
1996	\$3,308,600	\$2,140,800	\$418,056	\$450,368	11.6032	\$3,276,288	\$1,135,488	\$6,361,182
1997	3,457,500	2,244,200	508,895	555,493	11.4514	3,410,902	1,166,702	7,527,884
1998	3,405,500	2,323,600	602.231	666,920	11.2875	3,340,811	1,017,211	8,545,095
1999	3,450,800	2,391,167	683.608	802,425	11.1105	3,331,983	940,816	9,485,911
2000	3,334,200	0	758,873	906,366	10.9194	3,186,707	3,186,707	12,672,618
2001	1,494,200	955,772	1,045,491	1,112,094	11.3953	1,427,597	471,825	13,144,443
2002	1,647,793	1,632,000	1.084,417	1,163,307	11.2992	1,568,903	-63,097	13,081,346
2003	1,682,036	1.675.200	1,079.211	1,168,478	11.1952	1,592,769	-82,431	12,998,915
2004	1,872.975	1,675,200	1,039,913	1,144,699	11.3558	1,768.189	92,989	13,091,904
2005	1,906,328	1,906,320	1,047,352	1,166,239	11.2257	1,787,441	-118,879	12,973,025
2006	2,574,201	2,206,320	1.037.842	1,170,286	11.0853	2,441,757	235,437	13,208,462

SECTION 4: Reporting Information for the City of Meriden Fire Pension Fund

EXHIBIT VI

Actuarial Assumptions and Actuarial Cost Method

Mortality rates: RP2000 Combined Healthy Blue Collar (previously, 1983 Group Annuity Mortality Table with margins)

n Rates before I	Rates before Retirement:			e (%)		
	Mor	tality	Disa	ıbility	With	drawal
Age	Male	Female	Male	Female	Male	Female
20	0.03	0.02	0.06	0.06	0.00	0.00
25	0.04	0.02	0.09	0.09	0.00	0.00
30	0.07	0.03	0.11	0.11	0.00	0.00
35	0.11	0.05	0.15	0.15	0.00	0.00
40	0.14	0.09	0.22	0.22	0.00	0.00
45	0.18	0.14	0.36	0.36	0.00	0.00
50	0.24	0.20	0.61	0.61	0.00	0.00
55	0.42	0.28	1.01	1.01	0.00	0.00
60	0.83	0.49	1.63	1.63	0.00	0.00
	Age 20 25 30 35 40 45 50 55	Age Male 20 0.03 25 0.04 30 0.07 35 0.11 40 0.14 45 0.18 50 0.24 55 0.42	Mortality Age Male Female 20 0.03 0.02 25 0.04 0.02 30 0.07 0.03 35 0.11 0.05 40 0.14 0.09 45 0.18 0.14 50 0.24 0.20 55 0.42 0.28	Mortality Disa Age Male Female Male 20 0.03 0.02 0.06 25 0.04 0.02 0.09 30 0.07 0.03 0.11 35 0.11 0.05 0.15 40 0.14 0.09 0.22 45 0.18 0.14 0.36 50 0.24 0.20 0.61 55 0.42 0.28 1.01	Age Male Female Male Female 20 0.03 0.02 0.06 0.06 25 0.04 0.02 0.09 0.09 30 0.07 0.03 0.11 0.11 35 0.11 0.05 0.15 0.15 40 0.14 0.09 0.22 0.22 45 0.18 0.14 0.36 0.36 50 0.24 0.20 0.61 0.61 55 0.42 0.28 1.01 1.01	Mage Male Female Male Female Male Female Male 20 0.03 0.02 0.06 0.06 0.00 25 0.04 0.02 0.09 0.09 0.00 30 0.07 0.03 0.11 0.11 0.00 35 0.11 0.05 0.15 0.15 0.00 40 0.14 0.09 0.22 0.22 0.02 45 0.18 0.14 0.36 0.36 0.00 50 0.24 0.20 0.61 0.61 0.00 55 0.42 0.28 1.01 1.01 1.01 0.00

25% of deaths prior to retirement and 100% of the disabilities with less than 10 years of service are assumed service connected.

Percent married: 75%

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

Net investment return: 8.00%

SECTION 4: Reporting Information for the City of Meriden Fire Pension Fund

Retirement rates:			
	Years of Service	Retirement Probability	
	25	20%	
	26 - 29	10	
	30	25	
	31 - 34	15	
	35	100	
	(Previously, 52 or cor	npletion of 30 years of service, but n	ot later than 65)
Salary increases:	4%, Previously,		
	Year	Rate (%)	
	2005	3.00%	
	2006	3.00%	
	2007	4.25%	
	2008 and after	5.25%	
Pay adjustment:	allowance and insurar	ncreased 7.3% to reflect holiday and ce which are included in the determ rement prior to April 1, 2003.	
Cost of living increase		, 2000.	
after retirement:	3% per year if date of is before April 1, 200	retirement April 1, 2003 or later and 3.	13.75% if date of retirement
Administrative expenses:	\$30,000 per year (pre-	viously, \$20,000 per year)	
Actuarial value of assets:	earnings based on the market value at end of	e at beginning of year, contributions, actuarial interest assumption less be year in excess of that sum, plus add sary so that final actuarial value is w	nefit payments plus 20% of litional adjustment toward

Actuarial cost method:	Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant would have commenced participation if the plan had always been in existence. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salary and service, with Normal Cost determined as if the current benefit accrual rate had always been in effect.
Changes in assumptions:	Based on past experience and future expectations, the following actuarial assumptions were changed:
	The salary increase assumption has been changed to 4.0% per year. The prior

The salary increase assumption has been changed to 4.0% per year. The prior assumption is below:

<u>PriorAssumption</u>		
2005	3.00%	
2006	3.00%	
2007	4.25%	
2008 and later	5.25%	

- > The assumption for administrative expenses was increased from \$20,000 to \$30,000.
- > The mortality table was changed from the 1983 Group Annuity Mortality Table with margins to the RP2000 Combined Healthy Blue Collar table.
- The retirement assumption was changed from age 52 and completion of 30 years of service (but no later than age 65) to retirement rates in the following table:

Years of Service	Retirement Probability
25	20%
26 - 29	10
30	25
31 - 34	15
35	100

EXHIBIT VII

Summary of Plan Provisions

This exhibit summarizes the major provisions of the City of Meriden Fire Pension Fund included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year:	July 1 through June 30
Normal Retirement:	
Age requirement	None
Service requirement	25 years
Amount	2.2% times years of service (maximum 30 years) times base rate of pay at retirement plus 50% of emoluments (longevity pay, holiday pay, clothing allowance, life insurance, health insurance minus cost share (as long as language remains in collective bargaining agreement)).
Disability:	
Service connected	
Age requirement	None
Service requirement	None
Amount	An annuity of no less than 50% of prevailing pay for the rank held at termination.
Non-service connected	
Age requirement	None
Service requirement	10 years if hired after July 1, 1971; otherwise none
Amount	An annuity of 50% of prevailing pay for the rank held at termination.

Spouse's pre-retirement death b	enefit:
Lump sum benefit	
Age requirement	None
Service requirement	None
Amount	Refund of employee contributions
Service connected spouse's ben	efit
Age requirement	None
Service requirement	None
Amount	An annuity of 50% of prevailing pay including holiday and longevity pay and insurance for the rank held at death, payable to spouse until employee would have accumulated 25 years of service. At that time, the benefit is reduced to 50% of the pension the employee would have been entitled to had they retired the day before their death. Benefit is payable until death or remarriage.
Non-service connected spouse's	benefit
Requirement	Eligible for service retirement
Amount	An annuity of 50% of the pension the employee would have received if they had retired the day before their death, payable until death or remarriage.
Post-retirement death benefits:	
Lump-sum benefit	100% of contributions made on behalf of the employee, less total benefits paid to the pensioner (if not eligible for spouse's benefit).
Spouse's benefit	An annuity of 50% of the pension the retired employee was receiving at the time of death payable until death or remarriage.
Cost of living adjustment:	Firefighters who retire after April 1, 2003 with a minimum of 25 years of service shall receive a COLA of 3% per year to begin one year after retirement.
Employee contribution rate:	7.5% of rate of pay pretax plus emoluments. 6.5% goes to pension and 1% goes to health.

Changes in plan provisions: There have been no changes in the plan provisions since our prior valuation.