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**City of Hartford
Municipal
Employees'
Retirement Fund
(MERF)**

Actuarial Survey-Revised

July 1, 2013

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May 16, 2014

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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,

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

B. Contribution for 2014-2015 Fiscal Year

The City's recommended contribution for the 2014-2015 fiscal year, determined from the July 1, 2013 actuarial valuation, is shown below. We have shown the recommended contribution for the 2014-2015 fiscal year as a percentage of payroll, as well as an *estimated* dollar amount.

	Recommended 2014-2015 Fiscal Year Contribution (July 1, 2013 Valuation)		Recommended 2013-2014 Fiscal Year Contribution (July 1, 2012 Valuation)	
	% of payroll	\$ in millions (est.)	% of payroll	\$ in millions (est.)
Police	41.31%	\$17.20	40.02%	\$16.91
Firefighters	28.88%	\$10.25	28.07%	\$8.82
Board of Education	9.85%	\$4.48	9.43%	\$3.86
Municipal Services	43.98%	\$11.52	45.89%	\$12.42
Library	21.94%	<u>\$1.12</u>	24.18%	<u>\$1.19</u>
Total		<u>\$44.57</u>		<u>\$43.20</u>

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

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, and Library. Under the cost method currently used by the MERF, the annual contribution is first developed as a flat dollar amount for each group and then converted to a percentage of payroll using an *estimated* payroll figure. Each of those percentages is then applied against the *actual* payroll for each group for the fiscal year, to yield the *actual* dollar amount of the cash contribution required.

The dollar amount shown above is merely an *estimate* 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 a dollar amount, the estimated contribution for fiscal year 2013-2014 was \$43.2 million as shown in the July 1, 2012 valuation, determined based on a payroll estimate at that time of approximately \$151.5 million (obtained by projecting the payroll provided with the July 1, 2012 actuarial valuation to fiscal year 2013-2014 using the valuation’s assumed rate of salary increase). The 2014-2015 fiscal year contribution represents an increase of approximately \$1.4 million over that figure to \$44.6 million.

As is true each year, the change in the recommended contribution requirement from last year to this year is the result of actual plan asset performance, changes in liabilities caused by changes in the covered population and benefit provisions (where applicable) as well as any changes in methods and assumptions. See Sections D and E to follow for more detail regarding this year’s increase.

C. Funded Status

The funded status of the plan as of July 1, 2013 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, 2013
Actuarial Accrued Liability	\$1,288,961,000
Actuarial Value of Assets	<u>963,269,000</u>
Unfunded Status	325,692,000
Funded Percentage	74.7%

During the 2012-2013 fiscal year, the plan’s funded status dropped from 79.0% as of July 1, 2012 to 74.7% as of July 1, 2013, as detailed above. This was due in part to the reduction in investment return assumption from 8.0% to 7.75% this year. In addition, 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 discussed in Section D below. Changes in the plan population and the resulting impact on plan liabilities partially offset these assets losses, preventing an otherwise larger decline in funded status.

Even with a funded status of less than 100%, the plan is still in a healthy position with the ability to pay benefits due at the current 74.7% level. It is not the intent of the plan’s funding method to fully fund such shortfalls in just one year. Absent of other significant changes, such underfunding will be eliminated over a period of years as it is spread into future contribution requirements.

Section I

Valuation Report

(continued)

D. Plan Experience During Period Under Review

As discussed earlier, the recommended City contribution for the 2014-2015 fiscal year has increased from last year by approximately \$1.4 million based on estimates of payroll. This increase is the net impact of annual plan asset and liability experience, as well as changes in methods and assumptions made this year.

The primary reason for this \$1.4 million increase is the continued recognition of the decline in the capital markets that occurred within the 2008-2009 fiscal year, with the resulting loss of market value of MERF assets during that period.

During 2012-2013, the market value of assets increased from \$942.7 million to \$969.9 million, resulting in an asset return of approximately 8.4% over the period. In order to avoid dramatic fluctuations in contribution requirements with 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.

As of July 1, 2013, the actuarial value of assets used in the development of the contribution requirement was approximately \$963.3 million, \$6.6 million lower than the market value of assets of \$969.9 million at such date. The return for the year on the actuarial value was 3.8%. Since 3.8% is less than MERF’s 8% return assumption for the 2012-2013 plan year, asset losses were generated that increased the fiscal year 2014-2015 contribution requirement. Specifically, these losses represented approximately \$4.7 million of the increase in the contribution and were therefore the primary driver of the increase.

A change was made to the investment return assumption this year, lowering it from 8.0% to 7.75% to better represent a long-term estimate of the expected return on investments in the MERF. Additionally, a change was made to the method for amortizing the unfunded Actuarial Accrued Liability. Specifically the unfunded liability as of July 1, 2013 will be amortized over a closed 25 year period. Any future gains and losses generated from actual experience not matching expected after July 1, 2013 will be amortized over an open 15 year period. The net impact of the change in investment return assumption and change in amortization method was a decrease in contribution of approximately \$3.2 million.

Changes in the plan’s population and the resulting impact on plan liabilities had the net effect of decreasing the recommended City contribution by approximately \$0.1 million. The main reasons for this decrease were salaries increasing by less than expected. The small gain related to non-investment experience in total indicates that the assumptions, put in place after the 2011 experience study, are closely modeling actual plan experience. A new study is not expected to be recommended until 2016; however actual experience compared to the assumptions is reviewed each year.

Section I

Valuation Report

(continued)

E. Changes Since The Last Valuation

- The investment return assumption was lowered from 8.00% to 7.75%.
- The method for amortizing the unfunded actuarial accrued liability as of July 1, 2013 was changed from an open 15 year amortization period to a closed 25 year period. Future gains and losses will continue to be amortized over an open 15 year period.

Specific plan changes reflected in this valuation are as follows:

- MLA: New hires after November 26, 2012 receive 1.75% benefit multiplier (reduced from 2.0%)

F. 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, 2013, there were approximately \$6.6 million in net unrecognized asset gains that eventually will be recognized in future City contribution requirements because of the use of this smoothing method. As a percentage of total assets, the amount of unrecognized gains are relatively small and so future contributions can be expected to remain fairly level for the 2015-2016 fiscal year, absent other significant changes.

To provide a sense of the level of expected future contributions, an estimate for the 2015-2016 fiscal year has been calculated. Specifically, the City's estimated recommended contribution for that fiscal year is currently \$44.4 million. This figure is based on a projected market value of assets at July 1, 2014 of \$1,000.1 million, determined by projecting the market value of assets as of July 1, 2013 to June 30, 2014 assuming a 7.75% return. Projected plan liabilities inherent in this calculation were based on the results of the July 1, 2013 valuation, including the assumptions, methods, and census data as of such date.

The projected asset value and estimated contribution for the 2015-2016 fiscal year assume the City funds the recommended contribution for 2013-2014. If the City contributes an amount other than the annual recommended contribution, the estimated future contribution will vary from the amount shown here.

The final 2015-2016 recommended contribution will be based upon final liabilities, assets and investment return assumption as of July 1, 2014.

Beginning with the 2014-2015 fiscal year contribution, the historic asset losses of 2007-2009 will be fully recognized. Therefore, future contribution increases are not expected to be as significant beyond the 2014-2015 fiscal year absent any other assumption or method changes. The extent of any increase or decrease in contribution will depend on market returns after July 1, 2013, among other factors.

Section I
Valuation Report
(continued)

G. New Accounting Standards

In June of 2013, The Government Accounting Standards Board (GASB) issued statements 67 and 68. GASB 67 is a new standard that pertains to financial reporting for pension plans. In general, it replaces GASB 25 and it is effective for fiscal years beginning after June 15, 2013. GASB 68 is a new standard that pertains to accounting and financial reporting for pensions by State and Local Government Employers. In general, it replaces GASB 27 and it is effective for fiscal years beginning after June 15, 2014. Both statements replace the relevant provisions of GASB 50.

Currently, the City’s annual financial report tracks the Net Pension Obligation (NPO) in the footnote section of the annual financial report. With GASB 68, the NPO will no longer be tracked. A new item called Net Pension Liability (NPL) will be displayed not as a footnote but directly on your balance sheet. For both standards, liabilities are calculated using the Entry Age Normal (EAN) Cost Method. In general, the NPL is the EAN Accrued Liability less the Market Value of Assets. The following table displays the NPL for the MERF for the last two years.

<u>Valuation Date</u>	<u>Entry Age Normal Accrued Liability</u>	<u>Market Value Of Assets</u>	<u>Net Pension Liability</u>
July 1, 2012	\$1,237,136,000	\$942,652,000	\$294,484,000
July 1, 2013	\$1,288,961,000	\$969,868,000	\$319,093,000

In addition to replacing the NPO with the NPL, the Annual Required Contribution (ARC) will also be eliminated. Even though the ARC will be eliminated, we will work with the City to develop a contribution policy. The new term for this is the Actuarially Determined Contribution (ADC). This report determines the ADC for the 2014-2015 fiscal year.

Under the prior standards, the ARC served as both the contribution policy and the accounting expense. As noted above the ARC is eliminated and replaced with the ADC with regard to the funding policy. The new pension expense will be quite different from the ARC and it has several components (including normal cost, interest cost, amortization components, actual return, and plan changes). The new pension expense will help reconcile the change in the Net Pension Liability each year. In addition, it will be more volatile than the ARC and so not suitable for use as a contribution policy.

If the City wants to see how the pension expense works, please let us know and we will prepare a sample exhibit. Like the Net Pension Liability, the calculation of the pension expense is based upon the Entry Age Normal Cost Method and will no longer be a footnote but reported directly in the annual financial report.

Section I
Valuation Report
(continued)

H. Certification

This report presents the results of the July 1, 2013 Actuarial Valuation for the City of Hartford Municipal Employees' Retirement Fund (MERF) (the Plan) for the purpose of estimating the funded status of the Plan and determining the Actuarial Determined Contribution (ADC) for the fiscal year ending June 30, 2015. This report is intended to satisfy the requirements of Connecticut General Statute 7-450a.

The valuation has been performed in accordance with generally accepted actuarial principles and practices. It is intended to comply with all applicable Actuarial Standards of Practice.

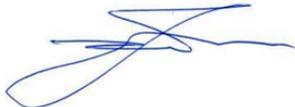
We certify that the actuarial assumptions and methods that were selected by us and represent our best estimate of anticipated actuarial experience under the Plan.

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

The results in this valuation report are based on the Plan as summarized in the *Summary of Plan Provisions* section of this report and the actuarial assumptions and methods detailed in the *Description of Actuarial Methods and Assumptions* section of this report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

We are members of the American Academy of Actuaries and meet its Qualification Standards to render the actuarial opinion contained herein.



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Enrolled Actuary 14-05126



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Enrolled Actuary 14-07674

May 16, 2014

Section II
Supporting Exhibits

**A. Entry Age Normal Actuarial Accrued Liability
as of July 1, 2013**

	Police	Firefighters	Board Of Education	Municipal Services	Library	Total Membership
A. Covered Payroll						
Annual Payroll (000)	\$37,883	\$32,754	\$44,519	\$24,852	\$4,641	\$144,649
B. Actuarial Accrued Liability (AAL)						
Entry Age Normal AAL (000)						
1. Active Members						
a. Active Members' MERF Liability	\$138,491	\$116,985	\$73,993	\$51,554	\$10,058	\$391,081
b. Local 566 Payment Present Value	0	0	2,912	0	0	
c. Local 1716 Payment Present Value	0	0	0	2,710	0	
d. Total for Active Members	138,491	116,985	76,905	54,264	10,058	396,703
2. Terminated Non-Vested Members [allocated by (1d)]	196	166	105	73	14	554
3. Terminated Vested Members	900	2,280	7,624	6,906	97	17,807
4. Retired Members	277,926	211,897	95,580	273,067	14,687	873,157
5. Old Plans Cola 1987/1990/1997/1999/2001/2005/2007	426	179	76	60	0	741
6. Total	417,939	331,507	180,288	334,370	24,856	1,288,960
C. Valuation Assets (Adjusted Value)						
1. Amount prior to Recognizing Receivable (000)	\$301,097	\$262,236	\$149,248	\$233,945	\$16,743	\$963,269
2. Contribution Receivable (000)	0	0	0	0	0	0
3. Valuation Assets after Recognition of Receivable (000)	301,097	262,236	149,248	233,945	16,743	963,269
D. Unfunded Actuarial Accrued Liability (000)	\$116,842	\$69,271	\$31,040	\$100,425	\$8,113	\$325,691
E. Funded Percent (C. / B.)	72.0%	79.1%	82.8%	70.0%	67.4%	74.7%

Section II
Supporting Exhibits
(continued)

B. Cash Contributions

July 1, 2014 – June 30, 2015 Fiscal Year Contribution

	Police	Firefighters	Board Of Education	Municipal Services	Library	Total Membership
1. Development of Amortization						
a. Unfunded Actuarial Accrued Liability	\$116,842,207	\$69,271,001	\$31,040,687	\$100,424,806	\$8,113,065	\$325,691,766
b. Amortization of Unfunded AAL (25 year closed)	9,942,315	5,894,395	2,641,308	8,545,329	690,355	27,713,703
2. Normal Cost Development						
a. Normal Cost Beginning of Year prior to Expense Load	\$5,473,398	\$3,135,434	\$1,519,337	\$2,233,112	\$314,863	\$12,676,144
b. Normal Cost Projected One Year prior to Expense Load	5,897,586	3,378,430	1,637,086	2,406,178	339,265	13,658,545
c. Expense Load (Allocated by AAL)	817,770	648,650	352,765	654,253	48,635	2,522,073
3. Fiscal Year Contribution for 07/01/2014 - 06/30/2015						
I. Gross City Contribution						
a. Total Contribution Due as of Beginning of Year (1b+2b+2c)	16,657,671	9,921,475	4,631,159	11,605,760	1,078,255	43,894,320
b. Total Interest Adjusted Gross City Contribution	17,291,112	10,298,759	4,807,268	12,047,092	1,119,258	45,563,488
II. Annual Adjusted Payroll as of 07/01/2013 w 2 year proj	41,856,490	35,658,714	48,786,313	27,394,181	5,101,183	158,796,881
III. Contribution as a % of Payroll prior to adjustments	41.31%	28.88%	9.85%	43.98%	21.94%	28.69%
IV. 07/01/2014 Payment for Local 566 (000)	0	0	303,918	0	0	303,918
V. 07/01/2014 Payment for Local 1716 (000)	0	0	0	509,126	0	509,126
VI. Old Plans COLA Annual Payment (000)	93,815	45,565	18,933	15,488	0	173,801
VII. Net City Contribution [(I.) - (IV.) - (V.) - (VI.)]	17,197,297	10,253,194	4,484,417	11,522,478	1,119,258	44,576,643

	2014 - 2015 Contribution Sensitivity*					
	Police	Firefighters	Board of Education	Municipal Services	Library	Total
Estimated 2014-2015 Fiscal Year Payroll +5%	\$43,949,315	\$37,441,650	\$51,225,629	\$28,763,890	\$5,356,242	\$166,736,726
Net City Contribution Estimate for 2014-2015	18,061,647	10,767,584	4,722,873	12,125,745	1,175,159	46,853,008
Estimated 2014-2015 Fiscal Year Payroll -5%	39,763,666	33,875,778	46,346,997	26,024,472	4,846,124	150,857,037
Net City Contribution Estimate for 2014-2015	16,332,555	9,737,760	4,242,328	10,920,949	1,063,240	42,296,832

*Based on contribution policy of depositing a % of payroll using actual fiscal year payroll.

Section II

Supporting Exhibits (continued)

C. Actuarial Balance Sheet

	July 1, 2013	July 1, 2012
Actuarial Liabilities		
Present Value of Future Benefits for:		
Active Employees	\$588,388,152	\$536,794,819
Inactive Members		
• Regular Retirees	786,066,104	769,949,362
• Disability Retirees	61,869,619	61,312,447
• Survivors	25,220,847	26,622,704
• Terminated Non-Vesteds	553,450	553,450
• Terminated Vesteds	17,807,523	14,834,388
• Old Plans COLA	<u>740,291</u>	<u>723,482</u>
 TOTAL	 \$1,480,645,986	 \$1,410,790,652
Source of Funds		
1. Actuarial Value of Assets	\$963,269,168	\$977,145,866
2. Present Value of Future Employee Contributions	85,836,132	91,249,308
3. Present Value of Future City Normal Cost Contributions	105,848,920	82,405,435
4. Unfunded Accrued Liability	<u>325,691,766</u>	<u>259,990,043</u>
5. TOTAL = (1) + (2) + (3) + (4)	\$1,480,645,986	\$1,410,790,652

Section II
Supporting Exhibits
(continued)

D. Value of Accrued Benefits as of July 1, 2013

	Police	Firefighters	Board Of Education	Municipal Services	Library	Total Membership
A. Covered Payroll						
Annual Payroll	\$37,883	\$32,754	\$44,519	\$24,852	\$4,641	\$144,649
B. Actuarial Accrued Liability (AAL)						
Unit Credit AAL						
1. Active Members						
a. Active Members' MERF Liability	\$104,302	\$96,496	\$48,208	\$41,663	\$6,272	\$296,941
b. Local 566 Payment Present Value	0	0	2,912	0	0	2,912
c. Local 1716 Payment Present Value	0	0	0	2,710	0	2,710
d. Total for Active Members	104,302	96,496	51,120	44,373	6,272	302,563
2. Terminated Non-Vested Members [allocated by (1d)]	196	166	105	73	14	554
3. Terminated Vested Members	900	2,280	7,624	6,906	97	17,807
4. Retired Members	277,926	211,897	95,580	273,067	14,687	873,157
5. Old Plans Cola 1987/1990/1997/1999/2001/2005/2007	426	179	76	60	0	741
6. Total	383,750	311,018	154,505	324,479	21,070	1,194,822

Section II
Supporting Exhibits
(continued)

E. Development of Asset Values

The Actuarial 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 7/1/2013	\$	969,867,917
2. Gain / (loss) not recognized in actuarial value 7/1/2013		6,598,749
3. Preliminary actuarial value 7/1/2013: (1)-(2)		963,269,168
4. Preliminary actuarial value as a percentage of market value: (3)÷(1)		99.3%
5. Gain / (loss) recognized for corridor min/max		N/A
6. Actuarial value 7/1/2013 after corridor min/max: (3)+(5)		963,269,168
7. Actuarial value as a percentage of market value: (6)÷(1)		99.3%

Development of Asset Gain / (Loss) for 2012-2013 Plan Year		
1. Market value 7/1/2012	\$	942,652,465
2. Contributions		44,796,727
3. Benefit payments		92,521,793
4. Administrative expenses		2,334,383
5. Expected return at 8.00%		73,464,792
6. Expected value 7/1/2013: (1)+(2)-(3)-(4)+(5)		966,057,808
7. Market value 7/1/2013		969,867,917
8. Asset gain / (loss) for -1 Plan Year: (7)-(6)		3,810,109

Recognition of Gain / (Loss) in Actuarial Value					
	(a)	(b)	(c)	(d)	(e)
Year	Gain / (loss)	Recognized as of 7/1/2012	Recognized in current year: 20% of (a)	Total recognized as of 7/1/2013: (b)+(c)	Not recognized as of 7/1/2013: (a)-(d)
2008-2009	\$ (241,203,873)	\$ (192,963,100)	\$ (48,240,773)	\$ (241,203,873)	\$ 0
2009-2010	26,022,852	15,613,710	5,204,570	20,818,280	5,204,572
2010-2011	83,151,652	33,260,660	16,630,330	49,890,990	33,260,662
2011-2012	(58,190,952)	(11,638,190)	(11,638,190)	(23,276,380)	(34,914,572)
2012-2013	3,810,109	0	<u>762,022</u>	762,022	<u>3,048,087</u>
Total			(37,282,041)		6,598,749

Section II

Supporting Exhibits (continued)

E. Development of Asset Values

Summary of Fund Activity		
	Market Value	Actuarial Value
1. Beginning value 7/1/2012		
a. Trust assets	\$ 942,652,465	\$ 977,145,866
b. Accrued contribution	0	0
c. Benefits payable	0	0
d. Administrative expenses payable	0	0
e. Net: (a)+(b)-(c)-(d)	942,652,465	977,145,866
2. Contributions		
a. Employer Contributions during year	34,300,386	34,300,386
b. Employee Contributions during year	10,496,341	10,496,341
c. Change in accrued contribution	0	0
d. Total for plan year	44,796,727	44,796,727
3. Disbursements		
a. Benefit payments during year	92,521,793	92,521,793
b. Administrative expenses during year	2,334,383	2,334,383
c. Change in benefits payable	0	0
d. Change in administrative expenses payable	0	0
e. Total for plan year	94,856,176	94,856,176
4. Net investment return		
a. Interest and dividends	15,400,729	N/A
b. Change in accrued income	0	N/A
c. Realized gain (loss)	36,245,609	N/A
d. Unrealized gain (loss)	30,209,260	N/A
e. Expected return	N/A	73,464,792
f. Recognized gain (loss)	N/A	(37,282,041)
g. Required adjustment due to corridor	N/A	0
h. Reversal of prior year required adjustment	N/A	0
i. Investment-related expenses	(4,580,697)	N/A
j. Total	77,274,901	36,182,751
5. Ending value 7/1/2013		
a. Trust assets: (1a)+(2d)-(3a)-(3b)+(4j)	969,867,917	963,269,168
b. Accrued contribution	0	0
c. Benefits payable	0	0
d. Administrative expenses payable	0	0
e. Net: (a)+(b)-(c)-(d)	969,867,917	963,269,168
6. Approximate rate of return 2012-2013		
	8.4%	3.8%

Section II
Supporting Exhibits
(continued)

E. Development of Asset Values

Rate of Return on Market Value of Assets				
Period Ending June 30	Average Annual Effective Rate of Return			
	1 Year	3 Years	5 Years	10 Years
2004	14.6%	5.1%	4.3%	9.9%
2005	9.1%	9.4%	4.4%	9.3%
2006	8.7%	10.8%	6.6%	8.7%
2007	15.6%	11.1%	10.4%	8.3%
2008	-1.9%	7.2%	9.0%	6.3%
2009	-15.0%	-1.2%	2.7%	3.5%
2010	11.1%	-2.5%	3.1%	3.7%
2011	17.7%	3.6%	4.7%	5.7%
2012	1.9%	10.0%	2.1%	6.2%
2013	8.4%	9.1%	4.2%	6.6%

Section II

Supporting Exhibits

(continued)

F. 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 year ending 2008 through 2010, 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 *
2008	13,252,745	125%	16,454,745	129,258
2009	11,797,419	109%	12,713,915**	115,067
2010	9,601,580	113%	10,727,385	112,662
2011	18,846,217	100%	18,730,668	115,549
2012	27,599,529	100%	26,681,068	918,461
2013	34,337,947	100%	34,207,067	130,880

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

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

Section II

Supporting Exhibits

(continued)

F. Accounting Information

As detailed below, the plan's funded status dropped from 79.0% as of July 1, 2012 to 74.7% as of July 1, 2013. 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 Actuarial Value of Assets during the year previously discussed.

Even with a funded status of less than 100%, the plan is still in a healthy position at the current 74.7% level with the ability to pay benefits due.

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)
7/1/2008	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%
7/1/2010	1,041,572,000	1,175,040,000	133,468,000	88.6%	132,529,000	100.7%
7/1/2011	1,017,602,000	1,218,900,000	201,298,000	83.5%	136,555,000	147.4%
7/1/2012	977,146,000	1,237,136,000	259,990,000	79.0%	137,919,000	188.5%
7/1/2013	963,269,000	1,288,960,934	325,691,766	74.7%	144,649,000	225.2%

Section II

Supporting Exhibits (continued)

G. Membership Data

Summary – Active Members as of July 1, 2013

	Number	Payroll*	Average Annual Pay*
Police	479	\$37,882,653	\$79,087
Firefighters	382	32,753,962	85,743
Board of Education	973	44,518,703	45,754
Municipal Services	419	24,852,373	59,314
Library	71	4,640,729	65,362
Total	2,324	\$144,648,420	\$62,241

*Basic salary plus overtime.

Summary – Pensioners as of July 1, 2013

	Service Pensions*		Disability Pensions		Survivor Benefits*		Total	
	Count	Total Monthly Annuities	Count	Total Monthly Annuities	Count	Total Monthly Annuities	Count	Total Monthly Annuities
Police	525	\$2,013,720	64	\$167,572	73	\$81,190	662	\$2,262,482
Firefighters	358	1,437,394	119	361,677	100	112,277	577	1,911,348
Board of Ed.	634	891,568	22	14,227	42	18,098	698	923,893
Municipal Svcs.	829	2,289,969	8	10,194	66	51,614	903	2,351,777
Library	68	136,113	1	1,867	2	1,115	71	139,095
Vested Deferred	173	194,776	--	--	--	--	173	194,776
TOTAL**	2,587	\$6,963,540	214	\$555,537	283	\$264,294	3,084	\$7,783,371

* 16 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)

G. Membership Data

Data Reconciliation – Police

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2012	495	2	660	1,157
Adjustments	0	0	+3	+3
Retirements	-3	-1	+4	0
Disabilities	0	0	0	0
Terminations				
Vested	-3	+3	N/A	0
Non-vested	-11	N/A	N/A	-11
Deaths	-1	0	-12	-13
New beneficiaries	N/A	0	+8	+8
Transfer group	0	0	0	0
Rehires	+1	0	-1	0
New entrants	<u>+1</u>	<u>N/A</u>	<u>N/A</u>	<u>+1</u>
Total Participants 7/1/2013	479	4	662	1,145
Average Age				
7/1/2012	38.7			
7/1/2013	39.8			
Average Service				
7/1/2012	10.0			
7/1/2013	11.4			
Payroll**				
7/1/2012	\$38,333,847			
7/1/2013	37,882,653			
Total monthly benefits*				
7/1/2012		\$7,756	\$2,251,691	
7/1/2013		6,521	2,262,482	

* Excludes old plan COLA participants.

** Basic salary plus overtime.

Section II

Supporting Exhibits (continued)

G. Membership Data

Data Reconciliation – Firefighters

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2012	345	2	577	924
Adjustments	0	0	-1	-1
Retirements	-8	-1	+9	0
Disabilities	-2	0	+2	0
Terminations				
Vested	-3	+3	N/A	0
Non-vested	-1	N/A	N/A	-1
Deaths	0	0	-16	-16
New beneficiaries	N/A	0	+6	+6
Transfer group	0	0	0	0
Rehires	0	0	0	0
New entrants	<u>+51</u>	<u>N/A</u>	<u>N/A</u>	<u>+51</u>
Total Participants 7/1/2013	382	4	577	963
Average Age				
7/1/2012	41.2			
7/1/2013	40.2			
Average Service				
7/1/2012	13.9			
7/1/2013	12.8			
Payroll**				
7/1/2012	\$29,102,161			
7/1/2013	32,753,962			
Total monthly benefits*				
7/1/2012		\$10,537	\$1,864,734	
7/1/2013		16,637	1,911,348	

* Excludes old plan COLA participants.

** Basic salary plus overtime.

Section II

Supporting Exhibits (continued)

G. Membership Data

Data Reconciliation – Board of Education

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2012	883	75	691	1,649
Adjustments	+12	0	+2	+14
Retirements	-6	-7	+13	0
Disabilities	0	0	0	0
Terminations				
Vested	-30	+30	N/A	0
Non-vested	-24	N/A	N/A	-24
Deaths	-1	-1	-26	-28
New beneficiaries	N/A	0	+18	+18
Transfer group	0	0	0	0
Rehires	0	0	0	0
New entrants	<u>+139</u>	<u>N/A</u>	<u>N/A</u>	<u>+139</u>
Total Participants 7/1/2013	973	97	698	1,768
Average Age				
7/1/2012	47.5			
7/1/2013	46.7			
Average Service				
7/1/2012	12.2			
7/1/2013	10.2			
Payroll**				
7/1/2012	\$40,418,741			
7/1/2013	44,518,703			
Total monthly benefits*				
7/1/2012		\$76,490	\$925,752	
7/1/2013		86,756	923,893	

* Excludes old plan COLA participants.

** Basic salary plus overtime.

Section II

Supporting Exhibits (continued)

G. Membership Data

Data Reconciliation – Municipal Services

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2012	434	59	901	1,394
Adjustments	0	+2	0	+2
Retirements	-16	-8	+24	0
Disabilities	0	0	0	0
Terminations				
Vested	-12	+12	N/A	0
Non-vested	-24	N/A	N/A	-24
Deaths	-1	0	-33	-34
New beneficiaries	N/A	0	+11	+11
Transfer group	0	0	0	0
Rehires	0	0	0	0
New entrants	<u>+38</u>	<u>N/A</u>	<u>N/A</u>	<u>+38</u>
Total Participants 7/1/2013	419	65	903	1,387
Average Age				
7/1/2012	48.3			
7/1/2013	48.6			
Average Service				
7/1/2012	10.0			
7/1/2013	10.9			
Payroll**				
7/1/2012	\$25,586,351			
7/1/2013	24,852,373			
Total monthly benefits*				
7/1/2012		\$77,263	\$2,343,888	
7/1/2013		83,267	2,351,777	

* Excludes old plan COLA participants.

** Basic salary plus overtime.

Section II

Supporting Exhibits (continued)

G. Membership Data

Data Reconciliation – Library

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2012	71	2	73	146
Adjustments	0	0	0	0
Retirements	-1	0	+1	0
Disabilities	0	0	0	0
Terminations				
Vested	-1	+1	N/A	0
Non-vested	-4	N/A	N/A	-4
Deaths	0	0	-3	-3
New beneficiaries	N/A	0	0	0
Transfer group	0	0	0	0
Rehires	0	0	0	0
New entrants	<u>+6</u>	<u>N/A</u>	<u>N/A</u>	<u>+6</u>
Total Participants 7/1/2013	71	3	71	145
Average Age				
7/1/2012	47.3			
7/1/2013	48.3			
Average Service				
7/1/2012	13.1			
7/1/2013	12.6			
Payroll**				
7/1/2012	\$4,478,204			
7/1/2013	4,640,729			
Total monthly benefits*				
7/1/2012		\$1,069	\$141,415	
7/1/2013		1,595	139,095	

*Excludes old Plan COLA participants.

**Basic salary plus overtime.

Section II

Supporting Exhibits (continued)

G. Membership Data

Data Reconciliation – Total

Participant Data				
	Active	Terminated Vested	Pensioners*	Total
Total Participants 7/1/2012	2,228	140	2,902	5,270
Adjustments	+12	+2	+4	+18
Retirements	-34	-17	+51	0
Disabilities	-2	0	+2	0
Terminations				
Vested	-49	+49	N/A	0
Non-vested	-64	N/A	N/A	-64
Deaths	-3	-1	-90	-94
New beneficiaries	N/A	0	+43	+43
Transfer group	0	0	0	0
Rehires	+1	0	-1	0
New entrants	<u>+235</u>	<u>N/A</u>	<u>N/A</u>	<u>+235</u>
Total Participants 7/1/2013	2,324	173	2,911	5,408
Payroll**				
7/1/2012	\$137,919,304			
7/1/2013	144,648,420			
Total monthly benefits				
7/1/2012		\$173,115	\$7,527,480	
7/1/2013		194,776	7,588,595	

**Excludes old Plan COLA participants.*

***Basic salary plus overtime.*

City of Hartford MERF - Police

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

July 1, 2013

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	52,954	1	64,404															4	55,816
25 to 29			28	58,977	30	80,513	4	74,852													62	70,609
30 to 34			21	57,664	53	85,261	16	85,032	1	93,368											91	79,109
35 to 39			8	57,129	36	85,342	20	84,465	18	92,427	1	77,389									83	83,834
40 to 44			7	58,684	25	83,949	22	86,414	54	103,813	3	71,337	7	110,264							118	93,208
45 to 49			3	56,037	13	76,199	13	82,834	39	90,826	5	95,171	5	105,426							78	86,882
50 to 54			1	49,376	9	77,398	2	85,281	6	93,075	4	64,035	6	90,358							28	81,188
55 to 59					2	77,179			3	83,296			3	84,495	1	107,302					9	85,004
60 to 64									1	115,605					2	72,326					3	86,752
65 to 69							1	39,084							1	72,651					2	55,867
70 & over															1	88,139					1	88,139
All ages			71	57,824	169	82,878	78	83,772	122	96,954	13	78,722	21	99,743	5	82,549					479	

City of Hartford MERF - Fire

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

July 1, 2013

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	14	55,867	5	61,766	1	85,268															20	58,812
25 to 29	20	55,871	14	63,814	23	82,804															57	68,933
30 to 34	8	55,208	7	61,526	22	81,314	9	86,978	1	80,417											47	74,989
35 to 39	5	54,878	3	60,684	14	80,162	22	84,005	12	87,784	3	88,264	1	82,514							60	80,459
40 to 44	3	54,477	2	60,964	6	83,906	13	84,510	30	87,894	4	89,088	1	104,682	1	79,648					60	84,416
45 to 49					3	82,162	13	86,694	24	94,483	11	93,204	11	91,074	3	98,834			1	86,245	66	91,680
50 to 54	1	53,575			3	87,505	5	81,762	20	88,914	6	88,030	11	102,450	9	94,276					55	91,033
55 to 59									5	83,101			2	91,944	4	88,607	1	82,797	1	113,140	13	88,443
60 to 64									1	79,529	1	82,824			1	79,529			1	118,220	4	90,026
65 to 69																						
70 & over																						
All ages	51	55,542	31	62,480	72	82,139	62	84,925	93	89,372	25	90,296	26	96,148	18	92,144	1	82,797	3	105,869	382	81,355

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, 2013

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	20	34,085	2	51,177																	22	35,639
25 to 29	36	38,567	19	45,608	9	43,706															64	41,380
30 to 34	19	44,793	28	53,939	42	43,606	4	30,747													93	46,406
35 to 39	14	41,488	30	46,945	33	48,582	14	46,084	12	41,597											103	45,978
40 to 44	7	40,905	30	54,069	36	54,011	32	59,095	29	49,226	8	41,341						1	68,407	143	52,881	
45 to 49	7	36,754	24	50,197	35	52,993	37	55,073	27	51,552	10	45,168	4	53,249							144	51,438
50 to 54	9	52,407	15	54,829	31	52,391	29	42,812	35	42,227	10	43,943	7	55,468							136	47,579
55 to 59	11	42,106	11	45,076	28	42,347	25	49,166	21	43,056	13	45,528	8	45,527	8	56,464			2	99,325	127	46,335
60 to 64	4	38,287	5	51,284	22	46,999	19	50,746	18	49,290	12	50,317	7	48,097	2	42,476	3	40,284	2	51,720	94	48,347
65 to 69			3	74,118	11	60,430	7	69,563	7	42,225	4	49,364	1	45,130	1	55,918	1	39,163	2	39,986	37	56,412
70 & over	1	25,750			2	27,088	5	42,436					1	35,356			1	36,460			10	36,392
All ages	128	40,308	167	50,977	249	48,919	172	51,275	149	46,225	57	45,876	28	49,380	11	53,871	5	39,295	7	64,353	973	

City of Hartford MERF - Municipal Services

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

July 1, 2013

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	1	37,345	7	39,712	1	53,795															9	41,014					
25 to 29	10	44,598	11	57,674	7	42,770			1	11,858												29	47,988				
30 to 34	5	64,367	14	65,339	3	64,499	3	64,127	1	60,781													26	64,740			
35 to 39	4	56,309	16	64,250	14	75,923	6	60,143	1	93,950	1	71,948	1	80,460										43	67,985		
40 to 44	1	35,675	8	71,011	19	78,197	6	85,799	2	71,446			2	101,500	1	88,812									39	77,923	
45 to 49	1	67,320	13	81,063	13	50,723	12	67,846	5	54,520	6	41,867	3	63,791						6	60,052				59	62,206	
50 to 54	4	53,811	14	70,065	21	74,196	11	47,144	12	48,899	8	45,848	3	73,370	1	47,479	2	70,950	4	49,224						80	60,410
55 to 59	3	57,657	12	98,293	14	59,481	15	47,234	8	78,448	7	48,468	6	64,513	1	46,209	1	59,658								67	64,978
60 to 64	3	67,635	6	99,777	9	82,795	6	59,662	6	50,511	2	45,367	2	70,054			3	56,423	1	59,658						38	70,198
65 to 69			6	55,786	4	80,732	3	45,264	3	37,816	2	45,964														18	55,490
70 & over					2	11,284	4	11,272	3	11,284	1	11,236	1	62,645												11	15,944
All ages	32	53,891	107	70,756	107	67,629	66	55,275	42	53,496	27	45,300	18	71,376	3	60,833	6	61,805	11	56,079						419	

City of Hartford MERF - Library

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

July 1, 2013

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			1	57,185																	1	57,185
25 to 29	1	52,702			1	56,539	1	52,200													3	53,814
30 to 34	1	82,987	1	65,287	1	51,797	1	51,394													4	62,866
35 to 39	1	64,928	2	76,309	2	52,855	1	55,045	1	58,508	1	50,831									8	60,955
40 to 44					4	65,965	3	51,978	1	57,974	1	67,136	1	61,154							10	60,605
45 to 49	1	67,760			2	70,763	1	54,563	3	70,099	1	50,618	3	53,800							11	62,379
50 to 54			3	105,676	2	77,436	5	77,056			2	53,506	2	86,744	1	50,246					15	79,195
55 to 59	2	65,525	2	84,918	3	66,445	2	81,949					1	62,780							10	72,690
60 to 64			1	62,780	2	134,974	2	51,173					2	86,769	1	50,246					8	82,357
65 to 69													1	50,246							1	50,246
70 & over																						
All ages	6	66,571	10	82,473	17	73,152	16	63,791	5	65,356	5	55,119	10	68,261	2	50,246					71	

City of Hartford MERF - All Groups

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

July 1, 2013

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	35	42,083	18	50,238	3	74,836															56	45,884
25 to 29	67	45,364	72	57,019	70	73,496	5	70,322	1	11,858											215	58,666
30 to 34	33	51,260	71	59,151	121	69,207	33	76,086	3	78,189		45,363									261	65,268
35 to 39	24	49,228	59	53,628	99	70,254	63	73,017	44	77,049	6	77,493	2	81,487							297	66,932
40 to 44	11	44,774	50	61,073	90	69,145	76	72,156	116	84,975	16	60,681	11	103,698	2	84,230			1	68,407	370	73,645
45 to 49	9	52,619	40	59,702	66	59,600	79	67,244	98	77,835	33	68,161	26	79,370	3	98,834		67,383	7	63,794	358	68,736
50 to 54	14	65,284	40	63,551	66	65,915	52	54,443	73	59,891	30	57,269	29	86,215	11	89,873	2	70,950	4	43,031	314	63,910
55 to 59	16	53,077	25	65,846	47	53,503	42	49,353	37	56,735	20	40,232	20	60,483	14	65,627	2	71,227	3	103,930	226	55,492
60 to 64	7	58,481	14	68,397	30	57,340	27	55,586	26	53,394	15	51,974	11	59,260	6	53,772	6	48,551	6	70,433	147	56,676
65 to 69			9	61,897	15	65,937	11	62,308	10	41,030	6	48,362	2	47,688	2	64,285	1	39,547	2	40,193	58	56,378
70 & over	1	26,002			4	19,256	9	28,650	3	11,284	1	11,236	2	49,174	1	88,139	1	36,817			22	28,603
All ages	217	48,672	386	58,878	614	66,192	394	64,345	411	71,671	127	57,350	103	77,014	39	75,675	12	55,339	21	65,898	2,324	

Section II
Supporting Exhibits
(continued)

H. 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, 2013</u>	<u>July 1, 2012</u>
1. Number of retirees and beneficiaries receiving benefits	11	11
2. Annual benefits payable	\$94,000	\$111,000
3. Present value of benefits	\$362,000	\$431,000

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 2013 Section 415(m) Fund valuation are as follows:

Mortality Basis:	RP-2000 Healthy Annuitants Table projected by Scale AA to valuation date with no adjustment and separate male and female rates.
Mortality Improvement:	Projected to date of decrement using Scale AA (generational mortality).
Termination:	N/A.
Salary Scale:	N/A.
Investment Return:	7.75% per year, net of investment expenses. (Prior Valuation: 8.00%)
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 – Actuarial 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 reflected 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 “Entry Age Normal Actuarial Cost Method” is used to determine plan liabilities. The Unfunded Actuarial Accrued Liability developed with the July 1, 2013 valuation is amortized over 25 years using a level dollar, closed period. Future gains and losses will be amortized over a 15 year level dollar, open period. Prior to this valuation, the unfunded liability was amortized over a 15 year level dollar open period.

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 2013 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 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 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 with no adjustment.
- Post-retirement: RP2000 Healthy Annuitants Table – male and female rates, projected by Scale AA to valuation date with no adjustment.
- Disability: RP2000 Disabled Table – male and female rates.

Mortality Improvement:

Pre and Post-retirement: Projected to date of decrement using Scale AA (generational mortality).

Disability: None.

Section III

Actuarial Cost Methods and Assumptions

(continued)

Termination:

Yearly Rates of Employee Termination – Police and Fire

<u>Age</u>	<u>Police</u>	<u>Fire</u>
20-24	4.0%	1.0%
25-29	3.0%	1.0%
30-34	2.5%	1.0%
35-39	2.0%	1.0%
40-44	1.0%	0.5%
45+	0.0%	0.0%

Yearly Rates of Employee Termination – Bd of Ed

<u>Age</u>	<u>Years of Service</u>					
	<1	1	2	3	4	5+
20-29	30.0%	30.0%	28.0%	25.0%	20.0%	15.0%
30-39	25.0%	25.0%	20.0%	18.0%	15.0%	9.0%
40-49	20.0%	17.0%	15.0%	12.0%	10.0%	8.0%
50-54	17.0%	15.0%	12.0%	10.0%	8.0%	6.0%
55+	9.0%	8.0%	8.0%	7.0%	6.0%	5.0%

Yearly Rates of Employee Termination – Munic. Svc. & Lib.

<u>Age</u>	<u>Years of Service</u>					
	<1	1	2	3	4	5+
20-29	27.0%	25.0%	22.0%	19.0%	17.0%	15.0%
30-39	20.0%	17.0%	15.0%	12.0%	10.0%	6.0%
40-49	15.0%	10.0%	9.0%	7.0%	6.0%	5.0%
50+	8.0%	7.0%	6.0%	5.0%	4.0%	3.0%

Section III

Actuarial Cost Methods and Assumptions

(continued)

Investment Return: 7.75% per year, net of investment expenses.
(Prior valuation: 8.00%).

Salary Scale: 3% for inflationary salary increases plus a percentage for promotion or merit increases as follows.

Yearly Rates of Increases for Promotion or Merit

<u>Age</u>	<u>Police</u>	<u>Fire</u>	<u>Bd of Ed</u>	<u>Munic. Svc. & Lib.</u>
25	6.60%	4.5%	4.40%	6.40%
30	4.80%	2.63%	3.70%	4.78%
35	2.65%	1.25%	3.35%	2.75%
40	1.45%	0.85%	2.50%	2.21%
45	1.10%	0.75%	1.40%	2.00%
50	1.00%	0.75%	0.85%	1.55%
55+	1.00%	0.75%	0.75%	1.25%

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
Building and Grounds Supervisors
MLA
HESP
Paraprofessionals
HSSA
School Crossing Guards
Police

For Police, final average pay is loaded by a percentage for assumed private duty and overtime as follows: Pre-7/1/1999 hires: 43%; Post 7/1/1999 hires: 19% for employees remaining in the pre 2012 plan; 25% for employees moving to the 7/1/2012 plan.

Section III

Actuarial Cost Methods and Assumptions

(continued)

Assumed Retirement Age:

Retirement Rates: Police

<u>Service</u>	<u>Age <50</u>	<u>Age >50</u>
20	50.0%	30.0%
21-24	40.0%	25.0%
25-29	30.0%	15.0%
30+	100.0%	100.0%

100% retire at age 65, regardless of service; must be age 40 to retire

Retirement Rates: Fire

<u>Age</u>	<u>Years of Service</u>	
	<u>20-24</u>	<u>25-29</u>
45-49	2.5%	5.0%
50-54	5.0%	20.0%
55-59	10.0%	30.0%
60-64	25.0%	40.0%
65+	100.0%	100.0%

100% retire at 30 years of service for all ages

Retirement Rates: Board of Education

<u>Age</u>	<u>Rate</u>
55	10.0%
56-57	5.0%
58-61	10.0%
62-64	15.0%
65	40.0%
66-69	15.0%
70	100%

Retirement Rates: Municipal Services and Library

<u>Age</u>	<u><20 yrs svc or</u>	<u>Service</u>	<u>+20 on yrs svc</u>
	<u>over age 65</u>		<u>and under age 65</u>
55	15.0%	20	15%
56-59	7.5%	21	20%
60-64	15.0%	22	15%
65	30.0%	23-25	10%
66-74	15.0%	26-27	15%
75	100%	28	20%
		29	10%
		30	25%
		31-34	10%
		35	100%

Post 65 rates above used for all years of service.

Section III

Actuarial Cost Methods and Assumptions

(continued)

Social Security: Future tax wage bases are developed by projecting the 2013 base of \$113,700 forward at 4% per year.

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 150% for the Police, 250% for Firefighter groups, 10% for the Board of Education groups, and 10% for the Municipal Services and Library groups.

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

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

Expenses other than
Investment Expenses:

An explicit dollar amount was included in the development of the normal cost 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 2013 valuation, \$2,522,073 was used. Estimated expenses were then allocated to the various groups by the actuarial accrued liability.

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, 2013, the City payment will be \$509,126 (\$1,420,000 on a present value basis) and the pension fund payment will be \$462,336 (\$1,290,000 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, 2013, the City payment will be \$303,918 (\$1,525,000 on a present value basis) and the pension fund payment will be \$276,288 (\$1,387,000 on a present value basis).

Section IV

Hartford MERF - Summary of Principal Provisions of Pension Plan July 1, 2013

PROVISIONS FOR:

Retirement Pensions:

POLICE OFFICERS AND FIREFIGHTERS

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 not opting into 2012 plan: 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. Final Average Pay includes a provision for over-time and private duty pay.

Sworn Police Officers hired after the July 1, 2012 and officers hired after June 30, 1999 opting into new Plan: 2.8% of final rate of pay times years of service up to 25 years plus 2.5% for years of service over 25. Final Average Pay includes a provision for over-time.

BOARD OF EDUCATION MEMBERS

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.

Nonunion employees hired after September 30, 2010 no longer participate in the MERF.

MUNICIPAL SERVICES & LIBRARY MEMBERS

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 Nonbargaining municipal employees hired after January 1, 2011 and MLA employees hired after November 26, 2012, retirement benefit multiplier is reduced to 1.75%.

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

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 and after July 1, 2012 or hired between July 1, 1999 and June 30, 2012 opting into 2012 plan, increase maximum benefit to 80% of Final Average Pay with sick exchange provision for pre July 1, 1999 hires only. 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.

Sworn Police Officers hired after June 30, 2012, full benefits after 25 years of continuous service and age 55.

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.

For Nonbargaining municipal employees hired after January 1, 2011, earlier of age 55 with 20 years of service and age 62 with 5 years of service.

<u>PROVISIONS FOR:</u>	<u>POLICE OFFICERS AND FIREFIGHTERS</u>	<u>BOARD OF EDUCATION MEMBERS</u>	<u>MUNICIPAL SERVICES & LIBRARY MEMBERS</u>
<u>Optional Early 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.	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. For Nonbargaining municipal employees hired after January 1, 2011, early retirement reduction is 4% per year prior to age 62.
<u>Vesting of Earned Deferred Pension:</u>	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.
<u>Benefits to Survivors: (Death of Active Member Prior to Retirement)</u>	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.	

MUNICIPAL SERVICES & LIBRARY MEMBERS

PROVISIONS FOR:

POLICE OFFICERS AND FIREFIGHTERS

BOARD OF EDUCATION 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.

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.

10 years of continuous service, except no requirement if disability is service connected as defined in Worker's Compensation Act.

Non-Sworn Police Officers: Same as General Government members.

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.

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).

Non-Sworn Police Officers: Same as General Government members.

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.

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.

Non-Sworn Police Officers: Same as General Government members.

PROVISIONS FOR:

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.)

POLICE OFFICERS AND FIREFIGHTERS

Firefighters and Sworn Police Officers hired before July 1, 1999: 8%.

Sworn Police Officers hired after June 30, 1999: 6.5%. If opt into 2012 plan, rate increases to 8.0%

Sworn Police Officers hired after June 30, 2012, 9.5%

Non-Sworn Police Officers: 4% on earnings taxed for Social Security and 7% on excess.

Sworn and Non-Sworn Police Officers hired prior to July 1, 2012 had the option to elect retiree health insurance. If such election was made, the employee contribution rate increases by 1.5%.

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

BOARD OF EDUCATION MEMBERS

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.

MUNICIPAL SERVICES & LIBRARY MEMBERS

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, Nonbargaining municipal members hired after January 1, 2011) 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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