HOOKER & HOLCOMBE, INC.
Benefit Consultants and Actuaries

65 LaSalle Road | West Hartford, CT 06107-2397 | Founded in 1956

Confidential

April 16, 2010

Ms. Kathleen E. Palm Devine, Secretary
City of Hartford Pension Commission
Office of the Treasurer
550 Main Street
Hartford, CT 06103

Re: 2009 MERF Actuarial Survey

Dear Kathleen:

We are pleased to present the Annual Valuation of the City of Hartford Municipal Employees' Retirement Fund for 2009. Eleven additional copies are included for distribution.

Recommended contribution rates are as follows:

	Recommended Fiscal Year 2010-2011 Contribution (2009 MERF Actuarial Survey)	**Recommended Fiscal Year 2009-2010 Contribution (2008 MERF Actuarial Survey)**
Police	9.94%	3.35%
Firefighters	1.55%	-4.88%
Board of Education	11.87%	10.64%
Municipal Services	30.74%	22.00%
Library	20.90%	16.08%

Please see Section I of the attached report for analysis and discussion regarding the changes in the contribution requirements from last year to this year, as well as expectations for future increases.

As adopted by the Pension Commission, this valuation reflects a change in the asset valuation method which extended the period for smoothing gains and losses from 4 to 5 years. Section I includes a detailed discussion of the implications of this change.

As always, I am available to answer any questions you or the Pension Commission may have.

Sincerely,

Elizabeth J. Churney

/aps
Enclosure

Copy with enclosure: Donna P. Parker

HOOKER & HOLCOMBE, INC.

65 LaSalle Road
West Hartford, CT 06107-2397
860-521-8400 tel
860-521-3742 fax
www.hhconsultants.com

City of Hartford Municipal Employees' Retirement Fund (MERF)

Actuarial Survey

July 1, 2009

Elizabeth J. Churney, F.S.A., MAAA
Consulting Actuary

Scott B. Moss, A.S.A.
Pension Analyst

April 16, 2010

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Section I

Valuation Report

A. 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 information found in Section II of the report has been developed for this purpose.

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,

City's ultimate cost	=	*benefits paid*	+	*expenses incurred*	-	*investment return*	-	*employee contributions*

B. Contribution for 2010-2011 Fiscal Year

The City's contribution rates for the 2010-2011 fiscal year, determined from the July 1, 2009 actuarial valuation, are shown below. Last year's results are shown for comparison purposes.

	Recommended 2010-2011 Fiscal Year Contribution (July 1, 2009 Valuation)	**Recommended 2009-2010 Fiscal Year Contribution (July 1, 2008 Valuation)**
Police	9.94%	3.35%
Firefighters	1.55%	-4.88%
Board of Education	11.87%	10.64%
Municipal Services	30.74%	22.00%
Library	20.90%	16.08%

Please see Section II, Exhibit A for the development of these figures.

It is important to note that the recommended City contribution is expressed as a percentage of the payroll for each of the five groups of employees covered by the plan: Police, Firefighters, Board of Education, Municipal Services (general government employees), and Library. Each of those percentages is then applied against the *estimated* payroll for each group for the next fiscal year, to yield an *estimated* dollar amount of the cash contribution required. Importantly, while the percentages of payroll will not change because they are actuarially determined, the dollar amount of the City's *actual* required contribution will change -- upward or downward -- depending on whether *actual* payrolls in the fiscal year are more, or less, than currently estimated.

Section I

Valuation Report
(continued)

As can be seen, the percentages of payroll on which estimated contributions have been based have increased considerably from last year for all groups. Based on an estimated payroll of approximately $143.1 million for fiscal year 2010-2011 obtained from the City of Hartford's Office of Management and Budget, the estimated dollar amount of the City's contribution for such year is approximately $18.3 million.

By comparison, using payroll estimates for fiscal year 2009-2010 of approximately $136.5 million, the approximate dollar amount of the City's contribution for the 2009-2010 fiscal year is $9.9 million. Thus, the 2010-2011 fiscal year contribution represents an estimated $8.4 million increase from the previous year, or approximately 85%.

The primary reason for this increase in the recommended contribution requirement for fiscal year 2010-2011 is the drop in the capital markets starting in September 2008 through June 2009, with the resulting loss of market value of MERF assets during that period. The net impact of changes in the covered population and modifications to plan provisions since the last valuation report also served to increase the contribution, although to a lesser extent.

With the drop in the markets, the market value of assets for the MERF decreased from $1,080.2 million as of July 1, 2008 to approximately $861.7 million as of July 1, 2009, a return for the year of approximately -15.0%. In order to avoid dramatic fluctuations in contribution requirements with such large swings in the market, a "smoothed" or "actuarial" value of assets is used to perform the valuation. This smoothed value recognizes the difference between the expected return on the market value of assets and the actual return over a 5-year period at 20% per year (See section III for a description of the asset valuation method).

As of July 1, 2009, the smoothed (actuarial) value of assets used in the development of the contribution requirement was approximately $1,089.2 million, $227.5 million higher than the market value of assets of $861.7 million at such date. This value represents a change in the asset smoothing methodology from a method that spreads the difference between the expected return on the market value of assets and the actual return over a 4-year period, to one that uses a 5-year smoothing period instead.

The return for the year on the actuarial value prior to the change in method was 1.6%, as opposed to the -15% return on the market value. Since this 1.6% was still far less than the MERF's 8% return assumption, asset losses were generated that increased the fiscal year 2010-2011 contribution requirement. Specifically, these losses represented approximately $7.7 million of the $8.4 million estimated increase and were therefore the primary driver of the increase in estimated contributions for fiscal year 2010-2011. Note that the change in asset valuation method reflected with this valuation partially offset this $7.7 million increase in contribution requirements. For a full discussion of the impact of this change, see section *E. Changes Since the Last Valuation.*

Future Contribution Requirements

The use of a smoothed (actuarial) value of assets is meant to produce a more level funding pattern, given asset volatility. With a drop in the market, asset losses are spread over a five-year period, leveling out the recommended funding rather than providing for a spike in contribution requirements in one year. As of July 1, 2009, there were approximately $227.5 million in net unrecognized asset losses that eventually need to be recognized in future City contribution requirements because of the use of this smoothing method. Given this level of unrecognized losses, future contribution increases can be expected for at least the 2011-2012 and 2012-2013 fiscal year, absent other significant changes. Note that the change in asset valuation method reflected in this valuation is expected to help mitigate some of this increase short-term, but any decrease in current funding requirements from this change generally will be deferred to future years.

To provide a sense of the level of expected future contributions, an estimate for the 2011-2012 fiscal year has been calculated. Specifically, the City's estimated recommended contribution for such fiscal year is currently $28.3 million. This figure is based on a projected market value of assets at July 1, 2010 of $874 million, determined by projecting actual assets of $902.7 million as of January 31, 2010 to June 30, 2010 assuming 0% return. In addition, estimates of payroll for fiscal year 2011-2012 payroll of $150 million were used. Projected plan liabilities inherent in this calculation were based on the results of the July 1, 2009 valuation, including the assumptions, methods, and census data as of such date. Consequently, the costs of the 2009 early retirement incentive program have ***not*** been incorporated into this estimate because participants electing this option did not leave City service until after July 1, 2009.

The actual 2011-2012 contribution requirement will be based upon final liabilities and assets as of July 1, 2010, as well as actual payroll for the 2011-2012 fiscal year. To provide some sensitivity of the contribution to asset values, if the market value of assets as of July 1, 2010 is approximately $50 million higher at $925 million, the contribution estimate decreases by $1.2 million to $27.1 million.

Funding requirements for fiscal year 2012-2013 through 2014-2015 are expected to increase even further as asset losses are fully phased into the smoothed value of assets. The extent of the increase will depend upon market returns after July 1, 2009, among other factors.

C. Funded Status

The funded status of the plan as of July 1, 2009 is summarized below. The figures are prepared in accordance with the requirements of the Governmental Accounting Standards Board, or GASB, and are useful in accessing the health of the plan overall.

Specifically, the funded status is based on the smoothed (actuarial) value of assets used in the valuation, as well as a measure of the plan's liability known as the Actuarial Accrued Liability. The Actuarial Accrued Liability is the liability for benefits expected to be paid from the plan for inactive participants, as well as the liability for future expected benefit payments for active participants. For actives, the liability measure includes the impact of assumed future salary increases on projected benefits, but includes only that portion of their overall liability attributable to services rendered as of the valuation date.

	July 1, 2009
Actuarial Accrued Liability	$1,126,965,000
Actuarial Value of Assets	1,089,184,000
Funded Status	-37,781,000
Funded Percentage	96.6%

During the 2008-2009 fiscal year, the plan's funded status dropped from 102.2% as of July 1, 2008 to 96.6% as of July 1, 2009, as detailed above. Despite the fact that the City fully funded the recommended contribution for the year, asset growth did not keep pace with liability growth, resulting in the decline in the funded status. This is primarily the result of the asset losses on the smoothed (actuarial) value of assets previously discussed. The change in asset valuation method partially offset this decline. Under the old asset method, the plan's funded status would have been 95.7%.

Even with a funded status of less than 100%, the plan is still in a healthy, well-funded position at the current 96.6% level. It is not the intent of the plan's funding method to fully fund such shortfalls in just one year. Absent other significant changes, such underfunding will be eliminated over a period of years as it is spread into future contribution requirements.

D. Plan Experience During Period Under Review

As discussed earlier, the recommended City contribution rate for the 2010-2011 fiscal year has increased from last year for all groups. As a result, the dollar amount of the City's contribution is expected to increase by approximately $8.4 million based on current estimates of payroll.

Also as previously discussed, the market value of assets returned -15.0% over the 2008-2009 fiscal year. The smoothed (actuarial) value of assets prior to the change in method earned a return of approximately 1.6% during the same fiscal period. The resulting asset loss generated from a return less than the 8.0% expected accounted for approximately $7.7 million of the estimated $8.4 million increase in contribution.

Of the remaining $0.7 million increase, approximately $1.6 million is attributable to changes in the plan's population and the resulting impact on plan liabilities. Despite the decrease in active membership of the MERF (from 2,671 as of July 1, 2008 to 2,406 as of July 1, 2009) and the corresponding drop in total payroll, changes in the population increased costs. This was due to items such as salaries increasing by more than expected for continuing actives, new hires, and the net impact of retirements, terminations and deaths.

The change in asset valuation method resulted in a decrease in the contribution requirement of approximately $1.1 million. There was also a $0.2 million increase in the contribution requirement is due to the net impact of modifications to plan provisions for select groups. See section *E. Changes Since the Last Valuation* for the specifics of the asset method and plan changes adopted during the year.

E. Changes Since The Last Valuation

Asset Valuation Method Change

The July 1, 2009 valuation reflects a change in asset smoothing methodology from a method that spreads the difference between the expected return on the market value of assets and the actual return over a 4-year period, to one that uses a 5-year smoothing period instead. This change partially offset the increase in contribution requirement for the 2010-2011 fiscal year.

As, noted, the new method extends the period for smoothing asset gains and losses by one year. With a longer smoothing period, asset gains and losses are being recognized more slowly, resulting in a larger smoothed (actuarial) value of assets after the change, given the large asset losses of fiscal years 2007-2008 and 2008-2009. Specifically, the actuarial value of assets under the prior 4-year smoothing method would have been $1,079.0 million as of July 1, 2009, approximately $10.2 million less then the $1,089.2 million value used in the valuation.

With the use of a larger asset value, the estimated contribution for the 2010-2011 fiscal year is less than it otherwise would have been as a result of the change. Based on estimated payroll of $143.1 million, the change in method decreased the 2010-2011 fiscal year contribution by approximately $1.1 million. It is important to note that this decrease is merely the result of the slower recognition of recent net asset losses in the MERF's annual valuation. The decrease in the contribution today will result in contribution increases in the future, all else being equal. Plan funding is simply being deferred. (Note that in an environment of net asset gains, extending the smoothing period has the opposite effect. Current year contribution requirements would be higher using a longer smoothing period.)

Plan Changes

For the Board of Education group, this valuation reflects plan improvements in both vesting and retirement eligibility for non-bargaining employees and members of HSSSA. Somewhat mitigating these factors, however, was the fact that employee contribution rates for both of these sub-groups were increased. The net impact of these benefit modifications was a minimal decrease in the estimated City contribution requirement for the Board of Education group of approximately $20,000.

Within the Municipal Services group, the maximum pension for HMEA members was increased from 70% to 75% representing an increase in plan costs. Partially offsetting this increase was the increase in employee contribution rates for school crossing guards and non-bargaining employees. The estimated City contribution requirement increased for the Municipal Services group by approximately $0.2 million as a result of these changes.

See the Summary of Principal Pension Plan Provisions for additional information.

Section I

Valuation Report
(continued)

F. Certification

The results of this valuation are based on financial, personnel and payroll data furnished to us by the City and unaudited by us as of July 1, 2009.

In my opinion, and to the best of my knowledge, this Report presents fairly the financial and actuarial position of the City of Hartford Municipal Employees' Retirement Fund (MERF) as of July 1, 2009. The actuarial present values shown have been estimated on the basis of actuarial assumptions which, in my opinion, are appropriate for the purposes of the Report, are reasonable in the aggregate (taking into account the experience of the Plan and reasonable expectations), and, when applied in combination, represent my best estimate of the measure of anticipated experience under the Plan.

I believe that this Report meets the requirements of Public Act No. 77-468, An Act Requiring Periodic Actuarial Evaluation of Municipal Pension Plans.

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

HOOKER & HOLCOMBE, INC.

Elizabeth J. Churney
Enrolled Actuary

April 16, 2010

Section II

Supporting Exhibits

A. Normal Cost

	July 1, 2009 Valuation					
	Police	**Fire**	**Board of Ed.**	**Municipal Services**	**Library**	**Total Membership**
Active Membership						
Number of Employees	463	371	1,019	479	74	2,406
Annual Payroll (000)	$34,361	$27,717	$39,926	$27,884	$4,254	$134,143
Normal Actuarial Costs						
A. Actuarial Present Value of Future Benefits (000)						
Active Members	$144,290	$140,789	$115,517	$113,027	$14,565	$528,188
Terminated Non-Vested Members	151	148	121	118	15	553
Terminated Vested Members	2,499	191	7,296	7,104	146	17,236
Retired Members	247,851	181,629	96,159	238,894	13,228	777,761
Old Plans COLA	524	321	367	6	0	1,218
Total	$395,316	$323,077	$219,460	$359,149	$27,954	$1,324,957
B. Valuation Assets (Adjusted Value) (000)	$340,460	$303,795	$151,455	$275,656	$17,819	$1,089,184
C. Actuarial Present Value of Future Employee Contributions (000)	$24,428	$20,429	$22,221	$13,615	$1,841	$82,535
D. Actuarial Present Value of Future Normal Costs (A) - (B) - (C) (000)	$30,428	($1,146)	$45,785	$69,878	$8,294	$153,238
E. Actuarial Present Value of Future Salaries (000)	$381,588	$261,565	$419,059	$244,856	$41,941	$1,349,009
F. Normal Actuarial Costs as Percentage of Payroll						
Pension Benefits (D)/(E)*	7.97%	-0.44%	10.93%	28.54%	19.78%	11.36%
G. Expenses (other than Investment Expenses)	1.97%	1.99%	0.94%	2.20%	1.12%	1.69%
Total Normal Cost Percent Payable by City	**9.94%**	**1.55%**	**11.87%**	**30.74%**	**20.90%**	**13.05%**

* *Based on $2,266,000 estimate of expenses (other than investment expenses) allocated by present value of future benefits.*

Section II

Supporting Exhibits

(continued)

B. Estimated Cash Contribution

The cash contribution for fiscal year 2010-2011 detailed below is estimated based upon payroll data provided by the City of Hartford's Office of Management and Budget for the fiscal year 2010-2011. ***The actual contribution will be based upon actual payroll figures for fiscal year 2010-2011.*** *To illustrate the sensitivity of the cash contribution to changes in payroll, the second table below details the estimated fiscal year 2010-2011 contribution assuming payroll is either 5% higher or 5% lower than this estimate.*

	Estimated July 1, 2010 - June 30, 2011 Fiscal Year Contribution					
	Police	**Fire**	**Board of Ed**	**Municipal Services**	**Library**	**Total**
(1) Estimated Annual Adjusted Payroll for 2010-2011 Fiscal Year	$41,052,948	$27,856,104	$40,032,956	$29,992,495	$4,189,095	$143,123,598
(2) Total Normal Cost Percent Payable by City	9.94%	1.55%	11.87%	30.74%	20.90%	
(3) Gross City Contribution: (1) x (2)	4,080,663	431,770	4,751,912	9,219,693	875,521	19,359,559
(4) July 1, 2009 Payment for Local 566	0	0	303,918	0	0	303,918
(5) July 1, 2009 Payment for Local 1716	0	0	0	509,126	0	509,126
(6) Old Plans COLA Annual Payment	115,474	75,003	86,162	1,602	0	278,241
(7) Net City Contribution Estimate: (3)-(4)-(5)-(6)	**$3,965,189**	**$356,767**	**$4,361,832**	**$8,708,965**	**$875,521**	**$18,268,274**

	2010 - 2011 Contribution Sensitivity					
	Police	**Fire**	**Board of Ed**	**Municipal Services**	**Library**	**Total**
Estimated 2010-2011 Fiscal Year Payroll +5%	$43,105,595	$29,248,909	$42,034,604	$31,492,120	$4,398,550	$150,279,778
Net City Contribution Estimate for 2010-2011	4,169,222	378,355	4,599,428	9,169,950	919,297	19,236,252
Estimated 2010-2011 Fiscal Year Payroll -5%	39,000,301	26,463,299	38,031,308	28,492,870	3,979,640	135,967,418
Net City Contribution Estimate for 2010-2011	3,761,156	335,179	4,124,236	8,247,980	831,745	17,300,296

Section II

Supporting Exhibits
(continued)

C. Actuarial Balance Sheet

	July 1, 2009	July 1, 2008
Actuarial Liabilities		
Present Value of Future Benefits for:		
Active Employees	$ 528,188,244	$ 534,033,298
Inactive Members		
• Regular Retirees	694,074,400	670,119,179
• Disability Retirees	54,882,411	58,085,699
• Survivors	28,804,110	26,138,551
• Terminated Non-Vesteds	553,450	553,450
• Terminated Vesteds	17,236,150	13,540,217
• Old Plans COLA	1,217,781	1,361,086
TOTAL	$1,324,956,546	$1,303,831,480
Source of Funds		
1. Actuarial Value of Assets	$1,089,183,892	$1,123,378,687
2. Present Value of Future Employee Contributions	82,534,553	85,172,126
3. Present Value of Future City Normal Cost Contributions	153,238,101	95,280,667
4. TOTAL = (1) + (2) + (3)	$1,324,956,546	$1,303,831,480

Section II

Supporting Exhibits
(continued)

D. Development of Asset Values

The Adjusted Value of assets is used in the determination of plan contributions. It phases in recognition of asset gains and losses. 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. The smoothing is accomplished by recognizing asset gains and losses over a five-year period at 20% per year.

Relationship of Actuarial Value to Market Value		
1. Market value 7/1/2009	$	861,706,321
2. Gain / (loss) not recognized in actuarial value 7/1/2009		(227,477,571)
3. Preliminary actuarial value 7/1/2009: (1)-(2)		1,089,183,892
4. Preliminary actuarial value as a percentage of market value: (3)÷(1)		126.4%
5. Gain / (loss) recognized for corridor min/max		N/A
6. Actuarial value 7/1/2009 after corridor min/max: (3)+(5)		1,089,183,892
7. Actuarial value as a percentage of market value: (6)÷(1)		126.4%

Development of Asset Gain / (Loss) for 2008-2009 Plan Year		
1. Market value 7/1/2008	$	1,080,235,594
2. Contributions		23,919,451
3. Benefit payments		82,858,008
4. Administrative expenses		2,418,777
5. Expected return at 8.00%		84,031,934
6. Expected value 7/1/2009: (1)+(2)-(3)-(4)+(5)		1,102,910,194
7. Market value 7/1/2009		861,706,321
8. Asset gain / (loss) for -1 Plan Year: (7)-(6)		(241,203,873)

Recognition of Gain / (Loss) in Actuarial Value

Year	(a) Gain / (loss)	(b) Recognized as of 7/1/2008	(c) Recognized in current year: 20% of (a)	(d) Total recognized as of 7/1/2009: (b)+(c)	(e) Not recognized as of 7/1/2009: (a)-(d)
2004-2005	$ 10,701,876	$ 8,561,500	$ 2,140,376	$ 10,701,876	$ 0
2005-2006	6,782,904	4,069,743	1,356,581	5,426,324	1,356,580
2006-2007	77,566,647	31,026,658	15,513,329	46,539,987	31,026,660
2007-2008	(111,496,189)	(22,299,238)	(22,299,238)	(44,598,476)	(66,897,713)
2008-2009	(241,203,873)	0	(48,240,775)	(48,240,775)	(192,963,098)
Total			(51,529,727)		(227,477,571)

Section II

Supporting Exhibits
(continued)

D. Development of Asset Values

Summary of Fund Activity		
	Market Value	**Actuarial Value**
1. Beginning Value 7/1/2008		
a. Trust Assets	$1,080,235,594	$1,123,378,687
b. Receivable	0	0
c. Adjustment to beginning values	0	0
d. Total	1,080,235,594	1,123,378,687
2. Contributions made during 2008-2009		
a. Member Contributions	9,709,660	9,709,660
b. City Contributions	12,828,982	12,828,982
c. Other Contributions	1,380,809	1,380,809
d. Total	23,919,451	23,919,451
3. Disbursements		
a. Benefit Payments	82,858,008	82,858,008
b. Expenses	2,418,777	2,418,777
c. Total	85,276,785	85,276,785
4. Net Investment Income		
a. Net Income	(157,171,939)	N/A
b. Expected Return	N/A	84,031,934
c. Recognized Gain (Loss)	N/A	(67,087,627)
d. Total	(157,171,939)	16,944,307
5. Ending Value 7/1/2009		
a. Trust Assets: (1a)+(2)-(3)+(4)	861,706,321	1,078,965,660
b. Receivable	0	0
c. Change in Asset Valuation Method	0	10,218,232
d. Total	861,706,321	1,089,183,892
6. Approximate rate of return 2008-2009	-15.0%	1.6%

Section II

Supporting Exhibits
(continued)

D. Development of Asset Values

Rate of Return on Market Value of Assets				
	Average Annual Effective Rate of Return			
Period Ending June 30	1 Year	3 Years	5 Years	10 Years
2000	8.8%	N/A	N/A	N/A
2001	-2.1%	N/A	N/A	N/A
2002	-3.1%	1.1%	N/A	N/A
2003	4.6%	-0.3%	N/A	N/A
2004	14.6%	5.1%	4.3%	N/A
2005	9.1%	9.4%	4.4%	N/A
2006	8.7%	10.8%	6.6%	N/A
2007	15.6%	11.1%	10.4%	N/A
2008	-1.9%	7.2%	9.0%	N/A
2009	-15.0%	-1.2%	2.7%	3.5%

Section II

Supporting Exhibits
(continued)

E. Accounting Information

GASB Statements No. 25 and 27

The following information is based on the Governmental Accounting Standards Board (GASB) Statement No. 25 on "Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans" and Statement No. 27 on "Accounting for Pensions by State and Local Governmental Employers". It represents a summary of information detailed further within the MERF's annual GASB report. The exhibits are provided for information purposes only here.

In reviewing the following exhibit regarding employer contributions, it is important to note that for the fiscal years ending 2007, 2008, and 2009, the City contributed more than the recommended Annual Required Contribution (ARC). This is due to a catch up period in which the City has been making contributions for prior fiscal years in which there was a shortfall in the amount contributed. The footnotes below provide further detail.

Schedule of Employer Contributions

Year Ended June 30	Annual Required Contribution	Percentage Contributed	Actual Contribution Received by MERF	Miscellaneous *	Net Percentage Contributed
2004**	6,717,025	97%	6,296,790	239,359	94%
2005**	9,336,898	99%	9,000,000	206,742	96%
2006**	17,033,102	70%	11,765,350	183,037	69%
2007	14,328,866	115%	16,317,266***	163,749	114%
2008	13,352,745	125%	16,454,745	129,258	123%
2009	11,797,419	109%	12,713,915****	115,067	108%

* *Funds transferred from State of Connecticut's Connecticut Municipal Employees' Retirement System (CMERS) and Aetna annuity payments.*

** *Revised.*

*** *2006-2007 fiscal year contribution includes contributions paid for prior fiscal years during the 2006-2007 fiscal year as follows: FY 00-01 $117,500, FY 02-03 $2,198, FY 03-04 $180,876, FY 04-05 $130,156, FY 05-06 $5,084,715. After the June 30, 2006 GASB reporting period closed, two contributions of $1,572,500 and $1,490,242 were made to the Plan for the 2006-2007 fiscal year. These amounts are not included in the $16,317,266 fiscal year 2006-2007 contribution listed above. They will be included in the 2007-2008 fiscal year contributions listed in the June 30, 2008 GASB report.*

**** *Contribution includes $1,031,484 in contributions paid for the prior fiscal year (2007/2008) after the 06/30/2008 reporting period closed.*

E. Accounting Information

As detailed below, the plan's funded status dropped from 102.2% as of July 1, 2008 to 96.6% as of July 1, 2009. Despite the fact that the City fully funded the recommended contribution for the year, asset growth did not keep pace with liability growth, resulting in the decline in the funded status. This is primarily the result of the asset losses on the smoothed (actuarial) value of assets during the year previously discussed. The change in asset valuation method partially offset this decline. Under the old method, the plan's funded status would have been 95.7%.

Even with a funded status of less than 100%, the plan is still in a healthy, well-funded position at the current 96.6% level.

Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets * (a)	Actuarial Accrued Liability (AAL) ** (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a÷b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)÷c)
7/1/2004	963,044,000	967,393,000	4,349,000	99.6%	107,808,000	4.0%
7/1/2005	986,405,000	970,286,000	(16,119,000)	101.7%	117,261,000	-13.7%
7/1/2006	1,021,491,000***	1,002,848,000	(18,643,000)	101.9%	124,837,000	-14.9%
7/1/2007	1,092,128,000***	1,090,715,000	(1,413,000)	100.1%	133,280,000	-1.1%
7/1/2008	1,123,379,000	1,099,441,000	(23,938,000)	102.2%	139,243,000	-17.2%
7/1/2009	1,089,184,000	1,126,965,000	(37,781,000)	96.6%	134,143,000	-28.2%

* *Excludes receivable from CMERS (applicable for 7/1/2004-7/1/2005 only; no longer applicable 7/1/2006+).*

** *Liability shown determined using the projected unit credit cost method 7/1/2004-7/1/2006 and the entry age normal cost method as of 7/1/2007.*

*** *Excludes estimated City contribution receivable of $5,463,745 as of July 1, 2007 and $7,022,224 as of July 1, 2006. These receivable amounts were fully paid by the City as of July 1, 2008.*

Section II

Supporting Exhibits
(continued)

F. Membership Data

Summary – Active Members as of July 1, 2009

	Number	Payroll*	Average Annual Pay*
Police	463	$ 34,361,016	$74,214
Firefighters	371	27,716,992	74,709
Board of Education	1,019	39,925,732	39,181
Municipal Services	479	27,884,353	58,214
Library	74	4,254,409	57,492
Total	**2,406**	**$134,142,502**	**$55,753**

**Basic salary, plus overtime, plus Fire private duty pay.*

Summary – Pensioners as of July 1, 2009

	Service Pensions*		Disability Pensions		Survivor Benefits*		Total	
	Count	Total Monthly Annuities	Count	Total Monthly Annuities	Count	Total Monthly Annuities	Count	Total Monthly Annuities
Police	457	$1,801,034	59	$139,793	71	$78,219	587	$2,019,046
Firefighters	318	1,217,228	118	318,172	106	113,666	542	1,649,066
Board of Ed.	614	850,200	20	12,321	63	27,417	697	889,938
Municipal Svcs.	728	1,975,275	13	11,229	106	78,847	847	2,065,351
Library	57	122,700	0	0	1	185	58	122,885
Vested Deferred	164	199,875	--	--	--	--	164	199,875
TOTAL**	**2,338**	**$6,166,312**	**210**	**$481,515**	**347**	**$298,334**	**2,895**	**$6,946,161**

* *Four pensioners receiving benefits as retirees and as survivors are included in both groups.*

** *Additional monthly benefits for the July 1, 1987, July 1, 1990, July 1, 1997, July 1, 1999,July 1, 2001, July 1, 2005, and July 1, 2007 COLA's for the unfunded plans (PBF, FRF, and RAF) are also included in the total liabilities for MERF. Such participants are not included in the counts shown here.*

Section II

Supporting Exhibits
(continued)

F. Membership Data

Data Reconciliation – Police

Participant Data				
	Active	**Terminated Vested**	**Pensioners***	**Total**
Total Participants 7/1/2008	**451**	**6**	**574**	**1,031**
Adjustments	+5	0	+11	+16
Retirements	-10	0	+10	0
Disabilities	0	0	0	0
Terminations				
Vested	-3	+3	N/A	0
Non-vested	-8	N/A	N/A	-8
Deaths	0	0	-19	-19
New beneficiaries	N/A	0	+11	+11
Transfer group	0	0	0	0
Rehires	0	0	0	0
New entrants	+28	N/A	N/A	+28
Total Participants 7/1/2009	**463**	**9**	**587**	**1,059**
Average Age				
7/1/2008	37.2			
7/1/2009	37.3			
Average Service				
7/1/2008	9.0			
7/1/2009	9.3			
Payroll**				
7/1/2008	$31,841,226			
7/1/2009	34,361,016			
Total monthly benefits*				
7/1/2008		$18,004	$1,962,448	
7/1/2009		26,716	2,019,046	

* *Excludes old plan COLA participants.*

** *Basic salary plus overtime and private duty pay.*

Section II

Supporting Exhibits
(continued)

F. Membership Data

Data Reconciliation – Firefighters

Participant Data				
	Active	**Terminated Vested**	**Pensioners***	**Total**
Total Participants 7/1/2008	**379**	7	**531**	**917**
Adjustments	+4	-2	+2	+4
Retirements	-12	-3	+15	0
Disabilities	0	0	0	0
Terminations				
Vested	0	0	N/A	0
Non-vested	-1	N/A	N/A	-1
Deaths	0	0	-13	-13
New beneficiaries	N/A	0	+7	+7
Transfer group	0	0	0	0
Rehires	0	0	0	0
New entrants	+1	N/A	N/A	+1
Total Participants 7/1/2009	**371**	2	**542**	**915**
Average Age				
7/1/2008	40.7			
7/1/2009	41.2			
Average Service				
7/1/2008	13.4			
7/1/2009	14.1			
Payroll**				
7/1/2008	$29,817,424			
7/1/2009	27,716,992			
Total monthly benefits*				
7/1/2008		$ 19,171	$1,579,865	
7/1/2009		1,614	1,649,066	

* *Excludes old plan COLA participants.*
** *Basic salary plus overtime and private duty pay.*

F. Membership Data

Data Reconciliation – Board of Education

Participant Data				
	Active	**Terminated Vested**	**Pensioners***	**Total**
Total Participants 7/1/2008	**1,211**	**58**	**691**	**1,960**
Adjustments	-3	-4	-5	-12
Retirements	-31	-4	+35	0
Disabilities	0	0	0	0
Terminations				
Vested	-36	+36	N/A	0
Non-vested	-190	N/A	N/A	-190
Deaths	-8	-1	-33	-42
New beneficiaries	N/A	0	+9	+9
Transfer group	0	0	0	0
Rehires	0	0	0	0
New entrants	+76	N/A	N/A	+76
Total Participants 7/1/2009	**1,019**	**85**	**697**	**1,801**
Average Age				
7/1/2008	45.0			
7/1/2009	45.7			
Average Service				
7/1/2008	9.0			
7/1/2009	9.7			
Payroll**				
7/1/2008	$43,206,401			
7/1/2009	39,925,732			
Total monthly benefits*				
7/1/2008		$69,236	$853,558	
7/1/2009		94,512	889,938	

* *Excludes old plan COLA participants.*
** *Basic salary plus overtime and private duty pay.*

Section II

Supporting Exhibits
(continued)

F. Membership Data

Data Reconciliation – Municipal Services

Participant Data				
	Active	**Terminated Vested**	**Pensioners***	**Total**
Total Participants 7/1/2008	**554**	**62**	**816**	**1,432**
Adjustments	-16	0	+3	-13
Retirements	-46	-5	+51	0
Disabilities	0	0	0	0
Terminations				
Vested	-10	+10	N/A	0
Non-vested	-36	N/A	N/A	-36
Deaths	-7	-1	-32	-40
New beneficiaries	N/A	0	+9	+9
Transfer group	0	0	0	0
Rehires	+1	-1	0	0
New entrants	+39	N/A	N/A	+39
Total Participants 7/1/2009	**479**	**65**	**847**	**1,391**
Average Age				
7/1/2008	48.9			
7/1/2009	49.0			
Average Service				
7/1/2008	10.2			
7/1/2009	11.8			
Payroll**				
7/1/2008	$30,226,828			
7/1/2009	27,884,353			
Total monthly benefits*				
7/1/2008		$70,351	$1,924,856	
7/1/2009		75,178	2,065,351	

* *Excludes old plan COLA participants.*
** *Basic salary plus overtime and private duty pay.*

Section II

Supporting Exhibits
(continued)

F. Membership Data

Data Reconciliation – Library

Participant Data				
	Active	**Terminated Vested**	**Pensioners***	**Total**
Total Participants 7/1/2008	**76**	**3**	**52**	**131**
Adjustments	+10	-1	+1	+10
Retirements	-5	0	+5	0
Disabilities	0	0	0	0
Terminations				
Vested	-1	+1	N/A	0
Non-vested	-7	N/A	N/A	-7
Deaths	0	0	0	0
New beneficiaries	N/A	0	0	0
Transfer group	0	0	0	0
Rehires	0	0	0	0
New entrants	+1	N/A	N/A	+1
Total Participants 7/1/2009	**74**	**3**	**58**	**135**
Average Age				
7/1/2008	44.8			
7/1/2009	45.7			
Average Service				
7/1/2008	11.7			
7/1/2009	11.9			
Payroll**				
7/1/2008	$4,151,449			
7/1/2009	4,254,409			
Total monthly benefits*				
7/1/2008		$1,710	$109,894	
7/1/2009		1,855	122,885	

**Excludes old Plan COLA participants.*
***Basic salary plus overtime and private duty pay.*

Section II

Supporting Exhibits
(continued)

F. Membership Data

Data Reconciliation – Total

Participant Data				
	Active	**Terminated Vested**	**Pensioners***	**Total**
Total Participants 7/1/2008	**2,671**	**136**	**2,664**	**5,471**
Adjustments	0	-7	+12	+5
Retirements	-104	-12	+116	0
Disabilities	0	0	0	0
Terminations				
Vested	-50	+50	N/A	0
Non-vested	-242	N/A	N/A	-242
Deaths	-15	-2	-97	-114
New beneficiaries	N/A	0	+36	+36
Transfer group	0	0	0	0
Rehires	+1	-1	0	0
New entrants	+145	N/A	N/A	+145
Total Participants 7/1/2009	**2,406**	**164**	**2,731**	**5,301**
Payroll**				
7/1/2008	$133,280,227			
7/1/2009	134,142,502			
Total monthly benefits				
7/1/2008		$ 178,472	$6,430,121	
7/1/2009		199,875	6,746,286	

**Excludes old Plan COLA participants.*
***Basic salary plus overtime and private duty pay.*

City of Hartford MERF - Police

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

July 1, 2009

	Completed Years of Credited Service																					
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
Attained Age	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25			22	51,670																	22	51,670
25 to 29			59	58,099	23	75,643															82	63,020
30 to 34			34	62,050	31	78,700	12	83,538													77	72,102
35 to 39			24	63,761	22	78,827	38	85,720	21	87,904											105	79,693
40 to 44			14	56,249	16	80,336	37	83,169	29	97,398	10	82,948									106	83,058
45 to 49	1	53,163	6	54,848	5	69,801	8	85,375	13	83,022	6	78,816	2	109,794							41	77,708
50 to 54					4	71,416	2	69,528	5	74,458	9	86,108	2	93,893							22	79,989
55 to 59							2	110,510			1	108,473	2	65,410							5	92,063
60 to 64							1	36,374					1	73,587							2	54,980
65 to 69													1	87,697							1	87,697
70 & over																						
All ages	1	53,163	159	58,623	101	77,562	100	84,165	68	90,031	26	84,070	8	87,435							463	

City of Hartford MERF - Firefighters

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

July 1, 2009

	Completed Years of Credited Service																					
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
Attained Age	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	.No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25			21	52,036																	21	52,036
25 to 29			23	51,549	6	72,510	1	70,970													30	56,388
30 to 34			15	50,639	20	70,933	9	69,181	6	72,909											50	64,767
35 to 39			10	56,004	15	69,690	21	74,265	10	77,323											56	70,325
40 to 44			3	58,933	13	73,405	21	75,568	15	76,527	7	78,011	2	71,110							61	74,659
45 to 49			2	63,400	3	69,932	26	76,607	14	79,057	29	81,711	18	77,637	1	75,838					93	78,259
50 to 54					1	69,932	5	72,534	2	76,482	13	76,206	23	83,714					1	73,344	45	79,445
55 to 59							1	69,932	2	73,575	3	83,134	6	83,172			1	72,805	1	83,525	14	80,132
60 to 64											1	69,932									1	69,932
65 to 69																						
70 & over																						
All ages			74	52,724	58	71,260	84	74,577	49	76,847	53	79,730	49	80,901	1	75,838	1	72,805	2	78,435	371	

City of Hartford MERF - Board of Education

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

July 1, 2009

	Completed Years of Credited Service																					
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
Attained Age	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	3	37,841	10	32,448																	13	33,693
25 to 29	12	38,779	52	33,133	15	39,413															79	35,183
30 to 34	10	35,691	51	43,883	27	37,951	16	34,940													104	40,179
35 to 39	8	42,031	37	41,368	33	44,008	39	47,339	8	40,018	1	32,731	1	64,153							127	43,956
40 to 44	16	38,616	41	34,234	39	43,142	46	42,576	11	44,607	7	43,531	1	57,396							161	40,467
45 to 49	7	38,152	37	39,433	33	43,880	55	36,365	11	35,331	13	51,946			1	80,771					157	40,248
50 to 54	6	40,088	38	39,013	22	49,001	37	34,162	13	37,995	16	39,223	8	56,809	3	62,140			1	60,575	144	40,889
55 to 59	4	33,253	25	39,968	26	41,322	28	37,614	22	40,488	22	47,484	6	39,767	3	36,230	2	36,398	1	47,669	139	40,741
60 to 64	2	42,494	9	42,329	15	61,055	17	42,128	7	48,334	12	51,561	7	40,971	2	72,170	3	56,017	1	27,521	75	49,090
65 to 69			6	25,962	4	38,024	2	41,834	3	44,693	1	39,244			1	30,746					17	35,036
70 & over					2	43,552					1	32,018									3	39,707
All ages	68	38,463	306	38,226	216	44,010	240	39,504	75	40,754	73	46,232	23	47,888	10	55,097	5	48,169	3	45,255	1,019	

City of Hartford MERF - Municipal Services

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

July 1, 2009

	Completed Years of Credited Service																					
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
Attained Age	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	2	38,377	9	29,893																	11	31,436
25 to 29	3	46,090	6	37,839	2	49,624															11	42,232
30 to 34	1	9,120	15	49,436	8	45,020	3	60,646	2	50,150											29	48,036
35 to 39	2	56,125	18	67,132	7	58,630	7	75,252	3	102,743	1	93,310			1	53,530					39	69,561
40 to 44	7	73,334	16	63,525	15	54,522	6	54,633	9	74,428	14	55,565	2	64,342	2	53,901	3	54,332			74	61,116
45 to 49	5	64,375	20	69,690	23	59,978	10	30,019	6	60,092	8	52,393	6	78,192	4	54,663	3	66,997	3	70,471	88	59,946
50 to 54	3	77,957	20	64,111	20	44,772	11	80,202	7	78,646	8	58,891	8	88,929	1	55,970	3	64,464	1	46,374	82	64,910
55 to 59	3	63,173	14	66,565	18	70,549	10	67,889	17	48,030	5	63,413	4	58,911	2	49,429	1	10,316	3	59,929	77	61,408
60 to 64	1	163,894	7	70,562	10	63,322	7	71,712	7	41,931	3	81,924	5	75,180			1	59,877			41	67,515
65 to 69			1	78,301	5	63,687	9	27,655	1	78,301	1	57,734					1	10,316			18	43,999
70 & over			2	10,316	1	10,316	1	43,970	2	10,316	2	10,316	1	81,377							9	21,951
All ages	27	65,144	128	59,869	109	56,830	64	57,698	54	59,230	42	57,207	26	77,007	10	53,481	12	53,157	7	62,511	479	

City of Hartford MERF - Library

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

July 1, 2009

Attained Age	Completed Years of Credited Service																					
	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25			3	48,034																	3	48,034
25 to 29			2	58,359	2	46,838															4	52,598
30 to 34					3	44,149	2	47,277	1	45,797											6	45,466
35 to 39			1	54,343	3	44,974	2	45,442			2	53,555									8	48,407
40 to 44			3	58,173			1	90,204	3	47,554	3	48,039									10	55,150
45 to 49			4	69,197	6	62,494			1	48,743	4	56,527	2	49,470							17	60,326
50 to 54			4	79,376	3	88,818	1	45,343	1	45,177			1	56,446							10	73,092
55 to 59			2	85,366	3	60,291	2	71,929			3	86,071	1	47,439							11	72,828
60 to 64					1	46,829			1	94,713	2	73,681			1	77,738					5	73,328
65 to 69																						
70 & over																						
All ages			19	66,037	21	58,579	8	58,105	7	53,870	14	63,065	4	50,706	1	77,738					74	

City of Hartford MERF - All Groups

Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service

July 1, 2009

Completed Years of Credited Service

Attained Age	Under 1		1 to 4		5 to 9		10 to 14		15 to 19		20 to 24		25 to 29		30 to 34		35 to 39		40 and over		All years	
	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	5	38,055	65	45,810																	70	45,256
25 to 29	15	40,241	142	47,252	48	61,940	1	70,970													206	50,279
30 to 34	11	33,275	115	50,971	89	60,568	42	58,772	9	64,839											266	55,151
35 to 39	10	44,930	90	54,461	80	59,942	107	68,404	42	77,856	4	58,288	1	64,153	1	53,530					335	62,944
40 to 44	23	49,182	77	46,326	83	57,279	111	63,726	67	79,304	41	63,679	5	65,660	2	53,901	3	54,332			412	60,799
45 to 49	13	49,434	69	51,936	70	53,742	99	50,323	45	66,554	60	69,464	28	78,120	6	62,543	3	66,997	3	70,471	396	58,353
50 to 54	9	52,711	62	49,676	50	51,968	56	48,120	28	57,809	46	62,439	42	79,492	4	60,597	3	64,464	3	60,098	303	57,073
55 to 59	7	46,076	41	51,196	47	53,701	43	50,417	41	45,229	34	58,203	19	60,677	5	41,509	4	38,979	5	62,196	246	51,927
60 to 64	3	82,960	16	54,681	26	61,380	25	50,196	15	48,438	18	60,100	13	56,695	3	74,026	4	56,982	1	27,521	124	56,431
65 to 69			7	33,439	9	52,281	11	30,233	4	53,095	2	48,489	1	88,585	1	30,746	1	10,316			36	41,005
70 & over			2	10,316	3	32,473	1	43,970	2	10,316	3	17,550	1	81,377							12	26,390
All ages	96	46,134	686	49,431	505	57,349	496	57,275	253	65,591	208	62,954	110	72,531	22	56,334	18	52,863	12	60,851	2,406	

G. IRC Section 415(m) Valuation

The IRC Section 415(m) Fund* is an unfunded "excess benefit plan" to provide that portion of certain retirees' pension benefits that exceed the limits permitted under Section 415 of the Federal Internal Revenue Code (IRC).

	July 1, 2009	July 1, 2008
1. Number of retirees and beneficiaries receiving benefits	4	5
2. Annual benefits payable	$ 44,000	$ 56,000
3. Present value of benefits	$143,000	$213,000

The "actives" are funded through MERF. The City provides contributions for the retirees' benefits payable each year, as determined by the Pension Commission.

Actuarial Assumptions

The actuarial assumptions used in the 2009 Section 415(m) Fund valuation are as follows:

Mortality Basis:	RP-2000 Healthy Annuitants Table projected by Scale AA to year of valuation plus 8 years (2017 for July 1, 2009 valuation), with no adjustment and separate male and female rates.
Termination:	N/A.
Salary Scale:	N/A.
Investment Return:	8.00% per year, net of investment expenses.
Assumed Retirement age:	Immediate as all are retired.
Increases in dollar limit on benefits under IRC Section 415:	3% per year.

Benefits

Retiree pension amounts in excess of IRC Section 415 limits. Benefits which do not exceed such amounts are payable from the City's MERF Plan. IRC Section 415 limits are assumed to increase annually and thus decrease the benefits payable from this Plan and increase the portion of the benefits payable from the City's MERF Plan.

**Section 415(m) Fund adopted by the Court of Common Council on March 24, 1997.*

Section III

Actuarial Cost Methods and Assumptions

A. Actuarial Cost Methods

Asset Valuation Method – Adjusted Value of Assets

In order to smooth the year-to-year fluctuations in asset values, the asset values are adjusted by phasing in recognition of gains and losses over a five-year period. (Phase-in started July 1, 2003). Gains and losses are defined as the difference between the actual and the expected return on assets.

The July 1, 2009 valuation reflects a change in the asset valuation method from the use of a four-year smoothing period for gains and losses to the use of a five-year period. In the year of implementation of the change, the five-year smoothing methodology was retroactively applied to the gains and losses for previous years.

The assets held by the insurance companies include the funds on deposit for future purchase of annuities, as well as the reserves and contingency reserves for annuities already purchased which are subject to experience rating.

Actuarial Funding Method

The "Aggregate Actuarial Cost Method" (first adopted for the 1969 valuation) is used for determining the future rates of contributions needed for funding service retirements. This method is designed to produce stable "percentage-of-payroll" Normal Actuarial Costs over a period of years. This aim will be achieved so long as the emerging experience conforms with the actuarial assumptions.

Using this method, an actuarial valuation was made of the actuarial present value of all future pension benefits for active members (including survivor benefits, disability benefits, and refunds of employee contributions). The actuarial present value needed for future payments to present pensioners and deferred vested pensioners and survivors was subtracted from the Valuation Assets (Adjusted Value) to determine the current Valuation Assets (Adjusted Value) available for future benefits for active members. The latter figure was subtracted from the actuarial present value of future benefits for active members in order to determine the remaining actuarial present value to be funded by future contributions. Finally, the net remainder was divided by the actuarial present value of all future salaries, and the total Normal Actuarial Costs for future contributions was determined as a level percentage of future annual payrolls.

Since the MERF fund includes several classifications of members who have different provisions for benefits and contributions, it was necessary to apply this method by separate actuarial valuations for Police, Firefighters, Board of Education, Municipal Services, and Library participants.

Section III

Actuarial Cost Methods and Assumptions
(continued)

B. Actuarial Assumptions

The actuarial assumptions used in the 2009 MERF valuation are as follows:

Mortality Basis:

For Police, Fire, Board of Education Corridor Supervisors and Building and Grounds Supervisors:

- Pre-retirement: RP2000 Employees Table – male and female rates, projected by Scale AA to valuation date plus 17 years with occupational (i.e., non-office worker, blue collar) adjustment.
- Post-retirement: RP2000 Healthy Annuitants Table – male and female rates, projected by Scale AA to valuation date plus 8 years with occupational (i.e., non-office worker, blue collar) adjustment. No adjustment reflected for assumed future beneficiaries.
- Disability: RP2000 Disabled Table – male and female rates.

For All Other Groups:

- Pre-retirement: RP2000 Employees Table – male and female rates, projected by Scale AA to valuation date plus 17 years with no adjustment.
- Post-retirement: RP2000 Healthy Annuitants Table – male and female rates, projected by Scale AA to valuation date plus 8 years with no adjustment.
- Disability: RP2000 Disabled Table – male and female rates.

Section III

Actuarial Cost Methods and Assumptions

(continued)

Termination:

Yearly Rates of Employee Termination

Age	Non-Uniformed	Uniformed
20	10.0%	5.0%
25	7.0%	2.0%
30	5.0%	2.0%
35	4.0%	2.0%
40+	0.0%	0.0%

Salary Scale:

3% for inflationary salary increases plus a percentage for promotion or merit increases. For Police under age 45, overtime limited to less than or equal to 20% of base pay.

Yearly Rates of Increases for Promotion or Merit

Age	Police	Fire	Bd of Ed	Munic. Svc. & Lib.
25	4.0%	2.5%	4.0%	6.0%
30	3.5%	2.5%	4.0%	4.7%
35	2.2%	1.6%	2.1%	3.1%
40	1.2%	1.1%	1.0%	2.0%
Over 40	1.0%	1.0%	1.0%	2.0%

Salaries are adjusted for groups in negotiations by 3% per year for the period of each open contract, and non-bargaining groups by 3% per year for one full fiscal year from the measurement date. Any wage increases negotiated beyond the valuation date have been reflected in our projections.*

* *The following groups have future salary increases that have been negotiated and are reflected in this valuation:*

Firefighters
HMEA
CHPEA
MLA
Non-union
School Crossing Guards

Investment Return:

8.00% per year, net of investment expenses.

Section III

Actuarial Cost Methods and Assumptions

(continued)

Assumed Retirement Age:

Retirement Rates:

Service	Police	Fire	Mun. Svc. & Lib.
20	20%	5%	10%
21	15%	1%	5%
22	5%	1%	5%
23	5%	1%	10%
24	20%	10%	15%
25	30%	30%	15%
26-27	5%	5%	10%
28	10%	5%	15%
29	25%	20%	15%
30	100%	20%	100%
31-34	n/a	5%	n/a
35	n/a	100%	n/a

(maximum of age 65)

Age	Bd of Ed
55	15%
56	10%
57-59	5%
60	30%
61	5%
62	20%
63-64	10%
65	100%

For both Uniformed and Non-Uniformed who have reached Assumed Retirement Age, retirement after one year.

Social Security:

Future tax wage bases are developed by projecting the 2009 base of $106,800 forward at 4% per year.

Section III

Actuarial Cost Methods and Assumptions

(continued)

Marital Status at Retirement:

Non-Uniformed:

Males - 80% married, spouse 3 years younger.
Females - 60% married, spouse same age.

Uniformed:

All - 80% married, spouse 2 years younger.

Disability:

Disability benefits were explicitly valued using the DP85 Class 1 Male and Female Disability Incidence Rate Table increased three times for the Police and Firefighter groups, two times for the Board of Education groups and with no increase for the Municipal Services and Library groups.

DP85 Class 1 Disability Incidence Table:
Sample male and female rates

Age	Male	Female
15	0.021%	0.023%
20	0.029%	0.030%
25	0.038%	0.047%
30	0.048%	0.080%
35	0.069%	0.136%
40	0.117%	0.211%
45	0.202%	0.323%
50	0.358%	0.533%
55	0.722%	0.952%
60	1.256%	1.159%
65	1.753%	1.358%

Expenses other than Investment Expenses:

An explicit dollar amount was included in the development of the normal cost percentage equal to an estimate of expenses (other than investment expenses) for the upcoming year. The estimate was developed based on an average of actual expenses over the last four years. For the 2009 valuation, $2,266,353 was used. Estimated expenses were then allocated to the various groups by the present value of future benefits and expressed as a percentage of payroll.

Section III

Actuarial Cost Methods and Assumptions
(continued)

Sick Exchange:	Four years are exchanged by all actives if provision available. For Firefighters hired prior to July 1, 2003, six years are exchanged.
Military and Prior Service Buy-backs:	When a decision to buy-back service occurs, date of hire is adjusted accordingly.

Additional Liabilities:

COLAs:

Included in this valuation is the liability for the Cost of Living Adjustments (COLAs) effective July 1, 1987, July 1, 1990, July 1, 1997, July 1, 1999, July 1, 2001, July 1, 2005, and July 1, 2007 for both the MERF and the unfunded "Old Plans" (PBF, FRF, and RAF).

Local 1716:

Included in this valuation is the obligation for Local 1716 members who transferred to State MERF B on July 1, 1987.

29-year amortization payments (split between the City administration and the pension fund) commenced July 1, 1987 for this obligation. As of July 1, 2009, the City payment will be $509,126 ($2,863,000 on a present value basis) and the pension fund payment will be $462,336 ($2,599,000 on a present value basis).

Local 566:

Included in this valuation is the obligation for Local 566 (included merged Local 1303) members who transferred to State MERF B on August 1, 1988.

30-year amortization payments (split between the City administration and the pension fund) commenced August 1, 1988 for this obligation. As of July 1, 2009, the City payment will be $303,918 ($2,202,000 on a present value basis) and the pension fund payment will be $276,288 ($2,003,000 on a present value basis).

Section IV

Hartford MERF - Summary of Principal Provisions of Pension Plan
July 1, 2009

PROVISIONS FOR:	POLICE OFFICERS AND FIREFIGHTERS	BOARD OF EDUCATION MEMBERS	MUNICIPAL SERVICES & LIBRARY MEMBERS
Retirement Pensions:	Firefighters hired before July 1, 2003: 2.80% of Final Average Pay (rate of weekly pay immediately preceding retirement times 52, plus for firefighters who work a 42 hour week, holiday pay) multiplied by years of service up to 25 plus 2.0% for years over 25. Firefighters hired after June 30, 2003: 2.5% of Final Average Pay (rate of weekly pay immediately preceding retirement times 52, plus for firefighters who work a 42 hour week, holiday pay) multiplied by years of service up to 20 plus 2% of Final Average Pay for years of service over 20. Sworn Police Officers hired before July 1, 1999: 2.65% of Final Average Pay for highest 3 of last 5 years multiplied by years of service up to 20 plus 3% for year 21 plus a decreasing percentage for years over 21. Final Average Pay includes a provision for over-time and private duty pay. Sworn Police Officers hired after June 30, 1999: 2.5% of Final Average Pay for highest 3 of last 5 years times years of service up to 20 plus 2% for years of service- over 20.	2% (2.5% for HFSHP, HSSSA and HESP) of Final Average Pay for highest 5 of last 10 years times years of service, with maximum benefit of 70% of Final Average Pay. Final Average Pay for HFSHP, HESP, HSSSA, and Local 2221, Hartford Federation of Paraprofessionals are based on highest 3 out of last 5 years. Benefit for Local 2221 is 2.5% of Final Average Pay multiplied by years of service up to 20 plus 2% of Final Average Pay for years of service over 20 (maximum of 10 years). Effective July 1, 2008 for Local 818, employees hired prior to March 1, 2007 will get 2.5% of Final Average Pay (for each year of service) and employees hired after March 1, 2007 will get 2.0%. Final Average Pay is the highest 3 of the 7 years. Maximum benefit is 70% of pay.	For Library and MLA hired on or after July 1, 2006, HMEA hired after July 1, 2003, CHPEA hired after June 23, 2003, 2% of Final Average Pay for highest 2 of last 5 years times years of service with a maximum benefit of 70% of Final Average Pay. For Library with 5-year option, Final Average Pay is highest 5 of last 10 years. For CHPEA hired on or before June 23, 2003, MLA hired before July 1, 2006, and Nonbargaining, 2.5% of Final Average Pay for highest 2 of last 5 years times years of service. Maximum benefit of 70% of Final Average Pay for CHPEA, 80% for Nonbargaining and MLA. For Nonbargaining with 5-year option, Final Average Pay is highest 5 of last 10 years. For HMEA hired before July 1, 2003, 2.75% of Final Average Pay for highest 2 of last 5 years times years of service with a maximum benefit of 75% (was 70%) of Final Average Pay. For SCGA, 2% of Final Average Pay for highest 5 of last 10 years reduced by 1% of average Social Security covered earnings for all years included in computation of Social Security primary benefits. Maximum benefit of 100% of Final Average Pay.

PROVISIONS FOR:	POLICE OFFICERS AND FIREFIGHTERS	BOARD OF EDUCATION MEMBERS	MUNICIPAL SERVICES & LIBRARY MEMBERS
Retirement Pensions:	Non-Sworn Police Officers: 2.5% of Final Average Pay for highest 3 of last 5 years times years of service, with maximum benefit of 80% of Final Average Pay. Sworn Police Officers have a maximum benefit of 70% of Final Average Pay. For Sworn Police Officers hired before July 1, 1999 increase maximum benefit to 80% of Final Average Pay with sick exchange provision. Firefighters have a maximum benefit of 80% of Final Average Pay (85% with sick exchange if hired prior to July 1, 2003). Assistant Police Chief, Police Chief, Assistant Fire Chief and Fire Chief: Same as Non-Bargaining.		
Normal Form of Benefit:	For unmarried members: life annuity. For married members: surviving spouse benefit of 25% of member's final year's earnings, if non-service connected death, and 50% of member's final year's earnings, if service connected death. Minimum of 50% of pension benefit for firefighters for non-service connected death. For married Non-Sworn Police Officers: life annuity with 50% to survivor.	For unmarried members: life annuity. For married members: life annuity with 50% to survivor.	For unmarried members: life annuity. For married members: life annuity with 50% to survivor.

PROVISIONS FOR:	POLICE OFFICERS AND FIREFIGHTERS	BOARD OF EDUCATION MEMBERS	MUNICIPAL SERVICES & LIBRARY MEMBERS
Normal Retirement Age and Service Requirement:	Firefighters and Sworn Police Officers hired before July 1, 1999: Full benefits after 20 years of continuous service. Sworn Police Officers hired after June 30, 1999: Full benefits after 25 years of continuous service. Non-Sworn Police Officers: Full benefits after 20 years of service, or age 60 plus 5 years of continuous service, or after 15 years of service, if contributions are left in the MERF until would have had 20 years of service.	Age 60 plus 10 (5 for non-bargaining – was 10) years of service (continuous service for Local 2221). Members are also eligible at age 55 with 25 years of service. Local 818 employees hired prior to March 1, 2007 may retire after 20 years of service, regardless of age. For HSSSA, age 55 and 5 (was 10) years of service.	For SCGA and MLA hired on or after July 1, 2006, earlier of (1) age 60 plus 5 years of continuous service or (2) age 55 with 25 years of continuous service. For Nonbargaining and MLA hired prior to July 1, 2006, earlier of (1) age 60 plus 5 years of continuous service or (2) 20 years of service, or (3) after 20 years of service if participant leaves after 15 years of service and contributions are left in the MERF until would have had 20 years of service. For CHPEA, earlier of (1) age 60 plus 5 years of continuous service or (2) 20 years of aggregate service if hired on or before June 23, 2003, age 55 with 25 years of aggregate service if hired after June 23, 2003. For HMEA earlier of (1) age 60 plus 5 years of continuous service or (2) 20 years of continuous service if hired before July 1, 2003, age 55 with 25 years of continuous service if hired after July 1, 2003. For Library non union, earlier of (1) age 60 plus 5 years of continuous service or (2) 25 years of continuous service. For Library union, (1) age 60 plus 10 years of continuous service or (2) 25 years of continuous service.

PROVISIONS FOR:	POLICE OFFICERS AND FIREFIGHTERS	BOARD OF EDUCATION MEMBERS	MUNICIPAL SERVICES & LIBRARY MEMBERS
Optional Early Retirement:	Sworn Police Officers: Age 50 with 10 years of continuous service, actuarially reduced for years prior to Normal Retirement Age. Non-Sworn Police Officers: Age 55 with 5 years of continuous service, reduced at 4% per whole year prior to age 60. Firefighters: Age 50 with 5 years of continuous service, actuarially reduced or reduced at 2% per year (prorated for fractional years) prior to Normal Retirement Age.	At age 55 with 10 years (5 years for HESP) of service (continuous service for Local 2221), reduced at 4% per whole year prior to age 60. For Local 818, reduction is adjusted for partial years.	For Library union, age 55 with 10 years of continuous service. For all others, age 55 with 5 years of continuous service. Benefit reduced at 4% per whole year prior to age 60 (prorate for partial years for HMEA and CHPEA). For SCG members, reduction is 2% per whole year and fraction of a year prior to age 60.
Vesting of Earned Deferred Pension:	Sworn Police Officers: After 10 years of continuous service. Firefighters and Non-Sworn Police Officers: After 5 years of continuous service.	After 10 years (5 years for HESP, HSSSA and non-bargaining) of continuous service. Payments begin no earlier than age 55. (Was 10 years for HSSSA and non-bargaining).	For Library union, 10 years of continuous service. For all others, 5 years of continuous service. Payments begin no earlier than age 55.
Benefits to Survivors: (Death of Active Member Prior to Retirement)	Surviving Spouse: 25% of final year's earnings (50% if service connected death), payable until death or remarriage. Minimum of 50% of pension benefit for Firefighters for non-service connected death. Surviving Child: $100 per month for first child, $50 for each additional child (10% of final year's earnings if service connected death, or 15% if no surviving spouse). Total benefit, including Worker's Compensation, cannot exceed 100% of current pay rate for Member's rank. Non-Sworn Police Officers: Same as General Government members.	Member must meet qualifications for vesting. Surviving Spouse: 50% of pension which Member is receiving or would be entitled to when retired, payments beginning no earlier than date of Member's 55th birthday. Surviving Spouse benefits are payable until death or remarriage.	

PROVISIONS FOR:	POLICE OFFICERS AND FIREFIGHTERS	BOARD OF EDUCATION MEMBERS / MUNICIPAL SERVICES & LIBRARY MEMBERS
Refund of Contributions upon Discontinuance of Employment or at Death (Non-Vested Members): (May be taken in lieu of earned deferred pension by vested members)	Refund of total contributions, without interest. Non-Sworn Police Officers: Same as General Government members.	Termination: Refund of total contributions, with 3% interest compounded annually. Death: Refund of total contributions with interest preretirement and without interest postretirement.
Pensions for Permanent, Total Disability - Service Requirements:	5 years of continuous service, but no requirement if disability is service connected as defined in Worker's Compensation Act. Non-Sworn Police Officers: Same as General Government members.	10 years of continuous service, except no requirement if disability is service connected as defined in Worker's Compensation Act.
Amount of Total Disability Pension: (Payable so long as total disability continues.)	Retirement Pension with minimum of 25% of "final average pay." If disability is service connected, the pension equals 100% of the Member's final annual pay less Worker's Compensation benefits. Non-Sworn Police Officers: Same as General Government members.	Retirement Pension using Final Average Pay for last 10 years. If disability is service connected, amount not less than 50% of Member's final annual pay at time of disability. Maximum benefit of 2/3 of 10-year Final Average Pay less Social Security benefit. Minimum benefit of $30 per month. All service connected disability benefits are offset by benefits payable by Worker's Compensation (exception: no offset for $30 minimum). If non service connected, same as above, but no 50% Final Average Pay minimum and minimum benefit equals $10 per month instead of $30 per month.
Pensions for Permanent Partial Disability: (Where earnings capacity is reduced by at least 10%.)	Ten years of continuous service, but no service requirement if disability is service connected. Same as retirement pension with reduction for less than 15 years of service. If non-service connected, retirement pension, subject to a minimum equal to 25% of Final Average Pay. This minimum is reduced by earnings if less than 15 years of service at time of disability. If service connected, pension equals 50% of final annual pay (regular 20 year pension for Firefighters) if 15 years of service, with reductions for earnings if less than 15 years of service. If at least 20 years of service, pension equals retirement pension. Non-Sworn Police Officers: Same as General Government members.	10 years of continuous service, except no requirement if disability is service connected as defined in Worker's Compensation Act. Retirement Pension using Final Average Pay for last 10 years (with offset for Worker's Compensation benefits if service-related disability), subject to a minimum pension of $10 monthly (non-service connected), or $30 (service connected). If the disability is service connected, benefit not less than 50% of the reduction in earnings with offset for Worker's Compensation benefits. For service connected disability, the maximum benefit is 2/3 of 10 year final average pay less Worker's Compensation and Social Security benefits. For non-service connected disability, the maximum is 2/3 of 10 year final average pay less Social Security benefits, or 1-^{2}/3% of the reduction in income times years of service.

PROVISIONS FOR:	POLICE OFFICERS AND FIREFIGHTERS	BOARD OF EDUCATION MEMBERS	MUNICIPAL SERVICES & LIBRARY MEMBERS
Member's Contribution Rate of Total Earnings: **(City pays full balance of costs to fund MERF benefits; also Members and City pay taxes for those covered by Social Security.)**	Firefighters and Sworn Police Officers hired before July 1, 1999: 8%. Sworn Police Officers hired after June 30, 1999: 6.5%. Non-Sworn Police Officers: 4% on earnings taxed for Social Security and 7% on excess. Assistant Police Chief, Police Chief, Assistant Fire Chief and Fire Chief: Same as Non-Bargaining.	4% on earnings taxed for Social Security and 7% on excess. For HESP, 9% and 12%, respectively. For HSSSA, 9.25% and 12.25%, respectively (was 8.75%/11.75%). For HFSHP 10.14% and 13.14%, respectively. For Non-bargaining 4.5% and 7.5%, respectively (was 4%/7%). For Local 818, 5.2% up to Social Security Wage Base and 8.2% of the excess. If hired on or after March 1, 2007, 7.1% and 10.1%, respectively.	For Nonbargaining, 5% on earnings taxed by Social Security and 8% on excess if 5 year Final Average Pay option elected (was 4%/7%). With 2 year option, 6% and 9%, respectively (was 5%/8). For Library, 4% on earnings taxed by Social Security and 7% on excess if 5 year Final Average Pay option elected. With 2 year option, 5% and 8%, respectively. For MLA, HMEA hired after July 1, 2003, and CHPEA hired after June 30, 2003, 5% on earnings taxed by Social Security and 8% on excess. For CHPEA hired on or before June 30, 2003, 6.5% and 9.5%, respectively. For HMEA hired before July 1, 2003, 7.8% on all earnings. For SCGA, 4% on earnings taxed by Social Security and 7% on excess (was 3%/6%).

Note 1 Any Member (other than a Police Officer or Firefighter) who was a Member before January 1, 1958 is guaranteed a minimum total benefit, including Social Security based on earnings from the City, equal to the pension the Member would have received under the terms of the MERF plan in existence prior to the enactment of the 1957 Special Act No. 347. Also, several active Members who transferred to MERF on or after July 1, 1968 from the City's Retirement Allowance Fund are entitled to a pension determined by the RAF provisions if it is greater than that based on the MERF provisions.

Note 2 Section 2-166 of the Municipal Code provides a minimum benefit of $155 monthly for all pensions granted by reason of service or for service-connected disability, and for joint annuitants under elected options, except members for whom Social Security taxes have been paid and anyone for whom more than half of the total pension is paid by the Metropolitan District.

Note 3 All members (other than SCG) may purchase up to 4 years of pension credit for military service. Pension credit is at the following rates of Final Average Pay per year purchased:

HMEA members hired before July 1, 2003	2.75%
Sworn Police Officers, Firefighters, CHPEA members hired on or before June 23, 2003, HFSHP, Local 818 hired prior to March 1, 2007, HSSSA, HESP, Non-bargaining (including Assistant Police Chief, Police Chief, Assistant Fire Chief, and Fire Chief), Non-Sworn Police Officers, and MLA hired prior to July 1, 2006	2.50%
Other (including CHPEA members hired after June 23, 2003, HMEA members hired prior to July 1, 2003, MLA hired on or after July 1, 2006, and Local 818 hired on or after March 1, 2007)	2.00%

Note 4 All members (other than Sworn Police Officers hired after July 1, 1999, all Board of Education members, CHPEA hired after June 23, 2003, HMEA hired on or after July 1, 2003, Library, SCG and MLA hired on or after July 1, 2006) may exchange accumulated sick leave upon retirement for up to 4 years (6 years for Firefighters hired prior to July 1, 2003) of pension service time. Additional pension service time may be purchased from accumulated sick leave at the rate of twenty days of accumulated sick leave for each year of pension service time.

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Appendix I

Additional Explanatory Commentary

A. Purpose of the Valuation

The purpose of preparing an Annual Valuation Report for the City of Hartford Municipal Employees' Retirement Fund (MERF) is twofold: 1) to determine the funded status of the plan (how well the plan is funded), which is of importance to many parties (including the bond rating agencies) in assessing the fiscal health of the City, and 2) to determine how much is recommended for the City of Hartford to contribute to the plan as the employer for the next fiscal year (in this case FY 2010-2011), as required by the City Charter, so that budget provisions can be made for this cost for the next fiscal year.

It is important to note that the recommended City contribution for the next fiscal year is expressed as a percentage of the payroll for each of the five groups of employees covered by the plan: Police, Fire, Municipal Services (general government employees), Library and Board of Education. That is to say, using actuarial methodologies, a computation is prepared assessing how much the current and future pensions for each of these five groups will cost, with that cost expressed as a percentage of each group's payroll. Each of those percentages is then applied against the *estimated* payroll for each group in question for the next fiscal year, to yield an *estimated* dollar or cash contribution required. The information found in Section II of this report has been developed for this purpose.

Importantly, while the percentages of payroll will not change, because they are actuarially determined, the dollar amount of the City's *actual* required contribution could well change -- upward or downward -- depending on whether *actual* payrolls in FY 2010-2011 are more, or less, than is currently estimated. *(Please note that the payroll estimates used here are obtained from the City of Hartford's Office of Management and Budget.)*

The ultimate cost of any defined benefit pension plan such as the MERF is based primarily on the level of benefits promised by the plan, with the pension fund's investment earnings serving to reduce the cost of plan benefits and expenses. Thus,

City's ultimate cost	=	*benefits paid*	+	*expenses incurred*	-	*investment return*	-	*employee contributions*

It stands to reason, therefore, that in years in which investment earnings do not show positive results, the pension costs will be affected adversely.

Because each Annual Valuation Report is prepared using actual investment and demographic experience, each such report is necessarily one year in arrears. Thus, for FY 2010-2011, the report is dated (valued) as of July 1, 2009.

Comments prepared by the City Treasurer and Pension Commission in conjunction with Hooker & Holcombe

Appendix I

Additional Explanatory Commentary
(continued)

B. Contribution for 2010-2011 Fiscal Year

The City's contribution rates for the 2010-2011 fiscal year, determined as explained above from the July 1, 2009 actuarial valuation, are shown below. Last year's results are shown for comparison purposes.

	Recommended 2010-2011 Fiscal Year Contribution (July 1, 2009 Valuation)	**Recommended 2009-2010 Fiscal Year Contribution (July 1, 2008 Valuation)**
Police	9.94%	3.35%
Firefighters	1.55%	-4.88%
Board of Education	11.87%	10.64%
Municipal Services	30.74%	22.00%
Library	20.90%	16.08%

Please see Section II, Exhibit A for the development of these figures.

As can be seen, the percentages of payroll on which estimated contributions have been based have increased considerably from last year for all groups. Based on an estimated payroll of approximately $143.1 million for fiscal year 2010-2011, the estimated dollar amount of the City's contribution for such year is approximately $18.3 million. (See Section II, Exhibit B.)

By comparison, using payroll estimates of approximately $136.5 million, the estimated dollar amount of the City's contribution for the 2009-2010 fiscal year is $9.9 million, based on the percentages of payroll shown in the column on the right. The 2010-2011 fiscal year contribution represents an estimated $8.4 million increase from the previous year, or approximately 85%, based on the increases in required percentages of contribution. *(Again, please note that actual contribution requirements will be based upon the above percentages applied to actual payroll figures, whatever these may turn out to be, for the 2010-2011 fiscal year.)*

One of the purposes of preparing an Annual Valuation report is to assess the ratio of the value of the pension plan's assets to its accumulated liability, that is, how much the plan will need to pay out in benefits over the lifetimes of the members, both currently retired and those who will retire in the future. The best outcome is for there to be a like amount of assets as pension benefit obligation. It stands to reason that the cash contribution of the employer, in this case the City of Hartford, will be less in years in which there is less of a gap between assets and plan obligations. Taken a step further, contributions will likely be more in years in which the plan experienced investment losses.

Comments prepared by the City Treasurer and Pension Commission in conjunction with Hooker & Holcombe

Appendix I

Additional Explanatory Commentary
(continued)

Thus, the primary reason for the increase in the recommended contribution requirement for FY 2010-2011 is the drop in both the equity and fixed-income markets starting in September, 2008 to June, 2009, with the resulting loss of market value of MERF assets during that period. However, the net impact of changes in the covered population and modifications to plan provisions since the last Valuation Report also served to increase the contribution requirement from last year, although to a lesser extent.

With the drop in the markets, especially for the period from June, 2008 to June, 2009 (the time period covered by this 2009 Valuation Report), the market value of assets for the MERF was approximately $861.7 million as of July 1, 2009, down from $1,080.2 million (slightly more than $1 billion) as of July 1, 2008. Put another way, the investment return for the MERF for the year was approximately negative 15.0% (based on market value of assets), compared to an assumed rate of investment return of positive 8%.

However, there is another way of computing the value of assets, known as the "smoothed" or "actuarial" value. By way of background, several years ago, in order to avoid dramatic fluctuations in the City's contribution requirements from year to year and thus benefit the City, the City of Hartford Pension Commission, on the recommendation of the City Treasurer, instituted the use of a so-called "smoothed" value of assets to perform the Annual Valuation. This smoothed value recognizes the difference between the expected return on the market value of assets and the actual return over a period of years.

Under this method, any realized gains in assets -- or any realized losses in assets -- are smoothed in over a fixed time period, to mitigate "peaks and valleys" in required City contributions. This allows for more predictable budgeting for pension costs.

The act of smoothing results in what is called the "actuarial value of assets," as opposed to the "market value" of the assets, because only a fixed portion of the asset gain (or loss) is recognized for any given Valuation year. With the July 1, 2009 valuation, the Pension Commission adopted a change in the length of time asset gains or losses are smoothed into the "actuarial value of assets" from four to five years. After reflecting this change, the actuarial value of MERF assets used in the development of the contribution requirement for FY 2010-2011 was approximately $1,089.2 million, $10.2 million higher than the $1,079.0 million value that would have been used under the prior 4-year methodology.

Comments prepared by the City Treasurer and Pension Commission in conjunction with Hooker & Holcombe

Appendix I

Additional Explanatory Commentary

(continued)

The MERF's return for the year on the smoothed (actuarial) value prior to the change in method was 1.6%, as opposed to negative 15% (on the market value). However, because a 1.6% return was still far less than the MERF's 8% return assumption, asset losses still increased the estimated FY 2010-2011 contribution requirement. Specifically, these losses represented approximately $7.7 million of the $8.4 million estimated increase and were therefore the primary driver of the increase in estimated contributions for FY 2010-2011.

The change made to the smoothing period used to develop the plan's "actuarial value of assets" partially offset this $7.7 million increase in contribution requirements. Specifically, it accounted for a decrease of approximately $1.1 million for FY 2010-2011. It is important to note that this decrease is merely the result of the slower recognition of recent net asset losses in the MERF's actuarial valuation. The decrease in contribution today will result in contribution increases in the future, all else being equal. Plan funding is simply being deferred.

The net impact of changes in the population and modifications to plan provisions since the last Valuation also served to increase the contribution requirement from last year, although to a lesser extent. Despite the decrease in active membership of the MERF (from 2,671 as of July 1, 2008 to 2,406 as of July 1, 2009) and the corresponding drop in total payroll, changes in the population increased costs due to what are called "net liability losses," including the fact that salaries increased by more than expected for active employees continuing in active service. During the Valuation year, the average age of covered employees also increased, giving the plan less time to pre-fund for these employees' ultimate future benefits before they retire, which also added to the cost. These elements in total accounted for the remaining $1.8 million increase in the estimated contribution.

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