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October 31, 2008

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Subject: Certification of Actuarial Results

Dear Members of the Board:

The fifty-second annual actuarial valuation of the Kentucky Employees Retirement System, the forty-ninth annual actuarial valuation of the County Employees Retirement System, and the fiftieth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. These reports describe the current actuarial condition of the Kentucky Retirement Systems (KRS), determine the calculated employer contribution rates, and analyze fluctuations in these contribution rates.

Under state statute, the Board of Trustees must approve the employer contribution rate for the upcoming fiscal year based upon the results of the most recent annual valuation. These rates are determined actuarially based upon current membership data, plan provisions, and the assumptions and funding policies adopted by the KRS Board. Employer contribution rates become effective one year after the valuation date. The recently completed June 30, 2008 actuarial valuation will be used by the Board of Trustees to certify the employer contribution rates for the fiscal year beginning July 1, 2009 and ending June 30, 2010.

Funding Objectives & Policies

For each retirement system, KRS administers both a pension and insurance fund to provide for monthly retirement allowances and retiree insurance benefits respectively. The total employer contribution rate is comprised of a contribution to each respective fund.

Relative to the pension fund, a contribution rate has been established which consists of the normal cost and an amortization payment on the unfunded accrued liability (UAL). The normal cost is expected to remain level as a percent of payroll in future years. The amortization of any UAL is made over 30 years from the establishment of the amortization base using a level percent of payroll amortization method. Prior to the June 30, 2007 actuarial valuation, each year any actuarial gains or losses, along with any other changes in the actuarial liability (such as the retiree COLA or other benefit improvements) are established as a new amortization base to be amortized over the following 30 years. Effective with the June 30, 2007 actuarial valuation, all amortization bases have been combined and amortized over a single 30-year period beginning June 30, 2007. The amortization period will decrease by one each year going forward (i.e. 29-year amortization June 30, 2008, 28-year amortization June 30, 2009, and so on).



Overall, the total contribution for the pension fund is expected to remain stable as a percentage of payroll over future years in the absence of benefit improvements and material experience gains or losses. However, the current valuation contribution rate does not anticipate any future cost of living increases to benefit recipients as required by statute. Should these cost of living increases occur in the future, the contribution rate for the pension fund will be expected to increase as a percentage of payroll in the absence of material aggregate experience gains.

Relative to the insurance fund, the Board's funding objective is to establish a contribution rate which consists of the normal cost and an amortization payment on the UAL over a 30 year period. Beginning with the June 30, 2006 valuation, the assumptions and methods used are to meet the requirements of GASB Statement No. 43. As with the pension Fund, going forward, the combined UAL bases will be amortized over a 30 year period beginning June 30, 2007. The amortization period will decrease by one each year in the future.

.Administrative expenses of the plans are also included as part of the total pension fund contribution. This portion of the funding is expected to remain stable as a percentage of payroll over future years.

The impact of HB1 passed into law in 2008 will be to eventually reduce the contribution rates otherwise required as more active members are covered under the lower benefit structure effective for those hired after August 31, 2008.

Progress towards Realization of Funding Objectives

The progress towards achieving the intended funding objectives, both relative to the pension and insurance funds, can be measured by the relationship of actuarial assets of each fund to the actuarial accrued liabilities. This relationship is known as the funding level and in the absence of benefit improvements, should increase over time until it reaches 100%.

In recent years, funding levels for the pension funds have fallen dramatically in response to investment returns less than the actuarially assumed rate, higher than anticipated retirement rates, the 2006 assumption changes, and increasing expenditures for retiree Cost of Living Adjustments (COLA). Within the KERS and SPRS plans, employer contribution rate reductions enacted by the State Legislature have limited the plans ability to correct the declining funding levels. As of June 30, 2008 the funding levels for the pension funds are as follows:

System	Pension Funding Level
KERS Non-Hazardous Pension Fund	52.5%
KERS Hazardous Pension Fund	81.3%
CERS Non-Hazardous Pension Fund	78.5%
CERS Hazardous Pension Fund	72.9%
SPRS Pension Fund	59.8%

The funding level for the insurance funds is not anywhere near 100% at this time, and the Board's funding objective is to increase this funded level consistently over time. Recent employer contribution rate reductions under KERS and SPRS have significantly limited this improvement. The recent adoption of new actuarial assumptions and the application of GASB Statement 43 requirements have further reduced the measured funding level. As of June 30, 2008 the funding level for the insurance funds are as follows:



System	Insurance Funding Level
KERS Non-Hazardous Insurance Fund	11.1%
KERS Hazardous Insurance Fund	53.2%
CERS Non-Hazardous Insurance Fund	32.6%
CERS Hazardous Insurance Fund	34.7%
SPRS Insurance Fund	27.9%

Data

In completing the valuation of these systems, we have relied on data provided by Kentucky Retirement Systems, as well as financial data provided by the plan's external auditor. We have reviewed this data for reasonableness, and made some general edit checks to impute certain information that may not have been provided with the original employee data. However, we have not audited this data. Any schedules of trend data over the past ten years or less contained in the Actuarial Section, as well as the Schedule of Funding Progress and Schedule of Employer Contributions in the Financial Section, have been based on valuation reports fully prepared by the actuary for the plan at the time of each valuation.

Assumptions & Methods

The Board of Trustees, in consultation with the actuary, sets the actuarial assumptions and methods used in the valuation. Once every five years the actuary conducts a thorough review of plan experience for the preceding five years, and then makes recommendations to the Board. The actuarial assumptions and methods used for the funding calculations of the valuation, as adopted by the Board on January 19, 2006 based on the experience investigation report dated January 12, 2006, meet the parameters set for disclosure under GASB Statements No. 25 and 43. The health care cost trend assumptions were updated for the June 30, 2007 valuation adopted by the Board November 15, 2007. These assumptions have been adopted by the Board of Trustees of the Kentucky Retirement Systems in accordance with the recommendation of the actuary. The next experience study is schedule to be completed in January 2011 and any adjustments will be reflected in the June 30, 2011 actuarial valuation.

Closing

The information presented in this letter describes the pertinent issues relative to the valuation. There are no other specific issues that need to be raised beyond these items in order to fairly assess the funded position of the plan as presented in the current valuation.

Based on the continuation of current funding policies adopted by the Board, adequate provision is being determined for the funding of the actuarial liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes. The funding rates established by the Board are appropriate for this purpose.

Sincerely,

A handwritten signature in purple ink that reads 'Thomas J. Cavanaugh'.

Thomas J. Cavanaugh FSA, FCA, MAAA, EA
Chief Executive Officer



Summary of June 30, 2008 Actuarial Valuation Results

	KERS Non-Hazardous	KERS Hazardous	CERS Non-Hazardous	CERS Hazardous	SPRS
Recommended Contribution Rate (Fiscal Year 2009-2010)					
Pension Fund Contribution	18.96%	11.98%	8.62%	16.11%	35.23%
Insurance Fund Contribution	<u>20.49</u>	<u>23.56</u>	<u>12.29</u>	<u>27.25</u>	<u>56.89</u>
Recommended Employer Contribution	39.45%	35.54%	20.91%	43.36%	92.12%
Funded Status as of Valuation Date					
Pension Fund					
Actuarial Liability	\$10,129,689,985	\$618,010,827	\$7,304,217,691	\$2,403,122,095	\$587,129,257
Actuarial Value of Assets	5,318,792,893	502,132,214	5,731,502,438	1,750,867,373	350,891,451
Unfunded Actuarial Liability on Actuarial Value of Assets	4,810,897,092	115,878,613	1,572,715,253	652,254,722	236,237,806
Funding Level as a % of Actuarial Value of Assets	52.5%	81.3%	78.5%	72.9%	59.8%
Market Value of Assets	\$5,056,867,294	\$484,440,015	\$5,431,735,605	\$1,644,983,243	\$337,358,918
Unfunded Actuarial Liability on Market Value of Assets	5,072,822,691	133,570,812	1,872,482,086	758,138,852	249,770,339
Funding Level on Market Value of Assets	49.9%	78.4%	74.4%	68.5%	57.5%
Insurance Fund					
Actuarially Accrued Liability	\$5,431,499,285	\$541,657,214	\$3,583,193,466	\$1,769,782,957	\$445,107,468
Actuarial Value of Assets	603,197,761	288,161,759	1,168,883,170	613,526,319	123,961,197
Unfunded Actuarial Liability as a % of Actuarial Value of Assets	4,828,301,524	253,495,455	2,414,310,296	1,156,256,638	321,146,271
Funding Level as a % of Actuarial Value of Assets	11.1%	53.2%	32.6%	34.7%	27.9%
Market Value of Assets	\$574,480,809	\$269,299,859	\$1,105,944,178	\$576,414,457	\$121,781,967
Unfunded Actuarial Liability as a % of Market Value of Assets	4,857,018,476	272,357,355	2,477,249,288	1,193,368,500	323,325,501
Funding Level on Market Value of Assets	10.6%	49.7%	30.9%	32.6%	27.4%
Member Data					
Number of Active Members	48,085	4,393	85,221	10,173	993
Total Annual Payroll (Active Members)	\$1,837,873,488	\$148,710,060	\$2,166,612,648	\$474,241,332	\$53,269,080
Average Annual Pay (Active Members)	\$38,221	\$33,852	\$25,423	\$46,618	\$53,645
Number of Retired Members & Beneficiaries	35,307	2,404	37,579	5,422	1,135
Average Annual Retirement Allowance	\$20,124	\$13,972	\$10,478	\$23,511	\$36,382
Number of Vested Inactive Members	5,605	287	8,693	487	55



Additional Valuation Notes

In addition to the valuation results presented in the three reports that follow, certain calculations were made to round out the presentation and put the results in greater perspective. That information follows.

- Recent Contribution Shortfall – Although it has happened periodically in the past, there has been an ongoing contribution shortfall for KERS and SPRS since the 2002-2003 fiscal year. That shortfall has placed additional pressure on contribution rates, and that impact is compounding. The table below shows the recommended and budgeted contribution rates as a percent of payroll for KERS and SPRS over the last six fiscal years. The rates shown are the combined rates for retirement and insurance.

Fiscal Year	Recommended Rate	Budgeted Rate
<u>KERS Non-Hazardous</u>		
2002-2003	5.89%	3.76%
2003-2004	7.53	5.89
2004-2005	10.29	5.89
2005-2006	13.62	5.89
2006-2007	17.13	7.75
2007-2008	34.23	8.50
<u>KERS Hazardous</u>		
2002-2003	18.84%	17.60%
2003-2004	18.84	18.84
2004-2005	19.47	18.84
2005-2006	21.59	18.84
2006-2007	23.32	22.00
2007-2008	47.11	24.25
<u>SPRS</u>		
2002-2003	21.58%	17.37%
2003-2004	21.58	21.58
2004-2005	28.08	21.58
2005-2006	34.83	21.58
2006-2007	42.30	25.50
2007-2008	72.00	28.00

Had the recommended contributions been made over this period of time, the contribution rates recommended as a result of the June 30, 2008 valuations would have been reduced by 2.51% of payroll for KERS Non-Hazardous, 1.63% for KERS Hazardous and 4.05% for SPRS.



- Market Value of Assets and COLA Liability Impact on Funding Ratio - The funding ratio for all the Plans is based on the actuarial liabilities and asset values computed for the purpose of meeting funding requirements on the basis required by state law. This basis does not take all actuarial liabilities and investment performance to date into account. If the Retirement and Insurance results were combined, if the market value instead of actuarial value of assets were used, and if a 1.5% annual cost-of-living adjustment for retirement benefits were assumed to be in effect for all future years, then the funding ratio for the combined Retirement and Insurance plans would be lower, as shown in the table below.

System	Reported Funding Ratio	Adjusted Funding Ratio
KERS Non-Hazardous	38.1%	33.2%
KERS Hazardous	68.1	60.3
CERS Non-Hazardous	63.4	55.1
CERS Hazardous	56.7	48.9
SPRS	46.0	41.0

- Impact of Blended Interest Rates on Insurance Valuations - The June 30, 2007 Insurance Plan valuations recognize the parameters required by GASB Statements No. 43 and 45. One of the parameters is that a blended interest rate must be used when the benefits are not being fully funded. This rate reflects the level of advanced funding that is occurring. Because of the contribution rate shortfall noted above, blended rates were required for KERS Non-Hazardous and SPRS. The rate used for the June 30, 2008 valuation is 4.50% for both KERS Non-Hazardous and SPRS. If KERS Non-Hazardous and SPRS were being fully funded, an interest rate of 7.75% would be used, reducing liabilities and therefore contribution rates. The impact on rates is shown in the table below.

Insurance Plan	"Blended" Contribution Rate	"Full Funding" Contribution Rate
KERS Non-Hazardous	20.49%	12.33%
SPRS	56.89	26.64



- Unrecognized Investment Gains and Losses - The actuarial value of assets is determined by smoothing market gains and losses over a five year period. This results in a difference between market value and actuarial value of assets on each valuation date representing the gains and losses that have yet to be recognized in the valuation. The total unrecognized investment gain as of June 30, 2008 for each of the plans is shown in the table below.

Plan	Unrecognized investment gains/(losses)	Actuarial value as a % of market value
	<u>KERS Non-Hazardous</u>	
Retirement Insurance	\$(261,925,599)	105.2%
	(28,716,952)	105.0
	<u>KERS Hazardous</u>	
Retirement Insurance	\$(17,692,199)	103.7%
	(18,861,900)	107.0
	<u>CERS Non-Hazardous</u>	
Retirement Insurance	\$(299,766,833)	105.5%
	(62,938,992)	105.7
	<u>CERS Hazardous</u>	
Retirement Insurance	\$(105,884,130)	106.4%
	(37,111,862)	106.4
	<u>SPRS</u>	
Retirement Insurance	\$(13,532,533)	104.0%
	(2,179,230)	101.8



**Report on the Annual Valuation of the
Kentucky Employees Retirement System**

Prepared as of June 30, 2008

November 21, 2008

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the Kentucky Employees Retirement System (KERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2009. The date of the valuation was June 30, 2008.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

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, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc

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**REPORT ON THE ANNUAL VALUATION OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM**

PREPARED AS OF JUNE 30, 2008

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2008, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	KERS Non-Hazardous		KERS Hazardous		KERS Totals	
	6/30/2008	6/30/2007	6/30/2008	6/30/2007	6/30/2008	6/30/2007
Contributions for next fiscal year:						
Retirement	18.96%	16.54%	11.98%	10.84%		
Insurance	<u>20.49</u>	<u>20.38</u>	<u>23.56</u>	<u>23.94</u>	N/A	N/A
Total	39.45%	36.92%	35.54%	34.78%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	\$10,129,689,985	\$9,485,939,277	\$618,010,827	\$558,992,329	\$10,747,700,812	\$10,044,931,606
Actuarial value of assets	5,318,792,893	5,396,782,459	502,132,214	467,287,809	5,820,925,107	5,864,070,268
Unfunded liability on actuarial value of assets	4,810,897,092	4,089,156,818	115,878,613	91,704,520	4,926,775,705	4,180,861,338
Funded ratio on actuarial value of assets	52.51%	56.89%	81.25%	83.59%	54.16%	58.38%
Market value of assets	\$5,056,867,294	\$5,773,156,838	\$484,440,015	\$510,775,499	\$5,541,307,309	\$6,283,932,337
Unfunded liability on market value of assets	5,072,822,691	3,712,782,439	133,570,812	48,216,830	5,206,393,504	3,760,999,269
Funded ratio on market value of assets	49.92%	60.86%	78.39%	91.37%	51.56%	62.56%
Insurance						
Actuarial accrued liability	\$5,431,499,285	\$5,201,355,055	\$541,657,214	\$504,842,981	\$5,973,156,499	\$5,706,198,036
Actuarial value of assets	603,197,761	621,171,658	288,161,759	251,536,756	891,359,520	872,708,414
Unfunded liability on actuarial value of assets	4,828,301,524	4,580,183,397	253,495,455	253,306,225	5,081,796,979	4,833,489,622
Funded ratio on actuarial value of assets	11.11%	11.94%	53.20%	49.82%	14.92%	15.29%
Market value of assets	\$574,480,809	\$663,558,360	\$269,299,859	\$280,885,910	\$843,780,668	\$944,444,270
Unfunded liability on market value of assets	4,857,018,476	4,537,796,695	272,357,355	223,957,071	5,129,375,831	4,761,753,766
Funded ratio on market value of assets	10.58%	12.76%	49.72%	55.64%	14.13%	16.55%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	35,307	33,849	2,404	2,202	37,711	36,051
Number of vested former members	5,605	5,298	287	278	5,892	5,576
Number of former members due a refund	27,597	25,606	2,640	2,460	30,237	28,066
Number of active members	48,085	47,913	4,393	4,349	52,478	52,262
Total salary	\$1,837,873,488	\$1,780,223,493	\$148,710,060	\$144,838,020	\$1,986,583,548	\$1,925,061,513
Average salary	38,221	37,155	33,852	33,304	37,856	36,835

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.
3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.
4. There were no changes in benefit provisions since the last valuation. However, coverage options for pre-65 members have changed. There are three coverage options from which retirees and beneficiaries may choose for Plan Year 2009. Two of the options are new and a third has a new name. The new rates for 2009 can be found in Schedule C. The options for 2009 are summarized below.
 - Commonwealth Optimum PPO is a new plan which combines the Commonwealth Enhanced and Commonwealth Premier plans of Plan Year 2008 into one plan.
 - Commonwealth Capitol Choice is a new plan offering for Plan Year 2009.
 - Commonwealth Standard PPO is the new name for the Commonwealth Essential plan of Plan Year 2008. The benefits on this plan remain unchanged for Plan Year 2009.
5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.
6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2007 and June 30, 2008 is 4.50% for KERS Non-Hazardous and 7.75% for KERS Hazardous. The lower rate for KERS Non-Hazardous is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of insurance benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2008 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages		
			Salary	Age	Service
Non-Hazardous	48,085	\$1,837,873,488	\$38,221	43.2	9.1
Hazardous	4,393	148,710,060	33,852	41.4	6.9
Total in KERS	52,478	\$1,986,583,548	\$37,856	43.1	8.9

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	49,158	\$1,658,604,696	\$33,740	2.6%
6/30/2004	47,599	1,645,412,496	34,568	2.5
6/30/2005	47,118	1,655,907,288	35,144	1.7
6/30/2006	46,707	1,702,230,777	36,445	3.7
6/30/2007	47,913	1,780,223,493	37,155	1.9
6/30/2008	48,085	1,837,873,488	38,221	2.9

SCHEDULE OF HAZARDOUS KERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	4,189	\$129,088,956	\$30,816	3.5%
6/30/2004	4,014	126,664,812	31,556	2.4
6/30/2005	4,274	131,687,088	30,811	(2.4)
6/30/2006	4,320	138,747,320	32,117	4.2
6/30/2007	4,349	144,838,020	33,304	3.7
6/30/2008	4,393	148,710,060	33,852	1.6

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	29,645	\$647,783,384	\$21,851	66.1
Disability	1,880	21,337,353	11,350	63.1
Beneficiary	3,782	41,384,533	10,942	70.1
Total in KERS	35,307	\$710,505,270	\$20,124	66.4

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	2,055	\$30,873,038	\$15,023	61.5
Disability	122	935,920	7,671	57.2
Beneficiary	227	1,780,035	7,842	59.6
Total in KERS	2,404	\$33,588,993	\$13,972	61.1

This valuation also includes 36,129 inactive members (33,202 Non-Hazardous and 2,927 Hazardous; of which 5,605 Non-Hazardous are vested and 287 Hazardous are vested.)

SECTION III – ASSETS

1. As of June 30, 2008 the total market value of assets amounted to \$6,385,087,977 as shown in the following table.

**MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2008**

Member Group	Retirement	Insurance	KERS Total
Non-Hazardous	\$5,056,867,294	\$574,480,809	\$5,631,348,103
Hazardous	<u>484,440,015</u>	<u>269,299,859</u>	<u>753,739,874</u>
Total	\$5,541,307,309	\$843,780,668	\$6,385,087,977

2. The five-year smoothed market related actuarial value of assets used for the current valuation was \$6,712,284,627 . Schedule B shows the development of the actuarial value of assets as of June 30, 2008. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	June 30, 2008	June 30, 2007
Retirement		
Non-Hazardous	\$ 5,318,792,893	\$ 5,396,782,459
Hazardous	<u>502,132,214</u>	<u>467,287,809</u>
Total	\$ 5,820,925,107	\$ 5,864,070,268
Insurance		
Non-Hazardous	\$ 603,197,761	\$ 621,171,658
Hazardous	<u>288,161,759</u>	<u>251,536,756</u>
Total	\$ 891,359,520	\$ 872,708,414
KERS Total		
Non-Hazardous	\$ 5,921,990,654	\$ 6,017,954,117
Hazardous	<u>790,293,973</u>	<u>718,824,565</u>
Total	\$ 6,712,284,627	\$ 6,736,778,682

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2008. Separate balance sheets are shown for each employee group as well as in total for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of \$12,268,599,377, of which \$7,337,998,938 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, \$180,269,639 is for the prospective benefits payable on account of present inactive members, and \$4,750,330,800 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of \$5,820,925,107 as of June 30, 2008. The difference of \$6,447,674,270 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, \$879,861,003 is the present value of future contributions expected to be made by members, and the balance of \$5,567,813,267 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.55% of payroll for non-hazardous members and 7.07% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of \$641,037,562. When this amount is subtracted from \$5,567,813,267, which is the present value of the total future contributions to be made by the employers, there remains \$4,926,775,705 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 14.99% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 4.46% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of \$4,810,897,092 for non-hazardous members and \$115,878,613 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.

5. The contribution rate for administrative expenses is determined to be 0.42% of payroll for non-hazardous members and 0.45% of payroll for hazardous members.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of \$7,741,550,212, of which \$2,668,463,744 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, \$348,560,950 is for the prospective benefits payable on account of present inactive members, and \$4,724,525,518 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of \$891,359,520 as of June 30, 2008. The difference of \$6,850,190,692 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, \$0 is the present value of future contributions expected to be made by members, and the balance of \$6,850,190,692 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 9.97% of payroll for non-hazardous members and 13.74% of payroll for hazardous members are required to provide the benefits of the System for the average new member of KERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of \$1,768,393,713. When this amount is subtracted from \$6,850,190,692, which is the present value of the total future contributions to be made by the employers, there remains \$5,081,796,979 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 10.33% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 9.76% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of \$4,828,301,524 for non-hazardous members and \$253,495,455 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.19% of payroll for non-hazardous members and 0.06% of payroll for hazardous members.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2008 is shown below (\$ millions).

**Experience Gain/(Loss)
Retirement Benefits**

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/07	\$ 4,089.2	\$ 91.7	\$ 4,180.9
(2)	Normal cost from last valuation	64.4	10.5	74.9
(3)	Expected employer contributions	<u>294.5</u>	<u>15.7</u>	<u>310.2</u>
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	299.1	6.7	305.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$ 4,158.2	\$ 93.2	\$ 4,251.4
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 4,158.2	\$ 93.2	\$ 4,251.4
(9)	Actual UAAL as of 6/30/08	\$ 4,810.9	\$ 115.9	\$ 4,926.8
(10)	Gain/(loss): (8) - (9)	\$ (652.7)	\$ (22.7)	\$ (675.4)
(11)	Accrued liabilities as of 6/30/07	\$ 9,485.9	\$ 559.0	\$ 10,044.9
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(6.9%)	(4.1%)	(6.7%)

*Unfunded actuarial accrued liability.

**Experience Gain/(Loss)
Insurance Benefits**

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL * as of 6/30/07	\$ 4,580.2	\$ 253.3	\$ 4,833.5
(2)	Normal cost from last valuation	184.6	20.3	204.9
(3)	Expected employer contributions	<u>359.5</u>	<u>34.6</u>	<u>394.1</u>
(4)	Interest accrual: Non-Haz: [(1) + (2) - (3)] x .045 Haz: [(1) + (2) - (3)] x .0775	198.2	18.5	216.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$ 4,603.5	\$ 257.5	\$ 4,861.0
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 4,603.5	\$ 257.5	\$ 4,861.0
(9)	Actual UAAL as of 6/30/08	\$ 4,828.3	\$ 253.5	\$ 5,081.8
(10)	Gain/(loss): (8) - (9)	\$ (224.8)	\$ 4.0	\$ (220.8)
(11)	Accrued liabilities as of 6/30/07	\$ 5,201.4	\$ 504.8	\$ 5,706.2
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(4.3%)	0.8%	(3.9%)

*Unfunded actuarial accrued liability.

**NON-HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE**

**Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
(\$ Millions)**

Type of Activity	Retirement \$ Gain (or Loss) For Year Ending 6/30/08	Insurance \$ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (265.6)	\$ (89.0)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.9	6.0
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	1.9	(3.1)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	71.1	34.3
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(21.3)	202.2
New Members. Additional unfunded accrued liability will produce a loss.	(14.1)	(28.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(11.5)	3.4
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	99.5	114.7
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(513.6)</u>	<u>(464.5)</u>
Gain (or Loss) During Year From Financial Experience	\$ (652.7)	\$ (224.8)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	<u>0.0</u>	<u>0.0</u>
Composite Gain (or Loss) During Year	\$ (652.7)	\$ (224.8)

**HAZARDOUS KERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE**

**Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
(\$ Millions)**

Type of Activity	Retirement \$ Gain (or Loss) For Year Ending 6/30/08	Insurance \$ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (21.0)	\$ (13.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.6	1.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.5	0.4
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	11.5	12.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(0.1)	21.2
New Members. Additional unfunded accrued liability will produce a loss.	(2.5)	(4.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	1.1	0.2
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	2.0	8.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(14.8)</u>	<u>(22.6)</u>
Gain (or Loss) During Year From Financial Experience	\$ (22.7)	\$ 4.0
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	<u>0.0</u>	<u>0.0</u>
Composite Gain (or Loss) During Year	\$ (22.7)	\$ 4.0

TOTAL KERS MEMBERS

ANALYSIS OF FINANCIAL EXPERIENCE

Gains & Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience & Actual Experience (\$ Millions)

Type of Activity	Retirement \$ Gain (or Loss) For Year Ending 6/30/08	Insurance \$ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (286.6)	\$ (102.4)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	1.5	7.3
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	2.4	(2.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	82.6	47.1
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(21.4)	223.4
New Members. Additional unfunded accrued liability will produce a loss.	(16.6)	(33.2)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(10.4)	3.6
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	101.5	123.2
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(528.4)</u>	<u>(487.1)</u>
Gain (or Loss) During Year From Financial Experience	\$ (675.4)	\$ (220.8)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	<u>0.0</u>	<u>0.0</u>
Composite Gain (or Loss) During Year	\$ (675.4)	\$ (220.8)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2009/2010 fiscal year.

**Required Contribution Rates
Non-Hazardous Retirement**

Contribution for	Amount	% of Payroll
A. Normal Cost:		
(1) Service retirement benefits	\$ 136,370,213	7.42%
(2) Disability benefits	16,357,074	0.89
(3) Survivor benefits	4,410,896	0.24
(4) Total	\$ 157,138,183	8.55%
B. Member Contributions	\$ 91,893,674	5.00%
C. Employer Normal Cost: [A(4) - B]	\$ 65,244,509	3.55%
D. Administrative Expenses	\$ 7,723,852	0.42%
E. Unfunded Actuarial Accrued Liability Contributions*:		
(1) UAAL Contribution Based on 6/30/07 Valuation:	\$ 230,089,252	12.92%
(2) Change due to:		
a. Active decrements	\$ 10,978,948	0.60%
b. Pay increases	1,221,410	0.07
c. Retiree mortality	(5,697,771)	(0.31)
d. Investment return	660,338	0.04
e. COLA	14,024,484	0.76
f. Assumption Change	0	0.00
g. Other	24,249,657	1.31
h. Total Change	\$ 45,437,065	2.07%
(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	\$ 275,526,317	14.99%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	\$ 348,494,678	18.96%

*Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

**Required Contribution Rates
Hazardous Retirement**

Contribution for	Amount	% of Payroll
A. Normal Cost:		
(1) Service retirement benefits	\$ 18,930,791	12.73%
(2) Disability benefits	2,483,458	1.67
(3) Survivor benefits	996,357	0.67
(4) Total	\$ 22,410,606	15.07%
B. Member Contributions	\$ 11,896,805	8.00%
C. Employer Normal Cost: [A(4) - B]	\$ 10,513,801	7.07%
D. Administrative Expenses	\$ 664,311	0.45%
E. Unfunded Actuarial Accrued Liability Contributions*:		
(1) UAAL Contribution Based on 6/30/07 Valuation:	\$ 5,160,043	3.56%
(2) Change due to:		
a. Active decrements	\$ 481,388	0.32%
b. Pay increases	3,660	0.00
c. Retiree mortality	(113,858)	(0.08)
d. Investment return	(65,426)	(0.04)
e. COLA	706,932	0.48
f. Assumption Change	0	0.00
g. Other	463,780	0.30
h. Total Change	\$ 1,476,476	0.90%
(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	\$ 6,636,518	4.46%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	\$ 17,814,630	11.98%

* Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

**Required Contribution Rates
Non-Hazardous Insurance**

	Contribution for	Amount	% of Payroll
A.	Normal Cost:	\$ 183,199,470	9.97%
B.	Member Contributions*	\$ 0	0.00%
C.	Employer Normal Cost: [A - B]	\$ 183,199,470	9.97%
D.	Administrative Expenses	\$ 3,487,268	0.19%
E.	Unfunded Actuarial Accrued Liability**:	\$ 189,869,449	10.33%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	\$ 376,556,187	20.49%

*The liabilities are net of retiree contributions towards their healthcare

** Based on 29 year amortization of the UAAL from June 30, 2008

**Required Contribution Rates
Hazardous Insurance**

	Contribution for	Amount	% of Payroll
A.	Normal Cost:	\$ 20,431,843	13.74%
B.	Member Contributions*	\$ 0	0.00%
C.	Employer Normal Cost: [A - B]	\$ 20,431,843	13.74%
D.	Administrative Expenses	\$ 95,421	0.06%
E.	Unfunded Actuarial Accrued Liability**:	\$ 14,518,014	9.76%
F.	Total Recommended Employer Contribution Rate: [C+D+E]	\$ 35,045,278	23.56%

*The liabilities are net of retiree contributions towards their healthcare

** Based on 29 year amortization of the UAAL from June 30, 2008

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2008**

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	35,307	2,404	37,711
Terminated employees entitled to benefits but not yet receiving benefits	33,202	2,927	36,129
Active Members	<u>48,085</u>	<u>4,393</u>	<u>52,478</u>
Total	116,594	9,724	126,318

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

**RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS**

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c))
Non-Hazardous Members						
6/30/2003	\$ 6,351,318,832	\$ 6,520,463,188	\$ 169,144,356	97.4%	\$ 1,658,604,696	10.2%
6/30/2004	6,000,513,743	7,049,613,171	1,049,099,428	85.1	1,645,412,496	63.8
6/30/2005	5,578,685,746	7,579,074,839	2,000,389,093	73.6	1,655,907,288	120.8
6/30/2006	5,394,086,323	8,994,826,247	3,600,739,924	60.0	1,702,230,777	211.5
6/30/2007	5,396,782,459	9,485,939,277	4,089,156,818	56.9	1,780,223,493	229.7
6/30/2008	5,318,792,893	10,129,689,985	4,810,897,092	52.5	1,837,873,488	261.8
Hazardous Members						
6/30/2003	\$ 385,925,722	\$ 356,879,133	\$ (29,046,589)	108.1%	\$ 129,088,956	(22.5%)
6/30/2004	397,212,763	403,578,036	6,365,273	98.4	126,664,812	5.0
6/30/2005	405,288,662	438,994,257	33,705,595	92.3	131,687,088	25.6
6/30/2006	427,984,192	508,655,903	80,671,711	84.1	138,747,320	58.1
6/30/2007	467,287,809	558,992,329	91,704,520	83.6	144,838,020	63.3
6/30/2008	502,132,214	618,010,827	115,878,613	81.2	148,710,060	77.9
Total KERS Members						
6/30/2003	\$ 6,737,244,554	\$ 6,877,342,321	\$ 140,097,767	98.0%	\$ 1,787,693,652	7.8%
6/30/2004	6,397,726,506	7,453,191,207	1,055,464,701	85.8	1,772,077,308	59.6
6/30/2005	5,983,974,408	8,018,069,096	2,034,094,688	74.6	1,787,594,376	113.8
6/30/2006	5,822,070,515	9,503,482,150	3,681,411,635	61.3	1,840,978,097	200.0
6/30/2007	5,864,070,268	10,044,931,606	4,180,861,338	58.4	1,925,061,513	217.2
6/30/2008	5,820,925,107	10,747,700,812	4,926,775,705	54.2	1,986,583,548	248.0

INSURANCE BENEFITS

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c))
Non-Hazardous Members						
6/30/2003	\$ 553,885,082	\$ 2,093,210,321	\$ 1,539,325,239	26.5%	\$ 1,658,604,696	92.8%
6/30/2004	600,586,961	2,335,905,365	1,735,318,404	25.7	1,645,412,496	105.5
6/30/2005	607,068,351	2,680,559,188	2,073,490,837	22.7	1,655,907,288	125.2
6/30/2006	611,350,765	7,815,480,774	7,204,130,009	7.8	1,702,230,777	423.2
6/30/2007	621,171,658	5,201,355,055	4,580,183,397	11.9	1,780,223,493	257.3
6/30/2008	603,197,761	5,431,499,285	4,828,301,524	11.1	1,837,873,488	262.7
Hazardous Members						
6/30/2003	\$ 151,459,500	\$ 283,178,335	\$ 131,718,835	53.5%	\$ 129,088,956	102.0%
6/30/2004	169,158,879	323,503,563	154,344,684	52.3	126,664,812	121.9
6/30/2005	187,947,644	386,844,695	198,897,051	48.6	131,687,088	151.0
6/30/2006	212,833,318	621,237,856	408,404,538	34.3	138,747,320	294.4
6/30/2007	251,536,756	504,842,981	253,306,225	49.8	144,838,020	174.9
6/30/2008	288,161,759	541,657,214	253,495,455	53.2	148,710,060	170.5
Total KERS Members						
6/30/2003	\$ 705,344,582	\$ 2,376,388,656	\$ 1,671,044,074	29.7%	\$ 1,787,693,652	93.5%
6/30/2004	769,745,840	2,659,408,928	1,889,663,088	28.9	1,772,077,308	106.6
6/30/2005	795,015,995	3,067,403,883	2,272,387,888	25.9	1,787,594,376	127.1
6/30/2006	824,184,083	8,436,718,630	7,612,534,547	9.8	1,840,978,097	413.5
6/30/2007	872,708,414	5,706,198,036	4,833,489,622	15.3	1,925,061,513	251.1
6/30/2008	891,359,520	5,973,156,499	5,081,796,979	14.9	1,986,583,548	255.8

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2008. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2008	6/30/2008
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases*	4.0% - 13.5%	4.0% - 14.5%
Cost-of-living adjustment	None	None
*Includes inflation at	3.50%	3.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2008	6/30/2008
Actuarial cost method	Entry Age	Entry Age
Amortization	Level Percent Closed	Level Percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 Year Smoothed Market	5 Year Smoothed Market
Medical Trend Assumption	11.0% - 5.0%	11.0% - 5.0%
Year Ultimate Trend	2015	2015
Actuarial assumptions:		
Investment rate of return*	4.50%	7.75%
*Includes inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2008 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2007. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

**VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
KENTUCKY EMPLOYEES RETIREMENT SYSTEM**

**RETIREMENT BENEFITS
NON-HAZARDOUS KERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 5,318,792,893	\$ 5,396,782,459
Prospective contributions		
Member contributions	\$ 781,785,019	\$ 749,698,617
Employer normal contributions	554,332,337	482,231,015
Unfunded accrued liability contributions	<u>4,810,897,092</u>	<u>4,089,156,818</u>
Total prospective contributions	<u>\$ 6,147,014,448</u>	<u>\$ 5,321,086,450</u>
 Total assets	 <u>\$ 11,465,807,341</u>	 <u>\$ 10,717,868,909</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 6,997,568,860	\$ 6,310,580,255
Present value of benefits payable on account of active members	4,303,310,641	4,280,633,316
Present value of benefits payable on account of inactive members	<u>164,927,840</u>	<u>126,655,338</u>
 Total liabilities	 <u>\$ 11,465,807,341</u>	 <u>\$ 10,717,868,909</u>

**VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS KERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 502,132,214	\$ 467,287,809
Prospective contributions		
Member contributions	\$ 98,075,984	\$ 99,593,387
Employer normal contributions	86,705,225	85,380,476
Unfunded accrued liability contributions	<u>115,878,613</u>	<u>91,704,520</u>
Total prospective contributions	<u>\$ 300,659,822</u>	<u>\$ 276,678,383</u>
 Total assets	 <u><u>\$ 802,792,036</u></u>	 <u><u>\$ 743,966,192</u></u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 340,430,078	\$ 290,866,419
Present value of benefits payable on account of active members	447,020,159	437,473,842
Present value of benefits payable on account of inactive members	<u>15,341,799</u>	<u>15,625,931</u>
 Total liabilities	 <u><u>\$ 802,792,036</u></u>	 <u><u>\$ 743,966,192</u></u>

**VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL KERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 5,820,925,107	\$ 5,864,070,268
Prospective contributions		
Member contributions	\$ 879,861,003	\$ 849,292,004
Employer normal contributions	641,037,562	567,611,491
Unfunded accrued liability contributions	<u>4,926,775,705</u>	<u>4,180,861,338</u>
Total prospective contributions	<u>\$ 6,447,674,270</u>	<u>\$ 5,597,764,833</u>
 Total assets	 <u><u>\$ 12,268,599,377</u></u>	 <u><u>\$ 11,461,835,101</u></u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 7,337,998,938	\$ 6,601,446,674
Present value of benefits payable on account of active members	4,750,330,800	4,718,107,158
Present value of benefits payable on account of inactive members	<u>180,269,639</u>	<u>142,281,269</u>
 Total liabilities	 <u><u>\$ 12,268,599,377</u></u>	 <u><u>\$ 11,461,835,101</u></u>

**VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS KERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 603,197,761	\$ 621,171,658
Prospective contributions		
Normal contributions	\$ 1,628,379,162	\$ 1,649,460,524
Unfunded accrued liability contributions	<u>4,828,301,524</u>	<u>4,580,183,397</u>
Total prospective contributions	<u>\$ 6,456,680,686</u>	<u>\$ 6,229,643,921</u>
 Total assets	 <u>\$ 7,059,878,447</u>	 <u>\$ 6,850,815,579</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 2,456,368,401	\$ 2,292,824,569
Present value of benefits payable on account of active members	4,271,688,693	4,281,618,012
Present value of benefits payable on account of inactive members	<u>331,821,353</u>	<u>276,372,998</u>
 Total liabilities	 <u>\$ 7,059,878,447</u>	 <u>\$ 6,850,815,579</u>

**VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS KERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 288,161,759	\$ 251,536,756
Prospective contributions		
Normal contributions	\$ 140,014,551	\$ 144,387,789
Unfunded accrued liability contributions	<u>253,495,455</u>	<u>253,306,225</u>
Total prospective contributions	<u>\$ 393,510,006</u>	<u>\$ 397,694,014</u>
 Total assets	 <u>\$ 681,671,765</u>	 <u>\$ 649,230,770</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 212,095,343	\$ 187,093,153
Present value of benefits payable on account of active members	452,836,825	448,041,224
Present value of benefits payable on account of inactive members	<u>16,739,597</u>	<u>14,096,393</u>
 Total liabilities	 <u>\$ 681,671,765</u>	 <u>\$ 649,230,770</u>

**VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL KERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 891,359,520	\$ 872,708,414
Prospective contributions		
Normal contributions	\$ 1,768,393,713	\$ 1,793,848,313
Unfunded accrued liability contributions	<u>5,081,796,979</u>	<u>4,833,489,622</u>
Total prospective contributions	<u>\$ 6,850,190,692</u>	<u>\$ 6,627,337,935</u>
 Total assets	 <u>\$ 7,741,550,212</u>	 <u>\$ 7,500,046,349</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 2,668,463,744	\$ 2,479,917,722
Present value of benefits payable on account of active members	4,724,525,518	4,729,659,236
Present value of benefits payable on account of inactive members	<u>348,560,950</u>	<u>290,469,391</u>
 Total liabilities	 <u>\$ 7,741,550,212</u>	 <u>\$ 7,500,046,349</u>

The following tables provide the solvency test for non-hazardous and hazardous KERS members.

**Solvency Test
Retirement Benefits
Non-Hazardous KERS Members**

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Actuarial Value of Assets	(1)	(2)	(3)
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)				
6/30/2003*	\$ 859,895,312	\$ 3,844,696,149	\$ 1,815,871,727	\$ 6,351,318,832	100.0%	100.0%	90.7%
6/30/2004*	915,105,103	4,452,864,748	1,681,643,320	6,000,513,743	100.0	100.0	37.6
6/30/2005*	866,044,474	5,056,247,608	1,656,782,757	5,578,685,746	100.0	93.2	0.0
6/30/2006	866,050,799	5,881,990,853	2,246,784,595	5,394,086,323	100.0	77.0	0.0
6/30/2007	878,842,180	6,437,235,593	2,169,861,504	5,396,782,459	100.0	70.2	0.0
6/30/2008	875,178,069	7,162,496,700	2,092,015,217	5,318,792,893	100.0	62.0	0.0

*Reported by prior actuarial firm.

**Solvency Test
Retirement Benefits
Hazardous KERS Members**

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Actuarial Value of Assets	(1)	(2)	(3)
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)				
6/30/2003*	\$ 71,414,721	\$ 135,622,333	\$ 149,842,079	\$ 385,925,722	100.0%	100.0%	119.4%
6/30/2004*	78,817,575	175,102,848	149,657,613	397,212,763	100.0	100.0	95.7
6/30/2005*	75,098,321	213,310,550	150,585,386	405,288,662	100.0	100.0	77.6
6/30/2006	87,092,538	262,446,606	159,116,759	427,984,192	100.0	100.0	49.3
6/30/2007	88,670,847	306,492,350	163,829,132	467,287,809	100.0	100.0	44.0
6/30/2008	89,590,638	355,771,877	172,648,312	502,132,214	100.0	100.0	32.9

*Reported by prior actuarial firm.

**Solvency Test
Insurance Benefits
Non-Hazardous KERS Members**

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	(1)		(2)	(3)	
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)					
6/30/2003*	\$ 0	\$ 1,089,606,122	\$ 1,003,604,199	\$ 553,885,082	100.0%	50.8%	0.0%	
6/30/2004*	0	1,282,214,660	1,053,690,705	600,586,961	100.0	46.8	0.0	
6/30/2005*	0	1,550,619,458	1,129,939,730	607,068,351	100.0	39.2	0.0	
6/30/2006	0	3,543,125,375	4,272,355,400	611,350,765	100.0	17.3	0.0	
6/30/2007	0	2,569,197,567	2,632,157,488	621,171,658	100.0	24.2	0.0	
6/30/2008	0	2,788,189,754	2,643,309,531	603,197,761	100.0	21.6	0.0	

*Reported by prior actuarial firm.

**Solvency Test
Insurance Benefits
Hazardous KERS Members**

Valuation Date	Aggregate Accrued Liabilities For				Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	(1)		(2)	(3)	
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)					
6/30/2003*	\$ 0	\$ 113,979,451	\$ 169,198,884	\$ 151,459,500	100.0%	100.0%	22.2%	
6/30/2004*	0	142,872,557	180,631,006	169,158,879	100.0	100.0	14.6	
6/30/2005*	0	187,883,650	198,961,045	187,947,644	100.0	100.0	0.0	
6/30/2006	0	234,058,715	387,179,141	212,833,318	100.0	90.9	0.0	
6/30/2007	0	201,189,546	303,653,435	251,536,756	100.0	100.0	16.6	
6/30/2008	0	228,834,940	312,822,274	288,161,759	100.0	100.0	19.0	

*Reported by prior actuarial firm.

SCHEDULE B

**Development of Actuarial Value of Assets
Retirement Benefits
Non-Hazardous Members**

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 5,394,086,323	\$ 5,396,782,459				
B. Market Value End of Year	5,773,156,838	5,056,867,294				
C. Market Value Beginning of Year	5,440,132,708	5,773,156,838				
D. Cash Flow						
D1. Contributions	204,502,532	221,142,527				
D2. Benefit Payments	(649,690,416)	(708,127,920)				
D3. Administrative Expenses	(7,082,562)	(7,723,852)				
D4. Investment Expenses	<u>(4,842,834)</u>	<u>(5,200,312)</u>				
D5. Net	(457,113,280)	(499,909,557)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	790,137,410	(216,379,987)				
E2. Assumed Rate	7.75%	7.75%				
E3. Amount for Immediate Recognition	408,927,639	433,449,984				
E4. Amount for Phased-In Recognition	381,209,771	(649,829,971)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	76,241,954	(129,965,994)	0	0	0	0
F2. First Prior Year	15,910,299	76,241,954	(129,965,994)	0	0	0
F3. Second Prior Year	(2,608,084)	15,910,299	76,241,954	(129,965,994)	0	0
F4. Third Prior Year	28,891,832	(2,608,084)	15,910,299	76,241,954	(129,965,994)	0
F5. Fourth Prior Year	<u>(67,554,224)</u>	<u>28,891,832</u>	<u>(2,608,084)</u>	<u>15,910,299</u>	<u>76,241,954</u>	<u>(129,965,994)</u>
F6. Total Recognized Investment Gain	50,881,777	(11,529,993)	(40,421,825)	(37,813,741)	(53,724,040)	(129,965,994)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 5,396,782,459	\$ 5,318,792,893				
H. Difference Between Market & Actuarial Values	\$ 376,374,379	\$ (261,925,599)	\$ (221,503,774)	\$ (183,690,033)	\$ (129,965,994)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

**Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members**

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 427,984,192	\$ 467,287,809				
B. Market Value End of Year	510,775,499	484,440,015				
C. Market Value Beginning of Year	437,029,583	510,775,499				
D. Cash Flow						
D1. Contributions	26,482,004	28,348,194				
D2. Benefit Payments	(30,176,113)	(33,347,504)				
D3. Administrative Expenses	(612,323)	(664,311)				
D4. Investment Expenses	<u>(455,686)</u>	<u>(460,314)</u>				
D5. Net	(4,762,118)	(6,123,935)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	78,508,034	(20,211,549)				
E2. Assumed Rate	7.75%	7.75%				
E3. Amount for Immediate Recognition	34,158,604	39,825,950				
E4. Amount for Phased-In Recognition	44,349,430	(60,037,499)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	8,869,886	(12,007,500)	0	0	0	0
F2. First Prior Year	1,788,273	8,869,886	(12,007,500)	0	0	0
F3. Second Prior Year	151,597	1,788,273	8,869,886	(12,007,500)	0	0
F4. Third Prior Year	2,340,134	151,597	1,788,273	8,869,886	(12,007,500)	0
F5. Fourth Prior Year	<u>(3,242,759)</u>	<u>2,340,134</u>	<u>151,597</u>	<u>1,788,273</u>	<u>8,869,886</u>	<u>(12,007,500)</u>
F6. Total Recognized Investment Gain	9,907,131	1,142,390	(1,197,744)	(1,349,341)	(3,137,614)	(12,007,500)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 467,287,809	\$ 502,132,214				
H. Difference Between Market & Actuarial Values	\$ 43,487,690	\$ (17,692,199)	\$ (16,494,455)	\$ (15,145,114)	\$ (12,007,500)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

**Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members**

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 611,350,765	\$ 621,171,658				
B. Market Value End of Year	663,558,360	574,480,809				
C. Market Value Beginning of Year	632,642,846	663,558,360				
D. Cash Flow						
D1. Contributions	86,954,395	76,318,407				
D2. Benefit Payments	(111,659,052)	(122,946,356)				
D3. Administrative Expenses	(3,199,131)	(3,487,268)				
D4. Investment Expenses	<u>(366,841)</u>	<u>(391,063)</u>				
D5. Net	(28,270,629)	(50,506,280)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	59,186,143	(38,571,271)				
E2. Assumed Rate	4.50%	4.50%				
E3. Amount for Immediate Recognition	28,207,934	29,123,597				
E4. Amount for Phased-In Recognition	30,978,209	(67,694,868)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	6,195,642	(13,538,974)	0	0	0	0
F2. First Prior Year	3,451,674	6,195,642	(13,538,974)	0	0	0
F3. Second Prior Year	(51,332)	3,451,674	6,195,642	(13,538,974)	0	0
F4. Third Prior Year	7,351,776	(51,332)	3,451,674	6,195,642	(13,538,974)	0
F5. Fourth Prior Year	<u>(7,064,172)</u>	<u>7,351,776</u>	<u>(51,332)</u>	<u>3,451,674</u>	<u>6,195,642</u>	<u>(13,538,972)</u>
F6. Total Recognized Investment Gain	9,883,588	3,408,786	(3,942,990)	(3,891,658)	(7,343,332)	(13,538,972)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 621,171,658	\$ 603,197,761				
H. Difference Between Market & Actuarial Values	\$ 42,386,702	\$ (28,716,952)	\$ (24,773,962)	\$ (20,882,304)	\$ (13,538,972)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

**Development of Actuarial Value of Asset
Insurance Benefits
Hazardous Members**

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 212,833,318	\$ 251,536,756				
B. Market Value End of Year	280,885,910	269,299,859				
C. Market Value Beginning of Year	223,523,081	280,885,910				
D. Cash Flow						
D1. Contributions	19,843,444	22,318,658				
D2. Benefit Payments	(6,873,207)	(8,069,143)				
D3. Administrative Expenses	(83,560)	(95,421)				
D4. Investment Expenses	<u>(201,690)</u>	<u>(186,674)</u>				
D5. Net	12,684,987	13,967,420				
E. Investment Income						
E1. Market Total: B.-C.-D5.	44,677,842	(25,553,471)				
E2. Assumed Rate	7.75%	7.75%				
E3. Amount for Immediate Recognition	18,024,088	22,503,803				
E4. Amount for Phased-In Recognition	26,653,754	(48,057,274)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	5,330,751	(9,611,455)	0	0	0	0
F2. First Prior Year	1,622,467	5,330,751	(9,611,455)	0	0	0
F3. Second Prior Year	346,732	1,622,467	5,330,751	(9,611,455)	0	0
F4. Third Prior Year	2,465,285	346,732	1,622,467	5,330,751	(9,611,455)	0
F5. Fourth Prior Year	<u>(1,770,872)</u>	<u>2,465,285</u>	<u>346,732</u>	<u>1,622,467</u>	<u>5,330,751</u>	<u>(9,611,455)</u>
F6. Total Recognized Investment Gain	7,994,363	153,780	(2,311,505)	(2,658,237)	(4,280,704)	(9,611,455)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 251,536,756	\$ 288,161,759				
H. Difference Between Market & Actuarial Values	\$ 29,349,154	\$ (18,861,900)	\$ (16,550,395)	\$ (13,892,158)	\$ (9,611,455)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006, with the exception of the health care cost trend rate which was adopted by the Board on November 15, 2007.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for KERS non-hazardous is 4.50% and for KERS hazardous is 7.75%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 3.50% per annum:

Service	Annual Rates of				
	Merit & Seniority		Base (Economy)	Increase Next Year	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0-1	10.0%	11.0%	3.5%	13.5%	14.5%
1-2	3.5	4.0	3.5	7.0	7.5
2-3	2.0	3.5	3.5	5.5	7.0
3-4	1.5	3.0	3.5	5.0	6.5
4-5	1.5	2.5	3.5	5.0	6.0
5-6	1.0	2.0	3.5	4.5	5.5
6-7	1.0	1.5	3.5	4.5	5.0
7-8	1.0	1.5	3.5	4.5	5.0
8-9	0.5	1.0	3.5	4.0	4.5
9-10	0.5	1.0	3.5	4.0	4.5
10 & over	0.5	0.5	3.5	4.0	4.0

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	6.00%	0.05%	0.03%	0.05%	
25	5.40	0.07	0.03	0.07	
30	4.80	0.08	0.04	0.09	
35	3.60	0.09	0.05	0.13	
40	2.66	0.11	0.07	0.20	
45	1.98	0.16	0.10	0.33	
50	1.92	0.26	0.14	0.56	
55	1.08	0.44	0.23	0.92	8.0%
60	0.75	0.80	0.44	1.46	10.0
65		1.45	0.86		25.0
70		2.37	1.37		25.0
75					100.0

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.

** If service is at least 27 years, the rate is 25%. All rates are doubled during the window period expiring January 1, 2009, for those eligible for enhanced benefits.

Hazardous Members

Age	Withdrawal and Vesting*	Death**			Service Retirement***	
		Male	Female	Disability	Service	Rate
20	6.00%	0.05%	0.03%	0.07%	20	20.0%
25	5.40	0.07	0.03	0.09	25	20.0
30	4.80	0.08	0.04	0.12	30	35.0
35	3.60	0.09	0.05	0.17	35	60.0
40	2.66	0.11	0.07	0.27		
45	1.98	0.16	0.10	0.44		
50	1.92	0.26	0.14	0.75		
55	1.08	0.44	0.23	1.23		
60	0.75	0.80	0.44	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.

** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.

*** The annual rate of service retirement is 100% at age 65.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Fiscal Year Ended	Trend
2009	11.0%
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	90%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

**MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE**

2008					
	Single	Parent Plus	Couple	Family	
TOTAL PREMIUMS					
Essential	N/A	\$ 617.12	\$ 947.44	\$ 1,056.56	
Enhanced	\$ 484.24	\$ 742.74	\$ 1,137.18	\$ 1,267.40	
Premier	\$ 501.20	\$ 772.06	\$ 1,175.32	\$ 1,309.76	
Select	\$ 469.00	\$ 703.50	\$ 989.18	\$ 1,128.48	

2009					
	Single	Parent Plus	Couple	Family	
TOTAL PREMIUMS					
Standard PPO	\$ 446.24	\$ 690.00	\$ 1,044.48	\$ 1,162.16	
Optimum PPO	\$ 566.20	\$ 821.46	\$ 1,265.10	\$ 1,407.32	
Capitol Choice	\$ 545.08	\$ 826.38	\$ 1,249.74	\$ 1,383.52	

MEDICARE ELIGIBLE

Effective January 1, 2009	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Available Plan		
Kentucky Retirement System Health Plan - Medical Only	\$ 162.48	\$ 162.00
Kentucky Retirement System Health Plan - PLUS	\$ 203.05	\$ 267.00
Kentucky Retirement System Health Plan - PREMIUM	\$ 363.18	\$ 338.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2008 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

UNUSED SICK LEAVE: It is assumed that a member will be granted one-half year of service credit for unused sick leave at termination of employment.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost and is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of KERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

<i>Age Requirement</i>	65
<i>Service Requirement</i>	None
<i>Amount</i>	If a member has at least 48 months of service, the monthly benefit is 1.97% times final average compensation times years of service. For members who were participants in any one of the state retirement systems from January 1, 1998 through January 1, 1999, the benefit factor is 2.00%. For these members who retire between January 1, 1999 and January 31, 2009 with at least 240 months of service, the benefit factor is 2.20%.

Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period are less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.

Hazardous Normal Retirement:

<i>Age Requirement</i>	55
<i>Service Requirement</i>	None
<i>Amount</i>	If a member has at least 60 months of service, the monthly benefit is 2.49% times final average compensation times years of service.

Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

<i>Requirement</i>	Age 55 with 60 months of service or any age with 25 years of service.
<i>Amount</i>	Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Hazardous Early Retirement:

<i>Requirement</i>	Age 50 with 15 years of service or any age with 20 years of service.
<i>Amount</i>	Normal retirement benefit reduced by 5.5% for each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Non-Hazardous Disability:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	60 months
<i>Members whose participation began before 8/1/2004</i>	<p>Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.</p> <p>A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.</p>
<i>Members whose participation began on or after 8/1/2004</i>	Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement

None

Service Requirement

60 months

Members whose participation began before 8/1/2004

Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

<i>Requirement</i>	Any age with 60 months of service or age 65 with 48 months of service.
<i>Amount</i>	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

<i>Requirement</i>	None
<i>Amount</i>	The spouse may choose (1) a \$10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

<i>Requirement</i>	None
<i>Amount</i>	The non-spouse may choose (1) a \$10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

<i>Requirement</i>	None
<i>Amount</i>	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

<i>Lump-sum Benefit</i>	\$5,000
<i>Husband and Wife</i>	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003

The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System. For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after July 1, 2003

The Retirement System pays \$11.96 per month per year of service toward medical premiums for non-hazardous retirees, \$17.94 per month per year of service for hazardous retirees, and \$17.94 per month per year of service for surviving spouses of hazardous employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service. These amounts are shown as of the valuation date and are indexed annually based on the CPI.

Member Contributions:

Non-hazardous Members

5% of salary.

Hazardous Members

8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

**Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years**

Year Ending June 30	2003*	2004*	2005*	2006	2007	2008
			<u>Number</u>			
Beginning of Year	26,703	27,233	28,892	30,770	32,140	33,849
Added	2,148	2,473	2,481	2,481	2,440	2,573
Removed	1,618	814	603	1,111	731	1,115
End of Year	27,233	28,892	30,770	32,140	33,849	35,307
			<u>Annual Allowances</u>			
Beginning of Year	N/A	\$ 393,048,800	\$ 449,410,400	\$ 509,347,800	\$ 566,167,003	\$ 625,435,416
Added	48,272,600	57,329,301	56,489,600	65,942,585	65,965,990	102,305,405
Removed	13,060,300	6,092,500	5,298,200	9,123,382	6,697,577	17,235,551
End of Year	\$ 393,048,800	\$ 449,410,400	\$ 509,347,800	\$ 566,167,003	\$ 625,435,416	\$ 710,505,270
% Increase in Allowances	N/A	14.34%	13.34%	11.31%	10.47%	13.60%
Average Annual Allowance	\$ 14,433	\$ 15,555	\$ 16,553	\$ 17,611	\$ 18,477	\$ 20,124

*Reported by prior actuarial firm.

**Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years**

Year Ending June 30	2003*	2004*	2005*	2006	2007	2008
	<u>Number</u>					
Beginning of Year	1,208	1,357	1,549	1,752	1,980	2,202
Added	170	227	234	256	241	261
Removed	21	35	31	28	19	59
End of Year	1,357	1,549	1,752	1,980	2,202	2,404
	<u>Annual Allowances</u>					
Beginning of Year	N/A	\$ 12,974,700	\$ 16,099,000	\$ 19,640,700	\$ 23,381,537	\$ 27,528,789
Added	2,333,400	3,070,600	3,415,500	3,929,666	4,509,381	6,565,454
Removed	130,400	155,000	191,000	188,829	362,129	505,250
End of Year	\$ 12,974,700	\$ 16,099,000	\$ 19,640,700	\$ 23,381,537	\$ 27,528,789	\$ 33,588,993
% Increase in Allowances	N/A	24.08%	22.00%	19.25%	17.74%	22.01%
Average Annual Allowance	\$ 9,561	\$ 10,393	\$ 11,210	\$ 11,809	\$ 12,502	\$ 13,972

*Reported by prior actuarial firm.

**Non-Hazardous
Retired Lives Summary**

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,007	\$ 5,302,838.72	8,358	\$ 11,647,759.62	11,365	\$ 16,950,598.34
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,756	2,984,285.86	693	773,895.77	2,449	3,758,181.63
66-2/3% to Beneficiary	793	2,071,695.41	351	715,664.13	1,144	2,787,359.54
50% to Beneficiary	1,061	2,535,252.94	1,079	2,137,737.42	2,140	4,672,990.36
Pop-up Option	3,158	7,437,943.85	2,435	4,708,142.77	5,593	12,146,086.62
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	943	1,451,094.77	1,785	2,477,136.47	2,728	3,928,231.24
Social Security Option						
Age 62 Basic	421	1,298,736.21	979	2,129,846.11	1,400	3,428,582.32
Age 62 Survivorship	890	2,353,480.65	565	1,342,452.88	1,455	3,695,933.53
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	1	1,796.23	0	0.00	1	1,796.23
15 Years Certain & Life	379	584,590.85	451	671,021.37	830	1,255,612.22
20 Years Certain & Life	367	767,713.06	407	666,587.87	774	1,434,300.93
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	71	94,948.52	251	333,388.31	322	428,336.83
PLSO 24 Month Basic	30	32,798.08	133	138,837.31	163	171,635.39
PLSO 36 Month Basic	141	105,779.34	347	221,734.35	488	327,513.69
PLSO 12 Month Survivor	95	169,486.62	74	115,383.60	169	284,870.22
PLSO 24 Month Survivor	84	108,257.90	71	94,328.82	155	202,586.72
PLSO 36 Month Survivor	220	194,627.06	129	90,818.53	349	285,445.59
Total	13,417	\$ 27,495,326.07	18,108	\$ 28,264,735.33	31,525	\$ 55,760,061.40

**Hazardous
Retired Lives Summary**

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	309	\$ 334,316.10	232	\$ 213,783.46	541	\$ 548,099.56
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	173	189,884.43	13	11,886.52	186	201,770.95
66-2/3% to Beneficiary	64	77,792.45	11	13,061.73	75	90,854.18
50% to Beneficiary	112	160,322.34	24	34,525.58	136	194,847.92
Pop-up Option	474	631,816.04	88	103,560.69	562	735,376.73
10 Years Certain	19	27,564.84	5	5,463.77	24	33,028.61
10 Years Certain & Life	87	80,904.53	38	28,837.43	125	109,741.96
Social Security Option						
Age 62 Basic	48	85,953.16	27	43,421.49	75	129,374.65
Age 62 Survivorship	110	239,983.23	15	20,873.12	125	260,856.35
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	40	47,897.78	10	9,760.66	50	57,658.44
20 Years Certain & Life	42	44,928.39	15	23,359.93	57	68,288.32
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	14	14,384.73	12	10,568.83	26	24,953.56
PLSO 24 Month Basic	15	15,945.74	9	6,452.14	24	22,397.88
PLSO 36 Month Basic	39	36,263.24	25	21,556.91	64	57,820.15
PLSO 12 Month Survivor	18	20,716.70	5	3,855.92	23	24,572.62
PLSO 24 Month Survivor	17	22,170.24	8	10,288.04	25	32,458.28
PLSO 36 Month Survivor	45	41,628.86	14	17,017.42	59	58,646.28
Total	1,626	\$ 2,072,472.80	551	\$ 578,273.64	2,177	\$ 2,650,746.44

**Non-Hazardous
Beneficiary Lives Summary**

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	4	\$ 516.57	22	\$ 20,317.36	26	\$ 20,833.93
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	217	155,062.60	1,556	1,328,720.82	1,773	1,483,783.42
66-2/3% to Beneficiary	23	19,509.96	290	225,092.50	313	244,602.46
50% to Beneficiary	82	44,966.08	460	235,222.34	542	280,188.42
Pop-up Option	70	100,517.47	322	383,110.98	392	483,628.45
10 Years Certain	32	39,745.07	47	51,831.32	79	91,576.39
10 Years Certain & Life	40	43,314.07	61	67,073.76	101	110,387.83
Social Security Option						
Age 62 Basic	0	0.00	2	1,986.92	2	1,986.92
Age 62 Survivorship	36	56,639.78	202	343,731.32	238	400,371.10
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	9	3,629.09	9	3,629.09
Dependent Child	2	563.20	1	565.92	3	1,129.12
Refund	0	0.00	5	4,986.59	5	4,986.59
15 Years Certain & Life	28	30,877.66	60	66,183.44	88	97,061.10
20 Years Certain & Life	36	35,662.18	73	85,780.14	109	121,442.32
5 Years Certain	28	32,377.65	26	32,867.93	54	65,245.58
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	1	564.68	0	0.00	1	564.68
PLSO 36 Month Basic	1	596.24	11	6,924.85	12	7,521.09
PLSO 12 Month Survivor	2	2,949.09	4	3,989.62	6	6,938.71
PLSO 24 Month Survivor	2	3,375.52	4	1,796.99	6	5,172.51
PLSO 36 Month Survivor	6	3,303.45	17	14,357.96	23	17,661.41
Total	610	\$ 570,541.27	3,172	\$ 2,878,169.85	3,782	\$ 3,448,711.12

**Hazardous
Beneficiary Lives Summary**

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	\$ 0.00	2	\$ 294.55	2	\$ 294.55
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	7	2,987.01	89	61,279.59	96	64,266.60
66-2/3% to Beneficiary	0	0.00	8	3,846.72	8	3,846.72
50% to Beneficiary	1	430.28	15	5,144.69	16	5,574.97
Pop-up Option	4	1,851.60	28	15,660.29	32	17,511.89
10 Years Certain	1	1,686.74	11	8,709.74	12	10,396.48
10 Years Certain & Life	1	1,073.57	8	5,602.24	9	6,675.81
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	1	20.73	15	18,204.43	16	18,225.16
Partial Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	6	2,072.24	4	1,102.72	10	3,174.96
Refund	0	0.00	3	2,001.74	3	2,001.74
15 Years Certain & Life	4	1,414.38	2	878.83	6	2,293.21
20 Years Certain & Life	0	0.00	5	1,373.15	5	1,373.15
5 Years Certain	3	5,371.77	2	1,559.49	5	6,931.26
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	342.15	0	0.00	1	342.15
PLSO 12 Month Survivor	0	0.00	2	2,284.91	2	2,284.91
PLSO 24 Month Survivor	0	0.00	1	746.63	1	746.63
PLSO 36 Month Survivor	3	2,396.08	0	0.00	3	2,396.08
Total	32	\$ 19,646.55	195	\$ 128,689.72	227	\$ 148,336.27

**Non-Hazardous Members
Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages**

Attained Age	Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	107	\$ 2,344,227	50	\$ 538,974	28	\$ 211,764	185	\$ 3,094,965
45-49	1,004	\$ 28,990,592	117	\$ 1,381,746	55	\$ 622,097	1,176	\$ 30,994,435
50-54	2,904	\$ 89,897,151	201	\$ 2,319,145	121	\$ 1,780,923	3,226	\$ 93,997,219
55-59	4,972	\$ 156,095,923	307	\$ 3,980,707	205	\$ 3,151,111	5,484	\$ 163,227,742
60-64	5,525	\$ 143,921,364	376	\$ 4,474,360	295	\$ 4,662,015	6,196	\$ 153,057,740
65-69	4,814	\$ 90,309,050	338	\$ 3,904,229	358	\$ 5,268,846	5,510	\$ 99,482,126
70-74	3,629	\$ 57,058,635	275	\$ 2,821,848	455	\$ 6,081,699	4,359	\$ 65,962,182
75-79	2,816	\$ 38,025,123	120	\$ 1,182,441	462	\$ 6,080,640	3,398	\$ 45,288,203
80-84	2,172	\$ 25,858,001	58	\$ 467,912	530	\$ 5,649,444	2,760	\$ 31,975,357
85-89	1,178	\$ 11,570,885	26	\$ 202,568	581	\$ 4,271,274	1,785	\$ 16,044,727
90 & Over	524	\$ 3,712,433	12	\$ 63,422	692	\$ 3,604,719	1,228	\$ 7,380,574
Totals	29,645	\$ 647,783,384	1,880	\$ 21,337,353	3,782	\$ 41,384,533	35,307	\$ 710,505,270

**Hazardous Members
Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages**

Attained Age	Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	33	\$ 545,326	10	\$ 79,104	12	\$ 46,559	55	\$ 670,989
45-49	118	\$ 2,290,165	16	\$ 162,978	6	\$ 34,119	140	\$ 2,487,263
50-54	259	\$ 5,247,723	20	\$ 191,042	19	\$ 179,353	298	\$ 5,618,117
55-59	426	\$ 8,162,475	31	\$ 293,444	25	\$ 244,611	482	\$ 8,700,531
60-64	520	\$ 7,998,098	21	\$ 136,816	37	\$ 284,469	578	\$ 8,419,383
65-69	341	\$ 3,693,457	7	\$ 26,386	30	\$ 247,192	378	\$ 3,967,034
70-74	217	\$ 1,881,252	13	\$ 35,811	32	\$ 228,687	262	\$ 2,145,750
75-79	103	\$ 626,929	4	\$ 10,339	33	\$ 192,711	140	\$ 829,978
80-84	31	\$ 338,995			19	\$ 160,956	50	\$ 499,951
85-89	6	\$ 84,659			8	\$ 60,106	14	\$ 144,766
90 & Over	1	\$ 3,958			6	\$ 101,271	7	\$ 105,229
Totals	2,055	\$ 30,873,038	122	\$ 935,920	227	\$ 1,780,035	2,404	\$ 33,588,993

**Total Non-Hazardous Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	476								476
Avg Pay	\$23,062								\$23,062
20-24	1,980	64							2,044
Avg Pay	\$25,944	\$32,016							\$26,134
25-29	3,803	890	28						4,721
Avg Pay	\$29,333	\$32,382	\$34,982						\$29,941
30-34	2,797	2,186	492	9					5,484
Avg Pay	\$31,834	\$36,913	\$37,478	\$38,476					\$34,376
35-39	2,293	1,957	1,381	495	43				6,169
Avg Pay	\$33,150	\$38,379	\$42,059	\$43,448	\$57,803				\$37,801
40-44	1,896	1,556	1,185	1,000	688	117	4		6,446
Avg Pay	\$32,554	\$37,882	\$43,640	\$44,598	\$50,501	\$53,665	\$43,281		\$40,052
44-49	1,821	1,561	1,057	882	890	275	367	76	6,929
Avg Pay	\$32,496	\$37,653	\$42,285	\$45,418	\$49,497	\$55,080	\$57,171	\$54,757	\$41,427
50-54	1,581	1,397	1,042	824	746	248	367	327	6,532
Avg Pay	\$33,447	\$37,654	\$40,513	\$44,410	\$48,409	\$53,281	\$51,810	\$57,310	\$41,545
55-59	1,156	1,196	805	665	634	194	261	348	5,259
Avg Pay	\$35,341	\$38,016	\$41,733	\$42,805	\$47,440	\$52,101	\$51,785	\$56,710	\$42,179
60-64	555	637	543	466	318	115	105	187	2,926
Avg Pay	\$36,077	\$37,292	\$42,509	\$41,629	\$48,197	\$55,149	\$51,690	\$61,876	\$42,695
65-69	113	190	135	127	77	21	29	54	746
Avg Pay	\$41,465	\$39,161	\$41,926	\$43,021	\$46,966	\$46,407	\$56,982	\$65,529	\$44,278
70 & over	52	69	58	74	34	11	20	35	353
Avg Pay	\$33,613	\$30,634	\$34,850	\$40,013	\$44,677	\$50,100	\$45,325	\$63,480	\$39,780
Totals	18,523	11,703	6,726	4,542	3,430	981	1,153	1,027	48,085
Avg Pay	\$31,315	\$37,236	\$41,702	\$43,900	\$48,960	\$53,634	\$53,488	\$58,392	\$38,221

**Total Hazardous Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	22								22
Avg Pay	\$16,441								\$16,441
20-24	230	1							231
Avg Pay	\$26,250	\$37,644							\$26,299
25-29	492	59	1						552
Avg Pay	\$27,223	\$30,544	\$32,244						\$27,587
30-34	362	197	28						587
Avg Pay	\$28,705	\$33,525	\$35,890						\$30,665
35-39	309	172	150	23					654
Avg Pay	\$29,012	\$34,451	\$37,805	\$42,389					\$32,930
40-44	219	129	94	134	18				594
Avg Pay	\$29,256	\$34,918	\$41,283	\$43,558	\$47,785				\$36,177
44-49	181	128	87	121	18	7	1		543
Avg Pay	\$30,995	\$35,909	\$38,808	\$45,175	\$45,929	\$53,805	\$41,844		\$37,374
50-54	161	124	74	114	18	4	6	8	509
Avg Pay	\$28,719	\$33,685	\$43,085	\$43,752	\$46,837	\$28,701	\$44,864	\$53,130	\$36,599
55-59	120	125	71	88	13	2	3	3	425
Avg Pay	\$30,302	\$38,209	\$40,111	\$43,181	\$45,172	\$55,812	\$43,736	\$51,552	\$37,753
60-64	53	52	42	66	12		2	1	228
Avg Pay	\$32,356	\$36,665	\$37,844	\$49,022	\$49,104		\$35,028	\$66,804	\$40,230
65-69	7	16	9	8					40
Avg Pay	\$28,279	\$41,552	\$41,635	\$52,290					\$41,395
70 & over	4	2		2					8
Avg Pay	\$24,543	\$30,786		\$31,800					\$27,918
Totals	2,160	1,005	556	556	79	13	12	12	4,393
Avg Pay	\$28,443	\$34,882	\$39,506	\$44,574	\$46,916	\$46,389	\$42,691	\$53,875	\$33,852



**Report on the Annual Valuation of the
County Employees Retirement System**

Prepared as of June 30, 2008

November 21, 2008

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results for the annual actuarial valuation of the retirement and insurance benefits provided under the County Employees Retirement System (CERS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2009. The date of the valuation was June 30, 2008.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 6.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

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, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc

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**REPORT ON THE ANNUAL VALUATION OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM**

PREPARED AS OF JUNE 30, 2008

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2008, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results, broken down between non-hazardous and hazardous members, are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	CERS Non-Hazardous		CERS Hazardous		CERS Totals	
	6/30/2008	6/30/2007	6/30/2008	6/30/2007	6/30/2008	6/30/2007
Contributions for next fiscal year:						
Retirement	8.62%	7.76%	16.11%	15.04%		
Insurance	<u>12.29</u>	<u>12.75</u>	<u>27.25</u>	<u>27.62</u>	N/A	N/A
Total	20.91%	20.51%	43.36%	42.66%		
Funded status as of valuation date:						
Retirement						
Actuarial accrued liability	\$7,304,217,691	\$6,659,446,126	\$2,403,122,095	\$2,208,736,179	\$9,707,339,786	\$8,868,182,305
Actuarial value of assets	\$5,731,502,438	\$5,467,824,480	\$1,750,867,373	\$1,639,288,924	\$7,482,369,811	\$7,107,113,404
Unfunded liability on actuarial value of assets	\$1,572,715,253	\$1,191,621,646	\$652,254,722	\$569,447,255	\$2,224,969,975	\$1,761,068,901
Funded ratio on actuarial value of assets	78.47%	82.11%	72.86%	74.22%	77.08%	80.14%
Market value of assets	\$5,431,735,605	\$5,812,935,251	\$1,644,983,243	\$1,754,934,764	\$7,076,718,848	\$7,567,870,015
Unfunded liability on market value of assets	\$1,872,482,086	\$846,510,875	\$758,138,852	\$453,801,415	\$2,630,620,938	\$1,300,312,290
Funded ratio on market value of assets	74.36%	87.29%	68.45%	79.45%	72.90%	85.34%
Insurance						
Actuarial accrued liability	\$3,583,193,466	\$3,333,966,070	\$1,769,782,957	\$1,646,460,011	\$5,352,976,423	\$4,980,426,081
Actuarial value of assets	\$1,168,883,170	\$960,285,900	\$613,526,319	\$512,926,549	\$1,782,409,489	\$1,473,212,449
Unfunded liability on actuarial value of assets	\$2,414,310,296	\$2,373,680,170	\$1,156,256,638	\$1,133,533,462	\$3,570,566,934	\$3,507,213,632
Funded ratio on actuarial value of assets	32.62%	28.80%	34.67%	31.15%	33.30%	29.58%
Market value of assets	\$1,105,944,178	\$1,084,042,781	\$576,414,457	\$570,155,702	\$1,682,358,635	\$1,654,198,483
Unfunded liability on market value of assets	\$2,477,249,288	\$2,249,923,289	\$1,193,368,500	\$1,076,304,309	\$3,670,617,788	\$3,326,227,598
Funded ratio on market value of assets	30.86%	32.52%	32.57%	34.63%	31.43%	33.21%
Demographic data as of valuation date:						
Number of retired participants and beneficiaries	37,579	35,564	5,422	5,159	43,001	40,723
Number of vested former members	8,693	8,093	487	436	9,180	8,529
Number of former members due a refund	49,062	45,808	1,889	1,761	50,951	47,569
Number of active members	85,221	84,920	10,173	10,063	95,394	94,983
Total salary	\$2,166,612,648	\$2,076,848,328	\$474,241,332	\$458,998,956	\$2,640,853,980	\$2,535,847,284
Average salary	\$25,423	\$24,457	\$46,618	\$45,613	\$27,684	\$26,698

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.
3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.
4. There were no changes in benefit provisions since the last valuation. However, coverage options for pre-65 members have changed. There are three coverage options from which retirees and beneficiaries may choose for Plan Year 2009. Two of the options are new and a third has a new name. The new rates for 2009 can be found in Schedule C. The options for 2009 are summarized below.
 - Commonwealth Optimum PPO is a new plan which combines the Commonwealth Enhanced and Commonwealth Premier plans of Plan Year 2008 into one plan.
 - Commonwealth Capitol Choice is a new plan offering for Plan Year 2009.
 - Commonwealth Standard PPO is the new name for the Commonwealth Essential plan of Plan Year 2008. The benefits on this plan remain unchanged for Plan Year 2009.
5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following table summarizes the membership of the system as of June 30, 2008 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Employee Group	Number	Payroll	Group Averages		
			Salary	Age	Service
Non-Hazardous	85,221	\$2,166,612,648	\$25,423	45.9	8.3
Hazardous	10,173	474,241,332	46,618	38.7	8.3
Total in CERS	95,394	\$2,640,853,980	\$27,684	45.1	8.3

The following tables show a six-year history of active member valuation data.

SCHEDULE OF NON-HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	82,288	\$1,796,451,180	\$21,831	3.2%
6/30/2004	80,922	1,826,870,880	22,576	3.4
6/30/2005	81,240	1,885,275,000	23,206	2.8
6/30/2006	83,694	1,982,437,473	23,687	2.1
6/30/2007	84,920	2,076,848,328	24,457	3.3
6/30/2008	85,221	2,166,612,648	25,423	3.9

SCHEDULE OF HAZARDOUS CERS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	9,286	\$374,700,732	\$40,351	4.3%
6/30/2004	9,349	392,562,624	41,990	4.1
6/30/2005	9,464	411,121,728	43,441	3.5
6/30/2006	9,635	426,927,550	44,310	2.0
6/30/2007	10,063	458,998,956	45,613	2.9
6/30/2008	10,173	474,241,332	46,618	2.2

The following tables show the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Non-Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	31,154	\$339,994,566	\$10,913	68.1
Disability	3,002	28,695,122	9,559	62.8
Beneficiary	3,423	25,067,822	7,323	67.2
Total in CERS	37,579	\$393,757,510	\$10,478	67.6

Hazardous Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	4,486	\$114,080,001	\$25,430	58.9
Disability	380	5,858,308	15,417	52.6
Beneficiary	556	7,538,801	13,559	53.1
Total in CERS	5,422	\$127,477,109	\$23,511	57.9

This valuation also includes 60,131 inactive members (57,755 Non-Hazardous and 2,376 Hazardous; of which 8,693 Non-Hazardous are vested and 487 Hazardous are vested).

SECTION III – ASSETS

1. As of June 30, 2008 the total market value of assets amounted to \$8,759,077,483 as shown in the following table.

**MARKET VALUE OF ASSETS BY FUND
AS OF JUNE 30, 2008**

Member Group	Retirement	Insurance	CERS Total
Non-Hazardous	\$5,431,735,605	\$1,105,944,178	\$6,537,679,783
Hazardous	<u>1,644,983,243</u>	<u>576,414,457</u>	<u>2,221,397,700</u>
Total	\$7,076,718,848	\$1,682,358,635	\$8,759,077,483

2. The five-year smoothed market related actuarial value of assets used for the current valuation was \$9,264,779,300. Schedule B shows the development of the actuarial value of assets as of June 30, 2008. The following table shows the actuarial value of assets allocated among member groups.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2008	JUNE 30, 2007
Retirement		
Non-Hazardous	\$ 5,731,502,438	\$ 5,467,824,480
Hazardous	<u>1,750,867,373</u>	<u>1,639,288,924</u>
Total	\$ 7,482,369,811	\$ 7,107,113,404
Insurance		
Non-Hazardous	\$ 1,168,883,170	\$ 960,285,900
Hazardous	<u>613,526,319</u>	<u>512,926,549</u>
Total	\$ 1,782,409,489	\$ 1,473,212,449
KERS Total		
Non-Hazardous	\$ 6,900,385,608	\$ 6,428,110,380
Hazardous	<u>2,364,393,692</u>	<u>2,152,215,473</u>
Total	\$ 9,264,779,300	\$ 8,580,325,853

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2008. Separate balance sheets are shown for each employee group as well as in total for all groups.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of \$11,975,865,376, of which \$5,186,569,476 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, \$279,180,352 is for the prospective benefits payable on account of inactive members and \$6,510,115,548 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of \$7,482,369,811 as of June 30, 2008. The difference of \$4,493,495,565 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, \$1,238,584,550 is the present value of future contributions expected to be made by members, and the balance of \$3,254,911,015 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 3.85% of payroll for non-hazardous members and 7.99% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of \$1,029,941,040. When this amount is subtracted from \$3,254,911,015, which is the present value of the total future contributions to be made by the employers, there remains \$2,224,969,975 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 4.16% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of retirement benefits be set at 7.88% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of \$1,572,715,253 for non-hazardous members and \$652,254,722 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.

5. For non-hazardous members, the contribution rate for administrative expenses is determined to be 0.61% of payroll. For hazardous members, the contribution rate for administrative expenses is determined to be 0.24% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of \$6,673,332,079, of which \$1,985,100,837 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, \$258,784,621 is for the prospective benefits payable on account of inactive members and \$4,429,446,621 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of \$1,782,409,489 as of June 30, 2008. The difference of \$4,890,922,590 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, \$0 is the present value of future contributions expected to be made by members, and the balance of \$4,890,922,590 represents the present value of future contributions payable by the employers.
2. The employers' contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 5.75% of payroll for non-hazardous members and 13.21% of payroll for hazardous members are required to provide the benefits of the System for the average new member of CERS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of \$1,320,355,656. When this amount is subtracted from \$4,890,922,590, which is the present value of the total future contributions to be made by the employers, there remains \$3,570,566,934 as the amount of future accrued liability contributions.
4. For non-hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 6.38% of payroll. For hazardous members, it is recommended that the accrued liability contribution rate payable by the Counties on account of insurance benefits be set at 13.96% of payroll. These rates are sufficient to liquidate the unfunded accrued liability of \$2,414,310,296 for non-hazardous members and \$1,156,256,638 for hazardous members over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.16% of payroll for non-hazardous employees and 0.08% of payroll for hazardous employees.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2008 is shown below (\$ millions).

**Experience Gain/(Loss)
Retirement Benefits**

		Non-Hazardous Group	Hazardous Group	Total
(1)	UAAL* as of 6/30/07	\$ 1,191.6	\$ 569.4	\$ 1,761.0
(2)	Normal cost from last valuation	94.0	37.0	131.0
(3)	Expected employer contributions	<u>161.1</u>	<u>69.0</u>	<u>230.1</u>
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	87.2	41.6	128.8
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$ 1,211.7	\$ 579.0	\$ 1,790.8
(6)	Change due to plan amendments	0.0	0.0	0.0
(7)	Change due to new actuarial assumption or methods	0.0	0.0	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 1,211.7	\$ 579.0	\$ 1,790.8
(9)	Actual UAAL as of 6/30/08	\$ 1,572.7	\$ 652.3	\$ 2,225.0
(10)	Gain/(loss): (8) - (9)	\$ (361.0)	\$ (73.3)	\$ (434.2)
(11)	Accrued liabilities as of 6/30/07	\$ 6,659.4	\$ 2,208.7	\$ 8,868.1
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(5.4)%	(3.3)%	(4.9)%

*Unfunded actuarial accrued liability.

**Experience Gain/(Loss)
Insurance Benefits**

		Non-Hazardous Group		Hazardous Group		Total	
(1)	UAAL* as of 6/30/07	\$	2,373.7	\$	1,133.5	\$	3,507.2
(2)	Normal cost from last valuation		128.1		62.7		190.8
(3)	Expected employer contributions		<u>261.7</u>		<u>126.5</u>		<u>388.2</u>
(4)	Interest accrual: [(1) + (2) - (3)] x .0775		173.6		82.9		256.5
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$	2,413.7	\$	1,152.6	\$	3,566.3
(6)	Change due to plan amendments		0.0		0.0		0.0
(7)	Change due to new actuarial assumption or methods		0.0		0.0		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$	2,413.7	\$	1,152.6	\$	3,566.3
(9)	Actual UAAL as of 6/30/08	\$	2,414.3	\$	1,156.3	\$	3,570.6
(10)	Gain/(loss): (8) - (9)	\$	(0.6)	\$	(3.7)	\$	(4.3)
(11)	Accrued liabilities as of 6/30/07	\$	3,334.0	\$	1,646.5	\$	4,980.5
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(0.0)%		(0.2)%		(0.1)%

*Unfunded actuarial accrued liability.

**NON-HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE**

**Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
(\$ Millions)**

Type of Activity	Retirement \$ Gain (or Loss) For Year Ending 6/30/08	Insurance \$ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (169.9)	\$ (82.9)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(4.6)	8.6
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.2)	(4.2)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	58.3	30.8
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(29.9)	127.6
New Members. Additional unfunded accrued liability will produce a loss.	(13.1)	(21.8)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(27.7)	2.2
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	76.5	96.9
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(250.4)</u>	<u>(157.8)</u>
Gain (or Loss) During Year From Financial Experience	\$ (361.0)	\$ (0.6)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	<u>0.0</u>	<u>0.0</u>
Composite Gain (or Loss) During Year	\$ (361.0)	\$ (0.6)

**HAZARDOUS CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE**

**Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
(\$ Millions)**

Type of Activity	Retirement \$ Gain (or Loss) For Year Ending 6/30/08	Insurance \$ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (58.2)	\$ (89.7)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(0.7)	0.9
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	1.1	0.5
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	21.9	23.9
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	5.8	75.7
New Members. Additional unfunded accrued liability will produce a loss.	(5.4)	(20.5)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(11.4)	(0.5)
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	27.3	91.6
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(53.7)</u>	<u>(85.6)</u>
Gain (or Loss) During Year From Financial Experience	\$ (73.3)	\$ (3.7)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	<u>0.0</u>	<u>0.0</u>
Composite Gain (or Loss) During Year	\$ (73.3)	\$ (3.7)

**TOTAL CERS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE**

**Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
(\$ Millions)**

Type of Activity	Retirement \$ Gain (or Loss) For Year Ending 6/30/08	Insurance \$ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (228.1)	\$ (172.6)
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	(5.3)	9.5
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.9	(3.7)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	80.2	54.7
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(24.1)	203.3
New Members. Additional unfunded accrued liability will produce a loss.	(18.5)	(42.3)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(39.1)	1.7
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	103.8	188.5
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(304.1)</u>	<u>(243.4)</u>
Gain (or Loss) During Year From Financial Experience	\$ (434.3)	\$ (4.3)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	<u>0.0</u>	<u>0.0</u>
Composite Gain (or Loss) During Year	\$ (434.3)	\$ (4.3)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by employers to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2009/2010 fiscal year.

**Required Contribution Rates
Non-Hazardous Retirement**

Contribution for	Amount	% of Payroll
A. Normal Cost:		
(1) Service retirement benefits	\$ 163,579,255	7.55%
(2) Disability benefits	22,316,110	1.03
(3) Survivor benefits	<u>5,849,854</u>	<u>0.27</u>
(4) Total	\$ 191,745,219	8.85%
B. Member Contributions	\$ 108,330,632	5.00%
C. Employer Normal Cost: [A(4) - B]	\$ 83,414,587	3.85%
D. Administrative Expenses	\$ 13,238,353	0.61%
E. Unfunded Actuarial Accrued Liability Contributions*:		
(1) UAAL Contribution Based on 6/30/07 Valuation:	\$ 67,050,335	3.23%
(2) Change due to:		
a. Active decrements	\$ 6,665,726	0.31%
b. Pay increases	1,712,713	0.08
c. Retiree mortality	(4,560,357)	(0.21)
d. Investment return	1,586,848	0.07
e. COLA	7,394,437	0.34
f. Assumption Change	0	0.00
g. Other	<u>10,221,742</u>	<u>0.47</u>
h. Total Change	\$ 23,021,108	0.93%
(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	\$ 90,071,443	4.16%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	\$ 186,724,383	8.62%

* Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

**Required Contribution Rates
Hazardous Retirement**

Contribution for	Amount	% of Payroll
A. Normal Cost:		
(1) Service retirement benefits	\$ 66,820,604	14.09%
(2) Disability benefits	6,402,258	1.35
(3) Survivor benefits	2,608,327	0.55
(4) Total	<u>\$ 75,831,189</u>	<u>15.99%</u>
B. Member Contributions	\$ 37,939,307	8.00%
C. Employer Normal Cost: [A(4) - B]	\$ 37,891,882	7.99%
D. Administrative Expenses	\$ 1,143,313 1	0.24%
E. Unfunded Actuarial Accrued Liability Contributions*:		
(1) UAAL Contribution Based on 6/30/07 Valuation:	\$ 32,041,738	6.98%
(2) Change due to:		
a. Active decrements	\$ 2,057,352	0.43%
b. Pay increases	(331,571)	(0.07)
c. Retiree mortality	(1,565,952)	(0.33)
d. Investment return	651,883	0.14
e. COLA	2,455,592	0.52
f. Assumption Change	0	0.00
g. Other	2,046,432	0.41
h. Total Change	<u>\$ 5,313,736</u>	<u>1.12%</u>
(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	\$ 37,355,474	7.88%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	<u>\$ 76,390,669</u>	<u>16.11%</u>

* Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

**Required Contribution Rates
Non-Hazardous Insurance**

Contribution for	Amount	% of Payroll
A. Normal Cost:	\$ 124,635,859	5.75%
B. Member Contributions*	\$ 0	0.00%
C. Employer Normal Cost: [A - B]	\$ 124,635,859	5.75%
D. Administrative Expenses	\$ 3,424,785	0.16%
E. Unfunded Actuarial Accrued Liability**:	\$ 138,270,682	6.38%
F. Total Recommended Employer Contribution Rate: [C+D+E]	\$ 266,331,326	12.29%

*The liabilities are net of retiree contributions toward their healthcare

** Based on 29 year amortization of the UAAL from June 30, 2008

**Required Contribution Rates
Hazardous Insurance**

Contribution for	Amount	% of Payroll
A. Normal Cost:	\$ 62,642,769	13.21%
B. Member Contributions*	\$ 0	0.00%
C. Employer Normal Cost: [A - B]	\$ 62,642,769	13.21%
D. Administrative Expenses	\$ 364,362	0.08%
E. Unfunded Actuarial Accrued Liability**:	\$ 66,220,318	13.96%
F. Total Recommended Employer Contribution Rate: [C+D+E]	\$ 129,227,449	27.25%

*The liabilities are net of retiree contributions toward their healthcare

** Based on 29 year amortization of the UAAL from June 30, 2008

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2008**

GROUP	NUMBER		
	Non-Hazardous	Hazardous	Total
Retirees and beneficiaries currently receiving benefits	37,579	5,422	43,001
Terminated employees entitled to benefits but not yet receiving benefits	57,755	2,376	60,131
Active Members	<u>85,221</u>	<u>10,173</u>	<u>95,394</u>
Total	180,555	17,971	198,526

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

**RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS**

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c))
Non-Hazardous Members						
6/30/2003	\$ 5,286,580,047	\$ 4,417,597,802	\$ (868,982,245)	119.7%	\$ 1,796,451,180	(48.4)%
6/30/2004	5,187,851,530	4,936,459,488	(251,392,042)	105.1	1,826,870,880	(13.8)
6/30/2005	5,059,208,687	5,385,156,690	325,948,003	94.0	1,885,275,000	17.3
6/30/2006	5,162,894,136	6,179,569,267	1,016,675,131	83.5	1,982,437,473	51.3
6/30/2007	5,467,824,480	6,659,446,126	1,191,621,646	82.1	2,076,848,328	57.4
6/30/2008	5,731,502,438	7,304,217,691	1,572,715,253	78.5	2,166,612,648	72.6
Hazardous Members						
6/30/2003	\$ 1,467,004,856	\$ 1,499,628,782	\$ 32,623,926	97.8%	\$ 374,700,732	8.7%
6/30/2004	1,457,612,042	1,640,830,120	183,218,078	88.8	392,562,624	46.7
6/30/2005	1,452,353,023	1,795,617,335	343,264,312	80.9	411,121,728	83.5
6/30/2006	1,515,075,017	2,020,142,770	505,067,753	75.0	426,927,550	118.3
6/30/2007	1,639,288,924	2,208,736,179	569,447,255	74.2	458,998,956	124.1
6/30/2008	1,750,867,373	2,403,122,095	652,254,722	72.9	474,241,332	137.5
Total CERS Members						
6/30/2003	\$ 6,753,584,903	\$ 5,917,226,584	\$ (836,358,319)	114.1%	\$ 2,171,151,912	(38.5)%
6/30/2004	6,645,463,572	6,577,289,608	(68,173,964)	101.0	2,219,433,504	(3.1)
6/30/2005	6,511,561,710	7,180,774,025	669,212,315	90.7	2,296,396,728	29.2
6/30/2006	6,677,969,153	8,199,712,037	1,521,742,884	81.4	2,409,365,023	63.2
6/30/2007	7,107,113,404	8,868,182,305	1,761,068,901	80.1	2,535,847,284	69.4
6/30/2008	7,482,369,811	9,707,339,786	2,224,969,975	77.1	2,640,853,980	84.3

**INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS**

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c))
Non-Hazardous Members						
6/30/2003	\$ 520,060,105	\$ 2,176,963,259	\$ 1,656,903,154	23.9%	\$ 1,796,451,180	92.2%
6/30/2004	585,399,072	2,438,734,696	1,853,335,624	24.0	1,826,870,880	101.5
6/30/2005	663,941,949	2,788,754,654	2,124,812,705	23.8	1,885,275,000	112.7
6/30/2006	777,726,590	4,607,223,639	3,829,497,049	16.9	1,982,437,473	193.2
6/30/2007	960,285,900	3,333,966,070	2,373,680,170	28.8	2,076,848,328	114.3
6/30/2008	1,168,883,170	3,583,193,466	2,414,310,296	32.6	2,166,612,648	111.4
Hazardous Members						
6/30/2003	\$ 269,190,080	\$ 935,650,662	\$ 666,460,582	28.8%	\$ 374,700,732	177.9%
6/30/2004	310,578,162	1,025,684,477	715,106,315	30.3	392,562,624	182.2
6/30/2005	359,180,461	1,283,299,092	924,118,631	28.0	411,121,728	224.8
6/30/2006	422,785,042	1,928,481,371	1,505,696,329	21.9	426,927,550	352.7
6/30/2007	512,926,549	1,646,460,011	1,133,533,462	31.2	458,998,956	247.0
6/30/2008	613,526,319	1,769,782,957	1,156,256,638	34.7	474,241,332	243.8
Total CERS Members						
6/30/2003	\$ 789,250,185	\$ 3,112,613,921	\$ 2,323,363,736	25.4%	\$ 2,171,151,912	107.0%
6/30/2004	895,977,234	3,464,419,173	2,568,441,939	25.9	2,219,433,504	115.7
6/30/2005	1,023,122,410	4,072,053,746	3,048,931,336	25.1	2,296,396,728	132.8
6/30/2006	1,200,511,632	6,535,705,010	5,335,193,378	18.4	2,409,365,023	221.4
6/30/2007	1,473,212,449	4,980,426,081	3,507,213,632	29.6	2,535,847,284	138.3
6/30/2008	1,782,409,489	5,352,976,423	3,570,566,934	33.3	2,640,853,980	135.2

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2008. Additional information as of the latest actuarial valuation follows.

Retirement Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2008	6/30/2008
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Actuarial assumptions		
Investment rate of return*	7.75%	7.75%
Projected salary increases*	4.0% - 13.5%	4.0% - 14.5%
Cost-of-living adjustment	None	None
*Includes inflation at	3.50%	3.50%

Insurance Benefits

	Non-Hazardous Members	Hazardous Members
Valuation date	6/30/2008	6/30/2008
Actuarial cost method	Entry Age	Entry Age
Amortization	Level percent Closed	Level percent Closed
Remaining amortization period	29 years	29 years
Asset valuation method	5 year smoothed Market	5 year smoothed Market
Medical Trend Assumption	11.0% - 5.0%	11.0% - 5.0%
Year Ultimate Trend	2015	2015
Actuarial assumptions:		
Investment rate of return*	7.75%	7.75%
*Includes inflation at	3.50%	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2008 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2007. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

**VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
COUNTY EMPLOYEES RETIREMENT SYSTEM**

**RETIREMENT BENEFITS
NON-HAZARDOUS CERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 5,731,502,438	\$ 5,467,824,480
Prospective contributions		
Member contributions	\$ 905,496,624	\$ 879,530,367
Employer normal contributions	697,404,856	692,218,125
Unfunded accrued liability contributions	<u>1,572,715,253</u>	<u>1,191,621,646</u>
Total prospective contributions	<u>\$ 3,175,616,733</u>	<u>\$ 2,763,370,138</u>
 Total assets	 <u>\$ 8,907,119,171</u>	 <u>\$ 8,231,194,618</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 3,801,445,603	\$ 3,427,501,606
Present value of benefits payable on account of active members	4,848,351,752	4,641,682,555
Present value of benefits payable on account of inactive members	<u>257,321,816</u>	<u>162,010,457</u>
 Total liabilities	 <u>\$ 8,907,119,171</u>	 <u>\$ 8,231,194,618</u>

**VALUATION BALANCE SHEET
RETIREMENT BENEFITS
HAZARDOUS CERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 1,750,867,373	\$ 1,639,288,924
Prospective contributions		
Member contributions	\$ 333,087,926	\$ 338,741,336
Employer normal contributions	332,536,184	331,653,124
Unfunded accrued liability contributions	<u>652,254,722</u>	<u>569,447,255</u>
Total prospective contributions	<u>\$ 1,317,878,832</u>	<u>\$ 1,239,841,715</u>
Total assets	<u>\$ 3,068,746,205</u>	<u>\$ 2,879,130,639</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 1,385,123,873	\$ 1,255,383,148
Present value of benefits payable on account of active members	1,661,763,796	1,603,908,864
Present value of benefits payable on account of inactive members	<u>21,858,536</u>	<u>19,838,627</u>
Total liabilities	<u>\$ 3,068,746,205</u>	<u>\$ 2,879,130,639</u>

**VALUATION BALANCE SHEET
RETIREMENT BENEFITS
TOTAL CERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 7,482,369,811	\$ 7,107,113,404
Prospective contributions		
Member contributions	\$ 1,238,584,550	\$ 1,218,271,703
Employer normal contributions	1,029,941,040	1,023,871,249
Unfunded accrued liability contributions	<u>2,224,969,975</u>	<u>1,761,068,901</u>
Total prospective contributions	<u>\$ 4,493,495,565</u>	<u>\$ 4,003,211,853</u>
Total assets	<u>\$ 11,975,865,376</u>	<u>\$ 11,110,325,257</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 5,186,569,476	\$ 4,682,884,754
Present value of benefits payable on account of active members	6,510,115,548	6,245,591,419
Present value of benefits payable on account of inactive members	<u>279,180,352</u>	<u>181,849,084</u>
Total liabilities	<u>\$ 11,975,865,376</u>	<u>\$ 11,110,325,257</u>

**VALUATION BALANCE SHEET
INSURANCE BENEFITS
NON-HAZARDOUS CERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 1,168,883,170	\$ 960,285,900
Prospective contributions		
Normal contributions	\$ 864,456,661	\$ 904,995,678
Unfunded accrued liability contributions	<u>2,414,310,296</u>	<u>2,373,680,170</u>
Total prospective contributions	<u>\$ 3,278,766,957</u>	<u>\$ 3,278,675,848</u>
 Total assets	 <u>\$ 4,447,650,127</u>	 <u>\$ 4,238,961,748</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 1,291,138,217	\$ 1,177,386,474
Present value of benefits payable on account of active members	2,926,199,853	2,866,833,342
Present value of benefits payable on account of inactive members	<u>230,312,057</u>	<u>194,741,932</u>
 Total liabilities	 <u>\$ 4,447,650,127</u>	 <u>\$ 4,238,961,748</u>

**VALUATION BALANCE SHEET
INSURANCE BENEFITS
HAZARDOUS CERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 613,526,319	\$ 512,926,549
Prospective contributions		
Normal contributions	\$ 455,898,995	\$ 486,249,364
Unfunded accrued liability contributions	<u>1,156,256,638</u>	<u>1,133,533,462</u>
Total prospective contributions	<u>\$ 1,612,155,633</u>	<u>\$ 1,619,782,826</u>
 Total assets	 <u>\$ 2,225,681,952</u>	 <u>\$ 2,132,709,375</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 693,962,620	\$ 638,003,709
Present value of benefits payable on account of active members	1,503,246,768	1,472,956,397
Present value of benefits payable on account of inactive members	<u>28,472,564</u>	<u>21,749,269</u>
 Total liabilities	 <u>\$ 2,225,681,952</u>	 <u>\$ 2,132,709,375</u>

**VALUATION BALANCE SHEET
INSURANCE BENEFITS
TOTAL CERS MEMBERS**

	June 30, 2008	June 30, 2007
ASSETS		
Current actuarial value of assets	\$ 1,782,409,489	\$ 1,473,212,449
Prospective contributions		
Normal contributions	\$ 1,320,355,656	\$ 1,391,245,042
Unfunded accrued liability contributions	3,570,566,934	3,507,213,632
Total prospective contributions	<u>\$ 4,890,922,590</u>	<u>\$ 4,898,458,674</u>
 Total assets	 <u>\$ 6,673,332,079</u>	 <u>\$ 6,371,671,123</u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 1,985,100,837	\$ 1,815,390,183
Present value of benefits payable on account of active members	4,429,446,621	4,339,789,739
Present value of benefits payable on account of inactive members	<u>258,784,621</u>	<u>216,491,201</u>
 Total liabilities	 <u>\$ 6,673,332,079</u>	 <u>\$ 6,371,671,123</u>

The following tables provide the solvency test for non-hazardous and hazardous CERS members.

**Solvency Test
Retirement Benefits
Non-Hazardous CERS Members**

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Actuarial Value of Assets	(1)	(2)	(3)
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)				
6/30/2003*	\$ 759,938,261	\$ 2,068,481,586	\$ 1,589,177,955	\$ 5,286,580,047	100.0%	100.0%	154.7%
6/30/2004*	814,908,627	2,478,195,080	1,643,355,781	5,187,851,530	100.0	100.0	115.3
6/30/2005*	837,513,907	2,814,210,355	1,733,432,428	5,059,208,687	100.0	100.0	81.2
6/30/2006	883,946,564	3,210,095,023	2,085,527,680	5,162,894,136	100.0	100.0	51.3
6/30/2007	920,126,096	3,589,512,063	2,149,807,967	5,467,824,480	100.0	100.0	44.6
6/30/2008	963,213,677	4,058,767,419	2,282,236,595	5,731,502,438	100.0	100.0	31.1

*Reported by prior actuarial firm.

**Solvency Test
Retirement Benefits
Hazardous CERS Members**

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Actuarial Value of Assets	(1)	(2)	(3)
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)				
6/30/2003*	\$ 227,629,402	\$ 769,804,746	\$ 502,194,634	\$ 1,467,004,856	100.0%	100.0%	93.5%
6/30/2004*	256,366,204	851,354,443	533,109,473	1,457,612,042	100.0	100.0	65.6
6/30/2005*	264,913,465	960,052,305	570,651,565	1,452,353,023	100.0	100.0	39.8
6/30/2006	300,200,800	1,128,164,618	591,777,352	1,515,075,017	100.0	100.0	14.7
6/30/2007	317,007,367	1,275,221,775	616,507,037	1,639,288,924	100.0	100.0	7.6
6/30/2008	338,324,362	1,406,982,409	657,815,324	1,750,867,373	100.0	100.0	0.8

*Reported by prior actuarial firm.

**. Solvency Test
Insurance Benefits
Non-Hazardous CERS Members**

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Actuarial Value of Assets	(1)	(2)	(3)
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)				
6/30/2003*	\$ 0	\$ 799,777,264	\$ 1,377,185,995	\$ 520,060,105	100.0%	65.0%	0.0%
6/30/2004*	0	955,930,091	1,482,804,605	585,399,072	100.0	61.2	0.0
6/30/2005*	0	1,144,219,107	1,644,535,547	663,941,949	100.0	58.0	0.0
6/30/2006	0	1,694,600,143	2,912,623,496	777,726,590	100.0	45.9	0.0
6/30/2007	0	1,372,128,406	1,961,837,664	960,285,900	100.0	70.0	0.0
6/30/2008	0	1,521,450,274	2,061,743,192	1,168,883,170	100.0	76.8	0.0

*Reported by prior actuarial firm.

**. Solvency Test
Insurance Benefits
Hazardous CERS Members**

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Actuarial Value of Assets	(1)	(2)	(3)
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)				
6/30/2003*	\$ 0	\$ 401,276,347	\$ 534,374,315	\$ 269,190,080	100.0%	67.1%	0.0%
6/30/2004*	0	450,288,687	575,395,790	310,578,162	100.0	69.0	0.0
6/30/2005*	0	586,104,126	697,194,966	359,180,461	100.0	61.3	0.0
6/30/2006	0	787,671,273	1,140,810,098	422,785,042	100.0	53.7	0.0
6/30/2007	0	659,752,978	986,707,033	512,926,549	100.0	77.7	0.0
6/30/2008	0	722,435,184	1,047,347,773	613,526,319	100.0	84.9	0.0

*Reported by prior actuarial firm.

SCHEDULE B

Development of Actuarial Value of Assets Retirement Benefits Non-Hazardous Members

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 5,162,894,136	\$ 5,467,824,480				
B. Market Value End of Year	5,812,935,251	5,431,735,605				
C. Market Value Beginning of Year	5,191,376,948	5,812,935,251				
D. Cash Flow						
D1. Contributions	246,240,158	275,938,785				
D2. Benefit Payments	(377,044,524)	(415,881,616)				
D3. Administrative Expenses	(12,218,992)	(13,238,353)				
D4. Investment Expenses	<u>(4,731,050)</u>	<u>(5,136,459)</u>				
D5. Net	(147,754,408)	(158,317,643)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	769,312,711	(222,882,003)				
E2. Assumed Rate	7.75%	7.75%				
E3. Amount for Immediate Recognition	401,520,608	449,703,170				
E4. Amount for Phased-In Recognition	367,792,103	(672,585,173)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	73,558,421	(134,517,035)	0	0	0	0
F2. First Prior Year	9,281,202	73,558,421	(134,517,035)	0	0	0
F3. Second Prior Year	(936,362)	9,281,202	73,558,421	(134,517,035)	0	0
F4. Third Prior Year	24,906,205	(936,362)	9,281,202	73,558,421	(134,517,035)	0
F5. Fourth Prior Year	<u>(55,645,322)</u>	<u>24,906,205</u>	<u>(936,362)</u>	<u>9,281,202</u>	<u>73,558,421</u>	<u>(134,517,035)</u>
F6. Total Recognized Investment Gain	51,164,144	(27,707,569)	(52,613,774)	(51,677,412)	(60,958,614)	(134,517,035)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 5,467,824,480	\$ 5,731,502,438				
H. Difference Between Market & Actuarial Values	\$ 345,110,771	\$ (299,766,833)	\$ (247,153,059)	\$ (195,475,647)	\$ (134,517,035)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

**Development of Actuarial Value of Assets
Retirement Benefits
Hazardous Members**

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 1,515,075,017	\$ 1,639,288,924				
B. Market Value End of Year	1,754,934,764	1,644,983,243				
C. Market Value Beginning of Year	1,528,845,357	1,754,934,764				
D. Cash Flow						
D1. Contributions	105,203,362	116,415,000				
D2. Benefit Payments	(118,166,617)	(127,831,609)				
D3. Administrative Expenses	(1,075,008)	(1,143,313)				
D4. Investment Expenses	<u>(1,654,423)</u>	<u>(1,603,610)</u>				
D5. Net	(15,692,686)	(14,163,532)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	241,782,093	(95,787,989)				
E2. Assumed Rate	7.75%	7.75%				
E3. Amount for Immediate Recognition	119,595,955	137,124,357				
E4. Amount for Phased-In Recognition	122,186,138	(232,912,346)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	24,437,228	(46,582,469)	0	0	0	0
F2. First Prior Year	3,423,753	24,437,228	(46,582,469)	0	0	0
F3. Second Prior Year	286,557	3,423,753	24,437,228	(46,582,469)	0	0
F4. Third Prior Year	7,052,555	286,557	3,423,753	24,437,228	(46,582,469)	0
F5. Fourth Prior Year	<u>(14,889,455)</u>	<u>7,052,555</u>	<u>286,557</u>	<u>3,423,753</u>	<u>24,437,228</u>	<u>(46,582,469)</u>
F6. Total Recognized Investment Gain	20,310,638	(11,382,376)	(18,434,931)	(18,721,488)	(22,145,241)	(46,582,469)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 1,639,288,924	\$ 1,750,867,373				
H. Difference Between Market & Actuarial Values	\$ 115,645,840	\$ (105,884,130)	\$ (87,449,199)	\$ (68,727,711)	\$ (46,582,469)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

**Development of Actuarial Value of Assets
Insurance Benefits
Non-Hazardous Members**

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 777,726,590	\$ 960,285,900				
B. Market Value End of Year	1,084,042,781	1,105,944,178				
C. Market Value Beginning of Year	813,250,744	1,084,042,781				
D. Cash Flow						
D1. Contributions	171,229,072	217,217,750				
D2. Benefit Payments	(85,198,699)	(95,966,011)				
D3. Administrative Expenses	(3,040,328)	(3,424,785)				
D4. Investment Expenses	<u>(720,918)</u>	<u>(744,254)</u>				
D5. Net	82,269,127	117,082,700				
E. Investment Income						
E1. Market Total: B.-C.-D5.	188,522,910	(95,181,303)				
E2. Assumed Rate	7.75%	7.75%				
E3. Amount for Immediate Recognition	66,963,715	89,323,364				
E4. Amount for Phased-In Recognition	121,559,195	(184,504,667)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	24,311,839	(36,900,933)	0	0	0	0
F2. First Prior Year	5,266,783	24,311,839	(36,900,933)	0	0	0
F3. Second Prior Year	1,195,664	5,266,783	24,311,839	(36,900,933)	0	0
F4. Third Prior Year	8,317,853	1,195,664	5,266,783	24,311,839	(36,900,933)	0
F5. Fourth Prior Year	<u>(5,765,671)</u>	<u>8,317,853</u>	<u>1,195,661</u>	<u>5,266,781</u>	<u>24,311,839</u>	<u>(36,900,935)</u>
F6. Total Recognized Investment Gain	33,326,468	2,191,206	(6,126,650)	(7,322,313)	(12,589,094)	(36,900,935)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 960,285,900	\$ 1,168,883,170				
H. Difference Between Market & Actuarial Values	\$ 123,756,881	\$ (62,938,992)	\$ (56,812,342)	\$ (49,490,029)	\$ (36,900,935)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

**Development of Actuarial Value of Assets
Insurance Benefits
Hazardous Members**

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 422,785,042	\$ 512,926,549				
B. Market Value End of Year	570,155,702	576,414,457				
C. Market Value Beginning of Year	441,278,796	570,155,702				
D. Cash Flow						
D1. Contributions	70,920,610	90,754,757				
D2. Benefit Payments	(31,607,270)	(35,603,224)				
D3. Administrative Expenses	(319,632)	(364,362)				
D4. Investment Expenses	<u>(379,910)</u>	<u>(388,529)</u>				
D5. Net	38,613,798	54,398,642				
E. Investment Income						
E1. Market Total: B.-C.-D5.	90,263,108	(48,139,887)				
E2. Assumed Rate	7.75%	7.75%				
E3. Amount for Immediate Recognition	36,090,023	46,698,599				
E4. Amount for Phased-In Recognition	54,173,085	(94,838,486)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	10,834,617	(18,967,697)	0	0	0	0
F2. First Prior Year	2,819,186	10,834,617	(18,967,697)	0	0	0
F3. Second Prior Year	616,704	2,819,186	10,834,617	(18,967,697)	0	0
F4. Third Prior Year	4,199,719	616,704	2,819,186	10,834,617	(18,967,697)	0
F5. Fourth Prior Year	<u>(3,032,540)</u>	<u>4,199,719</u>	<u>616,704</u>	<u>2,819,186</u>	<u>10,834,617</u>	<u>(18,967,698)</u>
F6. Total Recognized Investment Gain	15,437,686	(497,471)	(4,697,190)	(5,313,894)	(8,133,080)	(18,967,698)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 512,926,549	\$ 613,526,319				
H. Difference Between Market & Actuarial Values	\$ 57,229,153	\$ (37,111,862)	\$ (32,414,672)	\$ (27,100,778)	\$ (18,967,698)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006, with the exception of the health care cost trend rate which was adopted by the Board on November 15, 2007.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement and insurance benefits.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for both non-hazardous and hazardous members are as follows and include inflation at 3.50% per annum:

Service	Annual Rates of				
	Merit & Seniority		Base (Economy)	Increase Next Year	
	Non-Hazardous	Hazardous		Non-Hazardous	Hazardous
0-1	10.0%	11.0%	3.5%	13.5%	14.5%
1-2	3.5%	4.0%	3.5%	7.0%	7.5%
2-3	2.0%	3.5%	3.5%	5.5%	7.0%
3-4	1.5%	3.0%	3.5%	5.0%	6.5%
4-5	1.5%	2.5%	3.5%	5.0%	6.0%
5-6	1.0%	2.0%	3.5%	4.5%	5.5%
6-7	1.0%	1.5%	3.5%	4.5%	5.0%
7-8	1.0%	1.5%	3.5%	4.5%	5.0%
8-9	0.5%	1.0%	3.5%	4.0%	4.5%
9-10	0.5%	1.0%	3.5%	4.0%	4.5%
10 & Over	0.5%	0.5%	3.5%	4.0%	4.0%

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Non-Hazardous Members

Age	Withdrawal and Vesting*	Death		Disability	Service Retirement**
		Male	Female		
20	6.00%	0.05%	0.03%	0.05%	
25	5.40	0.07	0.03	0.07	
30	4.80	0.08	0.04	0.09	
35	3.60	0.09	0.05	0.13	
40	2.66	0.11	0.07	0.20	
45	1.98	0.16	0.10	0.33	
50	1.92	0.26	0.14	0.56	
55	1.08	0.44	0.23	0.92	8.0%
60	0.75	0.80	0.44	1.46	10.0
65		1.45	0.86		25.0
70		2.37	1.37		25.0
75					100.0

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 15.0%, 14.0%, 10.0%, 8.0% and 6.0%, respectively.

** If service is at least 27 years, the rate is 25%.

Hazardous Members

Age	Withdrawal and Vesting*	Death**			Service Retirement***	
		Male	Female	Disability	Service	Rate
20	4.56%	0.05%	0.03%	0.07%	20	30.0%
25	3.04	0.07	0.03	0.09	25	25.0
30	3.01	0.08	0.04	0.12	30	40.0
35	1.95	0.09	0.05	0.17	35	30.0
40	1.50	0.11	0.07	0.27		
45	0.75	0.16	0.10	0.44		
50	0.50	0.26	0.14	0.75		
55		0.44	0.23	1.23		
60		0.80	0.44	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 10.0%, 7.0%, 5.0%, 4.0% and 3.5%, respectively.

** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.

*** The annual rate of service retirement is 100% at age 62.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Fiscal Year Ended	Trend
2009	11.0%
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and beyond	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation are as follows:

Medical	Non-Hazardous	Hazardous
Participation	85%	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

**MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE**

2008					
	Single	Parent Plus	Couple	Family	
TOTAL PREMIUMS					
Essential	N/A	\$ 617.12	\$ 947.44	\$ 1,056.56	
Enhanced	\$ 484.24	\$ 742.74	\$ 1,137.18	\$ 1,267.40	
Premier	\$ 501.20	\$ 772.06	\$ 1,175.32	\$ 1,309.76	
Select	\$ 469.00	\$ 703.50	\$ 989.18	\$ 1,128.48	

2009					
	Single	Parent Plus	Couple	Family	
TOTAL PREMIUMS					
Standard PPO	\$ 446.24	\$ 690.00	\$ 1,044.48	\$ 1,162.16	
Optimum PPO	\$ 566.20	\$ 821.46	\$ 1,265.10	\$ 1,407.32	
Capitol Choice	\$ 545.08	\$ 826.38	\$ 1,249.74	\$ 1,383.52	

MEDICARE ELIGIBLE

Effective January 1, 2009 Available Plan	Self-Supporting	Funding rates
	(Used for OPEB claims cost)	(Used for Retiree Contribution Amounts)
Kentucky Retirement System Health Plan - Medical Only	\$ 162.48	\$ 162.00
Kentucky Retirement System Health Plan - PLUS	\$ 203.05	\$ 267.00
Kentucky Retirement System Health Plan - PREMIUM	\$ 363.18	\$ 338.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of CERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Non-Hazardous Normal Retirement:

Age Requirement 65

Service Requirement None

Members whose participation began before 8/1/2004

If a member has at least 48 months of service, the monthly benefit is 2.20% times final average compensation times years of service.

Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five-year period are less than forty-eight, one or more additional fiscal years shall be used. For a non-hazardous member whose effective retirement date is between August 1, 2001 and January 1, 2009, and whose total service credit is at least 27 years and whose age and years of service total at least 75, final compensation is based on three years rather than five years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.

If a member has less than 48 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Members whose participation began on or after 8/1/2004

Monthly benefit as calculated above but with a benefit factor of 2.0% instead of 2.2%.

Hazardous Normal Retirement:

Age Requirement 55

Service Requirement None

Amount

If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service.

Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Non-Hazardous Early Retirement:

<i>Requirement</i>	Age 55 with 60 months of service or any age with 25 years of service.
<i>Amount</i>	Normal retirement benefit reduced by 5.0% per year for the first five years and 4.0% per year for the next five years for each year the member is younger than age 65 or has less than 27 years of service, whichever is smaller.

Hazardous Early Retirement:

<i>Requirement</i>	Age 50 with 15 years of service or any age with 20 years of service.
<i>Amount</i>	Normal retirement benefit reduced by 5.5% per each year the member is younger than age 55 or has less than 20 years of service, whichever is smaller.

Non-Hazardous Disability:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	60 months

Members whose participation began before 8/1/2004

Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 65th birthday or until the combined total service as of the last day of paid employment and added service equals 25 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For members with at least 25 years of service but less than 27 years of service, total service shall be 27 years. For employees with 27 or more years of service credit, actual service will be used.

A contributing member in a non-hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of the member's final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on actual service with no penalty or, if larger, 20% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Hazardous Disability:

Age Requirement

None

Service Requirement

60 months

Members whose participation began before 8/1/2004

Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

65 for non-hazardous members and 55 for hazardous members.

Pre-Retirement Death Benefit (not in line of duty):

<i>Requirement</i>	Any age with 60 months of service or age 65 with 48 months of service.
<i>Amount</i>	Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

<i>Requirement</i>	None
<i>Amount</i>	The spouse may choose (1) a \$10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty) – Hazardous Plan:

<i>Requirement</i>	None
<i>Amount</i>	The non-spouse may choose (1) a \$10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

<i>Requirement</i>	None
<i>Amount</i>	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

<i>Lump-sum Benefit</i>	\$5,000
<i>Husband and Wife</i>	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

Members whose participation began before July 1, 2003

The Retirement System pays a portion of medical premiums for retirees, and in the case of hazardous duty retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System. For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.

Members whose participation began on or after July 1, 2003

The Retirement System pays \$11.96 per month per year of service toward medical premiums for non-hazardous retirees, \$17.94 per month per year of service for hazardous retirees, and \$17.94 per month per year of service for surviving spouses of hazardous employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of hazardous service. These amounts are shown as of the valuation date and are indexed annually based on the CPI.

Member Contributions:

Non-hazardous Members 5% of salary.

Hazardous Members 8% of salary.

SCHEDULE E

DETAILED TABULATIONS OF THE DATA

**Schedule of Non-Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years**

Year Ending June 30	2003	2004*	2005*	2006*	2007	2008
			<u>Number</u>			
Beginning of Year	26,147	27,092	29,129	31,347	33,102	35,564
Added	2,411	2,805	2,808	2,782	3,244	3,366
Removed	1,466	768	590	1,027	782	1,351
End of Year	27,092	29,129	31,347	33,102	35,564	37,579
			<u>Annual Allowances</u>			
Beginning of Year	N/A	\$ 219,848,200	\$ 247,534,300	\$ 279,590,300	\$ 308,269,651	\$ 348,712,020
Added	\$ 24,855,000	\$ 28,181,800	30,397,300	34,559,599	44,888,509	56,376,123
Removed	8,111,100	3,587,800	3,161,200	5,880,248	4,446,140	11,330,633
End of Year	\$ 219,848,200	\$ 247,534,300	\$ 279,590,300	\$ 308,269,651	\$ 348,712,020	\$ 393,757,510
% Increase in Allowances	N/A	12.59%	12.95%	10.26%	13.12%	12.92%
Average Annual Allowance	\$ 8,115	\$ 8,498	\$ 8,919	\$ 9,313	\$ 9,805	\$ 10,478

*Reported by prior actuarial firm.

**Schedule of Hazardous Retired Members Added to and Removed From Rolls
Last Six Fiscal Years**

Year Ending June 30	2003	2004*	2005*	2006*	2007	2008
	<u>Number</u>					
Beginning of Year	3,483	3,737	4,005	4,361	4,712	5,159
Added	293	343	403	427	500	469
Removed	39	75	47	76	53	206
End of Year	3,737	4,005	4,361	4,712	5,159	5,422
	<u>Annual Allowances</u>					
Beginning of Year	N/A	\$ 72,322,200	\$ 79,559,200	\$ 89,224,700	\$ 100,290,052	\$ 113,735,850
Added	6,258,300	\$ 6,712,500	8,536,100	11,876,922	14,207,939	16,794,618
Removed	355,100	605,100	502,700	811,570	762,141	3,053,359
End of Year	\$ 72,322,200	\$ 79,559,200	\$ 89,224,700	\$ 100,290,052	\$ 113,735,850	\$ 127,477,109
% Increase in Allowances	N/A	10.01%	12.15%	12.40%	13.41%	12.08%
Average Annual Allowance	\$ 19,353	\$ 19,865	\$ 20,460	\$ 21,284	\$ 22,046	\$ 23,511

*Reported by prior actuarial firm.

**Non-Hazardous
Retired Lives Summary**

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	3,244	\$ 2,990,716.92	11,121	\$ 7,159,913.56	14,365	\$ 10,150,630.48
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	1,928	1,968,387.30	826	482,032.81	2,754	2,450,420.11
66-2/3% to Beneficiary	581	977,842.90	303	312,987.61	884	1,290,830.51
50% to Beneficiary	833	1,193,550.31	872	896,088.33	1,705	2,089,638.64
Pop-up Option	2,772	4,104,641.58	2,082	2,084,232.21	4,854	6,188,873.79
10 Years Certain	0	0.00	0	0.00	0	0.00
10 Years Certain & Life	1,137	970,433.85	2,421	1,597,292.75	3,558	2,567,726.60
Social Security Option						
Age 62 Basic	224	552,048.75	437	547,419.34	661	1,099,468.09
Age 62 Survivorship	547	1,280,444.87	260	361,671.73	807	1,642,116.60
Parital Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	505	453,388.78	512	363,424.77	1,017	816,813.55
20 Years Certain & Life	348	422,735.65	442	344,065.92	790	766,801.57
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	117	114,940.46	349	253,404.06	466	368,344.52
PLSO 24 Month Basic	65	41,426.38	225	157,241.47	290	198,667.85
PLSO 36 Month Basic	281	130,633.11	658	259,678.61	939	390,311.72
PLSO 12 Month Survivor	138	151,339.72	86	75,157.64	224	226,497.36
PLSO 24 Month Survivor	96	91,373.58	63	37,581.58	159	128,955.16
PLSO 36 Month Survivor	425	245,238.16	258	102,805.96	683	348,044.12
Total	13,241	\$ 15,689,142.32	20,915	\$ 15,034,998.35	34,156	\$ 30,724,140.67

**Hazardous
Retired Lives Summary**

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	595	\$ 1,138,678.98	178	\$ 269,363.31	773	\$ 1,408,042.29
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	481	903,325.02	22	20,040.93	503	923,365.95
66-2/3% to Beneficiary	200	489,806.98	4	10,789.23	204	500,596.21
50% to Beneficiary	336	742,635.43	17	28,463.50	353	771,098.93
Pop-up Option	1,793	4,208,990.31	62	110,502.32	1,855	4,319,492.63
10 Years Certain	28	39,647.40	3	3,700.96	31	43,348.36
10 Years Certain & Life	157	306,592.40	37	65,360.09	194	371,952.49
Social Security Option						
Age 62 Basic	92	193,780.69	7	12,380.04	99	206,160.73
Age 62 Survivorship	282	541,291.43	10	11,661.35	292	552,952.78
Parital Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	55	90,220.52	7	6,549.94	62	96,770.46
20 Years Certain & Life	103	185,092.86	11	10,917.62	114	196,010.48
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	25	42,238.28	8	11,424.82	33	53,663.10
PLSO 24 Month Basic	23	46,411.23	6	7,070.05	29	53,481.28
PLSO 36 Month Basic	52	77,476.69	13	13,320.02	65	90,796.71
PLSO 12 Month Survivor	53	119,134.44	2	3,364.20	55	122,498.64
PLSO 24 Month Survivor	63	94,682.27	4	3,900.59	67	98,582.86
PLSO 36 Month Survivor	130	181,375.21	7	4,669.90	137	186,045.11
Total	4,468	\$ 9,401,380.14	398	\$ 593,478.87	4,866	\$ 9,994,859.01

**Non-Hazardous
Beneficiary Lives Summary**

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	5	\$ 1,434.44	21	\$ 15,474.71	26	\$ 16,909.15
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	263	114,293.69	1,344	703,989.21	1,607	818,282.90
66-2/3% to Beneficiary	23	9,256.71	173	94,346.93	196	103,603.64
50% to Beneficiary	69	23,102.37	280	116,781.65	349	139,884.02
Pop-up Option	87	53,489.97	324	241,512.13	411	295,002.10
10 Years Certain	58	40,953.08	86	63,791.29	144	104,744.37
10 Years Certain & Life	56	34,833.45	84	65,478.62	140	100,312.07
Social Security Option						
Age 62 Basic	0	0.00	0	0.00	0	0.00
Age 62 Survivorship	15	10,877.76	91	149,355.08	106	160,232.84
Parital Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	651.28	3	651.28
Dependent Child	2	639.36	2	395.73	4	1,035.09
Refund	0	0.00	4	2,588.88	4	2,588.88
15 Years Certain & Life	29	25,092.56	79	60,180.27	108	85,272.83
20 Years Certain & Life	38	21,561.72	73	69,653.33	111	91,215.05
5 Years Certain	59	51,190.73	69	71,606.66	128	122,797.39
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	2	668.09	13	4,060.23	15	4,728.32
PLSO 12 Month Survivor	5	1,805.66	15	16,530.03	20	18,335.69
PLSO 24 Month Survivor	0	0.00	6	4,144.92	6	4,144.92
PLSO 36 Month Survivor	18	8,031.46	27	11,213.13	45	19,244.59
Total	729	\$ 397,231.05	2,694	\$ 1,691,754.08	3,423	\$ 2,088,985.13

**Hazardous
Beneficiary Lives Summary**

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	\$ 0.00	20	\$ 18,161.41	20	\$ 18,161.41
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	6	3,513.60	124	155,221.06	130	158,734.66
66-2/3% to Beneficiary	0	0.00	28	37,138.45	28	37,138.45
50% to Beneficiary	1	525.36	36	29,731.31	37	30,256.67
Pop-up Option	0	0.00	90	139,097.58	90	139,097.58
10 Years Certain	4	12,931.95	9	11,365.74	13	24,297.69
10 Years Certain & Life	1	1,990.34	3	2,198.04	4	4,188.38
Social Security Option						
Age 62 Basic	0	0.00	2	536.08	2	536.08
Age 62 Survivorship	1	2,688.82	65	114,781.82	66	117,470.64
Parital Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	3	2,581.57	3	2,581.57
Dependent Child	52	18,650.68	52	18,518.46	104	37,169.14
Refund	0	0.00	8	5,702.85	8	5,702.85
15 Years Certain & Life	0	0.00	5	5,614.32	5	5,614.32
20 Years Certain & Life	1	1,707.00	23	24,696.31	24	26,403.31
5 Years Certain	3	1,598.36	7	9,491.27	10	11,089.63
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	1	882.72	5	2,062.26	6	2,944.98
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	2	1,344.22	2	1,344.22
PLSO 36 Month Survivor	0	0.00	4	5,501.82	4	5,501.82
Total	70	\$ 44,488.83	486	\$ 583,744.57	556	\$ 628,233.40

Non-Hazardous Members

**Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages**

Attained Age	Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	67	\$ 1,410,123	58	\$ 520,235	32	\$ 196,718	157	\$ 2,127,075
45-49	587	\$ 13,243,768	130	\$ 1,408,578	54	\$ 426,580	771	\$ 15,078,926
50-54	1,715	\$ 39,357,311	276	\$ 3,215,080	133	\$ 1,307,050	2,124	\$ 43,879,441
55-59	3,621	\$ 64,881,862	548	\$ 5,687,722	226	\$ 2,679,715	4,395	\$ 73,249,300
60-64	5,317	\$ 67,898,563	702	\$ 7,155,490	344	\$ 3,399,343	6,363	\$ 78,453,396
65-69	6,518	\$ 60,619,255	635	\$ 5,934,562	428	\$ 4,088,301	7,581	\$ 70,642,118
70-74	5,462	\$ 43,189,097	422	\$ 3,299,985	466	\$ 3,835,709	6,350	\$ 50,324,791
75-79	3,790	\$ 27,096,677	164	\$ 1,153,981	482	\$ 3,496,947	4,436	\$ 31,747,605
80-84	2,440	\$ 15,069,785	42	\$ 238,493	461	\$ 2,343,813	2,943	\$ 17,652,092
85-89	1,181	\$ 5,357,043	19	\$ 57,681	401	\$ 1,853,241	1,601	\$ 7,267,966
90 & Over	456	\$ 1,871,083	6	\$ 23,314	396	\$ 1,440,404	858	\$ 3,334,800
Totals	31,154	\$ 339,994,566	3,002	\$ 28,695,122	3,423	\$ 25,067,822	37,579	\$ 393,757,510

Hazardous Members

**Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages**

Attained Age	Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	145	\$ 4,002,800	69	\$ 1,131,734	123	\$ 640,864	337	\$ 5,775,398
45-49	483	\$ 13,717,436	76	\$ 1,290,987	18	\$ 187,433	577	\$ 15,195,856
50-54	733	\$ 20,951,893	80	\$ 1,243,517	37	\$ 415,369	850	\$ 22,610,779
55-59	1,098	\$ 32,122,950	82	\$ 1,165,502	65	\$ 1,084,548	1,245	\$ 34,373,000
60-64	926	\$ 21,849,135	45	\$ 672,095	74	\$ 1,323,104	1,045	\$ 23,844,335
65-69	606	\$ 11,939,580	15	\$ 193,899	83	\$ 1,750,352	704	\$ 13,883,831
70-74	305	\$ 5,955,076	8	\$ 102,139	60	\$ 983,081	373	\$ 7,040,297
75-79	134	\$ 2,649,270	2	\$ 23,660	60	\$ 814,850	196	\$ 3,487,781
80-84	46	\$ 789,544	3	\$ 34,775	27	\$ 254,159	76	\$ 1,078,478
85-89	9	\$ 101,579			7	\$ 69,932	16	\$ 171,511
90 & Over	1	\$ 737			2	\$ 15,107	3	\$ 15,843
Totals	4,486	\$ 114,080,001	380	\$ 5,858,308	556	\$ 7,538,801	5,422	\$ 127,477,109

**Total Non-Hazardous Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	1,672								1,672
Avg Pay	\$12,523								\$12,523
20-24	3,611	210							3,821
Avg Pay	\$19,522	\$23,067							\$19,716
25-29	3,490	1,111	53						4,654
Avg Pay	\$21,885	\$27,238	\$31,681						\$23,274
30-34	3,571	1,891	570	5					6,037
Avg Pay	\$21,275	\$29,614	\$32,647	\$40,291					\$24,976
35-39	4,470	2,743	1,327	333	22				8,895
Avg Pay	\$20,126	\$27,449	\$34,830	\$37,288	\$46,725				\$25,286
40-44	4,187	3,725	1,876	836	426	70	4		11,124
Avg Pay	\$20,298	\$24,606	\$30,494	\$37,963	\$45,285	\$49,414	\$34,764		\$25,933
44-49	3,863	4,065	2,846	1,452	772	233	206	35	13,472
Avg Pay	\$20,783	\$24,497	\$26,946	\$33,422	\$42,761	\$44,194	\$47,902	\$52,931	\$26,730
50-54	3,302	3,343	3,029	2,028	972	297	301	177	13,449
Avg Pay	\$22,001	\$25,247	\$26,562	\$29,879	\$37,078	\$42,798	\$42,310	\$53,246	\$27,438
55-59	2,552	2,394	2,179	1,924	1,116	280	315	178	10,938
Avg Pay	\$21,191	\$26,309	\$26,909	\$28,532	\$34,537	\$35,478	\$39,267	\$50,102	\$27,460
60-64	1,607	1,768	1,242	1,125	676	195	189	137	6,939
Avg Pay	\$19,326	\$23,979	\$25,673	\$28,026	\$30,388	\$34,282	\$36,202	\$53,677	\$25,694
65-69	641	714	541	391	210	54	83	66	2,700
Avg Pay	\$15,760	\$21,363	\$21,482	\$25,144	\$25,141	\$28,984	\$28,172	\$44,407	\$21,823
70 & over	338	418	288	218	151	34	29	44	1,520
Avg Pay	\$15,978	\$19,069	\$19,142	\$22,588	\$23,812	\$22,733	\$28,787	\$48,490	\$20,490
Totals	33,304	22,382	13,951	8,312	4,345	1,163	1,127	637	85,221
Avg Pay	\$20,187	\$25,496	\$27,849	\$30,637	\$36,210	\$39,058	\$40,041	\$51,199	\$25,423

**Total Hazardous Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	85								85
Avg Pay	\$27,060								\$27,060
20-24	507	13							520
Avg Pay	\$32,116	\$43,385							\$32,397
25-29	1,085	236	2						1,323
Avg Pay	\$37,458	\$45,185	\$59,088						\$38,869
30-34	679	820	192	3					1,694
Avg Pay	\$38,343	\$47,568	\$53,685	\$61,544					\$44,589
35-39	485	753	691	169	14				2,112
Avg Pay	\$37,934	\$46,861	\$54,093	\$59,527	\$63,451				\$48,301
40-44	274	431	368	545	144	16			1,778
Avg Pay	\$36,384	\$46,092	\$52,435	\$59,085	\$65,847	\$64,619			\$51,658
44-49	153	233	196	300	225	53	15	4	1,179
Avg Pay	\$36,183	\$43,951	\$50,359	\$58,106	\$61,881	\$59,331	\$58,832	\$74,172	\$52,015
50-54	91	139	94	176	136	29	49	24	738
Avg Pay	\$40,158	\$44,722	\$48,776	\$55,360	\$55,259	\$59,951	\$56,775	\$63,551	\$51,165
55-59	78	108	43	65	69	21	40	38	462
Avg Pay	\$35,772	\$46,688	\$53,572	\$52,616	\$53,099	\$52,263	\$54,196	\$59,877	\$49,266
60-64	34	64	23	20	30	5	17	16	209
Avg Pay	\$33,741	\$46,126	\$42,593	\$51,953	\$43,753	\$47,290	\$42,865	\$50,305	\$44,022
65-69	8	22	8	3	2	3	2	1	49
Avg Pay	\$31,611	\$39,960	\$46,130	\$41,108	\$38,202	\$52,456	\$81,978	\$47,820	\$42,243
70 & over	6	8	1	3	2	2	2		24
Avg Pay	\$27,634	\$52,374	\$33,372	\$59,792	\$56,640	\$59,568	\$66,180		\$48,430
Totals	3,485	2,827	1,618	1,284	622	129	125	83	10,173
Avg Pay	\$36,492	\$46,387	\$52,683	\$57,931	\$59,445	\$58,353	\$54,858	\$59,638	\$46,618



**Report on the Annual Valuation of the
State Police Retirement System**

Prepared as of June 30, 2008

November 21, 2008

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, KY 40601

Dear Members of the Board:

Presented in this report are the results of the annual actuarial valuation of the retirement and insurance benefits provided under the State Police Retirement System (SPRS). The purpose of the valuation was to measure the System's funding progress and to determine the required employer contribution rates for the fiscal year beginning July 1, 2009. The date of the valuation was June 30, 2008.

The valuation was based upon data, furnished by the Executive Director and the Kentucky Retirement Systems (KRS) staff, concerning active, inactive and retired members along with pertinent financial information. The complete cooperation of the KRS staff in furnishing materials requested is hereby acknowledged with appreciation.

Your attention is directed particularly to the summary of results on page 1 and the comments on page 5.

To the best of our knowledge, this report is complete and accurate. The valuation was performed by, and under the supervision of, independent actuaries who are members of the American Academy of Actuaries with experience in performing valuations for public retirement systems. The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The valuation was prepared in accordance with the principles of practice prescribed by the Actuarial Standards Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: 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. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

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, in the aggregate, internally consistent and reasonably based on the actual experience of the system.

Respectfully submitted,

Thomas J. Cavanaugh, FSA, FCA, EA, MAAA
Chief Executive Officer

TJC:kc

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**REPORT ON THE ANNUAL VALUATION OF THE
STATE POLICE RETIREMENT SYSTEM**

PREPARED AS OF JUNE 30, 2008

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. This report, prepared as of June 30, 2008, presents the results of the annual actuarial valuation of the retirement and insurance benefits provided under the System. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized in the following table.

SUMMARY OF PRINCIPAL RESULTS

	6/30/2008	6/30/2007
Contributions for next fiscal year:		
Retirement	35.23%	32.39%
Insurance	<u>56.89</u>	<u>59.54</u>
Total	92.12%	91.93%
Funded status as of valuation date:		
Retirement		
Actuarial accrued liability	\$587,129,257	\$547,955,286
Actuarial value of assets	350,891,451	348,806,508
Unfunded liability on actuarial value of assets	236,237,806	199,148,778
Funded ratio on actuarial value of assets	59.76%	63.66%
Market value of assets	\$337,358,918	\$376,381,488
Unfunded liability on market value of assets	249,770,339	171,573,798
Funded ratio on market value of assets	57.46%	68.69%
Insurance		
Actuarial accrued liability	\$445,107,468	\$432,763,229
Actuarial value of assets	123,961,197	115,215,912
Unfunded liability on actuarial value of assets	321,146,271	317,547,317
Funded ratio on actuarial value of assets	27.85%	26.62%
Market value of assets	\$121,781,967	\$132,573,898
Unfunded liability on market value of assets	323,325,501	300,189,331
Funded ratio on market value of assets	27.36%	30.63%
Demographic data as of valuation date:		
Number of retired participants and beneficiaries	1,135	1,105
Number of vested former members	55	47
Number of former members due a refund	246	239
Number of active members	993	957
Total salary	\$53,269,080	\$49,247,580
Average salary	\$53,645	\$51,460

2. The valuation balance sheets showing the results of the valuation are given in Schedule A.
3. Comments on the valuation results are given in Section IV, comments on the experience and actuarial gains during the valuation year are given in Section V, and the rates of contribution payable by employers are given in Section VI.
4. There were no changes in benefit provisions since the last valuation. However, coverage options for pre-65 members have changed. There are three coverage options from which retirees and beneficiaries may choose for Plan Year 2009. Two of the options are new and a third has a new name. The new rates for 2009 can be found in Schedule C. The options for 2009 are summarized below.
 - Commonwealth Optimum PPO is a new plan which combines the Commonwealth Enhanced and Commonwealth Premier plans of Plan Year 2008 into one plan.
 - Commonwealth Capitol Choice is a new plan offering for Plan Year 2009.
 - Commonwealth Standard PPO is the new name for the Commonwealth Essential plan of Plan Year 2008. The benefits on this plan remain unchanged for Plan Year 2009.
5. Schedule B of this report presents the development of the actuarial value of assets. Schedule C details the actuarial assumptions and methods employed. Schedule D gives a summary of the benefit and contribution provisions of the plan.
6. The investment rate of return for developing insurance liabilities and contribution rates shown in this report for June 30, 2007 and June 30, 2008 is 4.50%. The lower rate for insurance benefits is required under the parameters set by the Governmental Accounting Standards Board Statements 43 and 45 given the lack of pre-funding of those benefits.

SECTION II – MEMBERSHIP DATA

Data regarding the membership of the System for use as a basis for the valuation were furnished by the System's office. The following tables summarize the membership of the system as of June 30, 2008 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

Active Members

Number	Payroll	Group Averages		
		Salary	Age	Service
993	\$53,269,080	\$53,645	36.9	10.8

The following table shows a six-year history of active member valuation data.

SCHEDULE OF SPRS ACTIVE MEMBER VALUATION DATA

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
6/30/2003	1,019	\$43,760,832	\$42,945	(2.1)%
6/30/2004	999	43,835,208	43,879	2.2
6/30/2005	987	43,720,092	44,296	1.0
6/30/2006	1,028	47,743,865	46,443	4.8
6/30/2007	957	49,247,580	51,460	10.8
6/30/2008	993	53,269,080	53,645	4.2

The following table shows the number and annual retirement allowances payable to retired members and their beneficiaries on the roll of the Retirement System as of the valuation date as well as certain group averages.

Retired Lives

Type of Benefit Payment	Number	Annual Benefits	Group Averages	
			Benefit	Age
Retiree	969	\$37,354,115	\$38,549	60.5
Disability	36	\$612,536	17,015	56.7
Beneficiary	130	3,326,365	25,587	63.0
Total in SPRS	1,135	\$41,293,016	\$36,382	60.7

This valuation also includes 301 inactive members of which 55 are vested.

SECTION III - ASSETS

1. As of June 30, 2008 the total market value of assets amounted to \$459,140,885 as shown in the following table.

Retirement	Insurance	SPRS Total
\$337,358,918	\$121,781,967	\$459,140,885

2. The five-year smoothed market related actuarial value of assets used for the current valuation was \$474,852,648. Schedule B shows the development of the actuarial value of assets as of June 30, 2008. The following table shows the actuarial value of assets.

COMPARISON OF ACTUARIAL VALUE OF ASSETS

	JUNE 30, 2008	JUNE 30, 2007
Retirement	\$ 350,891,451	\$ 348,806,508
Insurance	<u>123,961,197</u>	<u>115,215,912</u>
Total	\$ 474,852,648	\$ 464,022,420

SECTION IV - COMMENTS ON VALUATION

Schedule A of this report contains the valuation balance sheets which show the present and prospective assets and liabilities of the System as of June 30, 2008. Separate balance sheets are shown for Retirement and Insurance.

Retirement

1. The total valuation balance sheet on account of retirement benefits shows that the System has total prospective retirement benefit liabilities of \$665,344,483, of which \$423,834,095 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, \$2,477,273 is for the prospective benefits payable on account of inactive members, \$239,033,115 is for the prospective benefits payable on account of present active members. Against these retirement benefit liabilities the System has a total present actuarial value of assets of \$350,891,451 as of June 30, 2008. The difference of \$314,453,032 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of retirement benefits. Of this amount, \$35,604,574 is the present value of future contributions expected to be made by members, and the balance of \$278,848,458 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of retirement benefits consist of normal contributions, accrued liability contributions and contributions for administrative expenses. The valuation indicates that employer normal contributions at the rate of 9.57% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of retirement benefits at the above rates have a present value of \$42,610,652. When this amount is subtracted from \$278,848,458, which is the present value of the total future contributions to be made by the State, there remains \$236,237,806 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of retirement benefits be set at 25.40% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of \$236,237,806 over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.26% of payroll.

Insurance

1. The total valuation balance sheet on account of insurance benefits shows that the System has total prospective insurance benefit liabilities of \$607,603,231, of which \$169,176,606 is for the prospective benefits payable on account of present retired members and beneficiaries of deceased members, \$9,478,639 is for the prospective benefits payable to current inactive members, and \$428,947,986 is for the prospective benefits payable on account of present active members. Against these insurance benefit liabilities the System has a total present actuarial value of assets of \$123,961,197 as of June 30, 2008. The difference of \$483,642,034 between the total liabilities and the total present actuarial value of assets represents the present value of contributions to be made in the future on account of insurance benefits. Of this amount, \$0 is the present value of future contributions expected to be made by members, and the balance of \$483,642,034 represents the present value of future contributions payable by the State.
2. The State's contributions to the System on account of insurance benefits consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 32.98% of payroll are required to provide the benefits of the System for the average new member of SPRS.
3. Prospective employer normal contributions on account of insurance benefits at the above rates have a present value of \$162,495,763. When this amount is subtracted from \$483,642,034, which is the present value of the total future contributions to be made by the employers, there remains \$321,146,271 as the amount of future accrued liability contributions.
4. It is recommended that the accrued liability contribution rate payable by the State on account of insurance benefits be set at 23.71% of payroll. This rate is sufficient to liquidate the unfunded accrued liability of \$321,146,271 over 29 years on the assumption that the aggregate payroll for non-hazardous and hazardous members will increase by 3.50% each year.
5. The contribution rate for administrative expenses is determined to be 0.20% of payroll.

SECTION V – DERIVATION OF EXPERIENCE GAINS AND LOSSES

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain (loss) for the year ended June 30, 2008 is shown below (\$ millions).

Experience Gain/(Loss) Retirement Benefits

		Amount
(1)	UAAL* as of 6/30/07	\$ 199.1
(2)	Normal cost from last valuation	4.7
(3)	Expected employer contributions	<u>16.0</u>
(4)	Interest accrual: [(1) + (2) - (3)] x .0775	14.2
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$ 202.0
(6)	Change due to plan amendments	0.0
(7)	Change due to new actuarial assumption or methods	0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$ 202.0
(9)	Actual UAAL as of 6/30/08	\$ 236.2
(10)	Gain/(loss): (8) - (9)	\$ (34.2)
(11)	Accrued liabilities as of 6/30/07	\$ 548.0
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year	(6.2)%

*Unfunded actuarial accrued liability.

**Experience Gain/(Loss)
Insurance Benefits**

		Amount	
(1)	UAAL* as of 6/30/07	\$	317.5
(2)	Normal cost from last valuation		17.1
(3)	Expected employer contributions		<u>29.2</u>
(4)	Interest accrual: [(1) + (2) - (3)] x .045		13.7
(5)	Expected UAAL before changes: (1) + (2) - (3) + (4)	\$	319.1
(6)	Change due to plan amendments		0.0
(7)	Change due to new actuarial assumption or methods		0.0
(8)	Expected UAAL after changes: (5) + (6) + (7)	\$	319.1
(9)	Actual UAAL as of 6/30/08	\$	321.1
(10)	Gain/(loss): (8) - (9)	\$	(2.0)
(11)	Accrued liabilities as of 6/30/07	\$	432.8
(12)	Gain/(loss) as percent of actuarial accrued liabilities at start of year		(0.5)%

*Unfunded actuarial accrued liability.

**SPRS MEMBERS
ANALYSIS OF FINANCIAL EXPERIENCE**

**Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
(\$ Millions)**

Type of Activity	Retirement \$ Gain (or Loss) For Year Ending 6/30/08	Insurance \$ Gain (or Loss) For Year Ending 6/30/08
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ (3.3)	\$ 3.2
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	0.3	0.4
Death-in Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	0.7	2.5
Pay or Claims Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss. For insurance, smaller claims increases than assumed creates a gain; larger, a loss.	(5.4)	19.8
New Members. Additional unfunded accrued liability will produce a loss.	(0.4)	(0.9)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	0.7	2.1
Death After Retirement. If retired members live longer than assumed, there is a loss. If not as long, a gain.	(0.7)	2.8
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(26.1)</u>	<u>(31.9)</u>
Gain (or Loss) During Year From Financial Experience	\$ (34.2)	\$ (2.0)
Non-Recurring Items. Adjustments for plan amendments, assumption changes and method changes	<u>0.0</u>	<u>0.0</u>
Composite Gain (or Loss) During Year	\$ (34.2)	\$ (2.0)

SECTION VI – REQUIRED CONTRIBUTION RATES

The valuation balance sheet gives the basis for determining the percentage rates for contributions to be made by the State to the Retirement System. The following tables show the rates of contribution payable by employers as determined from the present valuation for the 2009/2010 fiscal year.

**Required Contribution Rates
Retirement**

Contribution for	Amount	% of Payroll
A. Normal Cost:		
(1) Service retirement benefits	\$ 8,560,341	16.07%
(2) Disability benefits	580,633	1.09
(3) Survivor benefits	218,403	0.41
(4) Total	\$ 9,359,377	17.57%
B. Member Contributions	\$ 4,261,526	8.00%
C. Employer Normal Cost: [A(4) - B]	\$ 5,097,851	9.57%
D. Administrative Expenses	\$ 137,444	0.26%
E. Unfunded Actuarial Accrued Liability Contributions*:		
(1) UAAL Contribution Based on 6/30/07 Valuation:	\$ 11,205,731	22.75%
(2) Change due to:		
a. Active decrements	\$ 135,092	0.25%
b. Pay increases	309,401	0.58
c. Retiree mortality	39,652	0.07
d. Investment return	(39,589)	(0.07)
e. COLA	927,198	1.74
f. Assumption Change	0	0.00
g. Other	952,159	1.78
h. Total Change	\$ 2,323,915	2.65%
(3) UAAL Contribution Based on 6/30/08 Valuation: [E(1) +E(2)h]	\$ 13,529,646	25.40%
F. Total Recommended Employer Contribution Rate: [C+D+E(3)]	\$ 18,764,941	35.23%

* Based on 30 year amortization of the UAAL from June 30, 2007 and 29 years from June 30, 2008

**Required Contribution Rates
Insurance**

Contribution for	Amount	% of Payroll
A. Normal Cost	\$ 17,567,794	32.98%
B. Member Contributions*	\$ 0	0.00%
C. Employer Normal Cost: [A - B]	\$ 17,567,794	32.98%
D. Administrative Expenses	\$ 105,513	0.20%
E. Unfunded Actuarial Accrued Liability**	\$ 12,628,844	23.71%
F. Total Recommended Employer Contribution Rate: [C+D+E]	\$ 30,302,151	56.89%

*The liabilities are net of retiree contributions toward their healthcare.

** Based on 29 year amortization of the UAAL from June 30, 2008

SECTION VII - ACCOUNTING INFORMATION

Governmental Accounting Standards Board Statements 25, 27, 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

**NUMBER OF ACTIVE AND RETIRED MEMBERS
AS OF JUNE 30, 2008**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	1,135
Terminated employees entitled to benefits but not yet receiving benefits	301
Active Members	<u>993</u>
Total	2,429

Another such item is the Schedule of Funding Progress for retirement and insurance benefits separately as shown in the following tables.

**RETIREMENT BENEFITS
SCHEDULE OF FUNDING PROGRESS**

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c))
6/30/2003	\$ 413,063,576	\$ 414,881,459	\$ 1,817,883	99.6%	\$ 43,760,832	4.2%
6/30/2004	385,077,195	437,482,425	52,405,230	88.0	43,835,208	119.6
6/30/2005	353,511,622	458,593,576	105,081,954	77.1	43,720,092	240.4
6/30/2006	344,016,197	516,482,298	172,466,101	66.6	47,743,865	361.2
6/30/2007	348,806,508	547,955,286	199,148,778	63.7	49,247,580	404.4
6/30/2008	350,891,451	587,129,257	236,237,806	59.8	53,269,080	443.5

**INSURANCE BENEFITS
SCHEDULE OF FUNDING PROGRESS**

Actuarial Valuation Date	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / (c))
6/30/2003	\$ 90,747,967	\$ 184,501,205	\$ 93,753,238	49.2%	\$ 43,760,832	214.2%
6/30/2004	96,622,908	197,604,301	100,981,393	48.9	43,835,208	230.4
6/30/2005	100,207,082	234,159,510	133,952,428	42.8	43,720,092	306.4
6/30/2006	105,580,269	582,580,867	477,000,598	18.1	47,743,865	999.1
6/30/2007	115,215,912	432,763,229	317,547,317	26.6	49,247,580	644.8
6/30/2008	123,961,197	445,107,468	321,146,271	27.8	53,269,080	602.9

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2008. Additional information as of the latest actuarial valuation follows.

Retirement Benefits	
Valuation date	6/30/2008
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	29 years
Asset valuation method	5 Year Smoothed Market
Actuarial assumptions:	
Investment rate of return*	7.75%
Projected salary increases*	4.0% - 14.5%
Cost-of-living adjustment	None
*Includes inflation at	3.50%

Insurance Benefits	
Valuation date	6/30/2008
Actuarial cost method	Entry Age
Amortization	Level Percent Closed
Remaining amortization period	29 years
Asset valuation method	5 Year Smoothed Market
Medical Trend Assumption	11.0 - 5.0%
Year of Ultimate Trend	2015
Actuarial assumptions:	
Investment rate of return*	4.50%
*Includes inflation at	3.50%

SCHEDULE A

Valuation Balance Sheet and Solvency Test

The following valuation balance sheets show the assets and liabilities of the retirement system as of the current valuation date of June 30, 2008 and, for comparison purposes, as of the immediately preceding valuation date of June 30, 2007. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date.

**VALUATION BALANCE SHEETS
SHOWING THE ASSETS AND LIABILITIES OF THE
STATE POLICE RETIREMENT SYSTEM**

RETIREMENT BENEFITS

	JUNE 30, 2008	JUNE 30, 2007
ASSETS		
Current actuarial value of assets	\$ 350,891,451	\$ 348,806,508
Prospective contributions		
Member contributions	\$ 35,604,574	\$ 33,817,886
Employer normal contributions	42,610,652	39,644,341
Unfunded accrued liability contributions	<u>236,237,806</u>	<u>199,148,778</u>
Total prospective contributions	<u>\$ 314,453,032</u>	<u>\$ 272,611,005</u>
 Total assets	 <u><u>\$ 665,344,483</u></u>	 <u><u>\$ 621,417,513</u></u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 423,834,095	\$ 395,686,232
Present value of benefits payable on account of active members	239,033,115	223,553,993
Present value of benefits payable on account of inactive members	<u>2,477,273</u>	<u>2,177,288</u>
 Total liabilities	 <u><u>\$ 665,344,483</u></u>	 <u><u>\$ 621,417,513</u></u>

**VALUATION BALANCE SHEET
INSURANCE BENEFITS**

	JUNE 30, 2008	JUNE 30, 2007
ASSETS		
Current actuarial value of assets	\$ 123,961,197	\$ 115,215,912
Prospective contributions		
Normal contributions	\$ 162,495,763	\$ 159,945,230
Unfunded accrued liability contributions	<u>321,146,271</u>	<u>317,547,317</u>
Total prospective contributions	<u>\$ 483,642,034</u>	<u>\$ 477,492,547</u>
 Total assets	 <u><u>\$ 607,603,231</u></u>	 <u><u>\$ 592,708,459</u></u>
LIABILITIES		
Present value of benefits payable on account of present retired members and beneficiaries	\$ 169,176,606	\$ 165,115,867
Present value of benefits payable on account of active members	428,947,986	420,417,317
Present value of benefits payable on account of inactive members	<u>9,478,639</u>	<u>7,175,275</u>
 Total liabilities	 <u><u>\$ 607,603,231</u></u>	 <u><u>\$ 592,708,459</u></u>

The following tables provide the solvency test for SPRS members.

**Solvency Test
Retirement Benefits**

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Actuarial Value of Assets	(1)	(2)	(3)
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)				
6/30/2003*	\$ 35,832,095	\$ 290,012,792	\$ 89,036,572	\$ 413,063,576	100.0%	100.0%	98.0%
6/30/2004*	37,658,106	318,664,694	81,159,625	385,077,195	100.0	100.0	35.4
6/30/2005*	35,670,717	341,398,363	81,524,496	353,511,622	100.0	93.1	0.0
6/30/2006	37,866,774	373,588,145	105,027,379	344,016,197	100.0	81.9	0.0
6/30/2007	39,505,285	397,863,520	110,586,481	348,806,508	100.0	77.7	0.0
6/30/2008	41,391,416	426,311,368	119,426,473	350,891,451	100.0	72.6	0.0

*Reported by prior actuarial firm.

**Solvency Test
Insurance Benefits**

Valuation Date	Aggregate Accrued Liabilities For				Portion of Accrued Liabilities Covered by Reported Asset		
	(1)	(2)	(3)	Actuarial Value of Assets	(1)	(2)	(3)
	Active Member Contributions	Retired Members & Beneficiaries	Active Members (Employer Financed Portion)				
6/30/2003*	\$ 0	\$ 106,317,750	\$ 78,183,455	\$ 90,747,967	100.0%	85.4%	0.0%
6/30/2004*	0	119,104,851	78,499,450	96,622,908	100.0	81.1	0.0
6/30/2005*	0	141,585,694	92,573,816	100,207,082	100.0	70.8	0.0
6/30/2006	0	240,913,868	341,666,999	105,580,269	100.0	43.8	0.0
6/30/2007	0	172,291,142	260,472,087	115,215,912	100.0	66.9	0.0
6/30/2008	0	178,655,245	266,452,223	123,961,197	100.0	69.4	0.0

*Reported by prior actuarial firm.

SCHEDULE B

**Development of Actuarial Value of Assets
Retirement Benefits**

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 344,016,197	\$ 348,806,508				
B. Market Value End of Year	376,381,488	337,358,918				
C. Market Value Beginning of Year	352,841,486	376,381,488				
D. Cash Flow						
D1. Contributions	11,293,952	12,850,624				
D2. Benefit Payments	(37,233,587)	(39,452,886)				
D3. Administrative Expenses	(126,687)	(137,444)				
D4. Investment Expenses	<u>(306,896)</u>	<u>(349,948)</u>				
D5. Net	(26,373,218)	(27,089,654)				
E. Investment Income						
E1. Market Total: B.-C.-D5.	49,913,220	(11,932,916)				
E2. Assumed Rate	7.75%	7.75%				
E3. Amount for Immediate Recognition	26,642,041	28,483,350				
E4. Amount for Phased-In Recognition	23,271,179	(40,416,266)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	4,654,236	(8,083,253)	0	0	0	0
F2. First Prior Year	2,482,933	4,654,236	(8,083,253)	0	0	0
F3. Second Prior Year	(128,096)	2,482,933	4,654,236	(8,083,253)	0	0
F4. Third Prior Year	1,765,427	(128,096)	2,482,933	4,654,236	(8,083,253)	0
F5. Fourth Prior Year	<u>(4,253,012)</u>	<u>1,765,427</u>	<u>(128,096)</u>	<u>2,482,933</u>	<u>4,654,236</u>	<u>(8,083,253)</u>
F6. Total Recognized Investment Gain	4,521,488	691,247	(1,074,180)	(946,084)	(3,429,017)	(8,083,253)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 348,806,508	\$ 350,891,451				
H. Difference Between Market & Actuarial Values	\$ 27,574,980	\$ (13,532,533)	\$ (12,458,353)	\$ (11,512,269)	\$ (8,083,253)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

**Development of Actuarial Value of Assets
Insurance Benefits**

Valuation date June 30:	2007	2008	2009	2010	2011	2012
A. Actuarial Value Beginning of Year	\$ 105,580,269	\$ 115,215,912				
B. Market Value End of Year	132,573,898	121,781,967				
C. Market Value Beginning of Year	110,491,075	132,573,898				
D. Cash Flow						
D1. Contributions	6,858,127	7,521,645				
D2. Benefit Payments	(6,515,053)	(6,767,181)				
D3. Administrative Expenses	(104,872)	(105,513)				
D4. Investment Expenses	<u>(93,044)</u>	<u>(84,947)</u>				
D5. Net	145,158	564,004				
E. Investment Income						
E1. Market Total: B.-C.-D5.	21,937,665	(11,355,935)				
E2. Assumed Rate	4.50%	4.50%				
E3. Amount for Immediate Recognition	5,070,502	6,065,374				
E4. Amount for Phased-In Recognition	16,867,163	(17,421,309)				
F. Phased-In Recognition of Investment Income						
F1. Current Year: 0.20*E4.	3,373,433	(3,484,262)	0	0	0	0
F2. First Prior Year	784,282	3,373,433	(3,484,262)	0	0	0
F3. Second Prior Year	68,955	784,282	3,373,433	(3,484,262)	0	0
F4. Third Prior Year	1,373,499	68,955	784,282	3,373,433	(3,484,262)	0
F5. Fourth Prior Year	<u>(1,180,186)</u>	<u>1,373,499</u>	<u>68,955</u>	<u>784,282</u>	<u>3,373,433</u>	<u>(3,484,262)</u>
F6. Total Recognized Investment Gain	4,419,983	2,115,907	742,408	673,453	(110,829)	(3,484,262)
G. Actuarial Value End of Year:						
A.+D5.+E3.+F6.	\$ 115,215,912	\$ 123,961,197				
H. Difference Between Market & Actuarial Values	\$ 17,357,986	\$ (2,179,230)	\$ (2,921,638)	\$ (3,595,091)	\$ (3,484,262)	\$ 0

The Actuarial Valuation of Assets recognizes assumed investment income (line E3) fully each year. Differences between actual and assumed investment income (line E4) are phased in over a closed 5 year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than market value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than market value. If assumed rates are exactly realized for 4 consecutive years, actuarial value will become equal to market value.

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected by the prior actuarial firm based on the actuarial experience study prepared as of June 30, 2005, submitted January 12, 2006, and adopted by the Board on January 19, 2006, with the exception of the health care cost trend rate which was adopted by the Board on November 15, 2007.

INVESTMENT RATE OF RETURN: 7.75% per annum, compounded annually for retirement benefits. A blended rate is necessary to meet GASB Statement 43 requirements for insurance benefits. The current blended rate for SPRS is 4.50%.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases for members are as follows and include inflation at 3.50% per annum:

Service	Annual Rates of		
	Merit & Seniority	Base (Economy)	Increase Next Year
0-1	11.0%	3.5%	14.5%
1-2	4.0	3.5	7.5
2-3	3.5	3.5	7.0
3-4	3.0	3.5	6.5
4-5	2.5	3.5	6.0
5-6	2.0	3.5	5.5
6-7	1.5	3.5	5.0
7-8	1.5	3.5	5.0
8-9	1.0	3.5	4.5
9-10	1.0	3.5	4.5
10 & over	0.5	3.5	4.0

SEPARATIONS FROM ACTIVE SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal and retirement are shown in the following tables:

Age	Withdrawal and Vesting*	Death**		Disability	Service Retirement***	
		Male	Female		Service	Rate
20	2.50%	0.05%	0.03%	0.07%	20	20.0%
25	2.28	0.07	0.03	0.09	25	20.0
30	1.83	0.08	0.04	0.12	30	45.0
35	1.31	0.09	0.05	0.17	35	70.0
40	0.81	0.11	0.07	0.27		
45	0.41	0.16	0.10	0.44		
50		0.26	0.14	0.75		
55		0.44	0.23	1.23		
60		0.80	0.44	1.95		

* Select rates of withdrawal apply in the first five years of employment regardless of age. The rates are 10.0%, 7.0%, 5.0%, 4.0% and 3.5%, respectively.

** 75% are presumed to be non-duty related, and 25% are assumed to be duty related.

*** The annual rate of service retirement is 100% at age 55.

HEALTH CARE COST TREND RATES: Following is a chart detailing trend assumptions.

Fiscal Year Ended	Trend
2009	11.0%
2010	10.0
2011	9.0
2012	8.0
2013	7.0
2014	6.0
2015 and beyond	5.0

AGE RELATED MORBIDITY: Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims was assumed to be:

Participant Age	Annual Increase
65-69	3.0%
70-74	2.5
75-79	2.0
80-84	1.0
85-89	0.5
90 and over	0.0

ANTICIPATED PLAN PARTICIPATION: The assumed annual rates of plan participation and spouse coverage are as follows:

Participation	100%
Spouse Coverage	100%

Following are charts detailing expected premiums for pre- and post-Medicare for the year following the valuation date.

**MEDICAL INSURANCE CONTRIBUTION RATES
PRE-MEDICARE ELIGIBLE**

2008					
	Single	Parent Plus	Couple	Family	
TOTAL PREMIUMS					
Essential	N/A	\$ 617.12	\$ 947.44	\$ 1,056.56	
Enhanced	\$ 484.24	\$ 742.74	\$ 1,137.18	\$ 1,267.40	
Premier	\$ 501.20	\$ 772.06	\$ 1,175.32	\$ 1,309.76	
Select	\$ 469.00	\$ 703.50	\$ 989.18	\$ 1,128.48	

2009					
	Single	Parent Plus	Couple	Family	
TOTAL PREMIUMS					
Standard PPO	\$ 446.24	\$ 690.00	\$ 1,044.48	\$ 1,162.16	
Optimum PPO	\$ 566.20	\$ 821.46	\$ 1,265.10	\$ 1,407.32	
Capitol Choice	\$ 545.08	\$ 826.38	\$ 1,249.74	\$ 1,383.52	

MEDICARE ELIGIBLE

Effective January 1, 2009	Self-Supporting (Used for OPEB claims cost)	Funding rates (Used for Retiree Contribution Amounts)
Available Plan		
Kentucky Retirement System Health Plan - Medical Only	\$ 162.48	\$ 162.00
Kentucky Retirement System Health Plan - PLUS	\$ 203.05	\$ 267.00
Kentucky Retirement System Health Plan - PREMIUM	\$ 363.18	\$ 338.00

Above amounts are shown as average retiree costs. In the valuation, the claims costs are converted to age 65 amounts and age adjusted.

DEATH AFTER RETIREMENT: The rates of mortality for the period after service retirement are according to the 1983 Group Annuity Mortality Table for all retired members and beneficiaries as of June 30, 2006 and the 1994 Group Annuity Mortality Table for all other members. The Group Annuity Mortality Table set forward 5 years is used for the period after disability retirement.

PERCENT MARRIED: 100% of employees are assumed to be married, with the wife 3 years younger than the husband.

DEPENDENT CHILDREN: For hazardous members' duty-related death benefits, it is assumed that the member is survived by two dependent children each age 6.

UNUSED SICK LEAVE: It is assumed that a member will be granted one and one-half year of service credit for unused sick leave at termination of employment.

ACTUARIAL METHOD: Entry age normal cost method. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability. For pre-Medicare retiree healthcare liabilities, the current premium charged by the Kentucky Employees' Health Plan (KEHP) is used as the base cost is projected forward using the healthcare trend assumption shown above. No implicit rate subsidy is calculated or recognized as the subsidy is the responsibility of KEHP. For the Medicare-eligible retirees, claims were analyzed and current premiums were utilized with appropriate aging factors applied.

ASSETS: Actuarial value, as developed in Schedule B. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected market value.

SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

This schedule summarizes the major retirement benefit provisions of SPRS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan Year: July 1 through June 30

Normal Retirement:

<i>Age Requirement</i>	55
<i>Service Requirement</i>	None
<i>Amount</i>	If a member has at least 60 months of service, the monthly benefit is 2.50% times final average compensation time years of service.

Final compensation is the average salary during the three highest paid fiscal years. If the months of service credit during the highest three-year period are less than twenty-four, one or more additional fiscal years shall be used.

If a member has less than 60 months of service, the monthly benefit is the actuarial equivalent of two times the member's contributions with interest.

Early Retirement:

<i>Requirement</i>	Age 50 with 15 years of service or any age with 20 years service.
<i>Amount</i>	Normal retirement benefit reduced by 6.5% per year for the first five years and 4.5% per year for the next five years for each year the member is younger than age 55 or has less than 20 years service, whichever is smaller.

Disability:

<i>Age Requirement</i>	None
<i>Service Requirement</i>	60 months

<i>Members whose participation began before 8/1/2004</i>	Normal retirement benefit except that service credit will be added to total service for the period from the last day of plan employment to the member's 55th birthday or until the combined total service as of the last day of paid employment and added service equals 20 years. The total amount of service credit added shall not exceed the member's actual service credit on the last day of paid employment. For employees with 20 or more years of service credit, actual service credit will be used.
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A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay.

Members whose participation began on or after 8/1/2004

Normal retirement benefit based on actual service with no penalty or, if larger, 25% of the Final Rate of Pay. May apply for disability even after normal retirement age.

Vesting:

Age Requirement

None

Service Requirement

60 months. Service purchased after August 1, 2004 does not count toward vesting insurance benefits. Service purchased by employees who began participating on or after August 1, 2004 does not count toward vesting retirement benefits.

Amount

Normal retirement benefit deferred to normal retirement age or reduced benefit payable at early retirement age.

Normal Retirement Age

55

Pre-Retirement Death Benefit (not in line of duty):

Requirement

Any age with 60 months service or age 65 with 48 months service.

Amount

Benefit equal to the benefit the member would have received had the member retired on the day before the date of death and elected a 100% joint and survivor form. Benefit is actuarially reduced if member is less than age 55 at date of death.

Spouse's Pre-Retirement Death Benefit (in line of duty):

Requirement

None

Amount

The spouse may choose (1) a \$10,000 lump sum payment and monthly payments of 25% of the member's final monthly rate of pay or (2) benefits based on the member's age, years of service and final compensation at date of death.

Dependent Non-Spouse's Death Benefit (in line of duty):

Requirement

None

Amount

The non-spouse may choose (1) a \$10,000 lump sum payment or (2) benefits based upon the member's age, years of service and final compensation at date of death.

Dependent Child's Death Benefit (in line of duty):

<i>Requirement</i>	None
<i>Amount</i>	10% of member's final monthly rate of pay up to a maximum of 40%.

Post-Retirement Death Benefit:

<i>Lump-sum Benefit</i>	\$5,000
<i>Husband and Wife</i>	The choice of payment option selected by the member will determine the monthly benefits provided to the beneficiary upon the member's death.

Insurance Plan for Retirees:

<i>Members whose participation began before July 1, 2003</i>	The Retirement System pays a portion of medical premiums for retirees, their dependents and beneficiaries. The Insurance Fund will pay 0%, 25%, 50%, 75%, or 100% of the premiums depending on retiree eligibility as reported by the System. For Medicare-eligible retirees, the percentage paid by the Insurance Fund is applied to the funding rate premiums rather than the self-supporting amounts.
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<i>Members whose participation began on or after July 1, 2003</i>	The Retirement System pays \$17.94 per month per year of service for retirees, and \$11.96 per month per year of service for surviving spouses employees. "Line of duty" insurance benefits will be calculated as if the member had at least 20 years of service. These amounts are shown as of the valuation date and are indexed annually based on the CPI.
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Member Contributions:	8% of salary.
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SCHEDULE E

DETAILED TABULATIONS OF THE DATA

**Schedule of Retired Members Added to and Removed From Rolls
Last Six Fiscal Years**

Year Ending June 30	2003*	2004*	2005*	2006	2007	2008
			<u>Number</u>			
Beginning of Year	897	941	992	1,036	1,067	1,105
Added	53	62	50	43	49	42
Removed	9	11	6	10	11	12
End of Year	941	992	1,036	1,067	1,105	1,135
			<u>Annual Allowances</u>			
Beginning of Year	N/A	\$ 28,115,500	\$ 30,805,600	\$ 32,983,900	\$ 34,651,251	\$ 37,208,377
Added	2,040,300	2,580,100	1,813,000	1,943,760	2,836,956	4,330,608
Removed	135,000	189,900	159,600	276,409	279,830	245,968
End of Year	\$ 28,115,500	\$ 30,805,600	\$ 32,983,900	\$ 34,651,251	\$ 37,208,377	\$ 41,293,017
% Increase in Allowances	N/A	9.57%	7.07%	5.06%	7.38%	10.98%
Average Annual Allowance	\$ 29,878	\$ 31,054	\$ 31,838	\$ 32,475	\$ 33,673	\$ 36,382

*Reported by prior actuarial firm.

Retired Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	91	\$ 270,613.82	5	\$ 13,896.30	96	\$ 284,510.12
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	115	327,339.52	1	3,336.41	116	330,675.93
66-2/3% to Beneficiary	79	277,478.57	1	2,832.04	80	280,310.61
50% to Beneficiary	75	254,517.07	0	0.00	75	254,517.07
Pop-up Option	361	1,215,311.71	1	4,081.24	362	1,219,392.95
10 Years Certain	3	13,369.70	0	0.00	3	13,369.70
10 Years Certain & Life	29	87,538.72	0	0.00	29	87,538.72
Social Security Option						
Age 62 Basic	33	110,679.36	0	0.00	33	110,679.36
Age 62 Survivorship	153	423,789.44	1	4,918.32	154	428,707.76
Parital Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	0	0.00	0	0.00	0	0.00
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	10	27,889.60	1	3,645.42	11	31,535.02
20 Years Certain & Life	29	85,817.37	1	2,616.58	30	88,433.95
5 Years Certain	0	0.00	0	0.00	0	0.00
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	1	429.02	1	429.02
PLSO 12 Month Survivor	4	11,817.90	0	0.00	4	11,817.90
PLSO 24 Month Survivor	3	6,994.65	0	0.00	3	6,994.65
PLSO 36 Month Survivor	8	14,974.83	0	0.00	8	14,974.83
Total	993	\$ 3,128,132.26	12	\$ 35,755.33	1,005	\$ 3,163,887.59

Beneficiary Lives Summary

	Male Lives		Female Lives		Total	
	Number	Monthly Benefits	Number	Monthly Benefits	Number	Monthly Benefits
Basic Form	0	\$ 0.00	4	\$ 2,835.23	4	\$ 2,835.23
Straight Life (Old Plan)	0	0.00	0	0.00	0	0.00
Joint & Survivor						
100% to Beneficiary	2	3,903.44	57	148,367.62	59	152,271.06
66-2/3% to Beneficiary	1	744.26	2	3,661.65	3	4,405.91
50% to Beneficiary	1	1,208.08	15	21,948.61	16	23,156.69
Pop-up Option	0	0.00	12	28,956.94	12	28,956.94
10 Years Certain	1	550.26	1	2,735.46	2	3,285.72
10 Years Certain & Life	0	0.00	0	0.00	0	0.00
Social Security Option						
Age 62 Basic	0	0.00	1	3,069.46	1	3,069.46
Age 62 Survivorship	0	0.00	22	46,375.23	22	46,375.23
Parital Deferred (Old Plan)	0	0.00	0	0.00	0	0.00
Widows Age 60	0	0.00	0	0.00	0	0.00
Dependent Child	3	895.29	2	541.17	5	1,436.46
Refund	0	0.00	0	0.00	0	0.00
15 Years Certain & Life	0	0.00	0	0.00	0	0.00
20 Years Certain & Life	0	0.00	5	8,010.17	5	8,010.17
5 Years Certain	1	3,394.25	0	0.00	1	3,394.25
PLSO 12 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 24 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 36 Month Basic	0	0.00	0	0.00	0	0.00
PLSO 12 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 24 Month Survivor	0	0.00	0	0.00	0	0.00
PLSO 36 Month Survivor	0	0.00	0	0.00	0	0.00
Total	9	\$ 10,695.58	121	\$ 266,501.54	130	\$ 277,197.12

**Retired and Beneficiary Information June 30, 2008
Tabulated by Attained Ages**

Attained Age	Retirement		Disability Retirement		Survivors and Beneficiaries		Total	
	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits	No.	Annual Benefits
Under 45	21	\$ 628,995	4	\$ 41,077	7	\$ 44,311	32	\$ 714,384
45-49	74	2,597,458	5	94,356	5	82,822	84	2,774,636
50-54	113	4,069,635	6	101,573	7	73,205	126	4,244,413
55-59	280	12,168,195	7	101,513	17	368,511	304	12,638,219
60-64	220	8,868,849	7	165,458	20	460,257	247	9,494,563
65-69	116	3,697,450	1	1,065	9	289,950	126	3,988,465
70-74	65	2,228,283	4	95,590	10	415,971	79	2,739,844
75-79	45	1,697,038	2	11,904	22	615,972	69	2,324,914
80-84	27	1,234,724	0	0	24	727,070	51	1,961,794
85-89	7	145,343	0	0	9	248,297	16	393,640
90 & Over	1	18,145	0	0	0	0	1	18,145
Totals	969	\$ 37,354,115	36	\$ 612,536	130	\$ 3,326,365	1,135	\$ 41,293,017

**Total Active Members as of June 30, 2008
Tabulated by Attained Ages and Years of Service**

Attained Age	Years of Service to Valuation Date								Totals
	0-4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 26	27 - 29	30+	
Under 20	21								21
Avg Pay	\$17,664								\$17,664
20-24	22								22
Avg Pay	\$35,549								\$35,549
25-29	102	28							130
Avg Pay	\$41,818	\$48,675							\$43,295
30-34	62	125	21						208
Avg Pay	\$41,178	\$48,778	\$57,227						\$47,366
35-39	33	74	134	23	4				268
Avg Pay	\$41,062	\$48,856	\$57,953	\$62,693	\$64,185				\$53,861
40-44	7	21	42	77	30	3			180
Avg Pay	\$44,043	\$48,552	\$60,121	\$65,856	\$70,054	\$71,776			\$62,449
44-49	8	6	11	34	38	10	4		111
Avg Pay	\$38,592	\$42,830	\$55,191	\$64,863	\$71,945	\$67,838	\$74,346		\$63,854
50-54			2	3	12	12	7	6	42
Avg Pay			\$57,900	\$65,444	\$68,016	\$72,039	\$75,423	\$80,140	\$71,467
55-59						1	3	2	6
Avg Pay						\$64,668	\$81,768	\$85,896	\$80,294
60-64								3	3
Avg Pay								\$91,548	\$91,548
65-69			1						1
Avg Pay			\$65,436						\$65,436
70 & over		1							1
Avg Pay		\$48,816							\$48,816
Totals	255	255	211	137	84	26	14	11	993
Avg Pay	\$38,994	\$48,631	\$58,204	\$65,069	\$70,339	\$70,110	\$76,475	\$84,298	\$53,645

