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City of Hartford Municipal Employee's Retirement Fund (MERF)

Actuarial Survey (Revised)

July 1, 2005

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February 6, 2007



Table of Contents

1

Section			Page
I	Valuation	Report	
	A.	Purpose of the Valuation	1
	В.	Contribution for 2006-2007 Fiscal Year	1
	C.	Funded Status	1
	D.	Plan Experience During Period Under Review	2
	E.	Changes Since the Last Valuation	2
	F.	Certification	3
II	Supporting	Exhibits	
	А.	Normal Cost	4
	В.	Estimated Cash Contribution	5
	С.	Actuarial Balance Sheet	6
	D.	Development of Asset Values	7
	E.	Accounting Information	10
	F.	Membership Data	11
	G.	IRC Section 415(m) Valuation	23
III	Actuarial C	ost Methods and Assumptions	
	А.	Actuarial Cost Methods	24
	В.	Actuarial Assumptions	25
IV	Summary o	f Principal Pension Plan Provisions	31

HOOKER & HOLCOMBE, INC. BENEFIT CONSULTANTS AND ACTUARIES

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

City's ultimate	benefits	 expenses	_	investment	_	employee]
cost	paid	 incurred		return		contributions	

B. Contribution for 2006-2007 Fiscal Year

The City's contribution rates for the 2006-2007 fiscal year, determined from the July 1, 2005 actuarial valuation, are shown below. Last year's results are shown for comparison purposes.

	2006-2007 Fiscal Year July 1, 2005 Valuation	2005-2006 Fiscal Year July 1, 2004 Valuation
Police	3.36%	8.73%
Firefighters	-4.59%	3.03%
Board of Education	13.35%	15.89%
Municipal Services	30.91%	28.89%*
Library	18.68%	N/A

*Includes Library.

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

C. Funded Status

The MERF fund was in sound financial condition on July 1, 2005. The MERF adjusted value of plan assets of \$987,905,000 (including \$1.5 million receivable from CMERS) was equal to 101.8% of the "pension benefit obligation" of \$970,286,000 as of July 1, 2005. The "pension benefit obligation" is the actuarial present value of credited projected benefits for prior years' service. For active members, the credited projected benefits are based on future salary increases and the ratio of actual service to total service projected at retirement.

Valuation Report (continued)

D. Plan Experience During Period Under Review

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Overall, the recommended City contribution rate for the 2006/2007 fiscal year has increased from last year for the Municipal Services group. For the Police, Firefighters, Board of Education and Library groups, the rates have decreased.

Prior to reflecting the change in assumptions effective with the July 1, 2005 actuarial valuation, the contribution rates for all groups, increased from last year. Reasons for this increase include the ad hoc cost of living increase for retirees effective July 1, 2005, a return on the actuarial value of assets that was slightly less than expected, and salary increases that were modestly more than anticipated by our valuation assumption.

The actuarial value of assets earned a return of about 7.7% during the 2004-2005 fiscal year, compared to an expected rate of return of 8.0%. The market value of assets returned 9.1% over the same period.

The active membership of MERF as of July 1, 2005, was 2,448, an increase of 139 from the total of 2,309 last year. Police active membership increased by 9, Firefighters decreased by 7, Board of Education increased by 92, and General Government (including Library) increased by 45. The total covered payroll for all active participants increased by approximately 9% from \$107,808,000 in last year's valuation to \$117,261,000 in this year's valuation.

E. Changes Since The Last Valuation

The July 1, 2005 actuarial valuation reflects the changes in assumptions recommended in the 2005 Experience Study. Specifically, changes have been made to the retirement, salary scale, disability, marriage, expense, and mortality assumptions. See the description of actuarial assumptions in Section III for details. These changes decreased the recommenced City contribution rate for each of the groups as follows: 10.5% for Police, 9.6% for Firefighters, 2.6% for Board of Education, 5.1% for Municipal Services and 3.2% for Library. It decreased the estimated fiscal year 2006/2007 City contribution by approximately \$7,550,000.

The July 1, 2005 actuarial valuation includes no changes in Plan Provisions from last year. It does, however, reflect the newly negotiated future increases in general wages for the HMEA and Non-Union groups. This change had a minimal impact on plan costs.

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, 2005.

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, 2005. 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.

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Elizabeth J. Willard, F.S.A., M.A.A.A. Enrolled Actuary

February 6, 2007

HOOKER & HOLCOMBE, INC. BENEFIT CONSULTANTS AND ACTUARIES

Supporting Exhibits

A. Normal Cost

[July 1, 2005 Valuation					
		Police	Fire	Board of Ed.	Municipal Services	Library	Total Membership
Ac	tive Membership						
	mber of Employees nual Payroll (000)	437 \$28,532	347 \$23,371	1,114 \$38,511	485 \$23,917	65 \$2,929	2,448 \$117,261
No	rmal Actuarial Costs						
A.	Actuarial Present Value of Future Benefits (000)						
	Active Members	\$125,488	\$119,011	\$104,679	\$98,030	\$9,333	\$456,540
	Terminated Non-Vested Members	198	188	165	155	15	720
}	Terminated Vested Members	830	193	1,940	4,267	0	7,230
}	Retired Members	212,381	164,708	88,557	219,558	12,192	697,395
<u>}</u> .	Old Plans COLA	<u>703</u>	<u>536</u>	<u>901</u>	<u>69</u>	<u>0</u>	<u>2,209</u>
	Total	\$339,599	\$284,635	\$196,243	\$322,079	\$21,539	\$1,164,094
B.	Valuation Assets (Adjusted Value) (000)*	\$315,284	\$283,109	\$124,509	\$250,085	\$14,919	\$987,905
С.	Actuarial Present Value of Future Employee Contributions (000)	\$20,074	\$16,240	\$19,756	\$11,442	\$1,316	\$68,828
D.	Actuarial Present Value of Future Normal Costs (A) - (B) - (C) (000)	\$4,241	(\$14,714)	\$51,978	\$60,552	\$5,305	\$107,362
E.	Actuarial Present Value of Future Salaries (000)	\$298,553	\$223,759	\$415,035	\$210,887	\$30,353	\$1,178,589
F.	Normal Actuarial Costs as Percentage of Payroli						
}	Pension Benefits (D)/(E)**	1.42%	-6.58%	12.52%	28.71%	17.48%	9.11%
G.	Expenses (other than Investment Expenses)	<u>1.94%</u>	<u>1.99%</u>	<u>0.83%</u>	<u>2.20%</u>	<u>1.20%</u>	<u>1.62%</u>
	Total Normal Cost Percent Payable by City	3.36%	-4.59%	13.35%	30.91%	18,68%	10.73%

* Includes \$1.5 million receivable from CMERS.

** Based on \$1,904,000 estimate of expenses (other than investment expenses) allocated by present value of future benefits.

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Supporting Exhibits (continued)

B. Estimated Cash Contribution

		E	stimated July 1	, 2006 - June 3	0, 2007 Fiscal Y	lear Contribut	ion
		Police	Fire	Board of Ed	Municipal Services	Library	Total
(1)	Annual Adjusted Payroli, July 1, 2005	\$28,532,224	\$23,370,771	\$38,511,053	\$23,917,186	\$2,929,350	\$117,260,584
(2)	Total Normal Cost Percent Payable by City	3.36%	-4.59%	13.35%	30.91%	18.68%	
(3)	Gross City Contribution: (1) x (2)	958,683	(1,072,718)	5,141,226	7,392,802	547,203	12,967,196
(4)	July 1, 2005 Payment for Local 566	0	0	303,918	0	0	303,918
(5)	July 1, 2005 Payment for Local 1716	0	0	0	509,126	0	509,126
(6)	Old Plans COLA Annual Payment	124,887	107,609	200,001	17,430	0	449,927
(7)	Net City Contribution Estimate: (3)-(4)-(5)-(6)	\$833,796	(\$1,180,327)	\$4,637,307	\$6,866,246	\$547,203	\$11,704,225

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Supporting Exhibits (continued)

C. Actuarial Balance Sheet

	July 1, 2005	July 1, 2004
Actuarial Liabilities		
Present Value of Future Benefits for:		A 450 450 005
Active Employees	\$ 456,539,985	\$ 458,452,035
Inactive Members		
Regular Retirees	612,171,106	604,666,731
• Disability Retirees	59,941,185	61,017,068
Survivors	25,283,174	27,427,550
Terminated Non-Vesteds	720,251	1,080,000
Terminated Vesteds	7,229,678	8,831,311
Old Plans COLA	2,209,077	4,406,155
TOTAL	\$1,164,094,456	\$1,165,880,850
Source of Funds		
1. Plan Assets	\$ 987,904,541	\$ 966,044,318
 Present Value of Future Employee Contributions 	68,828,126	64,656,286
3. Present Value of Future City Normal		
Cost Contributions	<u> 107,361,789</u>	135,180,246
4. TOTAL = $(1) + (2) + (3)$	\$1,164,094,456	\$1,165,880,850

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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 four-year period at 25% per year.

	Relationship of Adjusted Value to Market Value				
1.	Market value 7/1/2005 (without CMERS receivable)	\$1,014,829,007			
2.	Gains (losses) not recognized in actuarial value 7/1/2005	. 28,424,466			
3.	Preliminary adjusted value 7/1/2005: (1)-(2)	986,404,541			
4. 5.	Preliminary adjusted value as a percentage of market value: (3)+(1) CMERS receivable	97.2%			
		1,500,000			
6.	Adjusted value 7/1/2005: (3) + (5)	987,904,541			

Recognized Gains and Losses in Adjusted Value							
		2001-2002	2002-2003	2003-2004	2004-2005	Total	
1.	Gains (losses)	\$(49,416,908)	\$(34,119,614)	\$57,855,924	\$10,701,876	\$14,978,722	
2.	Recognized as of 7/1/2004	(37,062,681)	(17,059,807)	14,463,981	0		
3.	Recognized in current year: 25% of (1)	(12,354,227)	(8,529,904)	14,463,981	2,675,469	\$(3,744,681)	
4.	Total recognized as of 7/1/2005: (2)+(3)	(49,416,908)	(25,589,711)	28,927,962	2,675,469		
5.	Gains (losses) not recognized in actuarial value 7/1/2005: (1)-(4)	0	(8,529,903)	28,927,962	8,026,407	28,424,466	

Development of Asset Gain/Loss for 2003-2004 Year				
1.	Market value 7/1/2004 (without CMERS receivable)	\$977,022,227		
2.	Contributions	22,434,221		
3.	Benefit payments	69,589,379		
4.	Expenses	1,989,883		
5.	Expected interest at 8%	76,249,945		
6.	Expected value 7/1/2005: (1)+(2)-(3)-(4)+(5)	1,004,127,131		
7.	Market value 7/1/2005 (without CMERS receivable)	1,014,829,007		
8.	Asset gain/(loss): (7)-(6)	10,701,876		

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Supporting Exhibits (continued)

D. Development of Asset Values

Summary of Fund Activity					
	Market Value	Adjusted Value			
1. Beginning Value 7/1/2004					
a. Trust Assets	\$ 977,022,227	\$ 963,044,318			
b. CMERS Receivable	3,000,000	3,000,000			
c. Total	980,022,227	966,044,318			
2. Contributions	22,434,221	22,434,221			
3. Disbursements					
a. Benefit Payments	69,589,379	69,589,379			
b. Expenses	1,989,883	1,989,883			
c. Total	71,579,262	71,579,262			
4. Net Investment Income					
a. Net Income	86,951,821	N/A			
b. Expected Return	N/A	76,249,945			
c. Recognized Gain (Loss)	<u>N/A</u>	(3,744,681)			
d. Total	86,951,821	72,505,264			
5. Ending Value 7/1/2005					
a. Trust Assets: (1a)+(2)-(3)+(4)	\$1,014,829,007	\$ 986,404,541			
b. CMERS Receivable	1,500,000	1,500,000			
c. Total	1,016,329,007	987,904,541			
6. Approximate rate of return 2004-2005	9.1%	7.7%			

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Supporting Exhibits (continued)

D. Development of Asset Values

Summary of Assets by Investment Manager					
	Cost Basis	Market Value			
Treasurer's Account (includes Cash and Accounts Payable) Citibank - Advisory Accounts Insurance Carrier (Aetna Life) Total Receivable from CMERS Grand Total	\$ 16,029,389 841,900,498 <u>1,708,295</u> \$859,638,182 <u>1,500,000</u> \$861,138,182	\$ 15,282,685 998,790,444 <u>755,878</u> \$1,014,829,007 <u>1,500,000</u> \$1,016,329,007			

		Average Annual	Effective Rate o	f Return
Period Ending June 30th	1 Year	3 Years	5 Years	10 Years
1996	14.9%			
1997	20.7%	t i		
1998	18.0%	17.8%		
1999	10.4%	16.3%		
2000	8.8%	12.3%	14.5%	
2001	-2.1%	5.6%	10.9%	
2002	-3.1%	1.1%	6.1%	
2003	4.6%	-0.3%	3.6%	
2004	14.6%	5.1%	4.3%	
2005	9.1%	9.4%	4.4%	9.3%

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Supporting Exhibits

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".

Schedule of Employer Contributions

Year Ended June 30	Annual Required Contribution	Percentage Contributed	Net Annual Required Contribution *	Miscellaneous **	Net Percentage Contributed
1999	\$8,984,312	100%	\$8,576,940	\$407,372	100%
2000	7,301,471	100%	7,036,870	264,601	100%
2001	759,283	100%	470,000	289,283	100%
2002	332,806	100%	0	332,806	100%
2003	2,463,804	100%	2,196,698	267,106	100%
2004	6,536,149	100%	6,296,790	239,359	100%
2005	9,206,742	100%	9,000,000	206,742	100%

* City's cash contribution to MERF.

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

		Schedu	ule of Funding P	rogress		
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)
7/1/1999	\$858,805,000	\$753,379,000	\$(105,426,000)	114.0%	\$110,398,000	-95.5%
7/1/2000	944,652,000	805,453,000	(139,199,000)	117.3%	112,921,000	-123.3%
7/1/2001	978,884,000	865,570,000	(113,314,000)	113.1%	119,609,000	-94.7%
7/1/2002	957,390,000	880,444,000	(76,946,000)	108.7%	117,498,000	-65.5%
7/1/2003	965,389,000	922,258,000	(43,131,000)	104.7%	110,339,000	-39.1%
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%
* Freludo	s raceivable from	CMERS				

* Excludes receivable from CMERS.

** Liability shown on a PBO basis.

The information required for completion of GASB No. 25 and No. 27 for the fiscal year ending June 30, 2005 was prepared based upon the previous year's actuarial valuation (2004 Actuarial Survey) and additional information for fiscal year 2004-2005. It was contained in a separate report which was sent to the City's auditors, Scully & Wolf, LLP on November 8, 2005.

The information required for completion of GASB No. 25 and No. 27 for the fiscal year ending June 30, 2006 will be prepared based upon the current year's actuarial valuation (2005 Actuarial Survey) and additional information for fiscal year 2005-2006. It will be contained in a separate report and submitted to the City's auditors.

Supporting Exhibits (continued)

F. Membership Data

Summary - Active Members as of July 1, 2005

	Number	Payroll*	Average Annual Pay*
Police	437	\$ 28,532,224	\$65,291
Firefighters	347	23,370,771	67,351
Board of Education	1,114	38,511,053	34,570
Municipal Services	485	23,917,186	49,314
Library	<u>65</u>	2,929,350	45,067
Total	2,448	\$117,260,584	\$47,901

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

Summary – Terminated Non-Vested Members as of July 1, 2005

Number:UnknownTotal Monthly Annuities:N/A (all Non-Vested, return of employee contributions pending)

Summary - Pensioners as of July 1, 2005

	Service	Pensions*		sability nsions	Survivo	or Benefits*	Total				
	Count	Total Monthly Annuities	Count	Total Monthly Annuities	Count	Total Monthly Annuities	Count	Total Monthly Annuities			
Police	429	\$1,478,856	65	\$137,302	57	\$53,968	551	1,670,126			
Firefighters	295	998,033	129	327,113	94	91,907	518	1,417,053			
Board of Ed.	633	762,335	24	13,442	71	23,903	728	799,680			
Municipal Sves.	695	1,747,910	23	16,145	131	89,867	849	1,853,922			
Library	51	107,479	0	0	2	660	53	108,139			
Vested Deferred	<u> </u>	88,085			<u> </u>		<u> </u>	88,085			
TOTAL**	2,192	\$5,182,698	241	\$494,002	355	\$260,305	2,788	\$5,937,005			

* Fourteen pensioners receiving benefits as retirees and as survivors are included in both groups.
** An additional monthly benefit for the July 1, 1987, July 1, 1990, July 1, 1997, July 1, 1999, July 1, 2001, and July 1, 2005, COLA's for the unfunded plans (PBF, FRF, and RAF) is also included in the total liabilities for MERF. Such participants are not included in the counts shown here.

HOOKER & HOLCOMBE, INC. BENEFIT CONSULTANTS AND ACTUARIES

Supporting Exhibits (continued)

F. Membership Data

Data Reconciliation – Police

ActiveTerminated VestedPensTotal Participants 7/1/20044286Adjustments00Retirements-25-2Disabilities00Terminations00Vested00Non-vested-17N/ADeaths00New beneficiariesN/A0Transfer group+30Rehires00New entrants <u>-448</u> <u>N/A</u> Total Participants 7/1/20054374Average Age 7/1/200536.9	sioners*	Total
Adjustments00Retirements -25 -2 Disabilities00Terminations00Vested00Non-vested -17 N/ADeaths00New beneficiariesN/A0Transfer group $+3$ 0Rehires00New entrants $-\frac{+48}{-148}$ $\frac{N/A}{-148}$ Total Participants 7/1/20054374Average Age 37.2 36.9 Average Service $7/1/2004$ 10.2	•	
Retirements -25 -2 Disabilities 0 0 Terminations 0 0 Vested 0 0 Non-vested -17 N/A Deaths 0 0 New beneficiaries N/A 0 Transfer group +3 0 Rehires 0 0 New entrants +48 N/A Total Participants 7/1/2005 437 4 Average Age 37.2 36.9 7/1/2004 37.2 36.9	528	962
Disabilities00Terminations00Vested00Non-vested-17N/ADeaths00New beneficiariesN/A0Transfer group+30Rehires00New entrants ± 48 $\underline{N/A}$ Total Participants 7/1/20054374Average Age37.236.97/1/200437.236.9Average Service10.2	+2	+2
Terminations 0 0 Vested 0 0 Non-vested -17 N/A Deaths 0 0 New beneficiaries N/A 0 Transfer group +3 0 Rehires 0 0 New entrants 48 _N/A Total Participants 7/1/2005 437 4 Average Age 36.9 36.9 Average Service 36.9 36.9	+27	0
Vested 0 0 Non-vested -17 N/A Deaths 0 0 New beneficiaries N/A 0 Transfer group +3 0 Rehires 0 0 New entrants _+48 _N/A Total Participants 7/1/2005 437 4 Average Age	0	0
Non-vested -17 N/A Deaths 0 0 New beneficiaries N/A 0 Transfer group +3 0 Rehires 0 0 New entrants <u>+48</u> <u>N/A</u> Total Participants 7/1/2005 437 4 Average Age 37.2 36.9 7/1/2004 37.2 36.9 Average Service 10.2 10.2	Į.	
Deaths 0 0 New beneficiaries N/A 0 Transfer group +3 0 Rehires 0 0 New entrants <u>+48</u> <u>N/A</u> Total Participants 7/1/2005 437 4 Average Age 37.2 36.9 7/1/2004 36.9 10.2	N/A	0
Deaths00New beneficiariesN/A0Transfer group $+3$ 0Rehires00New entrants $+48$ N/A Total Participants 7/1/20054374Average Age $7/1/2004$ 37.2 36.9 37.2 Average Service $7/1/2004$ 10.2	N/A	-17
Transfer group +3 0 Rehires 0 0 New entrants 48 N/A Total Participants 7/1/2005 437 4 Average Age 37.2 36.9 7/1/2004 36.9	-10	-10
Rehires 0 0 New entrants <u>+48</u> <u>N/A</u> Total Participants 7/1/2005 437 4 Average Age 37.2 36.9 7/1/2004 36.9 36.9 Average Service 10.2 10.2	+1	+1
New entrants +48 _N/A Total Participants 7/1/2005 437 4 Average Age 37.2 37.2 7/1/2004 37.2 36.9 Average Service 10.2 10.2	+3	+6
Total Participants 7/1/2005 437 4 Average Age 37.2 37.2 7/1/2004 36.9 36.9 Average Service 10.2 10.2	0	0
Average Age 37.2 7/1/2004 37.2 7/1/2005 36.9 Average Service 10.2	<u>N/A</u>	+48
7/1/2004 37.2 7/1/2005 36.9 Average Service 10.2	551	992
7/1/2004 37.2 7/1/2005 36.9 Average Service 10.2		
7/1/2005 36.9 Average Service 10.2		
7/1/2004 10.2		
7/1/2004 10.2		
1 1012		
Payroll**		
7/1/2004 \$26,655,414		
7/1/2005 28,532,224		
Fotal monthly benefits*		
•	19,628	
+	70,126	

* Excludes old plan COLA participants.

** Basic salary plus overtime and private duty pay.

HOOKER & HOLCOMBE, INC. BENEFIT CONSULTANTS AND ACTUARIES

Supporting Exhibits (continued)

F. Membership Data

Data Reconciliation – Firefighters

	Participa	nt Data		
	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2004	354	3	517	874
Adjustments	0	0	+1	+1
Retirements	-9	-1	+10	0
Disabilities	0	0	0	0
Terminations				
Vested	0	0	N/A	0
Non-vested	0	N/A	N/A	0
Deaths	0	0	-9	-9
New beneficiaries	N/A	0	+5	+5
Transfer group	0	0	-6	-6
Rehires	0	0	0	0
New entrants	<u>+2</u>	<u>_N/A</u>	<u>N/A</u>	<u>+2</u>
Total Participants 7/1/2005	347	2	518	867
Average Age			ļ	
7/1/2004	41.0			
7/1/2005	41.7			
Average Service				
7/1/2004	13.8			
7/1/2005	14.6			
Payroll**				
7/1/2004	\$21,678,826			
7/1/2005	23,370,771			
Total monthly benefits*				
7/1/2004		62.770	#1 aco aoo	
7/1/2005		\$3,760	\$1,360,290	
// 1/ 2003	I	1,520	1,417,053	

* Excludes old plan COLA participants.

** Basic salary plus overtime and private duty pay.

Supporting Exhibits (continued)

F. Membership Data

Data Reconciliation - Board of Education

	Participa	nt Data		
	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2004	1,022	23	744	1,789
Adjustments	0	0	+2	+2
Retirements	-7	-2	+9	0
Disabilities	-1 -	0	+1	0
Terminations				
Vested	-4	+4	N/A	0
Non-vested	-47	N/A	N/A	-47
Lump Sum	0	0	N/A	0
Deaths	0	0	-38	-38
New beneficiaries	N/A	0	+5	+5
Transfer group	+1	0	+5	+6
Rehires	0	0	0	0
New entrants	+150	<u>_N/A</u>	<u>N/A</u>	+150
Total Participants 7/1/2005	1,114	25	728	1,867
Average Age				
7/1/2004	43.9			
7/1/2005	44.2			
				<u> </u>
Average Service				
7/1/2004	8.6			
7/1/2005	8.8			<u> </u>
Payroll**			l	
7/1/2004	\$25 419 067			
7/1/2004	\$35,418,067			
//1/2003	38,511,053			
Total monthly benefits*				
7/1/2004		\$22,816	\$773,744	
7/1/2005		23,025	799,680	

* Excludes old plan COLA participants.

** Basic salary plus overtime and private duty pay.

HOOKER & HOLCOMBE, INC. BENEFIT CONSULTANTS AND ACTUARIES

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Supporting Exhibits (continued)

F. Membership Data

Data Reconciliation – General Government (Municipal Services and Library)

	Participar	nt Data		
	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2004	505	57	917	1,479
Adjustments	0	0	+3	+2
Retirements	-9	-4	+13	0
Disabilities	0	0	0	0
Terminations				
Vested	-5	+5	N/A	0
Non-vested	-23	N/A	N/A	-23
Deaths	0	0	-34	-34
New beneficiaries	N/A	0	+5	+5
Transfer group	-4	0	-2	-6
Rehires	0	0	0	0
New entrants	+86	<u>N/A</u>	<u>N/A</u>	<u>+86</u>
Total Participants 7/1/2005	550	58	902	1,509
Average Age				
7/1/2004	47.0			
7/1/2005	47.5			
Average Service				
7/1/2004	9.8			
7/1/2005	11.6			
Payroll**				
7/1/2004	\$24,056,036			
7/1/2005	26,846,536			
Total monthly benefits*				
7/1/2004		\$58,306	\$1,862,874	
7/1/2005	-	55,928	1,962,061	

* Excludes old plan COLA participants.

** Basic salary plus overtime and private duty pay.

HOOKER & HOLCOMBE, INC. BENEFIT CONSULTANTS AND ACTUARIES

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Supporting Exhibits (continued)

F. Membership Data

Data Reconciliation – Total

	Participan	t Data		
· · ·	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2004	2,309	89	2,706	5,104
Adjustments	0	0	+8	+8
Retirements	-50	-9	+59	0
Disabilities	-1	0	+1	0
Terminations				
Vested	-9	+9	N/A	0
Non-vested	-87	N/A	N/A	-87
Lump Sum	0	0	0	0
Deaths	0	0	-91	-91
New beneficiaries	N/A	0	+16	+16
Transfer group	0	0	0	0
Rehires	0	0	0	0
New entrants	+286	<u>_N/A</u>	<u>_N/A</u>	+286
Total Participants 7/1/2005	2,448	89	2,699	5,236
Payroll**				
7/1/2004	\$107,808,343			
7/1/2005	117,260,584			
Total monthly benefits				
7/1/2004		\$98,558	\$5,516,536	
7/1/2005		88,085	5,848,920	

*Excludes old Plan COLA participants.

**Basic salary plus overtime and private duty pay.

				Ni	umber	of Perse	ons/Av	verage S;				ERF - Pol rocessine		up by Aç	je and	Years of	Servi	ce			,	
										Jul	ly 1, 20)05										
ſ					<u> </u>		<u> </u>		Cr	mpleted Y	ears of	f Credited S	Service	•								
	Un	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															ars					
Attained Age	No.	Avg. Comp.	No.	Avg. Comp.		Avg. Comp.	No.	Avg. Comp.		Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.	No.	Avg. Comp.
Under 25	6	41,447	15	48,781																	21	46,686
25 to 29	14	41,463	31	50,772	9	65,723									L						54	50,850
30 to 34	16	41.637	25	51,336	30	72,355	13	77,836	1	70,477)							85	61,207
35 to_39		40,845	27	51,336	38	70,445	34	77,916	27	77,100								L			133	68,269
40 to 44		40,478	6	46,742	11	71,347	9	73,515	43	74,251	7	77,717)]					77	71,483
45 to 49			5	44,760	2	90,915	5	64,473	18	77,746	13	86,518	1	87,043)		L			44	75,891
50 to 54					3	83,294	·			53,248	10	75,287)	1	66,308		 			15	74,820
55_to_59					1	31,147	L)	1	88,578	3	72,033	1	58,178	İł		ا 	L			6	65,667
60 to 64					L)	<u> </u>))	1	71,357])							1	71,357
65 to 69		Ì]		\			L)		!		L]				
70 & over)	<u> </u>										1	66,455	1	66,455
All ages	44	41,403	109	50,270	94	71,135	61	76,148	91	75,673	34	79,679	2	72,610	1	66,308			1	66,455	437	

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								1	City of	Hartford	IMER	F - Firetig	ghters	;								
	Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service																					
l	July 1, 2005																					
-	July 1, 2005																					
	Completed Years of Credited Service																					
	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															ears						
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			1	46,606																	1	46,606
25 to 29			16	50,654	6	60,960	1	56,695													23	53,605
30 to 34			12	52,477	20	60,727	14	65,766]											46	60,108
35 to 39	2	62,554	7	53,365	15	64,227	26	65,361	10	68,140	1	64,134									61	64,049
40 to 44			4	51,654	13	63,379	18	65,087	34	68,592	15	71,270	2	64,659							86	66,658
45 to 49			1	55,646	6	62,902	9	65,832	16	67,151	42	68,952	9	76,678	1	65,594					84	68,472
50 to 54					1	62,023	3	43,512	5	66,079	13	72,218	4	76,597			2	63,830			28	67,708
55 to 59							1	71,319			4	64,623	9	68,417	2	82,584					16	69,421
60 to 64									1	72,636							1	91,766			2	82,201
65 to 69																						
70 & over														1								
All ages	2	62,554	41	51,771	61	62,411	72	64,482	66	68,045	75	69,686	24	72,565	3	76,921	3	73,142			347	

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	City of Hartford MERF - Board of Education Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service]						
	Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service July 1, 2005																					
}	July 1, 2005																					
] i	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															ears						
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	12	20,853	14	25,009	1	19,450															27	22,956
25 to 29	21	30,609	46	29,909	19	27,518	2	24,490													88	29,437
30 to 34	10	22,220	35	37,096	57	33,735	12	37,002	1	26,271]							115	34,033
35 to 39	11	31,496	30	33,081	71	39,212	26	38,420	9	32,699	1	54,019									148	36,961
40 to 44	9	36,073	37	36,082	69	31,929	30	38,746	22	34,024	1	71,745	1	142,904							169	35,434
45 to 49	9	29,511	36	39,743	74	32,839	37	32,082	19		7	47,798	2	46,203	1	54,197					185	35,246
50 to 54	10	33,884	29	43,476	_58	33,965	36	38,090	28	39,225	14	42,914	7	39,544	3	63,936					185	38,425
55 to 59	4	26,154	18	45,865	24	36,511	20	40,085	20		16	42,738	9	39,689	9	39,305					120	39,700
60 to 64	6	54,750	10	36,717	16	41,928	10	43,696	9	46,148	2	35,161	6	58,861	2	27,994					61	44,234
65 to 69			5	39,073	3	49,072	1	60,092	1	31,482	1	26,951]	11	41,919
70 & over			1	54,205	3	29,159					1	28,066									5	33,950
All ages	92	30,695	261	36,343	395	34,517	174	37,421	109	37,624	43	43,495	25	48,899	15	43,716					1,114	

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				N	umber	of Perse	ons/Av	/erage Sa		of Person			-	up by Ag	e and	Years of	Servi	ce				
							<u> </u>		Co	mpleted Y	ears of	Credited S	Service				·					
	Un	der 1	1	to 4	51	io 9	10	to 14	15	to 19	20	to 24	25	to 29	30	to 34	35	to 39	40 at	nd over	All ye	ars
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	38,707															2	38,707
25 to 29			1	34,854	3	39,817															4	38,576
30 to 34	1	34,496	2	35,600	2	41,954	1	34,854	1	37,275											7	37,390
35 to 39	2	32,172	1	57,577	1	34,514	3	35,910	3	37,630	1	40,538									11	37,963
40 to 44			2	35,635	3	61,395			3	35,339	2	46,727									10	45,492
45 to 49			2	46,972	1	33,849	1	33,849	1	35,075	2	37,198									7	38,730
50 to 54	1	47,486	3	69,212	2	55,469	1	58,268	2	54,103	2	38,933									11	55,491
55 to 59			2	34,693	1	78,438	3	52,221	2	76,216			1	56,108							9	57,003
60 to 64					1	68,840					1	34,042							_		2	51,441
65 to 69													1	64,383							1	64,383
70 & over							1	135,500													1	135,500
All ages	4	36,582	13	46,605	16	49,471	10	52,686	12	45,991	8	40,037	2	60,246						l	65	

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										rtford MI												
}	Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service																					
										Ju	y 1, 20	005										
																						ļ
ľ			<u> </u>						Co	mpleted Y	ears of	Credited S	Service	· · · · · · · · · · · · · · · · · · ·								
}	Un	der 1	1 -	to 4	5	to 9	10	to 14		to 19		to 24		to 29	30	to 34	35	to 39	40 a	nd over	All ye	ars
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	24,791	2	33,908																	5	28,438
25 to 29	3	23,923	14	41,078	5	42,736	_ 1	44,379													23	39,344
30 to 34	1	73,806	11	36,644	5	54,073	1	94,415													18	46,759
35 to 39	3	53,987	20	45,659	8	50,291	5	63,955	8	48,970	4	54,718									48	50,164
40 to 44	4	60,879	27	39,665	13	30,207	5	45,223	22	50,727	9	50,990	9	52,381							89	44,715
45 to 49	6	47,017	15	55,953	9	42,647	16	64,084	14	55,557	12	55,245	4	52,636	3	59,095					79	55,179
50 to 54	6	47,311	28	56,907	15	46,656	11	47,507	16	50,379	7	68,458	2	40,401	6	54,484	5	52,982			96	52,683
55 to 59	1	50,434	11	67,417	16	68,386	11	55,768	12	60,844	9	60,583	5	61,967	2	33,783	1	41,296			68	61,672
60 to 64	_ 1	110,324	8	61,039	13	45,545	3	49,661	6	51,594	1	88,063	1	126,085							33	56,467
65 to 69	1	157,606	2	84,781	5	21,123			3	11,957			1	11,957	2	11,957					14	36,038
70 & over	2	10,130			4	18,921			2	11,957	3	56,663							1	11,957	12	25,150
All ages	31	49,355	138	49,727	93	45,487	53	56,510	83	50,495	45	58,294	22	55,030	13	45,821	6	51,035	1	11,957	485	

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	City of Hartford MERF - All Groups																					
	Number of Persons/Average Salary of Persons in Processing Group by Age and Years of Service																					
]	July 1, 2005																					
}																						
{	······								Co	mpieted Y	ears of	Credited S	ervice			·····		·				
}	Un	der 1	1	to 4	5 1	to 9	10	to 14	15	to 19	20	to 24	25 1	to 29	30 1	0 34	35	to 39	40 ar	nd over	All ye	ars
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	27,300	32	37,383	3	32,288									+				· <u> </u>		56	33,329
25 to 29	38	34,080	108	40,465	_42	43,172	4	37,514													192	39,732
30 to 34	28	35,596	85	43,362	114	49,670	41	61,119	3	44,674											271	47,914
35 to 39	25	39,351	85	43,798	133	51,588	94	61,436	57	62,492	7	53,938									401	53,073
40 to 44	14	43,475	76	39,004	109	40,263	62	51,963	124	60,447	34	65,799	12	61,971		_					431	50,254
45 to 49	15	36,513	59	44,804	92	37,033	68	46,486	68	59,007	76	67,008	16	67,506	5	59,415					399	50,731
50 to 54	17	39,423	60	51,030	79	39,148	51	40,836	52	46,081	46	61,947	13	51,077	10	58,502	7	56,082			335	47,148
55 to 59	5	31,010	31	52,792	42	49,524	35	46,946	35	49,491	32	53,239	25	55,883	13	45,114	1	41,296			219	50,116
60 to 64	7	62,689	18	47,527	30	44,392	13	45,072	16	49,846	5	52,757	7	68,464	2	27,994	1	91,766			99	49,498
65 to 69	1	157,606	7	52,133	8	31,604	1	60,092	4	16,838	1	26,951	2	38,170	2	11,957					26	39,616
70 & over	2	10,130	1	54,205	7	23,309	1	135,500	2	11,957	4	49,513							2	39,206	19	35,448
All ages	173	37,266	562	43,694	659	44,233	370	52,219	361	56,014	205	62,192	75	59,205	32	48,390	9	58,404	2	39,206	2,448	

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Supporting Exhibits (continued)

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).

		<u>July 1, 2005</u>	<u>July 1, 2004</u>
1.	Number of retirees and beneficiaries receiving benefits	8	6
2.	Annual benefits payable	\$ 44,000	\$ 36,000
3.	Present value of benefits	\$168,000	\$141,000

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 2005 Section 415(m) Fund valuation are as follows:

Mortality Basis:	RP-2000 Healthy Annuitants Table projected by Scale AA to year of valuation plus 10 years (2015 for July 1, 2005 valuation), with no adjustment and separate male and female rates.
	Prior valuation: UP-94 projected by Scale AA to year of valuation plus 10 years (2014 for July 1, 2004 valuation), with separate male and female tables.
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.

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 four-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 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.

The adjusted value of assets includes \$1.5 million in funds assumed owed the MERF from the State of Connecticut Municipal Employees' Retirement System (CMERS). The \$1.5 million is the estimated value of assets expected to be transferred from CMERS to this plan for members whose pension benefits were transferred prior to July 1, 2005.

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.

Actuarial Cost Methods and Assumptions (continued)

B. Actuarial Assumptions

The actuarial assumptions used in the 2005 MERF valuation are as ows:

Mortality Basis:

For Police, Fire, Boar' Jt 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.

Prior valuation: UP-94 projected by Scale AA to year of valuation plus 10 years (2014 for July 1, 2004 valuation), with separate male and female tables.

Actuarial Cost Methods and Assumptions (continued)

Termination:

<u>Yearly Rates of Employee Termination</u>									
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 Pror	notion or Merit

Age	Police	<u>Fire</u>	<u>Bd of Ed</u>	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%

Prior valuation:

Yearly Rates of Increases for Promotion or Merit

Age	Police	Firefighters	Non-Uniformed
25 and under	6.0%	5.0%	4.0%
30	3.5%	2.5%	4.0%
35	2.2%	1.6%	2.1%
40	1.2%	1.1%	1.0%
Over 40	1.0%	1.0%	1.0%

Salaries are adjusted for groups in negotiations by 3% per year for the period of each open contract, and nonbargaining 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 future salary increases have been negotiated as of this valuation:

0	HMEA:	1/1/2006	1.00%
		7/1/2006	1.00%
		1/1/2007	1.00%

Actuarial Cost Methods and Assumptions (continued)

• Fire:	1/1/2006	1.25%
	7/1/2006	1.25%
	1/1/2007	1.25%
	7/1/2007	2.00%
• Police:	7/1/2006	3.00%
	7/1/2007	3.00%
	7/1/2008	2.00%
	1/1/2009	1.00%
	7/1/2009	3.00%
• Nonunion:	1/1/2006	1.00%

Investment Return:

8.00% per year, net of investment expenses.

Assumed Retirement Age:

Retirement Rates:

<u>Service</u>	Police	<u>Fire</u>	<u>Mun. Svc. &</u>
			<u>Lib.</u>
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)	
	D1		
Age	<u>Bd of</u>		
55	159		
56	109		
57-59	5%		
60	30%		
61	5%		
62	20%		
63-64	10%		
65	100%	6	

Actuarial Cost Methods and Assumptions (continued)

Prior valuation:

Board of Education: Age 61.

<u>General Government</u>: Earlier of age 53 with 25 years service and age 62 with 10 years service.

<u>All Police</u>: Age 48 with 20 years service. Maximum retirement age of 65.

<u>Firefighters</u>: Age 53 with 25 years service. Maximum retirement age of 65.

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

Future tax wage bases are developed by projecting the

2005 base of \$90,000 forward at 4% per year.

Social Security:

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.

Prior valuation:

Non-Uniformed:

Males - 82% married, spouse 3 years younger. Females - 40% married, spouse same age.

Uniformed:

All - 90% married, spouse 2 years younger.

Actuarial Cost Methods and Assumptions (continued)

Disability:

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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

<u>Age</u>	Male	<u>Female</u>
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%

Prior valuation:

Based on study of actual experience. The amount considered is the cost of establishing a reserve for the temporary annuity payable until normal retirement date.

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 2005 valuation, \$1,904,000 was used.

Prior valuation:

All actuarial present values of future benefits have been increased by 2.50% to cover expenses other than investment expenses.

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 and July 1, 2005 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, 2005, the City payment will be \$509,126 (\$4,026,000 on a present value basis) and the pension fund payment will

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.

be \$462,336 (\$3,656,000 on a present value basis).

30-year amortization payments (split between the City administration and the pension fund) commenced August 1, 1988 for this obligation. As of July 1, 2005, the City payment will be \$303,918 (\$2,775,000 on a present value basis) and the pension fund payment will be \$276,288 (\$2,523,000 on a present value basis).

Section IV

Hartford MERF - Summary of Principal Provisions of Pension Plan July 1, 2005

PROVISIONS FOR:

POLICE OFFICERS AND FIREFIGHTERS BOAT

BOARD OF EDUCATION 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 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).

MUNICIPAL SERVICES & LIBRARY MEMBERS

For Library, HMEA hired after July 1, 2003, CHPEA hired after October 1, 1997, 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 before October 1, 1997 who retire from the unit, MLA, 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 MLA and CHPEA, 80% for Nonbargaining. For Nonbargaining with 5year 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 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.

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).

Normal Form of Benefit:

Retirement Pensions:

For unmarried members: life annuity. For married members: surviving spouse benefit For married members: life annuity with of 25% of member's final year's earnings, if nonservice 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. 50% to survivor.

For unmarried members: life annuity. For married members: life annuity with 50% to survivor.

MUNICIPAL SERVICES & LIBRARY MEMBERS

Assistant Police Chief, Police Chief, Assistant Fire Chief and Fire Chief: Same as Non-Bargaining.

HOOKER & HOLCOMBE, INC. BENEFIT CONSULTANTS AND ACTUARIES

PROVISIONS FOR:

POLICE OFFICERS AND FIREFIGHTERS

Non-Sworn Police Officers: 2.5% of Final

Average Pay for highest 3 of last 5 years times

BOARD OF EDUCATION MEMBERS

PROVISIONS FOR:

Normal Retirement Age and Service Requirement: Firefighters hired before July 1, 2003 and Age 60 plus 10 years of service Sworn Police Officers hired before July 1, 1999: Full benefits after 20 years of continuous service.

POLICE OFFICERS AND

FIREFIGHTERS

Sworn Police Officers hired after June 30, 1999: Full benefits after 25 years of service.

Firefighters hired after June 30, 2003: 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 for 5 more years before retirement.

BOARD OF EDUCATION MEMBERS

(continuous service for Local 2221). Members are also eligible at age 55 with 25 years of service.

MUNICIPAL SERVICES & LIBRARY MEMBERS

For MLA, earlier of (1) age 60 plus 10 years of continuous service or (2) 20 years of continuous service. For SCGA, earlier of (1) age 60 plus 5 years of continuous service or (2) age 55 with 25 years of continuous service.

For Nonbargaining, 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 for 5 years before retirement.

For CHPEA, earlier of (1) age 60 plus 5 years of continuous service of (2) 20 years of aggregate service if hired before October 1, 1997, 25 years of aggregate service if hired October 1, 1997 - 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, earlier of (1) age 60 plus 5 vears of continuous service or (2) 25 years of continuous service.

PROVISIONS FOR:	POLICE OFFICERS AND FIREFIGHTERS	BOARD OF EDUCATION MEMBERS	<u>MUNICIPAL SERVICES & LIBRARY</u> <u>MEMBERS</u>
<u>Optional Early</u> <u>Retirement:</u>	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.	(continuous service for Local 2221), reduced at 4% per whole year prior to age	For MLA, 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 <u>Pension:</u>	Sworn Police Officers: After 10 years of continuous service. Firefighters and Non-Sworn Police Officers: After 5 years of continuous service.	Payments begin no earlier than age 55.	For MLA, 10 years of continuous service. For all others, 5 years of continuous service. Payments begin no earlier than age 55.
<u>Benefits to Survivors:</u> (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 in 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 is receiving or would be entitled than date of Member's 55th birthday. Surv remarriage.	ng. Surviving Spouse: 50% of pension which to when retired, payments beginning no earlier iving Spouse benefits are payable until death or

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PROVISIONS FOR:	POLICE OFFICERS AND FIREFIGHTERS	BOARD OF EDUCATION MEMBERS	<u>MUNICIPAL SERVICES & LIBRARY</u> <u>MEMBERS</u>
Refund of Contributions upon Discontinuance of Employment or at Death <u>(Non-Vested Members):</u> (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 <u>Requirements:</u>	5 years of continuous service, but no requirement if disability is service connected as defined in Worker's Compensation Act.	10 years of continuous service, except no defined in Worker's Compensation Act.	requirement if disability is service connected as
	Non-Sworn Police Officers: Same as General Government members.		
Amount of Total Disability <u>Pension:</u> (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.	Maximum benefit of 2/3 of 10-year Final Average Pay less Social Security benefit.	
	Non-Sworn Police Officers: Same as General Government members.		
Pensions for Permanent <u>Partial Disability:</u> (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 disability pension with reduction for less than 15 years of service. If service connected, pension equals 50% of final annual pay (regular 20 year pension for Firefighters) if 15 years of service, with reductions for less than 15 years of service. If at least 20 years of service, pension equals retirement pension.	defined in Worker's Compensation Act. I last 10 years (with offset for Worker's Co subject to a minimum pension of \$10 n benefit not less than 50% of the red Compensation benefits. For service conner year final average pay less Worker's Com	requirement if disability is service connected as Retirement Pension using Final Average Pay for mpensation benefits if service-related disability), nonthly. If the disability is service connected, luction in earnings with offset for Worker's ected disability, the maximum benefit is $2/3$ of 10 pensation and Social Security benefits. For non- n is $2/3$ of 10 year final average pay less Social on in income times years of service.
	Non-Sworn Police Officers: Same as General Government members.		

HOOKER & HOLCOMBE, INC. BENEFIT CONSULTANTS AND ACTUARIES

PROVISIONS FOR:

POLICE OFFICERS AND FIREFIGHTERS

BOARD OF EDUCATION MEMBERS

Member's Contribution <u>Rate of Total Earnings:</u> (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.

4% on earnings taxed for Social Security and 7% on excess. For HESP, 8.41% and 11.41%, respectively. For HSSSA, 8.75% and 11.75%, respectively.

MUNICIPAL SERVICES & LIBRARY MEMBERS

For Library and Nonbargaining, 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 October 1, 1997, 5% on earnings taxed by Social Security and 8% on excess. For CHPEA hired before October 1, 1997, 6.5% and 9.5%, respectively. For HMEA hired before July 1, 2003, 7.8% on all earnings.

For SCGA, 3% on earnings taxed by Social Security and 6% on excess.

Assistant Police Chief, Police Chief, Assistant Fire Chief and Fire Chief: Same as Non-Bargaining.

- 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 before October 1, 1997, HSSSA, HESP, Non-bargaining (including Assistant Police Chief, Police Chief, Assistant Fire Chief, and Fire Chief), Non-Sworn Police Officers, and MLA	2.50%
Other (including CHPEA members hired after September 30, 1997, HMEA members hired after July 1, 2003)	2.00%

Note 4 All members (other than Sworn Police Officers hired after July 1, 1999, all Board of Education members, CHPEA hired after October 1, 1997, HMEA hired after July 1, 2003, Library, and SCG) 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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