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February 11, 2010

Ms. Helen Kemp
Assistant Director, Division Counsel
Municipal Employees Retirement System
Office of the State Comptroller
55 Elm Street
Hartford, CT 06106

Dear Ms. Kemp:

This letter supplements the letter we sent to you on February 8, 2010.

As requested by the MERS Actuarial Sub-Committee, we have prepared alternative funding scenarios as of July 1, 2009 (contribution requirements for the fiscal year beginning July 1, 2010). These alternatives were based on the rolled-forward July 1, 2009 valuation results that were sent to you on January 21st and are based on the same membership data, provisions and actuarial assumptions. The changes employed in the funding alternatives valued were as follows:

1. Remove the asset corridor limiting the valuation assets to 80% - 120% of market value.
2. Remove the asset corridor and extend 5-year asset smoothing to 10 years.
3. Amortize the Unfunded Accrued Liability (UAL) over 30 years as a level percent of payroll, incorporating the 3.75% payroll growth assumption.
4. Combination of 1. and 3.
5. Combination of 2. and 3.
6. Switch to Projected Unit Credit (PUC) cost method (all other methods are the same as those used in the 2009 roll forward valuation).
7. PUC and remove asset corridor.
8. Same as 7. and extend 5-year asset smoothing to 10 years.
9. PUC using 30-year level percent of payroll amortization of UAL.
10. Combination of 7. and 9.
11. Combination of 8. and 9.

MERS staff provided us with updated market value of assets as of December 31, 2009. We projected July 1, 2010 results (contribution requirements for the fiscal year beginning July 1, 2011) by rolling forward the July 1, 2009 liabilities one year and the assets for half a year. In rolling forward the assets, we assumed the fund would earn an annualized rate of 8.25% for the period January 1, 2010 to June 30, 2010. Note that this projection was based only on the results previously sent and does not incorporate any of the funding alternatives shown above.

The attached exhibits show the July 1, 2008 valuation results, baseline July 1, 2009 rolled-forward valuation results and the main results of the funding alternatives for each of the four employee groups. Note that in addition to the contribution amounts shown in the exhibits, the municipalities must also contribute the amortization payments toward their Unfunded Accrued Liability that was established upon their joining MERS..

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We look forward to discussing these results with you and the Sub-Committee on the 17th. Please feel free to contact us prior to the meeting should you have any questions.

We are both Members of the American Academy of Actuaries and meet the Academy's Qualification Standards to issue this Statement of Actuarial Opinion. The valuation roll forward was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board. The actuarial calculations were performed by qualified actuaries according to generally accepted actuarial procedures and methods. The calculations are based on the current provisions of the System, and on actuarial assumptions that are individually and in the aggregate internally consistent and reasonably based on the actual experience of the System.

Respectfully submitted,

Philip Bonanno, ASA, EA, MAAA, FCA
Director, Consulting Actuary

Janet H. Cranna, FSA, EA, MAAA, FCA
Principal, Consulting Actuary

PB/JC/ss
Enclosure
CT MERS - 6.30.2009 funding alternatives rev.doc

cc: Ms. Kathryn Balut

SUMMARY OF FUNDING ALTERNATIVES

Actuarial Cost Method - Entry Age Normal

	Funding Scenario	General Employees with Social Security Employer Normal Cost Rate	Unfunded Accrued Liability Rate	Total Employer Contribution Rate	Total Employer Contribution in Dollars	Actuarial Value of Assets	Unfunded Accrued Liability
	July 1, 2008 valuation results	7.62%	-0.12% *	7.50%	$15,571,240	$713,657,851	($12,789,816)
2009 baseline	July 1, 2009 roll-forward valuation results	7.62%	3.11%	10.73%	$23,112,651	$650,536,416	$73,876,571
1.	baseline without asset corridor	7.62%	0.42%	8.04%	$17,318,333	$714,337,725	$10,075,262
2.	1. with 10-year asset smoothing	7.62%	-0.48%	7.14%	$15,379,714	$735,865,731	($11,452,744)
3.	baseline using 30-year level % of payroll for UAL amortization	7.62%	2.14%	9.76%	$21,023,250	$650,536,416	$73,876,571
4.	3. without asset corridor	7.62%	0.29%	7.91%	$17,038,310	$714,337,725	$10,075,262
5.	4. with 10-year asset smoothing	7.62%	-0.33%	7.29%	$15,702,817	$735,865,731	($11,452,744)
	Projected July 1, 2010 results (roll forward of 2009 baseline results)	7.62%	3.91%	11.53%	$25,767,214	$673,743,832	$96,194,111

Actuarial Cost Method - Projected Unit Credit

	Funding Scenario	General Employees with Social Security Employer Normal Cost Rate	Unfunded Accrued Liability Rate	Total Employer Contribution Rate	Total Employer Contribution in Dollars	Actuarial Value of Assets	Unfunded Accrued Liability
	July 1, 2008 valuation results	7.62%	-0.12% *	7.50%	$15,571,240	$713,657,851	($12,789,816)
6.	July 1, 2009 roll-forward valuation results	8.75%	1.30%	10.05%	$21,647,917	$650,536,416	$30,804,956
7.	6. without asset corridor	8.75%	-1.39%	7.36%	$15,853,599	$714,337,725	($32,996,353)
8.	7. with 10-year asset smoothing	8.75%	-2.30%	6.45%	$13,893,439	$735,865,731	($54,524,358)
9.	6. using 30-year level % of payroll for UAL amortization	8.75%	0.89%	9.64%	$20,764,768	$650,536,416	$30,804,956
10.	9. without asset corridor	8.75%	-0.95%	7.80%	$16,801,368	$714,337,725	($32,996,353)
11.	10. with 10-year asset smoothing	8.75%	-1.58%	7.17%	$15,444,335	$735,865,731	($54,524,358)
	Projected July 1, 2010 results (roll forward of Scenario 6 above)	9.23%	2.15%	11.38%	$25,431,994	$673,743,832	$53,048,771

* Reduction in normal cost rate due to subsidy provided by the Stabilization Reserve.

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SUMMARY OF FUNDING ALTERNATIVES

Actuarial Cost Method - Entry Age Normal

	Funding Scenario	General Employees without Social Security: Employer Normal Cost Rate	Unfunded Accrued Liability Rate	Total Employer Contribution Rate	Total Employer Contribution in Dollars	Actuarial Value of Assets	Unfunded Accrued Liability
	July 1, 2008 valuation results	7.82%	-0.32% *	7.50%	$9,518,174	$674,484,769	($51,919,191)
2009 baseline	July 1, 2009 roll-forward valuation results	7.82%	2.97%	10.79%	$14,206,985	$607,906,279	$43,075,707
1.	baseline without asset corridor	7.82%	-1.14%	6.68%	$8,795,427	$667,526,641	($16,544,655)
2.	1. with 10-year asset smoothing	7.82%	-2.52%	5.30%	$6,978,408	$687,643,900	($36,661,914)
3.	baseline using 30-year level % of payroll for UAL amortization	7.82%	2.04%	9.86%	$12,982,471	$607,906,279	$43,075,707
4.	3. without asset corridor	7.82%	-0.78%	7.04%	$9,269,432	$667,526,641	($16,544,655)
5.	4. with 10-year asset smoothing	7.82%	-1.73%	6.09%	$8,018,585	$687,643,900	($36,661,914)
	Projected July 1, 2010 results (roll forward of 2009 baseline results)	7.82%	3.53%	11.35%	$15,504,738	$629,592,896	$53,242,591

Actuarial Cost Method - Projected Unit Credit

	Funding Scenario	General Employees without Social Security: Employer Normal Cost Rate	Unfunded Accrued Liability Rate	Total Employer Contribution Rate	Total Employer Contribution in Dollars	Actuarial Value of Assets	Unfunded Accrued Liability
	July 1, 2008 valuation results	7.82%	-0.32% *	7.50%	$9,518,174	$674,484,769	($51,919,191)
6.	July 1, 2009 roll-forward valuation results	9.02%	0.55%	9.57%	$12,600,634	$607,906,279	$8,042,657
7.	6. without asset corridor	9.02%	-3.55%	5.47%	$7,202,243	$667,526,641	($51,577,705)
8.	7. with 10-year asset smoothing	9.02%	-4.94%	4.08%	$5,372,057	$687,643,900	($71,694,964)
9.	6. using 30-year level % of payroll for UAL amortization	9.02%	0.38%	9.40%	$12,376,798	$607,906,279	$8,042,657
10.	9. without asset corridor	9.02%	-2.44%	6.58%	$8,663,759	$667,526,641	($51,577,705)
11.	10. with 10-year asset smoothing	9.02%	-3.39%	5.63%	$7,412,912	$687,643,900	($71,694,964)
	Projected July 1, 2010 results (roll forward of Scenario 6 above)	9.62%	1.17%	10.79%	$14,739,746	$629,592,896	$17,701,922

* Reduction in normal cost rate due to subsidy provided by the Stabilization Reserve.

SUMMARY OF FUNDING ALTERNATIVES

Actuarial Cost Method - Entry Age Normal

		Police and Fire with Social Security					
	Funding Scenario	Employer Normal Cost Rate	Unfunded Accrued Liability Rate	Total Employer Contribution Rate	Total Employer Contribution in Dollars	Actuarial Value of Assets	Unfunded Accrued Liability
	July 1, 2008 valuation results	11.22%	-1.47% *	9.75%	$3,136,402	$139,689,896	$6,995,015
2009 baseline	July 1, 2009 roll-forward valuation results	11.22%	5.61%	16.83%	$5,616,934	$127,976,189	$20,630,760
1.	baseline without asset corridor	11.22%	2.20%	13.42%	$4,478,863	$140,527,444	$8,079,505
2.	1. with 10-year asset smoothing	11.22%	1.04%	12.26%	$4,091,718	$144,762,522	$3,844,427
3.	baseline using 30-year level % of payroll for UAL amortization	11.22%	3.85%	15.07%	$5,029,542	$127,976,189	$20,630,760
4.	3. without asset corridor	11.22%	1.51%	12.73%	$4,248,578	$140,527,444	$8,079,505
5.	4. with 10-year asset smoothing	11.22%	0.72%	11.94%	$3,984,919	$144,762,522	$3,844,427
	Projected July 1, 2010 results (roll forward of 2009 baseline results)	11.22%	7.09%	18.31%	$6,340,035	$132,541,647	$27,057,214

Actuarial Cost Method - Projected Unit Credit

		Police and Fire with Social Security					
	Funding Scenario	Employer Normal Cost Rate	Unfunded Accrued Liability Rate	Total Employer Contribution Rate	Total Employer Contribution in Dollars	Actuarial Value of Assets	Unfunded Accrued Liability
	July 1, 2008 valuation results	11.22%	-1.47% *	9.75%	$3,136,402	$139,689,896	$6,995,015
6.	July 1, 2009 roll-forward valuation results	11.76%	4.34%	16.10%	$5,373,300	$127,976,189	$15,976,652
7.	6. without asset corridor	11.76%	0.93%	12.69%	$4,235,228	$140,527,444	$3,425,397
8.	7. with 10-year asset smoothing	11.76%	-0.22%	11.54%	$3,851,421	$144,762,522	($809,680)
9.	6. using 30-year level % of payroll for UAL amortization	11.76%	2.98%	14.74%	$4,919,406	$127,976,189	$15,976,652
10.	9. without asset corridor	11.76%	0.64%	12.40%	$4,138,442	$140,527,444	$3,425,397
11.	10. with 10-year asset smoothing	11.76%	-0.15%	11.61%	$3,874,783	$144,762,522	($809,680)
	Projected July 1, 2010 results (roll forward of Scenario 6 above)	12.37%	5.87%	18.24%	$6,315,797	$132,541,647	$22,405,626

* Reduction in normal cost rate due to subsidy provided by the Stabilization Reserve.

SUMMARY OF FUNDING ALTERNATIVES

Actuarial Cost Method - Entry Age Normal

	Funding Scenario	Police and Fire without Social Security					
		Employer Normal Cost Rate	Unfunded Accrued Liability Rate	Total Employer Contribution Rate	Total Employer Contribution in Dollars	Actuarial Value of Assets	Unfunded Accrued Liability
	July 1, 2008 valuation results	10.39%	-0.89% *	9.50%	$5,509,122	$251,266,083	$456,679
2009 baseline	July 1, 2009 roll-forward valuation results	10.39%	4.49%	14.88%	$8,952,612	$232,147,614	$31,268,359
1.	baseline without asset corridor	10.39%	1.22%	11.61%	$6,985,204	$254,915,473	$8,500,500
2.	1. with 10-year asset smoothing	10.39%	0.12%	10.51%	$6,323,384	$262,597,864	$818,109
3.	baseline using 30-year level % of payroll for UAL amortization	10.39%	3.09%	13.48%	$8,110,297	$232,147,614	$31,268,359
4.	3. without asset corridor	10.39%	0.84%	11.23%	$6,756,575	$254,915,473	$8,500,500
5.	4. with 10-year asset smoothing	10.39%	0.08%	10.47%	$6,299,318	$262,597,864	$818,109
	Projected July 1, 2010 results (roll forward of 2009 baseline results)	10.39%	6.18%	16.57%	$10,343,261	$240,429,312	$44,572,852

Actuarial Cost Method - Projected Unit Credit

	Funding Scenario	Police and Fire without Social Security					
		Employer Normal Cost Rate	Unfunded Accrued Liability Rate	Total Employer Contribution Rate	Total Employer Contribution in Dollars	Actuarial Value of Assets	Unfunded Accrued Liability
	July 1, 2008 valuation results	10.39%	-0.89% *	9.50%	$5,509,122	$251,266,083	$456,679
6.	July 1, 2009 roll-forward valuation results	10.53%	2.97%	13.50%	$8,122,330	$232,147,614	$20,684,976
7.	6. without asset corridor	10.53%	-0.30%	10.23%	$6,154,921	$254,915,473	($2,082,884)
8.	7. with 10-year asset smoothing	10.53%	-1.40%	9.13%	$5,493,102	$262,597,864	($9,765,275)
9.	6. using 30-year level % of payroll for UAL amortization	10.53%	2.04%	12.57%	$7,562,792	$232,147,614	$20,684,976
10.	9. without asset corridor	10.53%	-0.21%	10.32%	$6,209,070	$254,915,473	($2,082,884)
11.	10. with 10-year asset smoothing	10.53%	-0.96%	9.57%	$5,757,829	$262,597,864	($9,765,275)
	Projected July 1, 2010 results (roll forward of Scenario 6 above)	11.20%	4.66%	15.86%	$9,900,067	$240,429,312	$33,628,755

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February 8, 2010

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Assistant Director, Division Counsel
Municipal Employees Retirement System
Office of the State Comptroller
55 Elm Street
Hartford, CT 06106

Dear Ms. Kemp:

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Respectfully submitted,

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Director, Consulting Actuary

Janet H. Cranna, FSA, EA, MAAA, FCA
Principal, Consulting Actuary

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Enclosure
CT MERS - 6.30.2009 funding alternatives.doc

cc: Ms. Kathryn Balut