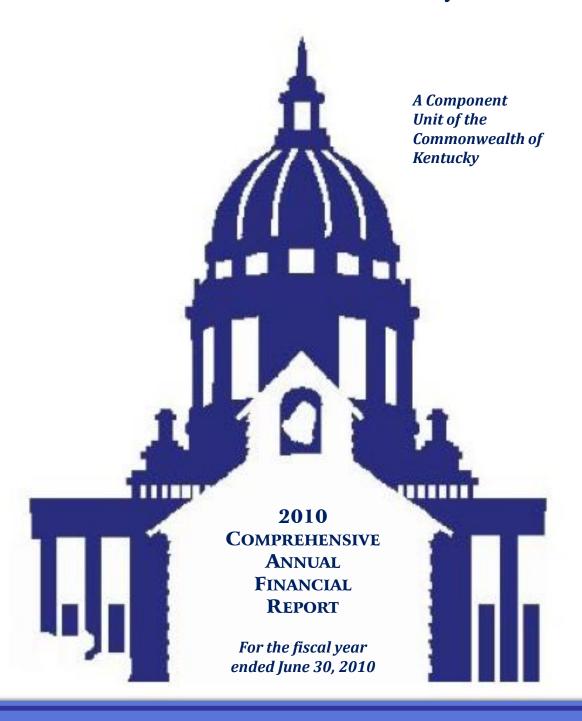
# Teachers' Retirement System of the State of Kentucky



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



### The 70th Comprehensive Annual Financial Report

#### A Component Unit of the Commonwealth of Kentucky Fiscal Year Ended June 30, 2010

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

> GARY L. HARBIN, CPA Executive Secretary

> > \_\_\_\_\_

This report was prepared by the Teachers' Retirement System staff.

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## Introductory Section

for Fiscal Year ending June 30, 2010

#### Chairperson's Letter

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

GARY L. HARBIN, CPA Executive Secretary



December 30, 2010

#### 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, 2010, the 70th 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 2009-2010 fiscal year with \$12.8 billion net assets. The active membership totaled 76,387 and the retired membership was 43,134 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.

**BOARD OF TRUSTEES** 

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EX OFFICIO DR. TERRY HOLLIDAY COMMISSIONER DEPARTMENT OF EDUCATION

EX OFFICIO TODD HOLLENBACH STATE TREASURER

Sincerely,

Barbara G. Sterrett Chairperson

Derliara Sterrett

**Board of Trustees** 

#### Letter of Transmittal



Teachers' Retirement System of the State of Kentucky

December 30, 2010

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

#### Dear Governor Beshear:

It is my pleasure to submit the 70th 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, 2010. 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 KTRS.

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 KTRS for the year ended June 30, 2010. 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**

KTRS was established on July 1, 1940 as a costsharing 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 91 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 continued work on several major initiatives concerning funding for retiree health care, the investment program, and information technology.

#### <u>"Shared Responsibility" Solution for Funding</u> Retiree Health Care

The Board of Trustees and Staff appreciate the extraordinary efforts of the many active and retired teachers and education community constituency groups who helped develop a "shared responsibility" solution for adequately funding retiree health care benefits. The Board and Staff are also grateful for the hard work of the General Assembly and Governor in enacting the plan. The

shared responsibility solution for funding retiree health care was truly a historic accomplishment that will help insure the retirement security of the state's teachers.

The shared responsibility solution, which was introduced on February 26, 2010, as House Bill 540, passed through both chambers of the General Assembly without a single negative vote, and was signed into law on Tuesday, April 13, 2010, by the Governor. The funding solution provides that active teachers, retired teachers, school districts. and the state will all share in prefunding retiree health care benefits. This approach will help insure that both current retired teachers and active teachers will receive health care benefits during retirement. Moreover, prefunding retiree health care benefits with shared responsibility by all interested parties is the most cost effective and actuarially sound method for providing retiree health care benefits.

The shared responsibility solution also helps the pension fund by stopping the redirection of contributions from the pension fund to pay for the costs of current retiree health care. From fiscal year 2005 through fiscal year 2010, over \$560 million was redirected from the pension fund to the medical insurance fund with the agreement that the amount would be repaid by the state with interest over staggered 10 year terms. On August 26, 2010, this debt by the state to the KTRS pension fund was fully satisfied ahead of schedule when KTRS received the proceeds of a bond issued by the state. The Board is also very grateful to the Governor and General Assembly for this affirmative action to help insure the retirement security of the state's teachers.

Although the shared responsibility solution for funding retiree health care was effective on July 1, 2010, and the bond proceeds were received in the KTRS pension fund on August 26, 2010, both developments had positive effects on the actuarial valuations of the retiree medical and pension plans as of June 30, 2010. Furthermore, in the future, the shared responsibility solution for prefunding retiree health care and stopping the redirection of contributions from the pension fund to pay for the costs of current retiree health care will improve the funding status of both the KTRS medical insurance and pension plans.

#### Investment Program

KTRS's investment program had solid performance during the year. Additionally, 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. This included new opportunistic investments that took advantage of dislocated financial markets. During the year, KTRS's independent investment consultant completed an asset liability modeling study, which included an analysis of the shared responsibility solution for funding retiree health care and receipt of the proceeds of a bond in the KTRS pension fund. These ongoing efforts are 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. KTRS's investment program continues to be recognized as a leader in the public pension community for governance structure, trustee education, and cost effectiveness.

#### Information Technology

KTRS Staff has continued working on a new information technology system known as the "Pathway Project," making preparations to begin the second phase of the project during the year. 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 database software 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. 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.

#### **Economic Condition**

The economic condition of the System is based primarily on investment earnings. The Investment Section of this report starting on page 51 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 growth in value during the 2009-2010 fiscal year as the portfolio's market value increased from \$11,732,059,913 to \$12,680,439,457. The increase in value of the portfolio and of the overall market was due to improvements in the financial markets and realized capital gains. Employer and employee contributions also provided significant income to the portfolio.

Investment income, including appreciation of asset values, net of investment expenses, for the 2009-2010 fiscal year was \$1,527,495,352. The major contributing factor of the positive return from the System's investment portfolio was the net appreciation in fair value of investments in the amount of \$1,170,428,775. The largest earnings component, \$209,869,513 was the result of interest income. Other income, net of expenses, of \$147,197,064 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 positive 13.1% in 2009-10, the portfolio's ten-year annualized rate of return is 2.7% and the

twenty-year annualized rate of return is 7.2%.

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 this fiscal year were approximately \$1.6 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, 2010. This report reflects the System's assets, based on modified market value; totaled \$14.9 billion and the liabilities totaled \$24.3 billion. The funded ratio of actuarial assets to liabilities is 61%. The actuary reports: "In our opinion, the System is not operating on an actuarially sound basis, since a portion of the annual contributions required to fund pension benefits have been allocation to the Medical Insurance Fund. Assuming that contributions to the System are made by the employer from year to year in the future at the 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."

Annual required employer contributions for the defined benefit plan are provided in the Schedule of Employer Contributions (on page 43). The 2010 employer shortfall of contributions created a net pension obligation of \$576,328,182 (as detailed on page 85). Annual required employer contributions for the Medical Insurance Fund are provided in the schedule of employer contributions (on page 44). The 2010 employer shortfall of contributions created a net OPEB obligation of \$814,379,040 (as detailed on page 107).

The sustained decline in the funded ratio is a continuation of the cumulative effect of the

transfer of contributions from the retirement fund to the medical insurance fund from 1998-2010. Also contributing to the reduced funded ratio are market fluctuations that are being recognized using actuarial smoothing over a five-year period.

KTRS expects that the shared responsibility solution for funding retiree health care will help improve the funded status of the pension fund in the future by stopping the redirection of contributions from the pension fund to pay for the costs of current retiree health care. As well, on August 26, 2010, KTRS received \$465 million in proceeds from a bond issued by the state. This bond issue was approved by the Governor under the authority of legislation enacted by both chambers of the General Assembly during the 2010 Regular and Special Sessions. The proceeds of this bond issue were deposited in the KTRS pension fund in repayment of retirement contributions that had been redirected by the state to pay retiree health care from fiscal year 2005 through fiscal year 2010. In calculating the actuarial value of assets as of June 30, 2010, the actuary was able to include the \$465 million proceeds from the bond (as detailed on page 87).

#### **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, 2010 indicated that the fund has an unfunded liability of \$3.0 billion. The funded ratio of actuarial assets to liabilities is 7.5%. As noted above, the shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of prefunding retiree health care over a 30 year period. The System believes that the shared responsibility solution for funding retiree health care will help insure the retirement security of the state's teachers.

Additionally, the System believes continued steps must be taken to realize true cost containment through legislation on both the state and national levels. KTRS will continue to take measures to contain costs and increase revenues to the insurance fund, adjusting coverage to meet existing revenues, or a combination of the two.

Effective January 1, 1999 KTRS eligible retirees and eligible dependents under the age of 65 have their health insurance provided by plans administered 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 sponsored by KTRS. These retirees also receive a supplement for the cost of their coverage.

#### **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 72 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, 2009. 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. KTRS has received the Certificate of Achievement for the last twenty-two consecutive years (fiscal years ended 1988-2009). 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 (PPCC) awarded a Certificate of Achievement to the Teachers' Retirement of the State of Kentucky for 2010 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 Past-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, debate, and implementation 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, and is made available 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



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Chairperson
Retired Teacher Trustee
Lexington



**Dr. Jay Morgan**Vice Chairperson
Teacher Trustee
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Ronald L. Sanders
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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**

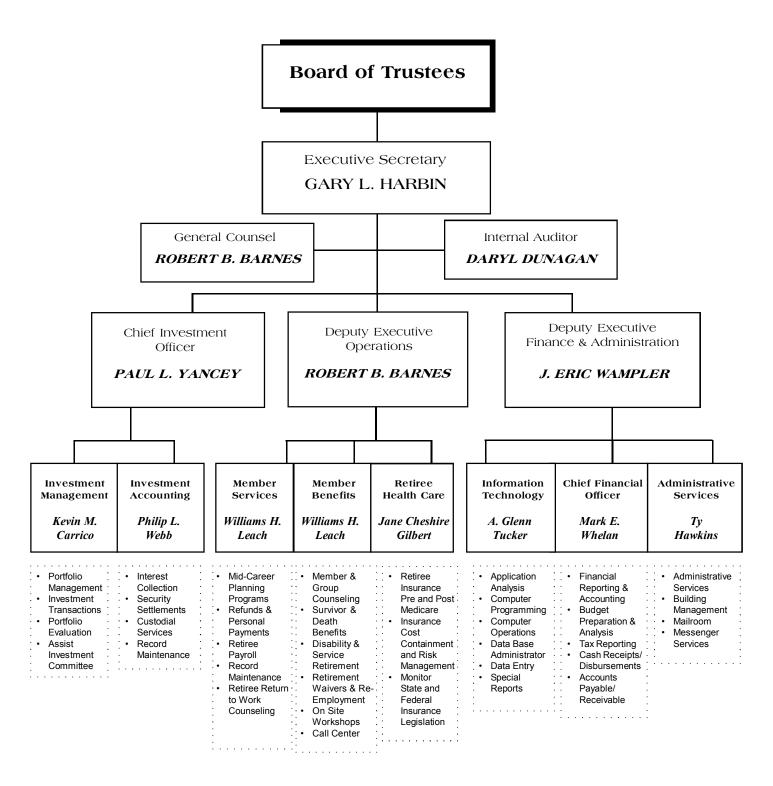
Cavanaugh Macdonald Consulting, LLC 3550 Busbee Parkway, Suite 250 Kennesaw, GA 30144

#### **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, 2009

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 Efrega President

**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-two consecutive years (fiscal years ended 1988-2009).



## Public Pension Coordinating Council Public Pension Standards 2010 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)

> 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 2010 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.

## Financial Section

for Fiscal Year ending June 30, 2010



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, 2010 and 2009 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, 2010 and 2009 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 17, 2010 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, 2010 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 7. Mitchell Co.

Frankfort, Kentucky December 17, 2010

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

#### 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, 2010. 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 43-45) 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, 2010, Kentucky Teachers' Retirement System's combined plan net assets increased by \$956.5 million – from \$11,830.2 million to \$12,786.7 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 other funds.

### **Summary of Plan Net Assets**

(In Millions)

Categories	2010	efined Benefit 2009	t Plan 2008	Medic 2010	cal Insuran 2009	ce Plan 2008	Life 2010	Insurance 2009	Fund 2008
Cash & Investments Receivables	\$ 12,513.9 96.5	\$ 11,591.9 3 94.3	\$ 14,224.0 93.6	\$ 237.1 7.9	\$ 225.0 7.1	\$ 182.0 6.2	\$ 87.1 .9	\$ 89.0 .7	\$ 76.8 .8
Capital Assets Total Assets	12,613.8	3.2 11,689.4	3.0 14,320.6	245.0	232.1	188.2	88.0	89.7	77.6
Total Liabilities Plan Net Assets	$\frac{(157.2)}{\$ 12,456.6}$	\$ 11,515.4	(243.9) \$ 14,076.7	$\frac{(3.8)}{$241.2}$	$\frac{(3.0)}{$229.1}$	$\frac{(2.3)}{$185.9}$	$\frac{(0.1)}{\$87.9}$	$\frac{(5.0)}{$84.7}$	\$ 77.6

*TOTALS	2010	2009	2008
Cash & Investments	\$ 12,838.1	\$ 11,905.9	\$ 14,482.8
Receivables	105.3	102.1	100.6
Capital Assets	3.4	3.2	3.0
Total Assets	12,946.8	12,011.2	14,586.4
<b>Total Liabilities</b>	(161.1)	(182.0)	(246.2)
Plan Net Assets	\$ 12,785.7	\$ 11,829.2	\$ 14,340.2

<sup>\*</sup> Other Funds consisting of the 403(b) Tax Shelter Plan, the Supplemental Benefit Fund and the Losey Scholarship fund had combined plan net assets of \$.9 million for years ended 2010 and 2009. Only the 403(b) Tax Shelter Plan amount of \$.5 million plan net assets is available for 2008.

Plan net assets of the defined benefit plan increased by 8.2% (\$12,456.6 million compared to \$11,515.4 million). The increase is primarily due to improvements in market conditions which resulted in a net investment income increase of \$3.5 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 5.3% (\$241.2 million compared to \$229.1 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	De 2010	fined Benefit 2009	Plan 2008	Medic 2010	al Insurano 2009	ce Plan 2008	Life 2010	Insurance 2009	Fund 2008
ADDITIONS Member Contributions	\$ 297.6	\$ 293.7	\$ 291.4	\$ 63.8	\$ 58.7	\$ 55.4	\$	\$	\$
Employer Contributions Net Investment Income Other Income	479.8 1,509.8	442.5 (2,020.7)	466.2 (909.1)	158.8 12.3 14.6	164.4 11.3 <u>13.7</u>	148.9 8.1 11.9	1.9 5.4	5.4 5.3	5.4 6.3
TOTAL ADDITIONS  DEDUCTIONS	2,287.2	(1,284.5)	(151.5)	249.5	248.1	224.3	7.3	10.7	11.7
Benefit Payments Refunds	1,321.8 15.3	1,252.9 15.2	1,170.9 15.9				4.1	3.7	4.0
Administrative Expense Insurance Expenses TOTAL DEDUCTIONS	1,345.9	8.2 1,276.3	7.6	237.4 237.4	$\frac{204.8}{204.8}$	179.2 179.2	4.1	3.7	4.0
Increase (Decrease) in Plan Net Assets	\$ 941.3	\$ (2,560.8)	\$ (1,345.9)	\$ 12.1	\$ 43.3	\$ 45.1	\$ 3.2	\$ 7.0	\$ 7.7

TOTALS	2010	2009	2008
ADDITIONS Member Contributions Employer Contributions Net Investment Income Other Income TOTAL ADDITIONS	$\begin{array}{c} \$ & 361.4 \\ 640.5 \\ 1,527.5 \\ \underline{ 14.6} \\ 2,544.0 \end{array}$	$\begin{array}{c} \$ & 352.4 \\ 612.3 \\ (2,004.1) \\ \hline \hline & 13.7 \\ \hline & (1,025.7) \end{array}$	\$ 346.8 620.5 (894.7) 11.9 84.5
DEDUCTIONS Benefit Payments Refunds Administrative Expense Insurance Expenses TOTAL DEDUCTIONS Increase (Decrease) in Plan Net Assets	1,325.9 15.3 8.8 237.4 1,587.4 \$ 956.6	1,256.6 15.2 8.2 204.8 1,484.8 \$ (2,510.5)	1,174.9 15.9 7.6 <u>179.2</u> <u>1,377.6</u> \$ (1,293.1)

#### **DEFINED BENEFIT PLAN ACTIVITIES**

Member contributions increased \$3.9 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 \$479.8 million, a net increase of \$37.3 million over the 2009 fiscal year.

The System experienced an increase in net investment income compared to the loss of the previous year (\$1,509.8 million at June 30, 2010 as compared to a \$2,020.7 million decrease at June 30, 2009). The increase in the fair value of investments is mainly due to favorable market conditions for the year ended June 30, 2010. This can be illustrated as follows:

(In Millions)	2010	2009	2008
Appreciation (depreciation) in fair value of investments – June 30, prior year	\$(1,336.2)	\$ 385.4	\$ 1,904.0
Appreciation (depreciation) in fair value of investments – June 30, end of year	(235.5)	(1,336.2)	385.4
Change in net appreciation (depreciation) in fair value of investments	1,100.7	(1,721.6)	(1,518.6)
Net income (net of investment expense) Net gain on sale of investments Investment Income (net) – June 30, end of year	$ \begin{array}{r} 341.3 \\ 67.8 \\ \hline 1,509.8 \end{array} $	373.1 (672.2) \$ (2,020.7)	426.9 182.6 \$ (909.1)

Program deductions in 2010 increased \$69.6 million. The increase was caused principally by an increase of \$68.9 million in benefit payments. Members who were drawing benefits as of June 2009 received an increase of 1.5% to their retirement allowances in July 2009. Also, there was an increase of 1,084 members and beneficiaries on the retired payroll as of June 30, 2010.

#### OTHER POST EMPLOYMENT BENEFIT ACTIVITIES

During the 2010 fiscal year, the medical insurance plan member contributions increased \$5.1 million and employer contributions decreased by \$5.6 million over fiscal year 2009. The employer contributions decreased primarily because less was placed in stabilization funding in the medical insurance fund from the pension fund. Stabilization Funding amounts were scheduled to be repaid over ten years per KRS 161.553 but in August 2010, bond proceeds were received to repay the pension fund for stabilization amounts redirected since fiscal year 2005.

Program deductions increased \$32.6 million due mainly to an increase of insurance premiums with the Medicare Advantage Program due to federal reimbursement cuts. The monthly premium subsidy for retirees under age 65 increased 8.1% from fiscal year 2009 to fiscal year 2010. No increase is expected for calendar year 2011. The monthly premium subsidy for retirees age 65 and over increased by 20% from

fiscal year 2009 to fiscal year 2010. A decrease is expected for calendar year 2011 due to the implementation of both an insured Medicare Advantage Regional PPO and an insured Employer Group Waiver Prescription Drug Plan as of July 1, 2010.

Net investment income increased \$1 million from \$11.3 million in 2009 to \$12.3 million in 2010. 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:

(In Millions)	<u>2010</u>	2009	2008
Appreciation in fair value of investments – June 30, prior year Appreciation in fair value of investments – June 30 end of year Net appreciation in fair value of investments	$\frac{$}{0}$	$\frac{$}{0}$	\$ 0 0 0
Net income (net of investment expense) Net gain on sale of investments Investment Income (net) – June 30	12.3 0 \$ 12.3	11.3 0 \$ 11.3	$   \begin{array}{r}     8.1 \\     \hline     8.1 \\     \hline     $8.1   \end{array} $

The life insurance plan has an actuarial valuation conducted independently from the defined benefit plan. Total life insurance benefits paid for 2010, 2009 and 2008 were \$4.1, \$3.7 and \$4.0 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 2010 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 43) and a shortfall of employer contributions has resulted in an accumulated net pension obligation of \$576,328,182 as of June 30, 2010 (as detailed on page 85).

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) and a shortfall of employer contributions has resulted in an accumulated net OPEB obligation of \$814,379,040 as of June 30, 2010 (as detailed on page 107).

#### Statement of Plan Net Assets As of June 30, 2010

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	2010 TOTAL
ASSETS					
Cash Prepaid Expenses	\$ 2,497,492 127,531	\$ 147,000	\$ 592,345	\$ 48,283	\$ 3,138,120 274,531
Receivables Contributions State of Kentucky Investment Income Installment Account Receivable Medicare D Receivables	38,343,995 71,937 57,550,193 530,191	3,055,730 4,838,295	32,225 895,791	7,514	41,431,950 71,937 58,453,498 530,191 4,838,295
Total Receivables	96,496,316	7,894,025	928,016	7,514	105,325,871
Investments at Fair Value (See Note 5) Short-Term Investments Bonds and Mortgages Equities Alternative Investments Real Estate	64,445,908 4,045,405,431 7,526,938,498 299,635,647 419,613,670	237,013,895	5,400,000 81,056,169	518,475 411,764	307,378,278 4,126,873,364 7,526,938,498 299,635,647 419,613,670
Total Investments	12,356,039,154	237,013,895	86,456,169	930,239	12,680,439,457
Invested Security Lending Collateral Capital Assets, at cost net of accumulated depreciation of \$1,995,799 (See Note 2)	155,226,862 3,483,370				155,226,862 3,483,370
Total Assets	12,613,870,725	245,054,920	87,976,530	986,036	12,947,888,211
<u>LIABILITIES</u>					
Accounts Payable Insurance Claims Payable Investment Purchases Payable Obligations Under Securities Lending	1,124,143 900,638 155,226,862	3,831,080	71,937		1,196,080 3,831,080 900,638 155,226,862
Total Liabilities	157,251,643	3,831,080	71,937	0	161,154,660
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:	\$ 12,456,619,082	\$ 241,223,840	\$ 87,904,593	\$ 986,036	\$ 12,786,733,551
The accompanying notes are an in	tegral part of these	financial stateme	nts.		

#### Statement of Plan Net Assets As of June 30, 2009

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	2009 TOTAL
<u>ASSETS</u>					
Cash Prepaid Expenses	\$ 4,901,504 148,786	\$ 121,000	\$ 1,736,300	\$ 25,558	\$ 6,663,362 269,786
Receivables Contributions State of Kentucky Investment Income Installment Account Receivable	34,794,627 2,966,717 55,886,305 605,511	2,762,036	77,453 674,184		37,634,116 2,966,717 56,560,489 605,511
Medicare D Receivables		4,328,805			4,328,805
Total Receivables	94,253,160	7,090,841	751,637	0	102,095,638
Investments at Fair Value (See Note 5) Short-Term Investments Bonds and Mortgages Equities Alternative Investments Real Estate	19,091,857 3,710,519,898 7,086,247,046 177,330,444 425,746,050	224,866,481	12,400,000 74,889,911	541,662 426,564	256,900,000 3,785,836,373 7,086,247,046 177,330,444 425,746,050
Total Investments	11,418,935,295	224,866,481	87,289,911	968,226	11,732,059,913
Invested Security Lending Collateral Capital Assets, at cost net of accumulated depreciation of \$2,087,345 (See Note 2)	167,874,202 3,219,786				167,874,202 3,219,786
Total Assets	11,689,332,733	232,078,322	89,777,848	993,784	12,012,182,687
<u>LIABILITIES</u>					
Accounts Payable Insurance Claims Payable Investment Purchases Payable Obligations Under Securities Lending	1,028,771 5,065,608 167,874,202	2,975,307	78,339 4,996,875		1,107,110 2,975,307 10,062,483 167,874,202
Total Liabilities	173,968,581	2,975,307	5,075,214	0	182,019,102
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:	\$ 11,515,364,152	\$ 229,103,015	\$ 84,702,634	\$ 993,784	\$ 11,830,163,585
The accompanying notes are an int	egral part of these	financial stateme	nts.		

#### Statement of Changes in Plan Net Assets For the Year Ended June 30, 2010

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	2010 TOTAL
<u>ADDITIONS</u>					
Contributions					
Employer	\$ 479,805,088	\$ 158,761,433	\$ 1,966,826	\$ 60,000	\$ 640,593,347
Member	297,613,965	63,805,573			361,419,538
Total Contributions	777,419,053	222,567,006	1,966,826	60,000	1,002,012,885
Other Income					
Recovery Income		4,063			4,063
Medicare D Receipts		14,614,285			14,614,285
Total Other Income		14,618,348			14,618,348
Investment Income					
Net Appreciation/(Depreciation)					
in FV of Investments	1,168,500,111		1,943,464	(14,800)	1,170,428,775
Interest	194,088,206	12,312,999	3,440,180	28,128	209,869,513
Dividends	133,351,529	12,312,999	3,440,100	20,120	133,351,529
Rental Income, Net					30,968,132
	30,968,132				
Securities Lending, Gross Earnings	1,549,318				1,549,318
Gross Investment Income	1,528,457,296	12,312,999	5,383,644	13,328	1,546,167,267
Less Investment Expense	(18,206,407)				(18,206,407)
Less Securities Lending Expense	(465,508)				(465,508)
Less Securities Lending Expense	(403,300)				(403,300
Net Investment Income	1,509,785,381	12,312,999	5,383,644	13,328	1,527,495,352
Total Additions	2,287,204,434	249,498,353	7,350,470	73,328	2,544,126,585
<u>DEDUCTIONS</u>					
Benefits	1,321,808,770		4,148,511	81,076	1,326,038,357
Refunds of Contributions	15,310,680		1,110,011	01,070	15,310,680
Insurance Expenses	10,010,000	237,377,528			237,377,528
Administrative Expense	8,830,054	201,011,020			8,830,054
Administrative Expense	0,030,034				
Total Deductions	1,345,949,504	237,377,528	4,148,511	81,076	1,587,556,619
Net Increase (Decrease)	941,254,930	12,120,825	3,201,959	(7,748)	956,569,966
, ,					
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS:					
Beginning of year	11,515,364,152	229,103,015	84,702,634	993,784	11,830,163,585
	I	1		1	

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

	Defined Benefit Plan	Medical Insurance Plan	Life Insurance Plan	Other Funds	2009 TOTAL
ADDITIONS					
Contributions					
Employer	\$ 442,489,935	\$ 164,408,037	\$ 5,455,473	\$ 60,000	\$ 612,413,445
Member	293,678,564	58,688,767			352,367,331
Total Contributions	736,168,499	223,096,804	5,455,473	60,000	964,780,776
Other Income					
Recovery Income		72,082			72,082
Medicare D Receipts		13,611,748			13,611,748
Medicare D Heceipts		10,011,740			10,011,740
Total Other Income		13,683,830			13,683,830
Investment Income					
Net Appreciation/(Depreciation)					
in FV of Investments	(2,393,829,082)		1,888,614	4,156	(2,391,936,312
Interest	206,675,446	11,296,280	3,394,344	23,625	221,389,695
Dividends	150,828,141	11,230,200	0,004,044	20,020	150,828,141
Rental Income, Net	29,794,103				29,794,103
The state of the s	, ,				
Securities Lending, Gross Earnings	3,053,121				3,053,121
Gross Investment Income	(2,003,478,271)	11,296,280	5,282,958	27,781	(1,986,871,252
Less Investment Expense	(16,321,910)				(16,321,910
Less Securities Lending Expense	(906,950)				(906,950
Net Investment Income	(2,020,707,131)	11,296,280	5,282,958	27,781	(2,004,100,112
Total Additions	(1,284,538,632)	248,076,914	10,738,431	87,781	(1,025,635,506
DEDUCTIONS					
<u>DEDUCTIONS</u>	4 050 044 007		0.004.000	00.750	4 050 700 400
Benefits	1,252,914,387		3,694,000	93,752	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	1,276,288,563	204,857,122	3,694,000	93,752	1,484,933,437
Net Increase (Decrease)	(2,560,827,195)	43,219,792	7,044,431	(5,971)	(2,510,568,943
NET ASSETS HELD IN TRUST FOR PENSION AND OTHER					
POSTEMPLOYMENT BENEFITS:					
Beginning of year	14,076,191,347	185,883,223	77,658,203	999,755	14,340,732,528
Ending of year	\$ 11,515,364,152	\$ 229,103,015	\$ 84,702,634	\$ 993,784	\$ 11,830,163,585
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#### Notes to Financial Statements Years Ended June 30, 2010 and 2009

#### **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, 2010 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>2010</u>	2009
Active contributing members:		
Vested	47,083	45,843
Non-vested	29,304	30,094
Inactive members, vested	5,637	5,245
Retirees and beneficiaries currently receiving benefits	43,134	42,050
Total members, retirees, and beneficiaries	125,158	123,232

#### 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 three (3) 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 four cash accounts. At June 30, 2010, the pension cash account totaled \$149,297. The administrative expense fund cash account was \$2,348,195 and the life insurance cash account totaled \$592,345. The excess benefit fund cash account contained \$48,283. Therefore, the carrying value of cash was \$3,138,120 and the corresponding bank balance was \$4,159,143. The variance is primarily due to outstanding checks and items not processed by the bank on June 30, 2010.

#### 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

#### 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, 2010 and 2009 accrued compensated absences were \$756,747 and \$733,610.

#### 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, 2010 and 2009 installment contract receivables were \$530,191 and \$605,511.

#### 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. RECLASSIFICATIONS

Certain 2009 amounts have been reclassified in conformity with the 2010 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.

Note 3: Contributions and Reserves continued . . .

#### **Unallocated Reserve**

This fund was established by KRS 161.420(6) as the Guarantee Fund, to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for cost of living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of the System, and deficiencies not covered by the other funds.

#### 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	5)
			_

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
2010	A	B	B-A	(A/B)	C	[(B-A)/C]
	\$ 14,851,330	\$ 24,344,316	\$ 9,492,986	61.0%	\$ 3,321,614	285.8%

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.

(1)	Actuarial Value of Assets on June 30, 2009	\$ 14,885,981,251
(2)	Market Value End of Year June 30, 2010	12,456,619,082
(3)	Market Value Beginning of Year June 30, 2009	11,515,883,575
(4)	Cash Flow	
	a. Contributions	777,419,053
	b. Benefit Payments	(1,337,119,450)
	c. Administrative Expenses	(8,830,054)
	d. Net	(568,530,451)
(5)	Investment Income	
	a. Market total: (2) - (3) - (4)d	1,509,265,958
	b. Assumed Rate	7.5%
	c. Amount for Immediate Recognition:	
	$[(3) \times (5)b] + [(4)d \times (5)b \times 0.5]$	842,371,376
	d. Amount for Phased-In Recognition: (5)a - (5)c	666,894,582
(6)	Phased-In Recognition of Investment Income	
	a. Current Year: 0.20 x (5)d	133,378,916
	b. First Prior Year	(611,235,941)
	c. Second Prior Year	(409,879,449)
	d. Third Prior Year	190,240,386
	e. Fourth Prior Year	(75,996,339)
	f. Total Recognized Investment Gain	(773,492,427)
(7)	Actuarial Value End of Year	
	(1) + (4)d + (5)c + (6)f	14,386,329,749
(8)	Additional Contribution from Pension Obligation Bond	465,000,000
(9)	Final Actuarial Value of Assets End of Year: (7) + (8)	14,851,329,749
(10)	Difference Between Market & Actuarial Values: (2) - (7) (prior to Pension Obligation Bond)	\$ (1,929,710,667)

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

#### C. ASSUMPTIONS

Significant actuarial assumptions employed by the actuary for the funding purposes as of June 30, 2010, 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%

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

#### 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, 2010 was \$4,159,143. An amount of \$2,348,195 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 \$1,025,446 balance reduction while the amount of \$1,810,948 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, 2010, the System's cash equivalents in the amount of \$1,810,948 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."

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, 2010.

Schedule of Investments				
Short-Term Investments	Market Value June 30, 2010	Market Value June 30, 2009		
Repurchase Agreements	\$ 304,700,000	\$ 256,900,000		
Agency & Other (Short-Term)	2,678,278	0		
Total Short-Term Investments	307,378,278	256,900,000		
Bonds and Mortgages				
U. S. Government	678,247,718	579,447,437		
Agency Bonds	337,019,558	393,391,786		
Mortgage-Backed Securities	297,733,549	385,320,648		
Collateralized Mortgage Obligations	116,575,407	125,751,715		
Asset Backed Securities	37,860,172	67,889,109		
Commercial Mortgage-Backed Securities	239,293,225	203,469,640		
Municipal Bonds	484,588,328	393,237,899		
Corporate Bonds	1,935,555,407	1,637,328,139		
Total Bonds and Mortgages	4,126,873,364	3,785,836,373		
Equities				
International Equity	1,769,557,930	1,355,549,565		
U. S. Equity	5,757,380,568	5,730,697,481		
Total Equities	7,526,938,498	7,086,247,046		
Real Estate				
Real Estate Equity	419,613,670	425,746,050		
Total Real Estate	419,613,670	425,746,050		
Alternative Investments				
PPIP	80,295,627			
Private Equity	110,757,811	60,731,073		
Timberland	108,582,209	116,599,371		
Total Alternative Investments	299,635,647	177,330,444		
TOTAL INVESTMENTS	\$ 12,680,439,457	\$ 11,732,059,913		

## **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.

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, 2010, cash collateral reinvestment securities acquired through securities lending by the System's custodian, who is also the lending agent/counterparty, amounted to \$155,226,862 related to \$151,070,706 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 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, 2010 KTRS had the following investments and weighted average maturities:

Investment Type	<u>Fair Value</u>	Average Maturity (years)
U.S. Government	\$ 678,247,718	9.58
Agency	337,019,558	9.71
MBS	297,733,549	13.85
CMO	116,575,407	20.76
ABS	37,860,172	15.48
CMBS	239,293,225	29.06
Muni	484,588,328	14.04
Corporate	1,935,555,407	7.75
Totals	\$ 4,126,873,364	10.9

In addition to the above securities, Repurchase Agreements (short-term investments) and STIF held at the Bank of New York Mellon had a total fair value of \$307,378,278 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 \$297.7 million in mortgage-backed securities as of June 30, 2010.

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 \$116.6 million in collateralized mortgage obligations as of June 30, 2010.

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 \$37.9 million held by the System as of June 30, 2010 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 \$239.3 million in commercial mortgage-backed securities investments as of June 30, 2010.

#### **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, 2010:

RATING	FAIR VALUE	<u>%</u>
U.S. Government	\$ 678,247,718	16.4
Agency	337,019,558	8.2
AAA	978,277,426	23.6
AA	451,960,420	11.0
A	869,787,468	21.1
BBB	577,703,721	14.0
ВВ	99,145,409	2.4
<u>B</u>	134,731,644	3.5
Total	\$ 4,126,873,364	100.0

Total market value of the fixed income portfolio was \$4,126,873,364 on June 30, 2010. 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 \$307,378,278 in Cash Equivalents or short-term investments. The credit risk associated with these Cash Equivalents is very minimal as the general rating of these securities is higher than AAA. In addition, investments in US Government and Agency securities are also highly rated securities since they are backed by the US 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."

The policy also allows that up to ten percent of System assets may be invested in additional categories of investments approved by the Board of Trustees. Having been approved by the Board as an additional category of investments, a high yield bond portfolio was funded in fiscal year 2010 with an initial allotment of \$225 million.

## **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.

"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, 2010, KTRS exposure to foreign currency risk consisted of \$1,180,792,803 of foreign equity investments through commingled funds managed by UBS Global Asset Management, Baring Asset Management, and Baillie Gifford as follows:

UBS International Collective	\$ 514,470,507
Baring Asset Management	319,619,142
Baillie Gifford	346,703,154
Total	\$ 1,180,792,803

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 \$588,765,127 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, 2010:

Item	Earnings
Gross Earnings (Interest and fees)	\$ 184,579
Plus: Gross Borrower Rebates	1,364,739
Less: Bank Fees	(465,508
Net Earnings	\$ 1,083,810

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, 2010 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, 2010:

Type of Security Lent	<u>Fair Value</u>	Cash Collateral Received Non-cash Collateral Value*
U.S. Equities	\$ 151,070,706	\$ 155,226,862

<sup>\*</sup> 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 2010, 2009 and 2008 were \$476,918, \$456,258, and \$413,492 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 2010, 2009, and 2008. 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 2010, 2009 and 2008 were 11.61%, 10.01% and 8.5%; and the System's annual required contributions to KERS were \$174,203, \$182,399 and \$129,356 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: Other Funds

## A. 403(B) TAX-SHELTERED ANNUITY PLAN

## **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, 2010, the twenty-two members who are receiving

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

annuities will continue to receive distributions according to the terms of their respective elections.

## **Summary of Significant Policies**

<u>Basis of Accounting</u> - 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.

<u>Method Used to Value Investments</u> - The short-term investments are reported at cost, which approximates fair value.

## B. SUPPLEMENTAL BENEFIT FUND

The Supplemental Retirement Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), KTRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of the retirement system employed by the employer, whose benefits under the retirement system are limited by Section 415 of the Internal Revenue Code of 1986, as amended from time to time. Funding of benefits payable under this fund are provided by the state, as employer, and are segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system.

## C. JUNITA LOSEY SCHOLARSHIP BEQUEST

Junita Losey, a retired teacher, designated KTRS as a residuary beneficiary of her estate and expressed a desire that KTRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997 and thereafter her estate provided a scholarship bequest to KTRS. The scholarship bequest has at all times been segregated from funds that are maintained by KTRS for payment of the regular benefits provided by the retirement system. The Scholarship Committee of the System's Board of Trustees meets each December to consider scholarship standards and administration of the scholarship bequest.

## 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 risk for excess claims expenses that exceed the premium equivalents

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

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 through June 30, 2010.

At June 30, 2010, KTRS insurance covered 34,315 retirees and 6,834 dependents. There are 197 participating employers and 76,387 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.

#### 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 2010 and 2009 respectively. The balances are to be amortized over a period of 10 years. The Legislature appropriated \$36,490,700 in fiscal year 2010 and \$18,280,000 in fiscal year 2009 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:

$(\Gamma$	ollar	amoun	t 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
2010	A	B	B-A	(A/B)	C	[(B-A)/C]
	\$ 241,224	\$ 3,206,806	\$ 2,965,582	7.5%	\$ 3,321,614	89.3%

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

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 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, 2010 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	8.0%
Projected salary increases	4.0%
Amortization method	Level percent of pay, open
Remaining amortization period	30 years
Medical Trend Assumption (Pre-Medicare)	10.50% - 5.0%
Medical Trend Assumption (Post-Medicare)	9.50% - 5.0%
Year of Ultimate Pre-Medicare trend rate	2018

#### 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, 2010 and 2009. Fiscal Year 2010 Fiscal Year 2009

_			 
Beginning Unpaid Claims Liability Current Year Claims and Changes in Estimate Claims Payments		2,969,754 33,703,094 32,845,365)	2,289,841 201,400,693 200,720,780)
Ending Unpaid Claims Liability	\$	3,827,483	\$ 2,969,754

## Note 9: Life Insurance Plan

## A. PLAN DESCRIPTON

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 2010 and 2009, this rate has been .06% and .17% of active members' payroll, respectively.

## 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:

/TD 11			-	000.
(Dollar	amounts	ın		()()()'e\
(Domai	amounts	111	1.	.000 31

Valuation Year June 30	Actuarial Value of Assets (a)	Actuarial Accrued Liabilities (b)	Unfunded Actuarial Accrued Liabilities (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll [(b-a)/c]
2010	\$ 87,905	\$92,091	\$ 4,186	95.5%	\$ 3,321,614	.13%

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. Significant actuarial methodologies and assumptions employed as of the June 30, 2010 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

## **Note 10: Subsequent Event**

On August 26, 2010, KTRS received \$465,384,165 in proceeds from a bond issued by the Commonwealth of Kentucky. The proceeds of this bond issue were deposited in the KTRS pension fund and represent the repayment of retirement contributions that had been redirected by the state to pay retiree health insurance during Fiscal Year 2005 through Fiscal Year 2010.

## **Required Supplementary Information**

## Defined Benefit Plan Schedule of Funding Progress

(dollar amounts in millions)

VALUATIO YEAR JUNE 30	N ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES	UNFUNDED ACTUARIAL ACCRUED LIABILITIES (UAAL)	FUNDED RATIO	COVERED PAYROLL	UAAL AS A % OF COVERED PAYROLL
	а	b	(b-a)	(a/b)	c	[(b-a)/c]
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
2010	14,851.3	24,344.3	9,493.0	61.0	3,321.6	285.8

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.

Scl	Defined Benefit Plan hedule of Employer Contributi	ons
FISCAL YEAR	ANNUAL	
ENDED	REQUIRED	PERCENTAGE
JUNE 30	CONTRIBUTIONS	CONTRIBUTED
2005	\$ 412,946,526	93~%
2006	464,152,466	87
2007	494,565,369	88
2008	563,789,483	83
2009	600,282,735	74
2010	633,938,088	76

Required Supplementary Information continued . . .

## Medical Insurance 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
	a	b	(b-a)	(a/b)	c	[(b-a)/c]
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
2010	241.2	3,206.8	2,965.6	7.5	3,321.6	89.3

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.

## Medical Insurance Plan Schedule of Employer Contributions

FISCAL YEAR ENDED JUNE 30	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION	RETIREE DRUG SUBSIDY CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTED
	(a)	(b)	(c)	(b) + (c)	[(b) + (c)/(a)]
2007	\$ 231,473,321	\$ 113,258,761	\$ 10,312,361	\$ 123,571,122	53.4%
2008	395,282,164	148,954,644	11,911,565	160,866,209	40.7
2009	467,312,904	164,480,119	13,611,748	178,091,867	38.1
2010	457,054,117	158,765,496	14,614,285	173,379,781	37.9

Only four years of actuarial calculations of annual required contributions are available.

Required Supplementary Information continued . . .

# **Life Insurance Plan Schedule of Funding Progress**

(dollar amounts in thousands)

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]
2007	\$ 71,426	\$ 82,722	\$ 11,296	86.3%	5 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
2010	87,905	92,091	4,186	95.5	3,321,614	0.13

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.

Life Insurance Plan Schedule of Employer Contributions					
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		
2010	1,992,969	1,966,826	98.7		

## **Required Supporting Schedules**

## Supporting Schedule 1 Schedule of Administrative Expenses Year Ended June 30, 2010

Salaries	\$ 6,001,066
Other Personnel Costs	668,029
Professional Services & Contracts	652,175
Utilities	78,610
Rentals	17,977
Maintenance	167,510
Postage & Related Services	315,645
Printing	148,524
Insurance	139,494
Miscellaneous Services	117,083
Telecommunications	27,115
Computer Services	59,086
Supplies	61,986
Depreciation	111,448
Travel	69,284
Dues & Subscriptions	41,037
Miscellaneous Commodities	13,758
Furniture, Fixtures, & Equipment not Capitalized	117,090
Compensated Absences	23,137
TOTAL ADMINISTRATIVE EXPENSES	\$ 8,830,054

## Supporting Schedule 2 Schedule of Professional Fees for Year Ended June 30, 2010

# Schedule of Professional Fees for Year Ended June 30, 2010 PROFESSIONAL NATURE OF SERVICE

Cavanaugh Macdonald Consulting	g Actuarial Services	\$ 267,376
Charles T. Mitchell Company	Auditing Services	30,600
Farmers Bank	Bank Services	15,737
International Claim Specialist	Investigative Services	4,025
Attorney General	Attorney Services	5,500
Ice Miller	Attorney Services	152,017
Reinhart, Boerner VanDeuren	Attorney Services	16,243
Stoll Keenon Ogden	Attorney Services	10,424
Peritus	Communications	90,000
Bevis Longstreth	Investment Committee Advisor	40,253
George Philip	Investment Committee Advisor	20,000
	TOTAL	\$ 652,175

Required Supporting Schedules continued . . .

Supporting Sch Schedule of Contracted Inve Expenses and Miscella Year Ended June	estment Management neous Expenses	
EQUITY MANAGERS Baillie Gifford	\$ 1,770,389	
Baring Asset Management, Inc.	\$ 1,770,389 1,500,000	
GE Asset Management	763,744	
Todd-Veredus Asset Management LLC	1,188,499	
UBS Global Asset Management	2,480,240	
Wellington Management Company	2,251,916	
<b>Total Equity Managers</b>		\$ 9,954,788
FIXED INCOME MANAGERS		
Fort Washington Investment Advisors	502,751	
Galliard Capital Management	342,062	
Total Fixed Income Managers		844,813
REAL ESTATE		
Prudential Real Estate		328,140
ALTERNATIVE INVESTMENTS		
PPIP	138,211	
Private Equity	5,480,032	
Total Alternative Investments		5,618,244
CUSTODIAN		
Farmers Bank		501,872
CONSULTANT		
Hewitt Enis Knupp		364,178
LEGAL & RESEARCH		
Stoll, Keenon, Ogden, PLLC	2,450	
Schottenstein, Zox & Dunn	48,054	
Total Legal & Research		50,504
OTHER		
Subscription/Services		543,868
TOTAL CONTRACTOR INVESTMENT MANAGEMENT	NE EXPENSES	ф 10 00C 40 <del>T</del>
TOTAL CONTRACTED INVESTMENT MANAGEMEN	NI EXPENSES	\$ 18,206,407

Required Supporting Schedules continued . . .

## Supporting Schedule 4 Combining Statement of Plan Net Assets - Other Funds As of June 30, 2010

	403(b) TAX SHELTERED	SUPPLEMENTAL BENEFIT FUND	LOSEY SCHOLARSHIP	2010 TOTAL
ASSETS				
Cash	\$	\$ 48,283	\$	\$ 48,283
Receivables Investment Income			7,514	7,514
Investments at Fair Value Short-Term Investments	448,086		70,389	518,475
Bonds and Mortgages Total Investments	448,086		411,764 482,153	<u>411,764</u> <u>930,239</u>
Total Assets	448,086	48,283	489,667	986,036
Liabilities				
Net Assets Held In Trust For				
Pension And Other Benefits	\$ 448,086	\$ 48,283	\$ 489,667	\$ 986,036

Required Supporting Schedules continued . . .

Net Increase (Decrease)

End of Year

Net Assets Held In Trust For Pension And Other Benefits Beginning of Year

Supporting Schedule 5 Combining Statement of Changes in Plan Net Assets - Other Funds For the Year Ended June 30, 2010						
	403(b) TAX SHELTERED	SUPPLEMENTAL BENEFIT FUND	LOSEY SCHOLARSHIP	2010 TOTAL		
ADDITIONS				_		
Contributions						
Employer	\$	\$ 60,000	\$	\$ 60,000		
Investment Income						
Net Appreciation/(Depreciat	tion)					
in Fair Value of Investmen			(14,800)	(14,800)		
Interest	525		27,603	28,128		
Net Investment Income	525		12,803	13,328		
Total Additions	525	60,000	12,803	73,328		
DEDUCTIONS						
Benefits	26,800	37,276	17,000	81,076		

22,724

25,559

(4,197)

493,864

489,667

(7,748)

993,784

986,036

(26,275)

474,361

\$ 448,086



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, 2010 have issued our report thereon dated December 17, 2010. 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 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 deficiency in internal control 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 and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be deficiencies. 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**

Charles T. Mitchell Co.

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.

Frankfort, Kentucky

December 17, 2010

# Investment Section

for Fiscal Year ending June 30, 2010

## 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

## **INVESTMENT COMMITTEE**

Mr. Robert M. Conley Chair

Mr. Ronald L. Sanders M

**Ms. Barbara G. Sterrett** Member

Vice-Chair

**Dr. Jay Morgan**Member

**Mr. Tom Shelton**Member

Mr. Bevis Longstreth
Investment Advisor to KTRS Investment Committee

Mr. George Philip
Investment Advisor to KTRS Investment Committee

## **EXECUTIVE INVESTMENT STAFF**

Mr. Gary L. Harbin, CPA

Executive Secretary

Mr. Paul L. Yancey, CFA
Chief Investment Officer

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December 1, 2010

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

The financial markets produced solid returns in the fiscal year ended June 30, 2010 as the frightening downward spiral of financial crisis and severe recession was arrested. Markets rebounded as economic growth resumed in the second half of 2009. It soon became clear, however, that the effects of the financial crisis - and the excesses that led to it-would be long-lasting. At the end of the fiscal year, a still-distressed housing market, an overleveraged consumer sector, and fiscal problems at all levels of government seemed to portend a long, slow recovery with unemployment remaining abnormally high. With the solvency of some European governments coming into question in the spring of 2010, even the stability of the global financial system remained in doubt.

Still-dislocated financial markets afforded exceptional opportunities, which the System actively sought to take advantage of. For the first time, the System invested in high yield bonds, with an allocation of \$225 million, due to extraordinary value in that sector. A total commitment of \$120 million was made to two fund managers participating in the U.S. Treasury's Public-Private Investment Program (PPIP) to take advantage of dislocations in the residential and commercial mortgage-backed securities markets. Both the high yield bonds and PPIP commitments were approved by the Board of Trustees as "additional categories" of investments as required by administrative regulation. A total of \$185 million in private equity commitments were made during the fiscal year, with the focus generally being one of capitalizing on unusual opportunities in specific sectors.

The System's portfolio returned 13.1% in the fiscal year, matching the return of the benchmark Policy Index. Domestic equities returned 15.1% versus 15.6% for the S&P 1500 Index. International equities returned 12.5% versus 10.9% for the MSCI All Country World (ex-U.S.) Index. Fixed income returned 11.7% versus 9.7% for the Barclays Government/Credit Index. Alternative strategies, including the opportunistic investments mentioned above, are expected to make a more significant contribution to total return in future years.

An expanded Investment Committee, including two outside experts, improved the decision-making process during the fiscal year. In legislative developments, House Bill 540 was passed by the Kentucky General Assembly, which ended the practice of diverting pension contributions to fund the Medical Insurance Fund and established a plan to, over time, prefund those benefits.

The System's investment program has always been based on fundamental value, a long-term focus on funding obligations to its members, and risk control. This philosophy led to a successful navigation of the financial turmoil of recent years. Continued adherence to these principles will help the System to meet its goals through whatever challenges and opportunities lie ahead.

It is a privilege to work with the System's investment staff, Investment Committee, and Board of Trustees. We look forward to continuing to help the System meet its long-term goals.

Respectfully.

Patrick J. Kelly, CFA

Principal

Hewitt EnnisKnupp, Inc.

10 South Riverside Plaza, Suite 1600 | Chicago, II 60606 t 312.715.1700 | f 312.715.1952 | www.hewittennisknupp.com Hewitt Investment Group LLC and Ennis, Knupp & Associates, Inc.

are part of the Hewitt global investment network.

#### 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 the investment philosophy and practice of KTRS.

## **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 approximately 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 allocations may differ markedly between various pension plans due to their unique circumstances.

The information below shows the System's asset allocation by market value as of June 30, 2010, and June 30, 2009, as well as the target and strategic range for each asset class for fiscal year 2010.

	<u>June 30, 2010</u>	<u>%</u>	<u>June 30, 2009</u>	<u>%</u>
Cash Equivalents *	\$ 218,429,317	1.7	\$ 134,219,594	1.1
Fixed Income **	3,933,016,478***	31.1	3,865,135,688	33.1
Domestic Equities	5,872,001,227	46.3	5,784,174,002	49.4
International Equities	1,703,159,180	13.4	1,344,393,598	11.3
Real Estate	419,613,671	3.3	425,746,050	3.6
Private Equity	110,757,811	0.9	60,731,073	0.5
Timberland	108,582,209	0.8	116,599,371	1.0
Additional Categories	312,947,084	2.5	-0-	0.0
Totals	\$12,678,506,977	100.0	\$11,730,999,376	100.0

<sup>\*</sup> 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.

<sup>\*\*</sup> Excludes purchased interest of \$1,450,327 as of June 30, 2010. Also, excludes purchased interest of \$1,060,537 as of June 30, 2009.

<sup>\*\*\*</sup> As of June 30, 2010, the Scholarship Fund is no longer reported in the pension fund Investment portfolio. The value of this fund at June 30, 2010 was \$482,153.

## Distribution of Investments Market Values



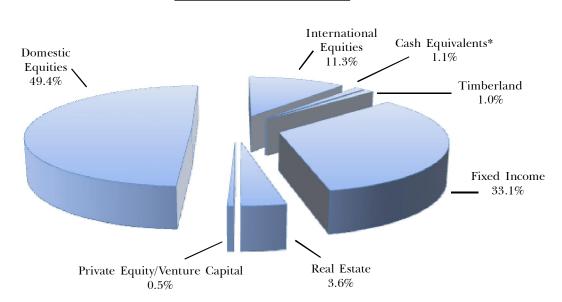
Real Estate

3.3%



Private Equity/Venture Capital

0.9%



<sup>\*</sup> 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.

Strategic Weightings by Asset Class					
Asset Class	Regulatory Limits (Mkt Value)	Strategic Range (Mkt)	Target (Mkt)	6/30/2010 (Mkt)	
Cash		1 - 3%	2.0%	1.7%	
Fixed Income Government/Agency/Other Corporate	Unlimited 35%	25 - 32	28.0	31.1 17.4 13.7	
Equity Domestic Large Cap Domestic Mid Cap Domestic Small Cap International	65%	55 - 63 37 - 43 3 - 6 2 - 4 11 - 15	62.0 40.0 5.0 3.0 14.0	59.7 39.2 4.4 2.7 13.4	
Real Estate	10%	3 - 5	4.0	3.3	
Alternative Investments*	10%	1 - 3	2.0	1.7	
<b>Additional Categories</b>	10%	1 - 4	2.0	2.5	
TOTAL			100.0%	100.0%	

This weighting reflects cash with manager in the manager's asset class.

<sup>\*</sup> Alternative Investments includes Private Equity, Timberland, Venture Capital and Infrastructure investments.

#### PORTFOLIO RETURNS

For the fiscal year, the System's portfolio generated a total return of 13.1%, matching the return of the benchmark Policy Index. Domestic equities returned 15.1% versus 15.6% for the Standard & Poor's 1500 Index, while international equities returned 12.5% versus 10.9% for the MSCI All Country World (Ex-US) Index. Fixed income investments outperformed, returning 11.7% versus 9.7% for the Barclays Government/Credit Index. Other asset classes such as alternative investments, though growing, were not large enough to substantially impact total System performance in the fiscal year.

The table below details historical performance for the System and its component asset classes for the period ended June 30, 2010. The System's domestic equity and fixed income components have regularly exceeded the returns of their benchmarks over long periods of time. International equities, with a shorter history in the System, have outperformed their benchmark. Other asset classes are expected to generate a more significant portion of the System's total return in the future. 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.

	1 Yr. (2)	3 Yr. <sup>(2)</sup>	5 Yr. <sup>(2)</sup>	10 Yr. (2)	20 Yr. (2)
Total Fund		· <u></u>	· <u> </u>		
KTRS	13.1	-2.9	2.2	2.7	7.2
Policy Index <sup>(1)</sup>	13.1	-	-	-	-
Equities					
Domestic Equities	15.1	-9.1	-0.4	-0.2	8.3
S & P Blended Index <sup>(3)</sup>	15.6	-9.5	-0.6	-1.5	7.7
International Equities	12.5	-10.2	-	-	-
MSCI AC World (Ex US)	10.9	-10.3	-	-	-
Total Equities	14.4	-9.2	-0.4	-0.2	8.3
Fixed Income					
Total Fixed Income	11.7	8.7	6.2	7.0	7.5
Barclays Govt/Credit Index	9.7	7.4	5.3	6.5	7.2
Real Estate					
Real Estate Equity	-16.8	-	-	-	-
NCREIF ODCE	-6.0	-	-	-	-
Triple Net Lease Real Estate	8.8	8.8	9.2	9.0	8.8
CPI plus 2%	3.1	3.6	4.3	4.4	4.6
Alternative Investments					
Private Equity <sup>(4)</sup>	17.1	1.6	-	-	-
Timberland	-4.2	-	-	-	-
NCREIF Timberland Index	-3.5	-	-	-	-
Cash					
Cash (Unallocated)	0.2	1.8	3.5	3.0	4.3
Additional Categories <sup>(5)</sup>					
High Yield Bond Fund	-	-	-	-	-
Public-Private Investments	-	-	-	-	-

<sup>(1)</sup> 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.

<sup>(2)</sup> Annualized

<sup>(3)</sup> 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.

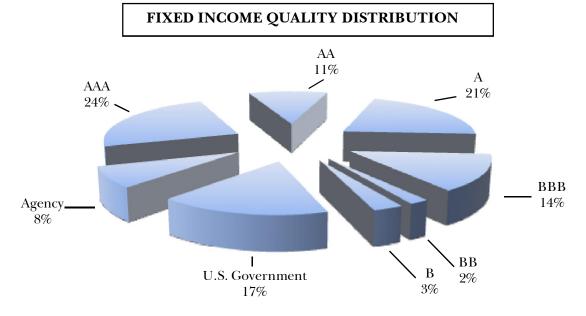
<sup>(4)</sup> For a period of five years private equity will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their 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.

<sup>(5)</sup> The investments in the Additional Categories asset class have not been in existence for a complete fiscal year; therefore, no yearly returns are available. The investments in this class shall be benchmarked versus the Merrill Lynch High Yield Master II.

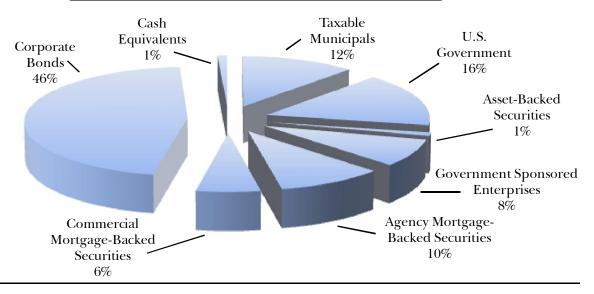
#### FIXED INCOME INVESTMENTS

As of June 30, 2010, the System had approximately \$4.17 billion in fixed income assets, including \$232.7 million in high-yield bonds. The System's investment policy established by administrative regulation requires that all fixed income investments be rated investment grade at the time of purchase and that the fixed income portfolios as a whole maintain an average rating equal to at least "AA" by one of the major rating agencies. The regulation also allows that up to 10% of System assets may be invested in additional categories of investments approved by the Board of Trustees. Having been approved by the Board as an additional category of investments, a high-yield bond portfolio was funded in the fiscal year with an initial allotment of \$225 million.

Excluding the high-yield portfolio, fixed income investments maintained the required "AA" average rating as of June 30, 2010. The credit quality distribution, including the high-yield portfolio, is illustrated below. Also illustrated below is the distribution of fixed income assets by sector, again including the high-yield portfolio.



## FIXED INCOME SECTOR DISTRIBUTION



#### FIXED INCOME MARKET OVERVIEW

The functioning of credit markets healed surprisingly quickly over the fiscal year, even as it became increasingly clear that healing the economy's woes was a long-term proposition. Bond market sectors that became dysfunctional and plunged in value during the financial crisis and recession recovered impressively. The Barclays High Yield Index returned 26.77% for the fiscal year, while investment grade commercial mortgage-backed securities returned 30.12%. Investment grade corporate bonds returned 15.92% while safe havens such as agency mortgage-backed securities returned 7.47% and U.S. Treasuries returned 6.67%. The Barclays Government/Credit Index returned 9.65%.

The Federal Reserve kept short-term rates near zero throughout the fiscal year. Yields on risk-free Treasuries trended up from the late fall of 2009 to the early spring of 2010 as the economy rebounded from the depths of the recession. Treasury yields then started a renewed plunge downward in the spring as it became clear that the U.S. recovery was weakening and a sovereign debt crisis in Europe hit the headlines. Over the fiscal year, the yield on the two-year Treasury declined from 1.11% to 0.60% and the yield on the thirty-year Treasury declined from 4.33% to 3.89%.

At the end of the fiscal year, the economic landscape was looking decidedly dismal. Inflation-adjusted GDP growth had slowed from a 5.0% annual rate in the quarter ended December 31, to 3.7% in the March 31 quarter, to a mere 1.7% rate in the June 30 quarter. With the economy too anemic to generate significant job creation, the unemployment rate remained at 9.5%. The housing market, so central to the financial crisis, remained deeply distressed. Mortgage delinquency and foreclosure rates seemed to have peaked, but were still near record levels, and the Case-Shiller Index of home prices remained over 28% below its peak with a massive inventory of unsold homes still overhanging the market. With confidence weak and credit availability still limited, consumers were in a deleveraging mode. There were fiscal problems at all levels of government. Consumer price inflation, excluding food and energy, was running at 0.9% annually. There was no prospect of a reversal of monetary policy in the foreseeable future.

The System moved to take advantage of opportunities in still-dislocated sectors of the credit markets during the fiscal year. A \$225 million initial allotment was made to a high-yield bond portfolio. To take advantage of dislocations in the residential and commercial mortgage-backed securities markets, a total commitment of \$120 million was made to two fund managers participating in the U.S. Treasury's Public-Private Investment Program (PPIP). As required by administrative regulation, both the high-yield bond portfolio and the PPIP commitments were approved by the Board as "additional categories of investments." Other than Board-approved "additional categories," fixed income investments are governed by conservative guidelines in administrative regulation. In those core portfolios, changes were made, such as increasing exposure to high quality commercial mortgage-backed securities, to capture superior relative value. By the end of the fiscal year, previously undervalued sectors had largely recovered and opportunities to pick up relative value had diminished.

As of mid-2010, bond yields were at historic lows, the economy was weak and uncertain, and there appeared no near-term prospect of a change in Federal Reserve policy of near zero short-term interest rates. Return prospects on core fixed income were clearly unappealing. While conditions seemed to portend an extended period of ultra-low yields, the risks of market losses were high in the event of rising rates or credit deterioration. Going forward in this environment, the focus was on risk control and fixed income's role in providing diversification and liquidity to the overall portfolio.

## **EQUITY INVESTMENTS**

As of June 30, 2010 the System's public equity investments had a market value of \$7.6 billion, representing 59.7% of total assets. Strong equity returns over the first nine months of the year prompted several rebalancing sales to reduce equity exposure back to target levels. The System divides its public equity investments into two broad categories: domestic and international.

The domestic portfolio had a market value of \$5.9 billion as of June 30, representing 46.3% of total assets. The benchmark for the domestic portfolio is the S&P 1500. The S&P 1500 is made up of three 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, 2010 was \$1.7 billion representing 13.4% of total assets. The benchmark for international equities is the Morgan Stanley Capital International All Country World Index ex US (MSCI ACWI-exUS), which represents the markets of 24 developed countries and 21 emerging markets 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. The System plans to continue increasing the international equity exposure during the coming fiscal year.

## **EQUITY MARKET OVERVIEW**

For the fiscal year 2010, equity markets staged a rebound as they recovered from the financial crisis. The Morgan Stanley Capital International (MSCI) World Index advanced 10.8%. Returns of domestic stocks, as measured by the Standard & Poor's 1500 Index, were 15.6%. The MSCI EAFE, which measures the returns of international developed markets, had a return of 6.4%. This was the second straight year that domestic equity returns outperformed those of the MSCI EAFE. Emerging market returns topped those of developed markets as the MSCI Emerging Markets Index advanced 23.5%.

Domestic stocks enjoyed strong returns for the first nine months of the fiscal year as the S&P 1500 rose 30.1%. Several events occurred late in the year which shook investor confidence and resulted in a decline of 11.2% over the last quarter. For the first nine months, the market continued to ride the rebound from the March 2009 lows, believing that the worst of the recession was over and that economic activity and corporate profits would improve. As the year progressed, it became apparent that the recovery would not be as robust or as certain as was believed earlier in the year. Real GDP growth, which registered 5.0% for the December 31 quarter, slowed to 1.7% for the June 30, 2010 quarter. Housing prices showed only modest improvement from their mid 2009 lows, and the unemployment rate ended the year at 9.5%, the same level as when the year began.

The past year was marked by several events which led to a decline in investor confidence and a late year stock selloff. Fears of sovereign debt default of several European countries had been simmering for months and reached a flashpoint when Standard & Poor's downgraded Greece's credit rating to junk status in April. Although Greece represents only about 2% of the European Union's GDP, many feared that the crisis could spread to other European countries such as Spain, Portugal, and Ireland, which, like Greece, have debt levels which are a large percentage of their GDP. Although the European Union agreed to provide financial relief to struggling countries, the damage to confidence had already occurred. Another event undermining investor confidence was dubbed the "flash crash" and occurred late in the afternoon of May 6, 2010. Within minutes the Dow Jones Industrial Average fell hundreds of points to an intra-day decline of almost 1,000 points before rebounding almost as fast to end the day down several hundred points. Many stocks traded at unexplainable levels, forcing the exchange to cancel many trades. The inability of the regulators to explain the event only added to investor anxiety. On April 20, 2010, a rig contracted by BP in the Gulf of Mexico exploded and sank, resulting in the largest domestic oil spill ever. The continual media coverage of the event and the resulting financial and ecological damage had a negative impact on consumer confidence. The accident had a direct effect upon energy stocks, and the energy sector was the worst performing sector for the second year in a row.

As was the case in 2009, the role government played with regard to regulation, stimulus, and monetary policy was central to investor confidence. Following the financial crisis and subsequent fallout, much attention was focused on Washington and what new regulations would be crafted regarding financial institutions and the amount of risk they could bear. "Too big to fail", the Madoff fraud, and the "flash crash" were hot topics on the regulatory agenda. While the government was winding down its Troubled Asset Relief Program (TARP), it still found itself in an ownership or creditor relationship with private companies. The government still controlled, or owned large stakes in, Fannie Mae, Freddie Mac, American International Group, Citigroup, Chrysler, and General Motors. On the stimulus front, the administration has made many efforts to boost the economy and create jobs with programs such as the American Recovery and Reinvestment Act of 2009, along with stimulus programs aimed at home ownership and auto sales. The Federal Reserve has continued its policy of keeping rates low to help stimulate the economy. With rates low, the Federal Reserve has also resorted to quantitative easing, whereby it increases the supply of money by buying securities held by banks and other financial institutions. The role of government with regard to regulation, stimulus, and monetary policy will play a central role in the performance of the equity markets during the coming year.

## **REAL ESTATE**

The System's real estate investments had a market value of \$419.6 million as of June 30, 2010, representing 3.3% 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

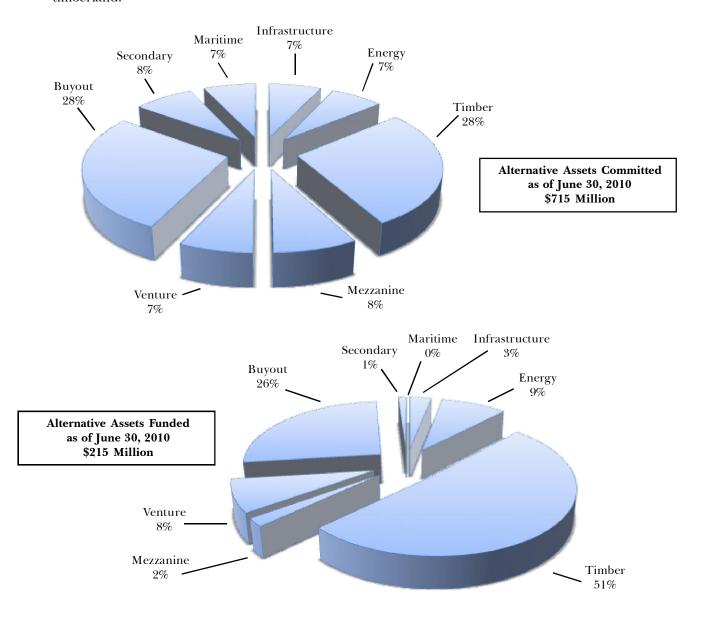
Real estate fundamentals improved in the second half of the fiscal year as commercial real estate investors sensed that property values were at or near a cyclical bottom. Both equity and debt capital flows into real estate picked up as occupancy rates and rents started to improve in select property types and markets. While broad market improvement in rents and occupancy will remain sluggish until a sustained improvement in job growth occurs, there were clearly opportunities for investors to take advantage of buying opportunities in a depressed market.

We expect the 2010-2011 fiscal year to be one of transition as fund managers continue to deleverage and refinance existing properties. While the contraction in demand appears to be largely over, new supply is expected to remain subdued for several more years. Opportunistic investments will be abundant for those investors who have available capital to provide financing at profitable rates and who are in a position to purchase properties at attractive levels from distressed sellers.



#### ALTERNATIVE ASSETS

As of June 30, 2010, the System had committed \$715 million to alternative investments and had funded \$215 million of those commitments. The percentage of the System's portfolio in alternative assets was 1.7%. 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 showed notable signs of improvement as the fiscal year progressed after experiencing a near standstill during the credit crisis. While nowhere near pre-crisis levels, the ability of fund managers to raise investment capital has clearly seen an uptick. An overall improvement in the stock market has led to increased activity in the IPO market, providing more opportunities for fund managers to exit existing investments. As the financial markets continue to heal, capital calls will pick up as more investment opportunities present themselves, although distributions will probably remain subdued over the next year.

Large buyout funds have been largely out of favor since the beginning of the financial crisis due to a lack of favorable financing. However, attractive opportunities were ample in the mezzanine and secondary sectors during the past year. Looking forward, it is anticipated that solid investment opportunities will be available in the distressed credit sector of the market, primarily in the middle market space. The financial crisis currently unfolding in the Eurozone should provide a favorable environment to invest in distressed credit markets in Europe

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#### **TIMBERLAND**

In addition to private equity, the System has invested in timberland in the alternative asset class. As of June 30, 2010 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.

## TIMBERLAND MARKET OVERVIEW

The tepid pace of recovery in both the U.S. housing market and the overall economy continues to adversely affect U.S. timber markets. A rebound in the housing market remains constrained by record foreclosures, tight credit conditions, and stubbornly high unemployment. However, going into next fiscal year many industry experts are cautiously optimistic about a gradual recovery in the demand for lumber. This optimism is based on an expected increase in U.S. construction spending and an anticipated uptick in home improvement and remodeling activity. Furthermore, as the global economy recovers, we should see a pickup in timber exports to countries such as China and South Korea.

## PORTFOLIOS MARKET VALUES \*\* June 30, 2010

## Internally Managed

Internally Managed	
Cash Equivalents	
Cash Collections Fund (Unallocated)	218,429,317
Fixed Income*	
Broad Market Bond Fund	1,029,183,758
Long Term Bond Fund	586,992,599
Intermediate Bond Fund	470,484,165
Internal Bond Fund	261,006,375
Life Insurance Trust	86,455,572
Tax Shelter Fund	448,085
Equity	
S & P 500 Stock Index Fund (Large Cap)	2,057,546,867
S & P 400 Stock Index Fund (Mid Cap)	317,995,096
S & P 600 Stock Index Fund (Small Cap)	221,369,425
Real Estate	
Internally Managed Fund	391,439,237
Subtotal	5,641,350,496 **
Externally Managed	
Fixed Income	
Galliard Capital Management	769,966,491
Ft. Washington Broad Market	728,479,433
Domestic Equity	
Todd - Veredus (Large Cap Core)	1,040,553,447
UBS (Large Cap Value)	752,827,093
GE Asset Management (Large Cap Growth)	550,145,051
Wellington (Large Cap Core)	393,820,288
Wellington (Mid Cap Core)	236,813,283
Wellington (Small Cap Core)	117,881,282
Todd - Veredus Opportunity Fund	97,236,017
UBS (130/30)	85,813,378
International Equity	
Todd - Veredus International	522,366,377
UBS International	514,470,507
Baillie Gifford EAFE Alpha	346,703,154
Baring Focused International Equity	319,619,142
Real Estate	
_ , , , , , _ ,	

 $continued \dots$ 

28,174,434

Prudential PRISA Fund

# PORTFOLIOS continued ... JUNE 30, 2010

Alternative Investments	
Molpus Woodlands Group Lake Superior Timberlands LLC	89,260,480
Hancock Bluegrass LLC - Oregon	19,321,729
Riverstone/Carlyle E & P Fund IV	22,564,831
KKR & Co European Fund III	21,836,749
KKR & Co Fund 2006	18,463,171
Ft. Washington Fund VI	12,364,325
Chrysalis Venture Fund III	10,195,122
Alinda Infrastructure Fund II	9,496,506
Ft. Washington Fund V	8,422,784
Landmark Equity Partners Fund XIV	2,702,755
CapitalSouth Partners Fund III	1,718,002
Oaktree Mezzanine Fund III	1,400,000
Parish Capital Fund III	1,136,304
J. P. Morgan Maritime Fund	320,034
Lexington Capital Partners Fund VII	137,228
Additional Categories	
Fort Washington High Yield Bond Fund	232,651,457
Marathon Legacy Securities PPIP	40,598,924
AG GECC PPIF, LP	39,696,703
Subtotal	7,037,156,481
Total Assets	12,678,506,977

- \* Excludes purchased interest of \$1,450,327 as June 30, 2010
- \*\* Detailed information concerning these market values of all KTRS investments is available upon request.
- \*\*\* As of June 30, 2010, the Scholarship Fund is no longer reported in the pension fund Investment portfolio. The value of this fund at June 30, 2010 was \$482,153.

	Investment Summary Fair Market Value – Total Funds June 30, 2010					
Type of Investment	Fair Value 07/01/09	Acquisitions	Appreciation (Depreciation)	Redemptions, Maturities & Paydowns	Fair Value 06/30/10	
Cash Equivalents \$	256,900,000	\$ 53,043,964,900	\$ -	\$ 52,993,486,600	\$ 307,378,300	
Fixed Income	3,785,836,400	2,233,431,200	240,528,800	2,132,923,000	4,126,873,400	
Equities	7,086,247,000	2,128,364,300	929,219,800	2,616,892,600	7,526,938,500	
Real Estate	425,746,100	2,390,800	(8,523,200)	-	419,613,700	
Alternative	177,330,400	129,673,700	9,203,400	16,571,900	299,635,600	
TOTAL \$	11,732,059,900	\$ 57,537,824,900	\$ 1,170,428,800	\$ 57,759,874,100	\$ 12,680,439,500	

Contracted Investment Management Expenses Fiscal Year 2009-10 (in thousands of dollars)						
Investment Manager Fees	Assets Under M	Management	]	Expense	Basis Points (1)	
Equity Managers Fixed Income Managers Real Estate Alternative Investments (2)	\$	4,978,249 1,731,097 28,174 299,636	\$ 	9,955 845 328 5,618		
Total	\$	7,037,156	\$	16,746	23.8	
Other Investment Services  Custodian Fees Consultant Fees Legal & Research Subscriptions/Services	\$	12,678,507	\$	502 364 50 544	0.4	
Total			_	1,460		
Grand Total			\$_	18,206	14.4	

- 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.

### Transaction Commissions Fiscal Year 2009-10

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
Barclays	1,826,271	\$ 63,006.25	0.0345
Bass / Baypoint Trading	42,300	1,692.00	0.0400
BB & T Capital Markets	74,300	2,972.00	0.0400
Bear Stearns & Co., Inc.	12,200	488.00	0.0400
Blair, William & Co	209,880	8,147.20	0.0388
BMO Capital Markets	63,900	2,556.00	0.0400
BNY ConvergEX Group	1,313,914	40,327.01	0.0307
Boenning & Scattergood	4,000	90.00	0.0225
BTIG	246,000	10,403.00	0.0423
Canacord Adams	69,700	2,788.00	0.0400
Cantor Fitzgerald & Co	62,600 10,340	2,406.00 413.60	$0.0384 \\ 0.0400$
Chapdelaine Institutional	· · · · · · · · · · · · · · · · · · ·		
CIBC Oppenheimer Worldmarket Citigroup Global	87,800 1,006,706	3,512.00 30,070.03	$0.0400 \\ 0.0299$
Collins Stewart LLC	6,900	288.00	0.0299
Cowen & Co	306,690	11,517.60	0.0376
Credit Research & Trading LLC	41,700	1,668.00	0.0400
Credit Suisse Sec. LLC	3,410,840	116,603.20	0.0342
Crowell Weedon & Co	82,100	3,067.00	0.0374
CRT Capital LLC	14,100	564.00	0.0400
CSI US Institutional (Calyon)	43,200	1,728.00	0.0400
Cuttone & Co Inc	6,200	139.50	0.0225
D A Davidson & Co	47,400	1,896.00	0.0400
Dahlman Rose & Co LLC	14,600	584.00	0.0400
Deutsche Bank	618,650	28,928.75	0.0468
Dowling & Partners	60,200	2,408.00	0.0400
First Kentucky Securities Corp	2,421,500	80,182.00	0.0331
Fox Pitt Kelton Inc	16,200	648.00	0.0400
Freidman Billings	183,100	7,324.00	0.0400
FTN Financial	3,600	144.00	0.0400
Goldman Sachs	3,208,992	105,126.88	0.0328
Heflin & Co	73,200	2,928.00	0.0400
Hudson Securities	1,300	52.00	0.0400
ICAP Corporates LLC	9,600	384.00	0.0400
Instinet	9,053	103.03	0.0114
Investment Tech Grp Transition	10,118,787	88,092.45	0.0087
Investment Technology Grp	56,588,062	718,544.07	0.0127
ISI Group	3,401,610	110,749.52	0.0326
J.J.B. Hilliard, W.L. Lyons	3,157,502	103,835.07	0.0329
Janney Montgomery Scott Inc	72,300	2,892.00	0.0400
Jefferies & Co.	556,680	19,183.60	0.0345
JMP Securities	108,800	4,422.00	$0.0406 \\ 0.0400$
Jones & Associates  IP Morgan & Chase	2,500 1,098,385	$   \begin{array}{r}     100.00 \\     26,557.23   \end{array} $	0.0400
JP Morgan & Chase	43,366	7,731.89	0.0242
Keefe Bruyette & Woods Kellogg Partners Inst Svs	1,300	29.25	0.1783
Keybanc Capital	18,200	3,227.00	0.1773
Knight Equity Markets	251,200	9,797.00	0.0390
LaBranche Financial Svs LLC	46,400	1,856.00	0.0400
Lazard Freres & Co.	3,038,630	102,561.20	0.0338
Leerink Swann & Co.	54,800	2,215.00	0.0404
Legent Clearing Corp	14,000	560.00	0.0400
Lexington Investment Co.	1,271,570	39,786.60	0.0313
Liquidnet Inc	7,180,595	102,243.76	0.0142
Longbow Securities LLC	3,800	152.00	0.0400
MacQuarie Securities Inc	65,200	2,678.00	0.0411

### Transaction Commissions continued . . .

COMPANIES	SHARES TRADED	COMMISSIONS	COMMISSION PER SHARE
Melvin Securities Inc	4,400	44.00	0.0100
Merrill Lynch	10,913,793	204,129.33	0.0187
Miller Tabak & Co. LLC	40,200	1,608.00	0.0400
Morgan Keegan	1,919,200	63,000.50	0.0328
Morgan Stanley Smith Barney-Hunt	3,074,524	100,980.84	0.0328
Morgan Stanley Smith Barney-Louv	1,876,300	61,692.00	0.0329
Morgan Stanley Smith Barney-NKY	3,049,400	101,229.00	0.0332
Morgan Stanley	2,417,049	51,930.77	0.0215
Murphy & Durieu	27,400	616.50	0.0225
Needham	38,700	1,548.00	0.0400
Nomura Securities Intrntl Inc	10,800	-	0.0000
Nova Capital Markets LLC	32,900	1,316.00	0.0400
OTA Limited Partners	68,800	2,752.00	0.0400
Pali Capital Inc.	45,500	1,820.00	0.0400
Pershing LLC	125,850	3,363.63	0.0267
Pickering Energy Partners Inc.	6,800	272.00	0.0400
Pipeline Trading	65,000	650.00	0.0100
Piper Jaffray	115,100	4,398.00	0.0382
Pulse Trading	448,490	9,174.53	0.0205
R W Baird	171,600	5,761.00	0.0336
Raymond James & Assoc	5,375,858	175,434.86	0.0326
RBC Capital Markets	207,300	8,218.00	0.0396
Ross Sinclaire & Assoc	1,219,500	40,110.00	0.0329
Sandler O'Neill	28,400	7,350.60	0.2588
Sanford C Bernstein	856,527	13,043.27	0.0152
Simmons & Co	65,750	2,630.00	0.0400
SI Levinson & Sons LLC	18,200	728.00	0.0400
Soleil Securities Co	17,600	704.00	0.0400
State Street Global	12,500	375.00	0.0300
Stephens Inc.	24,300	3,819.00	0.1572
Sterne, Agee & Leach	191,300	8,689.00	0.0454
Stifel, Nicolaus & Co	2,649,300	88,755.00	0.0335
Stifel, Nicolaus & Co-Louisville	1,270,600	43,846.00	0.0345
Suntrust Robinson	24,400	976.00	0.0400
Susquehanna Brokerage	351,326	10,473.50	0.0298
The Benchmark Company LLC	14,200	568.00	0.0400
Think Equity Partners	8,600	344.00	0.0400
Thomas Weisel Partners	63,900	1,484.00	0.0232
UBS/Paine Webber Securities	1,939,009	37,000.98	0.0191
UBS/Paine Webber-Louisville	5,107,300	162,385.49	0.0318
Wachovia / First Clearing Corp	7,100	284.00	0.0400
Weeden & Co	3,270,600	108,422.00	0.0332
Wells Fargo Securities, LLC	124,000	5,120.00	0.0413
White Cap Trading LLC	4,400	99.00	0.0225
WUB Capital Group Inc	42,000	1,680.00	0.0400
GRAND TOTAL	150,048,499	\$ 3,221,194.49	0.0215

The over-the-counter commission rate on medium to large capitalization stocks is assumed to be \$.03 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 2009-10, the System bought small capitalization IPOs that generated \$43,352 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 \$3,221,194. 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 Convergex. Trading commissions of \$30,399 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, 2010

<u>Rank</u>	<u>Name</u>	<u>Market Value</u>	Percentage of Equities
1	Microsoft Corp	115,166,684	1.839
2	Exxon Mobil Corp	106,591,180	1.702
3	Apple Inc	103,743,549	1.657
4	Pepsico Inc	93,166,281	1.488
5	AT &T Inc	82,812,070	1.322
6	Johnson & Johnson	81,913,503	1.308
7	Cisco Systems Inc	76,585,114	1.223
8	Qualcomm Inc	69,987,163	1.117
9	Hewlett Packard	65,526,656	1.046
10	Chevron Corp	60,874,967	0.972

### Top Ten Fixed Income Holdings (2) by Market Value June 30, 2010

Rank Description	<u>Maturity</u>	<u>Coupon</u>	<u>Par</u>	Market Value	Percent of Fixed Income
1 U S Treasury Bonds	8/15/2023	6.250	61,500,000.00	79,719,375.00	2.048
2 U S Treasury Notes	5/15/2020	3.500	75,640,000.00	79,161,798.40	2.033
3 U S Treasury Notes	6/30/2016	3.250	40,000,000.00	42,422,000.00	1.090
4 U S Treasury TIPS	4/15/2012	2.000	37,000,000.00	41,177,296.30	1.058
5 U S Treasury Notes	3/31/2015	2.500	38,000,000.00	39,377,500.00	1.011
6 FNMA Notes	1/15/2030	7.130	25,000,000.00	34,031,250.00	0.874
7 U S Treasury Bonds	8/15/2029	6.130	22,000,000.00	29,225,680.00	0.751
8 U S Treasury TIPS	1/15/2029	2.500	25,000,000.00	28,689,475.75	0.737
9 CMO FHR 3095 JE	7/15/2031	5.500	23,604,000.00	24,862,109.72	0.639
10 U S Treasury Notes	11/15/2013	4.250	22,000,000.00	24,261,820.00	0.623

<sup>(1)</sup> Includes only actively managed separate accounts.

<sup>(2)</sup> 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 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, 2010, approximately \$1.2 billion in defined benefit pension payments were distributed to annuitants living in Kentucky. Approximately \$325 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 Consultant**

Hewitt Ennis Knupp + Associates

#### **Investment Custodian/Subcustodian**

Farmers Bank & Capital Trust Company 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 Landmark Partners **Lexington Partners** Oaktree Capital Management Parish Capital Advisors, LLP Audax Group J.P. Morgan Asset Management Marathon Legacy Securities GP, LLC AG GECC PPIF GP, LLC

#### Attorney

Schottenstein, Zox & Dunn, Co.

# Actuarial Section

Report of the Actuary on the Annual Valuation

for Fiscal Year ending June 30, 2010



December 10, 2010

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, 2010. 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, 2013 required to support the benefits of the System are 29.41% of payroll for university members hired before July 1, 2008, 30.41% of payroll for university members hired on and after July 1, 2008, 32.37% of payroll for non-university members hired on and after July 1, 2008.

These rates represent an increase since the previous valuation in the required employer contribution rate of 1.27% of payroll for the 2012/2013 fiscal year. There has been a net decrease in the expected state special appropriation from 3.88% to 3.69%, or -0.19% of payroll. Therefore, for the 2012/2013 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 7.27%; 1.46% from this valuation and 5.81% 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.

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 to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under GASB 25 and 27.

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

The valuation reflects that a portion of the annual required contributions to the fund have been allocated to the Medical Insurance Fund and are being repaid over time.

Board of Trustees December 10, 2010 Page 2

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

Edward I Noche

Senior Actuary

### Report of Actuary on the Valuation Prepared as of June 30, 2010 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, 2010	June 30, 2009
Number of active members	76,387	75,937
Annual salaries	\$ 3,321,614	\$ 3,253,077
Number of annuitants and beneficiaries	43,134	42,050
Annual allowances	\$ 1,352,158	\$ 1,280,316
Assets		
Market value	\$12,456,619	\$11,515,884
Actuarial value	\$14,851,330	\$14,885,981
Unfunded actuarial accrued liability	\$ 9,492,986	\$ 8,514,445
Funded Ratio	61.0%	63.6%
Amortization period (years)	30	30

### **Contribution Rates for University Members**

Valuation Date	June 30, 2010 June 30, 2009			0, 2009
For Fiscal Year Ending	June 30, 2013		June 30, 2012	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008
Pension Plan: Normal Accrued liability Total	13.31 % 16.10 29.41 %	13.31 % <u>17.10</u> 30.41 %	13.41 % 14.73 28.14 %	13.41 % 15.73 29.14 %
Member State (ARC) Total	7.625% 21.785 29.41 %	7.625% 22.785 30.41 %	7.625% 20.515 28.14 %	7.625% 21.515 29.14 %
Life Insurance Fund: State *	0.05 %	0.05 %	0.05 %	0.05 %
Medical Insurance Fund:  Member State Match State Additional Total	1.43 % 1.43 <u>0.00</u> 2.86 %	1.75 % 0.75 0.00 2.50 %	$ \begin{array}{c} 0.75 \% \\ 0.75 \\ \underline{-0.00} \\ 1.50 \% \end{array} $	$ \begin{array}{c} 1.75 \% \\ 0.75 \\ \underline{0.00} \\ 2.50 \% \end{array} $
Total Contributions	32.32 %	<u>32.96</u> %	<u>29.69</u> %	31.69 %
Member Statutory State Statutory Required Increase * State Special Total	90.55 % 12.305 7.27 3.69 32.32 %	9.375 % 12.625 7.27 <u>3.69</u> 32.96 %	8.375% 11.625 5.81 3.88 29.69 %	9.375% 12.625 5.81 3.88 31.69 %

<sup>\*</sup> The 2009 Valuation Results were revised from last year due to a reduction in the Life Insurance Fund State Contribution Rate from 0.17% to 0.05%. This in turn lowered the required increase for the 2012 fiscal year from 5.93% to 5.81%.

### **Contribution Rates for Non-University Members**

Valuation Date	Jun	e 30, 2010	June 30, 2009		
For Fiscal Year Ending	Jur	June 30, 2013		June 30, 2012	
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	
Pension Plan: Normal	17.21 %	17.21 %	17.19 %	17.19 %	
Accrued liability	15.16	16.16	13.91	14.91	
Total	32.37 %	33.37 %	31.10 %	32.10 %	
Member	9.105%	9.105%	9.105%	9.105%	
State (ARC) Total	23.265 32.37 %	24.265 33.37 %	21.995 31.10 %	22.995 32.10 %	
Life Insurance Fund:					
State *	0.05 %	0.05 %	0.05 %	0.05 %	
Medical Insurance Fund:					
Member	1.75 %	1.75 %	0.75 %	1.75 %	
State Match	1.75	0.75	0.75	0.75	
State Additional Total	<u>0.00</u> 3.50 %	<u>0.00</u> 2.50 %	$\frac{0.00}{1.50}$ %	$\frac{0.00}{2.50}$ %	
iotai	3.30 %	2.30 %	1.30 %	2.30 70	
Total Contributions	35.92 %	<u>35.92</u> %	32.65 %	34.65 %	
Member Statutory	10.855%	10.855%	9.855%	10.855%	
State Statutory	14.105	14.105	13.105	14.105	
Required Increase *	7.27	7.27	5.81	5.81	
State Special	3.69	3.69	3.88	3.88	
Total	35.92 %	35.92 %	32.65 %	34.65 %	

<sup>\*</sup> The 2009 Valuation Results were revised from last year due to a reduction in the Life Insurance Fund State Contribution Rate from 0.17% to 0.05%. This in turn lowered the required increase for the 2012 fiscal year from 5.93% to 5.81%.

- 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, 2010 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.



### 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, 2010 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries (\$1,000's)
Full Time Part Time	58,983 17,404	\$ 3,211,563 110,051
Total	<u>76,387</u>	\$ 3,321,614

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, 2010

Group	Number	Annual Retirement Allowances <sup>1</sup> (\$1,000's)
Service Retirements Disability Retirements Beneficiaries of Deceased Members	37,667 2,284 	\$ 1,237,529 58,736 55,893
Total	43,134	<u>\$ 1,352,158</u>

<sup>&</sup>lt;sup>1</sup> Includes cost-of-living adjustments effective through July 1, 2010.

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, 2010 the market value of Pension Plan assets for valuation purposes held by the System amounted to \$12,456,619,082. 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, 2010 was \$14,851,329,749. This amount includes a Pension Obligation Bond of \$465,000,000 contributed on August 26, 2010. Schedule B shows the development of the actuarial value of assets as of June 30, 2010.
- 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 \$9,333,934,383 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 \$14,790,872,620 of which \$990,508,323 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 \$219,508,635. The total actuarial accrued liability of the System amounts to \$24,344,315,638. Against these liabilities, the System has present assets for valuation purposes of \$14,851,329,749. When this amount is deducted from the actuarial accrued liability of \$24,344,315,638, there remains \$9,492,985,889 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 13.31% of payroll for university members and 17.21% 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 9.055% of annual salary to the System and each non-university member who becomes a member before July 1, 2008 will contribute 10.855% of annual salary. Of this amount, for each university member, 1.43% is paid to the Medical Insurance Fund for medical benefits and for each non-university member, 1.75% if paid to the Medical Insurance Fund for medical benefits. The remainder, 7.625% for university members and 9.105% for non-university members, is applicable for the retirement benefits taken into account in the valuation.
- 2. Section 161.540 also provides that each university member who becomes a member on or after July 1, 2008 will contribute 9.375% of annual salary to the System and each non-university member who becomes a member on or after July 1, 2008 will contribute 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 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 2012/2013 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, 0.05% of payroll will be allocated to the Life Insurance Fund. Based on the results of the valuation, an additional 7.27% 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 3.69% of total payroll will be made by the State. Therefore, the total required employer contribution rate to the Pension Plan is 21.785% for university members who become members before July 1, 2008 and 22.785% for university members who become members on or after July 1, 2008. The total required employer contribution rate to the Pension Plan is 23.265% for non-university members who become members before July 1, 2008 and 24.265% 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 or after 7/1/2008
<u>Member</u>		
Statutory Total	9.055%	9.375%
Statutory Medical Insurance Fund Contribution to Pension Plan	<u>(1.43)</u> 7.625%	<u>(1.75)</u> 7.625%
<u>Employer</u>		
Statutory Matching Total Statutory Medical Insurance Fund Supplemental Funding Subtotal	9.055% (1.43) 3.250 10.875%	9.375% (0.75) <u>3.250</u> 11.875%
Life Insurance Additional to Maintain 30-Year Amortization Special Appropriation Contribution to Pension Plan	(0.05) % $7.27$ $3.69$ $21.785%$	(0.05) % 7.27 <u>3.69</u> 22.785%
Total Contribution to Pension Plan	29.41 %	30.41 %



### Contribution Rates by Source Non-University

	Members hired before 7/1/2008	Members hired on or after 7/1/2008
<u>Member</u>		
Statutory Total Statutory Medical Insurance Fund Contribution to Pension Plan	10.855% (1.75) 9.105%	10.855% (1.75) 9.105%
<u>Employer</u>		
Statutory Matching Total Statutory Medical Insurance Fund Supplemental Funding Subtotal	$   \begin{array}{r}     10.855\% \\     (1.75) \\     \underline{3.250} \\     12.355\%   \end{array} $	10.855% (0.75) 3.250 13.355%
Life Insurance Additional to Maintain 30-Year Amortization Special Appropriation Contribution to Pension Plan	$(0.05) \%$ $7.27$ $\underline{3.69}$ $23.265\%$	$(0.05) \%$ $7.27$ $\underline{3.69}$ $24.265\%$
Total Contribution to Pension Plan	32.37 %	33.37 %

4. The valuation indicates that normal contributions at the rate of 13.31% of active university members' salaries are required to meet the cost of benefits currently accruing. The normal rate for non-university members is 17.21%. 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 16.10% for university members hired before July 1, 2008, 17.10% for university members hired on and after July 1, 2008, 15.16% for non-university members hired before July 1, 2008, and 16.16% for non-university members hired on and after July 1, 2008. These rates include special appropriations of 3.69% of payroll to be made by the State. These rates are shown in the following table.

### **Actuarially Determined Contribution Rates**

	Percentage of Active Members' Salaries					
Rate	UNIVERSITY		NON-UNIVERSITY			
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008		
Normal Accrued Liability *	13.31% <u>16.10</u>	13.31% <u>17.10</u>	17.21% <u>15.16</u>	17.21% <u>16.16</u>		
Total	29.41%	30.41%	32.37%	33.37%		

<sup>\*</sup> Includes special appropriations of 3.69% of payroll to be made by the State.



5. The unfunded actuarial accrued liability amounts to \$9,492,985,889 as of the valuation date. Accrued liability contributions at the rates in the table above are sufficient to amortize the unfunded actuarial accrued liability over a 30-year period, based on the assumption that the payroll will increase by 4.0% annually.

### Section VI - COMMENTS ON LEVEL OF FUNDING

- 1. Our calculations indicate that the contribution rates shown in the previous section will be sufficient to cover the benefits of the System, the annual 1.5% increases in the allowances of retired members and beneficiaries, and the liabilities for minimum annuities, ad hoc increases and sick leave allowances granted after 1981.
- 2. The valuation indicates that the present statutory contribution rates, supplemental funding and special appropriations, if continued at the current level percentage, along with an additional required contribution of 7.27%, not currently provided in statute, are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a period of 30 years. However, as existing special contributions expire, the statutory contributions or supplemental funding will be required to increase as an equal percentage of payroll, in order to amortize the unfunded liability within a period of 30 years.
- 3. 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. It is our understanding that beginning with the 2011 fiscal year, there will be no further loans for stabilization funding. The following table shows the amounts borrowed, annual payments and remaining balances as of June 30, 2010:

### Medical Insurance Fund Stabilization Funding

FISCAL YEAR	LOAN AMOUNT	ANNUAL PAYMENT	BALANCE AS OF JUNE 30, 2010
2004/2005	\$ 29,169,700	\$ 4,249,600	\$ 17,193,538
2005/2006	62,294,800	9,075,500	42,598,781
2006/2007	73,000,000	10,207,400	53,174,638
2007/2008	125,000,000	18,280,000	106,522,125
2008/2009*	133,400,000	19,516,900	123,970,500
2009/2010**	134,200,000	19,611,300	134,200,000
TOTAL	\$ 557,064,500	\$ 80,940,700	\$ 477,659,582

 <sup>\*</sup> Includes \$125,000,000 for Stabilization Funding and \$8,400,000 for non-single subsidy funding.
 \*\* Includes \$125,000,000 for Stabilization Funding and \$9,200,000 for non-single subsidy funding.



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 7.27% of payroll for the fiscal year ending June 30, 2013, as shown in the following table:

VALUATION DATE	FISCAL YEAR	INCREASE	CUMULATIVE INCREASE
June 30, 2004	June 30, 2007	0.11%	0.11%
June 30, 2005	June 30, 2008	1.21	1.32
June 30, 2006	June 30, 2009	0.56	1.88
June 30, 2007	June 30, 2010	0.58	2.46
June 30, 2008	June 30, 2011	1.13	3.59
June 30, 2009	June 30, 2012	2.22*	5.81*
June 30, 2010	June 30, 2013	1.46	7.27

<sup>\*</sup> The 2009 Valuation Results were revised from last year due to a reduction in the Life Insurance Fund State Contribution Rate from 0.17% to 0.05%. This in turn lowered the required increase for the 2012 fiscal year from 5.93% to 5.81%.

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 \$978,540,691 in the unfunded accrued liability from \$8,514,445,198 to \$9,492,985,889 during the year ending June 30, 2010.

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

ITEM	AMOUNT OF INCREASE/ (DECREASE)
Interest (7.5%) added to previous unfunded accrued liability	\$ 638,583
Expected accrued liability contribution	(294,071)
Contributions allocated to the Medical Insurance Fund (MIF) for Stabilization Funding during 2009/2010 fiscal year with interest	139,233
Repayment of prior year's MIF Stabilization Funding with interest	t (63,544)
Pension Obligation Bond contribution made in August 2010	(465,000)
Experience:	
Valuation asset growth	1,026,250
Pensioners' mortality	20,027
Turnover and retirements	18,096
New entrants	56,140
Salary increases	(97,173)
Amendments	0
Assumption and method changes	0
Total	\$ 978,541

### **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, 2010

GROUP	NUMBER
Retirees and beneficiaries currently receiving benefits	43,134
Terminated employees entitled to benefits but not yet receiving benefits	5,637
Active plan members	76,387
Total	125,158

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)
6/30/2005	\$ 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
6/30/2010	14,851,330	24,344,316	9,492,986	61.0	3,321,614	285.8



3. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010. Additional information as of the latest actuarial valuation follows.

Valuation Date	06/30/2010	Actuarial Assumptions: Investment Rate of Return*
Actuarial cost method	Projected unit credit	7.50% Projected Salary Increases*
Amortization method	Level percent of pay, open	4.00 - 8.20%
Remaining amortization period	30 years	Cost-of-Living Adjustments 1.50% Annually
Asset valuation method	5-year smoothed market	*Includes Inflation at 4.00%

### **Schedule of Employer Contributions**

<u>Fiscal Year Ended</u> <u>June 30</u>	Annual Required Contributions	Percentage Contributed
2005	\$ 412,946,526	93%
2006	464,152,466	87
2007	494,565,369	88
2008	563,789,483	83
2009	600,282,735	74
2010	633,938,088	76

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2010. 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, 2010

(a)	Employer annual required contribution	\$ 633,938,088
(b)	Interest on net pension obligation	30,996,927
(c)	Adjustment to annual required contribution	 22,094,107
(d)	Annual pension cost: (a) + (b) - (c)	\$ 642,840,908
(e)	Employer contributions made for fiscal year ending June 30, 2010	 479,805,088
(f)	Increase (decrease) in net pension obligation: (d) - (e)	\$ 163,035,820
(g)	Net pension obligation beginning of fiscal year	 413,292,362
(h)	Net pension obligation end of fiscal year: (f) + (g)	\$ 576,328,182



### TREND INFORMATION

YEAR Ending	ANNUAL PENSION COST (APC)	PERCENTAGE OF APC CONTRIBUTED	NET PENSION OBLIGATION (NPO)
June 30, 2008	\$ 567,007,965	82%	\$ 250,170,583
June 30, 2009	605,671,714	73	413,292,362
June 30, 2010	642,840,908	75	576,328,182

SCHEDULE A
Results of the Valuation Prepared as of June 30, 2010 (\$1,000's)

1.	ACTU	JARIAL ACCRUED LIABILITY				
	Prese	nt value of prospective benefits payable in respect of:				
	(a)	Present active members - Service retirement benefits - Disability retirement benefits - Death and survivor benefits - Refunds of member contributions Total	75	5,018 3,535 2,141 2,240	\$ 9,5	333,934
	(b)	Present inactive members and members entitled to deferred vested benefits:			9	219,509
	(c)	Present annuitants and benficiaries: - Service retirement benefits - Disability retirement benefits - Death and survivor benefits Total		8,755 7,724 4,394	<u>\$ 14,7</u>	7 <u>90,873</u>
	(d)	Total actuarial accrued liability			\$ 24,3	344,316
2.	PRES	ENT ASSETS FOR VALUATION PURPOSES			\$ 14,8	851,330
3.	UNFI [ 1(d)	UNDED ACTUARIAL ACCRUED LIABILITY - 2 ]			\$ 9,4	192,986
4.	NOR	MAL CONTRIBUTION RATE	UNIVERS	<u>SITY</u>	<u>No</u> Unive	ON- CRSITY
	(a) (b) (c)	Actuarial present value of benefits accruing annually Annual payroll of active members  Normal contribution rate	\$ 200	7,520 6,823	\$ 3,	536,038 114,792
		[ (4(a) / 4(b) ]	13	.31%		17.21%



### Solvency Test (in millions of dollars)

Fiscal	(1) Active	(2) Retirants	(3) Active Members (Employer			Accrued Lered by Ass	
Year Ending	Member Contributions	And Beneficiaries	Financed Portion)	Valuation Assets	(1)	(2)	(3)
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
6/30/2010	3,196.3	15,010.4	6,137.6	14,851.3	100	78	0

## SCHEDULE B Development of Actuarial Value of Assets as of June 30, 2010

Actuarial Value of Assets Beginning of Year	\$ 14,885,981,251
Market Value of Assets End of Year	\$ 12,456,619,082
Market Value of Assets Beginning of Year	\$ 11,515,883,575
Cash Flow	
a. Contributions	\$ 777,419,053
b. Benefit Payments	1,337,119,450
c. Administrative Expense	8,830,054
d. Net: (4)a - (4)b - (4)c	\$ (568,530,451)
Investment Income	
a. Market total: (2) - (3) - (4)d	\$ 1,509,265,958
b. Assumed Rate	7.50%
c. Amount for Immediate Recognition:	
$[(3) \times (5)b] + [(4)d \times (5)b \times 0.5]$	\$ 842,371,376
d. Amount for Phased-In Recognition: (5)a - (5)c	\$ 666,894,582
Phased-In Recognition of Investment Income	
a. Current Year: 0.20 x (5)d	\$ 133,378,916
b. First Prior Year	(611,235,941)
c. Second Prior Year	(409,879,449)
d. Third Prior Year	190,240,386
e. Fouth Prior Year	(75,996,339)
f. Total Recognized Investment Gain	\$ (773,492,427)
Actuarial Value of Assets End of Year:	
(1) + (4)d + (5)c + (6)f	\$ 14,386,329,749
Additional Contribution from Pension Obligation Bond	\$ 465,000,000
Final Actuarial Value of Assets End of Year: (7) + (8)	\$ 14,851,329,749
Difference Between Market & Actuarial Values: (2) - (7) (prior to Pension Obligation Bond)	\$ (1,929,710,667)

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

	For the Yea	ar Ending
Receipts for the Year	<u>June 30, 2010</u>	<u>June 30, 2009</u>
Contributions		<del>.</del>
Members	\$ 297,613,965	\$ 293,678,564
Employers	479,805,088	442,549,935
Total	\$ 777,419,053	\$ 736,228,499
Net Investment Income	1,509,265,958	(2,020,682,522)
TOTAL	\$ 2,286,685,011	\$ (1,284,454,023)
Disbursements for the Year		
Benefit Payments	\$ 1,321,808,770	\$ 1,252,980,407
Refunds to Members	15,310,680	15,208,419
Medical Insurance Payments	0	0
Miscellaneous, including expenses	8,830,054	8,165,757
TOTAL	\$ 1,345,949,504	\$ 1,276,354,583
Excess of Receipts over Disbursements	\$ 940,735,507	\$ (2,560,808,606)
Reconciliation of Asset Balances		
Asset Balance as of the Beginning of the Year	\$ 11,515,883,575	\$ 14,076,692,181
Excess of Receipts over Disbursements	940,735,507	(2,560,808,606)
Asset Balances as of the End of the Year	\$ 12,456,619,082	\$ 11,515,883,575
Rate of Return	13.44%	-14.64%

<sup>\*</sup> 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.

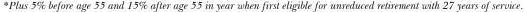
INVESTMENT RATE OF RETURN: 7.5% per annum, compounded annually.

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:

	 			THDRAW	'AL	RETIRE	MENT
AGE	DEATH	DISABILITY	S 0 - 4	ERVICE 5 - 9	10+	Before 27 Years	
AGE		DISABILITY	0.4	9-9	10 <sup>+</sup>	of Service	of Service*
20	0.003%	0.01%	9.00%				
25	0.010	0.01	9.00	1.50%	i		
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





		<u> </u>		WITHDRAWAL SERVICE		RETIREN	TIREMENT
AGE	DEATH	   DISABILITY   	0 - 4	5 - 9	10+	Before 27 Years of Service	After 27 Year of Service*
20	0.002%	0.03%	6.00%				
25	0.007	0.03	8.50	3.00%	Ï		
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

**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 . . .

	Service I	Retirement	   Disabilit	y Retirement
Age	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
	1	I	1	1

**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

### **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, 2010. 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:

Number of Children	<u>1</u>	<u>2</u>	<u>3</u>	<u>4 or more</u>
<b>Annual Allowance</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**

<u>Members before 7/1/2008:</u> 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.

<u>Members on and after 7/1/2008:</u> 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, 2010 by Age and Service Groups

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under Total Pay Avg. Pay	2,552 41,410,302 16,227								2,552 41,410,302 16,227
25 to 29 Total Pay Avg. Pay	7,342 217,949,175 29,685	1,401 63,246,757 45,144							8,743 281,195,932 32,162
30 to 34 Total Pay Avg. Pay	3,818 111,452,897 29,191	4,865 227,947,351 46,855	937 49,974,032 53,334						9,620 389,374,280 40,475
35 to 39 Total Pay Avg. Pay	2,817 74,313,656 26,380	2,509 120,604,468 48,069	4,012 225,193,125 56,130	706 42,603,634 60,345					10,044 462,714,883 46,069
40 to 44 Total Pay Avg. Pay	3,879 79,944,872 20,610	1,808 88,446,267 48,919	2,277 128,003,793 56,216	2,904 178,515,920 61,472	723 46,125,557 63,797				11,591 521,036,409 44,952
45 to 49 Total Pay Avg. Pay	1,814 44,689,939 24,636	1,269 62,904,777 49,570	1,334 75,802,300 56,823	1,528 95,801,767 62,697	2,155 138,579,018 64,306	639 42,056,954 65,817			8,739 459,834,755 52,619
50 to 54 Total Pay Avg. Pay	1,657 34,303,799 20,702	1,023 50,798,111 49,656	1,173 67,243,927 57,326	1,232 77,191,072 62,655	1,377 90,754,269 65,907	1,645 113,263,204 68,853	476 32,669,109 68,633		8,583 466,223,491 54,319
55 to 59 Total Pay Avg. Pay	2,510 39,542,880 15,754	755 39,660,051 52,530	944 56,148,619 59,479	1,083 70,541,207 65,135	1,158 77,380,607 66,823	823 59,083,162 71,790	707 54,593,179 77,218	103 8,806,679 85,502	8,083 405,756,384 50,199
60 to 64 Total Pay Avg. Pay	2,844 39,563,979 13,911	431 23,085,640 53,563	487 30,037,551 61,679	573 37,299,758 65,096	583 40,586,147 69,616	372 27,094,465 72,835	165 13,907,160 84,286	122 11,098,734 90,973	5,577 222,673,434 39,927
65 & over Total Pay Avg. Pay	2,096 19,263,491 9,191	148 7,200,683 48,653	134 8,811,446 65,757	119 8,107,359 68,129	129 9,067,291 70,289	98 7,442,506 75,944	47 3,632,962 77,297	84 7,868,617 93,674	2,855 71,394,355 25,007
Total Total Pay Avg. Pay	31,329 702,434,990 22,421	14,209 683,894,105 48,131	11,298 641,214,793 56,755	8,145 510,060,717 62,623	6,125 402,492,889 65,713	3,577 248,940,291 69,595	1,395 104,802,410 75,127	309 27,774,030 89,884	76,387 3,321,614,225 43,484

Average Age: 43.5 Average Service: 10.8



### **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	761	\$ 8,716,500	\$ 11,454
50 - 54	1,166	38,144,970	32,714
55 - 59	6,003	221,760,971	36,942
60 - 64	10,935	386,467,941	35,342
65 - 69	8,197	271,854,309	33,165
70 - 74	5,781	176,024,375	30,449
75 - 79	4,103	113,668,963	27,704
80 & Over	6,188	135,519,537	21,900
TOTAL	43,134	\$1,352,157,566	\$ 31,348

### **SCHEDULE F**

Table 3

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

	ADDED	TO ROLLS	REMOVED	FROM ROLLS	ROLLS AT	END OF YEAR		
Year Ended	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Number	Annual Allowances (in millions)	Increase in Annual Allowances	Average Annual Allowance
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
2010	2,105	93.7	1,021	21.8	43,134	1,352.2	5.6	31,348



# Actuarial Section

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

for Fiscal Year ending June 30, 2010



### Cavanaugh Macdonald

CONSULTING, LLC

December 16, 2010

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, 2010. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The valuation indicates a total annual required contribution of 7.20% of active member payroll for the Medical Insurance Fund payable for the fiscal year ending June 30, 2013 is required to support the benefits of the Kentucky Employees Health Plan and the Medicare Eligible Health Plan. Of this amount, 1.43% of payroll is estimated to be paid by University members entering the system prior to July 1, 2008 and 1.75% of payroll is estimated to be paid by all other members, leaving 5.77% and 5.45% respectively, as the remaining annual required contribution. This annual required contribution reflects the assets currently held in the Medical Insurance Fund. Given the changes to benefits, funding, and investment policy, the discount rate for valuing liabilities is 8.00%. Schedule A provides the liabilities of the medical plans under the alternate discount rate assumptions of 4.50% and 7.50%.

The Medical Insurance Fund valuation takes into account, as appropriate, the effect of amendments to the medical plans enacted through the most recent session of the Legislature. These changes include: an increase in cost sharing for current and future retirees not eligible for Medicare in the form of a minimum contribution based upon the projected Medicare Part B premium (phased-in over three years, beginning July 1, 2010); payment by the Commonwealth of KTRS' net premium cost (capped at 3.00% of payroll) of those members who retire July 1, 2010 and later that are not eligible for Medicare; and the increases in member and employer contributions scheduled to begin July 1, 2010. The valuation's discount rate assumption has been increased to 8.00% to reflect the impact of these changes, along with the adjustment to the Medical Insurance Fund's investment policy to achieve a long-term rate of return of 8.00%. Additionally, the assumed rates of health care inflation were revised to reflect current expectations. The actuarial accrued liability decreased from \$6.5 billion in 2009 to \$3.2 billion in 2010.

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, 2013 is required to support the benefits of the Life Insurance Fund. The contribution rate of 0.05% equals the amount to be contributed in the prior fiscal year. With the State contributions to the Life Insurance Fund meeting the required levels, the discount rate for valuing liabilities is 7.50%.

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

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Board of Trustees December 16, 2010 Page 2

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.

CMC has prepared the trend information shown in the Schedule of Funding Progress 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 planned levels, the medical plans will begin to operate in a more 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, FSA, EA, FCA, MAAA Principal and Senior Actuary

Mis Bound

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

### Report of Actuary on the on the Annual Valuation of the Retiree Medical and Life Insurance Plans Prepared as of June 30, 2010

### **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, 2010	June 30, 2009			
Number of active members	76,387	75,937			
Annual salaries	\$ 3,321,614	\$ 3,253,077			
Number of annuitants in medical plans Number of spouses and	34,315	33,481			
beneficiaries in medical plans Total	$\frac{6,834}{41,149}$	6,808 40,289			
Assets:					
Market value	\$ 241,224	\$ 229,103			
Unfunded actuarial accrued liability	\$ 2,965,582	\$ 6,225,630			
Amortization period (years)	30	30			
Discount rate	8.00%	4.50%			

Medical Insurance Fund Contribution Rates for University Members						
Valuation Date	Ju	ne 30, 2010	June 30, 2009*			
For Fiscal Year Ending	Ju	ne 30, 2013	June 30, 2012			
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008		
Pension Plan: Normal Accrued liability Total	2.32 % -4.88 7.20 %	2.32 % - 4.88 7.20 %	$\begin{array}{c} 7.53 \% \\ \underline{-6.83} \\ 14.36 \% \end{array}$	7.53 % <u>6.83</u> 14.36 %		
Member Employer State (ARC) Total	$ \begin{array}{r} 1.43 \% \\ 1.43 \\ \underline{-4.34} \\ 7.20 \% \end{array} $	1.75 % 0.75 <u>4.70</u> 7.20 %	$\begin{array}{c} 0.75 \ \% \\ 0.75 \\ \underline{12.86} \\ 14.36 \ \% \end{array}$	1.75 % 0.75 <u>11.86</u> 14.36 %		

<sup>\*</sup> The June 30, 2009 valuation results reflect provisions as of that date and are provided for informational purposes. For the fiscal years ending June 30, 2011 and June 30, 2012, it is recommended that the results of the June 30, 2010 valuation be appropriately used to determine the State contribution.

Medical Insurance Fund Contribution Rates for School District Employees (Non-Federal)						
Valuation Date	Ju	ne 30, 2010	June 30, 2009*			
For Fiscal Year Ending	June 30, 2013		June 30, 2012			
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008		
Pension Plan:						
Normal	2.32 %	2.32 %	7.53 %	7.53 %		
Accrued liability	4.88	4.88	6.83	6.83		
Total	7.20 %	7.20 %	14.36 %	14.36 %		
Member	1.75 %	1.75 %	0.75 %	1.75 %		
Employer	1.00	1.00	0.00	0.00		
State (ARC)	4.45	4.45	13.61	12.61		
Total	7.20 %	7.20 %	14.36 %	14.36 %		

\*The June 30, 2009 valuation results reflect provisions as of that date and are provided for informational purposes. For the fiscal years ending June 30, 2011 and June 30, 2012, it is recommended that the results of the June 30, 2010 valuation be appropriately used to determine the State contribution.

Valuation Date	Ju	ne 30, 2010	June 30, 2009*		
For Fiscal Year Ending	June 30, 2013		June 30, 2012		
	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on after 7/1/2008	
Pension Plan:					
Normal	2.32 %	2.32 %	7.53 %	7.53 %	
Accrued liability	4.88	4.88	6.83	6.83	
Total	7.20 %	7.20 %	14.36 %	14.36 %	
Member	1.75 %	1.75 %	0.75 %	1.75 %	
Employer	1.75	0.75	0.75	0.75	
State (ARC)	3.70	4.70	12.86	11.86	
Total	7.20 %	7.20 %	14.36 %	14.36 %	

<sup>\*</sup> The June 30, 2009 valuation results reflect provisions as of that date and are provided for informational purposes. For the fiscal years ending June 30, 2011 and June 30, 2012, it is recommended that the results of the June 30, 2010 valuation be appropriately used to determine the State contribution.

~ Life Insurance Fund ~ (dollar amounts are \$1,000's)				
Valuation Date	June 30, 2010	June 30, 2009		
Number of active members Annual salaries	76,387 \$ 3,321,614	75,937 \$ 3,253,077		
Number of retirees in Life Insurance Plan	39,951	38,958		
Assets:				
Market value	\$ 87,905 \$ 4,186	\$ 84,703 \$ 5,631		
Unfunded actuarial accrued liability*				
Amortization period (years) Discount rate	30	30		
Discount rate	7.50%	7.50%		
Contribution for fiscal year ending	June 30, 2012	June 30, 2012		
Normal	0.04%	0.04%		
Accrued liability	0.01%	0.01%		
Total	$\frac{0.01\%}{0.05\%}$	$\frac{0.01\%}{0.05\%}$		

- \* 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, employer, and State contributions of 7.20% 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, 2010 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. Since the previous valuation, the medical plan discount rate was increased from 4.50% to 8.00%. The impact of this change is shown on Schedule A.
- 4. The valuation takes into account the effect of amendments to the medical plans enacted

through the most recent session of the Legislature. Effective July 1, 2010, retirees under age 65 began a three year phase-in of the Shared Responsibility Contribution, the basis of which will, in the third year, equal the Standard Medicare Part B premium required to be paid by retirees age 65 and over. This additional contribution required from retirees under age 65 resulted in a decrease of \$173,536,621 in the accrued liability and \$16,306,917, or 0.49% of payroll, in the annual required contribution. Effective July 1, 2010, the Commonwealth of Kentucky will begin paying the System's cost of medical insurance for new retirees under the age of 65, less what those retirees are otherwise required to pay (capped at an ultimate amount of 3.00% of payroll). This change represents \$590,529,804 of the accrued liability and \$68,599,691, or 2.06% of payroll, in the annual required contribution. Effective July 1, 2010, active members will begin a six-year phase-in to an additional contribution to the medical insurance fund. Previously, members hired before July 1, 2008 were required to contribute 0.75% of pay and members hired on or after July 1, 2008 were required to contribute 1.75% of pay. For the fiscal year ending June 30, 2013, member contributions will be 1.43% for University employees who became members of the System before July 1, 2008 and 1.75% for all other members.

### **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, 2010 on the basis of which the valuation was prepared.

Group	Number	Annual Salaries (\$1,000's)
Full Time Part Time	58,983 17,404	\$ 3,211,563 110,051
Total	76,387	\$ 3,321,614

### **Section III - ASSETS**

- 1. As of June 30, 2010 the market value of Medical Insurance Fund assets for valuation purposes held by the medical plans amounted to \$241,223,840 and the market value of Life Insurance Fund assets for valuation purposes held by the life insurance plan amounted to \$87,904,593.
- 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 \$1,258,246,049 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 \$1,948,560,035. The total actuarial accrued liability of the medical plans amounts to \$3,206,806,084. Against these liabilities, the medical plans have present assets for valuation purposes of \$241,223,840. When this amount is deducted from the actuarial accrued liability of \$3,206,806,084 there remains \$2,965,582,244 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 \$77,101,531 or 2.32% of payroll.
- 4. The valuation shows that the life insurance plan has an actuarial accrued liability of \$17,657,348 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 amounts to \$74,433,365. The total actuarial accrued liability of the life insurance plan amounts to \$92,090,713. 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 \$87,904,593. When this amount is deducted from the actuarial accrued liability of \$92,090,713 there remains \$4,186,120 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 \$1,275,631, or 0.04% of payroll.

### Section V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

1. Sections 161.420 and 161.550 of the Kentucky Revised Statutes provide the amounts employers and the State are required to contribute to the Medical Insurance Fund. These contribution amounts vary by fiscal year, date of membership, and employee type.

Employer Percentage of Payroll Contributions Made to Medical Insurance Fund							
	UNIVERSITY EMPLOYEES		SCHOOL DISTRICT EMPLOYEES (Non-Federal)*		OTHER EMPLOYEES		
Fiscal Year Ending	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	Members hired before 7/1/2008	Members hired on or after 7/1/2008	
2011 2012 2013 2014 2015 2016 and Later	0.920% 1.090 1.430 1.750 2.270 2.775	0.750% 0.750 0.750 0.750 1.270 1.775	0.250% 0.500 1.000 1.500 2.250 3.000	0.250% 0.500 1.000 1.500 2.250 3.000	1.000% 1.250 1.750 2.250 3.000 3.750	0.750% 0.750 0.750 1.250 2.000 2.750	

<sup>\*</sup> In addition to the amounts contributed by School Districts on behalf of Non-Federal employees, the State contributes 0.75%.



For the fiscal year ending June 30, 2013, member contributions will be 1.43% for University employees who became members of the System before July 1, 2008 and 1.75% for all other members. CMC recommends employer and State contributions increase to the required amount of 5.77% of payroll for University employees hired prior to July 1, 2008 and 5.45% of payroll for all other members. The State is scheduled to contribute 0.05% of salary to the Life Insurance Fund for the fiscal year ending June 30, 2012. CMC's valuation indicates the same contribution of 0.05% for the fiscal year ending June 30, 2013 is required to sufficiently support the benefits of the life insurance plan.

REQUIRED CONTRIBUTION RATES For Fiscal Year Ending June 30, 2013 Medical Insurance Fund						
	ıl d liability otal		$2.32\% \\ \underline{4.88} \\ 7.20\%$			
		ERSITY OYEES	EMPL	DISTRICT OYEES ederal)*		HER OYEES
	Members hired prior 7/1/2008	hired on or after	hired prior	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
Member Employer (ARC) State (ARC)	1.43% 1.43 <u>4.34</u> 7.20%	1.75% 0.75 <u>4.70</u> 7.20%	1.75% 1.00 <u>4.45</u> 7.20%	1.75% 1.00 <u>4.45</u> 7.20%	1.75% 1.75 <u>3.70</u> 7.20%	1.75% 1.75 3.70 7.20%

Life Insurance Fund				
Normal	0.04%			
Accrued liability Total	0.01 0.05%			
Member	0.00%			
State (ARC) Total	$\frac{0.05}{0.05\%}$			

- 2. The valuation indicates that a total normal contribution of 2.32% 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 4.88% of payroll for the medical plans and 0.01% of payroll for the life insurance plan.
- 3. The unfunded actuarial accrued liability amounts to \$2,965,582,244 for the medical plans and \$4,186,120 for the life insurance plan as of the valuation date. An accrued liability contribution of 4.88% 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 and State contributions have been determined to be insufficient to fund the cost of the benefits to be provided. Benefits for university, school district (non-Federal), and other members are identical, although active employee contributions collected from university, school district (non-Federal), and other members differ. A listing of member contributions by fiscal year, date of membership, and employer type is provided in Schedule D.
- 2. The valuation indicates an 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 University employees who became members of the System before July 1, 2008, a member contribution of 1.43% of payroll together with employer and State contributions of 5.77% of payroll are 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 the remaining membership, a member contribution of 1.75% of payroll together with employer and State contributions of 5.45% 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, 2010					
GROUP	NUMBER				
Retirees currently receiving health benefits	34,315				
Spouses of retirees currently receiving health benefits*	6,834				
Active plan members	76,387				
Total	117,536				

Number of Active and Retired Members in Life Insurance Plan as of June 30, 2010				
GROUP	NUMBER			
Retirees	39,951			
Active plan members	<u>76,387</u>			
Total	116,338			

<sup>\*</sup> 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.



#### Schedule of Funding Progress Medical Insurance Fund

(Dollar amount in thousands)

ACTUARIAL VALUATION DATE	ACTUARIAL VALUE OF ASSETS	ACTUARIAL ACCRUED LIABILITIES (AAL) PROJECTED UNIT CREDIT	UNFUNDED AAL (UAAL)	FUNDED Ratio	COVERED Payroll	UAAL AS A % OF COVERED PAYROLL
	a	b	( <b>b-a</b> )	(a/b)	c	[( <b>b-a</b> )/ <b>c</b> ]
6/30/2005	\$ 147,311	\$ 4,763,947	\$ 4,616,636	3.1%	\$ 2,703,430	170.8
$6/30/2006^{1}$	131,614	4,341,963	4,210,349	3.0	2,859,477	147.2
$6/30/2007^2$	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
$6/30/2009^3$	229,103	6,454,733	6,225,630	3.5	3,253,077	191.4
$6/30/2010^4$	241,224	3,206,806	2,965,582	7.5	3,321,614	89.3

<sup>&</sup>lt;sup>1</sup>Reflects change in decrement assumptions and plan design.

## **Schedule of Funding Progress Life Insurance Fund**

(Dollar amount in thousands)

	(20000)	amount in mouse	ineas)		
	ACTUARIAL	UNFUNDED			
	ACCRUED	ACTUARIAL			UAAL
ACTUARIAL	LIABILITIES (AAL)	ACCRUED			AS A % OF
VALUE OF	PROJECTED UNIT	LIABILITIES	FUNDED	COVERED	COVERED
ASSETS	CREDIT	(UAAL)	RATIO	PAYROLL	PAYROLL
a	b	( <b>b-a</b> )	(a/b)	С	[(b-a)/c]
\$ 71,426	\$ 82,722	\$ 11,296	86.3%	\$ 2,975,289	0.38%
77,658	84,265	6,607	92.2	3,190,332	0.21
77,658 $84,703$	84,265 90,334	6,607 5,631	92.2 93.8	3,190,332 3,253,077	$0.21 \\ 0.17$
_	VALUE OF ASSETS <b>a</b>	ACTUARIAL LIABILITIES (AAL) VALUE OF ASSETS CREDIT  a b	ACTUARIAL ACTUARIAL ACTUARIAL ACTUARIAL LIABILITIES (AAL) VALUE OF PROJECTED UNIT ASSETS CREDIT (UAAL)  a b (b-a)	ACCRUED ACTUARIAL ACTUARIAL LIABILITIES (AAL) ACCRUED VALUE OF PROJECTED UNIT LIABILITIES FUNDED ASSETS CREDIT (UAAL) RATIO  a b (b-a) (a/b)	ACTUARIAL LIABILITIES (AAL) ACCRUED VALUE OF PROJECTED UNIT LIABILITIES FUNDED COVERED ASSETS CREDIT (UAAL) RATIO PAYROLL  a b (b-a) (a/b) c

2. The information presented in the required supplementary schedules was determined as part of the actuarial valuation at June 30, 2010. Additional information as of the latest actuarial valuation follows.

Actuarial cost method ......Projected unit credit

Amortization method ......Level percent of pay, open

Asset valuation method ...... Market Value of Assets



#### **Actuarial Assumptions:**

Investment Rate of Return\*
8.0% for Medical &
7.50% for Life Insurance

Medical Trend Assumption (Pre-Medicare)\*\* 10.5% - 5.0%

Medical Trend Assumption
(Post-Medicare)
9.0% - 5.0%

Year of Ultimate Trend Rate 2018

<sup>&</sup>lt;sup>2</sup>Reflects change in discount rate to 4.5% and updating medical trend.

<sup>&</sup>lt;sup>3</sup>Reflects change in participation assumptions and plan design.

<sup>&</sup>lt;sup>4</sup>Reflects change in discount rate to 8.0%, change in plan design and updating medical trend.

<sup>\*</sup> Includes Inflation at 4.00%.

<sup>\*\*</sup> Alternate trend rates were used for Medicare Part B premiums and are disclosed in Schedule C.

			nployer Contribu Insurance Fund	ıtions	
VALUATION YEAR JUNE 30	ANNUAL Required Contribution	ACTUAL Employer Contribution	RDS CONTRIBUTION	TOTAL CONTRIBUTION	PERCENTAGE OF ARC CONTRIBUTE
	(a)	<b>(b)</b>	(c)	$(\mathbf{b}) + (\mathbf{c})$	[(b) + (c)]/(a)
6/30/2007 6/30/2008 6/30/2009 6/30/2010	\$ 231,473,321 395,282,164 467,312,904 457,054,117	\$ 113,258,761 148,954,644 164,480,119 158,765,496 Schedule of En	\$ 10,312,361 11,911,565 13,611,748 14,614,285 aployer Contribu	\$ 123,571,122 160,866,209 178,091,867 173,379,781	53.4% 40.7 38.1 37.9
			surance Fund		
	FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION (ARC)	ACTUAL EMPLOYER CONTRIBUTION (b)	PERCENTAGE OF CONTRIBUTE (b) / (a)	
	6/30/2007 6/30/2008	\$ 1,785,173 1,914,199	\$ 5,022,137 5,411,249	281.3% 282.7	
	6/30/2009 6/30/2010	1,498,076 1,992,969	5,455,473 1,966,826	364.2 98.7	

3. Following is the calculation of the Annual OPEB Cost (AOC) and the Net OPEB Obligation (NOO) for the fiscal year ending June 30, 2010. 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.

Annual OPEB Cost and Net OPEB Obligation for the Medical Insurance Fund for Fiscal Year Ending June 30, 2010				
\$ 457,054,117				
23,661,734				
18,773,335				
461,942,516				
173,379,781				
288,562,734				
525,816,306				
\$ 814,379,040				



Trend Information for the Medical Insurance Fund				
Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)	
6/30/2008	\$ 395,282,164	40.7%	\$ 234,415,955	
6/30/2009	469,492,218	37.9	525,816,306	
6/30/2010	461,942,516	37.5	814,379,040	

# Annual OPEB Cost and Net OPEB Obligation for the Life Insurance Fund for Fiscal year Ending June 30, 2010

(a) Employer Annual Required Contribution	\$ 1,992,969
(b) Interest on Net OPEB Obligation	(565,190)
(c) Adjustment to Annual Required Contribution	(389,738)
(d) Annual OPEB Cost: (a) + (b) - (c)	1,817,516
(e) Employer contributions for Fiscal Year 2010	1,966,826
(f) Increase in Net OPEB Obligation: (d) - (e)	(149,310)
(g) Net OPEB Obligation at beginning of Fiscal Year	(7,535,867)
(h) Net OPEB Obligation at end of Fiscal Year: (f) + (g)	\$(7,685,177)

Trend Information for the Life Insurance Fund					
Fiscal Year Ending	Annual OPEB Cost (AOC)	Percentage of AOC Contributed	Net OPEB Obligation (NOO)		
6/30/2008	\$ 1,914,199	282.7%	\$ (3,497,050)		
6/30/2009	1,416,656	385.1	(7,535,867)		
6/30/2010	1,817,516	108.2	(7,685,177)		



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%							
PAYROLL	\$ 3,321,614	\$ 3,321,614	\$ 3,321,614				
ACTUARIAL ACCRUED LIABILITY							
Present value of prospective benefits payable in respect of:							
<ul> <li>(a) Present active members:</li> <li>(b) Present retired members and covered spouses:</li> <li>(c) Total actuarial accrued liability</li> </ul>	\$ 2,648,229 2,853,671 5,501,900	\$ 1,382,989 <u>2,045,561</u> 3,428,550	\$ 1,258,246 1,948,560 3,206,806				
PRESENT ASSETS FOR VALUATION PURPOSES	241,224	241,224	241,224				
UNFUNDED ACTUARIAL ACCRUED LIABILITY	\$ 5,260,676	3,187,326	2,965,582				
CONTRIBUTIONS FOR FISCAL YEAR ENDING JUNE 30, 2013:							
Normal Accrued Liability Total	$5.58 \%  \underline{5.65}  11.23 \%$	2.60 % 4.96 7.56 %	2.32% 4.88 7.20%				
Member Employer (ARC) State (ARC) Total	1.73 % 1.02 <u>8.48</u> 11.23 %	1.73 % 1.02 <u>4.81</u> 7.56 %	1.73% 1.02 <u>4.45</u> 7.20%				

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

For the Year Ending RECEIPTS FOR THE YEAR June 30, 2010 June 30, 2009 Contributions \$ 26,579,278 \$ 25,134,252 Members Statutory Payment by Retired Members 37,226,295 33,554,515 Total Members 63,805,573 58,688,767 State Statutory Contributions 25,022,737 24,561,433 0 State Special 0 General Fund Surplus 0 0 Allotment from Pension Fund 134,200,000 139,385,300 Total Employer 158,761,433 164,408,037 223,096,804 **Grand Total** 222,567,006 Recovery Income 4,063 72,082 Medicare D Receipts 14,614,285 13,611,748 Net Investment Income 11,296,280 12,312,999 TOTAL 248,076,914 249,498,353 DISBURSEMENTS FOR THE YEAR Refunds to Members 0 237,377,528 Medical Insurance Expense 204,857,122 TOTAL 237,377,528 204,857,122 EXCESS OF RECEIPTS OVER DISBURSEMENTS 12,120,825 43,219,792 RECONCILIATION OF ASSET BALANCES Asset Balance as of the Beginning of the Year 229,103,015 185,883,223 Excess of Receipts over Disbursements 43,219,792 12,120,825 Asset Balance as of the End of the Year \$229,103,015 \$ 241,223,840



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

#### For the Year Ending

0 1,966,826 1,966,826 5,383,644 7,350,470	
1,966,826 1,966,826 5,383,644	5,455,473 5,455,473 5,282,958
1,966,826 5,383,644	5,455,478 5,282,958
5,383,644	5,282,958
7,350,470	10,738,431
4,148,511	3,694,000
0	C
0	C
0	
4,148,511	3,694,000
3,201,959	7,044,431
84,702,634	77,658,203
3,201,959	7,044,431
87,904,593	\$ 84,702,634
	0 0 0 4,148,511 3,201,959 84,702,634 3,201,959

### 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, 2010

**Discount Rate:** 8.0% per annum, compounded annually for medical plans.

7.5% per annum, compounded annually for life insurance plan.



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

	MEDICARE	UNDER	AGE 65 &
FISCAL	PART B	AGE 65	OVER
YEAR	TREND	TREND	TREND
2011	4.4%	10.5%	9.0%
2012	-1.4	9.5	8.5
2013	3.0	8.5	7.5
2014	5.0	7.5	7.0
2015	4.1	6.5	6.5
2016	4.5	6.0	6.0
2017	5.5	5.5	5.5
2018	6.8	5.0	5.0
2019	6.1	5.0	5.0
2020	5.5	5.0	5.0
2021 and	5.0	5.0	5.0
beyond			

**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:

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

**Anticipated Plan Participation:** Representative values of the assumed annual rates of medical plan participation are as follows:

		Hired after		Hired 6/30/02 a	<u>nd earlier</u>
Years of Service	Hired 7/1/08 and later	6/30/02 and before 7/1/08	Years of Service	Age 65 on 12/31/04 and earlier	Age 65 on 1/1/05 <u>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: A	Annual Rat	e of			ears of Years of			
				WIT	ΓHDRAW	/AL	RETIRI	EMENT			
ACE	SALARY*	DEATH	DICADII ITA	· <del>-</del>	ERVICE		Before 27				
AGE	SALARY	DEATH	DISABILITY	0 - 4	5 - 9	10+	Service				
20	8.10%	0.003%	0.01%	9.00%							
25	7.20	0.010	0.01	9.00	1.50%						
30	6.20	0.016	0.02	9.00	3.00	3.00%					
35	5.50	0.032	0.05	10.00	3.25	1.50					
40	5.00	0.048	0.08	10.00	3.75	1.50					
45	4.70	0.064	0.22	9.50	2.50	1.50		25.0%			
50	4.50	0.104	0.42	10.00	4.00	3.00		20.0			
55	4.30	0.216	0.60	11.00	3.00	2.70	6.0%	35.0			
60	4.20	0.375	0.79	11.00	3.00	2.70	14.0	25.0			
62	4.10	0.438	0.83	11.00	3.00	2.70	14.0	23.0			
65	4.00	0.566	0.90	11.00	3.00	2.70	22.5	35.0			
70	4.00	0.905	0.00	0.00	0.00	0.00	100.0	100.0			

 $<sup>*</sup>Includes\ inflation\ at\ 4.0\%\ per\ annum.$ 

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

				WIT	THDRAW	AL	RETIRI	EMENT
AGE	SALARY*	DEATH	DISABILITY	0 - 4	ERVICE 5 - 9	10+	Before 27 Years of Service	After 27 Years of Service*
20	8.10%	0.002%	0.03%	6.00 %				
25	7.20	0.007	0.03	8.50	3.00 %			
30	6.20	0.014	0.04	9.00	4.00	1.50%		
35	5.50	0.026	0.11	8.50	4.00	2.00		
40	5.00	0.044	0.22	8.50	2.50	1.50		
45	4.70	0.055	0.38	7.00	2.50	1.50		25.0%
50	4.50	0.066	0.44	8.50	3.00	2.25		20.0
55	4.30	0.085	0.56	10.00	3.50	2.50	7.5%	35.0
60	4.20	0.122	0.85	11.00	3.50	2.50	16.5	30.0
62	4.10	0.137	0.85	11.00	3.50	2.50	12.5	25.0
65	4.00	0.159	0.85	11.00	3.50	2.50	26.0	30.0
70	4.00	0.195	0.00	0.00	0.00	0.00	100.0	100.0

<sup>\*</sup>Includes inflation at 4.0% per annum.

\*\*Plus 5% before age 55 and 15% 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 . . .

	Service Re	etirement	Disabilit	y Retirement	
Age	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 8.00% for the Medical Insurance Fund and 7.50% for the Life Insurance Fund.

**Spouse Coverage in Medical Plans:** 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.

	Average Monthly KTRS Full Costs & Cont						
<u>Year</u>	Pre-65 Full Cost and Contributions	Post-65 Full Costs	Post-65 Contributions				
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	$301^{1}$	285				
CY 2010	594	$373^{1}$	342				
CY 2011	626	$289^{2}$	289				

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup>1,800 current benefit recipients are not eligible for premium-free Medicare Part A benefits. For these individuals, the full cost of coverage is, on average, \$606 per month. It is assumed no new members will enter this population, as all active members are assumed to have begun contributing to Medicare as of 4/1/1986.



#### **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:

Pe	rcentage of Full Medi	cal Contribution I	Provided to Retire	ees
Years of Service	Hired before 7/1/02 (age 65 on 12/31/04 or earlier)	Hired Before 7/1/02 (age 65 on 1/1/05 or later)	Hired after 6/30/02 and before 7/1/08	Hired 7/1/08 and later
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 January 1, 2009, contributions towards pre-65 retirees and spouses healthcare are based upon the Commonwealth Capital Choice Plan which has a total rate of \$625.68 per month for single coverage (rate effective January 1, 2011). A minimum contribution of \$36.54 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.

Effective July 1, 2010, retirees under the age of 65 began a three-year phase-in of the Shared Responsibility Contribution. This contribution reduces the applicable amount of the full contribution provided by the System to retirees, and is the full Shared Responsibility Contribution amount adjusted by the appropriate percentage from the above table. In the first six months, the full amount equaled \$37 per month and will increase slightly to \$39 per month due to the increase in the Medicare Part B premium cost from \$110.50 in 2010 to \$115.40 in 2011. Effective July 1, 2011, the full amount will equal \$77, which



represents two-thirds of the Medicare Part B premium. Effective July 1, 2012, the full Shared Responsibility Contribution will equal the Standard Part B premium that is paid by retirees age 65 and over.

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.

**MEMBER CONTRIBUTIONS:** Active members make payroll contributions to the Medical Insurance Fund based upon the following schedule:

Emplo	•	_	Payroll C Insurance	Contributi Fund	ons Made	to
		ERSITY OYEES	EMPL	DISTRICT OYEES ederal)*		HER OYEES
Fiscal Year Ending	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008	Members hired prior 7/1/2008	Members hired on or after 7/1/2008
2011 2012 2013 2014 2015 2016 and Later	0.920% 1.090 1.430 1.750 2.270 2.775	1.750% 1.750 1.750 1.750 2.270 2.775	1.000% 1.250 1.750 2.250 3.000 3.750	1.750% 1.750 1.750 2.250 3.000 3.750	1.000% 1.250 1.750 2.250 3.000 3.750	1.750% 1.750 1.750 2.250 3.000 3.750

#### 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.

<u>Note:</u> 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**

## Active Age and Service Table as of June 30, 2010

Attained Age	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	>= 35	TOTAL
24 & under Total Pay Avg. Pay	2,552 41,410,302 16,227								2,552 41,410,302 16,227
25 to 29 Total Pay Avg. Pay	7,342 217,949,175 29,685	1,401 63,246,757 45,144							8,743 281,195,932 32,162
30 to 34 Total Pay Avg. Pay	3,818 111,452,897 29,191	4,865 227,947,351 46,855	937 49,974,032 53,334						9,620 389,374,280 40,475
35 to 39 Total Pay Avg. Pay	2,817 74,313,656 26,380	2,509 120,604,468 48,069	4,012 225,193,125 56,130	706 42,603,634 60,345					10,044 462,714,883 46,069
40 to 44 Total Pay Avg. Pay	3,879 79,944,872 20,610	1,808 88,446,267 48,919	2,277 128,003,793 56,216	2,904 178,515,920 61,472	723 46,125,557 63,797				11,591 521,036,409 44,952
45 to 49 Total Pay Avg. Pay	1,814 44,689,939 24,636	1,269 62,904,777 49,570	1,334 75,802,300 56,823	1,528 95,801,767 62,697	2,155 138,579,018 64,306	639 42,056,954 65,817			8,739 459,834,755 52,619
50 to 54 Total Pay Avg. Pay	1,657 34,303,799 20,702	1,023 50,798,111 49,656	1,173 67,243,927 57,326	1,232 77,191,072 62,655	1,377 90,754,269 65,907	1,645 113,263,204 68,853	476 32,669,109 68,633		8,583 466,223,491 54,319
55 to 59 Total Pay Avg. Pay	2,510 39,542,880 15,754	755 39,660,051 52,530	944 56,148,619 59,479	1,083 70,541,207 65,135	1,158 77,380,607 66,823	823 59,083,162 71,790	707 54,593,179 77,218	103 8,806,679 85,502	8,083 405,756,384 50,199
60 to 64 Total Pay Avg. Pay	2,844 39,563,979 13,911	431 23,085,640 53,563	487 30,037,551 61,679	573 37,299,758 65,096	583 40,586,147 69,616	372 27,094,465 72,835	165 13,907,160 84,286	122 11,098,734 90,973	5,577 222,673,434 39,927
65 & over Total Pay Avg. Pay	2,096 19,263,491 9,191	148 7,200,683 48,653	134 8,811,446 65,757	119 8,107,359 68,129	129 9,067,291 70,289	98 7,442,506 75,944	47 3,632,962 77,297	84 7,868,617 93,674	2,855 71,394,355 25,007
Total Total Pay Avg. Pay	31,329 702,434,990 22,421	14,209 683,894,105 48,131	11,298 641,214,793 56,755	8,145 510,060,717 62,623	6,125 402,492,889 65,713	3,577 248,940,291 69,595	1,395 104,802,410 75,127	309 27,774,030 89,884	76,387 3,321,614,225 43,484

Average Age: 43.5 Average Service10.8



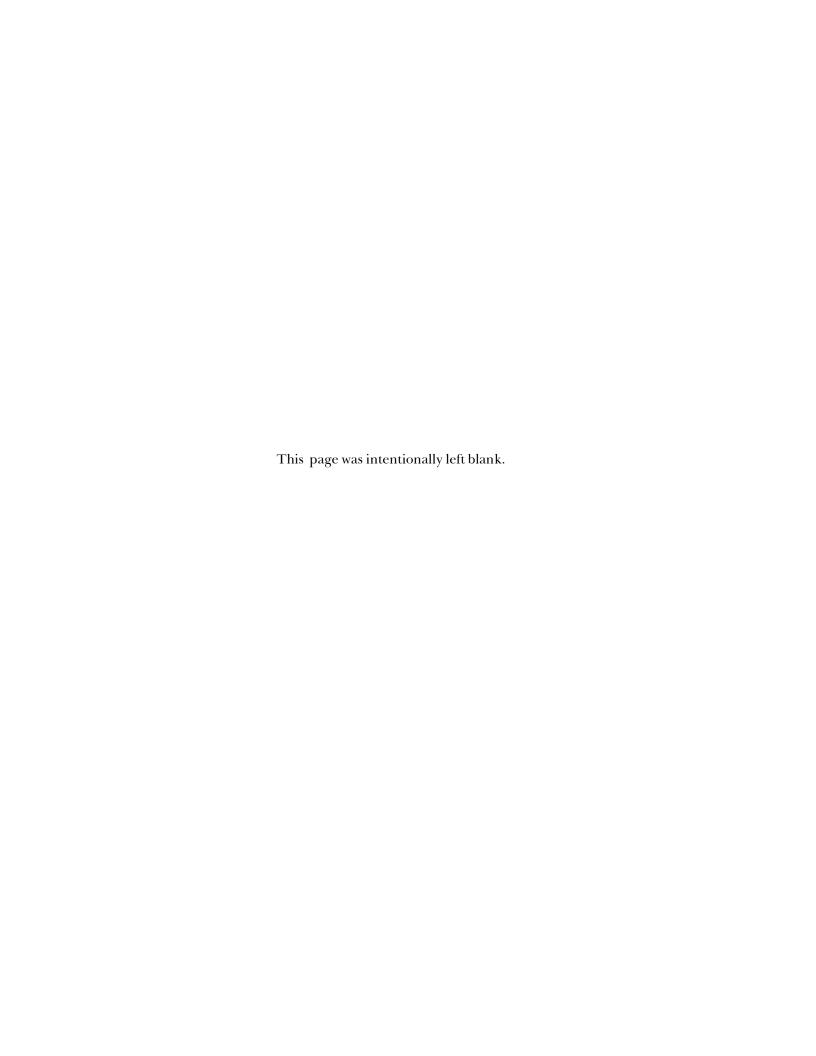
All Retirees and Spouses Receiving Health Benefits as of June 30, 2010 Male and Femal Demographic Breakdown

ATTAINED AGE	NUMBER OF MALES	NUMBER OF FEMALES	TOTAL Number
Under 40	6	30	36
40-44	18	65	83
45-49	42	175	217
50-54	344	980	1,324
55-59	1,804	4,178	5,982
60-64	3,581	6,867	10,448
65-69	2,942	4,729	7,671
70-74	2,134	3,344	5,478
75-79	1,645	2,315	3,960
80-84	1,045	1,873	2,918
85-89	597	1,186	1,783
90-94	221	623	844
95-99	63	288	351
100	2	19	21
101	1	16	17
102	0	5	5
103	0	5	5
104	0	2	2
105 & Over	0	4	4
Total	14,445	26,704	41,149

Retire	es Receiving Health	Benfits as of June 30, 2	2010
	UNDER AGE 65	AGE 65 AND OVER	TOTAL
Number	15,627	18,688	34,315
Average Age	60.0	74.9	68.1

Spous	es Receiving Health	Benfits as of June 30, 2	010
	UNDER AGE 65	AGE 65 AND OVER	TOTAL
Number	3,272	3,562	6,834
Average Age	58.8	75.8	67.6





# Statistical Section

for Fiscal Year ending June 30, 2010

his 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
These schedules contain trend information to help the reader understand how KTRS's
financial performance & well-being have changed over time.
Demographic & Economic Information
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
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
2010	\$ 479,805,088	\$ 297,613,965	\$ 1,509,785,381	\$ 2,287,204,434
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

#### **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
2010 5	\$1,249,272,057	\$57,782,651	\$14,754,062	\$	\$1,321,808,770	\$ 15,310,680	\$ 8,830,054	\$1,345,949,504
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

<sup>\*</sup> 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
2010	\$2,287,204,434	\$1,345,949,504	\$ 941,254,930
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)

#### **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
2010	\$ 158,761,433	\$ 63,805,573	\$ 14,618,348	\$ 12,312,999	\$ 249,498,353
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

#### **Deductions by Type**

(Including Benefits by Type)

Ins	urance Benef	it Expense		Total		Total Deductions
YEAR	Under Age 65	Age 65 & Over	Third Party Service Fee	Insurance Benefits Expense	Refunds	to Plan Net Assets
2010	\$ 136,702,152	\$ 100,675,376	\$	\$ 237,377,528	\$	\$ 237,377,528
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

#### **Changes in Net Assets**

YEAR	Total Additions to Plan Net Assets	Total Deductions to Plan Net Assets	Changes in Plan Net Assets
2010	\$ 249,498,353	\$ 237,377,528	\$ 12,120,825
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
	89,050,373	80,365,738	8,684,635

#### Life Insurance Plan

Past Four Fiscal Years

#### **Additions by Source**

YEAR	Employer Contributions	Net Investment Income	Total Additions to Plan Net Assets
2010	\$ 1,966,826	\$ 5,383,644	\$ 7,350,470
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
2010	\$ 4,148,511	\$ 4,148,511	\$ 7,350,470	\$ 4,148,511	\$ 3,201,959
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, 2010

By Age

$\mathbf{B}\mathbf{v}$	Sei	vice
Вy	Sei	vice

Age	Male	Female	Years of Service	Male	Female
20-24	900	2,934	Less than 1	6,047	15,43
25-29	2,740	7,761	1-4	4,312	13,559
30-34	2,552	7,462	5-9	3,098	9,80
35-39	2,473	7,753	10-14	2,261	7,113
40-44	2,202	7,322	15-19	1,591	4,914
45-49	2,084	6,524	20-24	1,144	3,584
50-54	1,976	6,247	25-29	614	1,904
55-59	1,951	5,498	30-34	194	643
60-64	1,507	3,562	35 or more	<u>72</u>	10
65-69	636	1,319	TOTAL	19,333	57054
Over 70	312	672			
TOTAL	19,333	57,054			

#### **Principal Participating Employers**

**Current Year and Nine Years Ago** 

	2010			:	2001			
	Covered Employees	Rank	Percentage of Total System	Covered Employees	Rank	Percentage of Total System		
Jefferson County Schools	10,058	1	13.02%	7,108	1	12.83%		
Fayette County Public Schools	4,384	2	5.67	2,958	2	5.34		
Boone County Schools	1,826	3	2.36	929	5	1.68		
Hardin County Schools	1,370	4	1.77	982	3	1.77		
Kenton County Schools	1,299	5	1.68	833	8	1.50		
Warren County Schools	1,260	6	1.63	779	10	1.41		
Bullitt County Schools	1,239	7	1.60	758	11	1.37		
Oldham County Schools	1,190	8	1.54	649	15	1.17		
Madison County Schools	1,177	9	1.52	679	14	1.23		
Daviess County Schools	1,157	10	1.50	790	9	1.43		
All Other *	52,316		67.70%	38,930		70.28%		
Total (197 Employers)	77,276		100.00%	55,395		100.00%		

# 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	<b>75</b> .	Marion	102.	Rockcastle		
22.	Carter	49.	Harrison	76.	Marshall	103.	Rowan		
23.	Casey	50.	Hart	77.	Martin	104.	Russell		
24.	Christian	51.	Henderson	<b>7</b> 8.	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
- 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**

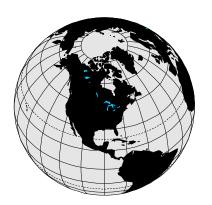
- 1. Education Professional Standards Board
- 2. Kentucky Education Association President
- 3. Kentucky Academic Association
- 4. Kentucky Educational Development Cooperative
- 5. Kentucky High School Athletic Association
- 6. Kentucky School Boards Association
- 7. Kentucky Valley Educational Cooperative
- 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

- 108 Alabama
  - 3 Alaska
- 69 Arizona
- 32 Arkansas
- 99 California
- 46 Colorado
- 12 Connecticut
- 5 Delaware
- 4 District of Columbia
- 887 Florida
- 209 Georgia
  - 5 Hawaii
  - 7 Idaho
  - 77 Illinois
- 573 Indiana
- 15 Iowa
- 27 Kansas
- 27 Louisiana
- 11 Maine
- 27 Maryland
- 17 Massachusetts
- 35 Michigan
- 17 Minnesota
- 53 Mississippi
- 68 Missouri
- 8 Montana
- 6 Nebraska
- 19 Nevada

- 3 New Hampshire
- 8 New Jersey
- 16 New Mexico
- 38 New York
- 228 North Carolina
  - 1 North Dakota
- 519 Ohio
- 21 Oklahoma
- 24 Oregon
- 37 Pennsylvania
- 0 Rhode Island
- 149 South Carolina
  - 8 South Dakota
- 717 Tennessee
- 162 Texas
- 11 Utah
- 1 Vermont
- 125 Virginia
- 33 Washington
- 82 West Virginia
- 21 Wisconsin
- 4 Wyoming

#### **Distribution of Retirement Payments Worldwide**

As of June 30, 2010



#### Additional Distribution Outside USA

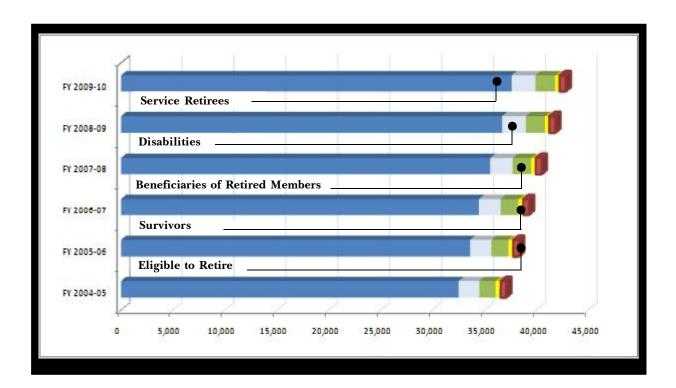
- Switzerland Canada 1 2 Military Apo 1 Barbados Philippines
- **TOTAL:** Out of State Payments ......\$ 103,518,389 **GRAND TOTAL:** Amount of Payments ...... \$ 1,321,792,347

### Distribution of Retirement Payments Statewide

as of June 30, 2010

County Name	Total Payments	Number of Recipients	County Name	Total Payments	Number of Recipients
Adair	\$ 5,046,949	179	Laurel	14,703,176	524
Allen	4,358,581	147	Lawrence	3,671,436	133
Anderson	5,464,510	184	Lee	1,865,249	75
Ballard	3,140,870	105	Leslie	3,859,452	137
Barren	11,356,861	372	Letcher	8,723,935	305
Bath	3,336,531	122	Lewis	4,819,792	161
Bell	9,929,150	354	Lincoln	7,761,152	256
Boone	23,174,458	708	Livingston	2,515,494	90
Bourbon	5,214,215	180	Logan	7,436,422	261
Boyd	15,375,237	479	Lyon	2,720,016	91
Boyle	11,882,687	394	Madison	37,153,119	1,172
Bracken	2,374,046	80	Magoffin	4,379,390	152
Breathitt	6,094,900	228	Marion	4,376,032	153
Breckinridge	5,301,383	164	Marshall	10,026,018	320
Bullitt	12,958,840	375	Martin	3,636,487	133
Butler	2,175,714	76	Mason	5,394,409	179
Caldwell	4,949,493	168	McCracken	19,448,847	633
Calloway	18,832,064	611	McCreary	5,226,260	182
Campbell	19,921,235	608	McLean	2,902,186	93
Carlisle	1,261,293	46	Meade	4,983,202	148
Carroll	2,401,493	80	Menifee	1,571,667	63
Carter	9,479,770	331	Mercer	6,249,553	230
Casey	4,375,854	159	Metcalfe	2,936,495	99
Christian	14,754,328	474	Monroe	4,537,651	158
Clark	9,199,139	316	Montgomery	7,714,870	259
Clay	7,676,353	265	Morgan	5,218,535	170
Clinton	3,601,262	127	Muhlenberg	8,568,917	282
Crittenden	1,775,228	65	Nelson	10,861,058	335
Cumberland	2,242,385	77	Nicholas	1,685,432	58
Daviess	29,231,301	945	Ohio	5,672,205	189
Edmonson	2,582,356	89	Oldham	13,290,103	401
Elliott	1,579,785	63	Owen	2,264,598	77
Estill	3,825,725	133	Owsley	3,117,552	108
Fayette	77,645,414	2,539	Pendleton	3,733,108	124
Fleming	4,392,084	158	Perry	10,181,615	349
Floyd	14,865,877	540	Pike <sup>'</sup>	22,680,322	779
Franklin	21,067,838	838	Powell	3,188,425	107
Fulton	2,090,200	67	Pulaski	18,180,253	627
Gallatin	561,070	20	Robertson	588,138	22
Garrard	4,705,953	156	Rockcastle	4,871,269	176
Grant	4,838,170	149	Rowan	13,279,586	446
Graves	10,789,694	357	Russell	5,657,935	194
Grayson	7,484,611	246	Scott	10,617,302	336
Green	3,020,972	105	Shelby	12,003,580	383
Greenup	10,313,662	345	Simpson	4,623,705	153
Hancock	2,061,265	69	Spencer	3,647,377	105
Hardin	22,852,558	722	Taylor	7,924,415	265
Harlan	11,114,936	385	Todd	2,292,982	85
Harrison	5,324,263	174	Trigg	4,554,520	157
Hart	4,457,442	144	Trimble	1,649,437	46
Henderson	11,606,657	370	Union	3,322,984	120
Henry	4,643,080	161	Warren	43,156,408	1,444
Hickman	1,074,428	36	Washington	2,966,809	109
Hopkins	13,276,111	432	Wayne	6,200,471	213
Jackson	3,113,651	121	Webster	3,885,168	133
Jefferson	205,877,867	5,839	Whitley	16,195,251	565
Jessamine	8,428,108	291	Wolfe	3,277,435	115
Johnson	9,503,858	312	Woodford	7,806,516	253
Kenton	24,747,630	783		_	
Knott	6,510,376	235	Total in		
Knox	6,624,048	230	Kentucky	<b>\$1,218,273,95</b> 8	39,601
Larue	4,632,418	140	′ =		

## Growth in Annuitants as of June 30, 2010



Fiscal Year	Service Retirees	Disabilities	Beneficiaries of Retired Members	Survivors	Eligible to Retire
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
FY 2009-10	37,607	2,284	1,915	435	567

# Schedule of Annuitants by Type of Benefit as of June 30, 2010

Type	of	Retirement*
1100	V.	1XCHI CHICH

Amount of Monthly	Number of		-,	P		
Benefit (\$)	Annuitants	1	2	3	4	5
1 - 500	3,142	2,251	17	387	196	291
501 - 1,000	2,661	2,020	189	9	443	0
1,001 - 1,500	3,399	2,481	336	0	582	0
1,501 - 2,000	4,165	3,343	446	2	374	0
2,001 - 2,500	6,563	5,590	611	14	348	0
2,501 - 3,000	8,544	7,880	409	14	241	0
3,001 - 3,500	5,875	5,595	150	4	126	0
3,501 - 4,000	3,558	3,390	84	2	82	0
4,001 - 4,500	2,171	2,101	23	2	45	0
4,501 - 5,000	1,211	1,182	11	0	18	0
5,001 & OVER	1,810	1,774	8	1	27	0
Total**	43,099	37,607	2,284	435	2,482	291

#### \*Type of Retirement

 $<sup>{\</sup>tt **Retirees\ in\ waiver\ program\ are\ not\ included}.$ 

Amount of Monthly				Option Sel	ected*			
Benefit (\$)	1	2	3	4	5	6	7	None
1 - 500	1,556	369	246	65	9	381	123	393
501 - 1,000	1,382	325	218	141	9	295	207	84
1,001 - 1,500	1,776	403	318	161	16	350	282	93
1,501 - 2,000	2,208	481	371	160	5	522	296	122
2,001 - 2,500	3,086	610	590	234	9	1,114	648	272
2,501 - 3,000	4,387	902	642	241	11	1,327	890	144
3,001 - 3,500	3,030	627	465	194	9	843	652	55
3,501 - 4,000	1,768	376	318	122	7	513	430	24
4,001 - 4,500	1,084	237	195	84	7	305	253	6
4,501 - 5,000	594	128	127	64	4	152	140	2
5,001 & OVER	922	160	202	99	14	196	213	4
Total	21.793	4,618	3,692	1.565	100	5.998	4.134	1.199

#### \*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

<sup>1-</sup>Normal Retirement for Age & Service

<sup>2-</sup>Disability Retirement

<sup>3-</sup>Survivor Payment - Active Member

<sup>4-</sup>Beneficiary Payment - Retired Member

<sup>5-</sup>Disabled Adult Child

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

Retirement Effective Dates	00-4.99	05-9.99	10-14.99	15-19.99	20-24.99	25-29.99	30>=	TOTAL
07/01/2000 TO 06/30/2001 Average monthly benefit Average final average salary Number of retired members	\$145 \$3,695 48	\$402 \$2,842 73	\$881 \$3,444 86	\$1,283 \$3,550 85	\$1,779 \$3,807 143	\$2,472 \$4,024 1008	\$3,246 \$4,707 486	1,929
07/01/2001 TO 06/30/2002 Average monthly benefit Average final average salary Number of retired members	\$204 \$4,143 65	\$408 \$2,950 128	\$790 \$3,312 82	\$1,296 \$3,613 116	\$1,898 \$3,920 107	\$2,552 \$4,115 1019	\$3,407 \$4,884 574	2,091
07/01/2002 TO 06/30/2003 Average monthly benefit Average final average salary Number of retired members	\$205 \$4,301 58	\$480 \$3,380 83	\$940 \$3,714 98	\$1,344 \$3,798 103	\$1,940 \$4,078 155	\$2,715 \$4,378 837	\$3,592 \$5,121 508	1,842
07/01/2003 TO 06/30/2004 Average monthly benefit Average final average salary Number of retired members	\$220 \$5,243 43	\$474 \$3,357 84	\$839 \$3,349 98	\$1,444 \$3,936 96	\$1,978 \$4,182 145	\$2,758 \$4,425 818	\$3,486 \$5,062 405	1,689
07/01/2004 TO 06/30/2005 Average monthly benefit Average final average salary Number of retired members	\$187 \$4,353 55	\$528 \$3,511 98	\$906 \$3,647 107	\$1,488 \$4,055 106	\$2,037 \$4,317 145	\$2,892 \$4,602 811	\$3,860 \$5,275 875	2,197
07/01/2005 TO 06/30/2006 Average monthly benefit Average final average salary Number of retired members	\$202 \$4,106 44	\$473 \$3,253 105	\$1,019 \$4,052 106	\$1,493 \$4,117 132	\$2,136 \$4,537 193	\$2,998 \$4,721 689	\$4,063 \$5,490 604	1,873
07/01/2006 TO 06/30/2007 Average monthly benefit Average final average salary Number of retired members	\$178 \$4,102 48	\$514 \$3,346 113	\$930 \$3,590 90	\$1,559 \$4,228 109	\$2,276 \$4,612 169	\$3,140 \$4,970 534	\$4,263 \$5,758 514	1,577
07/01/2007 TO 06/30/2008 Average monthly benefit Average final average salary Number of retired members	\$199 \$3,816 50	\$524 \$3,066 130	\$1,117 \$4,215 112	\$1,658 \$4,412 150	\$2,436 \$4,983 217	\$3,279 \$5,067 557	\$4,319 \$5,786 615	1,831
07/01/2008 TO 06/30/2009 Average monthly benefit Average final average salary Number of retired members	\$200 \$4,617 72	\$573 \$3,942 168	\$1,005 \$3,873 137	\$1,725 \$4,686 115	\$2,427 \$4,974 242	\$3,368 \$5,278 505	\$4,496 \$5,960 585	1,824
07/01/2009 TO 06/30/2010 Average monthly benefit Average final average salary Number of retired members	\$185 \$3,654 28	\$525 \$3,637 133	\$1,104 \$4,124 98	\$1,700 \$4,508 103	\$2,513 \$5,184 242	\$3,468 \$5,383 442	\$4,670 \$6,102 601	1,647

#### **Medical Insurance Plan**

Average Insurance Premium Supplements for the Last Ten Years

		Years of Se	ervice Credi	t	
	00-9.99	10-14.99	15-19.99	20>=	TOTAL
Retirement Effective Dates					
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	1,634	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	1,694	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	1,457	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	1,365	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	1,768	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	1,440	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	1,522
Number of retired members	26	64	103	1,329	
07/01/2009 TO 06/30/2010					
Average monthly supplement	\$ 151.05	\$ 339.31	\$ 435.19	\$ 621.12	
Number of retired members	32	73	103	1,276	1,484

#### Summary of Fiscal Year 2009-2010 Retiree Sick Leave Payments

#### **ACTUARIAL RATE**

Grand Total Members Retiring		1,911
Total members receiving sick leave payments		1,403
Total amount of sick leave payments @ 9.855% contribution rate	\$ 1'	7,974,601.49
Average payment per retiree	\$	12,811.55
Total increase in final 3/5 average salary base	\$ :	5,260,978.02
Average increase in final average salary	\$	3,749.81
Total service credit of 1,403 retirees		37,779.32
Average service credit of 1,403 retirees		26.93
Additional Average Monthly Annuity payment		
per Retirement Formula		
$3,749.81 \times 26.93 \times 2.50\% =$	\$	2,524.56
2,524.56/ 12 months	\$	210.38
Anticipated Lifetime Payout of Additional Annuity 210.38 X 142.1587 X 1403 new factor	\$ 41	1,960,008.27

#### **Funding of Additional Payments**

Member Contributions 9.855% x \$17,974,601.49 = State Contributions 13.105% x \$17,974,601.49 =	\$ 1,771,396.98 2,355,571.53
<b>Total Member-State Contributions</b>	\$ 4,126,968.50
DEFICIT:	
Anticipated additional payout Less total Member & State Contributions	\$ 41,960,008.27 4,126,968.50
Subtotal unfunded debt Less current year appropriation	37,833,039.77 6,281,300.00
TOTAL DEFICIT (overpayment) *	\$ 31,551,739.77 *

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