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# Introductory Section

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for Fiscal Year ending June 30, 2013

## Chairperson's Letter

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

GARY L. HARBIN, CPA  
*Executive Secretary*



December 30, 2013

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, 2013, the 73rd 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 2012-2013 fiscal year with a net position of \$16.6 billion. The active membership totaled 74,831 and the retired membership was 47,406 with an annual annuity and medical insurance benefits of \$1.8 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 ensure that the system continues to operate in a fiscally sound manner. Present and future members of the system deserve to be able to avail themselves of the best possible retirement as authorized by statute.

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

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

Sincerely,

Dr. Tom Shelton  
Chairperson  
Board of Trustees

#### BOARD OF TRUSTEES

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OF EDUCATION

*EX OFFICIO*  
TODD HOLLENBACH  
STATE TREASURER

## Letter of Transmittal



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

December 30, 2013

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

Dear Governor Beshear:

It is my pleasure to submit the 73rd 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, 2013. 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, 2013. Discussion and analysis of net assets and related additions and deductions is presented in Management's Discussion and Analysis beginning on page 18.

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. There are limits inherent in all systems of internal control based on the recognition that the costs of such systems should be related to the benefits to be derived.

Management believes the System's controls provide this appropriate balance. 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 began operations on July 1, 1940 as a cost-sharing multiple-employer defined benefit plan. The primary purpose of the plan is to provide retirement annuity plan coverage for local school districts and other public educational agencies in 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 28. Also, the summary of the plan provisions starting on page 101 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 retirement system. 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 and cost containment for retiree health care, the investment program, and information technology.

#### *Implementation of the "Shared Responsibility" Solution for Funding Retiree Health Care and Careful Management of Medical Insurance Costs*

June 30, 2013 marked the end of the third year of the six year phase in of the "shared responsibility" solution for pre-funding retired teacher health care. The Board of Trustees and

Staff are very pleased to report that \$3.1 billion in actuarial liability has been eliminated from the retired teacher health care plan through implementation of this solution. Another \$1.9 billion savings in actuarial liability was accomplished through careful management of health care costs. Thus, since implementing “shared responsibility” and other cost control measures, more than \$5 billion in actuarial accrued liability has been eliminated from the KTRS Medical Insurance Fund.

The Governor and Legislative leaders have commended Kentucky’s education community for their strong leadership and hard work in developing and implementing the solution. Constituent groups representing retired teachers, active teachers, school boards, school superintendents, and the state, all worked on the consensus funding solution. The solution provides that all the groups share in the solution by investing a little more now to receive substantial returns later. After two years, and \$3.1 billion in savings by converting to a pre-funded plan, the “shared responsibility” solution is truly a significant accomplishment on the road to retirement security for current and future retired teachers.

The Board of Trustees of KTRS regularly reviews the health care plan to contain costs and maintain a meaningful benefit for retired teachers. The move to Medicare Advantage, now in our eighth year, continues to be stable and financially feasible for our members and the KTRS medical plan.

Some recent cost saving initiatives include moving the KTRS sponsored Medicare drug plan to an insured Employer Group Waiver Prescription Drug Plan with a commercial wrap in the drug coverage gap to achieve the greatest amount of federal subsidies for 2013. Additionally, KTRS joined the KY Rx Coalition in 2012, which is spearheaded by the University of Kentucky. By joining the coalition, KTRS will achieve annual savings through leveraging greater prescription purchasing power and deeper drug discounts. As an added benefit, a dedicated staff of pharmacists with the KY Rx Coalition can help each member with their prescriptions and how to maximize their prescription dollars.

Other cost containment measures implemented in 2013 involved the elimination of the future risk

of adverse selection with our Medicare eligible spouses of retired teachers; and assisting those retirees and their spouses who were Medicare eligible, but under the normal Medicare age, to join the Medicare plan in 2013 achieving future savings for our members, the KTRS retiree medical plan, and the Commonwealth of Kentucky. KTRS is utilizing the industry best practice of a high performance formulary for 2014 with the Medicare Eligible retiree drug plan. The high performance formulary greatly incents participants to use lower cost brand and generic alternatives when clinically appropriate.

For 2014, the Board contracted with Edumedics for disease management services for Medicare Eligible retirees with diabetes, hypertension, hyperlipidemia, and other co-morbidity diseases. The Board of Trustees has been studying chronic disease management for several years and selected Edumedics to implement the disease management program. Edumedics is a Kentucky based company spun out from the University of Louisville.

Edumedics will be educating retirees with these diseases about nutrition, drug regime, exercise, and other matters. These educational efforts will be ongoing with routine face-to-face checkups with participating retirees. Edumedics will monitor adherence to a nutrition and wellness plan developed by the participating retiree, the retiree’s physician, and Edumedics. This effort will ramp up over the next two years and thereafter the Board will likely expand this program to other chronic diseases.

KTRS is efficient, effective, and always working to improve the retirement security of Kentucky’s teachers. Eliminating more than \$5 billion in liability helps the financial condition of the Commonwealth and eases burdens on taxpayers.

### *Investment Program*

For the twelve month period ended June 30, 2013, KTRS’s investment program produced a total return of 14.1%. This ranked in the top 10% of returns for pension funds with over \$1 billion in assets. During the period including the last five years, KTRS’s investment returns ranked in the top 7%. Moreover, during the last thirty years, KTRS investment returns have averaged 8.9%, which is consistent with the long-term assumed rate of return of 7.5%.

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. KTRS also continued to implement changes to the investment program based upon an asset liability modeling study and an analysis of the shared responsibility solution for funding retiree health care and receipt of the proceeds of bonds in the KTRS retirement annuity and medical insurance funds. 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 multi-year project planning, designing, and constructing a new information technology system known as the "Pathway System." The Board took action and authorized hiring a vendor to begin building and installation of the new system. The vendor has been working with staff on-site at KTRS since September 2011. The focus of work has been developing and constructing the first major component of the new system.

On July 15, 2013, the first major component of the new system (member enrollment, employer reporting, service credit purchases, and related accounting functions), was put into production. The implementation was highly successful. To date, more than 54% of the overall project has been completed and work has been proceeding according to schedule and within budget.

The objective of the Pathway System is to streamline retirement processes and improve staff efficiency in providing services to retirees and active members. In developing the Pathway System, KTRS is redesigning and improving office processes and ultimately will be applying new web-based 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 under the Pathway System,

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 55 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 2012-2013 fiscal year as the portfolio's market value increased from \$15,132,284,908 to \$16,597,563,301. The increase in value of the portfolio and of the overall market was primarily due to improvements in the financial markets and realized capital gains. This increase was supported with investment income that included interest income and dividends. Employer and employee contributions also provided significant income to the portfolio.

Investment income, including appreciation of asset values, net of investment expenses, for the 2012-2013 fiscal year was \$2,071,260,168. The major contributing factor of the positive return from the System's investment portfolio resulted from the net appreciation in fair value of investments in the amount of \$1,624,371,455. The largest earnings component, \$264,247,210 was the result of interest income. Other income, net of expenses, of \$182,641,503 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 14.1% in 2012-13, the portfolio's ten-year annualized rate of return is 6.4% and the twenty-year annualized rate of return is 7.3%.

KTRS annuities have a bolstering impact on the Commonwealth of Kentucky's economy, as approximately 92% of retired teachers reside within the state. Total benefits (retirement, medical...etc.) paid during the fiscal year were approximately \$1.8 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.

Since fiscal year 2008, the state has not paid the recommended annual employer contribution necessary to pre-fund the benefit requirements of members of the retirement system as determined by the actuary. Over this period of time, because of the failure to fund, the state's annual employer contributions have grown significantly from \$60.5 million (Fiscal Year 2009) to \$487 million (Fiscal Year 2016). The following schedule details the growth of the additional annual employer contributions payable by the state:

Fiscal Year	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

The Board has always taken action as required by state law and recommended annual employer contributions payable by the state that would ensure that the state meets the contractual obligations to members.

The latest actuarial valuation was for the period ending June 30, 2013. This report reflects the System's actuarial value of assets totaling \$15.0 billion and actuarial determined liabilities totaling \$28.8 billion. The funded ratio of actuarial assets to liabilities is 51.9%. The actuary reports: "...In our opinion, the System is not being funded on an actuarially sound basis since the actuarially required contributions are not being made by the employer. If contributions by the employer to the System continue to be less than those required, the assets are expected to become insufficient to pay promised benefits. 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 assets 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 50). After the 2013 employer contributions there remains a net pension obligation of \$682,450,008 (as detailed on page 95). Annual required employer contributions for the Medical Insurance Fund are provided in the Schedule of Employer Contributions (on page 51). The 2013 employer shortfall of contributions created a net OPEB obligation of \$1,469,685,047 (as detailed on page 118).

The sustained decline in the funded ratio is from the cumulative effect of the employer failing to make actuarially required contributions. Also contributing to the reduced funded ratio are market fluctuations that are being recognized using actuarial smoothing over a five-year period and the changing demographics of the retirement system.

**KTRS Medical Insurance Plan**

The shared responsibility solution for funding retiree health care, which went into effect on July 1, 2010, provides a method of pre-funding retiree health care over a 30 year period. The System believes that the shared responsibility solution for

funding retiree health care will help ensure the retirement security of the state's teachers. An actuarial valuation of the Medical Insurance Plan for the fiscal year ended June 30, 2013 indicated that the fund has an unfunded liability of \$3.1 billion. The funded ratio of actuarial assets to liabilities is 11.7%, which is trending upward from past years. The actuary reports: "...if the State contributions to the Medical Insurance Fund are increased to the planned levels, the Retiree Medical Plan 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 Retiree Medical Plan will improve...."

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 Medical Insurance Plan or may adjust coverage to meet existing revenues.

**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. Certifications from the Board's External Auditor and Independent Actuary are enclosed in this report. The System's consultants who are appointed by the Board are listed on pages 52, 53, 77 and 82 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, 2012. 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-five consecutive years (fiscal years ended 1988-2012). 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 2013 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.

In 2013, for the second consecutive year, KTRS was not awarded the PPCC Certificate of Achievement for funding. Failure to qualify for the award reflects the employer's continued underfunding of KTRS's retirement annuity plan.

The PPCC is a coalition of three national associations that represent public retirement systems and administrators. Combined, these associations serve retirement systems that provide pension coverage for most of the nation's 16 million employees of state and local government. The associations that form the PPCC are the National Association of State Retirement Administrators; the National Council on Teacher Retirement; and the National Conference on Public Employee Retirement Systems.

### NCTR Executive Committee

Gary L. Harbin is a former president 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 were properly represented during the formulation and debate, and now implementation of the Patient Protection and Affordable Care Act. Membership in the Roundtable is open to any statewide, regional or local governmental unit that provides health care coverage for public employees and retirees.

### **Our Gratitude**

At the regular quarterly meeting of the Board of Trustees on June 17, 2013, Ms. Barbara G. Sterrett announced that her term on the Board would conclude on June 30, 2013. Ms. Sterrett served with distinction on the Board as an Active Teacher Trustee from July 1, 1990 through June 30, 2003, and as a Retired Teacher Trustee from July 1, 2005 through June 30, 2013. She served as Chair of the Board from July 1, 2008 through June 30, 2012 and as Vice Chair of the Board from July 1, 2006 through June 30, 2008. During her service assets under management increased from \$3.75 billion in 1990 to \$16.58 billion in 2013. During Ms. Sterrett's tenure as Chair of the Board, the retirement system secured long-term funding and cost reductions of retiree health care that reduced the unfunded liability of the retirement system by over \$5 billion. We would like to thank Ms. Sterrett for her exemplary service and numerous contributions to the successful operation of the system.

At the regular quarterly meeting of the Board of Trustees on June 17, 2013, Mr. Charles Ludwig announced that his term on the Board would conclude on June 30, 2013. Mr. Ludwig served with distinction on the Board as an Active Teacher Trustee from March 21, 2011 through June 30, 2013. During his tenure on the Board, the retirement system implemented the "Shared Responsibility" solution to pre-fund medical insurance benefits for retired Kentucky educators. We would like to thank Mr. Ludwig for his exemplary service and numerous contributions to the successful operation of the system.

### **Acknowledgments**

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

This report is located at the KTRS web address [www.ktrs.ky.gov](http://www.ktrs.ky.gov), and is made available to all employers 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**



**Dr. Tom Shelton**  
Chairperson  
Teacher Trustee  
Lexington



**Laura Zimmerman**  
Vice Chairperson  
Teacher Trustee  
Lexington



**Arthur Green**  
Retired Teacher Trustee  
Elkton



**Hollis Gritton**  
Lay Trustee  
Union



**Jay Morgan, Ph.D.**  
Teacher Trustee  
Murray



**Ronald L. Sanders**  
Lay Trustee  
Hodgenville



**Ruth Ann Sweazy**  
Teacher Trustee  
Taylorsville



**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**

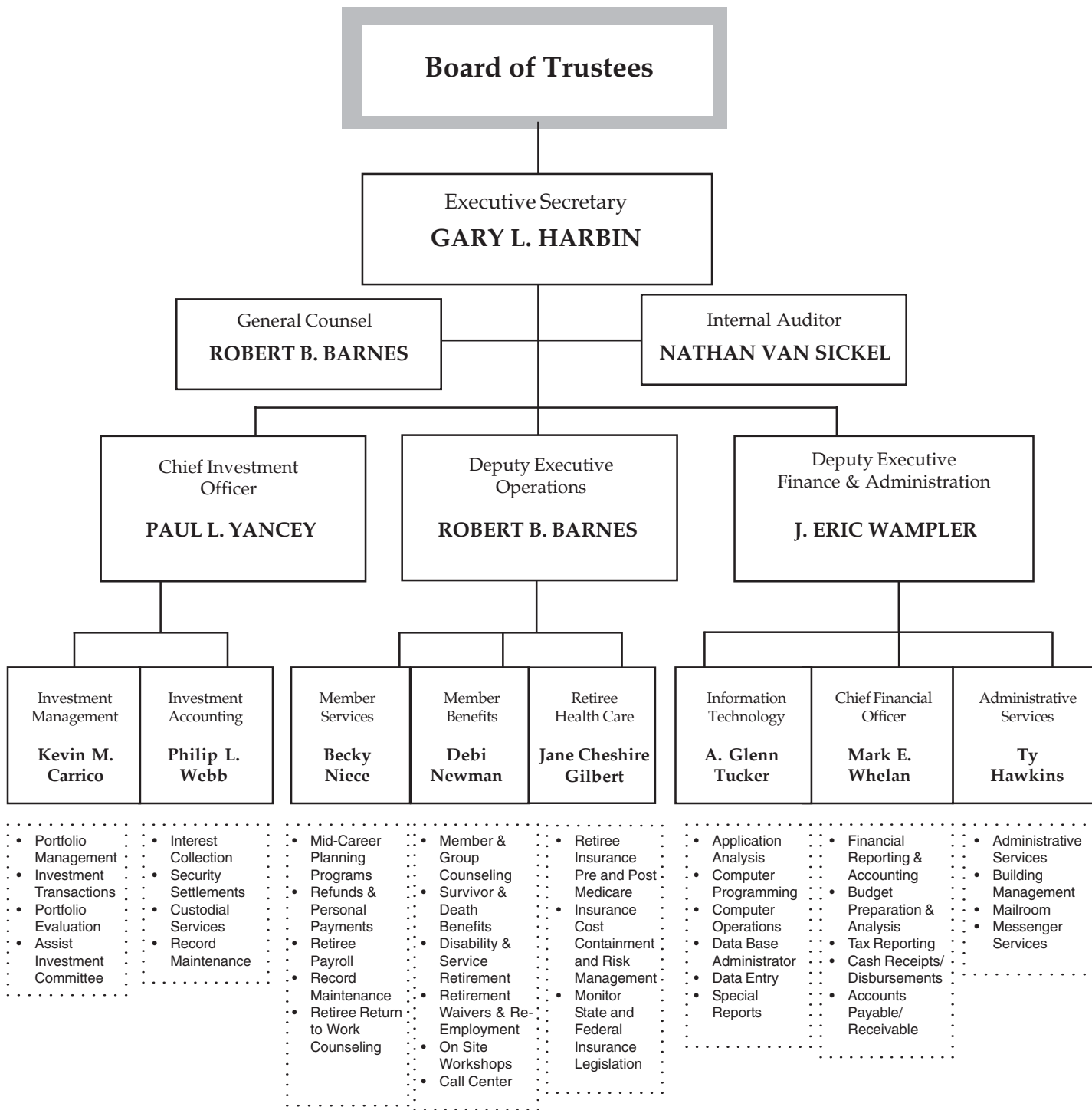
Cavanaugh Macdonald Consulting, LLC  
3550 Busbee Parkway, Suite 250  
Kennesaw, GA 30144

**AUDITOR**

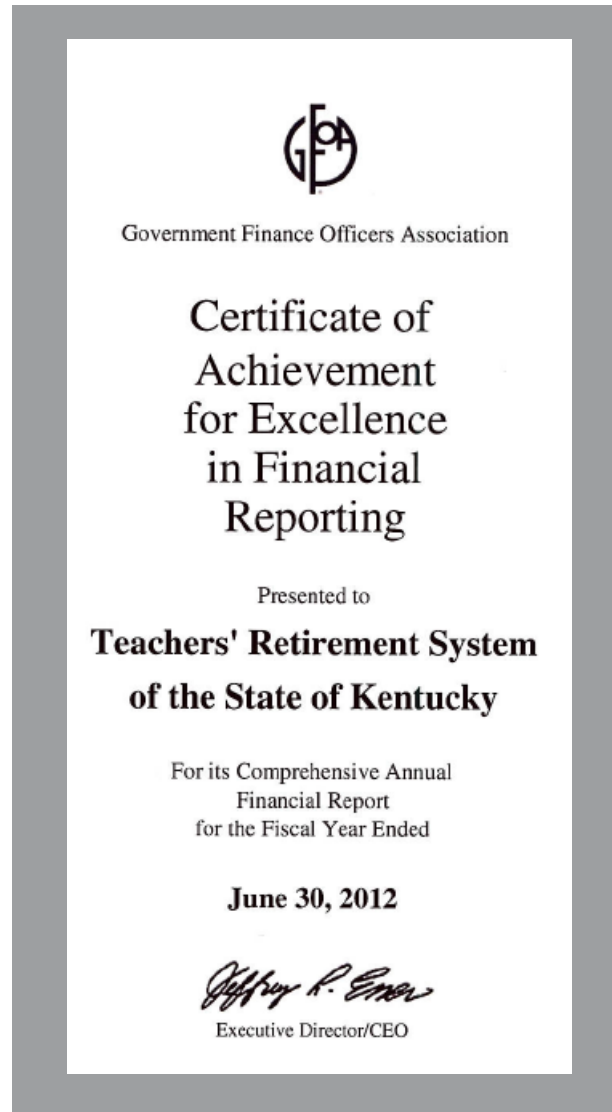
Mountjoy Chilton Medley LLC  
1000 Bluegrass Corporate Center  
333 West Vine Street  
Lexington, KY 40507

*\* See pages 77 and 82 of the Investment  
Section for investment consultants.*

## Kentucky Teachers' Retirement System Organizational Chart

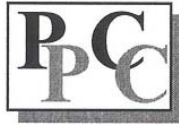


## GOVERNMENT FINANCIAL OFFICERS ASSOCIATION (GFOA)



*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-five consecutive years (fiscal years ended 1988-2012).*

**PUBLIC PENSION COORDINATING COUNCIL  
PUBLIC PENSION STANDARDS**



**Public Pension Coordinating Council  
Public Pension Standards  
2013 Award**

Presented to

**Kentucky Teachers' Retirement System**

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

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

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

A handwritten signature in black ink that reads "Alan H. Winkle". The signature is written in a cursive, flowing style.

Alan H. Winkle  
Program Administrator

*The Public Pension Coordinating Council awarded a Certificate of Achievement to the Teachers' Retirement System of the State of Kentucky for 2013 for implementing and maintaining high professional standards in administering the affairs of the System. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of benefits, actuarial valuation, financial reporting, investments and disclosure and are widely acknowledged to be marks of excellence for retirement systems. It represents the highest standards of excellence in the public pension industry.*



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