

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY

COMPONENT UNIT FINANCIAL REPORT FISCAL YEAR ENDED JUNE 30, 1989 49th Comprehensive Annual Report of the Teachers' Retirement System of the State of Kentucky for the Fiscal Year Ended June 30, 1989

> Kentucky Teachers' Retirement System 479 Versailles Road Frankfort, Kentucky 40601-3868

> > Pat N. Miller Executive Secretary

(This page left blank intentionally.)

Table of Contents

Page

Introductory Section

| Introductory Section | |
|---|------------|
| Letter of Transmittal | 2 |
| Chairperson's Letter | 3 |
| Board of Trustees | |
| Administrative Staff and Professional Consultants | 5 |
| Organizational Chart | 6 |
| System Highlights | |
| Financial Section | |
| | 10 |
| Independent Auditor's Report | |
| Balance Sheets | |
| Statement of Revenues, Expenses, and Changes in Fund Balances | 14 |
| Statement of Changes in Financial Position | |
| Elements of Net Increase (Decrease) in Working Capital | |
| Notes to Financial Statements | |
| Analysis of Funding Progress | |
| Revenues by Source and Expenses by Type | |
| Supporting Schedules | 30 |
| | |
| Actuarial Section | |
| Actuary's Certification Letter | |
| Summary of Principal Results | |
| Membership Data | |
| Assets | 42 |
| Comments on Valuation | 44 |
| Contributions Payable Under the System | 44 |
| Comments on Level of Funding | 45 |
| Results of the Valuation Prepared as of June 30, 1988 | |
| Summary of Receipts and Disbursements | |
| Outline of Actuarial Assumptions and Methods | |
| Solvency Test | |
| Schedule of Active Member Valuation Data | |
| Schedule of Retirants, Beneficiaries, and Survivors Added to and Removed from Rolls | |
| | 102 |
| Statistical Section | |
| Growth in Annuitants | 54 |
| Growth in Service Retirements | |
| Average Benefits Payments (by type of recipient) | |
| Average Benefit Payments (all recipients) | 55 |
| Summary of Revenue by Source | 56 |
| Summary of Expenses by Type | . JU 55 |
| Geographical Distribution of Retirement Payments | . JJ 57 |
| | |
| Summary of State Budget Appropriation | . 39 |
| Summary of State Match and Supplemental Appropriations | . 60 |
| Summary of Retiree Sick Leave Payments | . 01 |
| School Districts Electing to Pay for Sick Leave | . 62 |
| Schedule of KTRS Annuitants by Type of Benefit | . 64 |
| Distribution of Active Members | . 64 |
| | |
| Investment Section | |
| Investments | . 66 |

— iii -

KTRS =

Page

| Investment Income Growth Net Indicated Yield on Fixed Dollar Assets | |
|--|--|
| Analysis of Investments Held as of June 30, 1989 | |
| Short Term Investments | |
| U.S. Government Obligations | |
| Corporate Bonds | |
| Other Fixed Income Investments | |
| Real Estate Equity | |
| Common Stocks | |
| | |

NUMBER AT THE REPORT OF THE

INTRODUCTORY SECTION

Kentucky Teachers' Retirement System

Letter of Transmittal

BOARD OF TRUSTEES

W. D. BRUCE, JR. CHAIRPERSON, LOUISVILLE

ARLENE ROMINE VICE CHAIRPERSON, MT. WASHINGTON

MARTHA BAKER, PADUCAH ROBERT M. CONLEY, PAINTSVILLE FRANCES MILLER, RUSSELL VIRGINIA MURRELL, SOMERSET EARLE V. POWELL, FRANKFORT

EX OFFICIO

JOHN BROCK Supt. of Public Instruction

ROBERT MEAD CPA State Treasurer



PAT N. MILLER EXECUTIVE SECRETARY (502) 564-3266

COMMONWEALTH OF KENTUCKY TEACHERS' RETIREMENT SYSTEM 479 VERSAILLES ROAD FRANKFORT, KENTUCKY 40601-3868

December 1, 1989

Honorable Wallace Wilkinson, Governor Commonwealth of Kentucky Capitol Building Frankfort, Kentucky 40601

Dear Governor Wilkinson:

The 49th Annual Report of the Teachers' Retirement System of the State of Kentucky (the System) for the fiscal year ended June 30, 1989 is hereby submitted. The legal requirement for publication of this report is contained in Section 320 of Chapter 161 of the Kentucky Revised Statutes (KRS). In addition, KRS 161.370(2) requires an annual audit of the System. The auditor's opinion letter is in the Financial Section of this report.

The annual report consists of five sections: the Introductory Section containing this Letter of Transmittal and the identification of the trustees, staff, and consultants of the System; the Financial Section containing the auditor's opinion letter, the financial statements, and supporting schedules; the Actuarial Section containing the independent consulting actuary's opinion and results of their most recent actuarial valuation; the Statistical Section consisting of significant data pertaining to the System; and the Investment Section containing a detailed list of investments and charts reporting the investment performance and allocation.

Your support and assistance as well as that of the General Assembly is certainly appreciated in providing the financial assistance to insure the operation of the System in an actuarially sound manner.

2

Respectfully submitted,

Vn. nplo

Pat N. Miller Executive Secretary

Chairperson's Letter

BOARD OF TRUSTEES

W. D. BRUCE, JR. CHAIRPERSON, LOUISVILLE

ARLENE ROMINE VICE CHAIRPERSON, MT. WASHINGTON

MARTHA BAKER, PADUCAH ROBERT M. CONLEY, PAINTSVILLE FRANCES MILLER, RUSSELL VIRGINIA MURRELL, SOMERSET EARLE V. POWELL, FRANKFORT

EX OFFICIO

JOHN BROCK Supt. of Public Instruction

ROBERT MEAD CPA State Treasurer



PAT N. MILLER EXECUTIVE SECRETARY (502) 564-3266

COMMONWEALTH OF KENTUCKY TEACHERS' RETIREMENT SYSTEM 479 VERSAILLES ROAD FRANKFORT, KENTUCKY 40601-3868

December 1, 1989

Honorable Wallace Wilkinson, Governor Commonwealth of Kentucky Capitol Building Frankfort, Kentucky 40601

Dear Governor Wilkinson:

This 49th Annual Report of the Teachers' Retirement System of the State of Kentucky emphasizes the importance of a fiscally sound retirement system.

Local school districts, the Department of Education, state universities, and other participating employers are keenly aware of the importance of a growing, sound retirement system, particularly in attracting and retaining competent employees. The employees recognize the importance of their contributions and the Commonwealth's matching and overmatching of their contributions in providing a sound retirement system. In this manner, each member's future benefits are being protected and guaranteed.

The Board of Trustees is totally committed to maintaining a fiscally sound retirement system. Members of the system must continue to look to the future with confidence that their contributions, along with those of the Commonwealth, will be utilized to provide the very best retirement possible just as has been provided for present and past retirees.

The Board of Trustees looks forward to working with you and the members of the General Assembly in an effort to provide a financially sound retirement system for now and in the future for membership of the System.

Sincerely W. D. Bruce, Jr.

Chairperson Board of Trustees

Board of Trustees

Mrs. Arlene Romine



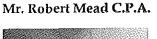
Vice-Chairperson, Teacher Trustee Mt. Washington





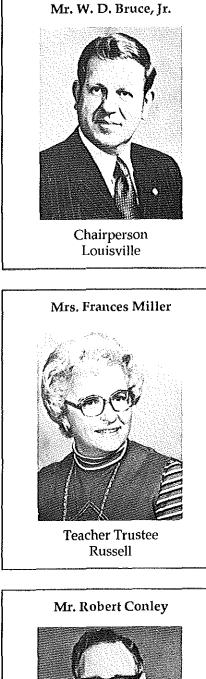
Teacher Trustee Paducah







Ex-Officio Trustee State Treasurer



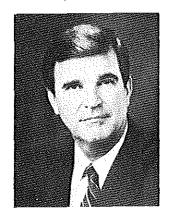


Lay Trustee Paintsville



Retired Teacher Trustee Somerset

Dr. John Brock



Ex-Officio Trustee, Superintendent of Public Instruction

_____ 4 ___

Administrative Staff

Kentucky Teachers' Retirement System 479 Versailles Road Frankfort, Kentucky 40601-3868

Executive Secretary Pat N. Miller (502) 564-3266

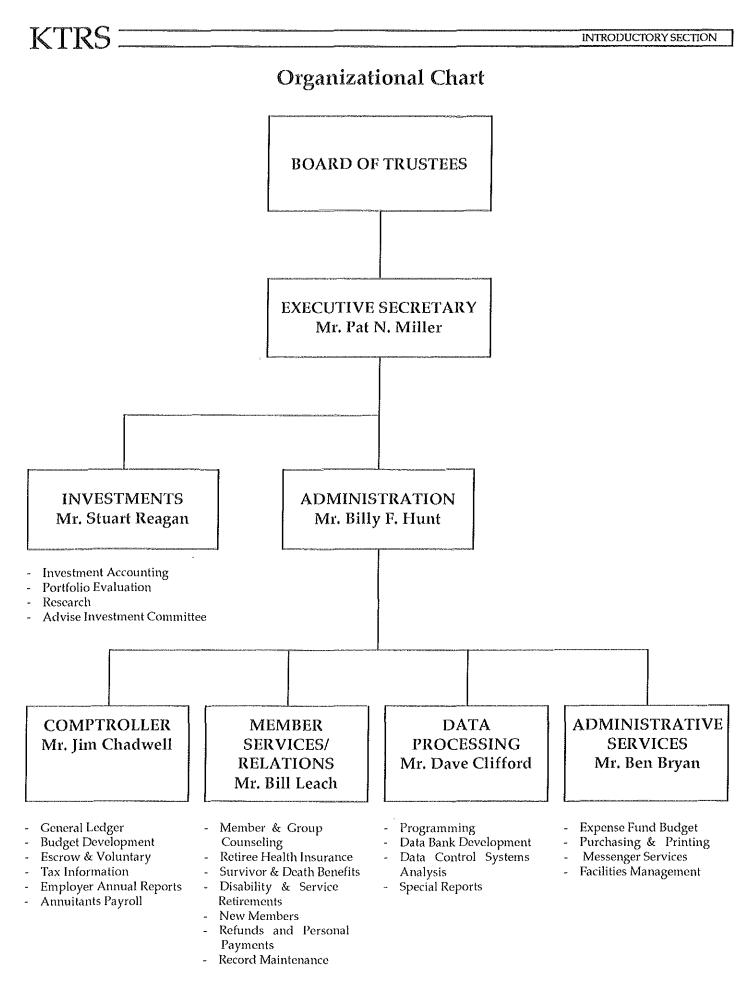
Deputy Executive Secretary for Administration Billy F. Hunt (502) 564-3266

Deputy Executive Secretary for Investments Stuart A. Reagan, CFA (502) 564-2057

Professional Consultants

Investment Advisors

| Fixed Income and Equity Manager | Todd Investment Advisors 3160 First National Tower Louisville, Kentucky 40202 |
|---------------------------------|--|
| Fixed Income Manager | First Kentucky Company First National Tower Louisville, Kentucky 40232 |
| Equity Manager | Invesco Capital Management, Inc. 1315 Peachtree Street, N.E., Suite 300 Atlanta, Georgia 30309 |
| Investment Custodian | Farmers Bank and Capital Trust Co. Farmers Bank Plaza Frankfort, Kentucky 40601 |
| Actuary | George B. Buck Consulting Actuaries, Inc. 200 Galleria Parkway, N.W., Suite 1060 Atlanta, Georgia 30339 |
| Auditor | CharlesT. Mitchell and Company Box 698 Frankfort, Kentucky 40602 |



System Highlights

Accounting System and Reports

This report has been prepared to conform with the principles of governmental accounting and reporting as established by the Governmental Accounting Standards Board and the American Institute of Certified Public Accountants. This report was prepared by the Kentucky Teachers' Retirement System (KTRS) accounting section. Responsibility for both the accuracy of the presented data and the completeness and fairness of the presentation, including all disclosures, rests with KTRS. KTRS believes the data, as presented, is accurate in all material aspects; that it is presented in a manner designed to fairly set forth the financial position and results of operations of KTRS as measured by the financial activity of its various funds; and that all disclosures necessary to enable the reader to gain the maximum understanding of KTRS's financial affairs have been included.

The accrual basis of accounting is used to record the assets, liabilities, revenues, and expenses of the System. Revenues of the System are taken into account when earned without regard to the date of collection, and expenses are recorded when the corresponding liabilities are incurred, regardless of when payment was made. Fixed assets are recorded at cost and depreciated over the estimated useful lives of the assets.

In developing and evaluating KTRS's accounting system, consideration is given to the adequacy of internal accounting controls. Internal accounting controls are designed to provide reasonable, but not absolute, assurance regarding: (1) the safeguarding of assets against loss from unauthorized use or disposition; and (2) the reliability of financial records for preparing financial statements and maintaining accountability for assets. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the evaluation of costs and benefits requires estimates and judgements by management.

All internal control evaluations occur within the above framework. We believe that KTRS's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions.

Revenues

The reserves needed to finance retirement and other member benefits are accumulated through the collection of member and employer or state contributions and through income derived from investment of reserve funds. Contributions and investment income for the fiscal year 1989 totaled \$565,944,604. This represents an increase of 1.5% over fiscal year 1988 revenue. The rate of increase for member contributions over fiscal year 1988 was 9.3% while the employer contributions decreased 4.7%. KTRS's overall revenue growth for the 1989 fiscal year was primarily affected by a reduction totaling \$31.5 million instate contributions below the amount recommended by the System's actuary.

Expenses

The primary purpose of a retirement system relates to the purpose for which it was created, the payment of benefits. These payments, along with refunds of contributions to terminated employees, insurance premiums for retired teachers, and the cost of administering the System, comprise the total expense. Expenses by type for 1989 and 1988 are shown for comparative purposes.

| | 1989 | 1988 | Increase/(D | ecrease) |
|-------------------------|------------|------------|-------------|----------|
| Expenses | (Millions) | (Millions) | (Millions) | % |
| Retiree Benefits | \$172.9 | \$155.7 | \$17.2 | 11.05 |
| Disabilities | 8.7 | 8.0 | .7 | 8.75 |
| Survivor/Death Benefits | 6.6 | 6.2 | .4 | 6.45 |
| Refunds | 7.0 | 5.9 | 1.1 | 18.64 |
| Medical Insurance | 24.2 | 20.6 | 3.6 | 17.48 |
| Administration | 2.9 | 2.6 | .3 | 11.54 |
| | \$222.3 | \$199.0 | \$23.3 | 11.71 |

The increase in medical insurance cost of 17.48 percent, while large, is comparable to increases other medical insurance plans have incurred. KTRS is reviewing the medical insurance plan to determine if any changes need to be made to the plan.

The increase in the refund of member contributions of 18.64 percent is due to the fact that teachers' currently withdrawing their accounts have more service credit and larger account balances. The teachers' reason for leaving employment is beyond the scope of KTRS.

Investments

The investment portfolio is a substantial contributor to the System. It is estimated that income from investments will provide more than one-half of the funds that are paid to the average retired member. The investment portfolio experienced significant growth during the year. The par value of the portfolio increased from \$3,157,418,379 to \$3,444,970,223 during the 1988-89 fiscal year. The growth of the portfolio is due to higher teachers' salaries and the corresponding effect on contributions, as well as investment income. Results for the fiscal year show that investment income exceeded \$258 million. This figure is somewhat larger than last year's total of \$251.7 million.

The total investment income earned by the System can be attributed to three separate activities. The largest component, \$257,159,217, results from investment income to the System's investment portfolio. Another \$879,797 is earned through the maintenance of a medical insurance stabilization fund which is held by an insurer. The third item affecting investment income is a special maintenance reserve account that is dedicated to a specific real estate holding in the investment portfolio. This amount totals \$7,605 for 1988-89.

According to KRS 161.430 the KTRS Board of Trustees has the authority to invest the assets of the System. The Board of Trustees, generally, delegates investment authority to an Investment Committee that is comprised of two Trustees and the System's Executive Secretary. The Investment Committee works closely with experienced investment counselors who are contracted by the Board of Trustees to provide investment advice.

Funding

The most important consideration for a retirement system is the level of funding it receives. The better the level of funding, the larger the ratio of assets accumulated and the greater the level of investment income potential. Also, a better level of funding gives the participants a higher degree of assurance that their pension benefits are secure. The advantage of a well-funded plan is that the participants can look at assets that are irrevocably committed to the payment of benefits.

KRS 161.550(1) establishes the state's funding level at an amount equal to that contributed by all members. In addition to the matching requirement, the state is required to provide a supplemental appropriation of 3.25% of total members' salaries. In the event annual appropriations are not sufficient to meet these statutory requirements, the statute requires the state to make up the deficit in the next biennial budget.

The last actuarial valuation was conducted at June 30, 1988. The actuarial accrued liability of the System was \$4.287 billion. The reserve balance from participant contributions from employers, employees, and investment income was \$2.916 billion. The amount by which the accrued liability exceeds the reserves, or the unfunded liability, totaled \$1.371 billion on June 30, 1988.

Current and Future Developments

The 1988 General Assembly reduced significantly its appropriation to KTRS for the 1988-90 biennium. The 3.25% supplemental appropriation required by KRS 161.550(1) for the fiscal years ending June 30, 1989 and 1990 was repealed and replaced with an appropriation of \$17.6 for 1988-89 and \$22.3 million for 1989-90.

The actual funding deficit for the 1988-89 fiscal year totaled \$29,080,372. It is estimated that the shortage for the 1989-90 fiscal year will be \$31.8 million. Monies to satisfy these shortages are being included in KTRS's budget request for the upcoming biennium. Any amounts not currently funded will have to be funded in the future if the System is going

8 ----

to pay benefits which have already been earned. Future payments for amounts not presently funded will cost the Commonwealth more money since these shortages will be accruing interest at an actuarially assumed rate of 8% per year.

For the last several months the operations and the funding policies of KTRS have been studied by a committee (SCR 69) composed of two legislators and two lay members appointed by the Governor. At its October 13th meeting the committee took the position that KTRS should be funded in accordance with the System's actuarial recommendations. KTRS intends to seek monies from the 1990 General Assembly to restore the balance of the supplemental appropriation which was not appropriated by the 1988 General Assembly.

Actuarial Valuation of Medical Insurance Program

During the 1988-89 fiscal year the KTRS Board of Trustees requested and received a report of its retirce medical insurance program. The major objectives of the study were to:

- Analyze the program's experience, demographics and plan design;
- Evaluate the existing funding approach;
- Exam the program's funding alternatives; and
- Identify any possible changes necessary to bring program's costs under control.

An actuarial valuation of the KTRS medical insurance program revealed that its unfunded accrued liability as of July 1, 1988 was \$1.05 billion. This liability was about 85% of the System's pension plan liability as of June 30, 1988. The KTRS Board of Trustees will be addressing the future funding of the medical insurance program and making recommendations to the General Assembly over the next two years in this regard.

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 Kentucky Teachers' Retirement System (KTRS). A certification from the certified public accountant and actuary are enclosed in this report. All of the consultants appointed by the Board are listed on page 5 of this report.

Our Gratitude

Effective July 1, 1989 Mrs. Frances Miller retired after having served ten years as an active member representative on the KTRS Board of Trustees. KTRS wishes to express its appreciation for Ms. Miller's devotion to KTRS. At its September 1989 meeting the Board of Trustees appointed Ms. Judith Gamble to serve the remainder of Ms. Miller's term.

Acknowledgements

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

This report is being mailed to all employer members of the System. They form the link between KTRS and its membership. Their cooperation continues to contribute significantly to the success of KTRS. Hopefully, the employers and their employees will find this report both informative and helpful.

(This page left blank intentionally.)

FINANCIAL SECTION

Kentucky Teachers' Retirement System

Independent Auditor's Report

Charles J. Mitchell Company

Certified Public Accountants

201 WEST MAIN P.O. BOX 698 FRANKFORT, KENTUCKY 40602 (502) 227-7395 C T M

CHARLES T. MITCHELL, C.P.A. DON C. GILES, C.P.A. WILLIAM G. JOHNSON, JR., C.P A. GARY L. HARBIN, C.P.A. LARRY T. WILLIAMS, C.P.A.

Board of Trustees Teachers' Retirement System of the State of Kentucky Frankfort, Kentucky 40601

Independent Auditor's Report

We have audited the accompanying balance sheets of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, as of June 30, 1989 and 1988, and the related statements of revenues, expenses, and changes in fund balances, and changes in financial position 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 component unit financial statements based on our audits.

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

In our opinion, the component unit financial statements referred to above present fairly, in all material respects, the financial position of the Teachers' Retirement System of the State of Kentucky, a component unit of the Commonwealth of Kentucky, at June 30, 1989 and 1988, and the results of its operations and its changes in financial position for the years then ended in conformity with generally accepted accounting principles.

Our examinations were made for the purposes of forming an opinion on the basic component unit financial statements taken as a whole. The supplementary information included in the Supporting Schedules is presented for purposes of additional analysis and is not a required part of the basic component unit financial statements. Such information has been subjected to the auditing procedures applied in the examinations of the basic component unit financial statements, and, in our opinion, is fairly stated in all material respects in relation to the basic component unit financial statements.

Chasho T Mutchell Co.

Charles T. Mitchell Company

October 13, 1989

 \equiv KTRS

Balance Sheets June 30, 1989 and June 30, 1988

| ASSETS | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|--|---|---|
| Cash Deposit with Insurance Carrier (See Note 4) Prepaid Expenses | \$ 4,295,069 3,771,730 112,926 | \$ 2,591,496 3,209,394 111,284 |
| Receivables: Contributions State of Kentucky Investment Income Total Receivables | 13,612,269 13,799,774 48,175,528 \$ 75,587,571 | 11,348,295 19,257,991 38,845,701 \$ 69,451,987 |
| Investments, at Cost (See Note 2): Short Term Investments (Market Value \$359,260,000 in 1989 and \$431,460,000 in 1988) Bonds and Mortgages (Market Value \$2,058,163,064 in 1989 and \$1,792,643,649 in 1988) Common Stock (Market Value \$869,311,552 in 1989 and \$574,873,769 in 1988) Real Estate (Market Value \$41,389,468 in 1989 and \$41,328,660 in 1988) | 359,260,000 2,040,131,061 777,841,038 37,592,183 | 431,460,000 1,829,496,205 581,237,317 37,531,374 |
| Total Investments | \$3,214,824,282 | \$2,879,724,896 |
| Fixed Assets (Net of Accumulated Depreciation of \$306,068 in 1989 and \$201,069 in 1988) Total Assets | 368,215 \$3,298,959,793 | 434,652 \$2,955,523,709 |
| LIABILITIES AND FUND BALANCE | | |
| Liabilities Accounts Payable Treasurer's Unredeemed Checks Total Liabilities | \$ 266,742 2,542 \$ 269,284 | \$ 473,846 |
| Fund Balance Member Reserve Employer Reserve Benefit Reserve Survivor, Death, Medical Reserve 403(b) Program Reserve Unallocated Reserve Administrative Expense Reserve | 997,780,513 1,026,464,838 116,325,901 40,568,317 11,173,769 1,106,004,450 372,721 | 906,405,608 931,361,850 81,715,074 37,829,757 10,597,034 986,773,602 365,762 |
| Unfunded Pension Benefit Obligation (See Note 5) | | |
| Total Fund Balance Total Liabilities and Fund Balance | \$3,298,690,509 \$3,298,959,793 | \$2,955,048,687 \$2,955,523,709 |

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

Statement of Revenues, Expenses Years Ended June 30,

RESERVES

| Member | Employer | Benefit | Survivor, Death, Medical |
|--|--|--|--|
| \$ 114,270,479 | \$ 1,132,864 117,327,322 | \$ | \$13,393,233 11,622,570 |
| \$ 114,270,479 | \$ 118,460,186 | \$ | \$25,015,803 |
| 5,725,570 | 685 | 181,586,886 | 6,561,274 228 24,193,806 |
| \$ 5,725,570 | \$ 685 | \$ 181,586,886 | \$30,755,308 |
| \$ 108,544,909 | \$ 118,459,501 | \$(181,586,886) | \$ (5,739,505) |
| \$ (42,912,773) 25,742,394 | \$ (44,137,463) (6,222,385) 26,430,413 | \$ 85,075,653 129,325,433 (389,086) 2,640,056 | \$ 1,974,583 3,716,117 (102,186) 2,721,118 |
| 10-10-10-10-10-10-10-10-10-10-10-10-10-1 | ······································ | | 168,433 |
| | | | \$ 8,478,065 |
| s)\$ 91,374 <i>,</i> 905 | \$ 95,102,988 | \$ 34,610,827 | \$ 2,738,560 |
| 906,405,608 | 931,361,850 | 81,715,074 | 37,829,757 |
| | | | |
| \$ 997,780,513 | \$ 1,026,464,838 | \$ 116,325,901 | \$40,568,317 |
| | \$ 114,270,479 \$ 114,270,479 \$ 114,270,479 5,725,570 \$ 5,725,570 \$ 108,544,909 \$ (42,912,773) 25,742,394 375 \$ (17,170,004) \$ 91,374,905 906,405,608 | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | $\begin{array}{c c c c c c c c c c c c c c c c c c c $ |

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

- 14

 \equiv KTRS

and Changes in Fund Balances 1989 and June 30, 1988

| 403(b) Program | Unallocated | Administrative Expense | 1988-89 Total | 1987-88 Total |
|---------------------------------|---|---------------------------|---|---|
| \$ 1,171,079 | \$ 48,980,438 258,046,619 | \$ | \$ 129,967,655 177,930,330 258,046,619 | \$ 118,958,551 186,803,428 251,701,591 |
| \$ 1,171,079 | \$ 307,027,057 | \$ | \$ 565,944,604 | \$ 557,463,570 |
| 110,219 1,269,651 | 630,000 | 2,224,463 | 188,258,379 6,996,134 24,193,806 2,854,463 | 169,952,683 5,945,822 20,588,869 2,566,215 |
| \$ 1,379,870 | \$ 630,000 | \$ 2,224,463 | \$ 222,302,782 | \$ 199,053,589 |
| \$ (208,791) | \$ 306,397,057 | \$ (2,224,463) | \$ 343,641,822 | \$ 358,409,981 |
| \$ 56,767 730,534 (1,775) | \$ (133,098,317) 6,713,657 (58,264,515) (2,231,422) (285,612) | \$ 2,231,422 | \$ | \$ |
| \$ 785,526 | \$ (187,166,209) | \$ 2,231,422 | \$ | \$ |
| \$ 576,735 | \$ 119,230,848 | \$ 6,959 | \$ 343,641,822 | \$ 358,409,981 |
| 10,597,034 | 986,773,602 | 365,762 | 2,955,048,687 | 2,596,638,706 |
| | | | | |
| \$11,173,769 | \$1,106,004,450 | \$ 372,721 | \$3,298,690,509 | \$2,955,048,687 |

Statement of Changes in Financial Position Year Ended June 30, 1989 and 1988

KTRS =

| Sources of Working Capital: Operations Net income Items not requiring working capital: Net amortization of premium/discount Depreciation of fixed assets \$343,641,822 \$358,409,981 Items not requiring working capital: Net amortization of premium/discount Depreciation of fixed assets \$(9,164,076) \$(8,109,161) Total working capital provided by operations \$334,582,987 \$350,387,870 Total sources of working capital \$334,582,987 \$350,387,870 Uses of Working Capital: \$334,582,987 \$350,387,870 Net increase (decrease) in long-term investments Acquisition of equipment \$398,135,311 \$501,184,975 Total uses of working capital \$398,174,114 \$501,295,713 Net decrease in working capital \$398,174,114 \$501,295,713 Net decrease in working capital \$(63,591,127) \$(151,007,843) Elements of Net Increase (Decrease) in Working Capital: \$(23,335) \$(1,703,573) \$1,501,724 Cash Pepsid Expenses Receivables \$(63,796,865) \$(150,876,709) \$(171,630,000) \$(171,630,000) \$(171,630,000) \$(171,630,335) \$(227,104) \$153,711 \$(22,572) \$(22,772) \$(151,007,843) \$(22,771) | | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|--|---|-----------------------------|-----------------------------|
| Net income\$ 343,641,822\$ 358,409,981Items not requiring working capital: Net amortization of premium/discount Depreciation of fixed assets $(9,164,076)$ $105,241$ $(8,109,161)$ $105,241$ Depreciation of fixed assets $105,241$ $87,050$ Total working capital provided by operations $\$ 334,582,987$ $\$ 350,387,870$ Total sources of working capital $\$ 334,582,987$ $\$ 350,387,870$ Uses of Working Capital: $\$ 334,582,987$ $\$ 350,387,870$ Uses of Working capital $\$ 398,135,311$ $\$ 501,184,975$ $38,803$ $\$ 501,184,975$ $210,738$ Total uses of working capital $\$ 398,174,114$ $\$ 501,395,713$ $\$ (151,007,843)$ Net increase (decrease) in long-term investments Acquisition of equipment $\$ 398,174,114$ $\$ 501,395,713$ $\$ (151,007,843)$ Elements of Net Increase (Decrease) in Working Capital: $$ (63,591,127)$ $\$ (151,007,843)$ Current Assets: Cash Prepaid Expenses Receivables $\$ (63,796,865)$ $\$ (1,703,573)$ $\$ 1,501,724$ $1,642$ Bodos Receivables Accounts payable Accounts payable Total current tabilities: Accounts payable Accounts payable Current Liabilities $\$ (207,104)$ $\$ 153,711$ $1,366$ Total current liabilities $\$ (205,738)$ $\$ 131,134$ | Sources of Working Capital: | | |
| Items not requiring working capital: Net amortization of premium/discount Depreciation of fixed assets $(9,164,076)$ $(8,109,161)$ $105,241$ $(8,109,161)$ $87,050$ Depreciation of fixed assets $\frac{1}{2}$ 334,582,987 $\frac{1}{8}$ 3350,387,870Total working capital provided by operations $\frac{1}{8}$ 334,582,987 $\frac{1}{8}$ 350,387,870Uses of Working Capital: $\frac{1}{8}$ 334,582,987 $\frac{1}{8}$ 350,387,870Uses of Working Capital: $\frac{1}{8}$ 334,582,987 $\frac{1}{8}$ 350,387,870Uses of working capital $\frac{1}{8}$ 398,135,311 $\frac{1}{8}$ 501,184,975Acquisition of equipment $\frac{3}{38,803}$ $\frac{2}{210,738}$ Total uses of working capital $\frac{1}{8}$ 398,174,114 $\frac{1}{8}$ 501,395,713Net decrease in working capital $\frac{1}{8}$ (63,591,127) $\frac{1}{8}$ (151,007,843)Elements of Net Increase (Decrease) in Working Capital: $\frac{1}{20}$ $\frac{1}{20}$ (1,439,834)Prepaid Expenses $1,642$ 18,066Receivables $6,133,584$ 20,673,335Short-term investments $(72,200,000)$ $(171,630,000)$ Total current assets $\frac{1}{8}$ (63,796,865) $\frac{1}{8}$ (150,876,709)Current Liabilities: $\frac{1}{3,266}$ $\frac{1}{202,738}$ $\frac{1}{3,1,134}$ | | ф Э.4Э. C.41, 9ЭЭ | Ф 250 400 001 |
| Net amortization of premium/discount $(9,164,076)$ $(8,109,161)$ Depreciation of fixed assets $105,241$ $87,050$ Total working capital provided by operations $\$ 334,582,987$ $\$ 350,387,870$ Total sources of working capital $\$ 334,582,987$ $\$ 350,387,870$ Uses of Working Capital:Net increase (decrease) in long-term investmentsAcquisition of equipment $\$ 398,135,311$ $\$ 501,184,975$ Acquisition of equipment $\$ 398,174,114$ $\$ 501,395,713$ Net decrease in working capital $\$ 398,174,114$ $\$ 501,395,713$ Net decrease in working capital $\$ (63,591,127)$ $\$ (151,007,843)$ Elements of Net Increase (Decrease) in Working Capital:Current Assets: $$1,642$ $18,066$ Receivables $$1,642$ $18,066$ Receivables $$(63,796,865)$ $$(150,876,709)$ Total current assets $$(63,796,865)$ $$$(150,876,709)$ Current Liabilities: $$(207,104)$ $$153,711$ Accounts payable $$1,34,134$ | | \$ 343,641,822 | \$ 338,409,981 |
| Depreciation of fixed assets105,24187,050Total working capital provided by operations $\$ 334,582,987$ $\$ 350,387,870$ Total sources of working capital $\$ 334,582,987$ $\$ 350,387,870$ Uses of Working Capital:Net increase (decrease) in long-term investmentsAcquisition of equipment $\$ 398,135,311$ $\$ 501,184,975$ Acquisition of equipment $\$ 398,174,114$ $\$ 501,395,713$ Total uses of working capital $\$ 398,174,114$ $\$ 501,395,713$ Net decrease in working capital $\$ (63,591,127)$ $\$ (151,007,843)$ Elements of Net Increase (Decrease) in Working Capital:Current Assets: Cash Deposit with Insurance Carrier Cash Deposit with Insurance Carrier Carrier Sto,335 Short-term investments $\$ (63,796,865)$ $\$ (150,876,709)$ Current Labilities: Accounts payable Total current assets $\$ (63,796,865)$ $\$ (150,876,709)$ Current Labilities: Accounts payable Treasurer's Unredeemed Checks $\$ (207,104)$ $\$ 133,711$ Total current liabilities $\$ (205,738)$ $\$ 131,134$ | | (9,164,076) | (8,109,161) |
| Total sources of working capital $$334,582,987$ $$350,387,870$ Uses of Working Capital:Net increase (decrease) in long-term investmentsAcquisition of equipment $$398,135,311$ $$501,184,975$ Total uses of working capital $$398,174,114$ $$501,395,713$ Net decrease in working capital $$(63,591,127)$ $$(151,007,843)$ Elements of Net Increase (Decrease) in Working Capital:Current Assets: $$(63,591,127)$ $$(1,513,311)$ Current Assets: $$(63,336)$ $$(1,429,834)$ Prepaid Expenses $$1,642$ $$18,066$ Receivables $$6,135,584$ $$20,673,335$ Short-term investments $(72,200,000)$ $(171,630,000)$ Total current assets $$(63,796,865)$ $$(150,876,709)$ Current Liabilities: $$(205,738)$ $$131,134$ | | | |
| Uses of Working Capital:Net increase (decrease) in long-term investments\$ 398,135,311\$ 501,184,975Acquisition of equipment $38,803$ $210,738$ Total uses of working capital\$ 398,174,114\$ 501,395,713Net decrease in working capital\$ (63,591,127)\$ (151,007,843)Elements of Net Increase (Decrease) in Working Capital: $(1,439,834)$ Current Assets:\$ 1,703,573\$ 1,501,724Cash\$ 1,703,573\$ 1,501,724Deposit with Insurance Carrier562,336(1,439,834)Prepaid Expenses6,135,58420,673,335Short-term investments(72,200,000)(171,630,000)Total current assets\$ (63,796,865)\$ (150,876,709)Current Liabilities:\$ (207,104)\$ 153,711Accounts payable\$ (205,738)\$ 131,134 | Total working capital provided by operations | \$ 334,582,987 | \$ 350,387,870 |
| Net increase (decrease) in long-term investments\$ 398,135,311 38,803\$ 501,184,975 210,738Acquisition of equipment $38,803$ 210,738 $210,738$ 210,738Total uses of working capital\$ 398,174,114\$ 501,395,713 \$ (151,007,843)Net decrease in working capital\$ (63,591,127)\$ (151,007,843)Elements of Net Increase (Decrease) in Working Capital:Current Assets: Cash Deposit with Insurance Carrier\$ 1,703,573 562,336 (1,439,834) 1,642\$ 1,501,724 18,066 6,135,584 20,673,335Short-term investments Accounts payable Treasurer's Unredeemed Checks\$ (207,104) 1,366 (22,577) (22,577) (22,577)\$ 131,134 | Total sources of working capital | \$ 334,582,987 | \$ 350,387,870 |
| Acquisition of equipment $38,803$ $210,738$ Total uses of working capital\$ 398,174,114\$ 501,395,713Net decrease in working capital\$ (63,591,127)\$ (151,007,843)Elements of Net Increase (Decrease) in Working Capital:Current Assets: Cash\$ 1,703,573\$ 1,501,724Deposit with Insurance Carrier562,336(1,439,834)Prepaid Expenses1,64218,066Receivables6,135,58420,673,335Short-term investments(72,200,000)(171,630,000)Total current assets\$ (63,796,865)\$ (150,876,709)Current Liabilities: Accounts payable Treasurer's Unredeemed Checks\$ (207,104)\$ 153,711 1,366Total current liabilities\$ (205,738)\$ 131,134 | Uses of Working Capital: | | |
| Total uses of working capital $$398,174,114$ $$501,395,713$ Net decrease in working capital $$(63,591,127)$ $$(151,007,843)$ Elements of Net Increase (Decrease) in Working Capital: Current Assets: Cash $$1,703,573$ $$1,501,724$ Deposit with Insurance Carrier $562,336$ $(1,439,834)$ Prepaid Expenses $1,642$ $18,066$ Receivables $6,135,584$ $20,673,335$ Short-term investments $(72,200,000)$ $(171,630,000)$ Total current assets $$(63,796,865)$ $$(150,876,709)$ Current Liabilities: $Accounts payable$ $$(207,104)$ $$153,711$ Treasurer's Unredeemed Checks $1,366$ $(22,577)$ Total current liabilities $$(205,738)$ $$131,134$ | Net increase (decrease) in long-term investments | | |
| Net decrease in working capital $\$$ (63,591,127) $\$$ (151,007,843) Elements of Net Increase (Decrease) in Working Capital: $\$$ (1,703,573 $\$$ 1,501,724 Current Assets: $\$$ 1,703,573 $\$$ 1,501,724 Deposit with Insurance Carrier $562,336$ (1,439,834) Prepaid Expenses $1,642$ $18,066$ Receivables $6,135,584$ $20,673,335$ Short-term investments $(72,200,000)$ $(171,630,000)$ Total current assets $\$$ (207,104) $\$$ 153,711 Treasurer's Unredeemed Checks $\$$ (205,738) $\$$ 131,134 | Acquisition of equipment | 38,803 | 210,738 |
| Elements of Net Increase (Decrease) in Working Capital: Current Assets: Cash \$ 1,703,573 \$ 1,501,724 Deposit with Insurance Carrier 562,336 (1,439,834) Prepaid Expenses 1,642 18,066 Receivables 6,135,584 20,673,335 Short-term investments (72,200,000) (171,630,000) Total current assets \$ (63,796,865) \$ (150,876,709) Current Liabilities: Accounts payable \$ (207,104) \$ 153,711 Treasurer's Unredeemed Checks 1,366 (22,577) Total current liabilities \$ (205,738) \$ 131,134 | Total uses of working capital | \$ 398,174,114 | \$ 501,395,713 |
| Current Assets: Cash \$ 1,703,573 \$ 1,501,724 Deposit with Insurance Carrier 562,336 (1,439,834) Prepaid Expenses 1,642 18,066 Receivables 6,135,584 20,673,335 Short-term investments (72,200,000) (171,630,000) Total current assets \$ (63,796,865) \$ (150,876,709) Current Liabilities: \$ (207,104) \$ 153,711 Accounts payable \$ (207,104) \$ 153,711 Treasurer's Unredeemed Checks 1,366 (22,577) Total current liabilities \$ (205,738) \$ 131,134 | Net decrease in working capital | \$ (63,591,127) | \$(151,007,843) |
| Cash\$ 1,703,573\$ 1,501,724Deposit with Insurance Carrier $562,336$ $(1,439,834)$ Prepaid Expenses $1,642$ $18,066$ Receivables $6,135,584$ $20,673,335$ Short-term investments $(72,200,000)$ $(171,630,000)$ Total current assets $\$ (63,796,865)$ $\$ (150,876,709)$ Current Liabilities: $\$ (207,104)$ $\$ 153,711$ Accounts payable $\$ (205,738)$ $\$ 131,134$ Total current liabilities $\$ (205,738)$ $\$ 131,134$ | Elements of Net Increase (Decrease) in Working Capital: | | |
| Deposit with Insurance Carrier 562,336 (1,439,834) Prepaid Expenses 1,642 18,066 Receivables 6,135,584 20,673,335 Short-term investments (72,200,000) (171,630,000) Total current assets \$ (63,796,865) \$(150,876,709) Current Liabilities: Accounts payable \$ (207,104) \$ 153,711 Treasurer's Unredeemed Checks 1,366 (22,577) Total current liabilities \$ (205,738) \$ 131,134 | Current Assets: | | |
| Prepaid Expenses 1,642 18,066 Receivables 6,135,584 20,673,335 Short-term investments (72,200,000) (171,630,000) Total current assets \$ (63,796,865) \$ (150,876,709) Current Liabilities: \$ (207,104) \$ 153,711 Accounts payable \$ (207,104) \$ 153,711 Treasurer's Unredeemed Checks 1,366 (22,577) Total current liabilities \$ (205,738) \$ 131,134 | | | |
| Receivables 6,135,584 20,673,335 Short-term investments (72,200,000) (171,630,000) Total current assets \$ (63,796,865) \$ (150,876,709) Current Liabilities: Accounts payable \$ (207,104) \$ 153,711 Treasurer's Unredeemed Checks 1,366 (22,577) Total current liabilities \$ (205,738) \$ 131,134 | | | |
| Short-term investments (72,200,000) (171,630,000) Total current assets \$ (63,796,865) \$ (150,876,709) Current Liabilities: Accounts payable \$ (207,104) \$ 153,711 Treasurer's Unredeemed Checks 1,366 (22,577) Total current liabilities \$ (205,738) \$ 131,134 | | - | - |
| Total current assets \$ (63,796,865) \$ (150,876,709) Current Liabilities: Accounts payable Treasurer's Unredeemed Checks \$ (207,104) \$ 153,711 (22,577) Total current liabilities \$ (205,738) \$ 131,134 | | | |
| Current Liabilities: Accounts payable Treasurer's Unredeemed Checks\$ (207,104) 1,366\$ 153,711 (22,577)Total current liabilities\$ (205,738)\$ 131,134 | | (12)200,000) | |
| Accounts payable \$ (207,104) \$ 153,711 Treasurer's Unredeemed Checks 1,366 (22,577) Total current liabilities \$ (205,738) \$ 131,134 | Total current assets | \$ (63,796,865) | \$(150,876,709) |
| Treasurer's Unredeemed Checks 1,366 (22,577) Total current liabilities \$ (205,738) \$ 131,134 | | | |
| Total current liabilities \$ (205,738) \$ 131,134 | | | |
| | Treasurer's Unredeemed Checks | 1,366 | (22,577) |
| Net decrease in working capital \$ (63,591,127) \$ (151,007,843) | Total current liabilities | \$ (205,738) | \$ 131,134 |
| | Net decrease in working capital | \$ (63,591,127) | \$(151,007,843) |

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

(This page left blank intentionally,)

Notes to Financial Statements Years Ended June 30, 1989 and 1988

Note 1: Description of Plan

The Teachers' Retirement System of the State of Kentucky (KTRS) was created by the 1938 General Assembly. KTRS is governed by Chapter 161 Section 220 through Chapter 161 Section 990 of the Kentucky Revised Statutes (KRS).

- 1. **Reporting Entity.** KTRS is a cost-sharing multiple-employer defined benefit plan established and administered by the Commonwealth of Kentucky to provide benefit pension plan coverage for local school districts and other public educational agencies within the state. The System is a component unit of the Commonwealth of Kentucky and is included in the Commonwealth of Kentucky's financial statements as a pension trust fund. KTRS is considered a component unit of the Commonwealth of Kentucky for the reasons of financial interdependency, ability to significantly influence operations, and accountability for fiscal matters.
- 2. Employers. Chapter 161 Section 220 of the Kentucky Revised Statutes stipulates who may become a member of the Teachers' Retirement System. Generally, eligible persons are employed by local boards of education, the state Department of Education, some state universities, and some nonstate-supported organizations. The following illustrates the participating employers at June 30, 1989 and 1988.

| | 1989 | 1988 |
|---|------|------|
| Local School Districts | 177 | 178 |
| State Universities | 5 | 5 |
| Department of Education/Other Organizations | 19 | 18 |
| | 201 | 201 |

The covered payroll of all participating employers totaled \$1,268,680,057 for the year ended June 30, 1989 and \$1,217,746,805 for the year ended June 30, 1988.

3. Participants. According to KRS 161.220 "...Any regular or special teacher, or professional employee occupying a position requiring certification by the state department of education or graduation from a four (4) year college or university..." is eligible to participate in the System. The following illustrates the participants at June 30, 1989 and 1988.

| nefits: | |
|---------|---|
| 15,886 | 15,284 |
| 908 | 860 |
| 803 | 730 |
| 17,597 | 16,874 |
| | 3 ⁻¹⁰⁻²⁰⁻²⁰⁰ |
| 898 | 900 |
| 27 | 23 |
| 66 | 59 |
| 991 | 982 |
| | |
| 652 | 636 |
| . 40 | 35 |
| 73 | 72 |
| 765 | 743 |
| - | 15,886 908 803 17,597 898 27 66 991 652 40 73 |

Note 1: Description of Plan (continued)

| 1989 | 1988 |
|--------|---|
| | |
| 1 833 | 1,842 |
| • | 1,042 |
| 142 | 134 |
| 2,176 | 2,147 |
| · | · |
| | |
| 32,211 | 31,944 |
| 1,921 | 1,921 |
| 1,652 | 1,698 |
| | |
| 9,313 | 9,036 |
| 1,109 | 1,048 |
| 731 | 749 |
| 46,937 | 46,396 |
| | 1,833 201 142 2,176 32,211 1,921 1,652 9,313 1,109 731 |

- 4. Benefit Provisions: Employees are entitled to an annual retirement benefit, payable monthly for life, if they either attain the age of fifty-five (55) and complete five (5) years of Kentucky service or complete twenty-seven (27) years of Kentucky service. Non-university employees receive monthly payments equal to two (2) percent (service prior to January 1, 1984) and two and one half (2 1/2) percent (service after January 1, 1984) of their final average salaries for each year of credited service. University employees receive monthly benefits equal to two (2) percent of their final average salary for each year of credited service. The final average salary is the average of the employee's five (5) highest annual salaries. Employees with less than twenty-seven (27) years of service may retire and receive reduced retirement benefits. Members' retirement benefits become vested when they complete five (5) years of credited service.
- 5. Contributions. 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.

The Commonwealth of Kentucky is required to contribute 13.105% of salaries for its non-university members and 13.84% of salaries for university members.

The member and employer contributions consist of pension contributions and post-retirement contributions. The post-retirement contribution (.67%) finances KTRS's retiree medical insurance program.

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 his request.

Note 2: Summary of Significant Accounting Policies

- A. Basis of Accounting. The financial statements are prepared on the accrual basis of accounting.
- B. Investments. The types of investments that KTRS may invest are subject to the provisions of KRS 161.430 (see Note 8). Investments in United States Government obligations, corporate bonds, and other fixed income investments are reported at amortized cost subject to adjustment for market declines judged to be other than temporary. Investments in stocks, repurchase agreements, and real estate are reported at cost subject to adjustment for market declines judged to be other than temporary. Gains and losses on sales and exchanges

Note 2: Summary of Significant Accounting Policies (continued)

of investments are recognized on the transaction date. Discounts on zero-coupon bonds and notes are amortized using the effective interest rate method. Premiums and discounts for all other bonds and notes are amortized using the straight-line method. Any unamortized premium or discount is recognized at the time of sale for bonds or notes sold prior to maturity.

The following represents the book values of the investments of the Kentucky Teachers' Retirement System at June 30, 1989 and June 30, 1988.

| | June 30, 1989 | June 30, 1988 |
|---|---|--|
| Short Term Investments | Editida i fan de arte anticipio en teles a se a mante a se opposition de la composition de la composition de la | and a second |
| Repurchase Agreements | \$ 359,260,000 | \$ 431,460,000 |
| Bonds and Mortgages | | |
| U.S. Government Obligations Treasury Notes and Bonds Agencies Ship Bonds (Title XI) GNMA (Single Family) Other Miscellaneous | 884,203,543 77,269,255 47,142,969 100,761,866 279,631,834 | 794,883,448 65,136,894 53,214,503 86,432,972 196,679,909 |
| Total U.S. Government Obligations | \$1,389,009,467 | \$1,196,347,726 |
| Corporate Bonds Industrials Finance Utility Bonds (Except Telephone) Telephone Bonds Railroad Obligations Other Corporate Bonds | 146,085,631 178,177,430 38,795,795 117,572,458 14,669,823 55,824,543 | 148,713,143 175,632,667 52,902,709 102,668,939 14,692,026 37,315,916 |
| Total Corporate Bonds | \$ 551,125,680 | \$ 531,925,400 |
| Other Fixed Income Investments FHA and VA Single Family Mortgages Project Mortgages (FHA & GNMA) | 11,253,055 88,742,859 | 13,035,488 88,187,591 |
| Total Other Investments | \$ 99,995,914 | \$ 101,223,079 |
| Total Bonds and Mortgages | 2,040,131,061 | 1,829,496,205 |
| Stocks Real Estate | 777,841,038 37,592,183 | 581,237,317 37,531,374 |
| Total Investments | \$3,214,824,282 | \$2,879,724,896 |
| | | |

The System operates a securities lending program whereby for a fee the System lends U.S. Government bonds to a primary U.S. Government bond dealer. In return, the System receives similar U.S. Government bonds that serve as collateral. The exchanges of securities are temporary, and the market value of collateral as of June 30, 1989 was \$168,581,487 which exceeds the market value of the loaned bonds.

On June 30, 1989 and June 30, 1988, the following values of U.S. Government Bonds were on loan. They are included among the investments and assets of the System.

| Securities Loaned | 1989 | 1988 |
|-------------------|---------------|---------------|
| | | |
| Book Value | \$157,679,644 | \$122,758,535 |
| Market Value | 161,599,832 | 126,194,395 |

Note 2: Summary of Significant Accounting Policies (continued)

- C. Furniture, Fixtures, and Equipment. Furniture, fixtures, and equipment are reported on the balance sheet at historical cost, net of accumulated depreciation. These assets are depreciated on a straight-line basis over an average useful life of five (5) to ten (10) years with ten (10) percent of cost as a salvage value.
- **D.** Land and Building. The KTRS office building and land are included in the real estate investments of the System at cost. The total cost of the project as of June 30, 1989 is \$2,709,398. Once the project is completed, the land and building will be included in the fixed assets in KTRS's financial statements. The building will be depreciated on a straight-line basis over a useful life of forty (40) years.

Note 3: Description of Funds

MEMBER RESERVE: This fund was established by KRS 161.420 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 as the State Accumulation Fund and receives state appropriations to the Retirement System. The state contributes an amount equal to members' contributions. Actual state appropriations for the fiscal year 1988-89 were based on estimates of members' salaries. For the fiscal year ended June 30, 1989, actual appropriations fell short of required appropriations by \$2,444,184. This increased the amount due from the state to \$13,799,774.

BENEFIT RESERVE: This fund was established by KRS 161.420 as the Allowance Reserve Fund, the source for retirement and disability 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.

UNALLOCATED RESERVE: This fund was established by KRS 161.420 as the Guarantee Fund to collect income from investments, state matching contributions of members withdrawn from the System, and state matching contributions for COLAs, the amortization of the unfunded liability, etc. In addition, it receives money whose disposition is not otherwise provided for. 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.

403(b) PROGRAM RESERVE: This fund was established as the Voluntary Contribution Fund, operating under the rules and regulations of Section 403(b) of the Internal Revenue Code. The primary purpose of the program is to enable members to defer payment of taxes on income until after retirement. KRS 161.705 allows members to voluntarily contribute part of their annual compensation to separate member accounts. Upon retirement, these accounts may be used to increase monthly benefits, or they may be refunded to the members. Active voluntary accounts earn interest at rates approved by the Board of Trustees.

SURVIVOR, DEATH, MEDICAL RESERVE: This fund was established by KRS 161.420 as the Survivor, Death, and Medical Insurance Fund. It consists of members' contributions and state matching contributions and provides survivor benefits, death benefits of \$2,000 for active members and \$2,500 for retired members, and health insurance premiums for retired members and eligible spouses. At June 30, 1989, the fund's balance was \$40,568,317. Of this amount, \$3,100,785 was restricted for survivor benefits.

ADMINISTRATIVE EXPENSE RESERVE: This fund was established by KRS 161.420 as the Expense Fund. Monies transferred to this fund from Unallocated Reserves are used to pay the administrative expenses of the System. The Board of Trustees annually adopts a budget that, according to KRS 161.420(1), cannot be greater than four (4) percent of the receipts of Employer Reserve.

Note 4: Premium Stabilization and Reserve Account, Aetna Life Insurance Company

The Aetna Life Insurance Company is the administrator of the health insurance plan provided to retired members. During the year, estimated premiums are paid to Aetna to maintain a premium stabilization and reserve account covering fluctuations in medical claims paid. Aetna annually compares estimated premiums to actual claims incurred with the resulting difference either increasing or decreasing the premium stabilization and reserve account. The following schedule reflects insurance premiums for 1988-89 and 1987-88.

| | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|--------------------------------------|-----------------------------|-----------------------------|
| Estimated Premiums Paid | \$23,876,345 | \$18,829,926 |
| Less: Experience Increase (Decrease) | (317,461) | (1,758,943) |
| Actual Premiums Incurred | \$24,193,806 | \$20,588,869 |

The premium stabilization and reserve account was affected in the following manner.

| | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|--------------------------------------|-----------------------------|-----------------------------|
| Beginning Balance | \$ 3,209,394 | \$ 4,649,228 |
| Plus: Experience Increase (Decrease) | (317,461) | (1,758,943) |
| Plus: Interest Earned | 879,797 | 990,082 |
| Less: Withdrawals | 0 | (670,973) |
| Ending Balance | \$ 3,771,730 | \$ 3,209,394 |

Note 5: Funding Status of KTRS

The amount shown below as "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess KTRS funding status on a going-concern basis, assess progress made in accumulating sufficient assets to pay benefits when due, and make comparisons among public employee retirement systems.

The pension benefit obligation presented herein is the actuarial valuation prepared for the fiscal year ended June 30, 1988. Significant actuarial assumptions at June 30, 1988 include, (a) a rate of return on the investment of present and future assets of 7.5% compounded annually, (b) projected salary increases graduated by age from 5.20% to 9.30% per year compounded annually, (c) life expectancies before and after retirement based on the 1982 George B. Buck Teacher's Mortality Table set forward one year, and (d) annual post-retirement cost of living increases of 1%.

At June 30, 1988, the unfunded pension benefit obligation was \$1,371,594,000 as follows:

| Pension Benefit Obligation: Retirees and beneficiaries currently receiving benefits and terminated employees entitled | |
|--|-----------------|
| to benefits but not yet receiving them | \$1,499,238,000 |
| Current employees: | |
| Accumulated employee contributions including allocated investment income | 906,406,000 |
| Employer-financed vested | 1,044,842,000 |
| Employer-financed nonvested | 836,822,000 |
| Total pension benefit obligation | \$4,287,308,000 |
| Net assets available for benefits, at cost | |
| per Note 2 (market value \$2,876,819,467) | 2,915,714,000 * |
| Unfunded pension benefit obligation | \$1,371,594,000 |

Note 5: Funding Status of KTRS

The June 30, 1988 unfunded pension benefit obligation represents an increase of \$134,644,000 since June 30, 1987.

Ten-year historical trend information designed to provide information about the progress made in accumulating sufficient assets to pay benefits when due is presented on pages 27 and 28.

*In order to compute the net assets available for benefits, the actuary took the KTRS fund balance at June 30, 1988 of \$2,955,048,687 and made the following adjustments.

| June 30, 1988 KTRS Fund Balance | \$2,955,048,687 |
|--|-----------------|
| Less portion of Survivor, Death, Medical Reserves Not Available for Benefits | 28,372,318 |
| Less 403(b) Program Reserves | 10,597,034 |
| Less Administrative Expense Reserves | 365,762 |
| Net Assets Available for Benefits | \$2,915,713,573 |

Effects of Current Year Changes in Actuarial Assumptions and Benefit Provisions - Section 161.400 of the law governing the operation of the Teachers' Retirement of the State of Kentucky provides that at least once in each two year period the actuary shall make an actuarial valuation of the System. Each valuation is affected by changes in acturial assumptions and benefit provisions since the preceding valuation. The nature of changes in acturial assumptions and benefit provisions, including the dollar effect on the Systems' pension benefit obligation at June 30, 1988 follows:

Acturial Assumptions - No Changes

Benefit Provisions - Provided unreduced retirement benefits after 27 years of service. Increased member contribution rates from 8.12% to 8.375% for university members and from 9.6% to 9.855% for non-university members. Provide for a one time cost of living increase of 2% for members and for beneficiaries of members who retired on or before July 1, 1987.

As a result of the change allowing members to retire with full benefits after 27 years of service instead of 30 years service, the pension benefit obligation increased by \$62,181,000.

Note 6: Actuarially Determined Contributions Required and Contributions Made

The funding policy of KTRS is to provide for periodic employer pension contributions at actuarially determined rates that, expressed as percentage of annual covered payroll are designed to accumulate sufficient assets to pay the pension benefits when due. A level percentage of payroll employer pension contribution rates are determined using the projected unit credit actuarial cost method. Unfunded actuarial accrued liabilities are being amortized as a level percent of payroll over a period of 29 1/2 years.

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. The Commonwealth of Kentucky is required to contribute 13.105% of salaries for its non-university members and 13.84% of salaries for university members. The member and employer contributions consist of pension contributions and post-retirement contributions. The post-retirement contribution (.67%) finances KTRS's retiree medical insurance program.

Significant actuarial assumptions used to compute pension contribution requirements are the same as those used to compute the standardized measure of the pension benefit obligation discussed in Note 5.

A comparison between actuarially established and actual member and employer pension contribution rates for the fiscal year ended June 30, 1989 is as follows:

| | Pension Contributions Required | | Pension Contributions Made | | | |
|---------------|-----------------------------------|----------------------|---------------------------------------|---------------------------------------|---|---------------------------------------|
| | Univ. Members | Non-Univ. Members | Univ. Members Amount (000's) | % of Current Covered Payroll | Non-Univ. Members Amount (000's) | % of Current Covered Payroll |
| Member | 5.49% | 9.185% | \$ 5,348 | 5.49% | \$107,581 | 9.185% |
| Employer | 13.17 | 12.435 | 9,664 | 9.92 | 125,181 | 10.688 |
| Total | 18.66% | 21.62 % | \$15,012 | 15.41% | \$232,761 | 19.873% |
| Normal Cost | 12.96% | 16.26 % | \$12,625 | 12.96% | \$190,448 | 16.26 % |
| Unfunded Cost | 5.7 | 5.36 | 2,387 | 2.45 | 42,314 | 3.613 |
| | 18.66% | 21.62 % | \$15,012 | 15.41% | \$232,761 | 19.873% |

Note 6: Actuarially Determined Contributions Required and Contributions Made (continued)

The employer contributions for the 1988-89 fiscal year were under the required actuarial contributions by \$31,524,556. Of this amount, \$29,080,372 is directly attributable to actions taken by the 1988 Kentucky General Assembly. The 1988 General Assembly reduced the required employers contribution rate by 3.25% and replaced it with an appropriation of \$17,600,000. The funding for the retiree cost-of-living adjustments granted by the 1988 General Assembly for the 1988-89 fiscal year was \$3,000,000 less than the actuarial requirements.

The remaining shortage for 1988-89 (\$2,444,184) is due to a difference between budgeted salaries and actual salaries. The 1988-89 shortage plus the 1987-88 shortage of \$11,355,590 make-up the \$13,799,774 receivable from the Commonwealth of Kentucky at June 30, 1989.

In addition to the above employer and member pension contributions, the member and employer made contributions for post-retirement benefits. The actuarial cost of retiree cost-of-living adjustments granted by the General Assembly are funded over a twelve year period and is also included in employer contributions. In accordance with KRS 161.550, these shortages are to be funded in the next biennial appropriation to KTRS.

Note 7: Compensated Accrued Absences

Expenses for accumulated vacation and compensatory time earned by the System's employees are recorded when paid or taken by the employees, not when earned. KTRS maintains records that document the cost of annual, sick, and compensatory leave earned by its employees. Annual leave is accumulated at amounts ranging from 7.5 to 13.13 hours per month (determined by length of service) with maximum accumulations ranging from 30 to 60 days. Compensatory leave is granted to authorized employees on an hour-for-hour basis. Generally, since sick leave (earned one day per month with unlimited accumulation) is paid only when an employee is absent due to illness, injury, or death in the family, there was no liability for sick leave at June 30, 1989. For retiring employees who qualify, a maximum of six (6) months of their accumulated sick leave balances (expressed in months) shall be added to their service credit for the purpose of determining their annual retirement allowances. The accumulated vacation and compensatory leave payable as of June 30, 1989 follows:

| | Balance | Earned | Used or Paid | Balance |
|------------------------------------|--------------|-----------|--------------|---------------|
| | July 1, 1988 | 1988-1989 | 1988-1989 | June 30, 1989 |
| Vacation and Compensatory Leave | \$260,581 | \$118,931 | \$106,100 | \$273,412 |

Note 8: Deposits With Financial Institutions and Investments (including Repurchase Agreements)

The following disclosures are meant to help the users of KTRS's financial statements assess the risks KTRS takes in investing public funds. The types of investments that KTRS may invest in are enumerated in KRS 161.430. The types of assets allowed by asset allocation parameters according to the statute are as follows:

Not more than 25% of any one issue may be purchased as an investment and not more than 7% of the invested funds of the System may be invested in the securities of any issuer except in the case of obligations of the United States government.

There shall be no limit on investments guaranteed by the United States government.

Except for investments guaranteed by the United States government, no more than 75% of the assets of the System may be invested in fixed debt obligations. Such obligations must be rated at the time of purchase within the three highest classifications established by one or more major rating services.

No more than 40% of the assets of the System may be invested in common stocks, preferred stocks, and stock index funds.

No more than 10% of the assets of the System may be invested in real estate.

At June 30, 1989, the amount of cash deposited in the State's General Depository Account was \$4,295,069. This account is under the control of the Kentucky State Treasurer and is insured up to \$100,000 by the Federal Depository Insurance Corporation(FDIC).

The following chart categorizes KTRS's investments, which gives an indication of the level of risk assumed by KTRS at June 30, 1989. Category 1 includes investments that are insured or registered or for which the securities are held by KTRS's custodial agent in KTRS's name. Category 2 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent, in KTRS's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent, in KTRS's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent, by the counterparty or by its trust department or agent, in KTRS's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the counterparty or by its trust department or agent, by the counterparty or by its trust department or agent, by the counterparty or by its trust department or agent, by the counterparty or by its trust department or agent, by the counterparty or by its trust department or agent, but not in KTRS's name. KTRS does not have any Category 2 or Category 3 investments.

| | | Category | | | |
|--------------------------------|-----------------|----------|----|--------------------|-----------------|
| | 1 | 2 | 3 | Carrying Amount | Market Value |
| Repurchase Agreements | \$ 359,260,000 | \$ | \$ | \$ 359,260,000 | \$ 359,260,000 |
| U.S. Government Securities | 1,389,009,467 | | | 1,389,009,467 | 1,415,874,296 |
| Corporate Bonds | 551,125,680 | | | 551,125,680 | 538,591,852 |
| Other Fixed Income Investments | 99,995,914 | | | 99,995,914 | 103,696,916 |
| Real Estate | 37,592,183 | | | 37,592,183 | 41,389,468 |
| Common Stocks | 777,841,038 | | | 777,841,038 | 869,311,552 |
| Total Investments | \$3,214,824,282 | \$ | \$ | \$3,214,824,282 | \$3,328,124,084 |

Included in Category 1 are individual repurchase agreements which are ordered by KTRS under the terms of master repurchase agreements with various qualified brokers. The terms of these master agreements are 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 100% of the value of the repurchase agreements.

Note 9: Actuarial Valuation of the KTRS Retiree Medical Insurance Program

An actuarial valuation of the KTRS retiree medical benefit program was prepared as of July 1, 1988. The valuation covers current retirees and active members of KTRS. The valuation was based on the same detailed employee information submitted for KTRS's regular actuarial valuation (See Note 5).

The purpose of the valuation was to: (1) estimate the actuarial liabilities due to the post-retirement insurance program for current active and retiree members, (2) show the expected claim costs over the next 20 years, and (3) provide an indication of the level of contributions that would be required to advance fund the plan using a modified level percentage of compensation method.

To measure the cost of retiree medical benefits, unit claim costs were developed from claims data supplied by the Aetna Life Insurance Co. Some of the significant actuarial assumptions used in this valuation include: a) a rate of return on the investment of present and future assets of 7.5% compounded annually, b) future salary increases of 4.5% compounded annually, c) health care cost trends ranging from 7% to 15% annually, and d) average annual per capita claim costs for retirees and dependents equal to: (1) under 65 retiree \$1725, (2) under 65 dependent \$1006, (3) over 65 retiree \$733, and (4) over 65 dependent \$667.

As of July 1, 1988, the unfunded post-retirement medical benefit obligation based on best estimate trend data was about \$1.029 billion as follows:

Post-retirement Medical Benefit Obligation:

| Retirees and dependents Active members and dependents | \$ 418,000,000 639,700,000 |
|--|-------------------------------|
| Total post-retirement medical benefit obligation | \$ 1,057 <i>,</i> 700,000 |
| Net assets available for medical benefits, at cost | 28,372,318 |
| Unfunded post-retirement medical benefit obligation | \$ 1,029,327,682 |

Required Supplementary Information Analysis of Funding Progress (in millions of dollars)

KTRS

| | (1) | (2) | (3) | (4) Unfunded | (5) | (6) Unfunded Pension |
|--------|---|--------------------|----------------------|----------------------------------|-------------------|---|
| Fiscal | Net Assets Available for Benefits | Pension Benefit | Percentage Funded | Pension Benefit Obligation | Annual Covered | Benefit Obligation as a Percentage of Covered Payroll |
| Year | (at cost) | Obligation | (1) ÷ (2) | (2) - (1) | Payroll | (4) ÷ (5) |
| 1980 | \$ 872.5 | \$1,902.8 | 45.85% | \$1,030.3 | \$ 704.1 | 146.33% |
| 1982 | 1,163.7 | 2,440.7 | 47.68 | 1,277.0 | 807.2 | 158.20 |
| 1984 | 1,569.1 | 2,907.8 | 53.96 | 1,338.7 | 916.6 | 146.05 |
| 1986 | 2,214.2 | 3,356.2 | 65.97 | 1,142.0 | 1,006.7 | 113.44 |
| 1987 | 2,562.3 | 3,799.3 | 67.44 | 1,237.0 | 1,105.0 | 111.95 |
| 1988 | 2,915.7 | 4,287.3 | 68.01 | 1,371.6 | 1,217.7 | 112.64 |

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of KTRS's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the retirement system. Trends in unfunded pension benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of KTRS's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the retirement system.

Actuarial valuations performed prior to 1980 are not presented since the valuations were conducted using a different actuarial method. As a result, comparison of data derived from actuarial valuations conducted in earlier years is not meaningful. As stated before, actuarial information for June 30, 1989 is not available.

KTRS I

Required Supplementary Information Revenues by Source and Expenses by Type (in millions of dollars)

| | | | Revenues by Sour | le | | |
|----------------|---------------------------|---------------------------|---------------------------|--|----------------------|---------|
| | | Emj | oloyer Contributio | ns | | |
| Fiscal Year | Employee Contributions | Employer Contributions | Annual Covered Payroll | Percentage of Annual Covered Payroll | Investment Income | Total |
| 1980 | \$ 57.6 | \$ 79.5 | \$ 704.1 | 11.3% | \$ 66.0 | \$203.1 |
| 1981 | 61.1 | 92.7 | 761.0 | 12.2 | 81.7 | 235.5 |
| 1982 | 63.6 | 94.5 | 807.2 | 11.7 | 104.3 | 262.4 |
| 1983 | 66.2 | 105.9 | 849.8 | 12.5 | 161.8 | 333.9 |
| 1984 | 83.1 | 122.0 | 916.6 | 13.3 | 147.7 | 352.8 |
| 1985 | 94.1 | 136.5 | 950.1 | 14.4 | 180.4 | 411.0 |
| 1986 | 100.0 | 143.7 | 1,006.7 | 14.3 | 331.1 | 574.8 |
| 1987 | 107.8 | 162.6 | 1,105.0 | 14.7 | 266.1 | 536.5 |
| 1988 | 119.0 | 186.8 | 1,217.7 | 15.3 | 251.7 | 557.5 |
| 1989 | 130.0 | 177.9 | 1,268.7 | 14.0 | 258.0 | 565.9 |

The employee and employer contributions include pension and post-retirement contributions for medical insurance. In addition, the employer contributions include the state appropriation for cost of living adjustments (COLA'S), increases in minimum values and the sick leave liability.

| | Expenses by Type | | | | | | |
|----------------|------------------|---------|----------------------|----------------------------|---------|--|--|
| Fiscal Year | Benefits | Refunds | Insurance Premium | Administrative Expenses | Total | | |
| 1980 | \$ 76.1 | \$ 6.2 | \$ 6.9 | \$ 1.0 | \$ 90.2 | | |
| 1981 | 87.3 | 6.5 | 7.9 | 1.1 | 102.8 | | |
| 1982 | 98.9 | 8.9 | 9.3 | 1.3 | 118.4 | | |
| 1983 | 111.4 | 6.2 | 11.7 | 1.4 | 130.7 | | |
| 1984 | 123.1 | 5.9 | 15.2 | 1.6 | 145.8 | | |
| 1985 | 133.0 | 6.7 | 12.4 | 1.7 | 153.8 | | |
| 1986 | 143.3 | 7.4 | 14.5 | 1.9 | 167.1 | | |
| 1987 | 157.5 | 6.7 | 17.6 | 2.4 | 184.2 | | |
| 1988 | 169.9 | 5.9 | 20.6 | 2.6 | 199.0 | | |
| 1989 | 188.2 | 7.0 | 24.2 | 2.9 | 222.3 | | |

Revenues by Source

SUPPORTING SCHEDULES

Kentucky Teachers' Retirement System

KTRS _____

Summary of Year Ended

| | (Beginning of Year) | | | |
|---|--------------------------------|--------------------------------|------------------------------|--------------------------|
| Type of Investment | Book Value | Market Value | Purchases | Amortization |
| Bonds and Mortgages: Government Bonds/Mortgages Corporate Bonds | \$1,297,570,805 531,925,400 | \$1,286,862,399 505,781,250 | \$ 372,514,056 82,427,466 | \$7,743,051 1,421,025 |
| Total Bonds and Mortgages | \$1,829,496,205 | \$1,792,643,649 | \$ 454,941,522 | \$9,164,076 |
| Equity: | | | | |
| Common Stock | 581,237,317 | 574,873,769 | 261,686,494 | |
| Real Estate | 37,531,374 | 41,328,660 | 65,594 | |
| Total Equity | \$ 618,768,691 | \$ 616,202,429 | \$ 261,752,088 | \$ |
| Short Term Investments: | | | | |
| Repurchase Agreements | 431,460,000 | 431,460,000 | 6,988,415,000 | |
| Total | \$2,879,724,896 | \$2,840,306,078 | \$7,705,108,610 | \$9,164,076 |
| - | | | | |

- 30 —

Investments

June 30, 1989

| Sales and Redemptions | (End of Year) | | | |
|------------------------------|--------------------------------|--------------------------------|-------------------|----------------------|
| | Book Value | Market Value | % Market Value | % Yield at Market |
| \$ 188,822,531 64,648,211 | \$1,489,005,381 551,125,680 | \$1,519,571,212 538,591,852 | 45.66% 16.18 | 8.65% 8.83 |
| \$ 253,470,742 | \$2,040,131,061 | \$2,058,163,064 | 61.84% | 8.70% |
| 65,082,773 4,785 | 777,841,038 37,592,183 | 869,311,552 41,389,468 | 26.12 1.24 | 3.69 8.17 |
| \$ 65,087,558 | \$ 815,433,221 | \$ 910,701,020 | 27.36% | 3.89% |
| 7,060,615,000 | 359,260,000 | 359,260,000 | 10.80 | 9.3 |
| \$7,379,173,300 | \$3,214,824,282 | \$3,328,124,084 | 100.00% | 7.45% |
| | · | | | |

KTRS

KTRS ====

Member Reserves

| | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|--|--|--|
| Operating Revenues Member Contributions Reinstated Accounts Personal Check Contributions Other Revenues | \$109,947,245 577,535 3,745,702 (3) | \$102,547,797 422,465 1,886,868 869 |
| Total Operating Revenues | \$114,270,479 | \$104,857,999 |
| Operating Expenses Refund of Member Contributions | 5,725,570 | 5,329,467 |
| Total Operating Expenses | \$ 5,725,570 | |
| Net Operating Income (Expense) | 108,544,909 | 99,528,532 |
| Reserve Transfers Transfer from Benefit Reserves Disability Recoveries Transfer from Unallocated Reserves Interest Credited to Member Accounts Balance Member Reserves and Employer Reserves Prior Year Reclassification Inactive Accounts Transfer to Benefit Reserves Retirements Transfer to Survivor, Death, Medical Reserves Survivor Benefits Transfer to Unallocated Reserves Inactive Accounts Transfer to Unallocated Reserves Inactive Accounts | \$ 143,777 25,742,394 7,695 (41,960,251) (952,522) (151,097) \$ (17,170,004) | \$ 32,200 23,381,002 42,123 34,547 (21,238,974) (781,086) |
| Total Reserve Transfers | \$ (17,170,004) | \$ 1,469,812 |
| Net Fund Balance Additions (Reductions) | \$ 91,374,905 | \$100,998,344 |
| Beginning Fund Balance | 906,405,608 | 805,407,264 |
| Ending Fund Balance | \$997,780,513 | \$906,405,608 |
| | | |

Employer Reserves

KTRS

| | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|--|---|--|
| Operating Revenues SAF Penalties State Contributions - Matching State Contributions - University Personnel Employer Paid Matching Employer Sick Leave Payments Other Revenue | \$ 1,132,864 98,153,308 2,157,753 16,696,660 317,908 1,693 | \$ 63,740 100,985,393 2,058,406 5,505,078 243,625 |
| Total Operating Revenues | \$ 118,460,186 | \$108,856,242 |
| Operating Expenses Other Expenses | 685 | 520 |
| Net Operating Income (Expense) | \$ 118,459,501 | \$108,855,722 |
| Reserve Transfers Transfer from Unallocated Reserves Match Interest Credited to Member Accounts Reinstated Accounts Prior Year Reclassification Balance Member Reserves and Employer Reserves Inactive Accounts Transfer from Benefit Reserves Disability Recoveries | \$ 26,430,413 577,535 7,695 (4,988) 143,777 | \$ 23,971,743 422,464 42,124 20,005 34,546 32,200 |
| Transfer to Benefit Reserves Retirements | (43,115,403) | (22,187,477) |
| Transfer to Survivor, Death, Medical Reserves Survivor Benefits Transfer to Unallocated Reserves | (1,022,060) | (827,437) |
| Refund of Member Contributions Inactive Accounts | (6,222,385) (151,097) | (5,798,070) |
| Total Reserve Transfers | \$ (23,356,513) | \$ (4,289,902) |
| Net Fund Balance Additions (Reductions) | \$ 95,102,988 | \$104,565,820 |
| Beginning Fund Balance Ending Fund Balance | 931,361,850 \$1,026,464,838 | 826,796,030 \$931,361,850 |

KTRS I

Benefit Reserves

| | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|--|-----------------------------------|------------------------------------|
| Operating Revenues None | | |
| Operating Expenses Benefits for Service Retirements Benefits for Disability Retirements | \$172,878,871 8,708,015 | \$155,576,557 8,025,592 |
| Total Operating Expenses | \$181,586,886 | \$163,602,149 |
| Net Operating Income (Expense) | (181,586,886) | (163,602,149) |
| Reserve Transfers Transfer from Member Reserves Retirements | \$ 41,960,251 | \$ 21,238,974 |
| Transfer from Employer Reserves Retirements Transfer from Unallocated Reserves Benefits Paid in Excess of Member | 43,115,402 | 22,187,477 |
| Contributions and Employer Matching Interest on Fund Balance Prior Year Reclassification Transfer to Unallocated Reserves | 129,325,433 2,640,056 2,149 | 119,621,741 1,606,249 11,361 |
| Refund of Member Contributions | (389,086) | (298,689) |
| Transfer to Member Reserves Disability Recoveries Transfer to Employer Reserves | (143,777) | (32,200) |
| Disability Recoveries Transfer to Survivor, Death, Medical Reserves | (143,777) | (32,200) |
| Survivors of Disability Retirements | (168,938) | (258,183) |
| Total Reserve Transfers | \$216,197,713 | \$164,044,530 |
| Net Fund Balance Additions (Reductions) | \$ 34,610,827 | \$ 442,381 |
| Beginning Fund Balance | 81,715,074 | 81,272,693 |
| Ending Fund Balance | \$116,325,901 | \$ 81,715,074 |

Survivor, Death, Medical Reserves Schedule of Revenues, Expenses, and Changes in Fund Balances Years Ended June 30, 1989 and 1988

KTRS

| | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|---|--|-----------------------------|
| Operating Revenues | · · · · · · · · · · · · · · · · · · · | |
| Member Contributions Insurance Premiums Paid by Members | \$11,622,463 1,770,770 | \$11,092,605 1,702,170 |
| State Contributions - Matching | 9,570,695 | 10,517,403 |
| Employer Paid Matching Other Revenues | 2,051,875 | 575,183 1,742 |
| Total Operating Revenues | \$25,015,803 | \$23,889,103 |
| Operating Expenses | | |
| Survivor Benefits | 5,038,352 | 4,799,224 |
| Death Benefits | 1,522,922 | 1,437,866 |
| Comprehensive Medical Insurance Premiums Other Expenses | 24,193,806 228 | 20,588,869 770 |
| Total Operating Expenses | \$30,755,308 | \$26,826,729 |
| Net Operating Income (Expense) | (5,739,505) | (2,937,626) |
| Reserve Transfers | | |
| Transfer from Member Reserves | • • • • • • • • • • • • • • • • • • • | A 504 004 |
| Survivor Benefits | \$ 952,523 | \$ 781,086 |
| Transfer from Employer Reserves Survivor Benefits | 1,022,060 | 827,437 |
| Transfer from Benefit Reserves | 1,022,000 | 027,437 |
| Survivors of Disability Retirements | 168,937 | 258,183 |
| Transfer from Unallocated Reserves | | |
| Benefits Paid in Excess of Member | | |
| Contributions and Employer Matching | 3,716,117 | 3,616,082 |
| Interest on Fund Balance Balance Member Reserves and Employer Reserves | 2,721,118 (504) | 2,335,775 2,082 |
| Transfer to Unallocated Reserves | (504) | 2,002 |
| Refund of Member Contributions | (102,186) | (65,724) |
| Total Reserve Transfers | \$ 8,478,065 | \$ 7,754,921 |
| Net Fund Balance Additions (Reductions) | \$ 2,738,560 | \$ 4,817,295 |
| Beginning Fund Balance | 37,829,757 | 33,012,462 |
| Ending Fund Balance | \$40,568,317 | \$37,829,757 |
| | | |

35

KTRS I

403(b) Program Reserves Schedule of Revenues, Expenses, and Changes in Fund Balances Years Ended June 30, 1989 and 1988

| | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|--|------------------------------------|---------------------------------|
| Operating Revenues Voluntary Contributions by Members | \$ 1,171,079 | \$ 1,240,295 |
| Operating Expenses Benefits Increased by Voluntary Contributions Benefits Continued after Voluntary Contributions Expired Refund of Member Contributions | 53,452 56,767 1,269,651 | 65,444 48,000 615,065 |
| Total Operating Expenses | \$ 1,379,870 | \$ 728,509 |
| Net Operating Income (Expense) | (208,791) | 511,786 |
| Reserve Transfers Transfer from Unallocated Reserves Benefits Continued after Voluntary Contributions Expired Interest Credited to Member Accounts Transfer to Unallocated Reserves Penalty on Early Withdrawal of 403(b) Accounts | \$ 56,767 730,534 (1,775) | \$ 48,000 689,556 (2,486) |
| Total Reserve Transfers | \$ 785,526 | \$ 735,070 |
| Net Fund Balance Additions (Reductions) | \$ 576,735 | \$ 1,246,856 |
| Beginning Fund Balance | 10,597,034 | 9,350,178 |
| Ending Fund Balance | \$11,173,769 | \$10,597,034 |

Unallocated Reserves

| | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
|--|-----------------------------|--|
| Operating Revenues | | |
| Interest Earned on Investments | \$ 203,772,173 | \$ 178,336,058 |
| Dividend Income | 29,257,231 | 21,312,601 |
| Rental Income | 2,277,787 | 2,130,261 |
| Gain on Sale of Investments | 21,964,798 | 49,189,918 |
| Leased Security Income | 767,025 | 722,461 |
| Maintenance Reserve - Rental Property | 7,605 | 10,292 |
| State Contributions - Sick Leave | 7,051,434 | 6,068,503 |
| State Contributions - Benefit Improvement | 24,110,000 | 20,376,578 |
| State Contributions - Supplemental Appropriation | 17,600,000 | 40,306,185 |
| State Contributions - Handicapped Children | 178,300 | 145,000 |
| Escrow Late Remittance Penalty | 9,283 | 18,583 |
| Other Revenues | 31,421 | 3,491 |
| Total Operating Revenues | \$ 307,027,057 | \$ 318,619,931 |
| Operating Expenses | | |
| Actuarial Services | | 38,729 |
| Investment Counsel Fees | 554,000 | 516,000 |
| Investment Processing Fees | 76,000 | 72,000 |
| Total Operating Expenses | \$ 630,000 | \$ 626,729 |
| Net Operating Income (Expense) | 306,397,057 | 317,993,202 |
| Reserve Transfers | | |
| Transfer from Various Funds | | |
| Refund of Member Contributions | \$ 6,713,657 | \$ 6,162,483 |
| Inactive Accounts | 302,194 | <i>•••••••••••••••••••••••••••••••••••••</i> |
| Penalty on Early Withdrawal of 403(b) Accounts | 1,775 | 2,486 |
| Transfer to Various Funds | | ., |
| Benefits Paid in Excess of Member | | |
| Contributions and Employer Matching | (133,098,317) | (123,285,823) |
| Interest | (58,264,515) | (51,984,325) |
| Balance Member Reserves and Employer Reserves | 5,493 | (22,087) |
| Reinstated Accounts | (577,535) | (422,464) |
| Prior Year Reclassification | (17,539) | (95,608) |
| Inactive Accounts | · / / | (69,093) |
| Administrative Expense Allotment | (2,231,422) | (2,116,109) |
| Total Reserve Transfers | \$ (187,166,209) | \$(171,830,540) |
| Net Fund Balance Additions (Reductions) | \$ 119,230,848 | \$ 146,162,662 |
| Beginning Fund Balance | 986,773,602 | 840,610,940 |
| Ending Fund Balance | \$1,106,004,450 | \$ 986,773,602 |
| <u> </u> | | |

KTRS =

| Administrative Expense Re Schedule of Revenues, Expenses, and Cha Years Ended June 30, 1989 and | nges in Fund B | alances |
|--|--|--|
| | Year Ended June 30, 1989 | Year Ended June 30, 1988 |
| Operating Revenues None | | |
| Operating ExpensesSalaries, Wages, and Fringe BenefitsOther Personnel CostsProfessional ContractsInterestUtilities and Heating FuelsRentalsMaintenance and RepairsPostage and Related ServicesPrintingInsuranceMiscellaneous ServicesSuppliesDepreciationTravelDues and SubscriptionsMiscellaneous CommoditiesFurniture, Fixtures, and Equipment Not Capitalized | \$1,463,973 6,934 148,356 14,287 25,123 8,348 51,122 134,745 68,849 42,158 2,520 39,268 30,828 28,897 105,241 21,838 19,480 10,447 2,049 | \$1,223,081 6,860 68,631 19,652 27,074 53,252 52,421 109,491 43,993 67,982 1,148 22,218 32,705 35,204 87,050 21,711 18,799 25,667 22,547 |
| Total Operating Expenses Net Operating Income (Expense) | \$2,224,463 | \$1,939,486 (1,939,486) |
| Reserve Transfers Transfer from Unallocated Reserves Allotment Net Fund Balance Additions (Reductions) | \$2,231,422 \$ 6,959 | \$2,116,109 |
| Beginning Fund Balance Ending Fund Balance | <u> </u> | 189,139 \$ 365,762 |
| - | · · · · · · · · · · · · · · · · · · · | |

- 38 -

ACTUARIAL SECTION

Kentucky Teachers' Retirement System

Actuary's Certification Letter

BUCK CONSULTANTS 200 Galleria Parkway, N. W. Atlanta, Georgia 30339

Suite 1060

September 12, 1989

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

Ladies and Gentlemen:

Section 161.400 of the law governing the operation of the Teachers' Retirement System of the State of Kentucky provides that at least once in each two-year period the actuary shall make an actuarial valuation of the System. We have submitted the results of the actuarial valuation prepared as of June 30, 1988. The valuation indicates that combined member and State contributions at the rate of 18.66% of university members' salaries and of 21.62% of non-university members' salaries are sufficient to support the benefits of the System. In preparing the valuation, the actuary relied on data provided by the System. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

The financing objective of the System is that contribution rates will remain relatively level over time as a percentage of payroll. Contribution rates are developed using the unit credit actuarial cost method with projected benefits. Book 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 5% 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.

In our opinion the System is operating on an actuarially sound basis. 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.

Sincerely,

Dr. Unerho

Donald M. Overholser

Buck Consultants, Inc. 404 | 955-2488 Fax 404 | 933-8336

Buck Consultants Pty. Limited | Buck Consultants S.A. | Buck Paterson Consultants Limited | GBB Buck Consultants Limited

40 -

Report of Actuary on the Valuation

Prepared as of June 30, 1988

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 valuations are summarized below (all dollar amounts are \$1,000's):

| Valuation Date | June 3 | 30, 1988 | June | 30, 1987 |
|--|--------------------------|--------------------------|-----------------------|-----------------------|
| Number of active members Annual salaries | | 46,278 12,585 | | 45,267 01,668 |
| Number of annuitants and beneficiaries Annual allowances | | 18,619 67,982 | | 18,360 55,559 |
| Assets for valuation purposes | \$2,91 | 15,714 | \$2,5 | 62,340 |
| Unfunded actuarial accrued liability | \$1,37 | 71,594 | \$1,2 | 36,950 |
| Statutory contribution rates: | Univ. | Non-Univ. | Univ. | Non-Univ. |
| Member State matching State supplemental appropriation | 7.705% 7.705 3.250 | 9.185% 9.185 3.250 | 7.45% 7.45 3.25 | 8.93% 8.93 3.25 |
| Total | 18.66 % | 21.62 % | 18.15% | 21.11% |
| Actuarially determined contribution rates: Normal Accrued liability (balancing item) | 12.96% 5.70 | 16.26% 5.36 | 12.69% 5.46 | 15.66% 5.45 |
| Total | 18.66% | 21.62% | 18.15% | 21.11% |
| Accrued liability funding period | 291/2 | years | 29 y | ears |

- 2. The valuation indicates that combined member and State contributions at the current rate of 18.66% of salaries for university members and at 21.62% for non-university members are just sufficient to support the benefits of the System. Comments on the valuation results as of June 30, 1988 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.
- 4. The valuation takes into account the effect of amendments to the System enacted through the 1988 Session of the Legislature and effective on the valuation date. The System was amended since the previous valuation to provide unreduced retirement benefits after 27 years of service, to increase member contributions rates from 8.12% to 8.375% for university members and from 9.6% to 9.855% for non-university members, and to provide for a one time cost of living increase of 2% for members and for beneficiaries of members who retired on or before July 1, 1987. The annual 1% increases for retired members and beneficiaries have been reflected. Provisions of the System which were taken into account in the current valuation are summarized in Schedule D (not shown in this annual report).

SECTION II - MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuations were furnished by the Retirement System office. The following table shows the number of active members and their annual salaries as of June 30, 1988 on the basis of which the valuation was prepared.

KTRS

| GROUP | NUMBER | ANNUAL SALARIES (\$1,000's) |
|--------------|------------------|--------------------------------|
| Men Women | 14,336 31,942 | \$ 430,094 782,491 |
| Total | 46,278 | \$1,212,585 |

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 allowance amounts do not include any post-retirement supplements granted after June 30, 1988.

| GROUP | NUMBER | ANNUAL RETIREMENT ALLOWANCES (\$1,000's) |
|-----------------------------------|--------|---|
| Service Retirements | 16,074 | \$ 151,538 |
| Disability Retirements | 982 | 8,541 |
| Beneficiaries of Deceased Members | 1,333 | 6,925 |
| Total | 18,389 | \$167,004 |

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF ANNUITANTS AND BENEFICIARIES ON THE ROLL AS OF JUNE 30, 1988

In addition, there are 230 beneficiaries entitled to term-certain only annuities totaling \$978,192 annually.

3. Tables 1 and 2 of Schedule E (not shown in this annual report) give the distribution by age and by years of service of the number and annual salaries of active members included in the valuation, while Tables 3, 4, and 5 give the number and annual retirement allowances of annuitants and beneficiaries included in the valuation, distributed by age.

SECTION III - ASSETS

- 1. The retirement law provides for the maintenance of seven funds for the purpose of recording the financial transactions of the system, namely, the Teachers' Savings Fund, the State Accumulation Fund, the Allowance Reserve Fund, the Guarantee Fund, the Survivor, Death and Medical Insurance Fund, the Expense Fund, and the Voluntary Contribution Fund.
 - (a) Teachers' Savings Fund

The Teachers' Savings Fund is the fund to which are credited all contributions made by members together with regular interest thereon. When a member retires by reason of service or disability, the amount of the member's accumulated contributions are transferred from the Teachers' Savings Fund to the Allowance Reserve Fund. If a survivor's benefit becomes payable, the member's accumulated contributions are transferred from the Teachers' Savings Fund to the Allowance Reserve Fund. If a survivor's benefit becomes payable, the member's accumulated contributions are transferred from the Teachers' Savings Fund to the Survivor, Death and Medical Insurance Fund. Refunds of accumulated member contributions upon withdrawal or death are also made from this Fund. The assets credited to the Teachers' Savings Fund on June 30, 1988 amounted to \$906,405,608.

(b) State Accumulation Fund

The State Accumulation Fund consists of funds appropriated by the State for the purpose of providing annuities. When a member retires by reason of service or disability, the amount, which together with the amount transferred from the Teachers' Savings Fund will provide the member's annuity, is transferred from the State Accumulation Fund to the Allowance Reserve Fund. Transfers are also made from this Fund to the

NSULTANTS

(c) Allowance Reserve Fund

The Allowance Reserve Fund is the Fund from which all retirement allowances are paid. When a member retires, his accumulated contributions are transferred from the Teachers' Savings Fund to the Allowance Reserve Fund. The balance of the amount necessary to provide the allowance is transferred from the State Accumulation Fund to the Allowance Reserve Fund. Transfers are also made from this fund to the Survivor, Death and Medical Insurance Fund when the death of a member results in an obligation on that Fund. The assets credited to the Allowance Reserve Fund as of June 30, 1988 amounted to \$81,715,074.

(d) Guarantee Fund

The Guarantee Fund is the Fund to which all investment earnings are credited and from which interest is paid to the other Funds as allowed by the Board of Trustees. The Guarantee Fund also serves to meet special requirements of the other Funds. On June 30, 1988 the assets credited to this Fund amounted to \$986,773,602.

(e) Survivor, Death and Medical Insurance Fund

Death and medical benefits are payable from this Fund, which is supported by the joint contributions of members and the State. Amounts held for a member in the Teachers' Savings Fund, State Accumulation Fund and Allowance Reserve Fund are transferred to the Survivor, Death and Medical Insurance Fund when the death of a member results in an obligation on the Fund. The assets credited to this Fund as of June 30, 1988 amounted to \$37,829,757. On the basis of past experience, it is assumed that 25 per cent of this amount, or \$9,457,439, is on account of survivor and death benefits and applicable for valuation purposes.

(f) Expense Fund

The assets credited to this Fund as of June 30, 1988 amounted to \$365,762. This amount was not included in the assets used for valuation purposes.

(g) Voluntary Contribution Fund

The assets credited to this Fund as of June 30, 1988 amounted to \$10,597,034. This amount was not included in the assets used for valuation purposes.

2. As of June 30, 1988 the total assets held by the System amounted to \$2,955,048,687. Of this amount, \$2,915,713,573 was used for valuation purposes, as shown in the following table.

| FUND | ASSETS FOR VALUATION PURPOSES | OTHER ASSETS | TOTAL ASSETS |
|--|---|---------------------------------------|---|
| Teachers' Savings State Accumulation Allowance Reserve Guarantee Survivor, Death and Medical Insurance Expense Voluntary Member Contribution | \$ 906,405,608 931,361,850 81,715,074 986,773,602 9,457,439 | \$28,372,318 365,762 10,597,034 | \$ 906,405,608 931,361,850 81,715,074 986,773,602 37,829,757 365,762 10,597,034 |
| Total | \$2,915,713,573 | \$39,335,114 | \$2,955,048,687 |

ASSETS AS OF JUNE 30, 1988

3. Schedule B shows the receipts and disbursements of the System for the year preceding the valuation date and a reconciliation of the asset balances.

KTRS

SECTION IV - COMMENTS ON VALUATION

- 1. Schedule A of this report outlines the results of the actuarial valuation (amounts are \$1,000's). 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 System has an actuarial accrued liability of \$2,788,070 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 amount to \$1,445,716 after adjustment for special appropriations remaining to be made toward funding the 1980, 1982, and 1987 ad hoc increases, and the liability for benefits expected to be paid to inactive members and to members entitled to deferred vested benefits is \$53,522. The total actuarial accrued liability of the System amounts to \$4,287,308. Against these liabilities, the System has present assets for valuation purposes of \$2,915,714. When this amount is deducted from the actuarial accrued liability of \$4,287,308, there remains \$1,371,594 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 12.96% of payroll for university members and 16.26% for non-university members.

SECTION V - CONTRIBUTIONS PAYABLE UNDER THE SYSTEM

- 1. Section 161.540 of the retirement law provides that each university member will contribute 8.375% of his annual salary to the System and each non-university member will contribute 9.855% of salary. Of this amount, 0.67% is paid to the Survivor, Death and Medical Insurance Fund for medical benefits leaving 7.705% for university members and 9.185% for non-university members applicable for the retirement and death benefits taken into account in the valuation.
- 2. Section 161.550 provides that the State will match the member contributions and contribute an supplemental appropriation of 3.25% of members' salaries.
- 3. The total net statutory contribution rate is 18.66% of active university members' salaries and 21.62% for active nonuniversity members.

| SOURCE | UNIVERSITY | NON-UNIVERSITY |
|---|--------------------------|--------------------------|
| Member State matching State supplemental appropritation | 7.705% 7.705 3.250 | 9.185% 9.185 3.250 |
| Total | 18.66 % | 21.62 % |

NET STATUTORY CONTRIBUTION RATES

4. The valuation indicates that normal contributions at the rate of 12.96% of active university members' salaries are required to meet the cost of benefits currently accruing. The rate for non-university members is 16.26%. 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 5.70% for university members and 5.36% for non-university members. These rates are shown in the following table.

| | RATE | PERCENTAGE OF ACTIVE MEMBERS' SALARIES | | |
|-----------------|---|---|----------------|--|
| | | UNIVERSITY | NON-UNIVERSITY | |
| | Normal Accrued Liability (balancing) | 12.96% 5.70 | 16.26% 5.36 | |
| C ONSULTANTS | Total | 18.66% | 21.62% | |

ACTUARIALLY DETERMINED CONTRIBUTION RATES

5. The unfunded actuarial accrued liability amounts to \$1,371,594,000 as of the valuation date. Accrued liability contributions at the rate of 5.70% of active university members' payroll and 5.36% of non-university members' payroll are sufficient to amortize the unfunded actuarial accrued liability over the 29½ year period commencing June 30, 1988, based on the assumption that the payroll will increase by 5% annually.

SECTION VI - COMMENTS ON LEVEL OF FUNDING

- 1. The benefit percentage for non-university members is 2% for service accrued through January 1, 1984 and 2½% for service accrued after that date. The total net contribution rate is 21.62% of payroll for these members. For university members the benefit percentage is 2% for all service and the contribution rate is 18.66%. Our calculations indicate that these contribution rates will be sufficient to cover the basic benefits of the System and the annual 1% increases in the allowances of retired members and beneficiaries. Special appropriations are being made toward the ad hoc increases granted in 1980, 1982, and 1987.
- 2. The valuation indicates that the present statutory contribution rates are sufficient to meet the cost of benefits currently accruing and provide for the amortization of the unfunded actuarial accrued liability over a reasonable period of time. The effect of the System experience has produced an increase in the funding period for the unfunded actuarial accrued liability from 29 years to about 29½ years.
- 3. Although the valuation shows that the System is operating on an actuarially sound basis, there are no excess assets or contributions available to provide additional benefits. Any further benefit improvements, including the ad hoc increases previously noted, should be accompanied by the additional contributions necessary to support the benefits.

SECTION VII - ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statement No. 5 sets forth certain items of 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:

| GROUP | NUMBER |
|---|--------|
| Retirees and Beneficiaries Active Members: | 18,619 |
| Vested | 36,060 |
| Non-vested | 10,218 |
| Total | 64,897 |

NUMBER OF ACTIVE AND RETIRED MEMBERS AS OF JUNE 30, 1988

2. Another such item is the pension benefit obligation, a standardized measure of the System's liabilities. It is the amount owed for benefits allocated to employee service before the balance sheet date, when total projected benefits (including the effects of projected salary increases) are allocated equally over all years of employee service before and after the balance sheet date. The pension benefit obligation, prepared in accordance with Governmental Accounting Standards Board Statement No. 5, and a comparison with net assets available for benefits as of June 30, 1988, are presented below.

Pension Benefit Obligation (in \$ thousand)

| * | Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving benefits | \$1,499,238 |
|---|--|-------------|
| * | Current employees: | |
| | Accumulated contributions | 906,406 |
| | Employer-financed vested | 1,044,842 |
| | Employer-financed nonvested | 836,822 |
| | Total Pension Benefit Obligation | \$4,287,308 |
| * | Net assets available for benefits | \$2,915,714 |
| * | Unfunded Pension Benefit Obligation | \$1,371,594 |

3. The following first two years of the ten-year historical trend information, prepared in accordance with Governmental Accounting Standards Board Statement No. 5, provides information on progress made in accumulating sufficient assets to pay benefits when due. A purpose of the chart is to establish a consistent method for analyzing and making comparisons among different public retirement systems.

| | Requir | ed Supplementar | y Information An (in \$ million) | alysis of Funding | Progress | |
|--------------------|----------------------|----------------------|-------------------------------------|----------------------------|----------------------|--------------------------------|
| | (1) | (2) | (3) | (4) Unfunded Pension | (5) | (6) Unfunded PBO as % of |
| Fiscal | Net Assets | Pension | Percentage | Benefit | Annual | Covered |
| Year | Available | Benefit | Funded | Obligation | Covered | Payroll |
| Ended | for Benefits | Obligation | $(1) \div (2)$ | (2) - (1) | Payroll | (4) ÷ (5) |
| 6/30/87 6/30/88 | \$2,562.3 2,915.7 | \$3,799.3 4,287.3 | 67.4 <i>%</i> 68.0 | \$1,237.0 1,371.6 | \$1,101.7 1,212.6 | 112.3% 113.1 |

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of the Retirement System's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the System is becoming financially stronger or weaker. Generally, the greater this percentage, the stronger the Retirement System.

KTRS

2.

3.

4.

SCHEDULE A

RESULTS OF THE VALUATION PREPARED AS OF JUNE 30, 1988 (\$1,000's)

1. ACTUARIAL ACCRUED LIABILITY

Present 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 | \$2,514,321 134,475 79,419 59,855 | |
| | | Total | | \$2,788,070 |
| | (b) | Present inactive members and members entitled to deferred vested benefts: | | 53,522 |
| | (c) | Present annuitants and beneficiaries | | |
| | | Service retirement benefits Disability retirement benefits Death and survivor benefits | \$1,300,338 61,692 83,686 | |
| | | Total | | 1,445,716 |
| | (d) | Total actuarial accrued liability | | \$4,287,308 |
| • | PRES | SENT ASSETS FOR VALUATION PURPOSES | | 2,915,714 |
| • | | UNDED ACTUARIAL ACCRUED LIABILITY ninus (2)] | | \$1,371,594 |
| - | NOR | RMAL CONTRIBUTION RATE | UNIVERSITY | NON-UNIVERSITY |
| | (a) | Actuarial present value of benefits accruing annually | \$11,883 | \$ 182,286 |
| | (b) | Annual payroll of active members | 91,687 | 1,120,898 |
| | (c) | Normal contribution rate [4(a) divided by 4(b)] | 12.96% | 16.26% |

KTRS

KTRS

SCHEDULE B

SUMMARY OF RECEIPTS AND DISBURSEMENTS

| | For the Year Ending | |
|---|---------------------|-----------------|
| | June 30, 1988 | June 30, 1987 |
| Receipts for the Year | | Control 1 |
| Contributions: | | |
| Members | \$ 118,892,200 | \$ 107,601,713 |
| Employers | 186,845,094 | 162,727,164 |
| Total | \$ 305,737,294 | \$ 270,328,877 |
| Net Investment Income | 251,691,299 | 266,127,244 |
| Miscellaneous, including expense appropriations | 34,977 | 86,235 |
| TOTAL | \$ 557,463,570 | \$ 536,542,356 |
| Disbursements for the Year | | |
| Benefit Payments | \$ 169,952,683 | \$ 157,424,992 |
| Refunds to Members | 5,944,532 | 6,699,212 |
| Medical Inusrance Premium | 20,588,869 | 17,559,850 |
| Miscellaneous, including expenses | 2,567,505 | 2,478,932 |
| TOTAL | \$ 199,053,589 | \$ 184,162,986 |
| xcess of Receipts Over Disbursements | \$358,409,981 | \$352,379,370 |
| econciliation of Asset Balances | | |
| Asset Balance as of the Beginning of the Year | \$2,596,638,706 | \$2,244,259,336 |
| Excess of Receipts Over Disbursements | 358,409,981 | 352,379,370 |
| Asset Balance as of the End of the Year | \$2,955,048,687 | \$2,596,638,706 |



SCHEDULE C

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INTEREST RATE: 7.5% per annum, compounded annually.

SALARY INCREASES: Representative values of the assumed annual rates of future salary increases are as follows:

| Age | Annual Rate |
|-----------------|-------------|
| 20 | 9.30% |
| 25 | 8.40 |
| 30 | 7.40 |
| 35 | 6.70 |
| 40 | 6.20 |
| 45 | 5.90 |
| 50 | 5.70 |
| 55 ⁻ | 5.50 |
| 60 | 5.40 |
| 65 | 5.20 |

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

| | | | Men | | |
|-----|-------|------------|-------------|---------------------|--|
| | | | Annual Rate | of | 949976407764776477647761767797677777777777777777 |
| Age | Death | Disability | Withdrawal | Service Retirement* | Early Retirement |
| 20 | .008% | .01% | 9.00% | | |
| 25 | .023 | .01 | 8.00 | | |
| 30 | .038 | .01 | 6.75 | | |
| 35 | .076 | .05 | 5.50 | | |
| 40 | .113 | .07 | 4.25 | | |
| 45 | .151 | .10 | 3.20 | | |
| 50 | .249 | .29 | 2.30 | | |
| 55 | .514 | 1.20 | | 9.30% | 2.00% |
| 60 | .892 | .05 | | 12.00 | |
| 62 | 1.043 | .03 | | 16.50 | |
| 65 | 1.346 | | , | 47.30 | |
| 70 | | | | 100.00 | |

* It is also assumed that an additional 15% of men will retire in their first year of eligibility if before age 60.

| | | | Women | | |
|-----|-------|------------|-------------|---|-----------------|
| | | | Annual Rate | of | |
| Age | Death | Disability | Withdrawal | Service Retirement* | Early Retiremen |
| 20 | .007% | .01% | 8.50% | Exiling of the second | |
| 25 | .014 | .01 | 8.00 | | |
| 30 | .036 | .01 | 7.40 | | |
| 35 | .058 | .04 | 6.40 | | |
| 40 | .094 | .09 | 4.60 | | |
| 45 | .109 | .18 | 2.80 | | |
| 50 | .130 | .29 | 1.80 | | |
| 55 | .167 | .60 | | 9.20% | 2.50% |
| 60 | .239 | .25 | | 15.00 | |
| 62 | .268 | .06 | | 20.00 | |
| 65 | .312 | | | 51.00 | |
| 70 | | | | 100.00 | |
| | | | | | DI VY |

* It is also assumed that an additional 20% of women will retire in their first year of eligibility if CONSULTANTS before age 60.

KTRS

DEATHS AFTER RETIREMENT: disability retirement are as follows:

Representative values of the assumed annual rates of death after service and

| | | Annual Rate of Death After | | | | | |
|-----|-----------|----------------------------|------------|------------|--|--|--|
| | Service R | letirement | Disability | Retirement | | | |
| Age | Men | Women | Men | Women | | | |
| 40 | .1% | .1% | 5.1% | 4.5% | | | |
| 50 | .4 | .2 | 5.1 | 4.5 | | | |
| 55 | .6 | .2 | 5.1 | 4.5 | | | |
| 60 | 1.1 | .4 | 5.1 | 4.5 | | | |
| 65 | 1.9 | .7 | 5.1 | 4.5 | | | |
| 70 | 3.1 | 1.4 | 5.1 | 4.5 | | | |
| 75 | 4.6 | 2.6 | 5.1 | 4.5 | | | |
| 80 | 7.0 | 4.4 | 7.8 | 5.5 | | | |
| 85 | 11.0 | 7.5 | 12.3 | 9.4 | | | |
| 90 | 16.8 | 12.8 | 19.1 | 15.9 | | | |
| 95 | 23.2 | 21.1 | 29.2 | 26.2 | | | |

ASSUMED INCREASE IN ACTIVE MEMBER PAYROLL: The assumed annual percentage increase is 5%; the proportion attributable to growth in the active group size is 0% and the proportion attributable to the effects of inflation on salaries is 5%.

ACTUARIAL METHOD: Unit credit actuarial cost method with projected benefits.

ASSETS: Book value, as reported by the System.



Solvency Test (in millions of dollars)

| | Aggre | | Portion of Accrued Liabilities | | | | |
|--------|-------------------------|-------------------------|---|-----------|------|---------------|-----|
| Fiscal | (1) Active Member | (2) Retirants and | (3) Active Members (Employer Financed | Valuation | | overed Assets | By |
| Year | Contributions | Beneficiaries | Portion) | Assets | (1) | (2) | (3) |
| 1980 | \$368.3 | \$ 788.7 | \$ 745.8 | \$ 872.4 | 100% | 64% | 0% |
| 1982 | 467.6 | 941.8 | 1,031.3 | 1,163.7 | 100 | 74 | 0 |
| 1984 | 580.8 | 1,101.2 | 1,225.8 | 1,569.1 | 100 | 90 | 0 |
| 1986 | 719.1 | 1,320.2 | 1,316.9 | 2,214.2 | 100 | 100 | 13 |
| 1987 | 805.4 | 1,430.0 | 1,563.9 | 2,562.3 | 100 | 100 | 21 |
| 1988 | 906.4 | 1,499.2 | 1,881.7 | 2,915.7 | 100 | 100 | 27 |

The solvency test is one means of checking a system's progress under its funding program. In a solvency test, the plan's present assets are compared with (1) the active member contributions, (2) the amount necessary to cover the present value of benefits payable to current retirees and beneficiaries, and (3) the amount necessary to cover the present value of benefits owed to active members for service already rendered. The total of (1), (2), and (3) is the total actuarial accrued liability of the plan.

In a system that has been following the discipline of level percent of payroll financing, such as KTRS, the liabilities in columns (1) and (2) should be fully covered by assets and the portion of the liability in column 3 covered by assets should increase over time.

KTRS I

| | (1) | (2) | (3) Average | (4) % Increase |
|-------------|----------------|----------------|----------------|-------------------|
| Fiscal | Number of | Total Annual | Annual Pay | (Decrease) In |
| <u>Year</u> | Active Members | Payroll | (2) 🔸 (1) | Average Pay |
| 1980 | 44,470 | \$ 704,091,059 | \$ 15,833 | 10.5% |
| 1981 | 44,233 | 760,999,554 | 17,204 | 8.7 |
| 1982 | 43,426 | 807,159,764 | 18,587 | 8.0 |
| 1983 | 42,570 | 849,839,088 | 19.963 | 7.4 |
| 1984 | 41,438 | 916,650,063 | 22,121 | 10.8 |
| 1985 | 43,375 | 950,093,444 | 21,904 | (1.0) |
| 1986 | 44,366 | 1,006,751,275 | 22,692 | 3.6 |
| 1987 | 44,556 | 1,104,968,563 | 24,800 | 9.3 |
| 1988 | 46,396 | 1,217,746,805 | 26,247 | 5.8 |
| 1989 | 46,937 | 1,268,680,057 | 27,029 | 3.0 |

Schedule of Active Member Valuation Data

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

| | Adde | d to Rolls | Remove | d from Rolls | Rolls-H | End of Year | | |
|---------------|-------|------------------------------------|--------|------------------------------------|---------|------------------------------------|---------------------------------------|---------------------------------|
| Year Ended | | Annual Allowances (Millions) | | Annual Allowances (Millions) | Number | Annual Allowances (Millions) | % Increase in Annual Allowances | Average Annual Allowances |
| 1980 | 1,044 | \$ 8.5 | 484 | \$ 2.2 | 14,143 | \$ 74.8 | 9.2% | \$ 5,287 |
| 1981 | 1,184 | 13.6 | 483 | 2.6 | 14,844 | 85.8 | 14.7 | 5,778 |
| 1982 | 1,287 | 14.4 | 496 | 2.7 | 15,635 | 97.5 | 13.6 | 6,236 |
| 1983 | 1,234 | 15.3 | 590 | 3.2 | 16,279 | 109.6 | 12.4 | 6,733 |
| 1984 | 1,082 | 15.4 | 574 | 3.4 | 16,787 | 121.6 | 10.9 | 7,243 |
| 1985 | 1,209 | 13.5 | 630 | 4.1 | 17,366 | 131.0 | 7.7 | 7,545 |
| 1986 | 1,213 | 14.7 | 647 | 4.1 | 17,932 | 141.6 | 8.1 | 7,896 |
| 1987 | 1,119 | 18.7 | 695 | 4.9 | 18,356 | 155.4 | 9.7 | 8,464 |
| 1988 | 981 | 17.8 | 738 | 5.6 | 18,599 | 167.6 | 7.8 | 9,012 |
| 1989 | 1,565 | 20.6 | 811 | 6.7 | 19,353 | 181.5 | 8.3 | 9,377 |

STATISTICAL SECTION

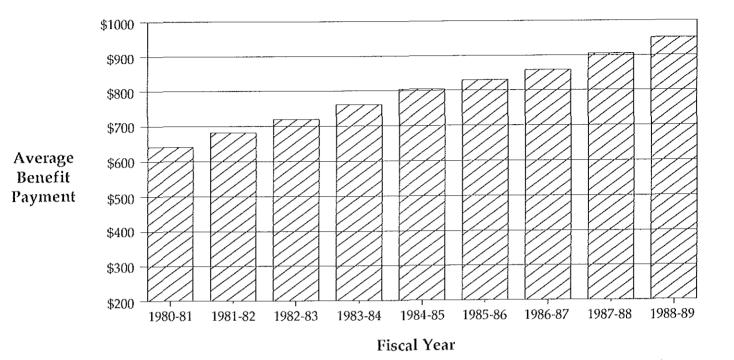
Kentucky Teachers' Retirement System



1.0 0.9 0.8 0.7 0.6 Number of 0.5 Annuitants 0.4 (thousands) 0.3 0.2 0.1 0 1985-86 1986-87 1987-88 1988-89 1984-85 1980-81 1982-83 1983-84 1981-82 **Fiscal Year** Beneficiary Retired Member Beneficiary Disability Survivor Active Member **Growth in Service Retirements** 17 16 15 14 13 12 11 10 9 Number of 8 Retirements 7 6 (thousands) 5 4 3 2 1 0 1986-87 1987-88 1988-89 1985-86 1983-84 1984-85 1981-82 1982-83 1980-81 **Fiscal Year**

Growth in Annuitants (except service retirements)

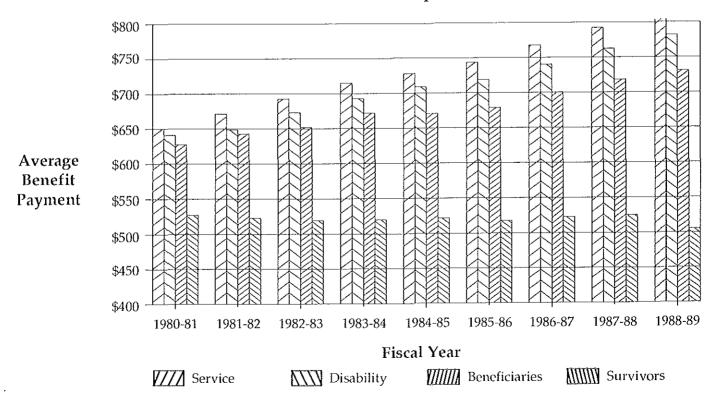
- 54 -



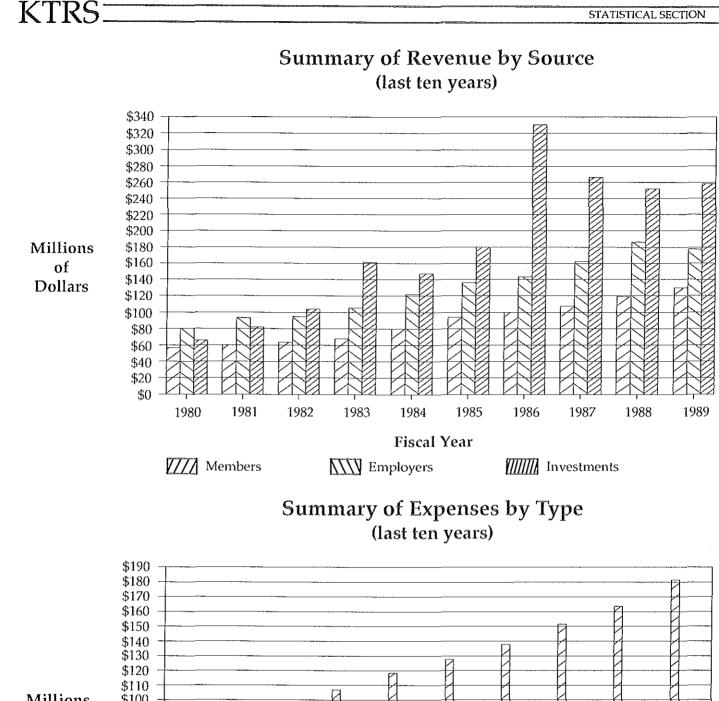
Average Benefit Payments

 \equiv KTRS

Average Benefit Payments (all recipients)



- 55 -----



Millions \$100 \$90 of \$80 **Dollars** \$70 \$60 \$50 \$40 \$30 \$20 \$10 YA. 11275-¥78-Λļ 11273-11/13-1Ę. KN255 $\forall \nabla$ \$0 1 ÇA 1980 1981 1982 1983 1985 1986 1987 1988 1989 1984 **Fiscal Year** Service/Disability Insurance Premiums /////// Refunds IIII Death/Survivor Adm./Inv.

- 56 -

GEOGRAPHICAL DISTRIBUTION OF RETIREMENT PAYMENTS as of June 30, 1989

TEXTRS

| County Name | Total Payments | Number of Recipients | County Name | Total Payments | Number of Recipients |
|----------------|-------------------|-------------------------|----------------|-------------------|-------------------------|
| Adair | \$ 1,068,868 | 117 | Harrison | \$ 979,429 | 101 |
| Allen | 627,783 | 66 | Hart | 684,507 | 77 |
| Anderson | 537,649 | 68 | Henderson | 1,420,689 | 150 |
| Ballard | 330,321 | 37 | Henry | 691,754 | 80 |
| Barren | 1,611,254 | 171 | Hickman | 220,834 | 26 |
| Bath | 603,274 | 74 | Hopkins | 1,716,383 | 217 |
| Bell | 1,928,159 | 211 | Jackson | 742,808 | 88 |
| Boone | 1,679,209 | 165 | Jefferson | 30,521,562 | 2,753 |
| Bourbon | 938,458 | 107 | Jessamine | 899,769 | 95 |
| Boyd | 2,564,330 | 291 | Johnson | 1,476,846 | 154 |
| Boyle | 1,613,349 | 169 | Kenton | 2,901,955 | 315 |
| Bracken | 315,261 | 37 | Knott | 1,027,485 | 119 |
| Breathitt | 1,022,883 | 110 | Knox | 1,233,125 | 136 |
| Breckinridge | 661,374 | 78 | Larue | 639,353 | 60 |
| Bullitt | 1,126,577 | 93 | Laurel | 2,013,304 | 214 |
| Butler | 634,287 | 70 | Lawrence | 710,348 | 89 |
| Caldwell | 668,353 | 82 | Lee | 493,041 | 59 |
| Calloway | 3,066,062 | 302 | Leslie | 629,909 | 70 |
| Campbell | 2,284,189 | 238 | Letcher | 1,613,490 | 182 |
| Carlisle | 290,790 | 39 | Lewis | 736,316 | 76 |
| Carroll | 320,033 | 40 | Lincoln | 1,128,097 | 127 |
| Carter | 1,278,240 | 145 | Livingston | 509,099 | 57 |
| Casey | 886,478 | 104 | Logan | 1,201,105 | 137 |
| Christian | 1,985,996 | 229 | Lyon | 381,316 | 41 |
| Clark | 1,256,679 | 137 | Madison | 4,407,646 | 439 |
| Clay | 1,489,848 | 171 | Magoffin | 674,420 | 86 |
| Clinton | 570,645 | 56 | Marion | 668,825 | 77 |
| Crittenden | 466,285 | 60 | Marshall | 1,012,683 | 114 |
| Cumberland | 495,649 | 58 | Martin | 583,519 | 71 |
| Daviess | 3,525,186 | 395 | Mason | 760,468 | 84 |
| Edmonson | 507,826 | 59 | McCracken | 2,582,043 | 303 |
| Elliott | 310,791 | 32 | McCreary | 649,012 | 70 |
| Estill | 690,203 | 78 | McLean | 370,290 | 45 |
| Fayette | 9,545,334 | 922 | Meade | 348,396 | 40 |
| Fleming | 651,555 | 72 | Menifee | 339,965 | 38 |
| Floyd | 2,755,591 | 290 | Mercer | 1,045,572 | 116 |
| Franklin | 3,306,664 | 349 | Metcalfe | 623,064 | 66 |
| Fulton | 446,093 | 60 | Monroe | 877,020 | 103 |
| Gallatin | 175,562 | 23 | Montgomery | 906,857 | 103 |
| Garrard | 653,589 | 72 | Morgan | 674,570 | 81 |
| Grant | 682,048 | 80 | Muhlenberg | 1,469,368 | 171 |
| Graves | 1,410,371 | 174 | Nelson | 1,204,632 | 118 |
| Grayson | 989,353 | 118 | Nicholas | 338,000 | 39 |
| Green | 697,851 | 69 | Ohio | 872,191 | 104 |
| Greenup | 1,669,986 | 169 | Oldham | 918,356 | 104 |
| Hancock | 270,965 | 32 | Owen | 364,899 | 45 |
| Hardin | 2,317,206 | 236 | Owsley | 420,594 | 55 |
| Harlan | 2,109,297 | 220 | Pendleton | 664,018 | 67 |

KTRS₌

GEOGRAPHICAL DISTRIBUTION OF RETIREMENT PAYMENTS as of June 30, 1989

| County Name | Total Payments | Number of Recipients | State Name | Total Payments | Number of Recipients |
|--------------------|-------------------|-------------------------|----------------|--|-------------------------|
| Perry | \$ 2,014,633 | 232 | Florida | \$ 3,793,377 | 480 |
| Pike | 3,791,140 | 394 | Georgia | 476,603 | 67 |
| Powell | 562,836 | 64 | Indiana | 1,500,450 | 199 |
| Pulaski | 3,028,260 | 321 | Ohio | 1,532,051 | 264 |
| Robertson | 119,564 | 16 | Tennessee | 1,812,864 | 252 |
| Rockcastle | 985,537 | 104 | Texas | 505,805 | 74 |
| Rowan | 1,847,956 | 175 | Virginia | 456,992 | 73 |
| Russell | 841,272 | 105 | Other States | 3,471,803 | 544 |
| Scott | 893,344 | 97 | Out Of Country | 14,583 | 5 |
| Shelby | 993,602 | 131 | | · · · · · · · · · · · · · · · · · · · | |
| Simpson | 650,012 | 72 | Total | | |
| Spencer | 364,467 | 40 | ····· | | |
| Taylor | 1,073,767 | 120 | Out Of State | \$ 13,564,529 | 1,958 |
| Todd | 537,911 | 69 | | | • |
| Trigg | 490,721 | 54 | In Kentucky | 173,066,245 | 18,243 |
| Trimble | 145,643 | 18 | j j | ······································ | |
| Union ¹ | 675,486 | 68 | GRAND TOTAL | \$186,630,774 | 20,201 |
| Warren | 5,960,259 | 578 | | | |
| Washington | 435,228 | 50 | | | |
| Wayne | 1,076,151 | 109 | | | |
| Webster | 684,247 | 89 | | | |
| Whitley | 2,358,520 | 269 | | | |
| Wolfe | 408,518 | 57 | | | |
| Woodford | 740,492 | 74 | | | |
| Total | | | | | |
| In Kentucky | \$173,066,245 | 18,243 | | | |

Summary of State Budget Appropriation to Teachers' Retirement System for 1988 - 1989

| Expense Item | 1988-89 State Budget Appropriation | 1988-89 State Actual Budget Requirement |
|---------------------------------------|---------------------------------------|--|
| Match of Member Contributions * | \$110,543,500 | \$112,805,568 |
| Supplemental Appropriation | 17,600,000 | 17,600,000 |
| Federal Payments | (4,000,000) | (7,239,318) |
| Sick Leave (KRS 161.155) | 3,630,000 | 7,051,434 |
| Retirce Cost of Living Adjustment | 21,680,000 | 21,680,000 |
| Prior Service Increase | 640,000 | 640,000 |
| \$75 Minimum Benefit | 10,000 | 10,000 |
| Handicapped Child Benefit | 178,300 | 178,300 |
| Minimum Benefit Adjustment | 1,780,000 | 1,780,000 |
| TOTALS | \$152,061,800 | \$154,505,984 |
| State Under-appropriation for 1988-89 | \$2,444,184 | |
| | | |

KRS 161.155 requires that in the event an annual appropriation is less than the amount of the statutory requirements, the state shall make up the deficit in the next biennial budget appropriation to the Retirement System.

*Also, it should be noted that beginning with FY 1988-89, the Department of Education and the state universities were responsible for matching their members' contributions with the state reimbursing these respective agencies in their normal budget appropriation. During this fiscal year, these agencies contributed \$16,740,757 in order to match the members' contributions. This resulted in the match of member contributions totaling \$129,546,325. In prior years, the Retirement System was appropriated an allotment of funds in their budget to cover the costs of matching these agencies member contributions.

Summary of State Match and Supplemental Appropriations for Member Contributions to Teachers' Retirement System

| Date | Total Member Contributions | Employer/Federal Payments | Required State Match Contribution | Supplemental | Total State Appropriation | (Deficit)Surplus State Funding | Running Total (Deficit)Surplus |
|---------|-------------------------------|------------------------------|---|--------------|---------------------------------|-----------------------------------|-----------------------------------|
| 1940-44 | \$ 2,063,717 | \$ | \$ 2,063,717 | \$ | \$ 2,063,637 | \$ (80) | \$ (80) |
| 1944-48 | 3,184,178 | | 3,184,178 | | 3,039,017 | (145,160) | (145,240) |
| 1948-52 | 4,951,458 | | 4,951,458 | | 5,090,848 | 139,390 | (5,850) |
| 1952-56 | 7,267,163 | | 7,267,163 | | 6,494,102 | (773,062) | (778,911) |
| 1956-60 | 14,970,961 | | 14,970,961 | | 14,963,272 | (7,689) | (786,600) |
| 1960-64 | 25,945,897 | | 25,945,897 | | 25,938,763 | (7,134) | (793,734) |
| 1964-68 | 49 <i>,</i> 957,299 | 2,042,014 | 47,915,285 | | 45,317,694 | (2,597,591) | (3,391,324) |
| 1968-72 | 82,922,869 | 6,044,865 | 76,878,005 | | 80,091,951 | 3,213,946 | (177,378) |
| 1972-76 | 120,349,350 | 8,019,216 | 112,330,134 | | 111,665,685 | (664,449) | (841,827) |
| 1976-80 | 189,072,371 | 12,044,186 | 177,028,185 | 75,010,028 | 256,784,030 | 4,745,817 | 3,903,990 |
| 1980-81 | 60,087,342 | 4,109,090 | 55,978,252 | 24,908,848 | 83,449,550 | 2,562,450 | 6,466,440 |
| 1981-82 | 63,859,388 | 4,012,767 | 59,846,622 | 26,472,323 | 89,301,425 | 2,982,481 | 0 |
| 1982-83 | 68,077,792 | 3,902,923 | 64,174,869 | 28,221,024 | 95,601,936 | 3,206,043 | 0 |
| 1983-84 | 80,720,250 | 4,310,157 | 76,410,093 | 30,019,916 | 110,314,100 | 3,884,091 | 206,370 |
| 1984-85 | 90,156,759 | 5,024,319 | 85,132,440 | 31,233,174 | 112,896,000 | (3,469,614) | (3,263,244) |
| 1985-86 | 95,894,952 | 5,039,582 | 90,855,370 | 33,218,460 | 115,962,300 | (8,111,530) | (11,374,774) |
| 1986-87 | 108,335,521 | 5,369,721 | 102,965,799 | 36,494,008 | 132,794,156 | (6,665,652) | (8,757,210) |
| 1987-88 | 119,545,184 | 5,983,982 | 113,561,202 | 40,306,185 | 144,949,722 | (8,917,666) | (17,674,875) |
| 1988-89 | 129,546,325 | 23,980,075 | 105,566,250 | 17,600,000 | 124,143,500 | 977,250 | (8,795,225) |

The state under-appropriation at June 30, 1989 is \$13,799,774. The state funding deficit of \$8,795,225 was reduced by the 1986-87 surplus in sick leave liability appropriation of \$855,387 and increased by the 1987-88 and 1988-89 deficit in sick leave liability appropriation of \$2,438,502 and \$3,421,434, respectively. The state under-appropriation of \$13,799,774 includes the state funding deficit remaining in 1987-88 of \$11,355,591. The state funding deficit for 1987-88 decreased from \$11,356,168 to 11,355,591 due to KTRS receiving \$7,902,400 from the state instead of \$7,901,823 for the 1986-88 deficit. KRS 161.550 requires that in the event an annual appropriation is less than the amount of the statutory requirements, the state shall make up the deficit in the next biennial budget appropriation to the Retirement System.

ſ

Summary of June 30, 1989 Retiree Sick Leave Payments

| Total members retiring Total members receiving sick leave payments | |
|--|--------------|
| Total amount of sick leave payments (at 9.855% contribution rate) Average payment per retiree | |
| Total increase in final average salary base (FASB) Average increase in FASB . | \$782,984.65 |
| Total service credit of 788 retirees Average service credit of 788 retirces | 22,827.66 |

| Average Yearl Increase | у | Service Credit | | Retirement Factor | | Average Yearly Annuity | |
|--|---|--|--------------------|----------------------|------|---|-----|
| \$993.64 | X | 22.97 | х | 2.00% | = | \$456.48 | |
| \$993.64 | Х | 1.00 | Х | 2.25% | = | \$22.36 | |
| \$993.64 | Х | 5.00 | Х | 2.50% | = | \$124.21 | |
| | | | | | | | \$6 |
| | • | 03.05 ÷ 12) Present Va | lue Facto ed on |)' | Numt | er of Members h Sick Leave Payments | |
| Average monthly an Average Monthly | • | 03.05÷12)… Present Va Bas Average A | lue Facto ed on |)' | Numt | er of Members h Sick Leave | |

Funding of Additional Payout

| Member Contributions State Contributions | 9.855% 9.855% | X X | \$3,914,923.27 = \$3,914,923.27 = | \$385,815.69 385,815.69 |
|---|------------------|--------|--------------------------------------|---------------------------------------|
| Total Member-State | Contribut | ions | | \$771,631.38 |
| Deficit | | | | |
| Anticipated additional pa Less total Member and SI | | ution | 5 | \$7,051,433.76 771,631.38 |
| Subtotal unfunded o Less current year approp | | | | \$6,279,802.38 <u>3,630,000.00</u> |
| Total Deficit | | | | \$2,649,802.38 * |

* This amount has been included in the 1988-89 shortfall.

KTRS:

School Districts That Have Elected to Pay for Sick Leave Under KRS 161.155(8) Fiscal Year 1989

| School District | Number of Members | Total Additional Compensation | School District | Number of Members | Total Additional Compensation |
|--------------------|----------------------|-------------------------------------|--------------------|----------------------|-------------------------------------|
| Adair | 2 | \$6,802.03 | Hopkins | 3 | \$17,260.99 |
| Allen | 4 | 30,914.16 | Jackson | 2 | 14,534.04 |
| Anderson | 3 | 15,836.43 | Jefferson | 174 | 1,112,219.03 |
| Barren | 2 | 6,067.58 | Johnson | 6 | 36,693.25 |
| Bath | 1 | 702.49 | Kenton | 10 | 35,567.32 |
| Bell | 3 | 18,148.15 | Knott | 3 | 8,660.58 |
| Boone | 8 | 50,829.72 | Knox | 4 | 15,568.24 |
| Bourbon | 6 | 27,382.36 | Larue | 7 | 42,963.57 |
| Boyd | 6 | 20,400.70 | Laurel | 11 | 53,780.64 |
| Breathitt | 4 | 19,406.59 | Lawrence | 1 | 2,301.27 |
| Breckinridge | 1 | 5,881.99 | Leslie | 4 | 10,765.91 |
| Bullitt | 9 | 33,866.87 | Letcher | 9 | 36,169.24 |
| Butler | 1 | 7,870.22 | Lewis | 2 | 6,508.98 |
| Caldwell | 4 | 17,317.00 | Lincoln | 1 | 9,508.68 |
| Calloway | 3 | 13,057.43 | Livingston | 2 | 13,037.03 |
| Campbell | 7 | 40,178.78 | Logan | 4 | 14,149.57 |
| Carroll | 4 | 12,550.28 | Lyon | 1 | 2,140.03 |
| Carter | 10 | 46,106.95 | Madison | 6 | 37,256.82 |
| Casey | 9 | 13,775.64 | Magoffin | 3 | 10,633.49 |
| Christian | 12 | 61,313.15 | Marshall | 3 | 18,995.85 |
| Clark | 1 | 6,898.43 | Mason | 1 | 3,300.96 |
| Clay | 5 | 25,460.58 | McCracken | 9 | 41,484.31 |
| Clinton | 4 | 2,124.10 | McCreary | 2 | 4,333.84 |
| Cumberland | 3 | 14,007.61 | Meade | 1 | 2,266.67 |
| Daviess | 13 | 62,258.86 | Menifee | 2 | 4,348.56 |
| Edmonson | 2 | 2,690.52 | Metcalfe | 6 | 31,809.74 |
| Elliott | 3 | 14,648.91 | Monroe | 4 | 20,198.68 |
| Estill | 2 | 3,467.07 | Montgomery | 2 | 6,654.79 |
| Fayette | 38 | 256,588.74 | Morgan | 2 | 13,316.28 |
| Fleming | 2 | 6,684.32 | Muhlenberg | 9 | 46,536.67 |
| Floyd | 11 | 27,691.72 | Nelson | 4 | 33,959.10 |
| Franklin | 5 | 3,419.07 | Ohio | 4 | 11,941.05 |
| Garrard | 3 | 18,329.37 | Oldham | 7 | 28,598.07 |
| Grant | 3 | 14,662.30 | Owen | 4 | 18,526.12 |
| Graves | 3 | 13,789.34 | Pendleton | 2 | 5,907.97 |
| Grayson | 4 | 27,044.04 | Perry | 7 | 19,920.95 |
| Green | 3 | 11,438.66 | Pike | 23 | 80,713.84 |
| Greenup | 4 | 24,149.88 | Pulaski | 10 | 53,215.32 |
| Hancock | 6 | 23,555.85 | Rockcastle | 12 | 19,292.85 |
| Hardin | 14 | 72,634.48 | Rowan | 2 | 2,468.80 |
| Harlan | 15 | 74,589.16 | Russell | 6 | 24,995.53 |
| Harrison | 5 | 24,344.18 | Scott | 1 | 5,230.44 |
| Hart | 7 | 31,617.14 | Shelby | 5 | 21,824.26 |
| Henderson | 9 | 46,280.27 | Simpson | 3 | 12,149.57 |
| Henry | 4 | 5,101.87 | Taylor | 5 | 21,871.43 |

- 62 -

School Districts That Have Elected to Pay for Sick Leave Under KRS 161.155(8) Fiscal Year 1989

| | Number | Total |
|--------------------|----------------------|----------------|
| School District | Number of Members | Additional |
| L'Istrict | members | Compensation |
| Trigg | 4 | \$24,319.12 |
| Trimble | 2 | 8,548.25 |
| Warren | 6 | 39,382.35 |
| Washington | 1 | 3,064.74 |
| Wayne | 4 | 23,514.97 |
| Webster | 1 | 5,826.69 |
| Whitley | 10 | 29,743.30 |
| Wolfe | 3 | 11,833.19 |
| Woodford | 4 | 14,238.86 |
| Ashland | 6 | 14,515.68 |
| Bowling Green | 4 | 20,251.04 |
| Campbellsville | 1 | 7,095.48 |
| Caverna | 1 | 9,845.97 |
| Corbin | 5 | 20,969.86 |
| Covington | 6 | 31,546.53 |
| Danville | 8 | 40,149.06 |
| Dayton | 2 | 13,757.69 |
| East Bernstadt | 1 | 7,496.09 |
| Elizabethtown | 2 | 11,699.44 |
| Eminence | 2 | 4,534.25 |
| Erlanger | 6 | 34,393.50 |
| Fairview | 1 | 5,610.25 |
| Glasgow | 4 | 24,066.46 |
| Harrodsburg | 2 | 4,502.79 |
| Hazard | 2 | 8,386.50 |
| Jenkins | 2 | 16,400.50 |
| Mayfield | 1 | 8,655.10 |
| Monticello | 1 | 3,888.18 |
| Newport | 3 | 17,901.78 |
| Owensboro | 8 | 47,661.30 |
| Paducah | 8 | 801.61 |
| Paris | 1 | 6,043.53 |
| Pikeville | 4 | 8,182.75 |
| Richmond | 7 | 45,528.56 |
| Russell | 3 | 21,806.19 |
| Walton Verona | 1 | 11,218.16 |
| Williamsburg | 2 | 1,263.62 |
| Education Adm. | 1 | 6,333.64 |
| KY Valley | 1 | 4,480.97 |
| Total | 788 | \$3,914,923.27 |

KTRS

Schedule of KTRS Annuitants by Type of Benefit June 30, 1989

| Amount of Monthly | Number of | Type of Retirement* | | | | | |
|----------------------|------------|---------------------|-----|-----|-----|-------|--|
| Benefit | Annuitants | 1 | 2 | 3 | 4 | 5 | |
| 1 - 200 | 1547 | 794 | 13 | 574 | 58 | . 108 | |
| 201 - 400 | 1972 | 1581 | 119 | 83 | 189 | 0 | |
| 401 - 600 | 3148 | 2652 | 272 | 0 | 224 | 0 | |
| 601 - 800 | 4119 | 3787 | 157 | 0 | 175 | 0 | |
| 801 - 1,000 | 3122 | 2859 | 165 | 0 | 98 | 0 | |
| 1,001 - 1,200 | 2394 | 2172 | 149 | 0 | 73 | 0 | |
| 1,201 ~ 1,400 | 1316 | 1204 | 76 | 0 | 36 | 0 | |
| 1,401 - 1,600 | 718 | 668 | 23 | 0 | 27 | 0 | |
| 1,601 - 1,800 | 406 | 387 | 6 | 0 | 13 | 0 | |
| 1,801 - 2,000 | 232 | 220 | 7 | 0 | 5 | 0 | |
| Over 2,000 | 379 | 368 | 4 | 0 | 7 | 0 | |
| Totals | 19353 | 16692 | 991 | 657 | 905 | 108 | |
| | | | | | | | |

*Type of Retirement

1 - Normal retirement for age & service

2 - Disability retirement

3 - Survivor payment - Active member

4 - Benificary payment - Retired member

5 - Mentally Disabled Child

Distribution of Active Members As Of June 30, 1989

By Age

By Service

| Age | Male | Female | Years Service | Male | Female |
|---------|--------|--------|------------------|--------|--------|
| 20-24 | 184 | 980 | Less 1 | 267 | 629 |
| 25-29 | 935 | 3318 | 1-4 | 2470 | 7556 |
| 30-34 | 1421 | 4480 | 5-9 | 1726 | 5180 |
| 35-39 | 2568 | 7080 | 10-14 | 2357 | 6153 |
| 40-44 | 3286 | 6808 | 15-19 | 2830 | 6415 |
| 45-49 | 2617 | 441 | 20-24 | 2347 | 3659 |
| 50-54 | 1735 | 2685 | 25-29 | 1374 | 1775 |
| 55-59 | 1016 | 1679 | 30-34 | 657 | 734 |
| 60-64 | 387 | 792 | Over 35 | 213 | 363 |
| 65-69 | 88 | 197 | | | |
| Over 70 | 4 | 30 | | | |
| Total | 14,241 | 32,464 | Total | 14,241 | 32,464 |
| | | | | | |

INVESTMENT SECTION

Kentucky Teachers' Retirement System

INVESTMENTS

The Board of Trustees of the Teachers' Retirement System annually appoints an Investment Committee consisting of two Board members and the Executive Secretary. This Committee acts on behalf of the Board, subject to its approval, in all matters concerning investments. In compliance with the Kentucky Revised Statutes, the Board of Trustees has adopted an "Investment Policy" which it reviews periodically. The investment objectives of the Board of Trustees are as follows:

- 1. Investment of the funds of the Teachers' Retirement System of the State of Kentucky shall be made solely in the interest of its members and their beneficiaries. Investment income shall be used for the exclusive purpose of providing benefits to the members and their beneficiaries and making payment of reasonable expenses in administering the Plan and its Trust Funds.
- 2. The specific objective of the investment program shall be the investment of the Fund's assets in securities which shall provide a reasonable rate of total return with major emphasis being placed upon the protection of the invested assets. When investments are acquired, current income together with prospects for capital appreciation shall be weighed in regard to the long range needs of providing benefits to members and their beneficiaries. Short term fluctuations in the market value of the Fund's assets shall be considered as secondary to the long term objectives and needs of the System.

During the 1980 session of the Kentucky General Assembly, the Board of Trustees worked with the General Assembly and modernized the section of the Teachers' Retirement Law that governs the investment process. The law is now patterned after the "Prudent Man" concept with a limited number of restrictions regarding asset allocation and permissible types of investments.

The Kentucky Revised Statutes require the Board of Trustees to employ an experienced investment counselor to advise it on investment related matters. Todd Investment Advisors of Louisville was retained during 1988-89 as the principal investment counselor. The First Kentucky Company and Invesco Capital Management also were employed to provide investment counseling services during the fiscal year. The First Kentucky Company assisted in the management of approximately \$280 million in bonds, while Invesco Capital Management was involved with managing approximately \$150 million in equity investments. All of the investment firms are required to work within the same set of portfolio objectives, portfolio constraints, and administrative guidelines. Three investment counselors provide the Board of Trustees with a diversification of management that is appropriate for a 3.2 billion dollar fund. The Farmers Bank & Capital Trust Company, located in Frankfort, Kentucky, was retained in 1988-89 as the Custodian of Securities.

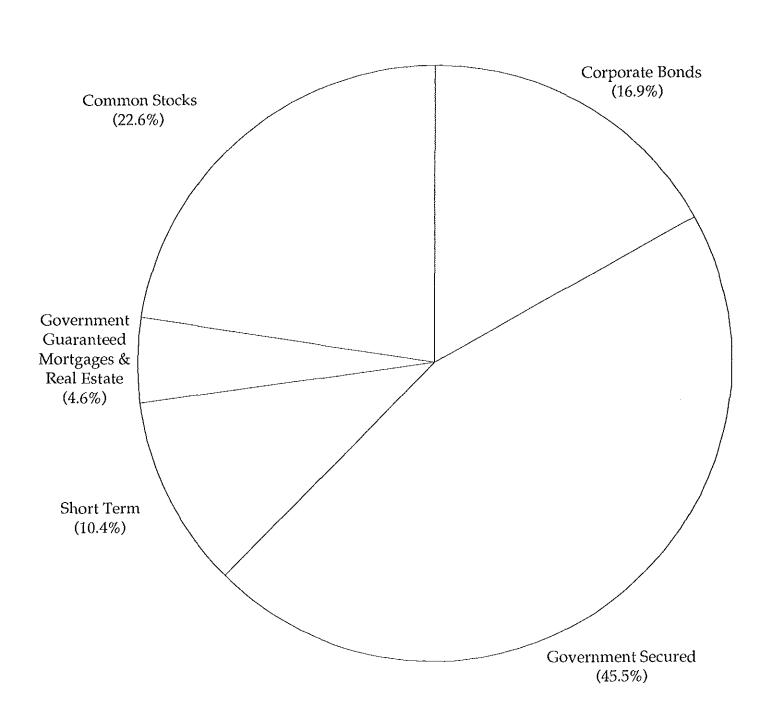
The investment portfolio experienced considerable growth in both par and book values during the year. The par value of the portfolio increased \$288 million, or 9.1%, to a total of \$3.4 billion at year-end. The book value of the fund correspondingly increased 11.6% during the year. The System collected \$248 million of investment income during 1988-89; investment income excludes monies earned but not received by the end of the fiscal year. The income resulted from interest, dividends, rental income, lending income, and gains. Total investment income for 1988-89 was about \$6 million higher than in 1987-88. At the year-end, the "net indicated yield" on fixed income investments at par value was 8.09%. The "indicated dividend yield" on common stocks was 4.12%.

The asset allocation of investments at par value was similar at the beginning of the fiscal year to what it was on June 30, 1989. During the 1988-89 fiscal year, the most significant change was in the stock position which increased from 18.4% of assets to 22.6%. This increase was due to the investment counselors' recommendations to be more fully invested in what they considered to be an undervalued stock market. The portion of the portfolio in government funds increased from 44.3% to 45.5%. The cash position decreased during the year by going from 13.7% to 10.4% of assets. The real estate equity position is a relatively small portion of the System's portfolio at approximately 1%. It should benefit the fund, particularly during inflationary periods.

The charts on the following pages display graphically the growth that is discussed in the preceding paragraphs and also depict the growth of the System over the last twenty years. Following the charts is a summary description of investments held at June 30, 1989. The pages thereafter provide a detailed listing of all investments held on June 30, 1989.

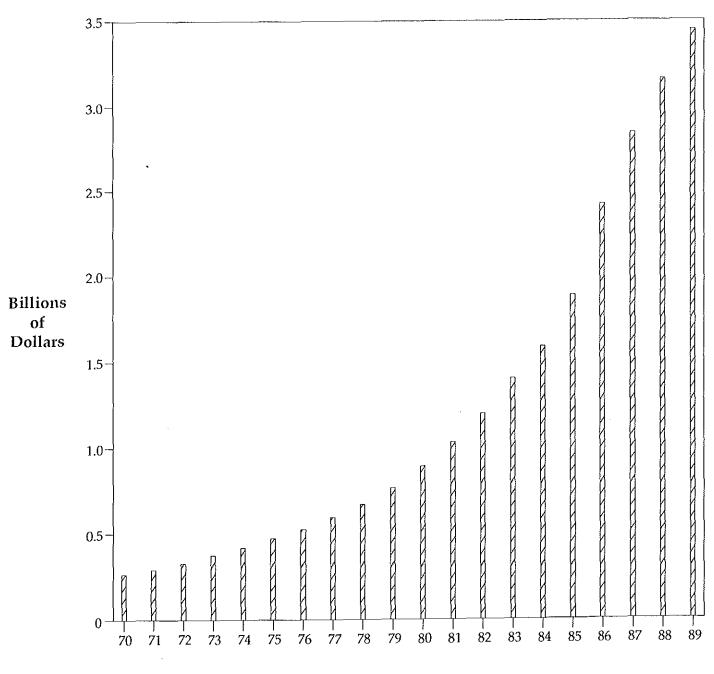
KTRS

Distribution of Investments June 30, 1989



Investment Portfolio Growth Fixed Income at Par Value Equities at Cost

KTRS

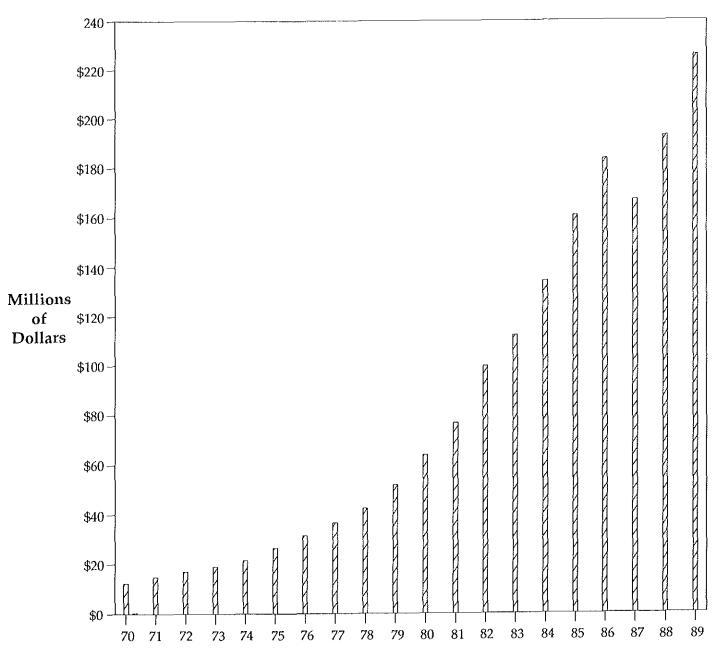


Fiscal Year

- 68

Investment Income Growth (Includes Amortization Excludes Net Gain)

KTRS



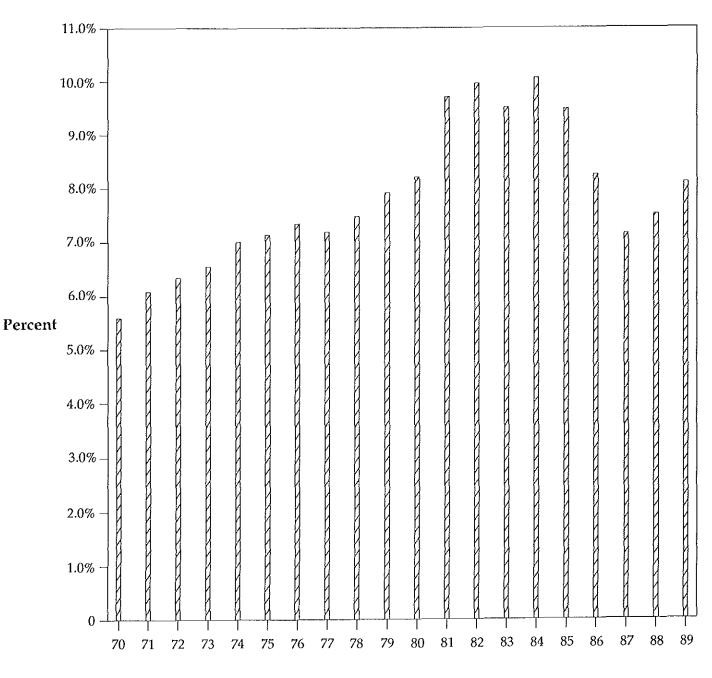
Fiscal Year

69 -

KTRS:

ţ

Net Indicated Yield on Fixed Dollar Assets (Par Value)



Fiscal Year

ANALYSIS OF INVESTMENTS HELD as of June 30, 1989

| | Percentage of Total | Par Value* or Remaining Principal Balance | Net Annual Interest/ Indicated Dividend Income | Annual Yield |
|--------------------------------------|------------------------|---|--|-----------------|
| Repurchase Agreements | 10.43% | \$ 359,260,000.00 | \$ 33,641,721.50 | 9.36% |
| Total Short Term | 10.43% | \$ 359,260,000.00 | \$ 33,641,721.50 | 9.36% |
| Treasury Notes and Bonds | 25.32 | 872,183,000.00 | 74,790,738.51 | 8.58 |
| Agencies | 3.03 | 104,496,442.09 | 6,920,357.76 | 6.62 |
| Ship Bonds (Title XI) | 1.37 | 47,274,419.34 | 4,389,128.26 | 9.28 |
| GNMA Mortgage Securities | 2.97 | 102,351,312.48 | 9,097,461.69 | 8.89 |
| Other Miscellaneous | 12.79 | 440,693,940.47 | 25,259,506.78 | 5.73 |
| Total U S Government Obligations | 45.48% | \$1,566,999,114.38 | \$120,457,193.00 | 7.69% |
| Industrials | 4.40 | 151,631,472.49 | 13,298,299.48 | 8.77 |
| Finance | 5.82 | 200,447,000.00 | 15,212,293.53 | 7.59 |
| Utility Bonds (Except Telephone) | 1.15 | 39,456,000.00 | 2,995,380.80 | 7.59 |
| Telephone Bonds | 3.48 | 119,740,000.00 | 9,917,647.60 | 8.28 |
| Railroad Obligations | .42 | 14,552,000.00 | 1,109,241.70 | 7.62 |
| Corporate Bonds NOC | 1.65 | 56,676,512.50 | 5,023,302.02 | 8.86 |
| Total Corporate Bonds | 16.92% | \$ 582,502,984.99 | \$ 47,556,165.13 | 8.16% |
| FHA & VA Single Family Mortgages | .33 | 11,257,725.72 | 745,982.58 | 6.63 |
| Project Mortgages (FHA & GNMA) | 3.17 | 109,517,177.01 | 10,211,253.59 | 9.32 |
| Total Other Fixed Income Investments | 3.50% | \$ 120,774,902.73 | \$ 10,957,236.17 | 9.07% |
| Subtotal (Fixed Income) | 76.33% | \$2,629,537,002.10 | \$212,612,315.80 | 8.09% |
| Real Estate Equity | 1.09 | 37,592,182.99 | 3,383,040.60 | 9.00 |
| Total Real Estate Equity | 1.09% | \$ 37,592,182.99 | \$ 3,383,040.60 | 9.00% |
| Common Stocks 16,871,489.8090 Shares | 22.58 | 777,841,037.69 | 32,040,484.24 | 4.12 |
| Total Stocks 16,871,489.8090 Shares | 22.58% | \$ 777,841,037.69 | \$ 32,040,484.24 | 4.12% |
| Subtotal (Equity) | 23.67% | \$ 815,433,220.68 | \$ 35,423,524.84 | 4.34% |
| Total Investments, Income & Yield | 100.00% | \$3,444,970,222.78 | \$248,035,840.64 | 7.20% |

*These figures represent the par value for the fixed income investments and the cost of stocks. The total book value and market value of KTRS investments are understandably different from the par value. The book value of fixed income investments as of 6-30-89 was \$2,399,391,061; the market value was \$2,417,423,065. The par and book values of stocks, which are the same, were \$777,841,038 for 6-30-89; the market value of stocks was \$869,311,552. Market value can be a highly volatile measure that changes daily and is particularly important when trading securities. Detailed information concerning the book values and market values of KTRS securities is available on request.

SHORT TERM INVESTMENTS

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|------------------------|--------|----------|--|
| Repurchase Agreements: | | | |
| Repurchase Agreement | 9.330 | 07/20/89 | \$ 25,140,000.00 |
| Repurchase Agreement | 9.330 | 07/11/89 | 9,000,000.00 |
| Repurchase Agreement | 9.340 | 07/06/89 | 26,140,000.00 |
| Repurchase Agreement | 9.340 | 07/05/89 | 2,886,300.00 |
| Repurchase Agreement | 9.340 | 07/05/89 | 28,432,800.00 |
| Repurchase Agreement | 9.340 | 07/05/89 | 4,002,400.00 |
| Repurchase Agreement | 9.340 | 07/05/89 | 678,500.00 |
| Repurchase Agreement | 9.340 | 07/24/89 | 25,000,000.00 |
| Repurchase Agreement | 9.340 | 07/31/89 | 21,430,000.00 |
| Repurchase Agreement | 9.350 | 07/18/89 | 39,670,000.00 |
| Repurchase Agreement | 9.360 | 07/12/89 | 6,314,500.00 |
| Repurchase Agreement | 9.360 | 07/12/89 | 5,408,300.00 |
| Repurchase Agreement | 9.360 | 07/12/89 | 4,691,400.00 |
| Repurchase Agreement | 9.360 | 07/12/89 | 1,945,800.00 |
| Repurchase Agreement | 9.360 | 07/27/89 | 8,630,000.00 |
| Repurchase Agreement | 9.360 | 07/10/89 | 17,000,000.00 |
| Repurchase Agreement | 9.360 | 07/12/89 | 3,887,800.00 |
| Repurchase Agreement | 9.360 | 07/12/89 | 112,200.00 |
| Repurchase Agreement | 9.375 | 07/13/89 | 25,650,000.00 |
| Repurchase Agreement | 9.380 | 07/27/89 | 26,440,000.00 |
| Repurchase Agreement | 9.380 | 07/25/89 | 37,030,000.00 |
| Repurchase Agreement | 9.400 | 07/03/89 | 13,400,000.00 |
| Repurchase Agreement | 9.470 | 07/11/89 | 26,370,000.00 |

\$359,260,000.00

\$359,260,000.00

Total Short Term Investments

U.S. GOVERNMENT OBLIGATIONS

Treasury Bonds and Notes:

| | F OFF | 00 /15 /00 | ¢ C 000 000 00 |
|--------------------|--------|------------|-----------------|
| U S Treasury Bonds | 7.875 | 02/15/00 | \$ 5,000,000.00 |
| U S Treasury Bonds | 8.750 | 11/15/08 | 3,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 10,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 20,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 10,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 10,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 10,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 10,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 10,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 10,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 10,000,000.00 |
| U S Treasury Bonds | 8.875 | 08/15/17 | 10,000,000.00 |
| U S Treasury Bonds | 9.125 | 05/15/09 | 15,000,000.00 |
| U S Treasury Bonds | 10.750 | 02/15/03 | 11,300,000.00 |
| U S Treasury Bonds | 10.750 | 08/15/05 | 1,625,000.00 |
| U S Treasury Bonds | 12.375 | 05/15/04 | 9,223,000.00 |

U. S. GOVERNMENT OBLIGATIONS (continued)

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|--|--------|--|--|
| Treasury Bonds and Notes: (cont.) | | ■ The physical sector development of the sector of the | |
| U S Treasury Bonds | 13.125 | 05/15/01 | \$ 8,000,000.00 |
| U S Treasury Bonds | 13.250 | 05/15/14 | 2,100,000.00 |
| U S Treasury Bonds | 14.250 | 02/15/02 | 6,735,000.00 |
| U S Treasury Notes | 7.000 | 04/15/94 | 10,000,000.00 |
| U S Treasury Notes | 7.125 | 10/15/93 | 2,000,000.00 |
| U S Treasury Notes | 7.250 | 11/15/96 | 17,000,000.00 |
| U S Treasury Notes | 7.375 | 04/15/93 | 65,000,000.00 |
| U S Treasury Notes | 7.375 | 05/15/96 | 8,500,000.00 |
| U S Treasury Notes | 7.375 | 05/15/96 | 25,000,000.00 |
| U S Treasury Notes | 7.375 | 05/15/96 | 22,600,000.00 |
| U S Treasury Notes | 7.375 | 05/15/96 | 11,400,000.00 |
| U S Treasury Notes | 7.500 | 08/15/91 | 10,000,000.00 |
| U S Treasury Notes | 7.750 | 08/31/89 | 10,000,000.00 |
| U S Treasury Notes | 7.750 | 11/30/89 | 20,000,000.00 |
| U S Treasury Notes | 7.875 | 05/15/90 | 7,000,000.00 |
| U S Treasury Notes | 7.875 | 08/15/90 | 10,000,000.00 |
| U S Treasury Notes | 7.875 | 08/15/90 | 15,000,000.00 |
| U S Treasury Notes | 8.375 | 11/15/92 | 5,000,000.00 |
| U S Treasury Notes | 8.375 | 11/15/92 | 25,000,000.00 |
| U S Treasury Notes | 8.500 | 05/15/97 | 2,000,000.00 |
| U S Treasury Notes | 8.500 | 05/15/97 | 8,000,000.00 |
| U S Treasury Notes | 8.625 | 08/15/97 | 20,000,000.00 |
| U S Treasury Notes | 8.750 | 08/15/91 | 5,000,000.00 |
| U S Treasury Notes | 8.750 | 08/15/93 | 1,000,000.00 |
| U S Treasury Notes | 8.875 | 07/15/95 | 25,000,000.00 |
| U S Treasury Notes | 8.875 | 07/15/95 | 25,000,000.00 |
| U S Treasury Notes | 8.875 | 11/15/97 | 2,500,000.00 |
| U S Treasury Notes | 8.875 | 11/15/97 | 1,000,000.00 |
| U S Treasury Notes | 8.875 | 11/15/98 | 4,000,000.00 |
| U S Treasury Notes | 8.875 | 11/15/98 | 3,000,000.00 |
| U S Treasury Notes | 8.875 | 02/15/99 | 30,000,000.00 |
| U S Treasury Notes | 9.000 | 05/15/98 | 25,000,000.00 |
| U S Treasury Notes | 9.000 | 05/15/98 | 25,000,000.00 |
| U S Treasury Notes | 9.125 | 02/15/91 | 66,000,000.00 |
| U S Treasury Notes | 9.125 | 09/30/91 | 25,000,000.00 |
| U S Treasury Notes | 9.250 | 01/15/96 | 20,000,000.00 |
| U S Treasury Notes | 9.250 | 01/15/96 | 2,000,000.00 |
| U S Treasury Notes | 9.500 | 10/15/94 | 25,000,000.00 |
| U S Treasury Notes | 9.500 | 10/15/94 | 25,000,000.00 |
| | 9.500 | 11/15/95 | 5,000,000.00 |
| U S Treasury Notes U S Treasury Notes | 10.875 | 02/15/93 | 5,000,000.00 |
| U S Treasury Notes | 11.750 | 11/15/93 | 1,250,000.00 |
| U S Treasury Notes | 11.750 | 11/15/93 | 4,450,000.00 |
| U S Treasury Notes | 11.750 | 11/15/93 | 7,000,000.00 |
| | 11.875 | 10/15/89 | 17,000,000.00 |
| U S Treasury Notes U S Treasury Notes | 12.750 | 11/15/89 | 56,000,000.00 |
| U S Treasury Notes | 13.750 | 05/15/92 | 1,500,000.00 |

\$872,183,000.00

KTRS

KTRS:

U. S. GOVERNMENT OBLIGATIONS (continued)

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|-----------------------------------|--------|----------|--|
| Federal Agencies: | | | 24 - 24 - 24 - 24 - 24 - 24 - 24 - 24 - |
| FHLMC FHA/VA Freddie Mac 14- | | | |
| 0527 B/E | 8.000 | 10/01/08 | \$ 11,096,442.09 |
| FHLMC Multiclass Mtg Ctfs 53, 53- | 9.500 | 08/15/20 | 6,000,000.00 |
| A | 0.000 | 07/05/14 | 31,900,000.00 |
| FNMA Bonds | 9.400 | 08/10/98 | 13,500,000.00 |
| FNMA Capital Deb. 1988-A | 7.750 | 09/05/89 | 5,000,000.00 |
| Federal Farm Credit Banks | 11.500 | 01/20/92 | 5,000,000.00 |
| Federal Farm Credit Banks | 11,500 | 01/20/92 | 10,000,000.00 |
| Federal Farm Credit Banks | 14.700 | 07/22/91 | 10,000,000.00 |
| Federal Farm Credit Banks | 7.050 | 03/15/91 | 8,000,000.00 |
| Sallie Mae (SLMA) MTN | 7.050 | 03/15/91 | 2,000,000.00 |
| Sallie Mae (SLMA) MTN | 7.350 | 05/01/97 | 2,000,000.00 |
| Tennessee Valley Auth Pr Ser B | | | \$104,496,442.09 |
| Ship Bonds (Title XI): | | | |
| American Commercial Lines Ser F | 10.950 | 07/15/04 | \$ 6,773,000.00 |
| Atlas Marine American Hertge | 7.700 | 12/15/96 | 2,423,000.00 |
| Cntrl Gulf Lns Lash Lighters | 8.250 | 01/15/95 | 1,181,917.21 |
| Crowley Maritime | 8.125 | 09/13/99 | 2,983,883.64 |
| Diamond M Drilling New Era | 7.750 | 09/30/89 | 270,319.40 |
| Farrell Lines Inc Freedom | 7.300 | 07/01/97 | 897,000.00 |
| Farrell Lines Inc SF Ser I | 7.950 | 06/07/04 | 2,957,000.00 |
| Flowers Transportation SF | 8.400 | 05/05/00 | 1,150,099.63 |
| Goodyear Steamship SF | 11.550 | 05/15/06 | 11,149,536.24 |
| Marine Ship Leasing A Antarctic | 7.875 | 09/12/95 | 804,180.19 |
| Marine Vessel Leasing Ind Ocean | 7.875 | 10/14/95 | 662,905.21 |
| Patriot Steamship | 8.100 | 12/07/04 | 1,576,000.00 |
| Shipco 668 Series A SF | 8.500 | 05/11/02 | 4,365,000.00 |
| Stuyvesant Issue | 7.950 | 09/30/97 | 6,991,577.82 |
| Zapata Marine US Inc SF | 7.700 | 09/30/94 | 3,089,000.00 |
| | | | \$ 47,274,419.34 |
| GNMA Single Family Mortgages: | | | |
| 150 Mortgage Pools | vari | ous | 102,351,312.48 |
| | | | \$102,351,312.48 |
| Other - Miscellaneous: | | | |
| B/E TINT (Treasury Securities) | 0.000 | 02/15/91 | \$ 30,000,000.00 |
| CATS (Treasury Securities) A | 0.000 | 11/15/04 | 1,500,000.00 |
| CATS (Treasury Securities) G | 0.000 | 05/15/03 | 1,800,000.00 |
| CATS (Treasury Securities) K | 0.000 | 11/15/03 | 3,300,000.00 |
| CATS (Treasury Securities) M | 0.000 | 05/15/02 | 2,500,000.00 |
| CATS (Treasury Securities) N | 0.000 | 05/15/04 | 2,800,000.00 |
| CATS (Treasury Securities) Q | 0.000 | 05/15/02 | 1,200,000.00 |
| CATS (Treasury Securities) Q | 0.000 | 05/15/03 | 6,100,000.00 |
| | | | |

- 74 -

U. S. GOVERNMENT OBLIGATIONS (continued)

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|--------------------------------------|--------|----------|--|
| Other - Miscellaneous: (cont.) | | | |
| CATS (Treasury Securities) R | 0.000 | 02/15/03 | \$ 1,200,000.00 |
| CATS (Treasury Securities) R | 0.000 | 02/15/02 | 9,650,000.00 |
| CATS (Treasury Securities) RU | 0.000 | 02/15/04 | 4,600,000.00 |
| CATS (Treasury Securities) U | 0.000 | 02/15/01 | 1,100,000.00 |
| CATS (Treasury Securities) U | 0.000 | 02/15/02 | 10,800,000.00 |
| CATS (Treasury Securities) U | 0.000 | 08/15/02 | 5,500,000.00 |
| CATS (Treasury Securities) U | 0.000 | 02/15/03 | 5,000,000.00 |
| CATS (Treasury Securities) UR | 0.000 | 02/15/02 | 3,300,000.00 |
| CATS (Treasury Securities) VGLQT | 0.000 | 11/15/03 | 10,600,000.00 |
| CATS (Treasury Securities) Z | 0.000 | 05/15/03 | 5,000,000.00 |
| CMO American SW Finl Ser 61E | 8.900 | 03/01/18 | 15,000,000.00 |
| CMO Coll Mtg Sec Corp Ser 88-4 CL B | 8.750 | 04/20/19 | 19,560,000.00 |
| CMO E F H Trust I Ser 87 CL E | 9.750 | 07/01/17 | 10,000,000.00 |
| CMO Ryland Accept Corp Ser 54 CL S4B | 9.850 | 11/01/03 | 1,715,686.21 |
| CMO Ryland IV 62D Ser 62 | 7.500 | 02/01/11 | 1,250,000.00 |
| CMO Trust 43 Ser Y | 8.200 | 05/20/04 | 8,382,808.72 |
| CMO Trust II 4C Bonds | 9.650 | 07/25/06 | 5,000,000.00 |
| CMO-FHLMC Ser 21R Class B | 8.900 | 02/15/04 | 20,000,000.00 |
| CMO-FHLMC Ser 21R Class E | 9.350 | 02/15/09 | 1,000,000.00 |
| CMO-FHLMC Ser 21R Class E | 9.350 | 02/15/09 | 30,000,000.00 |
| CMO-FHLMC Ser 55 Class B | 9.000 | 05/15/97 | 20,000,000.00 |
| CMO-FHLMC Series 19-A | 10.000 | 01/15/05 | 8,315,375.00 |
| CMO-Lomas Nettleton Mtg II 2 | 9.000 | 12/01/08 | 5,000,000.00 |
| CMO-MDC Asset Inv TR Ser 11 CL 3 | 9.050 | 11/20/17 | 4,116,296.60 |
| CMO-Mortgage Bankers Fin 87A | 7.200 | 07/25/00 | 6,082,090.16 |
| CMO-United Saving Assoc TX 3B | 8.950 | 12/25/05 | 3,240,000.00 |
| Call Treasury Receipts | 0.000 | 11/15/06 | 2,520,000.00 |
| Coupon Treasury Receipts | 0.000 | 11/15/93 | 1,662,500.00 |
| FHA Certificate of Claim | 3.000 | | 4,516.76 |
| FHA Certificate of Claim | 3.000 | | 32,887.02 |
| Principal CATS Series R | 0.000 | 08/15/04 | 45,000,000.00 |
| Principal CATS U | 0.000 | 08/15/04 | 22,800,000.00 |
| Principal CATS U | 0.000 | 08/15/04 | 5,004,000.00 |
| Principal Treasury Receipts | 0.000 | 08/15/04 | 10,000,000.00 |
| TIGR'S (Treasury Securities) 1 | 0.000 | 11/15/05 | 5,012,000.00 |
| TIGR'S (Treasury Securities) 18 | 0.000 | 02/15/02 | 2,500,000.00 |
| Treasury Receipts | 0.000 | 05/15/04 | 2,170,080.00 |
| Treasury Receipts | 0.000 | 05/15/94 | 8,125,700.00 |
| U S Treasury Strips Coupon | 0.000 | 05/15/92 | 14,000,000.00 |
| U S Treasury Strips Coupon | 0.000 | 05/15/92 | 14,000,000.00 |
| U S Treasury Strip Bonds | 0.000 | 05/15/04 | 15,000,000.00 |
| U S Treasury Strip Bonds | 0.000 | 11/15/11 | 15,000,000.00 |
| U S Treasury Strip Bonds | 0.000 | 05/15/92 | 5,000,000.00 |
| U S Treasury Strips Coupon | 0.000 | 08/15/90 | 8,250,000.00 |
| | | | ynan nymendd (2019 |

\$ 440,693,940.47

KTRS

Total U.S. Government Obligations

\$1,566,999,114.38

CORPORATE BONDS

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|-----------------------------------|--------|----------|--|
| Industrials: | | | |
| Ariel Properties Inc Mtg Nt | 7.000 | 07/01/98 | \$ 343,568.31 |
| BP America Inc | 9.250 | 04/15/16 | 3,000,000.00 |
| Borden Inc SF Debs | 8.375 | 04/15/16 | 20,000,000.00 |
| Chevron London 1st Prfd Ship Mtg | 7.700 | 09/07/97 | 608,052.09 |
| Chevron Stations Inc Nt | 5.100 | 04/01/91 | 25,000.00 |
| Conoco Inc | 5.875 | 12/01/89 | 61,000.00 |
| Conoco Pipe Line Guaranteed Nts | 7,500 | 05/01/94 | 75,000.00 |
| Corning Glass Works Debs | 8.875 | 03/15/16 | 5,000,000.00 |
| Cummins Engine Co Inc Nts | 5.000 | 07/15/90 | 30,000.00 |
| Dayton-Hudson Corp SF Debs | 9.500 | 10/15/16 | 1,000,000.00 |
| Dow Chemical Debs | 8.625 | 02/15/08 | 2,200,000.00 |
| Dow Chemical Nts | 5.000 | 04/01/91 | 328,800.00 |
| Dupont (E I) deNemours Debs | 6.000 | 12/01/01 | 8,000,000.00 |
| Dupont (E I) deNemours Debs | 6.000 | 12/01/01 | 8,000,000.00 |
| Fahrney Paul L 1st Prfd Ship Mtg. | 7.700 | 09/08/97 | 608,052.09 |
| Federated Dept Stores | 9.375 | 11/01/92 | 3,000,000.00 |
| Ford Motor Co Nts | 8.875 | 04/01/06 | 3,045,000.00 |
| General Motors Corp Debs | 8.125 | 04/15/16 | 3,500,000.00 |
| ITT Corp Variable Duration Nts | 10.450 | 09/01/95 | 7,138,000.00 |
| Johnson & Johnson Nts | 8.875 | 10/15/90 | 9,500,000.00 |
| Kimberly Clark Corp MTN | 8.350 | 12/31/91 | 8,000,000.00 |
| Kimberly Clark Corp MTN | 8.550 | 12/31/92 | 15,000,000.00 |
| Leased Tankers Secured Nts A | 7.450 | 12/01/92 | 1,230,000.00 |
| Loews Corp Nts | 8.875 | 04/15/11 | 4,900,000.00 |
| Marriott Corp Ser G Sr Nts | 8.375 | 02/01/94 | 2,000,000.00 |
| May Department Stores Debs | 9.125 | 12/01/16 | 3,000,000.00 |
| Pitney Bowes Inc SF Debs | 9.000 | 10/15/95 | 439,000.00 |
| Quaker Oats Co MTN | 7.850 | 03/15/96 | 3,000,000.00 |
| Quaker Oats SF Debs | 7.700 | 06/15/01 | 2,000,000.00 |
| RJR Nabisco Inc | 7.375 | 02/01/01 | 1,000,000.00 |
| RJR Nabisco Inc Nts | 9.250 | 05/01/95 | 20,000,000.00 |
| RJR Nabisco SF Debs | 8.625 | 03/15/17 | 1,600,000.00 |
| Ryder System Inc MTN | 8.800 | 07/19/93 | 5,000,000.00 |
| Time Inc SF Debs | 8.750 | 04/01/17 | 5,000,000.00 |
| U S Leasing Corp MTN | 8.780 | 05/20/91 | 2,000,000.00 |
| United Tech Corp SF Debs | 8.875 | 12/15/16 | 1,000,000.00 |
| Westvaco Corp SF Debs | 12.300 | 01/15/15 | 1,000,000.00 |
| | | | \$151,631,472.49 |
| Finance: | | | |
| American Express Cr Co Sr Nts | 7.750 | 03/01/97 | \$ 10,000,000.00 |
| American Express Cr Corp Nts | 8.750 | 02/01/95 | 5,000,000.00 |
| American Express Cr Corp Nts | 8.750 | 02/01/95 | 5,000,000.00 |
| Bank of N Y CD | 9.900 | 08/10/90 | 10,000,000.00 |
| Beneficial Finance Debs | 4.500 | 03/01/92 | 495,000.00 |
| Beneficial Finance Debs | 5.000 | 11/01/90 | 1,675,000.00 |
| C I T Group Hldg Inc Nts | 8.900 | 04/15/93 | 2,500,000.00 |
| S. I. Stoup Mag merils | 0.200 | 01/10/70 | 2,000,000,000 |

-

CORPORATE BONDS (continued)

KTRS

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|---|----------------------------------|--|--|
| Finance: (cont.) | | REFERE OF LAND AND AND AND AND AND AND AND AND AND | |
| Capital Cities ABC Fin Inc Gtd Debs | 8.750 | 03/15/16 | \$ 20,000,000.00 |
| Citicorp Sub Cap Nts | 9.000 | 04/15/99 | 2,000,000.00 |
| Ford Motor Credit Co | 8.700 | 11/14/90 | 5,000,000.00 |
| Ford Motor Credit Nts | 6.875 | 03/01/90 | 10,000,000.00 |
| Ford Motor Credit Nts | 7.500 | 03/01/94 | 10,000,000.00 |
| Ford Motor Credit Nts | 7.875 | 01/15/97 | 4,000,000.00 |
| G E Capital Corp Remarketed Resetnt | 8.750 | 12/15/07 | 15,000,000.00 |
| G E Capital Corp Remarketed Resetnt | 8.750 | 12/15/07 | 1,000,000.00 |
| G E Credit Corp Extennts | 9.375 | 10/15/07 | 8,000,000.00 |
| GMAC Deb Deferred Interest | 0.000 | 12/01/12 | 25,000,000.00 |
| GMAC MTN | 8.750 | 12/29/89 | 5,000,000.00 |
| GMAC MTN | 9.000 | 11/09/90 | 2,500,000.00 |
| GMAC Nts | 8.625 | 07/17/92 | 10,000,000.00 |
| General Motors Accept Corp Debs | 7.750 | 10/01/94 | 4,877,000.00 |
| General Motors Accept Corp Debs | 8.000 | 01/15/02 | 3,500,000.00 |
| Hartford Natl Corp Sub Cap Nts | 9.850 | 06/01/99 | 1,000,000.00 |
| IBM Credit | 8.000 | 08/15/90 | 10,000,000.00 |
| Morgan Bank of Del Dep Nts | 9.750 | 03/01/91 | 6,750,000.00 |
| Metropolitan Federal Bk MTN | 8.450 | 03/01/93 | 4,500,000.00 |
| Morgan Guaranty Tr Depository Nts | 8.000 | 09/01/89 | 1,750,000.00 |
| Pittsburgh Nat. Bank Dep. Nts | 8.875 | 06/10/91 | 6,700,000.00 |
| Penney J C Financial Corp Debs | 7.875 | 09/15/91 | 2,000,000.00 |
| Sovran Financial Corp Sub Cap Nts | 9.750 | 06/15/99 | 1,000,000.00 |
| United California Bk Cap Nts | 4.500 | 01/15/90 | 200,000.00 |
| Westinghouse Credit MTN Nts | 8.500 | 12/15/89 | 6,000,000.00 |
| | | | \$200,447,000.00 |
| Utility Bonds (except Telephone): | | | |
| Arkla Inc | 6.500 | 12/31/89 | \$ 1,142,000.00 |
| Columbus & Southern Power 1st Mtg | 8.625 | 02/01/96 | 2,000,000.00 |
| Con Edison 1st Ref Mtg EE | 6.250 | 08/01/97 | 500,000.00 |
| Con Edison 1st Ref Mtg FF | 6.850 | 10/01/98 | 250,000.00 |
| Con Edison 1st Ref Mtg R | 4.750 | 06/01/90 | 575,000.00 |
| Con Edison 1st Ref Mtg S | 5.000 | 12/01/90 | 700,000.00 |
| Con Edison 1st Ref Mtg V | 4.375 | 06/01/92 | 1,150,000.00 |
| Elizabethtown Water Co Debs NJ | 4.875 | 02/01/92 | 818,000.00 |
| Florida Power Corp 1st Mtg | 7.375 | 06/01/02 | 2,000,000.00 |
| Florida Power Light 1st Mtg | 4.625 | 03/01/95 | 100,000.00 |
| Florida Power Light 1st Mtg | 5.000 | 12/01/95 | 700,000.00 |
| | | 10/01/16 | 1,000,000.00 |
| Florida Power Light 1st Mtg | 9.000 | 10/01/16 | |
| Florida Power Light 1st Mtg Houston Lighting Power 1st Mtg | 9.000 9.000 | 03/01/17 | 207,000.00 |
| Houston Lighting Power 1st Mtg | | | 207,000.00 300,000.00 |
| Houston Lighting Power 1st Mtg Kentucky Utilities 1st Mtg I | 9.000 | 03/01/17 | 207,000.00 300,000.00 2,000,000.00 |
| Houston Lighting Power 1st Mtg Kentucky Utilities 1st Mtg I Kentucky Utilities 1st Mtg J | 9.000 8.750 | 03/01/17 04/01/00 | 207,000.00 300,000.00 2,000,000.00 2,000,000.00 |
| Houston Lighting Power 1st Mtg Kentucky Utilities 1st Mtg I Kentucky Utilities 1st Mtg J Louisville Gas Electric 1st Mtg | 9.000 8.750 7.625 | 03/01/17 04/01/00 09/01/01 | 207,000.00 300,000.00 2,000,000.00 2,000,000.00 500,000.00 |
| Houston Lighting Power 1st Mtg Kentucky Utilities 1st Mtg I Kentucky Utilities 1st Mtg J | 9.000 8.750 7.625 8.250 | 03/01/17 04/01/00 09/01/01 08/01/01 | 207,000.00 300,000.00 2,000,000.00 2,000,000.00 |

KTRS

CORPORATE BONDS (continued)

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|--|----------------|----------------------|---|
| Utility Bonds (except Telephone): (cont.) | | | <u>an an a</u> |
| Pacific Gas Elec 1st Ref Mtg XX | 7.500 | 12/01/03 | \$ 1,300,000.00 |
| Pacific Power Light 1st Mtg | 4.500 | 12/01/92 | 1,361,000.00 |
| Pennsylvania Electric Debs | 7.000 | 11/01/92 | 98,000.00 |
| Pub Ser Elec Gas 1st Ref Mtg U | 7.500 | 04/01/96 | 10,000,000.00 |
| Pub Ser Elec Gas Debs | 6.000 | 07/01/98 | 255,000.00 |
| Virginia Elec Power 1st Ref Mtg | 9.250 | 03/01/06 | 1,000,000.00 |
| Wisconsin Electric Power 1st Mtg | 8.500 | 12/15/16 | 7,500,000.00 |
| | | | \$ 39,456,000.00 |
| Telephone Bonds: | | | |
| American Tel Tel Credit Corp MTN | 8.800 | 01/31/95 | \$ 3,500,000.00 |
| American Tel Tel Debs | 5.125 | 04/01/01 | 4,000,000.00 |
| American Tel Tel Debs | 5.500 | 01/01/97 | 2,100,000.00 |
| American Tel Tel Debs | 6.000 | 08/01/00 | 1,000,000.00 |
| Bell South Capital Funding MTN | 7.820 | 04/01/91 | 5,000,000.00 |
| Bell South Capital Funding MTN | 7.820 | 03/01/91 | 5,000,000.00 |
| Chesapeake Potomac Tel Va Debs | 9.500 | 04/15/19 | 4,300,000.00 |
| Chesapeake Potomac Tel W Va Debs | 9.250 | 07/01/19 | 2,000,000.00 |
| GTE Florida Inc | 8.000 | 03/01/01 | 250,000.00 |
| Gen Telephone Midwest 1st Mtg F | 7.500 | 02/01/01 | 200,000.00 |
| Hawaiian Telephone 1st Mtg S | 6.750 | 04/01/98 | 100,000.00 |
| Hawaiian Telephone 1st Mtg T | 8.750 | 09/01/00 | 200,000.00 |
| Illinois Bell Tel Debs | 8.000 | 12/10/04 | 5,000,000.00 |
| Michigan Bell Tel Co MTN | 9.500 | 10/31/90 | 10,000,000.00 |
| Michigan Bell Tel Debs New York Telephone Co Debs | 7.000 | 11/01/12 05/15/24 | 2,000,000.00 3,750,000.00 |
| New York Telephone Co Debs | 8.625 8.750 | 04/01/23 | 20,000,000.00 |
| New York Telephone Co Debs | 8.750 | 04/01/23 | 3,000,000.00 |
| New York Telephone Co Debs | 8.750 | 04/01/23 | 2,000,000.00 |
| Pacific Tel Tel Debs | 7.800 | 03/01/07 | 250,000.00 |
| Pacific Tel Tel Debs | 8.375 | 02/01/17 | 2,500,000.00 |
| South Central Bell Tel Debs | 8.250 | 08/01/13 | 4,000,000.00 |
| Southwestern Bell Capital Corp MTN | 7.950 | 04/30/90 | 20,000,000.00 |
| Southwestern Bell Tel Debs | 4.625 | 08/01/95 | 1,590,000.00 |
| Southwestern Bell Tel Debs | 6.750 | 06/01/08 | 1,000,000.00 |
| Southwestern Bell Tel Debs | 7.750 | 09/01/09 | 2,000,000.00 |
| U S West Financial Service Inc MTN | 9.125 | 08/02/93 | 12,000,000.00 |
| U S West Financial Service Inc MTN | 9.250 | 08/02/94 | 3,000,000.00 |
| | | | \$119,740,000.00 |
| Railroad Obligations: | | | |
| CSX Corp Nts | 9.000 | 08/15/06 | \$ 10,000,000.00 |
| Chesapeake Ohio Ry Gen Mtg | 4.500 | 03/01/92 | 656,000.00 |
| Louisville Nashville RR Col Tr | 7.375 | 12/01/93 | 300,000.00 |
| Sou Railway Memphis Div Ist Mtg | 5.000 | 07/01/96 | 539,000.00 |

CORPORATE BONDS (continued)

T KTRS

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|--|----------------|----------------------|--|
| Railroad Obligations: (cont.) | | | |
| Southern Railway 1st Con Mtg Virginia Southwestern Ry 1st Mtg | 5.000 5.000 | 07/01/94 01/01/03 | \$ 2,950,000.00 107,000.00 |
| | | | \$ 14,552,000.00 |
| Corporate Bonds NOC: | | | |
| CFC-2 Grantor Trust Asset B/CT | 8.550 | 11/15/92 | 1,748,160.21 |
| CFC-3 Grantor Trust | 7.700 | 02/15/93 | 9,961,557.84 |
| College & Univ FAC Loan TR 2 Ser A | 4.000 | 06/01/96 | 3,174,592.60 |
| College & Univ FAC Loan TR 2 Ser A | 4.000 | 06/01/96 | 3,002,993.01 |
| GMAC Grantor 1986-G | 6.850 | 12/16/91 | 6,201,676.67 |
| GMAC Grantor 1986-G | 6.850 | 12/16/91 | 1,550,419.17 |
| Huntington Bank Grantor Tr 1988 A | 9.350 | 10/15/94 | 7,694,306.60 |
| Mack Truck Rec Ser 3 | 10.200 | 03/15/94 | 9,097,430.00 |
| Marine Midland 1988-1 Cars Trust | 8.500 | 06/15/93 | 10,688,540.89 |
| Salmon Receivables Ser 87-1A | 8.500 | 11/15/90 | 3,556,835.51 |
| | | | \$ 56,676,512.50 |
| Total Corporate Bonds | | | \$582,502,984.99 |

OTHER FIXED INCOME INVESTMENTS

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|-----------------------------------|--------|--------------|--|
| Single Family Mortgages: | | | |
| FHA VA | | ious ious | \$ 5,731,988.54 5,525,737.18 |
| | | | \$ 11,257,725.72 |
| Project Mortgages (FHA & GNMA): | | | |
| Americana Apts KY 221D4 | 7.500 | 10/01/18 | \$ 4,425,029.27 |
| Bedford Commons KY 221D4 | 8.000 | 11/01/23 | 1,260,960.19 |
| Bedford House KY 221D4 | 7.500 | 01/01/20 | 1,229,456.53 |
| Beech Creek Apts KY 221D4 | 7.500 | 08/01/21 | 2,063,622.47 |
| Belleville Manor Apts KY 221D4 | 7.500 | 11/01/19 | 632,586.90 |
| Berrytown Apts KŶ 221D4 | 8.000 | 02/01/24 | 1,370,074.11 |
| Bethany Circle Kings Daughters IN | 8.375 | 03/01/02 | 1,567,956.47 |
| Cambridge Square Apts KY 221D4 | 7.500 | 11/01/19 | 1,181,989.03 |
| Carnaby Square Apts KY 221D4 | 7.500 | 06/01/19 | 1,216,067.71 |
| Carrollton Village Apts KY 221D4 | 7.500 | 09/01/20 | 1,946,918.93 |
| Carter Court Apts KY 221D4 | 7.500 | 09/01/20 | 1,285,202.34 |

KTRS

OTHER FIXED INCOME INVESTMENTS (continued)

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|--|--------|----------|--|
| Project Mortgages (FHA & GNMA): (cont.) | | | |
| Christ Hosp GNMA 21191PL | 8.000 | 09/15/06 | \$3,431,663.93 |
| Congregational Home Kan 231 | 5.250 | 07/01/04 | 1,239,519.86 |
| Coolavin Apts KY 221D4 | 7.500 | 04/01/22 | 3,149,615.60 |
| Cortland Hosp GNMA 130809PL | 8.750 | 10/15/04 | 1,322,781.75 |
| Cottage Bell Apts CA 221D4 | 7.500 | 11/01/10 | 656,719.35 |
| Cottage Bell Apts II CA 221D4 | 8.500 | 11/01/11 | 419,157.24 |
| Denver Ed Sr Citzns 231 | 5.250 | 11/01/03 | 702,377.51 |
| Dixie Apts KY 221D4 | 7.500 | 05/01/18 | 1,118,073.97 |
| Ephraim McDowell Hosp KY | 9.000 | 01/01/01 | 2,615,726.54 |
| Ferndale Apts KY 221D4 | 7.500 | 08/01/23 | 3,718,778.77 |
| Gainesway Village KY 221D4 | 7.500 | 02/01/19 | 1,612,801.23 |
| Glenbrook Park KY 221D4 | 7.500 | 12/01/21 | 2,483,219.65 |
| Grand Central Apts KY 221D4 | 7.500 | 03/01/25 | 2,286,237.04 |
| Greater Corbin Mnr KY 221D4 | 7.500 | 03/01/21 | 3,511,783.89 |
| Hallmark Plaza KY 223F | 8.500 | 06/01/11 | 1,114,326.07 |
| Jackson Valley Apts KY 221D4 | 7.500 | 08/01/20 | 1,959,162.88 |
| Jamestown Manor Ltd KY 221D4 | 7.500 | 02/01/22 | 1,575,959.17 |
| Lakeview Estates KY 221D4 | 7.500 | 01/01/20 | 1,105,881.94 |
| Lebanon Apts KY 221D4 | 7.500 | 02/01/20 | 1,185,698.89 |
| Lin Meadows Homes KY 221D4 | 7.500 | 11/01/22 | 269,207.54 |
| Locust Ridge KY 221D4 | 7.500 | 10/01/21 | 1,881,938.27 |
| Longmont Christian Hsg 231 | 5.250 | 03/01/03 | 439,056.09 |
| Madison Ave Apts KY 221D4 | 7.500 | 09/01/20 | 1,932,616.72 |
| Manchester Hts Apts KY 221D4 | 7.500 | 06/01/19 | 1,213,343.20 |
| Middletown Apts KY 221D4 | 7.500 | 02/01/18 | 1,035,583.11 |
| Montgomery Sq Apts KY 221D4 | 7.500 | 05/01/19 | 1,212,404.30 |
| Mt Lebanon Cedars KY 221D3 | 7.500 | 03/01/23 | 2,627,115.54 |
| Oak Tree Villa Apts KY 221D4 | 7.500 | 05/01/23 | 3,468,294.71 |
| Panorama West KY 236 | 8.500 | 12/01/12 | 444,608.76 |
| Pine Ridge Apts KY 221D4 | 7.500 | 09/01/18 | 823,466.60 |
| Pinecreek Apts KY 221D4 | 7.500 | 10/01/17 | 565,428.14 |
| Regency Park BG KY 221D4 | 7.500 | 02/01/23 | 3,720,894.37 |
| Regency Park Apts KY 221D4 | 7.500 | 05/01/18 | 955,202.49 |
| Ridgeway Apts KY 221D4 | 7.500 | 02/01/19 | 1,034,045.42 |
| Rucker Village Apts KY 221D4 | 7.500 | 03/01/20 | 1,076,835.07 |
| Salem Village I 232 Ill | 7.750 | 03/01/16 | 992,863.75 |
| Salem Village II 231 Ill | 7.750 | 10/01/16 | 3,395,337.74 |
| Sandefur Manor KY 221D4 | 7.500 | 01/01/20 | 936,278.68 |
| Shepherdsville Vlg KY 221D4 | 7.500 | 05/01/20 | 1,358,377.33 |
| Shively Apts KY 221D4 | 7.500 | 10/01/21 | 2,405,061.78 |
| Southside Manor KY 221D4 | 7.500 | 02/01/19 | 1,405,439.83 |
| Town Branch Apts KY 221D4 | 7.500 | 11/01/23 | 749,571.90 |
| Tree Top Apts KY 221D4 | 7.500 | 11/01/20 | 1,124,865.71 |
| Vernon Manor Ltd KY 221D4 | 7.500 | 11/01/22 | 905,172.63 |
| Walnut Hill Apts KY 221D4 | 7.500 | 05/01/19 | 1,631,084.87 |
| Wesley Manor KY 232 | 8.000 | 12/01/11 | 937,665.45 |
| Wessington House Apts TN 221D4 | 7.500 | 02/01/22 | 1,862,997.70 |

KTRS

\$2,629,537,002.10

Par Value

OTHER FIXED INCOME INVESTMENTS (continued)

| Security | Coupon | Maturity | Par Value or Remaining Principal Balance |
|--|--------|----------|--|
| Project Mortgages (FHA & GNMA): (cont.) | | | |
| Westchester Circle KY 221D4 | 7.500 | 04/01/19 | \$ 4,181,138.77 |
| Westwood Apts KY 221D4 | 7.500 | 10/01/23 | 1,198,579.77 |
| Wilderness Trail Mnr KY 221D4 | 7.500 | 03/01/23 | 5,670,457.90 |
| Wildwood Apts KY 221D4 | 7.500 | 08/01/20 | 1,874,257.66 |
| Willow Creek Apts KY 221D4 | 7.500 | 08/01/23 | 1,384,986.43 |
| Woodsview Apts KY 221D4 | 7.500 | 01/01/19 | 1,413,649.55 |
| | | | \$ 109,517,177.01 |
| Total Other Fixed Income Investments | | | \$ 120,774,902.73 |

TOTAL FIXED INCOME INVESTMENTS

REAL ESTATE EQUITY

| Security | or Remaining Principal Balance | |
|----------------------------------|-----------------------------------|--|
| Real Estate Equity: | | |
| FIA Profile Fund I - 1500 Units | \$15,000,000.00 | |
| K Mart Store Winchester KY | 2,711,917.53 | |
| Kroger Store Georgetown KY L-357 | 2,186,000.00 | |
| Kroger Store Richmond KY L-308 | 2,305,000.00 | |
| Kroger Super-X Bowling Green KY | 2,792,467.00 | |
| Kroger Super-X Owensboro KY | 2,232,400.00 | |
| Office Building Frankfort KY | 2,709,398.46 | |
| Wal-Mart Store Hardinsburg KY | 965,000.00 | |
| Wal-Mart Store Paducah KY | 2,800,000.00 | |
| Wal-Mart Store Paris KY | 1,200,000.00 | |
| Wal-Mart Store Shelbyville KY | 1,600,000.00 | |
| Wal-Mart Store Williamstown KY | 1,090,000.00 | |
| | \$37,592,182.99 | |
| Total Real Estate Equity | \$37,592,182.99 | |
| | | |

INVESTMENT SECTION

KTRS

COMMON STOCKS

| | Number of Shares | Cost |
|---|-----------------------------|-----------------|
| Abbott Laboratories | 66,000.0000 | \$ 3,216,640.00 |
| Aetna Life & Casualty Co | 120,000.0000 | 7,224,000.00 |
| American General Corp | 95,000.0000 | 3,454,812.50 |
| American Home Products | 40,000.0000 | 2,910,462.50 |
| American Information Tech | 400,000.0000 | 18,528,810.43 |
| Amoco Corp | 530,000.0000 | 18,085,612.50 |
| Armstrong World Industries Inc | 250,000.0000 | 7,646,968.75 |
| Atlantic Richfield Co | 225,000.0000 | 16,860,032.81 |
| Banc One | 320,000.0000 | 8,299,875.00 |
| Bankers Trust NY Corp | 235,968.0000 | 10,523,562.10 |
| Bell Atlantic Corp | 180,000.0000 | 13,201,025.00 |
| Boeing Co | 337,500.0000 | 12,130,643.75 |
| Bristol Meyers Co | 220,000.0000 | 9,675,375.00 |
| Capital Holding Corp Del | 150,000.0000 | 3,103,799.71 |
| Chemical Waste Management Inc | 100,000.0000 | 3,440,462.50 |
| Chevron Corp | 300,000.0000 | 14,146,317.43 |
| Commonwealth Edison Co | 105,641.2550 | 3,440,342.08 |
| Community Psychiatric Cntr | 100,000.0000 | 2,419,000.00 |
| Consolidated Edison Co NY | 250,000.0000 | 10,843,379.55 |
| Corestates Financial Corp | 250,000.0000 | 10,282,500.00 |
| Delta Airlines Inc | 270,000.0000 | 13,627,175.00 |
| Deluxe Corp | 120,000.0000 | 3,492,500.00 |
| Digital Equipment Corp | 225,000.0000 | 30,857,648.62 |
| Dover Corp | 110,000.0000 | 2,558,999.83 |
| Dow Chemical Co | 240,000.0000 | 20,972,587.50 |
| Dow Jones & Co Inc | 100,000.0000 | 3,413,350.00 |
| DuPont (EI) De Nemours | 185,000.0000 | 17,565,640.62 |
| Duke Power Co | 250,000.0000 | 11,149,425.00 |
| Dun & Bradstreet Corp | 60,000.0000 | 2,952,225.00 |
| E G & G Inc | 100,000.0000 | 3,488,325.00 |
| E G & G Inc Emerson Electric | 70,000.0000 | 2,206,212.50 |
| | 330,000.0000 | 13,154,575.00 |
| Exxon Corp | 653.6270 | 37,223.67 |
| First Interstate Bancorp First Wachovia Corp | 280,522.0000 | 10,429,779.29 |
| Ford Motor Co Del | 185,000.0000 | 9,499,925.00 |
| General Electric Co | 620,000.0000 | 28,417,425.00 |
| | 300,000.0000 | 11,926,362.50 |
| General Motors Corp | 35,000.0000 | 1,749,262.50 |
| Grainger (WW) Inc | 40,000.0000 | 869,785.71 |
| Halliburton Co | 280,000.0000 | 11,876,875.00 |
| Heinz (H J) Co | 45,000.0000 | 1,973,771.59 |
| Hewlett Packard Co | 240,000.0000 | 31,524,360.06 |
| IBM KNA I Com | 375,000.0000 | 12,310,468.75 |
| K Mart Corp | 220,000.0000 | 11,858,713.64 |
| Marsh & McLennan Co Inc | 275,000.0000 | 11,081,476.25 |
| May Dept Stores Co | • | 13,638,937.50 |
| McDonalds Corp | 589,000.0000 80,000.0000 | 2,482,150.00 |
| Melville Corp | | 17,666,550.00 |
| Merck & Co | 310,000.0000 | 20,502,125.00 |
| Minnesota Mining & Manufacturing | 346,000.0000 | 6,162,437.50 |
| Mobil Corp | 125,000.0000 | 7,619,375.00 |
| Monsanto Co | 75,000.0000 | 11,192,825.00 |
| Morgan (JP) & Co | 300,000.0000 | 1,318,350.00 |
| Morton Thiokol Inc | 30,000.0000 | 1,010,00000 |

_____ 82 _____

and the second second

.

KTRS

COMMON STOCKS (continued)

| | Number of Shares | Cost |
|----------------------------|------------------|------------------|
| Nalco Chemical Co | 50,000.0000 | \$ 1,449,309.37 |
| New York Times Co A | 120,000.0000 | 3,208,687.50 |
| Norfolk Southern Corp | 101,000.0000 | 2,916,712.50 |
| PHH Inc | 95,000.0000 | 3,222,875.00 |
| Pennsylvania Power & Light | 350,000.0000 | 12,482,062.50 |
| Pepsico Inc | 200,000.0000 | 6,121,895.83 |
| Philip Morris Cos Inc | 250,000.0000 | 22,311,434.91 |
| Pioneer Hi-Bred Intl | 100,000.0000 | 3,652,562.50 |
| Pitney Bowes Inc | 75,000.0000 | 2,470,492.50 |
| Procter & Gamble Co | 231,000.0000 | 18,330,075.00 |
| Raytheon Co | 250,000.0000 | 17,227,706.25 |
| Roadway Services Inc | 100,000.0000 | 3,447,875.00 |
| Salomon Inc | 175,000.0000 | 7,461,712.50 |
| Smithkline Beckman | 60,000.0000 | 2,989,762.50 |
| Sovran Financial Co | 80,000.0000 | 2,795,900.00 |
| Squibb Corp | 185,000.0000 | 14,335,900.00 |
| Super Valu Stores | 140,000.0000 | 3,552,900.00 |
| TRW Inc | 76,000.0000 | 3,503,775.00 |
| Texas Utilitics Co | 425,000.0000 | 13,036,237.50 |
| Textron Inc | 100,000.0000 | 2,387,825.00 |
| Torchmark Corp | 95,000.0000 | 2,693,525.00 |
| Transco Energy Co | 75,000.0000 | 3,676,059.37 |
| Travelers Corp | 253,787.0000 | 11,906,390.03 |
| US West Inc | 55,000.0000 | 2,718,300.00 |
| Union Camp Corp | 451,200.0000 | 14,000,888.68 |
| Union Carbide | 384,217.9270 | 9,756,262.04 |
| Union Pacific Corp | 150,000.0000 | 11,898,250.00 |
| United Technologies Corp | 367,000.0000 | 16,436,491.34 |
| V F Corp | 90,000.0000 | 2,744,585.00 |
| Wal-Mart Stores | 400,000.0000 | 13,850,512.50 |
| Waste Management | 100,000.0000 | 5,259,150.00 |
| Whirlpool Corp | 100,000.0000 | 3,073,337.50 |
| Woolworth (FW) Co | 101,000.0000 | 3,911,120.23 |
| Total Common Stock | 16,871,489.8090 | \$777,841,037.69 |

Par Value or Remaining Principal Balance/ Cost

TOTAL INVESTMENTS

\$3,444,970,222.78

KTRS _____

(This page left blank intentionally,)

- 84 ---

.

¢