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Teachers' Retirement System of the State of Kentucky Report of the Actuary on the Annual Valuation

Prepared as of June 30, 2011

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December 14, 2011

Board of Trustees
Teachers' Retirement System of the
State of Kentucky
479 Versailles Road
Frankfort, KY 40601-3800

Members of the Board:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that the actuary shall make an actuarial valuation of the System. We have submitted the results of the annual actuarial valuation prepared as of June 30, 2011. While not verifying the data at source, the actuary performed tests for consistency and reasonability. The combined member and state contributions for the fiscal year ending June 30, 2014 required to support the benefits of the System are 29.99% of payroll for university members hired before July 1, 2008, 30.99% of payroll for university members hired on and after July 1, 2008, 32.95% of payroll for non-university members hired before July 1, 2008, and 33.95% of payroll for non-university members hired on and after July 1, 2008.

These rates represent an increase since the previous valuation in the Pension required employer contribution rate of 0.58% of payroll for the 2013/2014 fiscal year. In addition, there has been a net decrease in the expected state special appropriation from 3.69% to 3.50%, or 0.19% of payroll and a decrease in the amount required for life insurance benefits from 0.05% to 0.03%, or -0.02%. Therefore, the net impact on the required increase in the total employer contribution rate is 0.75% of payroll.

For the 2013/2014 fiscal year, in addition to the State statutory contribution rates and the state special appropriation, there is a required increase in the employer contribution rate of 8.02%; 0.75% from this valuation and 7.27% from the previous valuation. In order to maintain the actuarial soundness of the retirement system, the entire required contributions will need to be made without any being used as a Stabilization Contribution for the Medical Insurance Fund.

Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2010. These revised changes were adopted by the Board on September 19, 2011 and are discussed in depth on pages 4 and 5 of the report. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the entry age normal cost method.

Five-year market related value of plan assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase by 4.0% annually. The assumptions recommended by the actuary and adopted by the Board are reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

We have prepared the trend information shown in the Schedule of Funding Progress in the Financial Section of the Annual Report and Schedule A, Schedule B, Schedule C, Solvency Test and Analysis of Financial Experience shown in the Actuarial Section of the Annual Report.

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time. A pension obligation bond was issued August 26, 2010 and was used to repay the balances of a substantial portion of the loans previously made to the Medical Insurance Fund.

This is to certify that the independent consulting actuary is a member of the American Academy of Actuaries and has experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

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.

Assuming that contributions to the System are made by the employer from year to year in the future at rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Respectfully submitted,

Edward A. Macdonald, ASA, FCA, MAAA
President

Edward J. Koebel, EA, FCA, MAAA
Principal and Consulting Actuary

EAM/EJK:kc

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TEACHERS' RETIREMENT SYSTEM
OF THE STATE OF KENTUCKY
REPORT OF ACTUARY ON THE VALUATION
PREPARED AS OF JUNE 30, 2011

SECTION I - SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the valuation and a comparison with the results of the previous valuation are summarized below (all dollar amounts are $1,000's):

Valuation Date	June 30, 2011	June 30, 2010
Number of active members	76,349	76,387
Annual salaries	$ 3,451,756	$ 3,321,614
Number of annuitants and beneficiaries	44,419	43,134
Annual allowances	$ 1,433,386	$ 1,352,158
Assets:		
Market value	$ 15,130,606	$ 12,456,619
Actuarial value	$ 14,908,138	$ 14,851,330
Unfunded actuarial accrued liability	$ 11,060,554	$ 9,492,986
Funded Ratio	57.4%	61.0%
Amortization period (years)	30	30

Contribution rates are shown separately for university and non-university members on the following pages.

CONTRIBUTION RATES FOR UNIVERSITY MEMBERS

Valuation Date	June 30, 2011		June 30, 2010	
For fiscal year ending:	**June 30, 2014**		**June 30, 2013**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	11.77%	11.77%	13.31%	13.31%
Accrued liability	18.22	19.22	16.10	17.10
Total	29.99%	30.99%	29.41%	30.41%
Member	7.625%	7.625%	7.625%	7.625%
State (ARC)	22.365	23.365	21.785	22.785
Total	29.99%	30.99%	29.41%	30.41%
Life Insurance Fund:				
State	0.03%	0.03%	0.05%	0.05%
Medical Insurance Fund:				
Member	1.75%	1.75%	1.43%	1.75%
State Match	1.75	0.75	1.43	0.75
State Additional	0.00	0.00	0.00	0.00
Total	3.50%	2.50%	2.86%	2.50%
Total Contributions	33.52%	33.52%	32.32%	32.96%
Member Statutory	9.375%	9.375%	9.055%	9.375%
State Statutory	12.625	12.625	12.305	12.625
Required Increase	8.02	8.02	7.27	7.27
State Special	3.50	3.50	3.69	3.69
Total	33.52%	33.52%	32.32%	32.96%

CONTRIBUTION RATES FOR NON-UNIVERSITY MEMBERS

Valuation Date	June 30, 2011		June 30, 2010	
For fiscal year ending:	**June 30, 2014**		**June 30, 2013**	
	Members hired before 7/1/2008	**Members on and after 7/1/2008**	**Members hired before 7/1/2008**	**Members on and after 7/1/2008**
Pension Plan:				
Normal	15.05%	15.05%	17.21%	17.21%
Accrued liability	17.90	18.90	15.16	16.16
Total	32.95%	33.95%	32.37%	33.37%
Member	9.105%	9.105%	9.105%	9.105%
State (ARC)	23.845	24.845	23.265	24.265
Total	32.95%	33.95%	32.37%	33.37%
Life Insurance Fund:				
State	0.03%	0.03%	0.05%	0.05%
Medical Insurance Fund:				
Member	2.25%	2.25%	1.75%	1.75%
State Match	2.25	1.25	1.75	0.75
State Additional	0.00	0.00	0.00	0.00
Total	4.50%	3.50%	3.50%	2.50%
Total Contributions	37.48%	37.48%	35.92%	35.92%
Member Statutory	11.355%	11.355%	10.855%	10.855%
State Statutory	14.605	14.605	14.105	14.105
Required Increase	8.02	8.02	7.27	7.27
State Special	3.50	3.50	3.69	3.69
Total	37.48%	37.48%	35.92%	35.92%

2. The valuation includes only the assets and liabilities associated with the pension plan. The valuation of the Medical Insurance Fund and the Active and Retired Life Insurance Benefits will be prepared separately.

3. Comments on the valuation results as of June 30, 2011 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.

4. Since the previous valuation, various assumptions and methods have been revised to reflect the results of the experience investigation for the five-year period ending June 30, 2010. The changes adopted by the Board on September 19, 2011, include various revised demographic and economic assumptions, a valuation interest smoothing methodology and a change in the actuarial cost method from Projected Unit Credit to the Entry Age Normal. Schedule D of this report shows the development of the smoothed interest rate and Schedule F shows a brief description of the actuarial cost method. The following chart summarizes all the changes adopted by the Board that are reflected in the valuation.

Summary of Assumptions and Methods	
Economic Assumptions	
Price Inflation	Changed assumed rate from 4.00% to 3.50%
Ultimate Investment Rate of Return *	No change to current assumption
Wage Inflation	No change to current assumption
Demographic Assumptions	
Withdrawal	Changed rates to more closely reflect experience
Pre-Retirement Mortality	Changed to prescribed table that matches Post-Retirement Mortality
Disability	Lowered rates for most ages
Service Retirement	Changed rates to more closely reflect experience
Post-Retirement Mortality	Changed to RP2000 Combined Mortality Table
Salary Scale	No change to current assumption
Other Assumptions and Methods Changes	
Actuarial Cost Method	Change from Projected Unit Credit (PUC) to Entry Age Normal (EAN) Cost Method
Unused Sick Leave	Increase Load Assumption from 1% to 2%
Asset Smoothing	No change to current method
Interest Smoothing*	Change to interest smoothing methodology

* The Board adopted a Smoothed Interest Rate Methodology whereby the investment rate of return expected to be earned during a 25 year look forward period beginning on the valuation date and the actual returns earned during the 5 year look back period will result in an average rate of return over the combined 30 year period equivalent to the Ultimate Investment Rate of Return of 7.50%. A corridor of 0.50% around the ultimate investment rate of return will be applied in determining the smoothed interest rate.

5. Schedule B shows the development of the actuarial value of assets. Schedule E of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.
6. Provisions of the System, as summarized in Schedule G, were taken into account in the current valuation. The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature.

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 2011 on the basis of which the valuation was prepared.

GROUP	NUMBER	ANNUAL SALARIES ($1,000's)
Full Time	59,089	$ 3,337,547
Part Time	17,260	114,209
Total	76,349	$ 3,451,756

The table reflects the active membership for whom complete valuation data was submitted. The results of the valuation were adjusted to take account of inactive members and members for whom incomplete data was submitted.

2. The following table shows the number and annual retirement allowances payable to annuitants and beneficiaries on the roll of the Retirement System as of the valuation date.

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 2011

GROUP	NUMBER	ANNUAL RETIREMENT ALLOWANCES[1] ($1,000's)
Service Retirements	38,755	$ 1,310,584
Disability Retirements	2,379	62,730
Beneficiaries of Deceased Members	3,285	60,072
Total	44,419	$ 1,433,386

[1] Includes cost-of-living adjustments effective through July 1, 2011.

3. Table 1 of Schedule H shows a distribution by age and years of service of the number and annual salaries of active members included in the valuation, while Table 2 shows the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

1. As of June 30, 2011 the market value of Pension Plan assets for valuation purposes held by the System amounted to $15,130,606,279. This value excludes assets in the Medical Insurance Fund, the 403(b) Program Reserve Fund, and the Life Insurance Fund, which are not included in the assets used for Pension Plan valuation purposes.
2. The five-year market related value of Pension Plan assets used for valuation purposes as of June 30, 2011 was $14,908,138,356. Schedule B shows the development of the actuarial value of assets as of June 30, 2011.
3. Schedule C shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Pension Plan.

SECTION IV - COMMENTS ON VALUATION

1. Schedule A of this report contains the valuation balance sheet which shows the present and prospective assets and liabilities of the System as of June 30, 2011. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule E and Schedule F.
2. The valuation balance sheet shows that the System has total prospective liabilities of $15,233,865,216 for benefits expected to be paid on account of the present active members. The liability on account of benefits payable to annuitants and beneficiaries amounts to $15,330,710,085 of which $965,191,446 is for special appropriations remaining to be made toward funding minimum annuities, ad hoc increases and sick leave allowances granted after 1981. The liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is $227,185,346. The total prospective liabilities of the System amounts to $30,791,760,647. Against these liabilities, the System has present assets for valuation purposes of $14,908,138,356. When this amount is deducted from the total liabilities of $30,791,760,647, there remains $15,883,622,291 as the present value contributions to be made in the future.

3. The employer's contributions to the System consist of normal contributions and accrued liability contributions. The valuation indicates that employer normal contributions at the rate of 11.77% of payroll for University and 15.05% of payroll for Non-University are required.

4. Prospective normal employer and employee contributions have a present value of $4,823,068,059. When this amount is subtracted from $15,883,622,291, which is the present value of the total future contributions to be made by the employer, there remains $11,060,554,232 as the amount of future unfunded accrued liability contributions.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Section 161.540 of the retirement law provides that each university member who becomes a member before July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member before July 1, 2008 will contribute 11.355% of annual salary. Of this amount, for each university member, 1.75% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 2.25% is paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.

2. Section 161.540 also provides that each university member who becomes a member on or after July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member on or after July 1, 2008 will contribute 11.355% of annual salary. Of this amount, 1.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university for university members and 9.105% for non-university members applicable for the retirement benefits taken into account in the valuation.

3. Section 161.550 provides that the State will match the member contributions and contribute a supplemental 3.25% of members' salaries towards discharging the System's unfunded obligations. The System was amended as of June 30, 2000 to allow the Board to allocate up to a maximum of the entire 3.25% to the Medical Insurance Fund. **For the 2013/2014 fiscal year, we recommend that the Board allocate the entire 3.25% towards the Pension Plan.**

4. Therefore for university members, 10.875% of the salaries of active members who become members before July 1, 2008 and 11.875% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. For non-university members, 12.355% of the salaries of active members who become members before July 1, 2008 and 13.355% of the salaries of active members who become members on or after July 1, 2008 is funded by statute or supplemental funding for the Pension Plan and Life Insurance Fund. Of these amounts, 0.03% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 8.02% of payroll for both university and non-university will be required in order to maintain the amortization of the unfunded liability of the Pension Plan within a 30-year period. An additional special appropriation of 3.50% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 22.365% for university members who become members before July 1, 2008 and 23.365% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 23.845% for non-university members who become members before July 1, 2008 and 24.845% for non-university members who become members on or after July 1, 2008. The total member and employer contribution rates to the Pension Plan are shown in the following table.

CONTRIBUTION RATES BY SOURCE

UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	9.375%	9.375%
Statutory Medical Insurance Fund	(1.75)	(1.75)
Contribution to Pension Plan	7.625%	7.625%
Employer		
Statutory Matching Total	9.375%	9.375%
Statutory Medical Insurance Fund	(1.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	11.875%
Life Insurance	(0.03)%	(0.03)%
Additional to Maintain 30-Year Amortization	8.02	8.02
Special Appropriation	3.50	3.50
Contribution to Pension Plan	22.365%	23.365%
Total Contribution to Pension Plan	29.99%	30.99%

NON-UNIVERSITY

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Member		
Statutory Total	11.355%	11.355%
Statutory Medical Insurance Fund	(2.25)	(2.25)
Contribution to Pension Plan	9.105%	9.105%
Employer		
Statutory Matching Total	11.355%	11.355%
Statutory Medical Insurance Fund	(2.25)	(1.25)
Supplemental Funding	3.25	3.25
Subtotal	12.355%	13.355%
Life Insurance	(0.03)%	(0.03)%
Additional to Maintain 30-Year Amortization	8.02	8.02
Special Appropriation	3.50	3.50
Contribution to Pension Plan	23.845%	24.845%
Total Contribution to Pension Plan	32.95%	33.95%

4. The valuation indicates that normal contributions at the rate of 11.77% of active university members' salaries and 15.05% of active non-university members' salaries are required. The difference between the total contribution rate and the normal rate remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability rate is 18.22% for university members hired before July 1, 2008, 19.22% for university members hired on and after July 1, 2008, 17.90% for non-university members hired before July 1, 2008, and 18.90% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.50% of payroll to be made by the State. These rates are shown in the following table.

ACTUARIALLY DETERMINED CONTRIBUTION RATES

RATE	PERCENTAGE OF ACTIVE MEMBERS' SALARIES			
	UNIVERSITY		NON-UNIVERSITY	
	Members hired before 7/1/2008	Members hired on and after 7/1/2008	Members hired before 7/1/2008	Members hired on and after 7/1/2008
Normal	11.77%	11.77%	15.05%	15.05%
Accrued liability*	18.22	19.22	17.90	18.90
Total	29.99%	30.99%	32.95%	33.95%

* Includes special appropriations of 3.50% of payroll to be made by the State.

5. The unfunded actuarial accrued liability amounts to $11,060,554,232 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.

2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 8.02%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.

3. During the 2005 through 2010 fiscal years, a portion of the contributions required for the pension fund were allocated as loans to the Medical Insurance Fund for Stabilization Funding. Beginning with the 2009 fiscal year, additional contributions have also been allocated as loans for non-single subsidy funding. Payments are being made to repay these loans. In August 2010, a pension obligation bond was issued with proceeds used to fully repay the loans for the Stabilization Funding. In addition, it is our understanding that beginning with the 2011 fiscal year, there will be no further loans for Stabilization Funding. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2011:

MEDICAL INSURANCE FUND STABILIZATION FUNDING

	Loan Amount	Annual Payment	Balances as of June 30, 2011
2004/2005	$29,169,700	$0	$0
2005/2006	62,294,800	0	0
2006/2007	73,000,000	0	0
2007/2008	125,000,000	0	0
2008/2009*	133,400,000	1,228,900	7,343,046
2009/2010**	134,200,000	1,345,200	8,746,642
2010/2011***	10,700,000	1,405,600	10,700,000
Total	$567,764,500	$3,979,700	$26,789,688

* Includes $125,000,000 for Stabilization Funding and $8,400,000 for non-single subsidy funding.
** Includes $125,000,000 for Stabilization Funding and $9,200,000 for non-single subsidy funding.
*** For non-single subsidy funding.

4. There are no excess assets or contributions available to provide additional benefits, and there is a cumulative increase in the required employer contribution of 8.02% of payroll for the fiscal year ending June 30, 2014, as shown in the following table:

Valuation Date	Fiscal Year	Increase	Cumulative Increase
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21%	1.32%
June 30, 2006	June 30, 2009	0.56%	1.88%
June 30, 2007	June 30, 2010	0.58%	2.46%
June 30, 2008	June 30, 2011	1.13%	3.59%
June 30, 2009	June 30, 2012	2.22%	5.81%
June 30, 2010	June 30, 2013	1.46%	7.27%
June 30, 2011	June 30, 2014	0.75%	8.02%

In addition, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within 30 years. Any further benefit improvements must be accompanied by the entire additional contributions necessary to support the benefits.

SECTION VII – ANALYSIS OF FINANCIAL EXPERIENCE

The following table shows the estimated gain or loss from various factors that resulted in an increase of $1,567,568,343 in the unfunded accrued liability from $9,492,985,889 to $11,060,554,232 during the year ending June 30, 2011.

ANALYSIS OF FINANCIAL EXPERIENCE
(Dollar amounts in thousands)

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	$ 711,974
Expected Accrued liability contribution	(331,360)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2010/2011 fiscal year with interest	11,101
Repayment of prior year's MIF Stabilization Funding with interest	(2,671)
Experience:	
Valuation asset growth	521,208
Pensioners' mortality	11,676
Turnover and retirements	13,570
New entrants	53,011
Salary increases	(164,032)
Amendments	0
Assumption changes	750,720
Method changes	(7,629)
Total	$ 1,567,568

SECTION VIII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 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, 2011

GROUP	NUMBER
Retirees and beneficiaries currently Receiving benefits	44,419
Terminated employees entitled to Benefits but not yet receiving benefits	6,135
Active plan members	76,349
Total	126,903

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS
(Dollar amounts in thousands)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL)* (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b - a) / c)
6/30/2006**	$14,857,641	$20,324,781	$ 5,467,140	73.1%	$2,859,477	191.2%
6/30/2007	15,284,955	21,254,974	5,970,019	71.9	2,975,289	200.7
6/30/2008	15,321,325	22,460,304	7,138,979	68.2	3,190,332	223.8
6/30/2009	14,885,981	23,400,426	8,514,445	63.6	3,253,077	261.7
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8
6/30/2011***	14,908,138	25,968,692	11,060,554	57.4	3,451,756	320.4

* Funding method Projected Unit Credit prior to 6/30/2011
Funding method Entry Age Normal 6/30/2011 and after

** Reflects change in decremental assumptions

*** Reflects change in assumptions and methods

3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2011. Additional information as of the latest actuarial valuation follows.

Valuation date	6/30/2011
Actuarial cost method	Entry Age
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Asset valuation method	5-year smoothed market
Actuarial assumptions:	
Ultimate Investment Rate of Return*	7.50%
Projected salary Increases**	4.00 - 8.20%
Cost-of-living adjustments	1.50% Annually
*Includes price inflation at	3.50%
**Includes wage inflation at	4.00%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ending June 30	Annual Required Contributions	Percentage Contributed
2006	$464,152,466	87%
2007	494,565,369	88
2008	563,789,483	83
2009	600,282,735	74
2010	633,938,088	76
2011	678,741,428	153

5. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2011. Since KTRS is a cost sharing multi employer pension plan, GASB Statement 27 does not require the participating employers to disclose this information.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending June 30, 2011

(a) Employer annual required contribution	$ 678,741,428
(b) Interest on net pension obligation	43,224,614
(c) Adjustment to annual required contribution	30,809,803
(d) Annual pension cost: (a) + (b) – (c)	$ 691,156,239
(e) Employer contributions made for fiscal year ending June 30, 2011	1,037,935,993
(f) Increase (decrease) in net pension obligation: (d) – (e)	$(346,779,754)
(g) Net pension obligation beginning of fiscal year	576,328,182
(h) Net pension obligation end of fiscal year: (f) + (g)	$ 229,548,428

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2009	$605,671,714	73%	$413,292,362
June 30, 2010	642,840,908	75	576,328,182
June 30, 2011	691,156,239	150	229,548,428

SCHEDULE A

VALUATION BALANCE SHEET
SHOWING THE PRESENT AND PROSPECTIVE ASSETS AND LIABILITIES
AS OF JUNE 30, 2011
(Dollar amounts in thousands)

	ACTUARIAL LIABILITIES		
(1)	Present value of prospective benefits payable on account of present active members		
	- Service retirement benefits	$ 14,178,955	
	- Disability retirement benefits	697,309	
	- Death and survivor benefits	138,465	
	- Refunds of member contributions	219,136	
	Total		$ 15,233,865
(2)	Present value of prospective benefits payable on account of present retired members, beneficiaries of deceased members, and members entitled to deferred vested benefits		
	- Service retirement benefits	$ 14,224,794	
	- Disability retirement benefits	585,781	
	- Death and survivor benefits	520,135	
	Total		$ 15,330,710
(3)	Present value of prospective benefits payable on account of inactive members and members entitled to deferred vested benefits		$ 227,186
(4)	TOTAL ACTUARIAL LIABILITIES		$ 30,791,761
	PRESENT AND PROSPECTIVE ASSETS		
(5)	Actuarial value of assets		$ 14,908,138
(6)	Present value of total future contributions = (4)-(5)	$ 15,883,623	
(7)	Present value of future member contributions and employer normal contributions		4,823,069
(8)	Prospective unfunded accrued liability contributions = (6)-(7)		11,060,554
(9)	TOTAL PRESENT AND PROSPECTIVE ASSETS		$ 30,791,761

SCHEDULE A
(continued)

SOLVENCY TEST
(in millions of dollars)

Valuation Date	(1) Active Member Contributions	(2) Retirants And Beneficiaries	(3) Active Members (Employer Financed Portion)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets (1)	(2)	(3)
6/30/2006	$2,615.8	$12,216.6	$5,492.4	$14,857.6	100%	100%	0%
6/30/2007	2,762.8	12,843.7	5,648.5	15,285.0	100	97	0
6/30/2008	2,899.0	13,585.8	5,975.5	15,321.3	100	91	0
6/30/2009	3,042.3	14,309.9	6,048.2	14,886.0	100	83	0
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0
6/30/2011	3,325.7	15,557.9	7,085.1	14,908.1	100	74	0

SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS
AS OF JUNE 30, 2011

(1)	Actuarial Value of Assets Beginning of Year		
	(exclusive of Pension Obligation Bond)		$ 14,386,329,749
(2)	Market Value of Assets End of Year		$ 15,130,606,279
(3)	Market Value of Assets Beginning of Year		$ 12,456,619,082
(4)	Cash Flow		
	a.	Contributions (exclusive of Pension Obligation Bond)	$ 874,814,647
	b.	Benefit Payments	1,419,861,100
	c.	Administrative Expense	7,322,739
	d.	Net: (4)a – (4)b – (4)c	$ (552,369,192)
	e.	Pension Obligation Bond	$ 465,384,165
(5)	Investment Income		
	a.	Market total: (2) – (3) – (4)d – (4)e	$ 2,760,972,224
	b.	Assumed Rate	7.50%
	c.	Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5] + [(4)e x (5)b x 10/12]	$ 942,619,097
	d.	Amount for Phased-In Recognition: (5)a – (5)c	$ 1,818,353,127
(6)	Phased-In Recognition of Investment Income		
	a.	Current Year: 0.20 x (5)d	$ 363,670,625
	b.	First Prior Year	133,378,916
	c.	Second Prior Year	(611,235,941)
	d.	Third Prior Year	(409,879,449)
	e.	Fourth Prior Year	190,240,386
	f.	Total Recognized Investment Gain	$ (333,825,463)
(7)	Actuarial Value of Assets End of Year:		
	(1) + (4)d + (4)e + (5)c + (6)f		$ 14,908,138,356
(8)	Difference Between Market & Actuarial Values: (2) – (7)		$ 222,467,923

SCHEDULE C

PENSION PLAN ASSETS
SUMMARY OF RECEIPTS AND DISBURSEMENTS*
(Market Value)

	For the Year Ending	
	June 30, 2011	June 30, 2010
Receipts for the Year		
Contributions		
Members	$ 302,262,819	$ 297,613,965
Employers	1,037,935,993	479,805,088
Total	$ 1,340,198,812	$ 777,419,053
Net Investment Income	2,760,972,224	1,509,265,958
TOTAL	$ 4,101,171,036	$ 2,286,685,011
Disbursements for the Year		
Benefit Payments	$ 1,402,535,713	$ 1,321,808,770
Refunds to Members	17,325,387	15,310,680
Miscellaneous, including expenses	7,322,739	8,830,054
TOTAL	$ 1,427,183,839	$ 1,345,949,504
Excess of Receipts over Disbursements	$ 2,673,987,197	$ 940,735,507
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	$ 12,456,619,082	$ 11,515,883,575
Excess of Receipts over Disbursements	2,673,987,197	940,735,507
Asset Balance as of the End of the Year	$ 15,130,606,279	$ 12,456,619,082
Rate of Return	21.60%	13.44%

* Excludes assets for Medical Insurance Fund, the 403(b) Program Reserve Fund and the Life Insurance Fund.

SCHEDULE D

SMOOTHED INTEREST RATE

Actual Rate of Return for 5 Year Look Back Period

Fiscal Year Ending 6/30	Actual Rate of Return for Fiscal Year
2007	14.56 %
2008	-6.46
2009	-14.64
2010	13.44
2011	21.60

SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period beginning on the valuation date. This is the investment rate of return expected to be earned during this period based on the actual rates earned during the five year look back period shown above such that the average rate of return over the combined 30 year period is equivalent to the ultimate investment rate of return (currently 7.50%). On this basis, for the June 30, 2011 valuation, the smoothed interest rate during the 25 year look forward period has been determined to be 8.06%.

ULTIMATE INVESTMENT RATE OF RETURN (DISCOUNT RATE): The assumed investment rate of return used in determining the smoothed interest rate described above. This is also the assumed investment rate of return after the 25 year look forward period and is currently 7.50%.

CORRIDOR AROUND SMOOTHED INTEREST RATE: A corridor of 0.50% around the ultimate investment rate of return is applied in determining the smoothed interest rate.

LIMITED SMOOTHED INTEREST RATE: The assumed rate of return during the 25 year look forward period as limited based on the application of the corridor above and used for valuation purposes. Since the smoothed interest rate above 8.06% the assumed rate for the first 25 years after the valuation date is limited to 8.00% by the corridor.

SCHEDULE E

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

The assumptions and methods used in the valuation were selected based on the actuarial experience study prepared as of June 30, 2010, submitted to and adopted by the Board on September 19, 2011.

ULTIMATE INVESTMENT RATE OF RETURN: 7.50% per annum, compounded annually.

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

Age	Annual Rate
20	8.10%
25	7.20
30	6.20
35	5.50
40	5.00
45	4.60
50	4.50
55	4.30
60	4.20
65	4.00

SEPARATIONS FROM SERVICE: Representative values of the assumed annual rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Males

	Annual Rate of							
			WITHDRAWAL			RETIREMENT	
			Service			Before 27 Years of Service	After 27 Years of Service*
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+		
20	0.012%	0.01%	9.00%				
25	0.015%	0.01%	9.00%	3.00%			
30	0.020%	0.02%	9.00%	3.00%	3.00%		
35	0.035%	0.05%	10.00%	3.25%	1.75%		
40	0.046%	0.09%	10.00%	4.00%	1.40%		
45	0.058%	0.18%	11.00%	4.00%	1.50%		17.0%
50	0.074%	0.33%	9.00%	4.00%	2.00%		17.0%
55	0.124%	0.55%	12.00%	3.50%	2.50%	5.5%	35.0%
60	0.244%	0.70%	12.00%	3.50%	2.50%	13.0%	24.0%
62	0.324%	0.70%	12.00%	3.50%	2.50%	15.0%	25.0%
65	0.480%	0.70%	12.00%	3.50%	2.50%	21.0%	26.0%
70	0.821%	0.70%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

<u>Females</u>

	Annual Rate of						
						RETIREMENT	
			WITHDRAWAL			Before	After
			Service			27 Years	27 Years
Age	DEATH	DISABILITY	0 – 4	5 – 9	10+	of Service	of Service*
20	0.007%	0.01%	7.00%				
25	0.008%	0.02%	8.50%	4.00%			
30	0.010%	0.04%	9.00%	4.00%	1.65%		
35	0.017%	0.08%	9.00%	3.75%	1.85%		
40	0.024%	0.14%	8.50%	3.25%	1.50%		
45	0.037%	0.32%	7.50%	3.25%	1.25%		15.0%
50	0.055%	0.42%	9.50%	3.50%	1.75%		15.0%
55	0.103%	0.56%	11.00%	4.00%	2.00%	6.0%	35.0%
60	0.201%	0.85%	11.00%	4.00%	2.00%	14.0%	30.0%
62	0.263%	0.85%	11.00%	4.00%	2.00%	12.5%	25.0%
65	0.390%	0.85%	11.00%	4.00%	2.00%	22.0%	30.0%
70	0.672%	0.85%	0.00%	0.00%	0.00%	100.0%	100.0%

*Plus 10% in year when first eligible for unreduced retirement with 27 years of service.

DEATHS AFTER RETIREMENT: The RP-2000 Combined Mortality Table projected to 2020 using scale AA (set back one year for females) is used for death after service retirement and beneficiaries. The RP-2000 Disabled Mortality Table (set back seven years for males and set back five years for females) is used for death after disability retirement. Mortality improvement is anticipated under these assumptions as recent mortality experience shows actual deaths are approximately 4% greater for healthy lives and 5% greater for disabled lives than expected under the selected tables. Representative values of the assumed annual rates of death after service retirement and after disability retirement are shown below:

	Annual Rate of Death After			
	Service Retirement		Disability Retirement	
Age	Male	Female	Male	Female
45	0.1161%	0.0745%	2.2571%	1.1535%
50	0.1487	0.1100	2.2571	1.6544
55	0.2469	0.2064	2.6404	2.1839
60	0.4887	0.4017	3.2859	2.8026
65	0.9607	0.7797	3.9334	3.7635
70	1.6413	1.3443	4.6584	5.2230
75	2.8538	2.1680	5.6909	7.2312
80	5.2647	3.6066	7.3292	10.0203
85	9.6240	6.1634	9.7640	14.0049
90	16.9280	11.2205	12.8343	19.4509
95	25.6992	17.5624	16.2186	23.7467

ASSETS: Five-year market related 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 actuarial value of assets, based on the ultimate assumed valuation rate of return of 7.50%. The amount recognized each year is 20% of the difference between market value and expected actuarial value.

EXPENSE LOAD: None.

PERCENT MARRIED: 100%, with females 3 years younger than males.

LOADS: Unused sick leave: 2% of active liability

VALUATION INTEREST RATE SMOOTHING: The valuation liabilities are calculated using a smoothed interest rate method. The interest rate assumed during the look forward period (currently 25 years from the valuation date) is the investment rate of return expected to be earned during the look forward period based on the actual rate of return earned during the look back period (currently 5 years) such that the average assumed rate of return over the combined 30 year period is equivalent to the assumed ultimate investment rate of return (currently 7.50%). The interest rate after the 25 year look forward period is the ultimate investment rate of return of 7.50%.

CORRIDOR LIMIT ON INTEREST RATE SMOOTHING: The smoothed interest rate used during the 25 year look forward period is limited to a corridor of 0.50% around the ultimate investment rate of return.

SCHEDULE F

ACTUARIAL COST METHOD

1. The valuation is prepared on the projected benefit basis, under which the present value, at the interest rate assumed to be earned in the future (see Schedules C and E for a description of the interest rate used), of each active member's expected benefit at retirement or death is determined, based on his age, service, sex and compensation. The calculations take into account the probability of a member's death or termination of employment prior to becoming eligible for a benefit, as well as the possibility of his terminating with a service, disability or survivor's benefit. Future salary increases and post-retirement cost-of-living adjustments are also anticipated. The present value of the expected benefits payable on account of the active members is added to the present value of the expected future payments to retired members and beneficiaries and inactive members to obtain the present value of all expected benefits payable from the System on account of the present group of members and beneficiaries.
2. The employer contributions required to support the benefits of the System are determined following a level funding approach, and consist of a normal contribution and an accrued liability contribution.
3. The normal contribution is determined using the "entry age normal" method. Under this method, a calculation is made to determine the uniform and constant percentage rate of employer contribution which, if applied to the compensation of the average new member during the entire period of his anticipated covered service, would be required in addition to the contributions of the member to meet the cost of all benefits payable on his behalf.
4. The unfunded accrued liability is determined by subtracting the present value of prospective employer normal contributions and member contributions, together with the current actuarial value of assets held, from the present value of expected benefits to be paid from the System.

SCHEDULE G

SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES

The Teachers' Retirement System of the State of Kentucky was established on July 1, 1940. The valuation took into account amendments to the System effective through June 30, 2011. The following summary describes the main benefit and contribution provisions of the System as interpreted for the valuation.

1 - DEFINITIONS

"Final average salary" means the average of the five highest annual salaries which the member has received for service in a covered position and on which the member has made contributions or on which the public board, institution or agency has picked up the member contributions. For a member who retires after attaining age 55 with 27 years of service, “final average salary” means the average of the three highest annual salaries.

2 - BENEFITS

Service Retirement Allowance

Members Before 7/1/2008

Condition for Allowance: Completion of 27 years of service or attainment of age 55 and 5 years of service.

Amount of Allowance: The annual retirement allowance for non-university members is equal to:

(a) 2.0% of final average salary multiplied by service before July 1, 1983, plus

(b) 2.5% of final average salary multiplied by service after July 1, 1983.

(c) For individuals who become members of the Retirement System on or after July 1, 2002 and have less than 10 years of service at retirement, the retirement allowance is 2.0% of final average salary multiplied by service. If, however, they have 10 or more years, they receive a benefit percentage of 2.5% for all years of service up to 30 years.

(d) For members retiring on or after July 1, 2004, the retirement allowance formula is 3.0% of final average salary for each year of service credit earned in excess of 30 years.

The annual retirement allowance for university members is equal to 2.0% of final average salary multiplied by all years of service.

For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

The minimum annual service allowance for all members is $440 multiplied by credited service.

Members on and after 7/1/2008

Condition for Retirement

Completion of 27 years of service, attainment of age 60 and 5 years of service or attainment of age 55 and 10 years of service.

Amount of Allowance

The annual retirement allowance for non-university members is equal to:

1.7% of final average salary if service is 10 years or less.
2.0% of final average salary if service is greater than 10 years and no more than 20 years.
2.3% of final average salary if service is greater than 20 years but no more than 26 years.
2.5% of final average salary if service is greater than 26 years but no more than 30 years.
3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

1.5% of final average salary if service is 10 years or less.
1.7% of final average salary if service is greater than 10 years and no more than 20 years.
1.85% of final average salary if service is greater than 20 years but less than 27 years.
2.0% of final average salary if service is greater than or equal to 27 years.
.
For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

Disability Retirement Allowance

Condition for Allowance	Totally and permanently incapable of being employed as a teacher and under age 60 but after completing 5 years of service.
Amount of Allowance	The disability allowance is equal to the greater of the service retirement allowance or 60% of the member's final average salary. The disability allowance is payable over an entitlement period equal to 25% of the service credited to the member at the date of disability or five years, whichever is longer. After the disability entitlement period has expired and if the member remains disabled, he will be retired under service retirement. The service retirement allowance will be computed with service credit given for the period of disability retirement. The allowance will not be less than $6,000 per year. The service retirement allowance will not be reduced for commencement of the allowance before age 60 or the completion of 27 years of service.
Benefits Payable on Separation from Service	Any member who ceases to be in service is entitled to receive his contributions with allowable interest. A member who has completed 5 years of creditable service and leaves his contributions with the System may be continued in the membership of the System after separation from service, and file application for service retirement after the attainment of age 60.
Life Insurance	A separate Life Insurance fund has been created as of June 30, 2000 to pay benefits on behalf of deceased KTRS active and retired members.

Death Benefits

A surviving spouse of an active member with less than 10 years of service may elect to receive an annual allowance of $2,880 except that if income from other sources exceeds $6,600 per year the annual allowance will be $2,160.

A surviving spouse of an active member with 10 or more years of service may elect to receive an allowance which is the actuarial equivalent of the allowance the deceased member would have received upon retirement. The allowance will commence on the date the deceased member would have been eligible for service retirement and will be payable during the life of the spouse.

If the deceased member is survived by unmarried children under age 18 the following schedule of annual allowances applies:

Number of Children	Annual Allowance
1	$ 2,400
2	4,080
3	4,800
4 or more	5,280

The allowances are payable until a child attains age 18, or age 23 if a full-time student.

If the member has no eligible survivor, a refund of his accumulated contributions is payable to his estate.

Options

In lieu of the regular Option 1, a retirement allowance payable in the form of a life annuity with refundable balance, any member before retirement may elect to receive a reduced allowance which is actuarially equivalent to the full allowance, in one of the following forms:

Option 2. A single life annuity payable during the member's lifetime with payments for 10 years certain.

Option 3. At the death of the member his allowance is continued throughout the life of his beneficiary.

Option 3(a). At the death of the beneficiary designated by the member under Option 3, the member's benefit will revert to what would have been paid had he not selected an option.

Option 4. At the death of the member one half of his allowance is continued throughout the life of his beneficiary.

Option 4(a). At the death of the beneficiary designated by the member under Option 4, the member's benefit will revert to what would have been paid had he not selected an option.

Post-Retirement Adjustments

The retirement allowance of each retired member and of each beneficiary shall be increased by 1.50% each July 1.

3 - CONTRIBUTIONS

Member Contributions

University members contribute 7.625% of salary to the Retirement System. Non-university members contribute 9.105% of salary to the Retirement System. Member contributions are picked up by the employer.

<u>**SCHEDULE H**</u>

TABLE 1
AGE – SERVICE TABLE

Distribution of Active Members as of June 30, 2011 by Age and Service Groups

Attained Age	Completed Years of Service								
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	Total
24 & under	2,461	1							2,462
Total Pay	41,168,000	43,000							41,211,000
Avg. Pay	16,728	43,000							16,739
25 to 29	7,124	1,405							8,529
Total Pay	222,544,000	66,018,000							288,562,000
Avg. Pay	31,239	46,988							33,833
30 to 34	3,770	5,093	967						9,830
Total Pay	111,427,000	250,802,000	53,648,000						415,877,000
Avg. Pay	29,556	49,244	55,479						42,307
35 to 39	2,716	2,470	4,124	628					9,938
Total Pay	73,577,000	122,975,000	240,200,000	39,874,000					476,626,000
Avg. Pay	27,090	49,787	58,244	63,494					47,960
40 to 44	3,698	1,903	2,459	3,164	713				11,937
Total Pay	78,560,000	95,796,000	142,806,000	202,764,000	47,075,000				567,001,000
Avg. Pay	21,244	50,339	58,075	64,085	66,024				47,499
45 to 49	1,742	1,259	1,391	1,511	2,273	631			8,807
Total Pay	40,970,000	64,667,000	81,094,000	98,367,000	151,467,000	42,699,000			479,264,000
Avg. Pay	23,519	51,364	58,299	65,101	66,637	67,669			54,419
50 to 54	1,511	973	1,194	1,211	1,320	1,739	381		8,329
Total Pay	31,062,000	49,208,000	70,429,000	78,534,000	90,131,000	123,612,000	26,959,000		469,935,000
Avg. Pay	20,557	50,573	58,986	64,851	68,281	71,082	70,759		56,422
55 to 59	2,245	724	982	1,035	1,125	821	597	82	7,611
Total Pay	33,132,000	37,292,000	59,798,000	68,831,000	77,411,000	61,016,000	46,788,000	7,134,000	391,402,000
Avg. Pay	14,758	51,508	60,894	66,503	68,810	74,319	78,372	87,000	51,426
60 to 64	2,842	519	494	627	638	439	151	115	5,825
Total Pay	38,464,000	26,979,000	31,260,000	41,981,000	46,193,000	33,463,000	13,713,000	10,452,000	242,505,000
Avg. Pay	13,534	51,983	63,279	66,955	72,403	76,226	90,815	90,887	41,632
65 & over	2,164	246	155	144	145	112	40	75	3,081
Total Pay	20,190,000	10,359,000	9,870,000	9,807,000	10,342,000	8,439,000	3,365,000	7,001,000	79,373,000
Avg. Pay	9,330	42,110	63,677	68,104	71,324	75,348	84,125	93,347	25,762
Total	30,273	14,593	11,766	8,320	6,214	3,742	1,169	272	76,349
Total Pay	691,094,000	724,139,000	689,105,000	540,158,000	422,619,000	269,229,000	90,825,000	24,587,000	3,451,756,000
Avg. Pay	22,829	49,622	58,567	64,923	68,011	71,948	77,695	90,393	45,210

Average Age: 43.6

Average Service: 10.9

SCHEDULE H

TABLE 2

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES
AND THEIR BENEFITS BY AGE
AS OF JUNE 30, 2011

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	771	$ 9,250,517	$ 11,998
50 - 54	1,067	35,560,948	33,328
55 - 59	5,446	207,980,428	38,190
60 - 64	11,248	407,961,327	36,270
65 - 69	8,963	305,262,297	34,058
70 - 74	6,252	197,772,903	31,634
75 - 79	4,295	123,861,204	28,838
80 & Over	6,377	145,736,271	22,853
Total	44,419	$ 1,433,385,895	$ 32,270

SCHEDULE H

TABLE 3

SCHEDULE OF RETIRANTS, BENEFICIARIES AND SURVIVORS ADDED TO AND REMOVED FROM ROLLS

	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR			
Fiscal Year Ending June 30	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Increase In Annual Allowances	Average Annual Allowance
2002	2,577	$86.2	1,063	$16.8	33,408	$749.2	10.2%	$22,425
2003	2,252	86.7	1,015	16.9	34,645	819.0	9.3%	23,641
2004	2,126	85.4	1,033	17.5	35,738	887.0	8.3%	24,819
2005	2,644	105.1	1,036	18.9	37,346	973.1	9.7%	26,058
2006	2,266	121.1	1,115	20.0	38,497	1,074.2	10.4%	27,902
2007	2,050	82.1	1,041	20.7	39,506	1,135.6	5.7%	28,746
2008	2,183	90.6	950	19.4	40,739	1,206.8	6.3%	29,623
2009	2,351	96.2	1,040	22.7	42,050	1,280.3	6.1%	30,447
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6%	31,348
2011	2,133	98.9	848	17.7	44,419	1,433.4	6.0%	32,270