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# Introductory Section

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for Fiscal Year ending June 30, 2009



PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

**John Means School, 1908  
Boyd County, Ashland, Kentucky**

## Chairperson's Letter

### Teachers' Retirement System of the State of Kentucky

**GARY L. HARBIN, CPA**  
*Executive Secretary*



December 30, 2009

Dear Members:

On behalf of the Board of Trustees and staff, I am pleased to present this Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky for the year ending June 30, 2009, the 69th year of operation of the System. The accompanying reports from the independent auditor and the consulting actuary substantiate the financial integrity and the actuarial soundness of the system.

KTRS closed the 2008-2009 fiscal year with \$11.8 billion net assets. The active membership totaled 75,937 and the retired membership was 42,050 with an annual payroll of \$1.3 billion.

The Board of Trustees is totally committed to managing the retirement system funds in a prudent, professional manner. Every effort will be made to insure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

We appreciate the support and cooperation extended by the Governor and the Legislature. This cooperation allows the system to not only meet current challenges but to also make timely provisions for the future.

The Board of Trustees pledges to continue to administer the affairs of the Kentucky Teachers' Retirement System in the most competent and efficient manner possible.

Sincerely,

Barbara G. Sterrett  
Chairperson  
Board of Trustees

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**TODD HOLLENBACH**  
STATE TREASURER

Letter of Transmittal



**Teachers' Retirement System  
of the State of Kentucky**

December 30, 2009

Honorable Steven L. Beshear, Governor  
Commonwealth of Kentucky  
Capitol Building  
Frankfort, Kentucky

Dear Governor Beshear:

It is my pleasure to submit the 69th Comprehensive Annual Financial Report of the Teachers' Retirement System of the State of Kentucky, a Component Unit of the Commonwealth of Kentucky, for the fiscal year ended June 30, 2009. State law provides the legal requirement for the publication of this report; in addition, an annual audit and an annual actuarial valuation of the retirement system are also required. Kentucky Teachers' Retirement System (KTRS) has produced an annual report that will provide you, the General Assembly, and the general public, with information necessary to gain a better understanding of the Teachers' Retirement System.

This report has been prepared in conformity with the principles of governmental accounting and generally accepted accounting principles. Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS management. To the best of our knowledge and belief, the enclosed data is accurate in all material aspects and reported in a manner designed to present fairly the financial position and results of operations of the System for the year ended June 30, 2009. Discussion and analysis of net assets and related additions and deductions is presented in

Management's Discussion and Analysis beginning on page 15.

Management is responsible for maintaining a system of internal controls to establish reasonable assurance that assets are safeguarded, transactions are accurately executed and financial statements are fairly presented. The system of internal controls includes policies and procedures and an internal audit department that reports to the Executive Secretary and the Governance and Audit Committee of the Board of Trustees.

**Profile of KTRS**

Kentucky Teachers' Retirement System was established on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement benefits to the educators and some public employees of the state. KTRS is a blended component unit of the Commonwealth of Kentucky. The plan is described in the notes to the basic financial statements on page 24. Also, the summary of the plan provisions starting on page 89 is useful in understanding benefit and contribution provisions. The population of KTRS membership is stated in the preceding chairperson's letter.

Each year an operating budget is prepared for the administration of the pension fund. The budget is approved by the Board of Trustees and submitted to the Kentucky General Assembly for legal adoption. The KTRS investment earnings fund the administrative budget appropriations.

**Major Initiatives**

The System continually seeks opportunities to better serve its membership. During the past year, KTRS has undertaken several new major initiatives concerning the investment program, information technology, and funding for retiree health care.

The past year included the most significant global financial turmoil since the Great Depression. However, despite the crisis, KTRS's investment program performed remarkably well. In fact, because of KTRS's focus on fundamental value and risk control, it was able to continue a multiyear program of broadening the portfolio's

diversification even at the height of the financial crisis. KTRS has also hired an investment consultant to assist with efforts at diversification. These ongoing efforts are simply a continuation of a disciplined investment process and long-term focus on retirement security. This focus has generated exceptionally stable returns through the System's history and we have every confidence that it will do so in the future.

During the year, an independent investment consultant performed an operational and governance review of the KTRS investment program. The report confirmed that KTRS has a sound and cost effective investment program. In almost all functional areas of the investment program, KTRS currently utilizes "best practices" or "prevalent practices." In terms of governance structure, trustee education, and cost effectiveness, the report confirms that KTRS is a "cutting edge" leader in the public pension community. The report highlighted the action to include two nationally recognized experts on the membership of the investment committee and the use of innovative web based training programs for members of the investment committee.

In commissioning the review, the Board is again on the leading edge of best governance practices for the public pension community. Undertaking an operational and governance review of investment programs is a developing trend. The Board should be commended for its foresight in commissioning this report. The report included several recommendations to improve the investment program and we look forward to evaluating and continuing to implement the recommendations in the report.

KTRS staff has continued working on the design phase of a new information technology system known as the "Pathway Project." The objective of the Pathway Project is to streamline retirement processes, and improve staff efficiency in providing services to retirees and active members. During this project, the current legacy KTRS Pension Management System will be replaced with a new system of databases and applications, which will accomplish these goals. The new system will allow KTRS to redesign and improve office processes and ultimately apply new technologies to these processes. This will increase staff productivity, provide seamless member account management,

and simplify future system modifications.

In addition to continuing work on design, the first application of the Pathway Project was developed, tested, and successfully implemented to allow retirees to apply for health benefits through a web based enrollment. As KTRS continues to implement changes to the information technology system under the Pathway Project, we expect that the new technology will help the System better serve its membership.

Securing adequate funding for retiree health care provided by KTRS remains a major initiative of the System. The Board and Executive staff have continued to meet with members of the General Assembly and various interest groups to achieve the goal of moving away from the short-term, unsustainable solution of funding retiree medical insurance that allocates a portion of pension contributions to the medical insurance fund and move instead toward a long-term, sustainable funding solution to keep the health care fund solvent. The Board of Trustees commissioned its actuary to perform detailed work on this issue and authorized staff to continue to work with all interested parties to facilitate a legislative plan for prefunding retiree health benefits.

## **Economic Condition**

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 49 contains asset allocations, strategic target ranges for investments, discussion of the current year market environment and historical performance schedules among others.

The investment portfolio experienced a decline in value during the 2008-2009 fiscal year as the portfolio's market value decreased from \$14,233,808,958 to \$11,732,059,913. The decline in value of the portfolio and of the overall market was due to turmoil in the financial markets and a tightening of credit availability. This decline was partially offset with investment income that included interest income and dividends. Employer and employee contributions also provided significant income to the portfolio.

Investment income, including depreciation of

asset values, net of investment expenses, for the 2008-2009 fiscal year was negative \$2,004,100,112. The major cause of the negative return from the System's investment portfolio was the net depreciation in fair value of investments in the amount of \$2,391,936,312. The largest earnings component, \$221,389,695 was the result of interest income. Other income, net of expenses, of \$166,446,505 was generated from dividends, rent and securities lending.

According to the KRS 161.430 the KTRS Board of Trustees has the responsibility to invest the assets of the System. The Board of Trustees delegates investment authority to the Investment Committee. The Investment Committee works closely with experienced investment counselors and the System's professional staff in evaluating and selecting investment allocations.

The investment objectives of the Board of Trustees are to ensure that funds shall be invested solely in the interest of its members and their beneficiaries and that investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries, while making payment of reasonable expenses in administering the Plan and its Trust Funds. The investment program shall also provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. While the entire portfolio earned a total return of negative 14.3% in 2008-09, the portfolio's ten-year annualized rate of return is 1.9% and the twenty-year annualized rate of return is 7.1%. During 2008-09, 54% of the fixed income investments were rated at least "AAA" in terms of credit quality.

KTRS annuities have a bolstering impact on the Commonwealth of Kentucky's economy, as approximately 92% of retired teachers reside within the state. Total benefits (retirement, medical...etc.) paid during the fiscal year were approximately \$1.5 billion.

### Funding

Based on recommendations of the Board of Trustees, the General Assembly establishes by statute the levels of contribution that are to be made by members and employers to fund the

liabilities of the system. Each year, an independent actuary performs a valuation to determine whether the current levels of contribution will be sufficient to cover the cost of benefits earned by members.

The latest actuarial valuation was for the period ending June 30, 2009. This report reflects the actuarial value of the System's assets of \$14.9 billion and the actuarial accrued liabilities totaled \$23.4 billion. The actuary determined that the existing levels of contribution by members and employers would be sufficient to fund all of the System's liabilities within a reasonable period of time. The report concludes that the System is not operating on an actuarially sound basis since a portion of the annual contributions required to fund pension benefits have been allocated to the Medical Insurance Fund. Assuming that employer contributions continue in the future at rates recommended on the basis of the successive actuarial valuations, the actuary states that the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated.

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 44). The 2009 employer shortfall of contributions created a net pension obligation of \$413,292,362 (as detailed on page 83). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 44). The 2009 employer shortfall of contributions created a net OPEB obligation of \$525,816,306 (as detailed on page 104).

### KTRS Medical Insurance Plan

KTRS health care costs keep escalating at a much faster clip than revenue growth in the Medical Insurance Plan. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2009 indicated that the fund has an unfunded liability of \$6.2 billion for 2009. The KTRS 2008-2010 biennial budget requested additional funding from the Commonwealth, but sufficient funds were not allocated by the state. The budget bill directs KTRS to allocate a portion of the state employer contribution in a sufficient amount to the Medical Insurance Fund instead of

the Pension Fund to fund the Medical Insurance Fund Stabilization Contribution. This is the third consecutive budget that has funded current retiree medical insurance costs in this manner. The Commonwealth has agreed to return to the Pension Fund the portion of the state employer contribution that has been allocated to the Medical Insurance Fund over the last three biennia, to be paid in installments with interest over ten-year periods. Thus far, the Commonwealth has returned to the Pension Fund approximately \$70 million of the approximately \$557 million that will have been allocated for current medical insurance costs by the current fiscal year end, June 30, 2010.

Effective January 1, 1999, KTRS eligible retirees and eligible dependents under the age of 65 have their health insurance provided by plans managed by the Kentucky Department for Employee Insurance. Under this arrangement, KTRS provides a monthly supplement to assist the eligible retiree in purchasing health insurance. Retirees 65 and over remain in the Medicare eligible health plan administered by KTRS. These retirees also receive a supplement for the cost of their coverage.

The System realizes that the medical insurance fund is in crisis. To realize true cost containment, additional steps must be taken through legislation on both the state and national levels. Meanwhile, KTRS will address the problem by continuing to take measures to contain costs and by increasing revenues to the insurance fund, adjusting coverage to meet existing revenues, or a combination of the two.

## **Professional Services**

Professional consultants are appointed by the Board of Trustees to perform professional services that are essential to the effective and efficient operation of the KTRS. A certification from the certified public accountant and actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 46, 47 and 70 of this report.

## **National Recognition**

The System was honored by two national professional organizations in regard to the administration of the retirement program.

## **GFOA Certificate of Achievement**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2008. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report, whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The KTRS has received the Certificate of Achievement for the last twenty-one consecutive years (fiscal years ended 1988-2008). We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA.

## **PPCC Achievement Award**

The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2009 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure, and are widely acknowledged to be marks of excellence in the public pension industry.

The PPCC is a coalition of the four major public pension organizations in the nation. These include the National Association of State Retirement Administrators, The National Council on Teacher Retirement, the National Conference on Public Employees Retirement Systems, and the Government Finance Officers Association.

**NCTR Executive Committee**

Gary L. Harbin serves as the President on the Executive Committee of the National Council on Teacher Retirement (NCTR). NCTR is a national, nonprofit organization whose mission is to promote effective governance and benefits administration in state and local public pension systems in order that adequate and secure retirement benefits are provided to educators and other plan participants. NCTR membership includes 69 state, territorial, local and university pension systems with combined assets in excess of 2 trillion, serving more than 18 million active and retired teachers, non-teaching personnel and other public employees.

**Public Sector HealthCare Roundtable**

Mr. Harbin also serves on the Board of Directors and as President of the Public Sector HealthCare Roundtable. The Roundtable is a national coalition of public sector health care purchasers that was formed to ensure that the interests of the public sector are properly represented during the formulation and debate of federal health care reform initiatives. Membership in the Roundtable is open to any statewide, regional, or local governmental unit that provides health care coverage for public employees and retirees.

**Acknowledgments**

The preparation of this report reflects the combined efforts of the KTRS staff, under the leadership of the Board of Trustees. The report is intended to provide complete and reliable information that serves as a basis for making management decisions and for determining compliance with legal provisions. It is also used to determine responsible stewardship of the assets contributed by KTRS members and their employers.

This report is located at the KTRS web address [www.ktrs.ky.gov](http://www.ktrs.ky.gov), and is being mailed to all employer members of the System whose cooperation continues to contribute significantly to our success, and who form the vital link between KTRS and its active members.

KTRS management and staff are committed to the continued operation of an actuarially sound retirement system. Your support is an essential part of this commitment, and we look forward to working with you.

Respectfully submitted,



Gary L. Harbin, CPA  
Executive Secretary

**BOARD OF TRUSTEES**



**Barbara G. Sterrett**  
Chairperson  
Retired Teacher Trustee  
Lexington



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Vice Chairperson  
Teacher Trustee  
Murray



**Robert M. Conley**  
Lay Trustee  
Paintsville



**Ronald L. Sanders**  
Lay Trustee  
Hodgenville



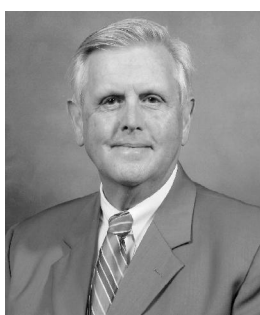
**Tom Shelton**  
Teacher Trustee  
Owensboro



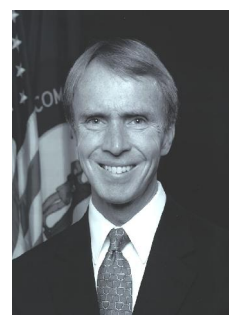
**Ruth Ann Sweazy**  
Teacher Trustee  
Taylorsville



**Laura Zimmerman**  
Teacher Trustee  
Lexington



**Dr. Terry Holliday**  
Ex Officio Trustee  
Commissioner,  
Dept. of Education



**Todd Hollenbach**  
Ex Officio Trustee  
State Treasurer



Kentucky Teachers' Retirement System  
479 Versailles Road  
Frankfort, Kentucky 40601-3800

ADMINISTRATIVE STAFF

**GARY L. HARBIN, CPA**  
*Executive Secretary*

**ROBERT B. BARNES, JD**  
*General Counsel and  
Deputy Executive Secretary  
Operations*

**J. ERIC WAMPLER, JD**  
*Deputy Executive Secretary  
Finance & Administration*

**PAUL L. YANCEY, CFA**  
*Chief Investment Officer*

PROFESSIONAL CONSULTANTS

**ACTUARY**

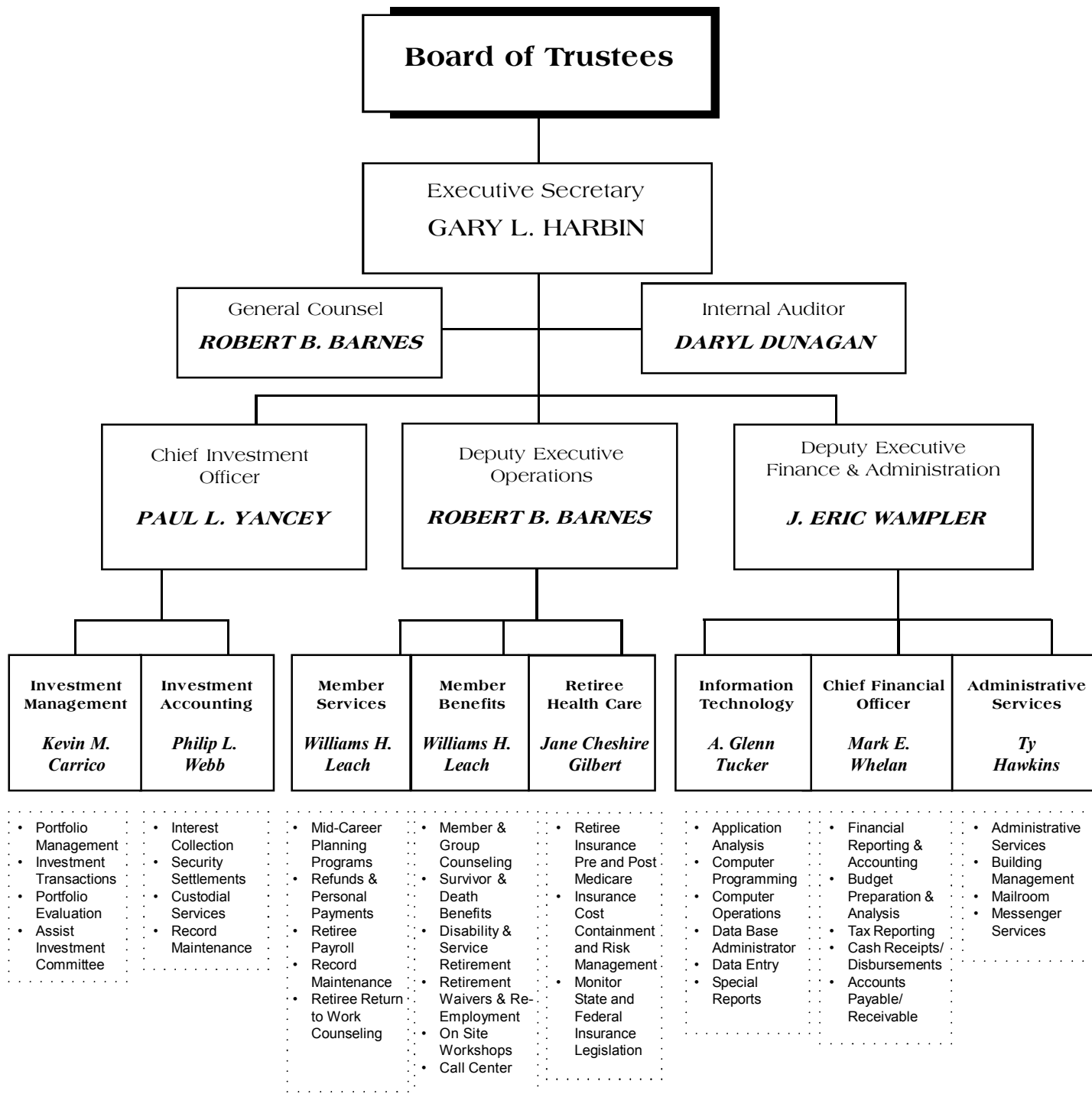
Cavanaugh Macdonald Consulting, LLC  
3550 Busbee Parkway, Suite 250  
Kennesaw, GA 30144

**AUDITOR**

Charles T. Mitchell, LLP  
201 West Main Street  
P.O. Box 698  
Frankfort, Kentucky 40601

*\* See page 70 of the Investment Section  
for investment consultants.*

Kentucky Teachers' Retirement System  
Organizational Chart



Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

Teachers' Retirement System  
of the State of Kentucky

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended  
June 30, 2008

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.



*Carla E. Perry*  
President

*Jeffrey R. Enos*  
Executive Director

GOVERNMENT FINANCIAL  
OFFICERS ASSOCIATION (GFOA)

*The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of the State of Kentucky. The KTRS has received the Certificate of Achievement for the last twenty-one consecutive years (fiscal years ended 1988-2008).*



**Public Pension Coordinating Council**  
**Public Pension Standards**  
**2009 Award**

Presented to

**Kentucky Teachers Retirement System**

In recognition of meeting professional standards for  
plan design and administration as  
set forth in the Public Pension Standards.

*Presented by the Public Pension Coordinating Council, a confederation of*

National Association of State Retirement Administrators (NASRA)  
National Conference on Public Employee Retirement Systems (NCPERS)  
National Council on Teacher Retirement (NCTR)

A handwritten signature in cursive script that reads 'Alan H. Winkle'.

Alan H. Winkle  
Program Administrator

**PUBLIC PENSION COORDINATING COUNCIL**  
**PUBLIC PENSION STANDARDS**

*The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2009 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.*

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# Financial Section

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for Fiscal Year ending June 30, 2009



PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

**Augusta High School, around 1905  
Bracken County  
Augusta, Kentucky**



*William G. Johnson, Jr., C.P.A.*  
*James Clouse, C.P.A.*  
*Bernadette Smith, C.P.A.*  
*Kim Field, C.P.A.*  
*Greg Miklavcic, C.P.A.*  
*Don C. Giles, C.P.A., Consultant*

Board of Trustees  
Teachers' Retirement System of the State of Kentucky  
Frankfort, Kentucky

We have audited the accompanying statements of plan net assets of the Teachers' Retirement System of the State of Kentucky as of June 30, 2009 and 2008 and the related statements of changes in plan net assets for the years then ended. These component unit financial statements are the responsibility of the Teachers' Retirement System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the general purpose financial statements referred to above present fairly, in all material respects, the plan net assets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 2009 and 2008 and the changes in its plan net assets for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with Government Auditing Standards, we have also issued our report dated December 18, 2009 on our consideration of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts and grants. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be read in conjunction with this report in considering the results of our audit.

The Management's Discussion and Analysis on pages 15-19 are not a required part of the basic financial statements but is supplemental information required by the Governmental Accounting Standards Board. We have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplemental information. However, we did not audit the information and express no opinion on it.

The financial section supporting schedules listed in the table-of-contents are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These schedules are the responsibility of the System's management. Such schedules as of and for the year ended June 30, 2009 have been subjected to the auditing procedures applied in our audit of the basic financial statements and, in our opinion, are fairly stated in all material respects when considered in relation to the basic financial statements taken as a whole.

We did not audit the data included in the Introductory and Statistical sections of the report and therefore express no opinion on them.

*Charles T. Mitchell Co.*

Frankfort, Kentucky  
December 18, 2009

201 West Main Street, Frankfort, Kentucky 40601 | P.O. Box 698, Frankfort, Kentucky 40602-0698  
(502) 227-7395 | Fax (502) 227-8005 | [www.ctmcpa.com](http://www.ctmcpa.com)

**MANAGEMENT’S DISCUSSION AND ANALYSIS**

This discussion and analysis of Kentucky Teachers' Retirement System's financial performance provides an overview of the defined benefit and medical insurance plans' financial year ended June 30, 2009. Please read it in conjunction with the respective financial statements, which begin on page 20.

**USING THIS FINANCIAL REPORT**

Because of the long-term nature of a defined benefit pension plan, and the medical and life insurance plans, financial statements alone cannot provide sufficient information to properly reflect the plan’s ongoing plan perspective. The Statement of Plan Net Assets and Statement of Changes in Plan Net Assets (on pages 20-23) provide information about the activities of the defined benefit plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan as a whole. The Kentucky Teachers’ Retirement System is the fiduciary of funds held in trust for its members.

The Schedule of Funding Progress (on pages 43-45) includes historical trend information about the actuarially funded status of each plan from a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due. The Schedule of Employer Contributions (on pages 44-45) presents historical trend information about the annual required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans.

**KENTUCKY TEACHERS’ RETIREMENT  
SYSTEM AS A WHOLE**

In the fiscal year ended June 30, 2009, Kentucky Teachers’ Retirement System’s combined plan net assets decreased by \$2,510.5 million – from \$14,340.7 million to \$11,830.2 million. The following summaries focus on plan net assets and changes in plan net assets of Kentucky Teachers’ Retirement System’s defined benefit plan, medical insurance plan, life insurance plan and the tax-sheltered annuity plan.

KENTUCKY TEACHERS' RETIREMENT SYSTEM

Summary of  
Plan Net Assets  
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2009	2008	2007	2009	2008	2007	2009	2008	2007
Cash & Investments	\$ 11,592.4	\$ 14,224.0	\$ 16,204.5	\$ 225.0	\$ 182.0	\$ 137.0	\$ 89.0	\$ 76.8	\$ 69.1
Receivables	94.3	93.6	95.8	7.1	6.2	5.7	.7	.8	.8
Capital Assets	3.2	3.0	3.1						
Total Assets	11,689.9	14,320.6	16,303.4	232.1	188.2	142.7	89.7	77.6	69.9
Total Liabilities	(174.0)	(243.9)	(880.8)	(3.0)	(2.3)	(1.9)	(5.0)		
Plan Net Assets	\$ 11,515.9	\$ 14,076.7	\$ 15,422.6	\$ 229.1	\$ 185.9	\$ 140.8	\$ 84.7	\$ 77.6	\$ 69.9

*TOTALS	2009	2008	2007
Cash & Investments	\$ 11,906.4	\$ 14,482.8	\$ 16,410.6
Receivables	102.1	100.6	102.3
Capital Assets	3.2	3.0	3.1
Total Assets	12,011.7	14,586.4	16,516.0
Total Liabilities	(182.0)	(246.2)	(882.7)
Plan Net Assets	\$ 11,829.7	\$ 14,340.2	\$ 15,633.3

\* The 403(b) Tax Shelter Plan cash and investments were approximately \$.5 million for the years ended 2009 and 2008 and 2007.

Plan net assets of the defined benefit plan decreased by 18.2% (\$11,515.9 million compared to \$14,076.7 million). The decrease is primarily due to unfavorable market conditions which resulted in a net investment income decrease of \$2 billion. The defined benefit plan assets are restricted to providing monthly retirement allowances to members and their beneficiaries.

Plan net assets of the medical insurance plan increased by 23.2% (\$229.1 million compared to \$185.9 million) primarily due to state allocations from redirecting contributions from the retirement fund to the medical plan. Plan assets are restricted to providing hospital and medical insurance benefits to members and their spouses.



**Summary of  
Changes in Plan Net Assets**  
(In Millions)

Categories	Defined Benefit Plan			Medical Insurance Plan			Life Insurance Fund		
	2009	2008	2007	2009	2008	2007	2009	2008	2007
<b>ADDITIONS</b>									
Member Contributions	\$ 293.7	\$ 291.4	\$ 269.7	\$ 58.7	\$ 55.4	\$ 53.1	\$	\$	\$
Employer Contributions	442.6	466.2	434.9	164.4	148.9	113.2	5.4	5.4	5.0
Net Investment Income	(2,020.7)	(909.1)	2,063.9	11.3	8.1	6.7	5.3	6.3	(3.4)
Other Income				13.7	11.9	10.4			
<b>TOTAL ADDITIONS</b>	<b>\$ (1,284.4)</b>	<b>\$ (151.5)</b>	<b>\$ 2,768.5</b>	<b>\$ 248.1</b>	<b>\$ 224.3</b>	<b>\$ 183.4</b>	<b>\$ 10.7</b>	<b>\$ 11.7</b>	<b>\$ 1.6</b>
<b>DEDUCTIONS</b>									
Benefit Payments	\$ 1,253.0	\$ 1,170.9	\$ 1,102.6	\$	\$	\$	\$ 3.7	\$ 4.0	\$ 4.2
Refunds	15.2	15.9	14.8						
Administrative Expense	8.2	7.6	7.4						
Insurance Expenses				204.8	179.2	174.2			
<b>TOTAL DEDUCTIONS</b>	<b>1,276.4</b>	<b>1,194.4</b>	<b>1,124.8</b>	<b>204.8</b>	<b>179.2</b>	<b>174.2</b>	<b>3.7</b>	<b>4.0</b>	<b>4.2</b>
<b>Increase (Decrease) in Plan Net Assets</b>	<b>\$ (2,560.8)</b>	<b>\$ (1,345.9)</b>	<b>\$ 1,643.7</b>	<b>\$ 43.3</b>	<b>\$ 45.1</b>	<b>\$ 9.2</b>	<b>\$ 7.0</b>	<b>\$ 7.7</b>	<b>\$ (2.6)</b>

TOTALS	2009	2008	2007
<b>ADDITIONS</b>			
Member Contributions	\$ 352.4	\$ 346.8	\$ 322.8
Employer Contributions	612.4	620.5	553.1
Net Investment Income	(2,004.1)	(894.7)	2,067.2
Other Income	13.7	11.9	10.4
<b>TOTAL ADDITIONS</b>	<b>\$ (1,025.6)</b>	<b>\$ 84.5</b>	<b>\$ 2,953.5</b>
<b>DEDUCTIONS</b>			
Benefit Payments	\$ 1,256.7	\$ 1,174.9	\$ 1,106.8
Refunds	15.2	15.9	14.8
Administrative Expense	8.2	7.6	7.4
Insurance Expenses	204.8	179.2	174.2
<b>TOTAL DEDUCTIONS</b>	<b>1,484.9</b>	<b>1,377.6</b>	<b>1,303.2</b>
<b>Increase (Decrease) in Plan Net Assets</b>	<b>\$ (2,510.5)</b>	<b>\$ (1,293.1)</b>	<b>\$ 1,650.3</b>

# KENTUCKY TEACHERS' RETIREMENT SYSTEM

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## DEFINED BENEFIT PLAN ACTIVITIES

Member contributions increased \$2.3 million. Retirement contributions are calculated by applying a percentage factor to salary and are paid monthly by each member. Members may also pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

Employer contributions totaled \$442.6 million, a net decrease of \$23.6 million over the 2008 fiscal year.

The System experienced a greater decrease in net investment income compared to the previous year (negative \$2,020.7 million at June 30, 2009 as compared to a \$909.1 million decrease at June 30, 2008). The decrease in the fair value of investments is mainly due to unfavorable market conditions for the year ended June 30, 2009. This can be illustrated as follows:

<u>(In Millions)</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Appreciation (depreciation) in fair value of investments – June 30, prior year	\$ 385.4	\$ 1,904.0	\$ 690.4
Appreciation (depreciation) in fair value of investments – June 30, end of year	<u>(1,336.2)</u>	<u>385.4</u>	<u>1,904.0</u>
Change in net appreciation (depreciation) in fair value of investments	(1,721.6)	(1,518.6)	1,213.6
Net income (net of investment expense)	373.1	426.9	443.1
Net gain on sale of investments	<u>(672.2)</u>	<u>182.6</u>	<u>403.8</u>
Investment Income (net) – June 30, end of year	\$ (2,020.7)	\$ (909.1)	\$ 2,060.5

Program deductions in 2009 increased \$82 million. The increase was caused principally by an increase of \$82.1 million in benefit payments. Members who were drawing benefits as of June 2008 received an increase of 1.5% to their retirement allowances in July 2008. Also, there was an increase of 1,311 members and beneficiaries on the retired payroll as of June 30, 2009.

## OTHER POST EMPLOYMENT BENEFIT ACTIVITIES

During the 2009 fiscal year, the medical insurance plan member contributions increased \$3.3 million and employer contributions increased by \$15.5 million over fiscal year 2008. The employer contributions increased primarily because \$139.4 million in stabilization funding was placed in the medical insurance fund from the pension fund at the recommendation of the System's actuary. The amount will be repaid over a ten-year period per KRS 161.553.

Program deductions increased \$25.6 million due to an increase of insurance expenses. The monthly premium subsidy for retirees under age 65 increased 12.56% from fiscal year 2008 to fiscal year 2009. A 8.19% increase is expected for calendar year 2010. The monthly premium subsidy for retirees age 65 and over increased by 2.50% from fiscal year 2008 to fiscal year 2009. A 20% increase is expected for calendar year 2010 due to federal reimbursement changes with the Medicare Advantage Program.

Net investment income increased \$3.2 million from \$8.1 million in 2008 to \$11.3 million in 2009. This is due to the recognition of interest income since all investments for the Medical Insurance Plan are short term in nature and the recognition of appreciation in fair value is not feasible. This can be illustrated as follows:

<u>(In Millions)</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
Appreciation in fair value of investments – June 30, prior year	\$ 0	\$ 0	\$ 0
Appreciation in fair value of investments – June 30 end of year	<u>0</u>	<u>0</u>	<u>0</u>
Net appreciation in fair value of investments	0	0	0
Net income (net of investment expense)	11.3	8.1	6.7
Net gain on sale of investments	<u>0</u>	<u>0</u>	<u>0</u>
Investment Income (net) – June 30	\$ 11.3	\$ 8.1	\$ 6.7

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2009, 2008, and 2007 were \$3.7, \$4.0, and \$4.2 million respectively.

### HISTORICAL TRENDS

Accounting standards require that the Statement of Plan Net Assets state asset value at fair value and include only benefits and refunds due plan members and beneficiaries and accrued investment and administrative expenses as of the reporting date. Information regarding the actuarial funding status of the defined benefit plan, the medical insurance plan, and the life insurance plan is provided in the Schedule of Funding Progress (beginning on page 43). The asset value, stated in the Schedule of Funding Progress, is determined by the System's independent actuary. The actuarial accrued liability is calculated using the projected unit credit cost method.

The 2009 fiscal year reveals a decline in funding position of the pension plan due to an increase in the actuarial liability.

Annual required employer contributions of the defined benefit plan are provided in the Schedule of Employer Contributions (on page 44). The 2009 employer shortfall of contributions created a net pension obligation of \$413,292,362 (as detailed on page 83).

The medical insurance plan is not as vulnerable to adverse market conditions since its assets are all short term in nature and less likely to experience huge fluctuations. Although the plan continues to have a large unfunded actuarial liability, the current obligations are being met by current funding.

Annual required contributions of the Medical Insurance Plan are provided in the Schedule of Employer Contributions (on page 44). The 2009 employer shortfall of contributions created a net OPEB obligation of \$525,816,306 (as detailed on page 104).

KENTUCKY TEACHERS' RETIREMENT SYSTEM

Statement of Plan Net Assets  
As of June 30, 2009

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2009 TOTAL
<b>ASSETS</b>					
Cash	\$ 4,927,062	\$	\$	\$ 1,736,300	\$ 6,663,362
Prepaid Expenses	148,786		121,000		269,786
Receivables					
Contributions	34,794,627		2,762,036	77,453	37,634,116
State of Kentucky	2,966,717				2,966,717
Investment Income	55,886,305			674,184	56,560,489
Installment Account Receivable	605,511				605,511
Medicare D Receivables			4,328,805		4,328,805
Other Receivables					
Total Receivables	94,253,160		7,090,841	751,637	102,095,638
Investments at Fair Value (See Note 5)					
Short Term Investments	19,159,158	474,361	224,866,481	12,400,000	256,900,000
Bonds and Mortgages	3,710,946,462			74,889,911	3,785,836,373
Equities	7,086,247,046				7,086,247,046
Alternative Investments	177,330,444				177,330,444
Real Estate	425,746,050				425,746,050
Total Investments	11,419,429,160	474,361	224,866,481	87,289,911	11,732,059,913
Invested Security Lending Collateral	167,874,202				167,874,202
Capital Assets, at Cost Net Of	3,219,786				3,219,786
Accumulated Depreciation of \$2,087,345 (See Note 2)					
Total Assets	11,689,852,156	474,361	232,078,322	89,777,848	12,012,182,687
<b>LIABILITIES</b>					
Accounts Payable	1,028,771			78,339	1,107,110
Insurance Claims Payable			2,975,307		2,975,307
Investment Purchases Payable	5,065,608			4,996,875	10,062,483
Obligations Under Security Lending	167,874,202				167,874,202
Total Liabilities	173,968,581		2,975,307	5,075,214	182,019,102
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POST EMPLOYMENT BENEFITS	<u>\$ 11,515,883,575</u>	<u>\$ 474,361</u>	<u>\$ 229,103,015</u>	<u>\$ 84,702,634</u>	<u>\$ 11,830,163,585</u>
<i>The accompanying notes are an integral part of these financial statements.</i>					

**Statement of Plan Net Assets  
As of June 30, 2008**

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2008 TOTAL
<b>ASSETS</b>					
Cash	\$ 8,083,548	\$	\$	\$ 587,853	\$ 8,671,401
Prepaid Expenses	146,008		121,000		267,008
Receivables					
Contributions	29,761,242		2,273,890	60,048	32,095,180
State of Kentucky	500,956				500,956
Investment Income	62,223,633	29		736,866	62,960,528
Installment Account Receivable	661,499				661,499
Medicare D Receivables			3,901,214		3,901,214
Other Receivables	423,332				423,332
<b>Total Receivables</b>	<b>93,570,662</b>	<b>29</b>	<b>6,175,104</b>	<b>796,914</b>	<b>100,542,709</b>
Investments at Fair Value (See Note 5)					
Short Term Investments	201,290,978	498,892	181,882,630	5,100,000	388,772,500
Bonds and Mortgages	4,208,000,818			71,173,450	4,279,174,268
Equities	9,029,380,841				9,029,380,841
Alternative Investments	104,787,575				104,787,575
Real Estate	431,693,774				431,693,774
<b>Total Investments</b>	<b>13,975,153,986</b>	<b>498,892</b>	<b>181,882,630</b>	<b>76,273,450</b>	<b>14,233,808,958</b>
Invested Security Lending Collateral	240,638,736				240,638,736
Capital Assets, at Cost Net Of Accumulated Depreciation of \$1,978,998 (See Note 2)	3,018,126				3,018,126
<b>Total Assets</b>	<b>14,320,611,066</b>	<b>498,921</b>	<b>188,178,734</b>	<b>77,658,217</b>	<b>14,586,946,938</b>
<b>LIABILITIES</b>					
Accounts Payable	3,280,149			14	3,280,163
Insurance Claims Payable			2,295,511		2,295,511
Obligations Under Security Lending	240,638,736				240,638,736
<b>Total Liabilities</b>	<b>243,918,885</b>	<b>0</b>	<b>2,295,511</b>	<b>14</b>	<b>246,214,410</b>
<b>NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POST EMPLOYMENT BENEFITS</b>	<b>\$ 14,076,692,181</b>	<b>\$ 498,921</b>	<b>\$ 185,883,223</b>	<b>\$ 77,658,203</b>	<b>\$ 14,340,732,528</b>
<i>The accompanying notes are an integral part of these financial statements.</i>					

KENTUCKY TEACHERS' RETIREMENT SYSTEM

Statement of Changes in Plan Net Assets  
For the Year Ended June 30, 2009

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2009 TOTAL
<b>ADDITIONS</b>					
Contributions					
Employer	\$ 442,549,935	\$	\$ 164,408,037	\$ 5,455,473	\$ 612,413,445
Member	293,678,564		58,688,767		352,367,331
Total Contributions	736,228,499		223,096,804	5,455,473	964,780,776
Other Income					
Recovery Income			72,082		72,082
Medicare D Receipts			13,611,748		13,611,748
Total Other Income			13,683,830		13,683,830
Investment Income					
Net Appreciation/(Depreciation) in Fair Value of Investments	(2,393,824,926)			1,888,614	(2,391,936,312)
Interest	206,695,899	3,172	11,296,280	3,394,344	221,389,695
Dividends	150,828,141				150,828,141
Rental Income, Net	29,794,103				29,794,103
Securities Lending, Gross Earnings	3,053,121				3,053,121
Gross Investment Income	(2,003,453,662)	3,172	11,296,280	5,282,958	(1,986,871,252)
Less: Investment Expense	(16,321,910)				(16,321,910)
Less: Securities Lending Expense	(906,950)				(906,950)
Net Investment Income	(2,020,682,522)	3,172	11,296,280	5,282,958	(2,004,100,112)
Total Additions	(1,284,454,023)	3,172	248,076,914	10,738,431	(1,025,635,506)
<b>DEDUCTIONS</b>					
Benefits	1,252,980,407	27,732		3,694,000	1,256,702,139
Refunds of Contributions	15,208,419				15,208,419
Insurance Expenses			204,857,122		204,857,122
Administrative Expense	8,165,757				8,165,757
Total Deductions	1,276,354,583	27,732	204,857,122	3,694,000	1,484,933,437
Net Increase(Decrease)	(2,560,808,606)	(24,560)	43,219,792	7,044,431	(2,510,568,943)
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS					
Beginning of Year	14,076,692,181	498,921	185,883,223	77,658,203	14,340,732,528
End of Year	\$ 11,515,883,575	\$ 474,361	\$ 229,103,015	\$ 84,702,634	\$11,830,163,585

The accompanying notes are an integral part of these financial statements.

**Statement of Changes in Plan Net Assets  
For the Year Ended June 30, 2008**

	Defined Benefit Plan	403(b) Tax Shelter	Medical Insurance Plan	Life Insurance Plan	2008 TOTAL
<b>ADDITIONS</b>					
Contributions					
Employer	\$ 466,247,782	\$	\$ 148,929,322	\$ 5,411,249	\$ 620,588,353
Member	291,423,948		55,402,830		346,826,778
Total Contributions	757,671,730		204,332,152	5,411,249	967,415,131
Other Income					
Recovery Income			25,322		25,322
Medicare D Receipts			11,911,565		11,911,565
Total Other Income			11,936,887		11,936,887
Investment Income					
Net Appreciation/(Depreciation) in Fair Value of Investments	(1,335,940,216)			2,821,989	(1,333,118,227)
Interest	240,681,166	17,397	8,128,179	3,499,502	252,326,244
Dividends	165,542,769				165,542,769
Rental Income, Net	28,660,581				28,660,581
Securities Lending, Gross Earnings	21,398,859				21,398,859
Gross Investment Income	(879,656,841)	17,397	8,128,179	6,321,491	(865,189,774)
Less: Investment Expense	(9,499,832)				(9,499,832)
Less: Securities Lending Expense	(19,926,852)				(19,926,852)
Net Investment Income	(909,083,525)	17,397	8,128,179	6,321,491	(894,616,458)
Total Additions	(151,411,795)	17,397	224,397,218	11,732,740	84,735,560
<b>DEDUCTIONS</b>					
Benefits	1,170,969,101	30,507		4,003,000	1,175,002,608
Refunds of Contributions	15,965,083		10,014		15,975,097
Insurance Expenses			179,276,215		179,276,215
Administrative Expense	7,551,936				7,551,936
Total Deductions	1,194,486,120	30,507	179,286,229	4,003,000	1,377,805,856
Net Increase(Decrease)	(1,345,897,915)	(13,110)	45,110,989	7,729,740	(1,293,070,296)
<b>NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS</b>					
Beginning of Year	15,422,590,096	512,031	140,772,234	69,928,463	15,633,802,824
End of Year	\$14,076,692,181	\$ 498,921	\$ 185,883,223	\$ 77,658,203	\$ 14,340,732,528

*The accompanying notes are an integral part of these financial statements.*

**Notes to Financial Statements  
Years Ended June 30, 2009 and 2008**

**Note 1: Description of Plan**

**A. REPORTING ENTITY**

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly and is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS). KTRS is a blended component unit of the Commonwealth of Kentucky and therefore is included in the Commonwealth's financial statements. KTRS is a cost-sharing multiple-employer defined benefit plan established to provide pension benefit plan coverage for local school districts and other public educational agencies in the state.

**B. PARTICIPANTS**

As of June 30, 2009, a total of 197 employers participated in the plan. Employers are comprised of 174 local school districts, 17 Department of Education Agencies and other educational organizations, 5 universities, and also the Kentucky Community and Technical College System.

According to KRS 161.220 " . . . any regular or special teacher, or professional occupying a position requiring certification or graduation from a four (4) year college or university . . . " is eligible to participate in the System. The following illustrates the classifications of members:

	<u>2009</u>	<u>2008</u>
Active contributing members:		
Vested	45,843	42,932
Non-vested	30,094	32,607
Inactive members, vested	5,245	4,861
Retirees and beneficiaries currently receiving benefits	<u>42,050</u>	<u>40,739</u>
Total members, retirees, and beneficiaries	<u><b>123,232</b></u>	<u><b>121,139</b></u>

**C. BENEFIT PROVISIONS**

Members become vested when they complete five (5) years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

- 1.) Attain age fifty-five (55) and complete five (5) years of Kentucky service, or
- 2.) Complete 27 years of Kentucky service.

Participants that retire before age 60 with less than 27 years of service receive reduced retirement benefits. Non-university members receive monthly payments equal to two (2) percent (service prior to July 1, 1983) and two and one-half (2.5) percent (service after July 1, 1983) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two (2) percent



*Note 1: Description of Plan continued . . .*

of their final average salary for each year of credited service. The final average salary is the member's five (5) highest annual salaries except members at least 55 with 27 or more years of service may use their (3) three highest annual salaries. New members (including second retirement accounts started) after July 1, 2002 will receive monthly benefits equal to 2% of their final average salary for each year of service if, upon retirement, their total service is less than ten years. New members after July 1, 2002 who retire with ten or more years of total service will receive monthly benefits equal to 2.5% of their final average salary for each year of service, including the first ten years. In addition, non-university members who retire July 1, 2004 and later with more than 30 years of service will have their multiplier increased for all years over 30 from 2.5% to 3.0% to be used in their benefit calculation.

The System also provides disability benefits for vested members at the rate of sixty (60) percent of the final average salary. A life insurance benefit, payable upon the death of a member, is \$2,000 for active contributing members and \$5,000 for retired or disabled members.

Cost of living increases are one and one-half (1.5) percent annually. Additional ad hoc increases, and any other benefit amendments must be authorized by the General Assembly.

**Note 2: Summary of Significant Accounting Policies**

**A. BASIS OF ACCOUNTING**

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

**B. CASH**

KTRS has three cash accounts. At June 30, 2009, the pension cash account totaled \$2,587,489. The administrative expense fund cash account was \$2,339,572 and the life insurance cash account totaled \$1,736,300. Therefore, the carrying value of cash was \$6,663,361 and the corresponding bank balance was \$10,712,930. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2009.

**C. CAPITAL ASSETS**

Fixed assets are recorded at historical cost less straight-line accumulated depreciation. The classes of fixed assets are furniture and equipment, the KTRS office buildings and land. Furniture and equipment are depreciated over an average useful life of five to seven years. The office buildings are depreciated over forty years. Internally created software for the Pathway capital project is capitalized and amortized over five years. The Pathway project will update technological record keeping abilities and improve timeliness and accuracy of responses to member inquiries.

**D. INVESTMENTS**

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and

# KENTUCKY TEACHERS' RETIREMENT SYSTEM

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## *Note 2: Summary of Significant Accounting Policies continued . . .*

preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in plan net assets.

Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

### **E. COMPENSATED ABSENCES**

Expenses for accumulated vacation days and compensatory time earned by the System's employees are recorded when earned. Upon termination or retirement, employees of the System are paid for accumulated vacation time limited to 60 days and accumulated compensatory time limited to 200 hours. As of June 30, 2009 and 2008 accrued compensated absences were \$733,610 and \$658,434.

### **F. RISK MANAGEMENT**

Destruction of assets, theft, employee injuries, and court challenges to administrative policy are among the various risks to which the System is exposed. In order to cover such risks, the System carries appropriate insurance policies such as fire and tornado, employee bonds, fiduciary liability, worker's compensation, and equipment insurance.

### **G. OTHER RECEIVABLES**

KTRS allows qualified purchases of service credit to be made by installment payments not to exceed a five-year period. Revenue is recognized in the initial year of the installment contract agreement. The June 30, 2009 and 2008 installment contract receivables were \$605,511 and \$661,499.

### **H. USE OF ESTIMATES**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### **I. INCOME TAXES**

The defined benefit plan is organized as a tax-exempt retirement plan under the Internal Revenue Code. The tax sheltered annuity plan is no longer continued and will be fully terminated when all lifetime annuities have expired. The System's management believes that it has operated the plans within the constraints imposed by federal tax law.

### **J. ACCOUNTING CHANGES**

The System implemented GASB #51 Accounting and Financial Reporting for Intangible Assets.

### **K. RECLASSIFICATIONS**

Certain 2008 amounts have been reclassified in conformity with the 2009 presentation.

**Note 3: Contributions and Reserves****A. CONTRIBUTIONS**

Contribution rates are established by Kentucky Revised Statutes. Pre July 2008 members are required to contribute 9.855% of their salaries to the System; university members are required to contribute 8.375% of their salaries. KRS 161.580 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 6.16% of their salary to KTRS. Post July 2008 members are required to contribute an additional 1% to the medical insurance fund.

Participating employers are required to contribute the percentage contributed by members plus an additional 3.25% of members' gross salaries. The Commonwealth of Kentucky contributes the required percentages for the local school district employers except for those members who are employed in federally funded positions, in which case the federal program pays the required percentages.

The member and employer contributions consist of pension contributions and post-retirement contributions to the medical insurance fund. The post-retirement contribution from employee (.75% for members prior to July 1, 2008 or 1.75% for members who joined after July 1, 2008) and the employer contribution rate of .75% of members' gross salaries help finance KTRS's retiree medical insurance plan.

If an employee leaves covered employment before accumulating five (5) years of credited service, accumulated employee contributions plus interest are refunded to the employee upon the member's request.

**B. RESERVES****Member Reserve**

This fund was established by KRS 161.420(2) as the Teacher Savings Fund and consists of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from Unallocated Reserves. The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to Benefit Reserves, the fund from which retirement benefits are paid.

**Employer Reserve**

This fund was established by KRS 161.420(3) as the State Accumulation Fund and receives state appropriations to the Retirement System. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching is also realized by producing either a receivable from or a payable to the State of Kentucky.

**Benefit Reserve**

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

# KENTUCKY TEACHERS' RETIREMENT SYSTEM

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Note 3: Contributions and Reserves continued . . .

## Unallocated Reserve

This fund was established by KRS 161.420(4) as the Allowance Reserve Fund, the source for retirement, disability, and survivor benefits paid to members of the System. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from Unallocated Reserves.

## Administrative Expense Reserve

This fund was established by KRS 161.420(1) as the Expense Fund. Investment income transferred to this fund from Unallocated Reserves is used to pay the administrative expenses of the System.

### Note 4: Funded Status and Funding Progress

#### A. DESCRIPTION OF FUNDING PROGRESS

The funded status of the Defined Benefit Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1,000's)

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2009	\$ 14,885,981	\$ 23,400,426	\$ 8,514,445	63.6%	\$ 3,253,077	261.7%

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear funding trend information as obtained from the System's independent actuary's annual valuation report.

Expressing the actuarial value of assets as a percentage of the actuarial accrued liabilities provides an indication whether the System is becoming financially stronger or weaker. Generally, the greater the percentage the stronger the retirement system. Trends in unfunded actuarial accrued liabilities and annual covered payroll are both affected by inflation. Expressing the unfunded actuarial accrued liabilities as a percentage of annual covered payroll aids analysis of progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage the stronger the retirement system.

The accompanying schedule of employer contributions, presented as required supplementary information following the notes to the financial statements, presents trend information about the amounts contributed to the plan by employers in comparison to the Annual Required Contribution (ARC). The ARC is actuarially determined in accordance with the parameters of GASB Statement 50. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each

*Note 4: Funded Status and Funding Progress continued . . .*

year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

**B. METHODOLOGIES**

The promised benefits of the System are included in the actuarially calculated contribution rates, which are developed using the projected unit credit actuarial cost method. 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 using an open amortization approach. The five (5) year smoothed market approach is used for asset valuation.

<b>Actuarial Value Assets</b>		
(1)	Actuarial Value of Assets on June 30, 2008	\$ 15,321,325,033
(2)	Market Value End of Year June 30, 2009	11,515,883,575
(3)	Market Value Beginning of Year June 30, 2008	14,076,692,181
(4)	Cash Flow	
	a. Contributions	736,228,499
	b. Benefit Payments	1,268,188,826
	c. Administrative Expenses	<u>8,165,757</u>
	d. Net: (4)a - (4)b - (4)c	(540,126,084)
(5)	Investment Income	
	a. Market total: (2) - (3) - (4)d	(2,020,682,522)
	b. Assumed Rate	7.5%
	c. Amount for Immediate Recognition: [(3) x (5)b] + [(4)d x (5)b x 0.5]	<u>1,035,497,185</u>
	d. Amount for Phased-In Recognition: (5)a - (5)c	(3,056,179,707)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20 x (5)d	(611,235,941)
	b. First Prior Year	(409,879,449)
	c. Second Prior Year	190,240,386
	d. Third Prior Year	(75,996,339)
	e. Fourth Prior Year	<u>(23,843,540)</u>
	f. Total Recognized Investment Gain	<u>(930,714,883)</u>
(7)	Actuarial Value End of Year (1) + (4)d + (5)c + (6)f	<u>14,885,981,251</u>
(8)	Difference Between Market & Actuarial Values (2) - (7)	<u>\$ (3,370,097,676)</u>

Note 4: Funded Status and Funding Progress continued . . .

**G. ASSUMPTIONS**

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2009, the most recent updated actuarial information include:

*	Assumed inflation rate	4%
*	Assumed investment rate	7.5%
*	Assumed projected salary increases	4.0% - 8.20%
*	Assumed post retirement benefit increase	1.5%

<p><b>Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements)</b></p>
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**A. LEGAL PROVISIONS FOR INVESTMENTS**

The following disclosures are meant to help the users of KTRS's financial statements assess the risks KTRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the Board approves through its powers as defined in KRS 161.430. The parameters as outlined in Title 102, Chapter 1.175, Section 2 of the Kentucky Administrative Regulations are as follows:

- ◆ There shall be no limit on the amount of investments owned by the System if the investments are guaranteed by the U.S. Government.
- ◆ Not more than thirty-five percent (35%) of the assets of the System at market value shall be invested in corporate debt obligations.
- ◆ Not more than sixty-five percent (65%) of the assets of the System at market value shall be invested in common stocks or preferred stocks. Not more than twenty-five percent (25%) of the assets of the System at market value shall be invested in a stock portfolio designed to replicate a general stock index. Not more than fifteen percent (15%) of the assets of the System at market value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks.
- ◆ Not more than ten percent (10%) of the assets of the System at market value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- ◆ Not more than ten percent (10%) of the assets of the System at market value shall be invested in alternative investments. This would include private equity, venture capital, timberland, and infrastructure investments.
- ◆ Not more than ten percent (10%) of the assets of the System at market value shall be invested in any additional category or categories of investments. The Board of Trustees shall approve by resolution such additional category or categories of investments.

*Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .*

**B. CASH AND CASH EQUIVALENTS**

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, the retirement system's deposits may not be returned to the System. The bank's total balance at June 30, 2009 was \$10,712,930 of which \$4,642,173 primarily represents deposited amounts due the System for which actual funds are in transit to and waiting to be received by the custodial bank; therefore, these funds were unavailable for investment. An additional amount of \$2,339,572 represents funds held in the bank but their investment is controlled by the Commonwealth of Kentucky. There were various outstanding checks and vouchers totaling a \$4,046,953 balance reduction while the amount of \$3,728,569 was the amount invested in cash equivalents. Cash equivalents are created through the daily sweeps of available excess cash by the System's custodial bank into bank sponsored short-term investment funds. These funds are custodial bank sponsored commingled funds which are invested in short-term securities backed by the U.S. Government and its agencies. The actual cash deposits held in bank accounts are currently insured up to \$250,000 as covered by federal depository insurance and uncollateralized until being invested in cash equivalents.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

- a. uncollateralized,
- b. collateralized with securities held by the pledging financial institution, or
- c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2009, the System's cash equivalents in the amount of \$3,728,569 were not exposed to custodial credit risk since this amount was invested by the custodial bank and collateralized at 102% with the collateral pledged to the Treasurer of the Commonwealth of Kentucky.

**C. INVESTMENTS**

All of the System's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, and alternative investments. These assets are reported at fair market value.

Investments are governed by the Board of Trustees' policy while the Board of Trustees and the Investment Committee shall execute their fiduciary responsibilities in accordance with the "prudent person rule", as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries, to act as a prudent person would be expected to act, with the "care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims".

# KENTUCKY TEACHERS' RETIREMENT SYSTEM

Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .

The following chart represents the fair market values of the investments of the Kentucky Teachers' Retirement System for June 30, 2009.

<b>Schedule of Investments</b>		
	<b>Market Value June 30, 2009</b>	<b>Market Value June 30, 2008</b>
<b>Short Term Investments</b>		
Repurchase Agreements	\$ 256,900,000	\$ 338,900,000
Agency & Other (Short Term)	0	49,872,500
<b>Total Short Term Investments</b>	<b>256,900,000</b>	<b>388,772,500</b>
<b>Bonds and Mortgages</b>		
U. S. Government	579,447,437	924,161,362
Agency Bonds	393,391,786	495,014,012
Mortgage-Backed Securities	385,320,648	500,140,653
Collateralized Mortgage Obligations	125,751,715	160,154,576
Asset Backed Securities	67,889,109	155,645,158
Commercial Mortgage-Backed Securities	203,469,640	205,815,754
Municipal Bonds	393,237,899	329,621,169
Corporate Bonds	1,637,328,139	1,508,621,584
<b>Total Bonds and Mortgages</b>	<b>3,785,836,373</b>	<b>4,279,174,268</b>
<b>Equities</b>		
International Equity	1,355,549,565	1,328,489,089
U. S. Equity	5,730,697,481	7,700,891,752
<b>Total Equities</b>	<b>7,086,247,046</b>	<b>9,029,380,841</b>
<b>Real Estate</b>		
Real Estate Equity	425,746,050	431,693,774
<b>Total Real Estate Equity</b>	<b>425,746,050</b>	<b>431,693,774</b>
<b>Alternative Investments</b>		
Private Equity	60,731,073	28,791,613
Timberland	116,599,371	75,995,962
<b>Total Alternative Investments</b>	<b>177,330,444</b>	<b>104,787,575</b>
<b>TOTAL INVESTMENTS</b>	<b>\$ 11,732,059,913</b>	<b>\$ 14,233,808,958</b>

## Custodial Credit Risk

Custodial Credit Risk for an investment is the risk that, in the event of the failure of counterparty, the pension trust fund will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the retirement system, and are held by either:

- a. the counterparty or
- b. the counterparty's trust department or agent, but not in the System's name.



*Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .*

The cash reserve of the System is maintained in high quality short term investments. Commercial paper, U.S. Treasury and agency obligations, certificates of deposit, banker's acceptances, and repurchase agreements are all permissible investments. The System utilized investment instruments it regards as the most secure and having the best returns and does not use short term investments that finance foreign businesses unless they are issued and guaranteed by the United States Government.

Individual repurchase agreements are ordered by KTRS under the terms of Master Repurchase Agreements with various brokers under terms dictated by KTRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and KTRS's nominee name. This account is unique to KTRS. The Master Repurchase Agreements require that the supporting collateral have a market value of at least 102% of the value of the repurchase agreements.

As of June 30, 2009, cash collateral reinvestment securities acquired through securities lending by the System's custodian, who is also the lending agent/counterparty, amounted to \$167,874,202 related to \$161,861,685 securities lent. This is consistent with the System's securities lending agreement with the custodian. (Please refer to a following section entitled Securities Lending.)

**Interest Rate Risk**

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of the retirement System's investments. In general, the longer the period until an investment matures, the greater the negative impact that changes in interest rates can have on fair value.

As of June 30, 2009 KTRS had the following investments and weighted average maturities:

<b><u>Investment Type</u></b>	<b><u>Fair Value</u></b>	<b><u>Average Maturity</u></b> <b><u>(years)</u></b>
U.S. Government	\$ 579,447,437	9.4
Agency	393,391,786	9.7
MBS	385,320,648	15.9
CMO	125,751,715	21.1
ABS	67,889,109	13.5
CMBS	203,469,640	28.7
Muni	393,237,899	13.8
Corporate	1,637,328,139	8.3
<b>Totals</b>	<b><u>\$ 3,785,836,373</u></b>	<b><u>11.6</u></b>

*Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .*

In addition to the above securities, Repurchase Agreements (short-term investments) had a total fair value of \$256,900,000 and had a weighted average maturity of two days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations are typically amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which are generally pre-payable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology. It is widely used in the management of fixed income portfolios by quantifying the risk of interest rate changes. This methodology takes into account optionality on bonds and scales the risk of price changes on bonds depending upon the degree of change in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the System manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by the System were securitized and are guaranteed by Fannie Mae, Freddie Mac, or GNMA. The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower than anticipated market rates generally lead to higher than anticipated prepayments and a shorter average life; higher than anticipated market rates generally lead to lower than anticipated prepayments and a longer average life. The System held \$385.3 million in mortgage-backed securities as of June 30, 2009.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with a collateralized mortgage obligations established payment order. The System held \$125.8 million in collateralized mortgage obligations as of June 30, 2009.

Asset-backed securities are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other credit providers. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The asset-backed securities in the amount of \$67.9 million held by the System as of June 30, 2009 are moderately sensitive to changes in interest rates.

Commercial mortgage-backed securities are securities representing interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are generally divided into various tranches based upon planned payment order and level of seniority. The System's commercial mortgage-backed securities investments consist of highly rated relatively senior tranches. The average maturity of the System's commercial mortgage-backed securities holdings in the schedule above reflects the legal maturity of those holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The System held \$203.5 million in commercial mortgage-backed securities investments as of June 30, 2009.

*Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .*

**Credit Risk**

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedule lists KTRS's fixed income investments (net of cash equivalents) according to credit ratings as of June 30, 2009:

<u>RATING</u>	<u>FAIR VALUE</u>	<u>%</u>
U.S. Government	\$ 579,447,437	15.3
Agency	393,391,786	10.4
AAA	1,055,435,764	27.9
AA	345,570,041	9.1
A	887,207,814	23.4
BBB	518,902,281	13.7
BB	2,441,250	0.1
<u>B</u>	<u>3,440,000</u>	<u>0.1</u>
Total	<u>\$ 3,785,836,373</u>	<u>100.0</u>

Total market value of the fixed income portfolio was \$3,785,836,373 on June 30, 2009. The rating system used in the chart is the nationally recognized Standard & Poor's rating system.

In addition to the above categories, the System held \$256,900,000 in Cash Equivalents or short term investments such as Repurchase Agreements. The credit risk associated with Repurchase Agreements and Agency Discount investments is very minimal as the general rating of these securities is higher than AAA. In addition, investments in U.S. Government and Agency securities are also highly rated securities since they are backed by the U.S. Government. Notation is made that the ratings of securities is subject to change due to circumstances and thereby may have a lower rating than when first purchased.

The System's policy on credit rating as stated in 102 KAR 1:175 is that:

"A fixed income investment shall be rated at the time of purchase within the four (4) highest credit classifications identified by one (1) of the major rating services. A private placement debt investment shall be subject to the same credit qualifications as each fixed income investment. Notwithstanding the foregoing, the fixed income investment portfolio as a whole shall maintain an average rating equal to at least the second highest credit classification."

**Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. Per Administrative Regulation 102 KAR 1:175, the System is subject to the following policies regarding single issuers of fixed income and equity securities:

"Unless the issuer is the United States Government or a government sponsored enterprise (GSE), the amount invested in the securities of a single issuer shall not equal more than five (5) percent of the assets of the System.

# KENTUCKY TEACHERS' RETIREMENT SYSTEM

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*Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .*

"The System's position in a single stock shall not exceed two and one-half (2.5) percent of the System's assets. The System's position in a single stock shall not exceed five (5) percent of the outstanding stock for that company unless the investment is part of a venture capital program."

KTRS has not invested greater than five percent (5%) of the System's assets at book value in any single issuer and is in compliance with the System's policies as stated here.

## **Foreign Currency Risk**

As of June 30, 2009, KTRS exposure to foreign currency risk consisted of \$934,821,801 of foreign equity investments through commingled funds managed by UBS Global Asset Management, Baring Asset Management, and Baillie Gifford as follows:

UBS International Collective	\$ 429,263,724
Baring Asset Management	245,698,127
Baillie Gifford	<u>259,859,950</u>
<b>Total</b>	<b><u><u>\$ 934,821,801</u></u></b>

These amounts represent the market values of equities held by the Fund as a result of cash contributions to each Fund by KTRS.

In addition to the commingled funds investing in foreign securities, KTRS held \$420,727,764 associated with foreign interests in American Depositary Receipt investments. These American Depositary Receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. American Depositary Receipts are denominated in U.S. currency.

The System's policy regarding foreign equities is that not more than fifteen percent (15%) of the assets of the System at market value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the sixty-five percent (65%) limitation for total stocks per 102 KAR 1:175 Section 2(e).

## **D. SECURITIES LENDING**

Section 161.430 of the Kentucky Revised Statutes empowers the Board of Trustees with complete fiduciary responsibility for the funds of the System. The System operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities, selected domestic bonds, and domestic and international stocks are the types of securities that are lent. The System's sub-custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral may consist of cash, marketable U.S. Government securities, and select marketable U.S. Government agency securities approved by the System.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28 Accounting and Financial Reporting for Securities Lending Transactions, which established standards of accounting and financial reporting for securities lending transactions. The following section details the net income earned from securities lending for the fiscal year ended June 30, 2009:

*Note 5: Deposits With Financial Institutions and Investments (Including Repurchase Agreements) continued . . .*

<b>Item</b>	<b>Earnings</b>
Gross Earnings (Interest and fees)	\$ 1,348,381
Plus: Gross Borrower Rebates	1,704,740
Less: Bank Fees	<u>(906,950)</u>
Net Earnings	<u><u>\$ 2,146,171</u></u>

Cash collateral is invested in short-term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities received unless the borrower defaults. The lending agent (Bank of New York Mellon) also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. As of June 30, 2009, the loan average days to maturity was one (1) day and the weighted average investment maturity of cash collateral investments was one (1) day.

At fiscal year end, the System has no credit risk exposure to borrowers, since the amounts the System owes the borrowers exceeds the amounts the borrowers owe the System and there were no losses resulting during the period.

Security lending programs can entail interest rate risk and credit risk. The System minimizes interest rate risk by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair values of the underlying securities, and the value of the collateral pledged at June 30, 2009:

<u>Type of Security Lent</u>	<u>Fair Value</u>	<u>Cash Collateral Received</u> <u>Non-cash Collateral Value*</u>
U.S. Government and Agencies	\$ 12,181,403	\$ 12,441,565
U.S. Equities	<u>149,680,282</u>	<u>155,432,637</u>
Total	<u><u>\$ 161,861,685</u></u>	<u><u>\$ 167,874,202</u></u>

*\* Represents value of cash collateral only. Loan or margin collateral requirements met via the use of non-cash collateral (e.g. Government securities or Letters of Credit) are excluded from these values.*

**Note 6: Pension Plan for Employees of the System**

Full-time employees of Kentucky Teachers' Retirement System (KTRS) participate in either KTRS or Kentucky Employees Retirement System. Both plans are multiple-employer cost sharing defined benefit pension plans. All KTRS employees in positions requiring a four-year degree are covered under KTRS. The contribution rates and required employer matching are the same as state agency employers in the System. These rates, the plan description and funding policy are fully disclosed in the notes to the financial statements.

The System's annual required contributions for KTRS employee members for the fiscal years 2009, 2008 and 2007 were \$456,258, \$413,492, and \$388,973 respectively. KTRS contributed 100% of the required contribution each year.

All other KTRS employees are covered under the Kentucky Employee Retirement System (KERS) in the Non-Hazardous Employees Pension Plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(3), contribution rates shall be determined by the Board on the basis of an annual actuarial valuation. Rates may be amended by the Board as needed. The System's administrative budget and employer contribution rates are subject to the approval of the Kentucky General Assembly. Employee contribution rates are set by the statute and may be changed only by the Kentucky General Assembly.

Members of KERS were required to contribute 5% of their annual creditable compensation for the fiscal years 2009, 2008, and 2007. As the employer, KTRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). The approved rate for the fiscal years 2009, 2008 and 2007 were 10.01%, 8.5% and 7.75%; and the System's annual required contributions to KERS were \$182,399, \$129,356 and \$114,711 respectively. KTRS contributed 100% of the required contributions for each year.

KERS issues a publicly available financial report that may be obtained by writing Kentucky Retirement System, 1260 Louisville Road, Frankfort, Kentucky 40601-6124.

**Note 7: 403(b) Tax-Sheltered Annuity Plan**

**A. PLAN DESCRIPTION**

KTRS has, in prior years, administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members were able to voluntarily defer a portion of their compensation within the limits established by the applicable laws and regulations. However, the System's Board of Trustees determined that the cost of providing the necessary services to assure the System of continuing compliance with these laws and regulations was not economically feasible due to the limited participation in the program by the System's members. The Board decided, therefore, to discontinue offering the program as of April 30, 1997. Members who were not receiving annuities from their account as of April 30, 1997, were able to transfer their respective accounts directly into other tax-sheltered plans on a tax-free basis. As of June 30, 2009, the twenty-four members who are receiving annuities will continue to receive distributions according to the terms of their respective elections.

Note 7: 403(b) Tax-Sheltered Annuity Plan continued . . .

## B. SUMMARY OF SIGNIFICANT POLICIES

### Basis of Accounting

The Tax-sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting. Contributions are no longer being accepted into the plan, therefore, there are no receivables to be recognized.

### Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

## Note 8: Medical Insurance Plan & Post-Employment Benefits

### A. PLAN DESCRIPTION

In addition to pension benefits described in Note 1, Kentucky Revised Statute 161.675 requires KTRS to provide access to post-retirement healthcare benefits for eligible members and dependents. The KTRS Medical Insurance benefit is funded by employer and employee contributions. Changes made to the medical plan may be made by the KTRS Board of Trustees, the Kentucky Department of Employee Insurance, and the General Assembly.

To be eligible for medical benefits, the member must have retired either for service or disability. The KTRS Medical Insurance Fund offers coverage to members under the age of 65 through the Kentucky Employees Health Plan administered by the Kentucky Department of Employee Insurance. KTRS retired members are given a supplement to be used for payment of their health insurance premium. The amount of the member's supplement is based on a contribution supplement table approved by the KTRS Board of Trustees. The retired member pays premiums in excess of the monthly supplement. The Commonwealth of Kentucky bears no risk for excess claims expenses that exceed the premium equivalents charged for the Kentucky Employees Health Plan. Once retired members and eligible spouses attain age 65 and are Medicare eligible, coverage is obtained through the KTRS Medicare Eligible Health Plan. KTRS bears the risk for actual drug claims cost in the Medicare Eligible Health Plan.

At June 30, 2009, KTRS insurance covered 33,489 retirees and 6,822 dependents. There are 197 participating employers and 75,937 active members contributing to the Medical Insurance Fund.

### B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### Basis of Accounting

The Medical Insurance Plan financial statements are prepared using the accrual basis of accounting. Member contributions and employer matching are recognized in the fiscal year due.

Healthcare premiums charged to retired members are recognized when due and any premiums collected in advance are recognized as a liability.

#### Method Used to Value Investments

Since the investments are all short-term investments they are reported at cost, which approximates fair value.

# KENTUCKY TEACHERS' RETIREMENT SYSTEM

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Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .

## C. CONTRIBUTIONS

The post-retirement healthcare provided by KTRS is financed on a pay-as-you-go basis. In order to fund the post-retirement healthcare benefit, active member contributions are matched by the state at .75% of members' gross salaries. Those who became members before July 1, 2008 contribute 0.75% of gross payroll to the plan. Member contributions are 1.75% of gross payroll for those who became members of the System after July 1, 2008. Also, the premiums collected from retirees as described in the plan description and investment interest help meet the medical expenses of the plan.

Escalating medical expenses have made it increasingly difficult to meet the expenses of the retiree health insurance program. To further fund the plan, the state legislature has directed a portion of the state employer contribution in a sufficient amount to be allocated to the Medical Insurance Fund instead of the pension fund. The System actuary calculated those amounts to be \$125,000,000 and \$125,000,000 for fiscal years 2008 and 2009 respectively. The balances are to be amortized over a period of 10 years. The Legislature appropriated \$18,280,000 in fiscal year 2008-2009 and \$36,490,700 in 2009-2010 to apply to amortization of the balances.

## D. FUNDED STATUS AND FUNDING PROGRESS

The funded status of the Medical Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amount in 1,000's):

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2009	\$ 229,103	\$ 6,454,733	\$ 6,225,630	3.5%	\$ 3,253,077	191.4%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Actuarially determined amounts are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedules of funding progress, presented as required supplementary information following the notes to the financial statements, present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

The accompanying schedule of employer contributions present trend information about the amounts contributed to the plan by employers in comparison to the ARC, an amount that is actuarially determined in accordance with the parameters of GASB Statement 43. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost for each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of



*Note 8: Medical Insurance Plan & Post-Employment Benefits continued . . .*

each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Significant actuarial methodologies and assumptions employed as of the June 30, 2009 valuation date include the following:

Actuarial cost method	Projected unit credit
Actuarial value of assets	Market value of assets
Assumed inflation rate	4.0%
Investment rate of return	4.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Healthcare trend rate	10.50%
Ultimate trend rate	5.00%
Year of Ultimate Pre-Medicare trend rate	2017

**E. INCURRED BUT NOT REPORTED CLAIMS LIABILITIES**

KTRS recognizes estimates of liabilities for self-insured unpaid claims that have incurred (both reported and unreported) using the development method. This method uses past observed patterns of time between the date the claim is incurred and the date the claim is paid to estimate incurred claims from available paid claim information. The following schedule shows the change in the claims and liability and the claims activity for the years ended June 30, 2009 and 2008.

	Fiscal Year 2009	Fiscal Year 2008
Beginning Unpaid Claims Liability	\$ 2,289,841	\$ 1,966,148
Current Year Claims and Changes in Estimates	201,400,693	175,915,477
Claims Payments	<u>(200,720,780)</u>	<u>(175,591,784)</u>
Ending Unpaid Claims Liability	<u>\$ 2,969,754</u>	<u>\$ 2,289,841</u>

**Note 9: Life Insurance Plan**

**A. PLAN DESCRIPTION**

The System administers the Life Insurance Plan as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 197 participating employers. The benefit is \$5,000 for members who are retired for service or disability, and \$2,000 for active contributing members.

**B. SUMMARY OF SIGNIFICANT POLICIES**

**Basis of Accounting**

The Life Insurance Plan financial statements are prepared using the accrual basis of accounting. Employer contributions are recognized in the fiscal year due.

**Method Used to Value Investments**

Life Insurance Plan investments are reported at fair value. The short-term securities are carried at cost, which approximates fair value. Fixed income is generally valued based on published market prices and quotations from national security exchanges and securities pricing services.

**C. CONTRIBUTIONS**

To finance the life insurance benefit, a portion of the employer contribution rate is directed to the plan as recommended by the System's actuary. For fiscal years 2009 and 2008, this rate has been .17% of active members' payroll.

**D. FUNDED STATUS AND FUNDING PROGRESS**

The funded status of the Life Insurance Plan as of the most recent actuarial valuation date is as follows:

(Dollar amounts in 1,000's)

Valuation Year June 30	Actuarial Value of Assets	Actuarial Accrued Liabilities	Unfunded Actuarial Accrued Liabilities (uaal)	Funded Ratio	Covered Payroll	UAAL as a % of Covered Payroll
	A	B	B-A	(A/B)	C	[(B-A)/C]
2009	\$ 84,703	\$ 90,334	\$ 5,631	93.8%	\$ 3,253,077	.17%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. The required supplementary schedules following the notes to the financial section contain more actuarial information.

*Note 9: Life Insurance Plan continued . . .*

Significant actuarial methodologies and assumptions employed as of the June 30, 2009 valuation date include the following:

Actuarial cost method	Projected unit credit
Actuarial value of assets	Market value of assets
Assumed inflation rate	4.0%
Investment rate of return	7.5%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years

**Required Supplementary Schedules**

**Defined Benefit Plan  
Schedule of Funding Progress**  
(dollar amounts in millions)

VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	<b>a</b>	<b>b</b>	<b>(b-a)</b>	<b>(a/b)</b>	<b>c</b>	<b>[(b-a)/c]</b>
2004	\$ 14,255.1	\$ 17,617.6	\$ 3,362.5	80.9%	\$ 2,641.5	127.3%
2005	14,598.8	19,134.8	4,536.0	76.3	2,703.4	167.8
2006	14,857.6	20,324.7	5,467.1	73.1	2,859.5	191.2
2007	15,285.0	21,255.0	5,970.0	71.9	2,975.3	200.7
2008	15,321.3	22,460.3	7,139.0	68.2	3,190.3	223.8
2009	14,885.9	23,400.3	8,514.4	63.6	3,253.1	261.7

The amounts reported in this schedule of funding progress do not include assets or liabilities for postemployment benefits, nor are the assets and liabilities of the tax-sheltered annuity plan included.

KENTUCKY TEACHERS' RETIREMENT SYSTEM

Required Supplemental Schedules continued . . .

<b>Defined Benefit Plan Schedule of Employer Contributions</b>		
FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS	PERCENTAGE CONTRIBUTED
2004	\$ 364,351,412	100 %
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85
2008	563,789,483	78
2009	600,282,735	67

<b>Medical Insurance Plan Schedule of Funding Progress</b> <i>(dollar amounts in millions)</i>						
VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	<b>a</b>	<b>b</b>	<b>(b-a)</b>	<b>(a/b)</b>	<b>c</b>	<b>[(b-a)/c]</b>
2004	\$ 158.9	\$ 3,166.6	\$ 3,007.7	5.0%	\$ 2,641.5	113.9%
2005	147.3	4,763.9	4,616.6	3.1	2,703.4	170.8
2006	131.6	4,341.9	4,210.3	3.0	2,859.5	147.2
2007	140.8	5,928.8	5,788.0	2.4	2,975.3	194.5
2008	185.9	6,434.5	6,248.6	2.9	3,190.3	195.9
2009	229.1	6,454.7	6,225.6	3.5	3,253.1	191.4

*The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or life insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.*

<b>Medical Insurance Plan Schedule of Employers Contributions</b>					
Fiscal Year Ending Date	Annual Required Contribution (ARC) ( a )	Actual Employer Contribution ( b )	Retiree Drug Subsidy Contribution ( c )	Total Contribution (b) + (c)	Percentage of ARC Contributed [(b) + (c)/(a)]
6/30/2007	\$ 231,473,321	\$ 113,258,761	\$ 10,312,361	\$ 123,571,122	53.40%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.70
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.10

*Only three years of actuarial calculations of annual required contributions is available.*

Required Supplemental Schedules continued . . .

<b>Life Insurance Plan Schedule of Funding Progress</b> <i>(dollar amounts in thousands)</i>						
VALUATION YEAR JUNE 30	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	<b>a</b>	<b>b</b>	<b>(b-a)</b>	<b>(a/b)</b>	<b>c</b>	<b>[(b-a)/c]</b>
2007	\$ 71,426	\$ 82,722	\$ 11,296	86.3%	\$ 2,975,289	0.38%
2008	77,658	84,265	6,607	92.2	3,190,332	0.21
2009	84,703	90,334	5,631	93.8	3,253,077	0.17

*The amounts reported in this schedule of funding progress do not include assets or liabilities for the defined benefit or medical insurance plans, nor are the assets and liabilities of the tax-sheltered annuity plan included.*

<b>Life Insurance Plan Schedule of Employer Contributions</b>			
FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTIONS (ARC)	ACTUAL EMPLOYER CONTRIBUTIONS	PERCENTAGE OF ARC CONTRIBUTED
2007	\$ 1,785,173	\$ 5,022,137	281.3 %
2008	1,914,199	5,411,249	282.7
2009	1,498,076	5,455,473	364.2

**Required Supporting Schedules**

**Supporting Schedule 1  
Schedule of Administrative Expenses  
Year Ended June 30, 2009**

Salaries	\$ 5,865,661
Other Personnel Costs	562,890
Professional Services & Contracts	324,181
Utilities	78,952
Rentals	16,172
Maintenance	132,703
Postage & Related Services	352,550
Printing	79,592
Insurance	109,741
Miscellaneous Services	107,331
Telecommunications	28,446
Computer Services	55,728
Supplies	49,493
Depreciation	108,347
Travel	50,781
Dues & Subscriptions	38,817
Miscellaneous Commodities	11,494
Furniture, Fixtures, & Equipment not Capitalized	117,702
Compensated Absences	75,176
<b>TOTAL ADMINISTRATIVE EXPENSES</b>	<b>\$ 8,165,757</b>

**Supporting Schedule 2  
Schedule of Professional Fees for Year Ended June 30, 2009**

<b>PROFESSIONAL</b>	<b>NATURE OF SERVICE</b>	
Cavanaugh Macdonald Consulting	Actuarial Services	\$ 249,959
Charles T. Mitchell Company	Auditing Services	29,600
Farmers Bank	Banking Services	16,967
International Claim Specialist	Investigative Services	2,840
Attorney General	Attorney Services	2,719
Klausner & Kaufman	Attorney Services	6,980
Reed, Weitkamp, Schell & Vice	Attorney Services	6,388
Stoll Keenon Ogden	Attorney Services	8,728
	<b>TOTAL</b>	<b>\$ 324,181</b>

Required Supporting Schedules continued . . .

<b>Supporting Schedule 3</b>		
<b>Schedule of Contracted Investment Management</b>		
<b>Expenses and Miscellaneous Expenses</b>		
<b>Year Ended June 30, 2009</b>		
<b>BALANCED MANAGER</b>		
Todd-Veredus Asset Management, LLC		\$ 1,233,072
<b>EQUITY MANAGERS</b>		
Baring Focused International	\$ 842,795	
Baillie Gifford International	178,330	
GE Asset Management Inc.	676,376	
UBS Global Asset Management Corporation	2,559,270	
Wellington Management Company, LLP	<u>2,225,042</u>	
<b>Total Equity Managers</b>		6,481,813
<b>FIXED INCOME MANAGERS</b>		
Galliard Capital Management		353,340
<b>REAL ESTATE</b>		
Prudential PRISA Real Estate		300,776
<b>ALTERNATIVE INVESTMENTS</b>		
Private Equity		6,785,554
<b>CUSTODIAN</b>		
Farmers Bank		468,079
<b>CONSULTANT</b>		
Becker, Burke Associates	125,000	
Enis Knupp	<u>235,930</u>	
<b>Total Consultant</b>		360,930
<b>LEGAL &amp; RESEARCH</b>		
Stoll, Keenon, Ogden, PLLC	11,164	
Schottenstein, Zox & Dunn	<u>32,335</u>	
<b>Total Legal &amp; Research</b>		43,499
<b>OTHER</b>		
Subscription/Services		<u>294,847</u>
<b>TOTAL CONTRACTED INVESTMENT MANAGEMENT EXPENSES</b>		<b><u>\$ 16,321,910</u></b>



Charles T. Mitchell Co. LLP  
Certified Public Accountants

William G. Johnson, Jr., C.P.A.  
James Clouse, C.P.A.  
Bernadette Smith, C.P.A.  
Kim Field, C.P.A.  
Greg Miklavcic, C.P.A.  
Don C. Giles, C.P.A., Consultant

**REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS  
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH  
GOVERNMENT AUDITING STANDARDS**

Board of Trustees  
Teachers' Retirement System of the State of Kentucky  
Frankfort, Kentucky

We have audited the financial statements of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2009, and have issued our report thereon dated December 18, 2009. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

**Internal Control Over Financial Reporting**

In planning and performing our audit, we considered Teachers' Retirement System of the State of Kentucky's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Teachers' Retirement System of the State of Kentucky's internal control over financial reporting.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the entity's financial statements that is more than inconsequential will not be prevented or detected by the entity's internal control.

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the entity's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

**Compliance and Other Matters**

As part of obtaining reasonable assurance about whether Teachers' Retirement System of the State of Kentucky's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

This report is intended solely for the information and use of management and the Commonwealth of Kentucky and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

*Charles T. Mitchell Co.*

Frankfort, Kentucky  
December 18, 2009

201 West Main Street, Frankfort, Kentucky 40601 | P.O. Box 698, Frankfort, Kentucky 40602-0698  
(502) 227-7395 | Fax (502) 227-8005 | www.ctmcpa.com





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# Investment Section

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for Fiscal Year ending June 30, 2009



PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

**Old One Room School House  
Salem, Kentucky**

## REPORT ON INVESTMENT ACTIVITY

This report is prepared by the Investment staff of the  
Kentucky Teachers' Retirement System.

**Mr. Paul L. Yancey, CFA**  
Chief Investment Officer

**Mr. Philip L. Webb**  
Director of Investment Accounting

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## INVESTMENT COMMITTEE

**Mr. Robert M. Conley**  
Chairman

**Mr. Ronald L. Sanders**  
Vice-Chairman

**Ms. Barbara G. Sterrett**  
Member

**Dr. Jay Morgan**  
Member

**Mr. Tom Shelton**  
Member

## EXECUTIVE INVESTMENT STAFF

**Mr. Gary L. Harbin, CPA**  
*Executive Secretary*

**Mr. Paul L. Yancey, CFA**  
*Chief Investment Officer*



December 1, 2009

**To the members of the Board of Trustees and participants of the Teachers' Retirement System of Kentucky:**

The fiscal year ended June 30, 2009 saw the greatest crisis our financial system has experienced since the 1930s. An overleveraged system nearly collapsed in the fall of 2008 as real estate prices continued to decline, exposing a plethora of unsound lending and financial engineering practices, as well as inadequate risk control and regulation. Economic activity, already weak, plummeted in late 2008 and early 2009. An unprecedented array of government initiatives appeared to be stabilizing the markets and the economy by mid-2009.

While negative returns were unavoidable, the System's portfolio held up remarkably well in what we hope to be a once-in-a-lifetime event. The total portfolio returned -14.3% for the fiscal year versus -16.0% for its Policy Index. Domestic equities returned -25.5% versus -26.3% for the S&P 1500. International equities returned -27.5% versus -31.0% for the MSCI EAFE Index. Fixed income returned 7.2% versus 5.3% for the Barclays Government/Credit Index.

Just as importantly, the System's multi-year process of optimizing its asset allocation was not disrupted by the market turmoil. Over the fiscal year, international equities rose from 9.0% to 11.3% of assets. In late 2008, near stock market lows, over \$500 million was rebalanced out of high quality bonds, with the funds going primarily into international and domestic stocks. The system made \$165 million in private equity commitments over the fiscal year while other institutions, suffering liquidity crises, were considering selling commitments at deep discounts. At fiscal year-end, plans were in the pipeline to continue prudently adding alternative assets on an opportunistic basis.

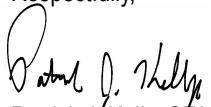
The System underwent a best practices study to compare and contrast the operations, management and governance of the System to other leading public pension plans. In general, the study found that the System was either currently utilizing best practices or in the process of taking measures to do so. The report recommended eliminating the requirement for Board investment policies to be set forth in administrative regulations in order to facilitate and modernize the management of the System's investments as well as eliminating the diversion of pension contributions to fund the Medical Insurance Fund.

Over the course of the fiscal year, the Investment Committee was expanded to include five trustees plus two outside members with investment expertise. We expect this enhanced Investment Committee structure to be a tremendous benefit to the System's investment program in the years ahead. An asset-liability modeling study, which will help chart the asset allocation course for the next several years, is scheduled to be completed in early 2010.

The System's investment program, grounded in fundamental value and risk control, has shown exceptional resilience through the financial crisis. Looking forward, the System is well positioned to take advantage of market opportunities due to disciplined management prior to and during the market crisis. We believe the ongoing initiatives to broaden and expand the asset classes in which the System invests will better equip it to achieve the long-term goals.

It is a privilege to have been selected as investment consultant for the System and we look forward to our continued work with its exceptional investment staff, Investment Committee, and Board of Trustees.

Respectfully,

  
Patrick J. Kelly, CFA  
Principal

ENNIS, KNUPP & ASSOCIATES, INC.  
10 SOUTH RIVERSIDE PLAZA, SUITE 1600  
CHICAGO, ILLINOIS 60606-3709

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## INVESTMENT POLICY SUMMARY

The KTRS Board of Trustees has a statutory obligation to invest the members' assets in a manner consistent with the fiduciary standards set forth in the "prudent person rule." Consistent with these fiduciary standards, the board has recognized certain principles that guide investment-related decisions. First, the board will preserve the long-term corpus of the fund. Second, the board will seek to maximize total investment return within prudent risk parameters. Third, the board will act in the exclusive interest of the members and beneficiaries of the System. This broad summary is a reference point for management of System assets and outlines KTRS's investment philosophy and practice.

## INVESTMENT OBJECTIVES

KTRS invests the members' funds in several diverse classes of assets, including equities, bonds and real estate. This diversification helps us earn the highest possible long-term rate of return within appropriate risk levels. In turn this enables us to pay guaranteed benefits to members and their beneficiaries at the lowest possible cost to participating employers and the taxpayers that fund them. Generally, the System's liabilities will not be paid for as many as 30-40 years. Therefore, as a long-term investor, KTRS holdings can withstand some short-term volatility. The System's long-term investment objective is to achieve an annualized rate of return of 7.5%.

## RISK CONTROLS

The KTRS investment program faces various risks; however, the primary risk to KTRS is that the assets will not support liabilities over long periods of time. In order to control this risk and any other risks, the board has taken the following steps, on an ongoing basis:

- Actuarial valuations are performed each year to evaluate the funding objectives of the System. In addition, every ten years an external audit of the actuary is conducted to ensure that the assumptions made and calculation methods used are resulting in properly computed liabilities of the System.
- Asset/liability studies are conducted, at a minimum, every five years. These studies ensure that the portfolio design is structured to meet the liabilities of the System.
- The KTRS investment committee adopts, and regularly reviews, detailed investment strategies for implementation of the investment policy.

## ASSET ALLOCATION

Operating within relevant regulatory limitations, the System's investment consultant, on an annual basis, presents to the Investment Committee for approval target percentages and ranges for the System's various asset classes. Annually approved asset allocation parameters serve to balance the System's liquidity requirements, volatility tolerance, and return requirements to meet both short-term and long-term obligations. The System's assets are diversified across a variety of asset classes, investment management styles, and individual securities in order to reduce volatility and enhance the potential of the investment portfolio to achieve the System's long-term goals.

Asset allocation decisions for pension plans are highly dependent on the unique characteristics of a particular plan. Factors such as liability requirements, the level of funding, and statutory investment restrictions are important considerations within the context of the asset allocation decision making process. Consequently, asset allocation comparisons between various pension plans may be quite different.

Rebalancing as necessary is normally strictly observed to remain within the approved ranges for the various asset classes. In this fiscal year, however, the Investment Committee suspended strict adherence to the approved ranges due to extraordinary market conditions.

The information below shows the System's asset allocation by market value as of June 30, 2009, and June 30, 2008, as well as the target and strategic range for each asset class for fiscal year 2009.

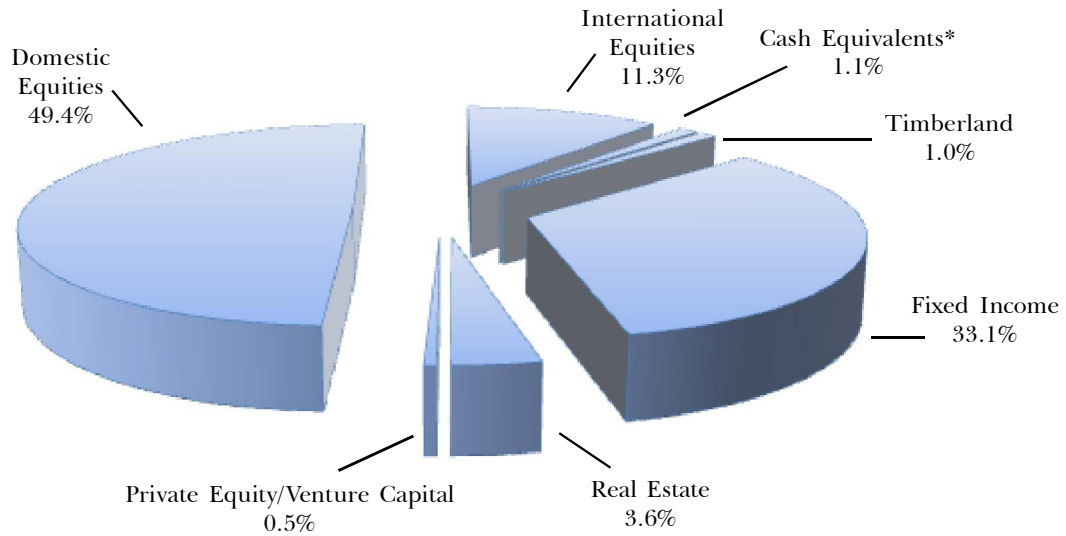
	<u>June 30, 2009</u>	<u>%</u>	<u>June 30, 2008</u>	<u>%</u>
Cash Equivalents *	\$ 134,219,594	1.1	\$ 221,260,264	1.6
Fixed Income **	3,865,135,688	33.1	4,381,342,566	30.8
Domestic Equities	5,784,174,002	49.4	7,815,837,500	54.9
International Equities	1,344,393,598	11.3	1,278,613,411	9.0
Real Estate	425,746,050	3.6	431,693,774	3.0
Private Equity	60,731,073	0.5	28,791,613	0.2
Timberland	<u>116,599,371</u>	<u>1.0</u>	<u>75,995,962</u>	<u>0.5</u>
Totals	<u>\$11,730,999,376</u>	<u>100.0</u>	<u>\$ 14,233,535,090</u>	<u>100.0</u>

\* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

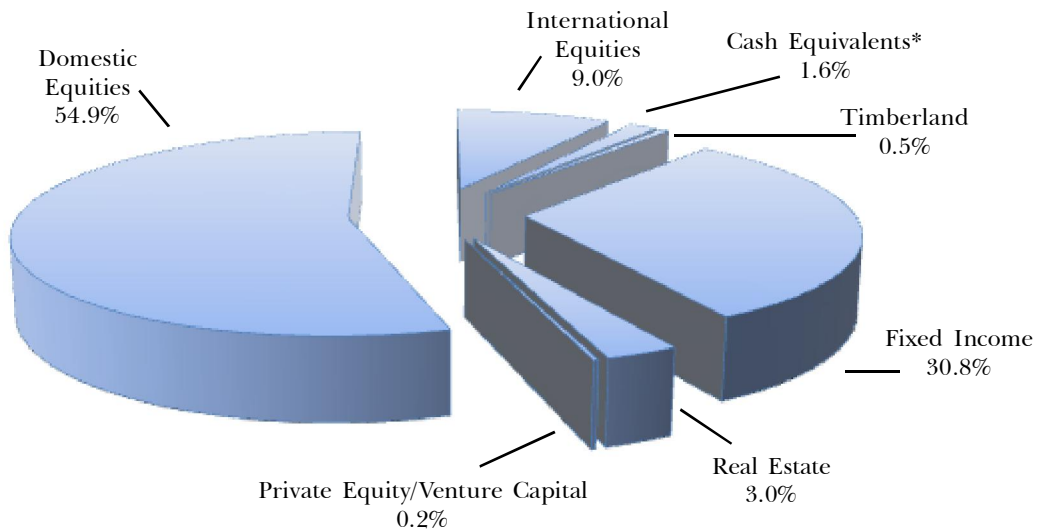
\*\* Excludes purchased interest of \$1,060,537 as of June 30, 2009 and \$273,868 as of June 30, 2008.

**Distribution of Investments  
Market Values**

**June 30, 2009**



**June 30, 2008**



\* Reflects only cash balances not allocated to other asset classes. Uninvested cash balances allocated to various asset classes are represented in the respective asset classes.

Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2009 (Mkt)
Cash		2 - 4%	2.0%	1.1%
Fixed Income		25 - 32	28.0	33.1
Government/Agency/Other	Unlimited			18.6
Corporate	35%			14.5
Equity	65%	57 - 65	64.0	60.7
Domestic Large Cap		42 - 50	45.0	42.6
Domestic Mid Cap		3 - 6	5.0	4.1
Domestic Small Cap		2 - 4	3.0	2.7
International	15%	8 - 13	11.0	11.3
Real Estate	10%	3 - 5	4.0	3.6
Alternative Investments*	10%	0 - 2	2.0	1.5
Additional Categories	10%		<u>0.0</u>	<u>0.0</u>
<b>TOTAL</b>			<b>100.0%</b>	<b>100.0%</b>
<p>This weighting reflects cash with manager in the manager's asset class.</p> <p>* Alternative Investments includes Private Equity, Timberland, Venture Capital and Infrastructure investments.</p>				



PORTFOLIO RETURNS

In a twelve-month period which saw the climax of the most serious financial market crisis in decades, the System's portfolio generated a total return of -14.3% versus -16.0% for the benchmark Policy Index. Domestic equities returned -25.5% versus -26.3% for the Standard & Poor's 1500 Index, while international equities returned -27.5% versus -31.0% for the MSCI EAFE Index. Fixed income investments also outperformed, returning 7.2% versus 5.3% for the Barclays Government/Credit Index.

The table below outlines historical performance for the total fund and its component asset classes for the period ended June 30, 2009. The System's domestic equity and fixed income components, which have historically comprised a large majority of System assets, have exceeded the returns of their benchmarks with regularity over long periods of time. The System's returns were generated by the Rogers Casey performance reporting system using a time-weighted rate of return calculation based upon the modified Dietz methodology.

	<u>1 Yr.</u> <sup>(2)</sup>	<u>3 Yr.</u> <sup>(2)</sup>	<u>5 Yr.</u> <sup>(2)</sup>	<u>10 Yr.</u> <sup>(2)</sup>	<u>20 Yr.</u> <sup>(2)</sup>
<b>Total Fund</b>					
KTRS	-14.3	-2.3	1.1	1.9	7.1
Policy Index <sup>(1)</sup>	-16.0	-	-	-	-
<b>Equities</b>					
Domestic Equities	-25.5	-7.9	-1.7	-1.3	8.4
S & P Blended Index <sup>(3)</sup>	-26.3	-8.2	-2.2	-2.2	7.8
International Equities	-27.5	-6.2	-	-	-
MSCI EAFE	-31.0	-7.5	-	-	-
Total Equities	-25.4	-7.6	-1.5	-1.2	8.5
<b>Fixed Income</b>					
Total Fixed Income	7.2	6.9	5.4	6.3	7.3
Barclays Govt/Credit Index	5.3	6.2	4.8	5.9	7.1
<b>Real Estate</b>					
Real Estate Equity	-30.4	-	-	-	-
NCREIF ODCE	-30.5	-	-	-	-
Triple Net Lease Real Estate	9.7	8.6	9.3	9.1	8.7
CPI plus 2%	0.8	4.1	4.6	4.6	4.8
<b>Alternative Investments</b>					
Private Equity <sup>(4)</sup>	-5.5	-	-	-	-
Timberland	6.3	-	-	-	-
NCREIF Timberland Index	3.3	-	-	-	-
<b>Cash</b>					
Cash (Unallocated)	1.1	4.1	3.9	3.6	4.7

(1) Prior to July 1, 2008, KTRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

(2) Annualized

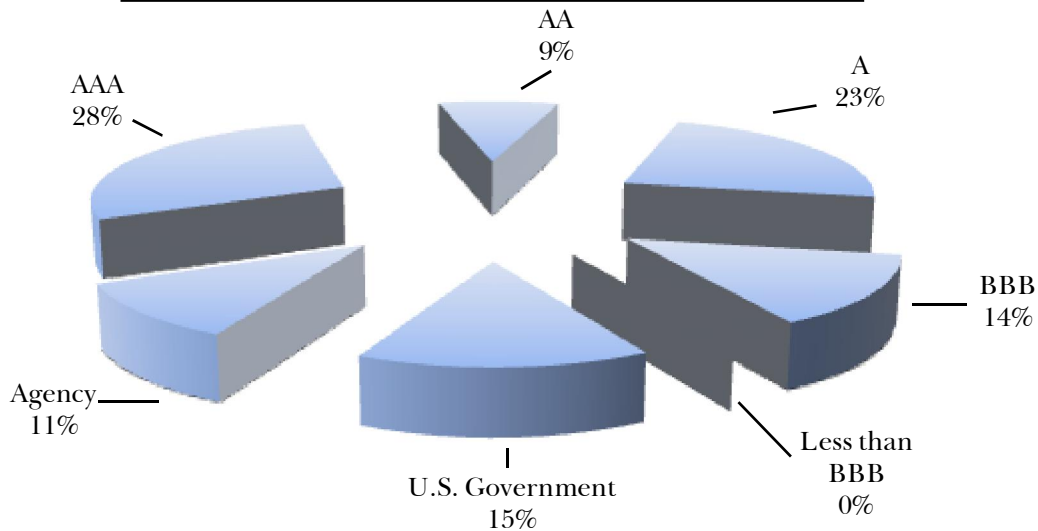
(3) Total Domestic Equity is benchmarked to a S & P Blended Index. Total domestic equity was benchmarked to the S & P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007, domestic equity is benchmarked to the S & P 1500 Index since the System's domestic stock mix is most comparable to this index.

(4) For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the commitment date, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.

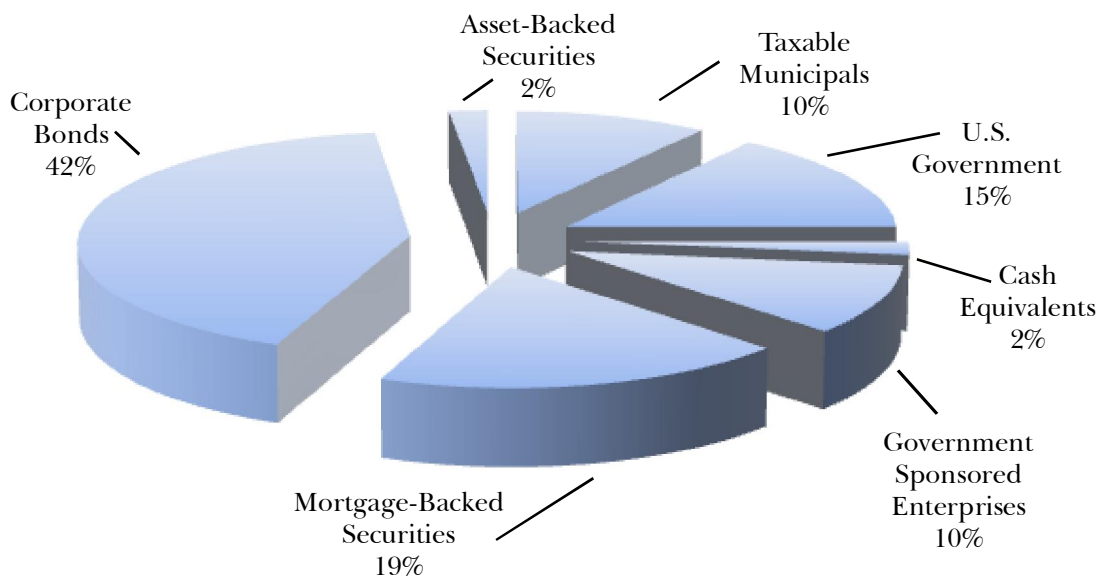
**FIXED INCOME INVESTMENTS**

As of June 30, 2009, the System had approximately \$3.87 billion in fixed income assets, or 33.1% of total assets. Over \$2.29 billion was managed internally with the remainder, or about \$1.58 billion, managed by two external managers. The System's investment policy established by administrative regulation requires that all fixed income investments be rated investment grade at the time of purchase by one of the major rating agencies. The regulation further requires that the fixed income portfolio as a whole maintain an average rating equal to at least "AA" by one of the major rating agencies.

**FIXED INCOME QUALITY DISTRIBUTION**



**FIXED INCOME SECTOR DISTRIBUTION**



## FIXED INCOME MARKET OVERVIEW

The credit market crisis which began in the summer of 2007 didn't peak until the fall of 2008. The federal takeover of Fannie Mae and Freddie Mac, the bailout of AIG, and the bankruptcy of Lehman Brothers all occurred within a couple of weeks in early to mid-September, 2008. A scenario of cascading financial institution failures and a full-scale collapse of the financial system was an imminent danger.

Fortunately, the response by the Federal Reserve and the federal government was robust and sustained. The Federal Reserve made clear that it would take any actions necessary to keep the financial system functioning. The federal government injected capital from its Troubled Asset Relief Program into the largest financial institutions to stem the panic. No more systemically important institutions would be allowed to fail. By December 16, the Federal Reserve had cut the target for the federal funds rate to a range of zero to 0.25%. An unprecedented array of spending, lending, and guarantee programs were initiated by the U.S. Treasury and the Federal Reserve, all in an effort to restore credit markets to normal functioning.

Despite the official resolve, credit markets remained severely impaired into early 2009. U.S. Treasury prices rose and yields plummeted in a panic-driven flight to quality. The securitization process came to a standstill, contributing to a collapse in bank lending. Interbank lending rates remained at crisis levels for months. Risk premiums on corporate bonds, especially in financials and below investment grade bonds, reached unprecedented levels by late 2008.

By the early spring of 2009, the U.S. economy and housing market were showing initial tentative signs of stabilization. This led to a sustained rally in risky assets in the spring and summer. By the end of the fiscal year, pricing in the credit markets generally reflected that the threat to the financial system had passed. Significant indigestion remained in areas such as commercial and non-agency residential mortgage-backed securities; the U.S. Treasury's Public Private Investment Program was in the works to help ease these dislocations.

For the fiscal year as a whole, the Barclays Government/Credit Index returned 5.26%. On the positive side, agency-backed fixed rate mortgage securities returned 9.52%. U. S. Treasury securities returned 6.47% and investment grade corporate bonds returned 3.84%. Faring worse, investment grade financial institution bonds returned -1.52%. High yield, or below investment grade, bonds returned -2.40%. Commercial mortgage-backed securities returned -10.13% and home equity asset-backed securities returned -26.52%. Even these figures fail to convey the volatility and illiquidity over the period as all but the safest sectors plunged in value in late 2008, only to rebound strongly in the spring and summer of 2009.

The System's fixed income portfolio went into the financial crisis with a very high quality profile. As dislocations developed in the markets, assets were gradually moved into sectors where investors were being overcompensated for risk. From June 30, 2008 to June 30, 2009, the System's exposure to U.S. government bonds declined from 21% of fixed income assets to 15%, while exposure to corporate bonds rose from 34% to 42%. Exposure to BBB-rated securities, the lowest investment grade rating, rose from 9% to 14% over the same period. The focus continues to be on prudently taking advantage of the opportunities that persist as a result of the financial crisis, while acknowledging the paramount importance of risk control and the economic uncertainty going forward.

## EQUITY INVESTMENTS

As of June 30, 2009 the System's public equity investments had a market value of \$7.1 billion, representing 60.7% of total assets. The global decline in equities caused the percentage of equities to remain below their 64% target allocation throughout the year. The System divides its public equity investments into two broad categories: domestic and international.

The domestic portfolio had a market value of \$5.8 billion as of June 30, representing 49.4% of total

assets. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of 3 well known component indices based upon capitalization: the S&P 500 large cap, S&P 400 mid cap, and the small cap S&P 600. The System's domestic equity holdings are comprised of eleven portfolios. Three of the portfolios are internal passively managed portfolios benchmarked to the S&P 500, S&P 400, and S&P 600. The other eight portfolios are managed externally with each representing a specific strategy and measured against an appropriate benchmark. The collective array of portfolios provides diversification by capitalization, manager, style, and strategy.

The market value of international equity holdings as of June 30, 2009 was \$1.3 billion representing 11.3% of total assets. The benchmark for international equities during the fiscal year was the Morgan Stanley Capital International (MSCI) EAFE (Europe, Australasia, Far East) Index, which represents the markets of 22 developed countries. Four external managers manage the System's international equities. During the fiscal year international equities increased as a percent of total assets despite the decline in international markets as the System continued to increase its exposure to international equities. Subsequent to fiscal year-end, the benchmark for international equities was changed to the MSCI All-Country World Ex-US (ACWI -Ex US) Index, which represents the markets of 23 developed and 21 emerging market countries. The change better reflects the portfolio's growing diversification and exposure to emerging markets. The System plans to continue increasing the international equity exposure during the coming fiscal year.

### **EQUITY MARKET OVERVIEW**

For the second straight year equity markets the world over suffered steep declines. The Morgan Stanley Capital International (MSCI) World Index declined -29.0%. Returns of domestic stocks as measured by the Standard & Poors' 1500 Index were -26.3%. The MSCI EAFE which measures the returns of international developed markets had a decline of -31.0%. Emerging market returns were similar to those of developed markets as the MSCI Emerging Markets Index declined -27.8%. This was the first time in six years that domestic equity returns outperformed those of the EAFE.

Domestic stocks continued to suffer from problems that originated in the sub-prime mortgage market in 2007 and spread throughout the financial sector and into the broad economy. It became apparent early in the year that the housing market decline was far from over and that the decline in debt obligations backed by mortgages was wreaking havoc throughout the entire financial system. Many prominent financial institutions failed or were acquired to prevent them from failing. Among them were Lehman Brothers, Merrill Lynch, Fannie Mae, Freddie Mac, Wachovia, Washington Mutual, and American International Group. Fearing a collapse of the entire financial system, the Federal Reserve, Treasury, and Congress moved aggressively to restore confidence and provide liquidity.

The distress in the financial system spread to other parts of the economy leading to a loss of consumer confidence and higher unemployment. The US had been in recession since December 2007. For the fourth quarter of 2008 and the first quarter of 2009, Gross Domestic Product contracted more than 5% for two quarters in a row for the first time since the Great Depression. Unemployment rose steadily from 5.6% in June 2008 to 9.5% in June 2009. These factors fueled further declines in stock prices into March 2009. As the market reached a bottom on March 9, 2009, the S&P 1500 had suffered a decline of -46.5%. From this point of maximum pessimism, the S&P 1500 rebounded almost 38% by June 30. Although welcome, this rebound was largely a bounce in lower quality stocks which had suffered the worst during the crisis. Higher quality stocks participated less in the market's recovery.

For the year, domestic stock returns were equally dismal across capitalization sectors and style categories. The large cap S&P 500 Index was down -26.2%, the mid cap S&P 400 declined -28.0%, and the small cap S&P 600 was down -25.3%. The Energy sector which was the top performing sector last year was the worst performing sector this year as crude prices fell sharply from last year's highs. The S&P Energy sector declined -43% for the year.

The fiscal year was one of extreme turmoil in the markets, leading to an extraordinary level of government intervention. The government "bailed out" a number of financial institutions, arranged for the acquisition of troubled companies, and provided enormous monetary and fiscal stimulus. This has led to an intense debate over the appropriate role of government in the financial system. Hot topics include regulation of systemic risk, executive pay schemes, and heretofore unregulated financial products. Comprehensive reform of financial system regulation is on the political agenda.

The international equity markets were affected by the same factors as the U.S. market. European banks, particularly, took massive write-downs on mortgage-related securities. The crisis in the credit markets and the resulting economic downturn were truly global, affecting markets everywhere. Emerging markets, as usual, were more volatile, but outperformed developed markets for the fiscal year. Over the five-year period ended June 30, 2009, the MSCI Emerging Markets Index generated an annualized return of 15.1% versus 2.8% for the developed markets MSCI EAFE Index.

Although China is still considered an emerging market country, it ranks as the world's third largest economy. While many countries saw their economic growth slow or turn negative, China's economy grew almost 10%. The global downturn would have been worse had it not been for China. China and its markets and economy will continue to be a focus for investors.

## REAL ESTATE

The System's real estate investments had a market value of \$425.8 million as of June 30, 2009, representing 3.6% of total assets. The System's investments in real estate are intended to provide attractive long-term returns, generate reliable cash flow, and provide diversification, thereby reducing the volatility of the overall investment portfolio.

The System's real estate exposure is currently provided through two portfolios. The System maintains an internally managed portfolio of directly owned properties under long-term lease agreements with high credit quality tenants. The System is also invested in a commingled real estate fund (PRISA FUND), which is managed by Prudential Real Estate Investors. This fund is a core real estate equity fund which invests primarily in existing income-producing properties with strong cash flow and the potential for capital appreciation. The fund is diversified across several property types including office, retail, industrial, apartment, self-storage, and hotel.

## REAL ESTATE OVERVIEW

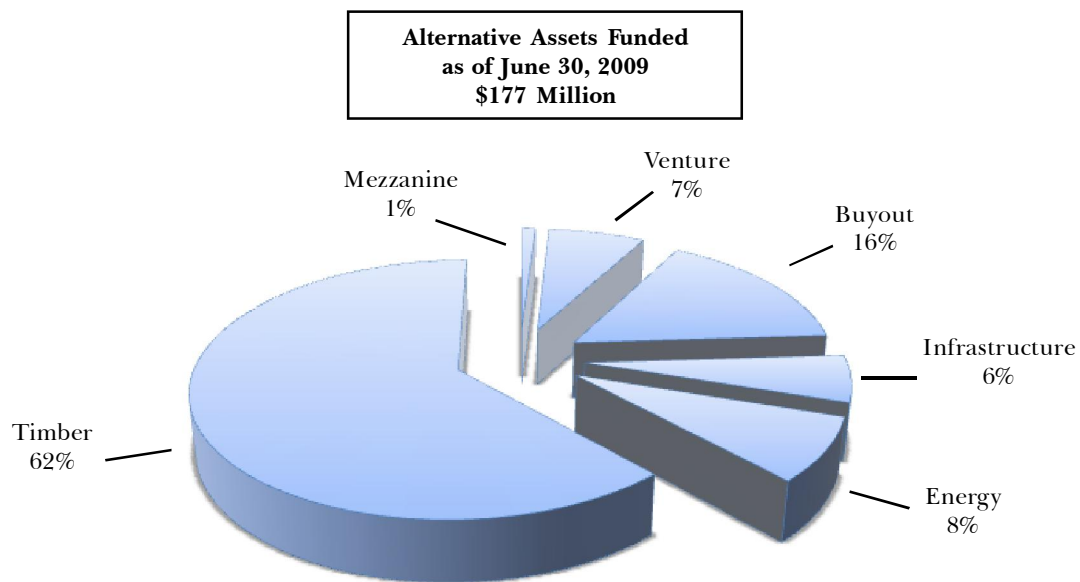
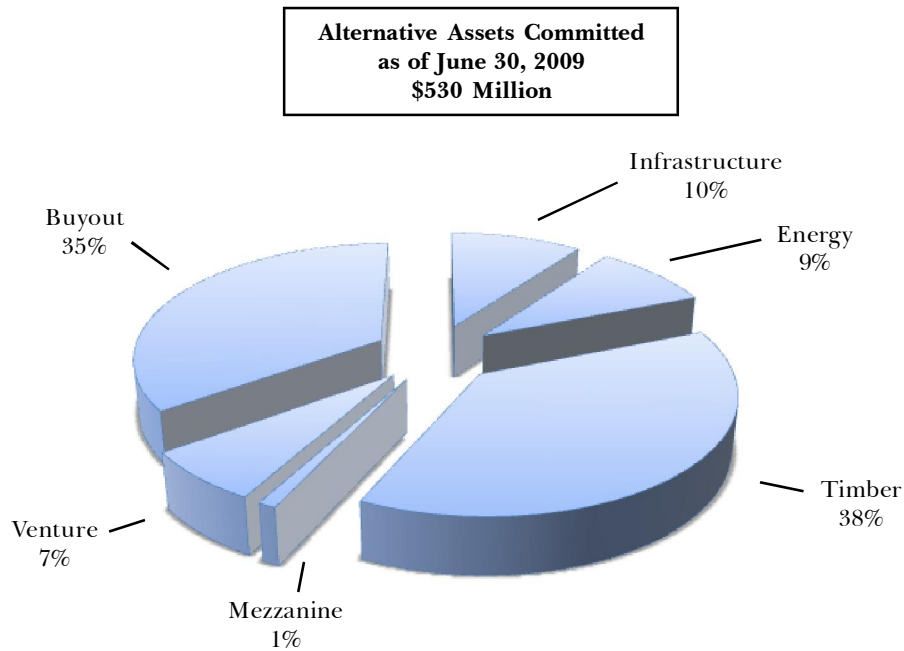
The commercial real estate market remains under pressure from excessive use of leverage and falling occupancy rates. Continued heavy job losses are taking a toll on market fundamentals in all property types, causing vacancies to rise and rents to fall. Debt is scarce and expensive, and equity investors remain on the sidelines waiting for greater clarity on asset values. We expect 2009 to be a year of continued dislocation and volatility in the real estate industry. We are in the midst of a great unwind, where market participants of all types and sizes are seeking to get their capital out of the leveraged structures of the past and flee to relative safety to ride out this market cycle. Weaker fund managers may not survive the market turmoil and uncertainty and, as in cycles past, new players will arise to take their place. Established fund managers that were



prudently financed and well diversified will have the wherewithal to absorb their losses and the savvy to take advantage of the buying opportunities available in a depressed market.

**ALTERNATIVE ASSETS**

As of June 30, 2009, the System had committed \$530 million to alternative investments and had funded \$177 million of those commitments. The percentage of the System's portfolio in alternative assets was 1.5%. The System's current alternative asset portfolio consists of private equity investments and timberland.



## PRIVATE EQUITY

The System has exposure to venture, buyout, infrastructure, energy, and mezzanine via participation in limited partnerships as well as investments in funds of funds. The System is in the early stages of its private equity investment program, which it intends to grow with a disciplined plan of commitments over the next several years. The System looks to diversify its private equity portfolio by firm, country, strategy, and vintage year. The System will achieve vintage year diversification by building out the portfolio with disciplined levels of commitments over time. The System's commitment to any given partnership shall not exceed 20% of the partnership's total commitments.

The Board and staff understand that private equity (along with many other forms of alternative assets) are illiquid and have a long-term holding period. When added to a portfolio with other publicly traded assets, this asset class can help to diversify and reduce risk for the System's overall portfolio while enhancing returns. Private equity returns for the first several years of a partnership's life are routinely negative due to the J-curve effect. Positive returns are typically realized only several years into a partnership's existence.

## PRIVATE EQUITY MARKET OVERVIEW

The private equity market is still reeling from the credit crisis and the lack of financing available to both established and new funds. Additionally, as the flow of distributions has slowed, with the IPO market all but shut down, many limited partners are quite content to see that the capital calls have slowed down as well. As the markets begin to heal we should expect to see capital calls pick up, although distributions will probably remain subdued for the next twelve to eighteen months. There has already been some improvement in the middle market space where deals do not rely on as much leverage as in the large buyout space. As the global economy improves and the ability of general partners to secure financing returns, we should see the number of deals steadily increase although with less leverage than in the past.

## TIMBERLAND

In addition to private equity, the System has invested in timberland in the alternative asset class. As of June 30, 2009, the System owns approximately 73,000 acres of timberland outright and has a 7.15% interest in a commingled fund that holds 97,938 acres of timberland. Timberland is, by nature, a long term investment as our anticipated time horizon in this asset category is generally a minimum of ten to fifteen years. Timberland provides valuable diversification, current income, and a hedge against inflation. Due to the low correlation of returns with other asset classes, timberland investments should lower the overall volatility of the System's portfolio. Timberland should earn real returns comparable to traditional equity investments with volatility between equities and fixed income over the long-term.

The System diversifies its timberland investments by geography, species of trees, and maturity of timber stands. Investment returns from timberland are primarily driven from net cash flow generated from the sale of trees (referred to as stumpage sales) and capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of the forest commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland from the conversion of timberland into higher and better uses, such as vacation property sales.

## TIMBER MARKET OVERVIEW

The downturn in the general economy and the poor housing market continue to negatively affect both global and national timber markets. Pulp markets are currently rallying, but improvements are being propelled by Chinese demand and the foundations of the rally are tenuous. The upside is that the U.S. housing market has seen a reduction in excess supply during this period. Furthermore, low interest rates and attractive home prices have helped spur this improvement. As the global economy recovers, we should see a more sustainable recovery in the timber markets going forward.

**PORTFOLIOS**  
**MARKET VALUES \*\***  
**June 30, 2009**

<b>Internally Managed</b>	
<b>Cash Equivalents</b>	
Cash Collections Fund	\$ 134,219,595
<b>Fixed Income*</b>	
Broad Market Bond Fund	1,003,917,492
Long Term Bond Fund	568,648,185
Intermediate Bond Fund	426,220,823
Internal Bond Fund	198,847,360
Life Insurance Trust	87,289,911
Scholarship Fund	495,865
Tax Shelter Fund	474,361
<b>Equity</b>	
S&P 500 Index Fund (Large Cap)	2,166,825,934
S&P 400 Index Fund (Mid Cap)	285,929,450
S&P 600 Index Fund (Small Cap)	217,036,883
<b>Real Estate</b>	
Internally Managed Fund	<u>389,472,533</u>
<b>Subtotal</b>	<b><u>5,479,378,392</u></b>

<b>Externally Managed</b>	
<b>Fixed Income*</b>	
Galliard Capital Management	737,677,688
Ft. Washington Broad Market	640,817,049
Ft. Washington Bond Index Plus	200,746,953
<b>Domestic Equity</b>	
Todd-Veredus (Large Cap Core)	1,144,375,526
UBS (Large Cap Value)	699,321,563
GE Asset Mgmt. (Large Cap Growth)	512,100,470
Wellington (Large Cap Core)	357,996,378
Wellington (Mid Cap Core)	196,803,445
Wellington (Small Cap Core)	92,845,858
UBS (130/30)	76,046,516
Todd-Veredus Opportunity Fund	34,891,979
<b>International Equity</b>	
UBS International	429,263,724
Todd-Veredus International	409,571,797
Baillie Gifford EAFE Alpha	259,859,950
Baring Focused International Equity	245,698,127
<b>Real Estate</b>	
Prudential PRISA Fund	36,273,517

*continued ...*



# KENTUCKY TEACHERS' RETIREMENT SYSTEM

*PORTFOLIOS continued ...*  
*JUNE 30, 2009*

**Alternative Investments**

Molpus Woodlands Group	
Lake Superior Timberlands LLC	91,625,796
Hancock Natural Resources Group	
Bluegrass LLC	24,973,575
Riverstone Group Fund IV	14,697,743
KKR 2006 Fund	13,297,106
Alinda Infrastructure Fund II	11,108,850
Chrysalis Venture Fund III	7,374,352
Ft. Washington Private Equity Fund VI	6,022,197
Ft. Washington Private Equity Fund V	4,989,322
CapitalSouth Fund III	2,000,000
KKR European Fund III	1,241,503
	<hr/>
<b>Subtotal</b>	<b>6,251,620,984</b>
	<hr/>
<b>Total Assets</b>	<b><u><u>\$ 11,730,999,376</u></u></b>

\* The aggregate value of fixed income portfolios excludes purchased interest of \$1,060,537 as of June 30, 2009.

\*\* Detailed information concerning these market values of all KTRS investments is available upon request.

<b>Investment Summary</b>					
<b>Fair Market Value</b>					
<b>June 30, 2009</b>					
Type of Investment	Fair Value 07/01/08	Acquisitions	Appreciation (Depreciation)	Sales Redemptions, Maturities & Paydowns	Fair Value 06/30/09
Cash Equivalents	\$ 388,772,500	\$ 36,018,598,600	\$ 1,331,900	\$ 36,151,803,000	\$ 256,900,000
Fixed Income	4,279,174,200	899,655,200	50,208,400	1,443,201,400	3,785,836,400
Equities	9,029,380,800	2,546,472,200	(2,435,392,000)	2,054,214,000	7,086,247,000
Real Estate	431,693,800	6,758,300	(9,736,100)	2,970,000	425,746,000
Alternative	104,787,600	76,647,400	1,651,500	5,756,000	177,330,500
<b>TOTAL</b>	<b><u><u>\$ 14,233,808,900</u></u></b>	<b><u><u>\$ 39,548,131,700</u></u></b>	<b><u><u>\$ (2,391,936,300)</u></u></b>	<b><u><u>\$ 39,657,944,400</u></u></b>	<b><u><u>\$ 11,732,059,900</u></u></b>

**Contracted Investment  
Management Expenses  
Fiscal Year 2008-09  
(in thousands of dollars)**

<u>Investment Manager Fees</u>	<u>Assets Under Management</u>	<u>Expense</u>	<u>Basis Points (1)</u>
Balanced Manager	\$ 2,430,403	\$ 1,233	
Equity Manager(s)	2,869,936	6,482	
Fixed Income Manager	737,678	353	
Real Estate	36,274	301	
Private Equity Fees (2)	<u>177,330</u>	<u>6,786</u>	
Total	\$ 6,251,621	\$ 15,155	24.2
 <b><u>Other Investment Services</u></b>			
Custodian Services	\$ 11,730,999	\$ 468	0.4
Consultant Fees		361	
Legal & Research Fees		43	
Subscriptions/Services		<u>295</u>	
Total		<u>1,167</u>	
<b>Grand Total</b>		<b>\$ <u><u>16,322</u></u></b>	<b>13.9</b>

1 – One basis point is one hundredth of one percent or the equivalent of .0001.

2 – Private equity fees are either withheld from the Fund operations or paid by direct disbursement, depending on contract terms.

# KENTUCKY TEACHERS' RETIREMENT SYSTEM

## Transaction Commissions Fiscal Year 2008-09

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
Allen & Co	300	252.00	0.8400
Avondale Partners, LLC	5,100	204.00	0.0400
BNY ConvergEx Group	1,482,100	55,301.47	0.0373
Bank of America	680,885	16,350.35	0.0240
Barclays	4,181,153	87,999.06	0.0210
Bass / Baypoint Trading	146,910	4,539.30	0.0309
Blair, William & Co	14,300	572.00	0.0400
Boenning & Scattergood	226,846	5,000.54	0.0220
CIBC Oppenheimer Worldmarket	64,900	2,596.00	0.0400
Cantor Fitzgerald & Co	74,400	1,876.00	0.0252
Citigroup Global	13,213,592	198,122.64	0.0150
Citigroup-Huntington	3,658,100	135,514.50	0.0370
Citigroup-Louisville	3,687,600	134,905.50	0.0366
Cowen & Co	76,750	2,195.00	0.0286
Credit Suisse Sec. LLC	3,878,934	126,433.92	0.0326
Crowell Weedon & Co	90,370	3,422.10	0.0379
D A Davidson & Co	25,700	1,028.00	0.0400
Dahlman Rose & Co LLC	23,220	928.80	0.0400
Deutsche Bank	116,800	4,672.00	0.0400
First Kentucky Securities Corp	2,940,900	107,074.50	0.0364
Fox Pitt Kelton Inc	122,000	4,880.00	0.0400
Freidman Billings	156,100	5,821.76	0.0373
Goldman Sachs	5,554,498	148,809.47	0.0268
Green Street Advisors	18,300	732.00	0.0400
Heflin & Co	67,300	2,692.00	0.0400
Hudson Securities	55,200	1,208.00	0.0219
ICAP Corporates LLC	166,360	6,654.40	0.0400
ING Financial Mkts LLC	20,300	3,045.00	0.1500
ISI Group	3,667,300	134,023.00	0.0365
Instinet	119,180	2,553.80	0.0214
Investment Technology Grp	42,068,307	604,746.85	0.0144
J.J.B. Hilliard, W.L. Lyons	3,625,200	133,259.50	0.0368
JMP Securities	56,400	1,128.00	0.0200
JP Morgan & Chase	499,756	64,147.06	0.1284
Jefferies & Co.	1,866,500	72,795.70	0.0390
Keefe Bruyette & Woods	78,200	5,943.50	0.0760
Kellogg Partners Inst Svs	38,300	861.75	0.0225
Keybanc Capital	60,100	1,202.00	0.0200
Knight Equity Markets	147,540	4,335.20	0.0294
Lazard Freres & Co.	5,272,311	188,325.88	0.0357
Leerink Swann & Co.	12,700	508.00	0.0400
Lehman Brothers	69,250	1,070.50	0.0155
Lexington Investment Co.	1,463,152	54,410.82	0.0372
Liquidnet Inc	5,423,944	80,701.55	0.0149
MacQuarie Securities Inc	22,500	900.00	0.0400
Merrill Lynch	13,940,621	348,302.92	0.0250
Miller Tabak & Co. LLC	149,960	5,314.40	0.0354
Morgan Keegan	2,989,100	109,285.00	0.0366
Morgan Stanley	11,810,089	243,551.75	0.0206

Year Ended June 30, 2009

*Transaction Commissions continued . . .*

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
Murphy & Durieu	162,200	3,571.25	0.0220
Needham	61,864	2,474.56	0.0400
Pipeline Trading	15,200	210.50	0.0138
Piper Jaffray	142,400	5,696.00	0.0400
Pulse Trading	253,540	5,616.34	0.0222
R W Baird	33,200	1,328.00	0.0400
RBC Capital Markets	99,900	3,094.00	0.0310
Raymond James & Assoc	5,915,400	215,239.50	0.0364
Ross Sinclair & Assoc	1,503,400	54,070.50	0.0360
Sandler O'Neill	80,100	7,692.50	0.0960
Sanford C Bernstein	539,540	7,180.40	0.0133
Simmons & Co	25,900	1,036.00	0.0400
State Street Global	85,700	2,571.00	0.0300
Sterne, Agee & Leach	20,100	804.00	0.0400
Stifel, Nicolaus & Co	2,982,700	109,021.50	0.0366
Stifel, Nicolaus & Co-Louisville	476,700	16,684.50	0.0350
Susquehanna Brokerage	50,600	1,037.50	0.0205
Thomas Weisel Partners	241,280	5,232.20	0.0217
UBS/Paine Webber Securities	7,827,522	82,488.31	0.0105
UBS/Paine Webber-Louisville	6,736,963	240,416.21	0.0357
Wachovia / First Clearing Corp	11,300	1,145.50	0.1014
Weeden & Co	3,836,400	139,810.00	0.0364
<b>GRAND TOTAL</b>	<b>165,231,237</b>	<b>4,026,617.76</b>	<b>0.0244</b>

The over-the-counter commission rate on medium to large capitalization stocks is assumed to be \$.035 per share. The acquisition of initial public offerings (IPOs) represented a portion of small capitalization stock purchases. IPOs usually have a high commission rate. However, the security issuers and not the investors pay the commissions. In 2008-09, the System bought small capitalization IPOs that generated \$140,411 in commissions. Although these commissions were not paid by the Retirement System, they resulted from the System's investment activities and are included in the total commissions of \$4,026,618. Typical stock transactions occur at lower commission rates than IPO transactions, frequently \$.03 per share or less. Investment companies usually provide investment research for brokerage clients. On occasion, investment companies direct third party research to active clients. The Retirement System received third party research through BNY ConvergeEx, Merrill Lynch (Citation Group) and Barclays Capital. Trading commissions of \$43,454 were associated with third party research obligations. The primary research providers were: Bloomberg, Interactive Data, Rogers Casey, RiskMetrics Group, QED Financial Systems, Standard & Poor's, and Thomson Financial.

**Ten Largest Stock Holdings Ranked (1) (2)  
by Market Value  
June 30, 2009**

<u>Rank</u>	<u>Name</u>	<u>Market Value</u>	<u>Percentage of Equities</u>
1	Microsoft	134,937,797	2.221
2	Exxon Mobil Corp	108,947,744	1.793
3	A T & T Inc	90,405,205	1.488
4	Chevron Corp	87,487,564	1.440
5	PepsiCo Inc	83,848,625	1.380
6	J P Morgan Chase & Co	81,600,125	1.343
7	Qualcomm Inc	81,209,258	1.336
8	Cisco Systems Inc	77,873,411	1.281
9	Johnson & Johnson	72,014,107	1.185
10	Wells Fargo & Co	71,311,469	1.173

**Top Ten Fixed Income Holdings (2)  
by Market Value  
June 30, 2009**

<u>Rank</u>	<u>Description</u>	<u>Maturity</u>	<u>Coupon</u>	<u>Par</u>	<u>Market Value</u>	<u>Percent of Fixed Income</u>
1	U S Treasury Notes	01/15/14	2.000	75,000,000.00	88,521,137.25	2.339
2	U S Treasury Bonds	08/15/23	6.250	66,000,000.00	80,396,580.00	2.124
3	FNMA Notes	11/15/21	5.625	54,000,000.00	56,514,240.00	1.493
4	U S Treasury Bonds	02/15/19	2.750	39,000,000.00	36,525,840.00	0.965
5	FNMA Notes	01/15/30	7.125	25,000,000.00	32,242,250.00	0.852
6	U S Treasury Notes	11/15/13	4.250	29,000,000.00	31,338,270.00	0.828
7	U S Treasury Notes	08/15/09	6.000	28,000,000.00	28,199,080.00	0.745
8	U S Treasury Bonds	08/15/29	6.125	22,000,000.00	27,396,820.00	0.724
9	John Deere Cap Corp	09/09/13	4.900	25,000,000.00	25,893,250.00	0.684
10	CMO FHR 3095 JE	07/15/31	5.500	23,604,000.00	24,379,901.25	0.644

(1) Includes only actively managed separate accounts.

(2) Detailed information concerning these values along with book values and cost values of all KTRS investments is available upon request.

### PROXY VOTING AND CORPORATE BEHAVIOR

The System regularly votes proxy statements associated with its equity ownership. The positions assumed by the System are intended to represent the financial interests of the membership. The Board of Trustees has adopted a policy that directs the staff not to subjugate the financial concerns of the System to social or political protests. At the same time, the System expects the companies in which it acquires stock to be solid corporate citizens that abide by federal, state, and local laws. The Board has adopted the following position on corporate behavior:

The Board's stated fiduciary duty is to obtain the highest return for the Fund commensurate with acceptable levels of risk. This implies that non-financial considerations cannot take precedence to pure risk/return considerations in the evaluation of investment decisions. However, action taken by the Fund as a shareowner can be instrumental in encouraging action as a responsible corporate citizen by the companies in which the Fund has invested.

The Board expects the managements of the companies whose equity securities are held in the Fund's portfolio to conduct themselves with propriety and with a view toward social considerations. A level of performance above minimum adherence to the law is generally expected. If any improper practices come into being, the Board expects corporate management to move decisively to eliminate them and effect adequate controls to prevent recurrence.

On the other hand, the Board does not intend to supplant the duties which are the responsibility of federal or state regulatory agencies, such as the Equal Employment Opportunity Commission, the Environmental Protection Agency, the Occupational Safety and Health Agency, the Nuclear Regulatory Commission, the Securities and Exchange Commission, and others which are covered by the laws of the United States Government or the State of Kentucky.

Should satisfaction of the Board's criteria by any company not be adequate, the Board will consider what action to take, which may include, but not be limited to, correspondence with the company, meetings with company officials, sponsoring of shareholder resolutions or, as a last resort, liquidation of the System's holdings in the company, if the sale is consistent with sound investment policy.

### SECURITY LENDING

The System operates a security lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high quality collateral. U.S. Government and agency securities and select stocks and bonds are the types of securities loaned. The System's sub-custodian, The Bank of New York Mellon, acts as lending agent in exchanging securities for collateral. The collateral, at the time of the loan, has a value of not less than 102% of the market value of the lent securities plus any accrued, unpaid distributions. The collateral consists of cash, marketable U.S. Government securities, and selected marketable U.S. Government agency securities approved by the System.

Cash collateral is invested in short term obligations fully guaranteed by the United States Government or select Government agencies and Government Repurchase Agreements with qualified agents. The System cannot pledge or sell collateral securities unless the borrower defaults. The lending agent also indemnifies the System from any financial loss associated with a borrower's default and collateral inadequacy. The weighted average maturity of cash collateral investments is typically two days. The System has no credit risk exposure to borrowers, since the amounts the System owes borrowers exceeds the amounts the borrowers owe the System.

Security lending programs can entail considerable interest rate risk and credit risk. The System has structured its program to minimize these two main categories of risk. The interest rate risk is

## KENTUCKY TEACHERS' RETIREMENT SYSTEM

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managed, as mentioned above, by limiting the term of cash collateral investments to several days. The credit risk is controlled by investing cash collateral in securities with qualities similar to the creditworthiness of lent securities.

### KENTUCKY INVESTMENTS

The System is ever mindful of its impact on the Commonwealth's economy. For the fiscal year ended June 30, 2009, approximately \$1.2 billion in defined benefit pension payments were distributed to annuitants living in Kentucky. Approximately \$329 million of the System's investments directly impact the Commonwealth. These investments include: pools of single-family mortgages in Kentucky; financing for multi-family housing; bonds issued by public agencies of the Commonwealth and those of local municipalities; direct ownership of commercial real estate, and investments in the bonds of Kentucky-based corporations. This excludes hundreds of millions in equity investments in companies which have an impact on the Commonwealth's economy but receive earnings from world-wide operations. Fiduciary duty requires that investments be made solely for the benefit of the System's members and annuitants. Investments which benefit the Commonwealth's economy are made only when fully consistent with this fiduciary duty.

### PROFESSIONAL SERVICE PROVIDERS

**Investment Consultants**

Becker, Burke Associates, Inc.  
Ennis Knupp + Associates

**Investment Custodian/Subcustodian**

Farmers Bank and Capital Trust Co.  
The Bank of New York Mellon

**Fixed Income Managers**

Galliard Capital Management  
Ft. Washington Investment Advisors

**Domestic Equity Managers**

Todd-Veredus Asset Management LLC  
UBS Global Asset Management  
Wellington Management Company  
GE Asset Management

**International Equity Managers**

Todd-Veredus Asset Management LLC  
UBS Global Asset Management  
Baring Asset Management, Inc.  
Baillie Gifford

**Real Estate Managers**

Prudential Real Estate Investors

**Alternative Investment Managers**

Molpus Woodlands Group  
Hancock Natural Resources Group  
Kohlberg Kravis Roberts & Co.  
Chrysalis Ventures  
Ft. Washington Private Equity Investors  
Alinda Capital Partners LLC  
Riverstone Holdings LLC  
CapitalSouth Partners

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# Actuarial Section

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Report of the Actuary  
on the Annual Valuation

for Fiscal Year ending June 30, 2009



PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

**Old One Room School House  
Area of Breathitt County  
Jackson, Kentucky**





**Cavanaugh Macdonald**  
CONSULTING, LLC

December 14, 2009

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, 2009. 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, 2012 shown in the following table are required to support the benefits of the System.

Members Hired:	UNIVERSITY	NON-UNIVERSITY
Before 7/1/2008	28.14%	31.10%
On and After 7/1/2008	29.14%	32.10%

These rates represent an increase since the previous valuation in the required employer contribution rate of 2.07% of payroll for the 2011/2012 fiscal year. There has been a net decrease in the expected state special appropriation from 4.15% to 3.88%, or -0.27% of payroll. Therefore, for the 2011/2012 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 5.93%; 2.34% from this valuation and 3.59% 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.

The valuation takes into account the effect of amendments to the System enacted through the most recent Session of the Legislature. Effective July 1, 2008, the System was amended to change the benefit and contribution structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation.

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 unit credit actuarial cost method with projected benefits.

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 in the aggregate reasonably related to the experience under the System and

Board of Trustees  
 December 14, 2009  
 Page 2

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 and the Schedule of Employer Contributions 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.

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.

In our opinion, since a portion of the annual contributions required to fund the pension benefits have been allocated to the Medical Insurance Fund by the employer, the retirement fund is not funded by the employer on an actuarially sound basis. 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  
 Senior Actuary

KENTUCKY TEACHERS' RETIREMENT SYSTEM

**Report of Actuary on the Valuation  
Prepared as of June 30, 2009  
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, 2009	June 30, 2008
Number of active members	75,937	75,539
Annual salaries	\$ 3,253,077	\$ 3,190,332
Number of annuitants and beneficiaries	42,050	40,739
Annual allowances	\$ 1,280,316	\$ 1,206,812
Assets		
Market value	\$11,515,884	\$14,076,692
Actuarial value	\$14,885,981	\$15,321,325
Unfunded actuarial accrued liability	\$ 8,514,445	\$ 7,138,979
Funded Ratio	63.6%	68.2%
Amortization period (years)	30	30

Valuation Date	Contribution Rates for University Members		
	June 30, 2009		June 30, 2008
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	
Pension Plan:			
Normal	13.41 %	13.41 %	13.45 %
Accrued liability	<u>14.73</u>	<u>15.73</u>	<u>12.62</u>
Total	<u>28.14 %</u>	<u>29.14 %</u>	<u>26.07 %</u>
Member	7.625%	7.625%	7.625%
State (ARC)	<u>20.515</u>	<u>21.515</u>	<u>18.445</u>
Total	28.14 %	29.14 %	26.07 %
Life Insurance Fund:			
State	0.17 %	0.17 %	0.17 %
Medical Insurance Fund:			
Member	0.75 %	1.75 %	0.75 %
State Match	0.75	0.75	0.75
State Additional	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
Total	<u>1.50 %</u>	<u>2.50 %</u>	<u>1.50 %</u>
Total Contributions:	<u>29.81 %</u>	<u>31.81 %</u>	<u>27.74 %</u>
<b>Contribution rates for fiscal year ending:</b>	<b>June 30, 2012</b>		
Member Statutory	8.375 %	9.375 %	8.375 %
State Statutory	11.625	12.625	11.625
Required Increase	5.93	5.93	3.590
State Special	<u>3.88</u>	<u>3.88</u>	<u>4.150</u>
Total	29.81 %	31.81 %	27.740 %



Contribution Rates for Non-University Members

Valuation Date	June 30, 2009		June 30, 2008
	Members hired before 7/1/2008	Members on or after 7/1/2008	
Pension Plan:			
Normal	17.19%	17.19%	17.11%
Accrued liability	13.91	14.91	11.92
Total	<u>31.10%</u>	<u>32.10%</u>	<u>29.03%</u>
Member	9.105%	9.105%	9.105%
State (ARC)	21.995	22.995	19.925
Total	<u>31.10%</u>	<u>32.10%</u>	<u>29.03%</u>
Life Insurance Fund:			
State	0.17%	0.17%	0.17%
Medical Insurance Fund:			
Member	0.75%	1.75%	0.75%
State Match	0.75	0.75	0.75
State Additional	0.00	0.00	0.00
Total	<u>1.50%</u>	<u>2.50%</u>	<u>1.50%</u>
Total Contributions	<u>32.77%</u>	<u>34.77%</u>	<u>30.70%</u>
<b>For fiscal year ending:</b>	<b>June 30, 2012</b>		
Member Statutory	9.855%	10.855%	9.855%
State Statutory	13.105	14.105	13.105
Required Increase	5.93	5.93	3.59
State Special	3.88	3.88	4.15
Total	<u>32.77%</u>	<u>34.77%</u>	<u>30.70%</u>

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, 2009 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.
4. Schedule B shows the development of the actuarial value of assets. Schedule D of this report outlines the full set of actuarial assumptions and methods employed in the current valuation.
5. Provisions of the System, as summarized in Schedule E, 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. Effective July 1, 2008, the System was amended to change the benefit and contribution structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation.
6. All amounts shown prior to the 2004/2005 fiscal year were developed and/or reported by the prior actuarial firm.



**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, 2009 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries (\$1,000's)
Full Time	58,409	\$ 3,148,452
Part Time	<u>17,528</u>	<u>104,624</u>
Total	<u><u>75,937</u></u>	<u><u>\$ 3,253,076</u></u>

*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, 2009**

Group	Number	Annual Retirement Allowances <sup>1</sup> (\$1,000's)
Service Retirements	36,749	\$ 1,172,261
Disability Retirements	2,209	55,456
Beneficiaries of Deceased Members	<u>3,092</u>	<u>52,599</u>
Total	<u><u>42,050</u></u>	<u><u>\$ 1,280,316</u></u>

<sup>1</sup> Includes cost-of-living adjustments effective through July 1, 2009.

3. Table 1 of Schedule F 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, 2009 the market value of Pension Plan assets for valuation purposes held by the System amounted to \$11,515,883,575. 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, 2009 was \$14,885,981,251. Schedule B shows the development of the actuarial value of assets as of June 30, 2009.
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 outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.
2. The valuation shows that the System has an actuarial accrued liability of \$9,090,560,396 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to annuitants and beneficiaries amounts to \$14,100,130,163 of which \$1,082,729,326 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 \$209,735,890. The total actuarial accrued liability of the System amounts to \$23,400,426,449. Against these liabilities, the System has present assets for valuation purposes of \$14,885,981,251. When this amount is deducted from the actuarial accrued liability of \$23,400,426,449, there remains \$8,514,445,198 as the unfunded actuarial accrued liability.
3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 13.41% of payroll for university members and 17.19% for non-university members.

**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 8.375% of annual salary to the System and each non-university member who becomes a member before July 1, 2008 will contribute 9.855% of annual salary. Of this amount, 0.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university members and 9.105% for non-university members 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 10.855% of annual salary. Of this amount, 1.75% is paid to the Medical Insurance Fund for medical benefits leaving 7.625% for university for



# KENTUCKY TEACHERS' RETIREMENT SYSTEM

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 2011/2012 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, 0.17% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 5.93% 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 3.88% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 20.515% for university members who become members before July 1, 2008 and 21.515% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 21.995% for non-university members who become members before July 1, 2008 and 22.995% 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
<b><u>Member</u></b>		
Statutory Total	8.375%	9.375%
Statutory Medical Insurance Fund	(0.75)	(1.75)
Contribution to Pension Plan	7.625%	7.625%
<b><u>Employer</u></b>		
Statutory Matching Total	8.375%	9.375%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	10.875%	11.875%
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	5.93	5.93
Special Appropriation	3.88	3.88
Contribution to Pension Plan	20.515%	21.515%
Total Contribution to Pension Plan	28.14%	29.14%



**Contribution Rates by Source  
Non-University**

	Members hired before 7/1/2008	Members hired on and after 7/1/2008
<b>Member</b>		
Statutory Total	9.855%	10.855%
Statutory Medical Insurance Fund	(0.75)	(1.75)
Contribution to Pension Plan	<u>9.105%</u>	<u>9.105%</u>
<b>Employer</b>		
Statutory Matching Total	9.855%	10.855%
Statutory Medical Insurance Fund	(0.75)	(0.75)
Supplemental Funding	3.25	3.25
Subtotal	<u>12.355%</u>	<u>13.355%</u>
Life Insurance	(0.17)%	(0.17)%
Additional to Maintain 30-Year Amortization	5.93	5.93
Special Appropriation	3.88	3.88
Contribution to Pension Plan	<u>21.995%</u>	<u>22.995%</u>
Total Contribution to Pension Plan	31.10%	32.10%

4. The valuation indicates that normal contributions at the rate of 13.41% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.19%. 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 14.73% for university members hired before July 1, 2008, 15.73% for university members hired on and after July 1, 2008, 13.91% for non-university members hired before July 1, 2008, and 14.91% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.88% 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	13.41%	13.41%	17.19%	17.19%
Accrued Liability*	<u>14.73</u>	<u>15.73</u>	<u>13.91</u>	<u>14.91</u>
Total	28.14%	29.14%	31.10%	32.10%

\* Includes special appropriations of 3.88% of payroll to be made by the State.





- The unfunded actuarial accrued liability amounts to \$8,514,445,198 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**

- 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.
- 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 5.93%, 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.
- Since the 2005 fiscal year, a portion of the contributions required for the pension fund have been 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, but the borrowing is expected to continue in the future. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2009:

**Medical Insurance Fund  
Stabilization Funding**

	Loan Amount	Annual Payment	Balances as of July 1, 2009
2004/2005	\$29,169,700	\$4,249,600	\$19,947,105
2005/2006	62,294,800	9,075,500	48,069,098
2006/2007	73,000,000	10,207,400	58,968,035
2007/2008	125,000,000	18,280,000	116,095,000
2008/2009*	<u>133,400,000</u>	<u>19,434,500</u>	<u>133,400,000</u>
Total	\$422,864,500	\$61,247,000	\$376,479,238

*\*Includes \$125,000,000 for Stabilization Funding and \$8,400,000 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 5.93% of payroll for the fiscal year ending June 30, 2012, 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	2.34	5.93

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 \$1,375,466,455 in the unfunded accrued liability from \$7,138,978,743 to \$8,514,445,198 during the year ending June 30, 2009.

**Analysis of Financial Experience  
(Dollar amounts in thousands)**

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.50%) added to previous unfunded accrued liability	\$ 535,423
Expected Accrued liability contribution	(290,426)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2008/2009 fiscal year with interest	144,612
Repayment of prior year's MIF Stabilization Funding with interest	(43,380)
Experience:	
Valuation asset growth	1,024,062
Pensioners' mortality	9,699
Turnover and retirements	29,587
New entrants	60,121
Salary increases	(94,232)
Amendments	0
Assumption and method changes	0
<b>Total</b>	<b>\$ 1,375,466</b>



**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, 2009**

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	42,050
Terminated employees entitled to benefits but not yet receiving benefits	5,245
Active plan members	<u>75,937</u>
Total	123,232

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

Schedule of Funding Progress (Dollar amount in thousands)						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) / c)
6/30/2004	\$ 14,255,131	\$ 17,617,626	\$ 3,362,495	80.9%	\$ 2,641,533	127.3%
6/30/2005	14,598,843	19,134,870	4,536,027	76.3	2,703,430	167.8
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

\* Reflects change in decremental assumptions.



3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2009. Additional information as of the latest actuarial valuation follows.

Valuation Date	06/30/2009	<b>Actuarial Assumptions:</b>
Actuarial cost method	Projected unit credit	<u>Investment Rate of Return*</u>
Amortization method	Level percent of pay, open	7.50%
Remaining amortization period	30 years	<u>Projected Salary Increases*</u>
Asset valuation method	5-year smoothed market	4.00 - 8.20%
		<u>Cost-of-Living Adjustments</u>
		1.50% Annually
		<i>*Includes Inflation at 4.00%</i>

**Schedule of Employer Contributions**

Fiscal Year Ended June 30	Annual Required Contributions	Percentage Contributed
2004	\$364,351,412	100%
2005	383,776,826	100
2006	406,107,266	100
2007	494,565,369	85
2008	563,789,483	78
2009	600,282,735	67

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2009. 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 Obligation for Fiscal Year Ending June 30, 2009**

(a) Employer annual required contribution	\$ 600,282,735
(b) Interest on net pension obligation	18,762,794
(c) Adjustment to annual required contribution	55,186,315
(d) Annual pension cost: (a) + (b) - (c)	563,859,214
(e) Employer contributions made for fiscal year ending June 30, 2009	400,737,435
(f) Increase (decrease) in net pension obligation: (d) - (e)	163,121,779
(g) Net pension obligation beginning of fiscal year	250,170,583
(h) Net pension obligation end of fiscal year: (f) + (g)	\$ 413,292,362



**TREND INFORMATION**

Year Ending	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation (NPO)
June 30, 2007	\$476,544,275	88%	\$149,410,401
June 30, 2008	539,549,665	81	250,170,583
June 30, 2009	563,859,214	71	413,292,362

**SCHEDULE A**  
**Results of the Valuation**  
**Prepared as of June 30, 2009**  
**(\$1,000's)**

<b>1. ACTUARIAL ACCRUED LIABILITY</b>		
Present value of prospective benefits payable in respect of:		
(a) Present active members		
- Service retirement benefits	\$ 8,479,308	
- Disability retirement benefits	384,813	
- Death and survivor benefits	70,527	
- Refunds of member contributions	<u>155,912</u>	
Total		\$ 9,090,560
(b) Present inactive members and members entitled to deferred vested benefits:		209,736
(c) Present annuitants and beneficiaries:		
- Service retirement benefits	13,190,941	
- Disability retirement benefits	440,627	
- Death and survivor benefits	<u>468,562</u>	
Total		<u>14,100,130</u>
(d) Total actuarial accrued liability		23,400,426
<b>2. PRESENT ASSETS FOR VALUATION PURPOSES</b>		14,885,981
<b>3. UNFUNDED ACTUARIAL ACCRUED LIABILITY</b>		
[ 1(d) - 2 ]		\$ 8,514,445
<b>4. NORMAL CONTRIBUTION RATE</b>		
	<u>UNIVERSITY</u>	<u>NON-UNIVERSITY</u>
(a) Actuarial present value of benefits accruing annually	\$ 27,018	\$ 524,653
(b) Annual payroll of active members	\$ 201,440	\$ 3,051,637
(c) Normal contribution rate		
[ (4(a) / 4(b) ]	13.41%	17.19%



**Solvency Test**  
(in millions of dollars)

Fiscal Year Ending	(1)	(2)	(3)	Valuation Assets	Portion of Accrued Liabilities Covered by Assets		
	Active Member Contributions	Retirants And Beneficiaries	Active Members (Employer Financed Portion)		(1)	(2)	(3)
6/30/2004	\$2,546.1	\$9,906.2	\$5,165.3	\$14,255.1	100%	100%	35%
6/30/2005	2,621.3	11,370.4	5,143.2	14,598.8	100	100	12
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

**SCHEDULE B**  
**Development of Actuarial Value of Assets**  
**as of June 30, 2009**

(1)	Actuarial Value of Assets Beginning of Year	\$ 15,321,325,033
(2)	Market Value of Assets End of Year	11,515,883,575
(3)	Market Value of Assets Beginning of Year	14,076,692,181
(4)	Cash Flow	
	a. Contributions	736,228,499
	b. Benefit Payments	1,268,188,826
	c. Administrative Expense	<u>8,165,757</u>
	d. Net: (4)a - (4)b - (4)c	(540,126,084)
(5)	Investment Income	
	a. Market total: (2) - (3) - (4)d	(2,020,682,522)
	b. Assumed Rate	7.50%
	c. Amount for Immediate Recognition: [ (3) x (5)b ] + [ (4)d x (5)b x 0.5 ]	1,035,497,185
	d. Amount for Phased-In Recognition: (5)a - (5)c	(3,056,179,707)
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20 x (5)d	(611,235,941)
	b. First Prior Year	(409,879,449)
	c. Second Prior Year	190,240,386
	d. Third Prior Year	(75,996,339)
	e. Fourth Prior Year	<u>(23,843,540)</u>
	f. Total Recognized Investment Gain	(930,714,883)
(7)	Actuarial Value of Assets End of Year: (1) + (4)d + (5)c + (6)f	14,885,981,251
(8)	Difference Between Market & Actuarial Values: (2) - (7)	\$ (3,370,097,676)



**SCHEDULE C**  
**PENSION PLAN ASSETS**  
**Summary of Receipts & Disbursements\***  
**(Market Value)**

	For the Year Ending	
	June 30, 2009	June 30, 2008
<b>Receipts for the Year</b>		
Contributions		
Members	\$ 293,678,564	\$ 291,423,948
Employers	<u>442,549,935</u>	<u>466,247,782</u>
Total	\$ 736,228,499	\$ 757,671,730
Net Investment Income	<u>(2,020,682,522)</u>	<u>(909,083,525)</u>
<b>TOTAL</b>	<b>\$ (1,284,454,023)</b>	<b>\$ (151,411,795)</b>
<b>Disbursements for the Year</b>		
Benefit Payments	\$ 1,252,980,407	\$ 1,170,969,101
Refunds to Members	15,208,419	15,965,083
Medical Insurance Payments	0	0
Miscellaneous, including expenses	<u>8,165,757</u>	<u>7,551,936</u>
<b>TOTAL</b>	<b>\$ 1,276,354,583</b>	<b>\$ 1,194,486,120</b>
<b>Excess of Receipts over Disbursements</b>	<b>\$ (2,560,808,606)</b>	<b>\$ (1,345,897,915)</b>
<b>Reconciliation of Asset Balances</b>		
Asset Balance as of the Beginning of the Year	\$ 14,076,692,181	\$ 15,422,590,096
Excess of Receipts over Disbursements	<u>(2,560,808,606)</u>	<u>(1,345,897,915)</u>
Asset Balances as of the End of the Year	<u><b>\$ 11,515,883,575</b></u>	<u><b>\$ 14,076,692,181</b></u>

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



**SCHEDULE D**

**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, 2005, submitted to and adopted by the Board on September 18, 2006.

INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows and include inflation at 4.0% per annum:

Age	20	25	30	35	40	45	50	55	60	65
Annual Rate	8.10%	7.20%	6.20%	5.50%	5.00%	4.70%	4.50%	4.30%	4.20%	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 . . .							
AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			SERVICE			Before 27 Years of Service	After 27 Years of Service*
0 - 4	5 - 9	10+					
20	0.003%	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905	0.00	0.00	0.00	0.00	100.0	100.0

*\*Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*





# KENTUCKY TEACHERS' RETIREMENT SYSTEM

FEMALES: Annual Rate of . . .							
AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			SERVICE			Before 27 Years of Service	After 27 Years of Service*
			0 - 4	5 - 9	10+		
20	0.002%	0.03%	6.00%				
25	0.007	0.03	8.50	3.00%			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195	0.00	0.00	0.00	0.00	100.0	100.0

*\*Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.*

**DEATHS AFTER RETIREMENT:** According to the 1994 Group Annuity Mortality Table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

**Annual Rate of  
Death After . . .**

Age	Service Retirement		Disability Retirement	
	MALE	FEMALE	MALE	FEMALE
45	0.1578%	0.0973%	6.500%	6.500%
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

**Actuarial Method:** Unit Credit Actuarial Cost Method with projected benefits. Actuarial gains and losses are reflected in the unfunded actuarial accrued liability.

**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 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: 1% of active liability



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**SCHEDULE E****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, 2009. Effective July 1, 2008, the System has been amended to change the benefit structure for members hired on or after that date. These plan changes are reflected in the June 30, 2009 valuation. 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.



## **Service Retirement Allowance: Members On or 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:

- (a) 1.7% of final average salary if service is 10 years or less.
- (b) 2.0% of final average salary if service is greater than 10 years and no more than 20 years.
- (c) 2.3% of final average salary if service is greater than 20 years but no more than 26 years.
- (d) 2.5% of final average salary if service is greater than 26 years but no more than 30 years.
- (e) 3.0% of final average salary for years of service greater than 30 years.

The annual retirement allowance for university members is equal to:

- (a) 1.5% of final average salary if service is 10 years or less.
- (b) 1.7% of final average salary if service is greater than 10 years and no more than 20 years.
- (c) 1.85% of final average salary if service is greater than 20 years but less than 27 years.
- (d) 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:

<b><u>Number of Children</u></b>	<b><u>1</u></b>	<b><u>2</u></b>	<b><u>3</u></b>	<b><u>4</u></b>
<b><u>Annual Allowance</u></b>	\$ 2,400	\$ 4,080	\$ 4,800	\$ 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

Members Before 7/1/2008: University members contribute 8.375% of salary of which 7.625% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Non-university members contribute 9.855% of salary of which 9.105% is contributed to the Retirement System and 0.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.

Members on and after 7/1/2008: University members contribute 9.375% of salary of which 7.625% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Non-university members contribute 10.855% of salary of which 9.105% is contributed to the Retirement System and 1.75% is contributed to the Medical Insurance Fund. Member contributions are picked up by the employer.



**SCHEDULE F**  
**Table 1: Age - Service Table**  
**Distribution of Active Members as of June 30, 2009**  
**by Age and Service Groups**

<b>Attained Age</b>	<b>0 to 4</b>	<b>5 to 9</b>	<b>10 to 14</b>	<b>15 to 19</b>	<b>20 to 24</b>	<b>25 to 29</b>	<b>30 to 34</b>	<b>&gt;= 35</b>	<b>TOTAL</b>
24 & under	2,595								2,595
Total Pay	39,745,490								39,745,490
Avg. Pay	15,316								15,316
25 to 29	7,615	1,290							8,905
Total Pay	227,008,336	57,380,853							284,389,189
Avg. Pay	29,811	44,481							31,936
30 to 34	3,882	4,670	830						9,382
Total Pay	113,269,413	218,043,692	44,291,642						375,604,747
Avg. Pay	29,178	46,690	53,363						40,035
35 to 39	3,010	2,545	3,984	662					10,201
Total Pay	79,647,918	121,131,930	221,265,021	39,293,353					461,338,222
Avg. Pay	26,461	47,596	55,538	59,356					45,225
40 to 44	3,840	1,648	2,095	2,717	664				10,964
Total Pay	79,186,648	79,487,856	116,421,557	166,421,024	41,840,206				483,357,291
Avg. Pay	20,622	48,233	55,571	61,252	63,012				44,086
45 to 49	1,939	1,291	1,361	1,452	2,172	600			8,815
Total Pay	48,445,446	63,598,288	77,417,070	89,497,680	138,769,270	39,410,174			457,137,928
Avg. Pay	24,985	49,263	56,882	61,638	63,890	65,684			51,859
50 to 54	1,697	1,024	1,183	1,249	1,374	1,625	538		8,690
Total Pay	33,728,120	51,433,269	67,764,908	76,847,143	90,516,215	109,873,901	36,696,325		466,859,881
Avg. Pay	19,875	50,228	57,282	61,527	65,878	67,615	68,209		53,724
55 to 59	2,797	762	946	1,088	1,174	785	780	117	8,449
Total Pay	45,773,868	40,581,777	56,268,484	69,862,760	78,212,871	54,852,877	58,587,128	9,522,788	413,662,553
Avg. Pay	16,365	53,257	59,480	64,212	66,621	69,876	75,112	81,391	48,960
60 to 64	2,712	425	428	526	532	306	156	124	5,209
Total Pay	37,994,285	22,697,514	26,730,945	33,975,145	36,953,135	22,058,924	13,278,778	11,209,862	204,898,588
Avg. Pay	14,010	53,406	62,455	64,592	69,461	72,088	85,120	90,402	39,335
65 & over	2,055	128	108	105	127	59	53	92	2,727
Total Pay	19,405,654	6,689,343	6,997,460	7,054,833	8,858,222	4,351,813	4,221,793	8,503,592	66,082,710
Avg. Pay	9,443	52,260	64,791	67,189	69,750	73,760	79,656	92,430	24,233
Total	32,142	13,783	10,935	7,799	6,043	3,375	1,527	333	75,937
Total Pay	724,205,178	661,044,522	617,157,087	482,951,938	395,149,919	230,547,689	112,784,024	29,236,242	3,253,076,599
Avg. Pay	22,531	47,961	56,439	61,925	65,390	68,310	73,860	87,797	42,839

Average Age: 43.4

Average Service: 10.6



**SCHEDULE F**

**Table 2**

**Number of Retired Members and Beneficiaries  
and their Benefits by Age**

Attained Age	Number of Members	Total Annual Benefits	Average Annual Benefits
49 & Under	758	\$ 8,751,336	\$ 11,545
50 - 54	1,341	42,889,619	31,983
55 - 59	6,461	232,264,595	35,949
60 - 64	10,276	352,699,647	34,323
65 - 69	7,866	252,891,651	32,150
70 - 74	5,382	159,572,080	29,649
75 - 79	3,972	105,566,338	26,578
80 & Over	5,994	125,680,717	20,968
Total	42,050	\$ 1,280,315,983	\$ 30,447

**SCHEDULE F**

**Table 3**

**Schedule of Retirants, Beneficiaries and Survivors  
Added to and Removed from Rolls**

Year Ended	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		Increase in Annual Allowances	Average Annual Allowance
	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)		
2000	2,462	\$79.2	1,008	\$14.1	30,615	\$619.2	11.8%	\$20,226
2001	2,410	77.0	1,128	16.5	31,897	679.8	9.8	21,311
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



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# Actuarial Section

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Report of the Actuary on the Annual Valuation  
of the Retiree Medical and Life Insurance Plans

for Fiscal Year ending June 30, 2009



PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

**Clifty School, 1910  
Warren County, Kentucky**





**Cavanaugh Macdonald**  
CONSULTING, LLC

December 14, 2009

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

Members of the Board:

Governmental Accounting Standards Board Statements No. 43 and 45 require the Teachers' Retirement System of the State of Kentucky (the System) to conduct actuarial valuations of the System's retiree medical and other post employment benefit plans. This report covers the Medical Insurance Fund and OPEB liabilities related to the Life Insurance Fund. Cavanaugh Macdonald Consulting, LLC (CMC) has submitted the results of the annual actuarial valuation prepared as of June 30, 2009. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 14.36% of active member payroll for the Medical Insurance Fund payable for the fiscal year ending June 30, 2012 is required to support the benefits of the Kentucky Employees Health Plan and the Medicare Eligible Health Plan. Of this amount, 0.75% of payroll is paid by those members entering the system prior to July 1, 2008 and 1.75% of payroll is paid by those members entering the System on or after July 1, 2008, leaving 13.61% and 12.61% respectively, as the State contribution. This required State contribution reflects the assets currently held in the Medical Insurance Fund. As the State contributions are less than the required levels, the discount rate for valuing liabilities is 4.5%. Schedule A shows the decrease in liabilities of the medical plans if the required contributions were made each year and the funded discount rates of 7.5% or 8.0% could be utilized.

The Medical Insurance Fund valuation takes into account the effect of amendments to the medical plans enacted through the most recent session of the Legislature. Several changes were made to the assumptions and methods used to determine the liability. The results of this valuation include a reduction in future payments estimated to be made by the System by providing prescription drug benefits to Medicare eligible retirees under a fully insured Prescription Drug Plan (PDP) where, under GASB 43 and 45, subsidies may be recognized. Additionally, changes were made to the expected rates of participation, starting per capita claims costs, dependent coverage subsidies, the assumed rate of health care inflation, and the relationship of cost between ages. The actuarial accrued liability increased from \$6.4 billion in 2008 to \$6.5 billion in 2009.

The Life Insurance Fund valuation indicates a total annual required contribution of 0.05% of active member payroll payable for the fiscal year ending June 30, 2012 is required to support the benefits of the Life Insurance Fund. The current contribution rate of 0.17% of active member payroll payable for the fiscal year ending June 30, 2012 exceeds the amount sufficient to support the benefits of the Life Insurance Fund. With the State contributions to the Life Insurance Funds exceeding the required levels, the discount rate for valuing liabilities is 7.5%.

The promised benefits of the medical and life insurance plans are included in the actuarially calculated contribution rates which are developed using the unit credit actuarial cost method with projected benefits. The market 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 in aggregate reasonably related to the experience under the medical and life insurance plans and to reasonable expectations of anticipated experience under the medical and life insurance plans and meet the parameters for the disclosures under GASB 43 and 45.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Board of Trustees  
 December 14, 2009  
 Page 2

CMC has prepared the trend information shown in the Schedule of Funding Progress and the Schedule of Employer Contributions in the Financial Section of the Annual Report and Schedule A and Schedule C shown in the Actuarial Section of the Annual Report.

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 medical and life insurance plans and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the plans.

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.

In our opinion, if the State contributions to the Medical Insurance Fund are increased to the required levels, the medical plans will begin to operate in an actuarially sound basis. Assuming that required contributions to the Medical Insurance Fund are made by the employer from year to year in the future at the levels required on the basis of the successive actuarial valuations, the actuarial soundness of the Medical Insurance Fund to provide the benefits called for under the medical plans will improve.

Respectfully submitted,



Eric Gary, FSA, FCA, MAAA  
 Senior Actuary



Alisa Bennett, ASA, EA, FCA, MAAA  
 Principal and Senior Actuary

**Report of Actuary on the on the Annual Valuation  
of the Retiree Medical and Life Insurance Plans**  
Prepared as of June 30, 2009

**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):

~ Medical Insurance Fund ~			
Valuation Date	June 30, 2009		June 30, 2008
Number of active members	75,937		75,539
Annual salaries	\$ 3,253,077		\$ 3,190,332
Number of annuitants in medical plans	33,481		32,591
Number of spouses and beneficiaries in medical plans*	<u>6,808</u>		<u>6,678</u>
Total	40,289		39,269
Assets:			
Market value	\$ 229,103		\$ 185,883
Unfunded actuarial accrued liability	\$ 6,225,630		\$ 6,248,639
Amortization period (years)	30		30
Discount rate	4.50%		4.50%
<b>Contribution for fiscal year ending:</b>	<b>June 30, 2012</b>		<b>June 30, 2011</b>
	<b>Hired prior to 7/1/08</b>	<b>Hired on or after 7/1/08</b>	
Normal	7.53%	7.53%	7.60%
Accrued liability	<u>6.83%</u>	<u>6.83%</u>	<u>6.99%</u>
Total	14.36%	14.36%	14.59%
Member	0.75%	1.75%	0.75%
State (ARC)	<u>13.61%</u>	<u>12.61%</u>	<u>13.84%</u>
Total	14.36%	14.36%	14.59%
* Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. 100% of the full contribution for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.			
~ Life Insurance Fund ~			
Valuation Date	June 30, 2009		June 30, 2008
Number of active members	75,937		75,539
Annual salaries	\$ 3,253,077		\$ 3,190,332
Number retirees in Life Insurance Plan	38,958		37,778
Assets:			
Market value	\$ 84,703		\$ 77,658
Unfunded actuarial accrued liability*	\$ 5,631		\$ 6,607
Amortization period (years)	30		30
Discount rate	7.50%		7.50%
<b>Contribution for fiscal year ending:</b>	<b>June 30, 2012</b>		<b>June 30, 2011</b>
Normal	0.04%		0.04%
Accrued liability	<u>0.01%</u>		<u>0.01%</u>
Total	0.05%		0.05%



\* Includes liability for death in active service. This amount could be segregated from the OPEB liability and assets could be split for active and post employment purposes. However, since this could be administratively burdensome and since death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45.

2. The valuation indicates combined member and State contributions of 14.36% of active member payroll would be sufficient to support the current benefits of the medical plans and State contributions of 0.05% of active member payroll would be sufficient to support the current benefits of the life insurance plan. Comments on the valuation results as of June 30, 2009 are given in Section IV and further discussion of the contribution levels is set out in Sections V and VI.
3. Schedule C of this report outlines the full set of actuarial assumptions and methods employed in the current valuation. There have been several changes made to the assumptions and methods used to determine the liability since the previous valuation. The results of this valuation include a reduction in future payments estimated to be made by the System by providing prescription drug benefits to Medicare eligible retirees under a fully insured Prescription Drug Plan, changes made to the expected rates of participation, starting per capita claims costs, dependent coverage subsidies, the assumed rate of health care inflation, and the relationship of cost between ages.
4. The valuation takes into account the effect of amendments to the medical plans enacted through the most recent session of the Legislature.
5. All amounts shown prior to the 2005 valuation year were developed and/or reported by the prior actuarial firm.

**Section II - MEMBERSHIP DATA**

1. Data regarding the membership of the medical and life insurance plans for use as a basis of the valuation were furnished by the System office. The following table shows the number of active members and their annual salaries as of June 30, 2009 on the basis of which the valuation was prepared.

<b>Group</b>	<b>Number</b>	<b>Annual Salaries (\$1,000's)</b>
Full Time	56,219	\$ 3,026,198
Part Time	<u>19,718</u>	<u>226,879</u>
Total	<u>75,937</u>	<u>\$ 3,253,077</u>



**Section III - ASSETS**

1. As of June 30, 2009 the market value of Medical Insurance Fund assets for valuation purposes held by the medical plans amounted to \$229,103,015 and the market value of Life Insurance Fund assets for valuation purposes held by the life insurance plan amounted to \$84,702,634.
2. Schedule B shows the receipts and disbursements for the year preceding the valuation date and a reconciliation of the asset balances for the Medical Insurance Fund and the Life Insurance Fund.

**Section IV - COMMENTS ON VALUATION**

1. Schedule A of this report outlines the results of the actuarial valuation and illustrates the benefits of pre-funding the liability for the medical and life insurance plans. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule C.
2. The valuation shows that the medical plans have an actuarial accrued liability of \$3,250,990,231 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to retirees and covered spouses amounts to \$3,203,742,794. The total actuarial accrued liability of the medical plans amounts to \$6,454,733,025. Against these liabilities, the medical plans have present assets for valuation purposes of \$229,103,015. When this amount is deducted from the actuarial accrued liability of \$6,454,733,025 there remains \$6,225,630,010 as the unfunded actuarial accrued liability for the medical plans.
3. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the medical plans is determined to be \$245,037,866, or 7.53% of payroll.
4. The valuation shows that the life insurance plan has an actuarial accrued liability of \$18,352,634 for benefits expected to be paid on account of the present active membership, based on service to the valuation date. The liability on account of benefits payable to retirees and covered spouses amounts to \$71,981,484. The total actuarial accrued liability of the life insurance plan amounts to \$90,334,118. This amount includes liability for death in active service. The liability for death in active service could be segregated from the OPEB liability and assets could be split for active and post employment purposes. As this could be administratively burdensome and, as death in active service liabilities can be considered de minimis, it is acceptable to consider the entire liability an OPEB liability under GASB 43 and 45. Against these liabilities, the life insurance plan has present assets for valuation purposes of \$84,702,634. When this amount is deducted from the actuarial accrued liability of \$90,334,118 there remains \$5,631,484 as the unfunded actuarial accrued liability for the life insurance plan.
5. The normal contribution is equal to the actuarial present value of benefits accruing during the current year. The normal contribution for the life insurance plan is determined to be \$1,206,829, or 0.04% of payroll.



**Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM**

- Section 161.420(5) of the Kentucky Revised Statutes provides that the State will contribute 0.75% of salary to the Medical Insurance Fund. Member contributions will be 1.75% for those who became members of the System on or after July 1, 2008 and 0.75% for all other members. CMC recommends the State contribution increase to the required amount of 13.61% of payroll for those employees hired prior to 7/1/2008 and 12.61% of payroll for those hired on or after 7/1/2008. The State is currently contributing 0.17% of salary to the Life Insurance Fund. CMC's valuation indicates a contribution of 0.05% is required to sufficiently support the benefits of the life insurance plan.

<b>Required Contribution Rates For Fiscal Year Ending June 30, 2012</b>			
	<b>Medical Insurance Fund</b>		<b>Life Insurance Fund</b>
Normal	7.53%		0.04%
Accrued liability	<u>6.83%</u>		<u>0.01%</u>
Total	14.36%		0.05%
	<b>Hired prior to 7/1/08</b>	<b>Hired on or after 7/1/08</b>	
Member	0.75%	1.75%	0.00%
State (ARC)	<u>13.61%</u>	<u>12.61%</u>	<u>0.05%</u>
Total	14.36%	14.36%	0.05%

- The valuation indicates that a total normal contribution of 7.53% of payroll is required to meet the cost of benefits currently accruing under the medical plans and 0.04% of payroll is required to meet the cost of benefits currently accruing under the life insurance plan. The difference between the total contribution and the normal contribution remains to be applied toward the liquidation of the unfunded actuarial accrued liability. This accrued liability payment is 6.83% of payroll for the medical plans and 0.01% of payroll for the life insurance plan.
- The unfunded actuarial accrued liability amounts to \$6,225,630,010 for the medical plans and \$5,631,484 for the life insurance plan as of the valuation date. An accrued liability contribution of 6.83% of payroll for the medical plans and 0.01% of payroll for the life insurance plan is sufficient to amortize the unfunded actuarial accrued liabilities 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. The System's monthly contribution for retirees to opt into the medical plan is based upon date of hire and years of service at retirement. Additionally, beneficiary contributions may vary by plan election, Medicare eligibility and tobacco use. Beneficiary contributions for dependents are targeted to be 100% of the cost of expected claims for spouses age 65 and older. Historically, this target has been achieved. 100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State. Current employer contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits and contributions for university and non-university members are identical.
2. The valuation indicates that a significant increase in contributions is required to fund the medical plans in an actuarially sound manner and to ensure the future solvency of the Medical Insurance Fund. For those who became members of the System on or after July 1, 2008, a member contribution of 1.75% of payroll together with a state contribution of 12.61% of payroll is required 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. For those who became members of the System prior to July 1, 2008, a member contribution of 0.75% of payroll together with a state contribution of 13.61% of payroll is required 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.

**Section VII - ACCOUNTING INFORMATION**

1. Governmental Accounting Standards Board Statements 43 and 45 set forth certain items of required supplementary information to be disclosed in the financial statements of the medical and life insurance plans and the employer.

Number of Active and Retired Members in Medical Plan as of June 30, 2009		Number of Active and Retired Members in Life Insurance Plan as of June 30, 2009	
GROUP	NUMBER	GROUP	NUMBER
Retirees currently receiving health benefits	33,481	Retirees	38,958
Spouses of retirees currently receiving health benefits	6,808	Active plan members	<u>75,937</u>
Active plan members	<u>75,937</u>	<b>Total</b>	<u><b>114,895</b></u>
<b>Total</b>	<u><b>116,226</b></u>		



**Schedule of Funding Progress  
Medical Insurance Fund**  
*(Dollar amount in thousands)*

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2003	\$ 165,537	\$ 2,886,000	\$ 2,720,463	5.7%	\$ 2,497,731	108.9%
6/30/2004	158,862	3,166,568	3,007,706	5.0	2,641,533	113.9
6/30/2005	147,311	4,763,947	4,616,636	3.1	2,703,430	170.8
6/30/2006*	131,614	4,341,963	4,210,349	3.0	2,859,477	147.2
6/30/2007**	140,772	5,928,761	5,787,989	2.4	2,975,289	194.5
6/30/2008	185,883	6,434,522	6,248,639	2.9	3,190,332	195.9
6/30/2009***	229,103	6,454,733	6,225,630	3.5	3,253,077	191.4

\*Reflects change in decrement assumptions and plan design. \*\*Reflects change in discount rate to 4.5% and updating medical trend. \*\*\*Reflects change in participation assumptions and plan design.

**Schedule of Funding Progress  
Life Insurance Fund**  
*(Dollar amount in thousands)*

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAAL as a Percentage of Covered Payroll ((b-a) /c)
6/30/2007	\$ 71,426	\$ 82,722	\$ 11,296	86.3%	\$ 2,975,289	0.38%
6/30/2008	77,658	84,265	6,607	92.2	3,190,332	0.21
6/30/2009	84,703	90,334	5,631	93.8	3,253,077	0.17

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2009. Additional information as of the latest actuarial valuation follows.

Valuation Date .....	06/30/2009	<b>Actuarial Assumptions:</b>
Actuarial cost method .....	Projected unit credit	<u>Investment Rate of Return*</u>
Amortization method .....	Level percent of pay, open	4.50% for Medical &
Remaining amortization period .....	30 years	7.50% for Life Insurance
Asset valuation method .....	Market Value of Assets	<u>Healthcare Trend Rate*</u>
		10.50%
		<u>Ultimate Trend Rate</u>
		5.00%
		<u>Year of Ultimate Trend Rate</u>
		2017
		*Includes Inflation at 4.00%





<b>Schedule of Employer Contributions Medical Insurance Fund</b>					
Fiscal Year Ending	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Retiree Drug Subsidy Contribution (c)	Total Contribution (b) + (c)	Percentage of ARC Contributed [(b) + (c)] / (a)]
6/30/2007	\$ 231,473,321	\$ 113,258,761	\$ 10,312,361	\$ 123,571,122	53.4%
6/30/2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7
6/30/2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1

<b>Schedule of Employer Contributions Life Insurance Fund</b>				
Fiscal Year Ending	Annual Required Contribution (ARC) (a)	Actual Employer Contribution (b)	Percentage of ARC Contributed (b) / (a)	
6/30/2007	\$ 1,785,173	\$ 5,022,137	281.3%	
6/30/2008	1,914,199	5,411,249	282.7	
6/30/2009	1,498,076	5,455,473	364.2	

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2009. As the medical and life insurance plans are cost-sharing multiple-employer plans, GASB Statement 45 does not require the participating employers to disclose this information.

<b>Annual OPEB Cost and Net OPEB Obligation for the Medical Insurance Fund for Fiscal Year Ending June 30, 2009</b>	
(a) Employer Annual Required Contribution	\$ 467,312,904
(b) Interest on Net OPEB Obligation	10,548,718
(c) Adjustment to Annual Required Contribution	<u>8,369,404</u>
(d) Annual OPEB Cost: (a) + (b) - (c)	469,492,218
(e) Employer contributions for Fiscal Year 2009	<u>178,091,867</u>
(f) Increase in Net OPEB Obligation: (d) - (e)	291,400,351
(g) Net OPEB Obligation at beginning of Fiscal Year	<u>234,415,955</u>
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	<u><u>\$ 525,816,306</u></u>



**Trend Information for the Medical Insurance Fund**

<b>Fiscal Year Ending</b>	<b>Annual OPEB Cost (AOC)</b>	<b>Percentage of AOC Contributed</b>	<b>Net OPEB Obligation (NOO)</b>
6/30/2008	\$ 395,282,164	40.7%	\$ 234,415,955
6/30/2009	469,492,218	37.9	525,816,306

**Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal year Ending June 30, 2009**

(a) Employer Annual Required Contribution	\$ 1,498,076
(b) Interest on Net OPEB Obligation	(262,279)
(c) Adjustment to Annual Required Contribution	<u>(180,859)</u>
(d) Annual OPEB Cost: (a) + (b) - (c)	1,416,656
(e) Employer contributions for Fiscal Year 2009	<u>5,455,473</u>
(f) Increase in Net OPEB Obligation: (d) - (e)	(4,038,817)
(g) Net OPEB Obligation at beginning of Fiscal Year	<u>(3,497,050)</u>
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	<u><u>(\$7,535,867)</u></u>

**Trend Information for the Life Insurance Fund**

<b>Fiscal Year Ending</b>	<b>Annual OPEB Cost (AOC)</b>	<b>Percentage of AOC Contributed</b>	<b>Net OPEB Obligation (NOO)</b>
6/30/2008	\$ 1,914,199	282.7%	(\$3,497,050)
6/30/2009	1,416,656	385.1	(7,535,867)



KENTUCKY TEACHERS' RETIREMENT SYSTEM

**SCHEDULE A**  
**Benefits of Pre-Funding Medical Plan**  
**(1,000's)**

	Pay-As-You-Go Discount Rate 4.50%	Pre-Funding Discount Rate 7.50%	Pre-Funding Discount Rate 8.00%			
<b>PAYROLL</b>	\$ 3,253,077	\$ 3,253,077	\$ 3,253,077			
<b>ACTUARIAL ACCRUED LIABILITY</b>						
Present value of prospective benefits payable in respect of:						
(a) Present active members:	\$ 3,250,990	\$ 1,689,955	\$ 1,536,618			
(b) Present retired members and covered spouses:	<u>3,203,743</u>	<u>2,288,593</u>	<u>2,179,273</u>			
(c) Total actuarial accrued liability	6,454,733	3,978,548	3,715,891			
<b>PRESENT ASSETS FOR VALUATION PURPOSES</b>	<u>229,103</u>	<u>229,103</u>	<u>229,103</u>			
<b>UNFUNDED ACTUARIAL ACCRUED LIABILITY</b>	<u>\$ 6,225,630</u>	<u>3,749,445</u>	<u>3,486,788</u>			
<b>CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2012:</b>						
Normal	7.53 %	3.42 %	3.05 %			
Accrued Liability	<u>6.83</u>	<u>5.96</u>	<u>5.86</u>			
Total	14.36 %	9.38 %	8.91 %			
	<b>Hired prior to 7/1/08</b>	<b>Hired on or after 7/1/08</b>	<b>Hired prior to 7/1/08</b>	<b>Hired on or after 7/1/08</b>	<b>Hired prior to 7/1/08</b>	<b>Hired on or after 7/1/08</b>
Member	0.75%	1.75%	0.75%	1.75%	0.75%	1.75%
State (ARC)	<u>13.61</u>	<u>12.61</u>	<u>8.63</u>	<u>7.63</u>	<u>8.16</u>	<u>7.16</u>
Total	14.36%	14.36%	9.38%	9.38%	8.91%	8.91%

**SCHEDULE B**  
**MEDICAL INSURANCE FUND**  
**Summary of Receipts & Disbursements**  
**(Market Value)**

	<i>For the Year Ending</i>	
<b>RECEIPTS FOR THE YEAR</b>	<u>June 30, 2009</u>	<u>June 30, 2008</u>
Contributions		
Members Statutory	\$ 25,134,252	\$ 24,125,800
Payment by Retired Members	<u>33,554,515</u>	<u>31,277,030</u>
Total Members	58,688,767	55,402,830
State Statutory Contributions	25,022,737	23,929,322
State Special	0	0
General Fund Surplus (6/2006)	0	0
Allotment from Pension Fund	<u>139,385,300</u>	<u>125,000,000</u>
Total Employer	164,408,037	148,929,322
Grand Total	223,096,804	204,332,152
Recovery Income	72,082	25,322
Medicare D Receipts	13,611,748	11,911,565
Net Investment Income	<u>11,296,280</u>	<u>8,128,179</u>
TOTAL	248,076,914	224,397,218
<b>Disbursements for the Year</b>		
Refunds to Members	0	10,015
Medical Insurance Expense	<u>204,857,122</u>	<u>179,276,215</u>
TOTAL	204,857,122	179,286,230
<b>Excess of Receipts over Disbursements</b>	43,219,792	45,110,988
<b>Reconciliation of Asset Balances</b>		
Asset Balance as of the Beginning of the Year	185,883,223	140,772,235
Excess of Receipts over Disbursements	<u>43,219,792</u>	<u>45,110,988</u>
Asset Balance as of the End of the Year	<u>\$ 229,103,015</u>	<u>\$ 185,883,223</u>



**SCHEDULE B (continued)**  
**LIFE INSURANCE FUND**  
**Summary of Receipts & Disbursements**  
**(Market Value)**

	For the Year Ending	
<b>RECEIPTS FOR THE YEAR</b>	June 30, 2009	June 30, 2008
Contributions		
Members	\$ 0	\$ 0
Employers	5,455,473	5,411,249
Total	5,455,473	5,411,249
Net Investment Income	5,282,958	6,321,491
TOTAL	10,738,431	11,732,740
<b>DISBURSEMENTS FOR THE YEAR</b>		
Benefits Payments	3,694,000	4,003,000
Refunds to Members	0	0
Medical Insurance Payments	0	0
Miscellaneous, including expenses	0	0
TOTAL	3,694,000	4,003,000
<b>EXCESS OF RECEIPTS OVER DISBURSEMENTS</b>	<b>7,044,431</b>	<b>7,729,740</b>
<b>RECONCILIATION OF ASSET BALANCES</b>		
Asset Balance as of the Beginning of the Year	77,658,203	69,928,463
Excess of Receipts over Disbursements	7,044,431	7,729,740
Asset Balance as of End of the Year	<b>\$ 84,702,634</b>	<b>\$ 77,658,203</b>

**SCHEDULE C**  
**Outline of Actuarial Assumptions and Methods**

The rates of retirement, disability, mortality, and termination used in the valuation were selected by the Actuary based on the actuarial experience investigation as of June 30, 2005 and adopted by the Board of Trustees on September 18, 2006. The discount rate, rates of future participation, health care cost trend rates, and expected plan costs were determined by the actuary based on plan experience.

**Valuation Date:** June 30, 2009

**Discount Rate:** 4.5% per annum, compounded annually for medical plans  
 7.5% per annum, compounded annually for life insurance plan



# KENTUCKY TEACHERS' RETIREMENT SYSTEM

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**Health Care Cost Trend Rates:** Following is a chart detailing trend assumptions.

<u>Fiscal Year</u>	<u>Trend</u>
2010	10.5%
2011	9.5
2012	8.5
2013	7.5
2014	6.5
2015	6.0
2016	5.5
2017 and beyond	5.0

**Age Related Morbidity:** For retirees age 65 and older, per capita costs are adjusted to reflect expected medical cost changes related to age. The increase to the net incurred claims was assumed to be:

<u>Participant Age</u>	<u>Annual Increase</u>
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:** Representative values of the assumed annual rates of medical plan participation are as follows:

<u>Years of Service</u>	<u>Hired after 6/30/02 and before 7/1/08</u>		<u>Hired 6/30/02 and earlier</u>		
	<u>Hired 7/1/08 and later</u>		<u>Age 65 on 12/31/04 and earlier</u>	<u>Age 65 on 1/1/05 and later</u>	
5-9.99	Not Eligible	10 %	5-9.99	70%	25%
10-14.99	Not Eligible	25	10-14.99	80	50
15-19.99	45%	45	15-19.99	90	75
20-24.99	65	65	20-24.99	93	93
25-25.99	90	90	25-25.99	93	93
26-26.99	93	93	26-26.99	93	93
27 or more	93	93	27 or more	93	93



**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 . . .							
AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			SERVICE			Before 27 Years of Service	After 27 Years of Service*
			0 - 4	5 - 9	10+		
20	0.003%	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%			
30	0.016	0.02	9.00	3.00	3.00%		
35	0.032	0.05	10.00	3.25	1.50		
40	0.048	0.08	10.00	3.75	1.50		
45	0.064	0.22	9.50	2.50	1.50		25.0%
50	0.104	0.42	10.00	4.00	3.00		20.0
55	0.216	0.60	11.00	3.00	2.70	6.0%	35.0
60	0.375	0.79	11.00	3.00	2.70	14.0	25.0
62	0.438	0.83	11.00	3.00	2.70	14.0	23.0
65	0.566	0.90	11.00	3.00	2.70	22.5	35.0
70	0.905	0.00	0.00	0.00	0.00	100.0	100.0

\* Plus 5% before age 55 and 15% after age 55 in year when first eligible for unreduced retirement with 27 years of service.

FEMALES: Annual Rate of . . .							
AGE	DEATH	DISABILITY	WITHDRAWAL			RETIREMENT	
			SERVICE			Before 27 Years of Service	After 27 Years of Service*
			0 - 4	5 - 9	10+		
20	0.002%	0.03%	6.00 %				
25	0.007	0.03	8.50	3.00 %			
30	0.014	0.04	9.00	4.00	1.50%		
35	0.026	0.11	8.50	4.00	2.00		
40	0.044	0.22	8.50	2.50	1.50		
45	0.055	0.38	7.00	2.50	1.50		25.0%
50	0.066	0.44	8.50	3.00	2.25		20.0
55	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	0.195	0.00	0.00	0.00	0.00	100.0	100.0

\* Plus 5% before age 55 and 20% after age 55 in year when first eligible for unreduced retirement with 27 years of service.



# KENTUCKY TEACHERS' RETIREMENT SYSTEM

**Deaths After Retirement:** According to the 1994 Group Annuity Mortality table for the period after service retirement. Special rates are used for the period after disability retirement. Representative values of the assumed annual rates of death after service and disability retirement are as follows:

**Annual Rate of  
Death After . . .**

Age	Service Retirement		Disability Retirement	
	MALE	FEMALE	MALE	FEMALE
45	0.1578 %	0.0973 %	6.500 %	6.500 %
50	0.2579	0.1428	10.000	10.000
55	0.4425	0.2294	10.000	10.000
60	0.7976	0.4439	9.000	9.000
65	1.4535	0.8636	10.000	10.000
70	2.3730	1.3730	6.500	4.500
75	3.7211	2.2686	7.000	6.000
80	6.2027	3.9396	10.000	6.500
85	9.7240	6.7738	12.500	7.500
90	15.2931	11.6265	15.000	17.500
95	23.3606	18.6213	23.368	31.702

**Actuarial Method:** Costs were determined using the Projected Unit Credit Actuarial Cost Method. The annual service cost is the present value of the portion of the projected benefit attributable to participation service during the upcoming year, and the Actuarial Accrued Liability (AAL) is equal to the present value of the portion of the projected benefit attributable to service before the valuation date. Service from hire date through the date of full retirement eligibility was used in allocating costs.

**Assets:** Market Value as provided by KTRS. Return on assets assumed to be 4.50% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

**Spouse Coverage:** Use actual census data and current plan elections for spouses of current retirees. For spouses of future retirees, assumed 20% of future retirees will cover spouses, with females 3 years younger than males.

**Medical Plan Costs:** Assumed per capita health care costs were based on past experience and trended based on the assumptions. Following is a chart detailing retiree per capita assumptions. These amounts include medical, drug, and administrative costs and represent the amount that KTRS pays as the full contribution amount. For retirees age 65 and older, the average costs shown are normalized to age 65 and then age adjusted in calculating liabilities.

<u>Year</u>	<b>Average Monthly KTRS Full Costs &amp; Contributions</b>		
	<u>Pre-65 Full Cost and Contributions</u>	<u>Post-65 Full Costs</u>	<u>Post-65 Contributions</u>
CY 2004	\$ 293	\$ 274	\$ 274
CY 2005	412	288	288
CY 2006	461	315	315
CY 2007	458	283	283
CY 2008	484	278	278
CY 2009	545	301*	285
CY 2010	594	373*	342

*\* Under GASB 43 and 45, cost reductions for the amount of the Medicare Part D Retiree Drug Subsidy cannot be taken into account in the gross cost calculations.*



**SCHEDULE D**  
**Summary of Main Plan Provisions as  
 Interpreted for Valuation Purposes**

**RETIREE MEDICAL ELIGIBILITY:** For those hired prior to July 1, 2008, retiree medical eligibility is attained when an employee retires, which is possible after the completion of 27 years of service or attainment of age 55 and 5 years of service. For those hired on or after July 1, 2008, employees may retire after the completion of 27 years of service, the attainment of age 55 and 10 years of service, or the attainment of age 60 and 5 years of service, but must complete a minimum of 15 years of service to be eligible for medical benefits. Disabled employees, who are totally and permanently incapable of being employed as a teacher and under age 60, but after completing the minimum years of service requirement, are eligible for subsidized retiree medical coverage that is based on the number of years of service credit accrued at disability retirement. At the expiration of the disability entitlement period, the subsidy is recalculated based upon the number of years of service credit that would have accrued had the member remained active. Spouses of those actives who die while eligible to retire are eligible for retiree medical coverage when the death occurred prior to July 1, 2002.

**MEDICAL PLAN CONTRIBUTIONS:** The full contribution is provided to retirees with 27 or more years of service. The full contribution is determined by KTRS; the full cost is projected based on historical claims data. For retirees with less than 27 years of service, the following percentages of these full contributions are provided:

<b>Percentage of Full Medical Contribution Provided to Retirees</b>				
<b>Years of Service</b>	<b>Hired before 7/1/02 (age 65 on 12/31/04 or earlier)</b>	<b>Hired Before 7/1/02 (age 65 on 1/1/05 or later)</b>	<b>Hired after 6/30/02 and before 7/1/08</b>	<b>Hired 7/1/08 and later</b>
27 or more	100 %	100 %	100 %	100 %
26 - 26.99	100	100	95	95
25 - 25.99	100	100	90	90
20 - 24.99	100	100	65	65
15 - 19.99	90	75	45	45
10 - 14.99	80	50	25	Not Eligible
5 - 9.99	70	25	10	Not Eligible

Effective 1/1/2009, contributions towards pre-65 retirees and spouses healthcare are based upon the Commonwealth Capital Choice Plan which has a total rate of \$594.14 per month for Single Coverage. A minimum contribution of \$5.00 is required to be paid by all pre-65 retirees and an additional \$24.00 per month contribution is required for pre-65 retiree smokers.

Spouses of post-65 retirees, as well as surviving spouses of deceased retirees, pay 100% of the full contribution. For spouses of active members who died while eligible to retire, prior to July 1, 2002, KTRS provides the same subsidy they would have provided to the retiree for the lifetime of the spouse, or until remarriage. For spouses of active members who die while eligible to retire July 1, 2002, or later, spouses pay 100% of the full contribution.

100% of the full cost for non-Medicare eligible dependents is paid through a combination of payments from beneficiaries and the State.





## **Life Insurance Benefit**

(1) Effective July 1, 2000, the Teachers' Retirement System shall:

(a) Provide a life insurance benefit in a minimum amount of five thousand dollars (\$5,000) for its members who are retired for service or disability. This life insurance benefit shall be payable upon the death of a member retired for service or disability to the member's estate or to a party designated by the member on a form prescribed by the retirement system; and

(b) Provide a life insurance benefit in a minimum amount of two thousand dollars (\$2,000) for its active contributing members. This life insurance benefit shall be payable upon the death of an active contributing member to the member's estate or to a party designated by the member on a form prescribed by the retirement system.

Note: Qualified members working 45 days per year will be eligible for survivor benefits and a life insurance benefit for the balance of the fiscal year and disability benefits under certain conditions. For substitute and part-time members, the survivor benefits and life insurance benefit are provided during the first 44 days if death occurs as the result of a physical injury on the job. The disability benefit is available as a direct result of a physical injury on the job during the five-year vesting period. After vesting, the disability benefit is available upon working 45 days for the balance of that fiscal year in accordance with the regular KTRS disability program.



**SCHEDULE E**  
**Age - Service Table**  
**Distribution of Active Members as of June 30, 2009**  
**by Age and Service Groups**

<b>Attained Age</b>	<b>0 to 4</b>	<b>5 to 9</b>	<b>10 to 14</b>	<b>15 to 19</b>	<b>20 to 24</b>	<b>25 to 29</b>	<b>30 to 34</b>	<b>&gt;= 35</b>	<b>TOTAL</b>
24 & under	2,595								2,595
Total Pay	39,745,490								39,745,490
Avg. Pay	15,316								15,316
25 to 29	7,615	1,290							8,905
Total Pay	227,008,336	57,380,853							284,389,189
Avg. Pay	29,811	44,481							31,936
30 to 34	3,882	4,670	830						9,382
Total Pay	113,269,413	218,043,692	44,291,642						375,604,747
Avg. Pay	29,178	46,690	53,363						40,035
35 to 39	3,010	2,545	3,984	662					10,201
Total Pay	79,647,918	121,131,930	221,265,021	39,293,353					461,338,222
Avg. Pay	26,461	47,596	55,538	59,356					45,225
40 to 44	3,840	1,648	2,095	2,717	664				10,964
Total Pay	79,186,648	79,487,856	116,421,557	166,421,024	41,840,206				483,357,291
Avg. Pay	20,622	48,233	55,571	61,252	63,012				44,086
45 to 49	1,939	1,291	1,361	1,452	2,172	600			8,815
Total Pay	48,445,446	63,598,288	77,417,070	89,497,680	138,769,270	39,410,174			457,137,928
Avg. Pay	24,985	49,263	56,882	61,638	63,890	65,684			51,859
50 to 54	1,697	1,024	1,183	1,249	1,374	1,625	538		8,690
Total Pay	33,728,120	51,433,269	67,764,908	76,847,143	90,516,215	109,873,901	36,696,325		466,859,881
Avg. Pay	19,875	50,228	57,282	61,527	65,878	67,615	68,209		53,724
55 to 59	2,797	762	946	1,088	1,174	785	780	117	8,449
Total Pay	45,773,868	40,581,777	56,268,484	69,862,760	78,212,871	54,852,877	58,587,128	9,522,788	413,662,553
Avg. Pay	16,365	53,257	59,480	64,212	66,621	69,876	75,112	81,391	48,960
60 to 64	2,712	425	428	526	532	306	156	124	5,209
Total Pay	37,994,285	22,697,514	26,730,945	33,975,145	36,953,135	22,058,924	13,278,778	11,209,862	204,898,588
Avg. Pay	14,010	53,406	62,455	64,592	69,461	72,088	85,120	90,402	39,335
65 & over	2,055	128	108	105	127	59	53	92	2,727
Total Pay	19,405,654	6,689,343	6,997,460	7,054,833	8,858,222	4,351,813	4,221,793	8,503,592	66,082,710
Avg. Pay	9,443	52,260	64,791	67,189	69,750	73,760	79,656	92,430	24,233
Total	32,142	13,783	10,935	7,799	6,043	3,375	1,527	333	75,937
Total Pay	724,205,178	661,044,522	617,157,087	482,951,938	395,149,919	230,547,689	112,784,024	29,236,242	3,253,076,599
Avg. Pay	22,531	47,961	56,439	61,925	65,390	68,310	73,860	87,797	42,839

<b>Retirees Receiving Health Benefits as of June 30, 2009</b>			
	<b>Under 65</b>	<b>Over 65</b>	<b>Total</b>
Number	15,614	17,867	33,481
Average Age	59.7	75.0	67.9



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# Statistical Section

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for Fiscal Year ending June 30, 2009



PHOTO COURTESY OF THE KENTUCKY HISTORICAL SOCIETY

**Jackson School, 1892  
Woodford County, Kentucky**

This section of the Kentucky Teachers' Retirement System Comprehensive Annual Financial Report (KTRS CAFR) presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information regarding the System's overall financial health.

**Contents**

Financial Trends ..... page 117

These schedules contain trend information to help the reader understand how KTRS's financial performance & well-being have changed over time.

Demographic & Economic Information ..... page 119

These schedules offer demographic and economic indicators to help the reader understand the System's environment within which KTRS's financial activities take place.

Operating Information ..... page 126

These schedules contain benefits, service, and employer contribution data to help the reader understand how KTRS's financial report relates to KTRS's services and activities.

**Defined Benefit Plan**  
Past Ten Fiscal Years

**Additions by Source**

YEAR	Employer Contributions	Member Contributions	Net Investment Income	Total Additions to Plan Net Assets
2009	\$ 442,549,935	\$ 293,678,564	\$ (2,020,682,522)	\$ (1,284,454,023)
2008	466,247,782	291,423,948	(909,083,525)	(151,411,795)
2007	434,890,469	269,687,864	2,063,878,767	2,768,457,100
2006	410,920,969	258,464,856	717,308,002	1,386,693,827
2005	388,346,438	247,024,518	946,070,556	1,581,441,512
2004	382,280,099	238,922,086	1,158,182,688	1,779,384,873
2003	341,132,900	233,429,797	538,552,074	1,113,114,771
2002	303,521,106	224,361,453	(520,214,494)	7,668,065
2001	280,108,701	208,702,802	(104,903,741)	383,907,762
2000	311,286,811	203,149,281	454,251,324	968,687,416

**Deductions by Type**  
(Including Benefits by Type)

YEAR	Service Retirants	Disability Retirants	Survivors	Life Insurance*	TOTAL Benefits	Refunds	Administrative Expense	Total Deductions to Plan Net Assets
2009	\$ 1,184,075,934	\$ 54,562,038	\$ 14,342,435	\$	\$ 1,252,980,407	\$ 15,208,419	\$ 8,165,757	\$ 1,276,354,583
2008	1,105,078,345	51,842,271	14,048,485		1,170,969,101	15,965,083	7,551,936	1,194,486,120
2007	1,040,003,417	48,863,876	13,671,586		1,102,538,879	14,822,827	7,351,846	1,124,713,552
2006	972,018,057	46,750,585	12,943,639	3,894,000	1,035,606,281	12,834,222	6,839,859	1,055,280,362
2005	902,863,420	44,070,071	12,585,248	3,852,800	963,371,539	10,975,941	6,652,673	981,000,153
2004	827,731,523	41,491,490	12,047,275	4,015,801	885,286,089	10,471,607	6,578,420	902,336,116
2003	763,099,082	38,744,454	11,259,332	3,961,800	817,064,668	9,951,410	6,388,183	833,404,261
2002	688,754,130	35,947,786	10,532,466	4,210,800	739,445,182	9,146,820	6,677,819	755,269,821
2001	627,637,879	32,233,070	10,005,656	4,110,400	673,987,005	10,673,981	5,950,036	690,611,022
2000	568,538,294	29,148,420	9,322,582	2,350,600	609,359,896	11,304,485	4,859,623	625,524,004

\* Life Insurance Plan valued separately-- see page 119.

**Changes in Net Assets**

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2009	\$(1,284,454,023)	\$ 1,276,354,583	\$ (2,560,808,606)
2008	(151,411,795)	1,194,486,120	(1,345,897,915)
2007	2,768,457,100	1,124,713,552	1,643,743,548
2006	1,386,693,827	1,055,280,362	331,413,465
2005	1,581,441,512	981,000,153	600,441,359
2004	1,779,384,873	902,336,116	877,048,757
2003	1,113,114,771	833,404,261	279,710,510
2002	7,668,065	755,269,821	(747,601,756)
2001	383,907,762	690,611,022	(306,703,260)
2000	968,687,416	625,524,004	343,163,412

# KENTUCKY TEACHERS' RETIREMENT SYSTEM

## Medical Insurance Plan Past Ten Fiscal Years

### Additions by Source

YEAR	Employer Contributions	Member Contributions	Recovery Income	Net Investment Income	Total Additions to Plan Net Assets
2009	\$ 164,408,037	\$ 58,688,767	\$ 13,683,830	\$ 11,296,280	\$ 248,076,914
2008	148,929,322	55,402,830	11,936,887	8,128,179	224,397,218
2007	113,233,784	53,099,678	10,337,338	6,722,080	183,392,880
2006	89,319,498	51,697,167	6,117,979	6,804,286	153,938,930
2005	79,022,562	51,576,031		6,507,537	137,106,130
2004	53,346,747	53,903,551		7,127,109	114,377,407
2003	77,235,407	50,718,084		7,391,671	135,345,162
2002	95,261,407	46,184,010		6,142,817	147,588,234
2001	92,429,167	40,017,682		5,286,426	137,733,275
2000	48,946,646	36,392,846		3,710,881	89,050,373

### Deductions by Type (Including Benefits by Type)

YEAR	Insurance Benefit Expense		Third Party Service Fee	Total Insurance Benefits Expense	Refunds	Total Deductions to Plan Net Assets
	Under Age 65	Age 65 & Over				
2009	\$ 123,819,475	\$ 81,037,647	\$	\$204,857,122	\$	\$ 204,857,122
2008	107,437,450	71,838,765		179,276,215	10,014	179,286,229
2007	104,828,254	69,400,843		174,229,097	5,834	174,234,931
2006	102,970,290	66,660,106		169,630,396	5,143	169,635,539
2005	82,186,847	64,233,482		146,420,329	9,072	146,429,401
2004	69,139,458	54,128,210		123,267,668	12,150	123,279,818
2003	63,546,028	52,300,059		115,846,087	7,808	115,853,895
2002	54,412,278	50,566,637	3,221,712	104,978,915	6,066	104,984,981
2001	46,544,264	38,389,936	3,023,755	88,155,912	5,155	88,161,067
2000	38,553,599	38,786,138			2,246	80,365,738

### Changes in Net Assets

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2009	\$ 248,076,914	\$ 204,857,122	\$ 43,219,792
2008	224,397,218	179,286,229	45,110,989
2007	183,392,880	174,234,931	9,157,949
2006	153,938,930	169,635,539	(15,696,609)
2005	137,106,130	146,429,401	(9,323,271)
2004	114,377,407	123,279,818	(8,902,411)
2003	135,345,162	115,853,895	19,491,267
2002	147,588,234	104,984,981	42,603,253
2001	137,733,275	88,161,067	49,572,208
2000	89,050,373	80,365,738	8,684,635
	83,054,541	70,357,216	12,697,325

Year Ended June 30, 2009

**Life Insurance Plan**  
Past Three Fiscal Years

**Additions by Source**

YEAR	Employer Contributions	Net Investment Income	Total Additions to Plan Net Assets
2009	\$ 5,455,473	\$ 5,282,958	\$ 10,738,431
2008	5,411,249	6,321,491	11,732,740
2007	5,022,137	(3,413,537)	1,608,600

**Deductions by Type**  
(Including Benefits by Type)

**Changes in Net Assets**

YEAR	Life Insurance	Total Deductions to Plan Net Assets	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2009	\$ 3,694,000	\$ 3,694,000	\$ 10,738,431	\$ 3,694,000	\$ 7,044,431
2008	4,003,000	4,003,000	11,732,740	4,003,000	7,729,740
2007	4,245,000	4,245,000	1,608,600	4,245,000	(2,636,400)

**Distribution of Active Contributing Members**  
as of June 30, 2009

By Age			By Service		
Age	Male	Female	Years of Service	Male	Female
20-24	915	2,961	Less than 1	5,860	15,445
25-29	2,731	7,922	1-4	4,421	13,858
30-34	2,454	7,264	5-9	3,031	9,599
35-39	2,449	7,774	10-14	2,241	6,912
40-44	2,100	7,033	15-19	1,516	4,760
45-49	2,029	6,550	20-24	1,116	3,584
50-54	2,034	6,385	25-29	559	1,869
55-59	2,037	5,780	30-34	241	727
60-64	1,425	3,351	35 or more	83	115
65-69	607	1,204	TOTAL	19,068	56,869
Over 70	287	645			
TOTAL	19,068	56,869			



# KENTUCKY TEACHERS' RETIREMENT SYSTEM

Principal Participating Employers Current Year and Nine Years Ago						
	2009			2000		
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System
Jefferson County Schools	9,999	1	13.02%	7,051	1	12.82%
Fayette County Public Schools	4,272	2	5.56	2,924	2	5.32
Boone County Schools	1,802	3	2.35	912	5	1.66
Hardin County Schools	1,348	4	1.75	998	3	1.81
Kenton County Schools	1,280	5	1.67	804	7	1.46
Oldham County Schools	1,217	6	1.58	609	15	1.11
Bullitt County Schools	1,216	7	1.58	733	11	1.33
Warren County Schools	1,206	8	1.57	773	9	1.41
Madison County Schools	1,180	9	1.54	653	13	1.19
Daviess County Schools	1,165	10	1.52	775	8	1.41
All Other	<u>52,141</u>		<u>67.87%</u>	<u>38,771</u>		<u>70.49%</u>
Total * (197 Employers)	<u>76,826</u>		<u>100.00%</u>	<u>55,003</u>		<u>100.00%</u>

\* Includes new retirees with contributions during the fiscal year.

## KTRS Schedule of Participating Employers School Districts: County Schools

- |                  |                |                |                 |                 |
|------------------|----------------|----------------|-----------------|-----------------|
| 1. Adair         | 28. Crittenden | 55. Jackson    | 82. Meade       | 109. Taylor     |
| 2. Allen         | 29. Cumberland | 56. Jefferson  | 83. Menifee     | 110. Todd       |
| 3. Anderson      | 30. Daviess    | 57. Jessamine  | 84. Mercer      | 111. Trigg      |
| 4. Ballard       | 31. Edmonson   | 58. Johnson    | 85. Metcalfe    | 112. Trimble    |
| 5. Barren        | 32. Elliott    | 59. Kenton     | 86. Monroe      | 113. Union      |
| 6. Bath          | 33. Estill     | 60. Knott      | 87. Montgomery  | 114. Warren     |
| 7. Bell          | 34. Fayette    | 61. Knox       | 88. Morgan      | 115. Washington |
| 8. Boone         | 35. Fleming    | 62. Larue      | 89. Muhlenberg  | 116. Wayne      |
| 9. Bourbon       | 36. Floyd      | 63. Laurel     | 90. Nelson      | 117. Webster    |
| 10. Boyd         | 37. Franklin   | 64. Lawrence   | 91. Nicholas    | 118. Whitley    |
| 11. Boyle        | 38. Fulton     | 65. Lee        | 92. Ohio        | 119. Wolfe      |
| 12. Bracken      | 39. Gallatin   | 66. Leslie     | 93. Oldham      | 120. Woodford   |
| 13. Breathitt    | 40. Garrard    | 67. Letcher    | 94. Owen        |                 |
| 14. Breckinridge | 41. Grant      | 68. Lewis      | 95. Owsley      |                 |
| 15. Bullitt      | 42. Graves     | 69. Lincoln    | 96. Pendleton   |                 |
| 16. Butler       | 43. Grayson    | 70. Livingston | 97. Perry       |                 |
| 17. Caldwell     | 44. Green      | 71. Logan      | 98. Pike        |                 |
| 18. Calloway     | 45. Greenup    | 72. Lyon       | 99. Powell      |                 |
| 19. Campbell     | 46. Hancock    | 73. Madison    | 100. Pulaski    |                 |
| 20. Carlisle     | 47. Hardin     | 74. Magoffin   | 101. Robertson  |                 |
| 21. Carroll      | 48. Harlan     | 75. Marion     | 102. Rockcastle |                 |
| 22. Carter       | 49. Harrison   | 76. Marshall   | 103. Rowan      |                 |
| 23. Casey        | 50. Hart       | 77. Martin     | 104. Russell    |                 |
| 24. Christian    | 51. Henderson  | 78. Mason      | 105. Scott      |                 |
| 25. Clark        | 52. Henry      | 79. McCracken  | 106. Shelby     |                 |
| 26. Clay         | 53. Hickman    | 80. McCreary   | 107. Simpson    |                 |
| 27. Clinton      | 54. Hopkins    | 81. McLean     | 108. Spencer    |                 |

**KTRS Schedule of Participating Employers (continued)**  
**School Districts: City Schools**

- |                    |                      |                 |                   |
|--------------------|----------------------|-----------------|-------------------|
| 1. Anchorage       | 15. Covington        | 29. Hazard      | 43. Pineville     |
| 2. Ashland         | 16. Danville         | 30. Jackson     | 44. Raceland      |
| 3. Augusta         | 17. Dawson Springs   | 31. Jenkins     | 45. Russell       |
| 4. Barbourville    | 18. Dayton           | 32. Ludlow      | 46. Russellville  |
| 5. Bardstown       | 19. East Bernstadt   | 33. Mayfield    | 47. Science Hill  |
| 6. Beechwood       | 20. Elizabethtown    | 34. Middlesboro | 48. Silver Grove  |
| 7. Bellevue        | 21. Eminence         | 35. Monticello  | 48. Somerset      |
| 8. Berea           | 22. Erlanger-Elsmere | 36. Murray      | 50. Southgate     |
| 9. Bowling Green   | 23. Fairview         | 37. Newport     | 51. Walton-Verona |
| 10. Burgin         | 24. Fort Thomas      | 38. Owensboro   | 52. West Point    |
| 11. Campbellsville | 25. Frankfort        | 39. Paducah     | 53. Williamsburg  |
| 12. Caverna        | 26. Fulton           | 40. Paintsville | 54. Williamstown  |
| 13. Cloverport     | 27. Glasgow          | 41. Paris       |                   |
| 14. Corbin         | 28. Harlan           | 42. Pikeville   |                   |

**Universities & Community/  
 Technical Colleges**

1. Eastern Kentucky
2. Kentucky State
3. Morehead State
4. Murray State
5. Western Kentucky
6. Kentucky Community & Technical College System

**State of Kentucky/  
 Other Organizations**

**State of Kentucky**

1. Education and Humanities Cabinet
2. Legislative Research Commission
3. Workforce Investment Cabinet
4. Finance and Administration Cabinet

**Other Organizations**

1. Education Professional Standards Board
2. Kentucky Education Association President
3. Kentucky Academic Association
4. Kentucky Educational Development Cooperative
5. Kentucky High School Athletic Association
6. Kentucky School Boards Association
7. Kentucky Valley Educational Cooperative
8. Northern Kentucky Cooperative for Educational Services
9. Ohio Valley Educational Cooperative
10. West Kentucky Education Cooperative
11. Green River Regional Education Cooperative
12. Central Kentucky Special Education Cooperative
13. Jefferson County Teacher's Association

107 Alabama	2 New Hampshire
2 Alaska	8 New Jersey
66 Arizona	15 New Mexico
27 Arkansas	38 New York
100 California	221 North Carolina
46 Colorado	2 North Dakota
12 Connecticut	491 Ohio
6 Delaware	19 Oklahoma
4 District of Columbia	23 Oregon
857 Florida	36 Pennsylvania
212 Georgia	0 Rhode Island
5 Hawaii	148 South Carolina
5 Idaho	8 South Dakota
73 Illinois	689 Tennessee
544 Indiana	152 Texas
16 Iowa	10 Utah
27 Kansas	1 Vermont
24 Louisiana	121 Virginia
12 Maine	31 Washington
25 Maryland	82 West Virginia
17 Massachusetts	22 Wisconsin
37 Michigan	5 Wyoming
18 Minnesota	
62 Mississippi	
59 Missouri	
8 Montana	
4 Nebraska	
16 Nevada	

**Distribution of Retirement  
Payments Worldwide**

**As of June 30, 2009**



**Additional Distribution Outside USA**

1 AUSTRALIA	1 PHILIPPINES
4 CANADA	1 SWITZERLAND
3 MILITARY APO	1 BARBADOS

**TOTAL:** Number of Out of State Payments ..... 4,526  
**TOTAL:** Out of State Payments ..... \$ 96,987,492  
**TOTAL:** Number of Payments ..... 43,140  
**GRAND TOTAL:** Amount of Payments ..... \$ 1,252,921,522

**Distribution of Retirement Payments Statewide**  
as of June 30, 2009

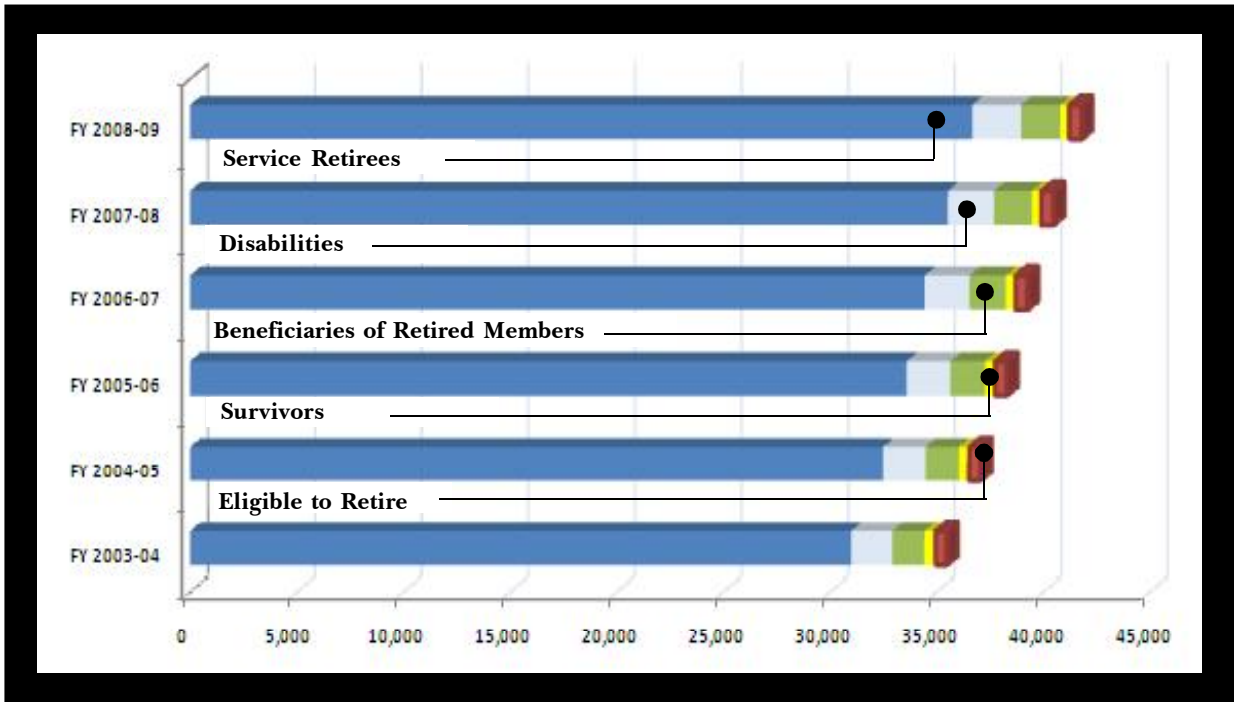
<b>County Name</b>	<b>Total Payments</b>	<b>Number of Recipients</b>	<b>County Name</b>	<b>Total Payments</b>	<b>Number of Recipients</b>
Adair	\$ 4,733,196	184	Franklin	20,693,822	839
Allen	4,267,558	148	Fulton	2,031,719	66
Anderson	5,103,405	178	Gallatin	529,150	19
Ballard	3,009,414	98	Garrard	4,271,559	146
Barren	10,746,685	366	Grant	4,341,609	136
Bath	3,266,406	124	Graves	10,337,540	341
Bell	9,694,790	350	Grayson	6,952,743	233
Boone	22,025,634	696	Green	2,993,054	105
Bourbon	4,983,446	175	Greenup	9,806,808	337
Boyd	15,112,419	487	Hancock	2,042,164	65
Boyle	10,953,760	370	Hardin	21,515,452	713
Bracken	2,226,983	76	Harlan	10,792,609	383
Breathitt	6,067,952	237	Harrison	5,278,334	178
Breckinridge	5,065,782	164	Hart	4,253,073	143
Bullitt	11,842,871	356	Henderson	10,739,677	363
Butler	2,048,932	76	Henry	4,602,105	160
Caldwell	4,538,833	158	Hickman	976,540	32
Calloway	17,882,193	595	Hopkins	12,740,610	427
Campbell	18,447,594	578	Jackson	3,016,042	117
Carlisle	1,319,422	52	Jefferson	195,092,605	5,676
Carroll	2,186,175	76	Jessamine	7,925,953	280
Carter	8,980,781	317	Johnson	8,925,789	304
Casey	3,980,611	159	Kenton	22,566,489	739
Christian	13,982,530	458	Knott	5,981,231	223
Clark	8,918,437	315	Knox	6,263,892	237
Clay	7,148,430	252	Larue	4,390,858	136
Clinton	3,438,345	125	Laurel	14,034,013	517
Crittenden	1,671,201	63	Lawrence	3,529,509	126
Cumberland	2,193,485	77	Lee	1,736,646	72
Daviess	27,642,927	907	Leslie	3,708,417	137
Edmonson	2,279,059	83	Letcher	8,512,295	305
Elliott	1,454,882	63	Lewis	4,788,548	162
Estill	3,624,746	126	Lincoln	7,402,322	247
Fayette	73,811,604	2,466	Livingston	2,461,682	88
Fleming	4,332,934	155	Logan	6,763,543	244
Floyd	14,699,468	541	Lyon	2,505,028	90

KENTUCKY TEACHERS' RETIREMENT SYSTEM

*Distribution of Retirement Payments Statewide  
as of June 30, 2009 continued . . .*

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Madison	35,762,198	1,144	Taylor	7,318,620	261
Magoffin	3,988,460	148	Todd	2,236,275	82
Marion	4,227,871	147	Trigg	4,215,420	151
Marshall	9,590,488	310	Trimble	1,624,566	47
Martin	3,589,071	130	Union	3,036,563	110
Mason	5,008,003	167	Warren	41,197,516	1,415
McCracken	18,418,557	612	Washington	2,952,476	107
McCreary	5,088,335	187	Wayne	5,994,300	209
McLean	2,765,916	91	Webster	3,546,093	125
Meade	4,756,168	145	Whitley	15,110,489	548
Menifee	1,469,024	61	Wolfe	3,051,474	113
Mercer	5,967,237	221	Woodford	7,279,409	243
Metcalfe	2,902,120	100			
Monroe	4,422,781	157			
Montgomery	7,381,213	247	<b>Total in</b>		
Morgan	4,772,796	164	<b>Kentucky</b>	<b><u>\$1,155,934,030</u></b>	<b><u>38,614</u></b>
Muhlenberg	7,857,907	264			
Nelson	9,788,125	312			
Nicholas	1,615,956	57			
Ohio	5,453,462	188			
Oldham	12,613,457	390			
Owen	2,177,687	78			
Owsley	3,081,686	112			
Pendleton	3,428,484	113			
Perry	9,815,742	353			
Pike	21,907,318	776			
Powell	2,914,125	103			
Pulaski	17,380,083	618			
Robertson	602,197	22			
Rockcastle	4,471,115	169			
Rowan	12,721,403	448			
Russell	5,451,448	190			
Scott	9,638,971	319			
Shelby	11,253,532	369			
Simpson	4,422,019	150			
Spencer	3,479,554	104			

**Growth in Annuitants  
as of June 30, 2009**



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
FY 2003-04	31,003	1,934	1,505	536	518
FY 2004-05	32,506	1,987	1,566	507	525
FY 2005-06	33,618	2,039	1,631	495	531
FY 2006-07	34,462	2,086	1,722	466	549
FY 2007-08	35,550	2,155	1,778	468	554
FY 2008-09	36,684	2,209	1,837	448	559

KENTUCKY TEACHERS' RETIREMENT SYSTEM

**Schedule of Annuitants by Type of Benefit  
as of June 30, 2009**

Amount of Monthly Benefit (\$)	Number of Annuitants	Type of Retirement*				
		1	2	3	4	5
1 - 500	3,119	2,227	18	396	195	283
501 - 1,000	2,693	2,032	203	11	447	0
1,001 - 1,500	3,537	2,625	336	0	576	0
1,501 - 2,000	4,323	3,490	449	2	382	0
2,001 - 2,500	6,895	5,948	614	17	316	0
2,501 - 3,000	8,367	7,784	354	13	216	0
3,001 - 3,500	5,462	5,204	140	4	114	0
3,501 - 4,000	3,166	3,029	65	2	70	0
4,001 - 4,500	1,906	1,843	21	2	40	0
4,501 - 5,000	1,061	1,039	6	0	16	0
5,001 & OVER	1,491	1,463	3	1	24	0
Total**	42,020	36,684	2,209	448	2,396	283

**\*Type of Retirement**

- 1-Normal Retirement for Age & Service
- 2-Disability Retirement
- 3-Survivor Payment - Active Member

- 4-Beneficiary Payment - Retired Member
- 5-Disabled Adult Child

\*\* Retirees in waiver program are not included.

Amount of Monthly Benefit (\$)	Option Selected*							
	1	2	3	4	5	6	7	None
1 - 500	1,530	366	247	66	9	380	121	400
501 - 1,000	1,401	327	219	138	10	299	215	84
1,001 - 1,500	1,850	436	331	173	13	351	290	93
1,501 - 2,000	2,303	491	385	163	5	526	317	133
2,001 - 2,500	3,229	659	586	245	11	1,179	706	280
2,501 - 3,000	4,329	859	630	243	10	1,281	880	135
3,001 - 3,500	2,827	598	432	186	7	771	593	48
3,501 - 4,000	1,577	324	291	111	8	459	381	15
4,001 - 4,500	961	208	176	75	9	256	217	4
4,501 - 5,000	515	105	123	57	4	134	122	1
5,001 & OVER	763	132	162	83	11	158	179	3
Total	21,285	4,505	3,582	1,540	97	5,794	4,021	1,196

**\*Option selected:**

- 1 - Straight-life annuity with refundable balance
- 2 - Period certain benefit and life thereafter
- 3 - Joint-survivor annuity
- 4 - Joint-survivor annuity, one-half benefit to beneficiary

- 5 - Other payment - special option
- 6 - Joint-survivor annuity with "pop-up" option
- 7 - Joint-survivor annuity, one-half benefit to beneficiary with "pop-up" option

**Defined Benefit Plan  
Average Benefit Payments for the Past Ten Years  
By Years of Service Credit**

<b>Retirement Effective Dates</b>	<b>00-4.99</b>	<b>05-9.99</b>	<b>10-14.99</b>	<b>15-19.99</b>	<b>20-24.99</b>	<b>25-29.99</b>	<b>30 &gt;=</b>	<b>TOTAL</b>
07/01/1999 TO 06/30/2000								
Average monthly benefit	\$195	\$444	\$840	\$1,232	\$1,721	\$2,414	\$3,052	
Average final average salary	\$3,764	\$3,183	\$3,198	3,390	\$3,573	\$3,958	\$4,461	
Number of retired members	54	82	74	82	95	1180	473	2,040
07/01/2000 TO 06/30/2001								
Average monthly benefit	\$145	\$402	\$881	\$1,283	\$1,779	\$2,472	\$3,246	
Average final average salary	\$3,695	\$2,842	\$3,444	\$3,550	\$3,807	\$4,024	\$4,707	
Number of retired members	48	73	86	85	143	1008	486	1,929
07/01/2001 TO 06/30/2002								
Average monthly benefit	\$204	\$408	\$790	\$1,296	\$1,898	\$2,552	\$3,407	
Average final average salary	\$4,143	\$2,950	\$3,312	\$3,613	\$3,920	\$4,115	\$4,884	
Number of retired members	65	128	82	116	107	1019	574	2,091
07/01/2002 TO 06/30/2003								
Average monthly benefit	\$205	\$480	\$940	\$1,344	\$1,940	\$2,715	\$3,592	
Average final average salary	\$4,301	\$3,380	\$3,714	\$3,798	\$4,078	\$4,378	\$5,121	
Number of retired members	58	83	98	103	155	837	508	1,842
07/01/2003 TO 06/30/2004								
Average monthly benefit	\$220	\$474	\$839	\$1,444	\$1,978	\$2,758	\$3,486	
Average final average salary	\$5,243	\$3,357	\$3,349	\$3,936	\$4,182	\$4,425	\$5,062	
Number of retired members	43	84	98	96	145	818	405	1,689
07/01/2004 TO 06/30/2005								
Average monthly benefit	\$187	\$528	\$906	\$1,488	\$2,037	\$2,892	\$3,860	
Average final average salary	\$4,353	\$3,511	\$3,647	\$4,055	\$4,317	\$4,602	\$5,275	
Number of retired members	55	98	107	106	145	811	875	2,197
07/01/2005 TO 06/30/2006								
Average monthly benefit	\$202	\$473	\$1,019	\$1,493	\$2,136	\$2,998	\$4,063	
Average final average salary	\$4,106	\$3,253	\$4,052	\$4,117	\$4,537	\$4,721	\$5,490	
Number of retired members	44	105	106	132	193	689	604	1,873
07/01/2006 TO 06/30/2007								
Average monthly benefit	\$178	\$514	\$930	\$1,559	\$2,276	\$3,140	\$4,263	
Average final average salary	\$4,102	\$3,346	\$3,590	\$4,228	\$4,612	\$4,970	\$5,758	
Number of retired members	48	113	90	109	169	534	514	1,577
07/01/2007 TO 06/30/2008								
Average monthly benefit	\$199	\$524	\$1,117	\$1,658	\$2,436	\$3,279	\$4,319	
Average final average salary	\$3,816	\$3,066	\$4,215	\$4,412	\$4,983	\$5,067	\$5,786	
Number of retired members	50	130	112	150	217	557	615	1,831
07/01/2008 TO 06/30/2009								
Average monthly benefit	\$200	\$573	\$1,005	\$1,725	\$2,427	\$3,368	\$4,496	
Average final average salary	\$4,617	\$3,942	\$3,873	\$4,686	\$4,974	\$5,278	\$5,960	
Number of retired members	72	168	137	115	242	505	585	1,824



KENTUCKY TEACHERS' RETIREMENT SYSTEM

**Medical Insurance Plan**

Average Insurance Premium Supplements for the Last Nine Years

	Years of Service Credit				TOTAL
	00-9.99	10-14.99	15-19.99	20>=	
<b>Retirement Effective Dates</b>					
07/01/2000 TO 06/30/2001					
Average monthly supplement	\$ 107.71	\$ 165.08	\$ 201.72	\$ 233.51	
Number of retired members	42	69	96	1634	1,841
07/01/2001 TO 06/30/2002					
Average monthly supplement	\$ 128.78	\$ 167.74	\$ 201.48	\$ 252.15	
Number of retired members	59	62	99	1694	1,914
07/01/2002 TO 06/30/2003					
Average monthly supplement	\$ 106.62	\$ 142.57	\$ 212.81	\$ 277.64	
Number of retired members	34	59	91	1457	1,641
07/01/2003 TO 06/30/2004					
Average monthly supplement	\$ 100.50	\$ 148.85	\$ 219.41	\$ 289.98	
Number of retired members	30	59	82	1365	1,536
07/01/2004 TO 06/30/2005					
Average monthly supplement	\$ 138.29	\$ 214.32	\$ 305.39	\$ 394.92	
Number of retired members	36	70	93	1768	1,967
07/01/2005 TO 06/30/2006					
Average monthly supplement	\$ 161.03	\$ 241.76	\$ 362.31	\$ 487.23	
Number of retired members	28	49	106	1440	1,623
07/01/2006 TO 06/30/2007					
Average monthly supplement	\$ 146.24	\$ 260.95	\$ 363.45	\$ 489.73	
Number of retired members	29	53	80	949	1,111
07/01/2007 TO 06/30/2008					
Average monthly supplement	\$ 162.54	\$ 260.71	\$ 378.28	\$ 512.29	
Number of retired members	36	61	104	952	1,153
07/01/2008 TO 06/30/2009					
Average monthly supplement	\$ 167.78	\$ 298.09	\$ 414.38	\$ 562.59	
Number of retired members	26	64	103	1,329	1,522

**Summary of Fiscal Year 2008-2009  
Retiree Sick Leave Payments**

**ACTUARIAL RATE**

Grand Total Members Retiring	1,921
Total members receiving sick leave payments	1,304
Total amount of sick leave payments @ 9.855% contribution rate	\$ 16,809,805.35
Average payment per retiree	\$ 12,890.96
Total increase in final 3/5 average salary base	\$ 4,935,738.33
Average increase in final average salary	\$ 3,785.08
Total service credit of 1,304 retirees	34,860.13
Average service credit of 1,304 retirees	26.73
Additional Average Monthly Annuity payment per Retirement Formula	
$3,785.08 \times .73 \times 2.00\% =$	\$ 55.26
$3,785.08 \times 26.00 \times 2.50\% =$	2,460.30
Total	<u>\$ 2,515.56</u>
$2,515.56 / 12 \text{ months} =$	\$ 209.63
Anticipated Lifetime Payout of Additional Annuity $209.63 \times 144.5250 \times 1,304 \text{ new factor}$	\$ 39,506,995.58

**Funding of Additional Payments**

Member Contributions	$9.855\% \times \$16,809,805.35 =$	\$ 1,656,606.32
State Contributions	$13.105\% \times \$16,809,805.35 =$	2,202,924.99
		<u>\$ 3,859,531.31</u>
<b>DEFICIT:</b>		
Anticipated additional payout		\$ 39,506,995.58
Less total Member & State Contributions		<u>3,859,531.31</u>
Subtotal unfunded debt		35,647,464.27
Less current year appropriation		<u>5,684,000.00</u>
<b>TOTAL DEFICIT (overpayment) *</b>		<b><u>\$ 29,963,464.27 *</u></b>

\* NOTE: Actuarial factors used for sick leave calculations changed effective July 1, 1998.  
Sick leave deficits are amortized over 20 year periods.

**Summary of State Match  
and Supplemental Appropriations  
for Member Contributions to Teachers' Retirement System  
for Fiscal Year Ended June 30, 2009 (in dollars)**

Fiscal Year	Total Member Contributions	Employer/Federal Payments	Required State Match Contributions	Required Supplemental Appropriation	Required Sick Leave Payments	Total State Appropriation	(Deficit) Surplus State Funding
1944-48	3,184,178		3,184,178			3,039,017	(145,160)
1948-52	4,951,458		4,951,458			5,090,848	(139,390)
1952-56	7,267,163		7,267,163			6,494,102	(773,062)
1956-60	14,970,961		14,970,961			14,963,272	(7,689)
1960-64	25,945,897		25,945,897			25,938,763	(7,134)
1964-68	49,957,299	2,042,014	47,915,285			45,317,694	(2,597,591)
1968-72	82,922,869	6,044,865	76,878,005			80,091,951	3,213,946
1972-76	120,349,350	8,019,216	112,330,134			111,665,685	(664,449)
1976-80	189,072,371	12,044,186	177,028,185	75,010,028		256,784,030	4,745,817
1980-84	272,744,772	16,334,937	256,409,836	109,622,111	5,197,234	378,667,011	7,437,831
1984-88	413,932,416	21,417,604	392,514,811	141,251,827	13,341,243	515,932,177	(31,175,706)
1988-92	602,399,432	119,352,211	483,347,221	133,545,987	28,978,117	634,358,200	(11,537,557)
1992-96	756,817,769	154,296,351(2)	602,521,418	213,030,177	53,308,591	854,138,311	(14,751,875)
1996-00	863,954,020	171,037,889	692,916,131	245,400,594	43,209,004(1)	990,501,344	8,975,615
2000-04	999,971,551	200,041,662	799,935,889	289,439,321		1,065,262,116	(24,113,095)
2004-08	1,189,003,238	268,868,767	920,134,471	343,060,563		1,272,694,016	9,498,982
2008-09	328,758,427	71,961,946	256,796,481	94,704,501		355,298,858	3,797,878

(1) The state appropriations for the sick leave deficit started being amortized over 15 years in the year ended June 1999 through the year ended June 2002. Starting the fiscal year 2003 the sick leave deficits were amortized over 20 years.

(2) Beginning with the 1988-89 fiscal year, the Department of Education and the state universities were responsible for matching their members' contributions with the state reimbursing the respective agencies in their normal budget appropriation.