

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

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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.

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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

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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



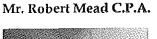
Vice-Chairperson, Teacher Trustee Mt. Washington





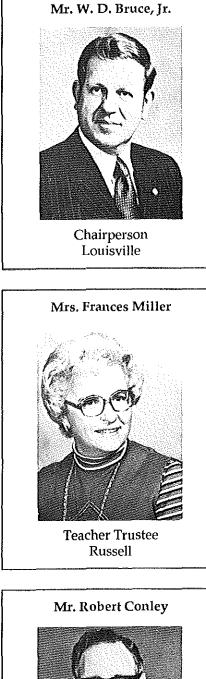
Teacher Trustee Paducah







Ex-Officio Trustee State Treasurer



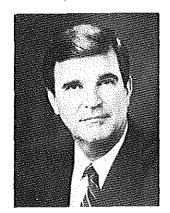


Lay Trustee Paintsville



Retired Teacher Trustee Somerset

Dr. John Brock



Ex-Officio Trustee, Superintendent of Public Instruction

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Administrative Staff

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

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

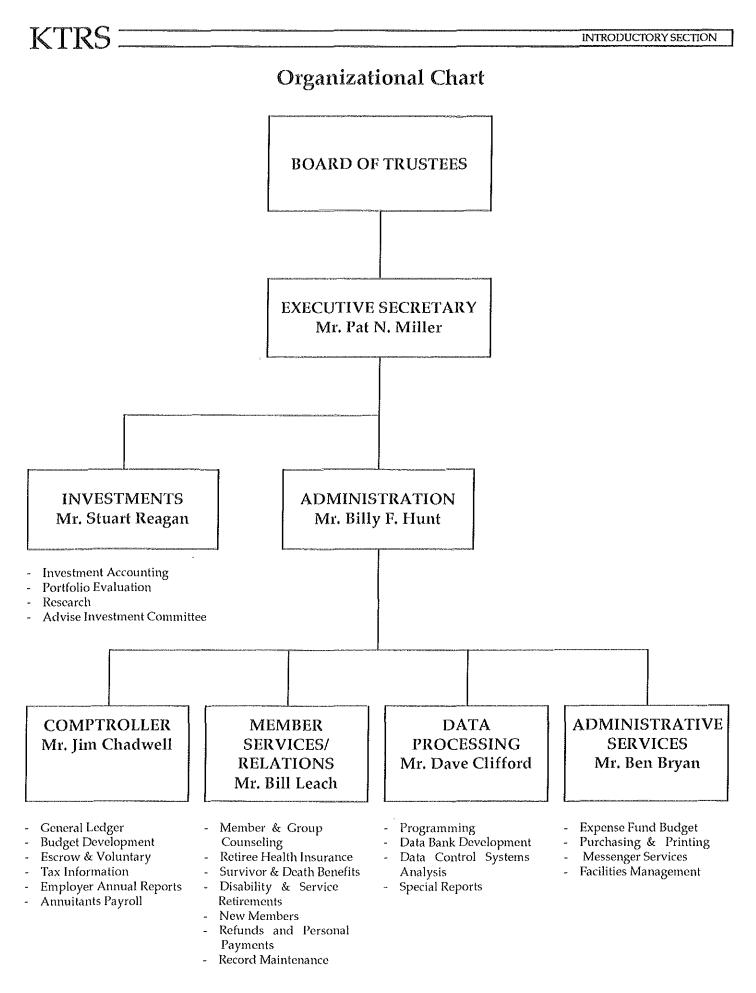
Deputy Executive Secretary for Administration Billy F. Hunt (502) 564-3266

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

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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.

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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

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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.

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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
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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)
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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.

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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.

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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
-				

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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%
	·			

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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

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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

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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
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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
-	· · · · · · · · · · · · · · · · · · ·	

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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

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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.

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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

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(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.

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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.

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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%

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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.

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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

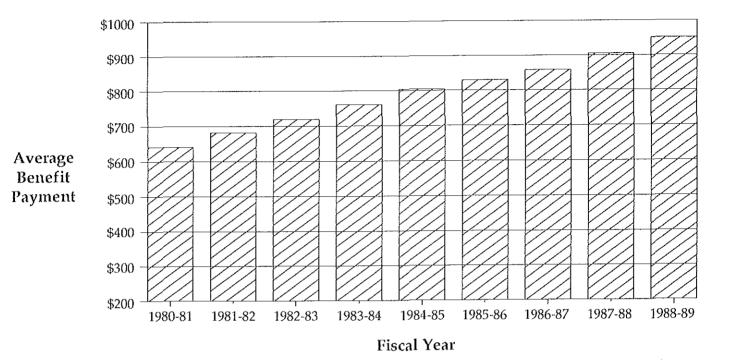
Kentucky Teachers' Retirement System



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)

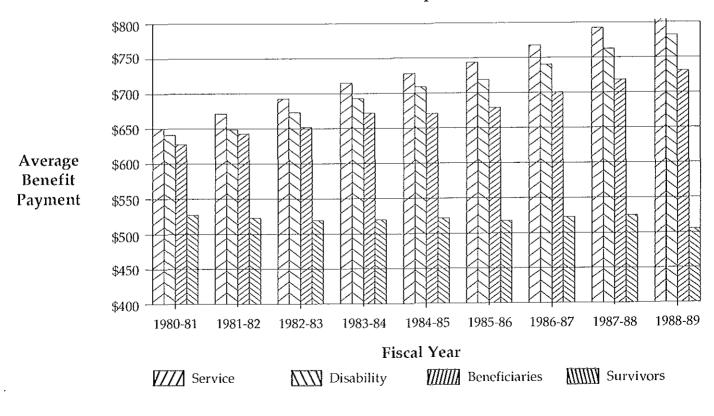
- 54 -



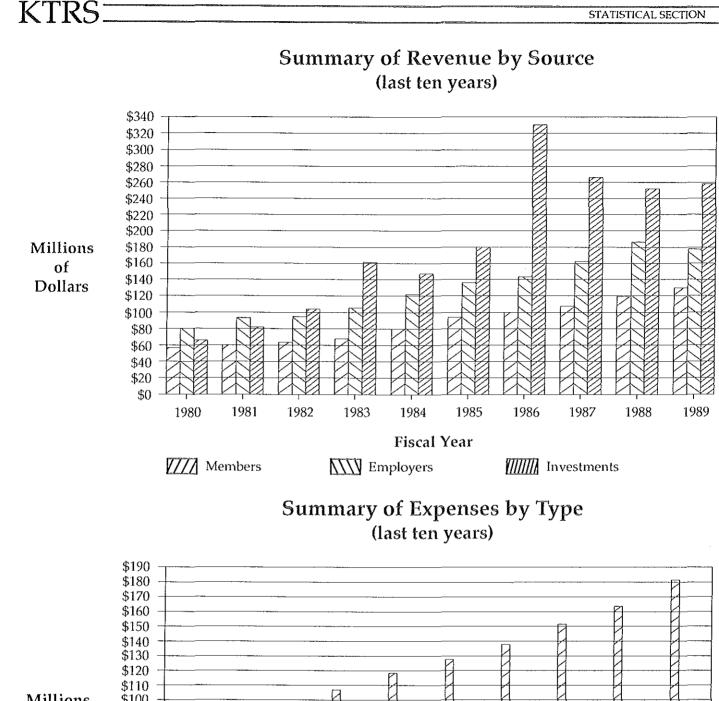
Average Benefit Payments

 \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.

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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.

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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

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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.

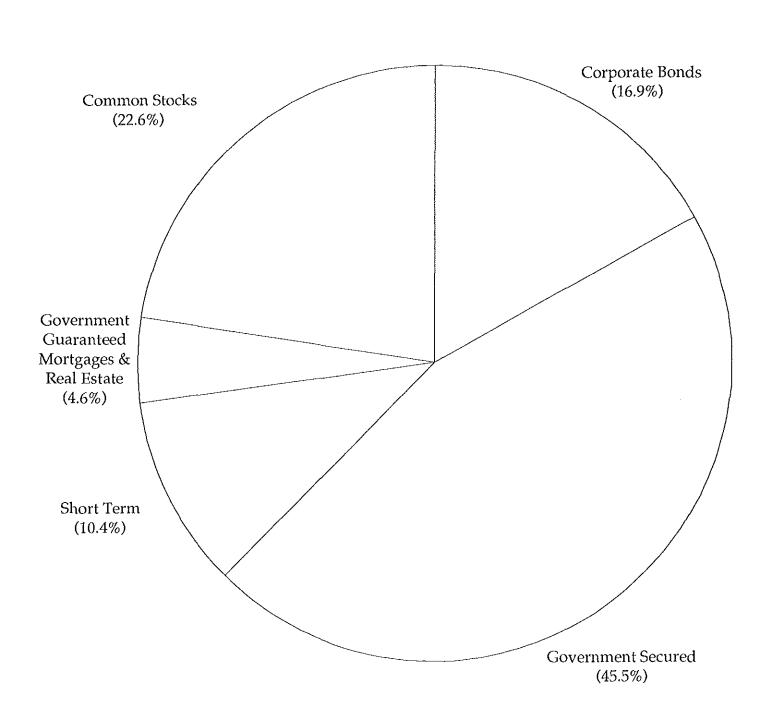
The investment portfolio experienced considerable growth in both par and book values during the year. The par value of the portfolio increased \$288 million, or 9.1%, to a total of \$3.4 billion at year-end. The book value of the fund correspondingly increased 11.6% during the year. The System collected \$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.

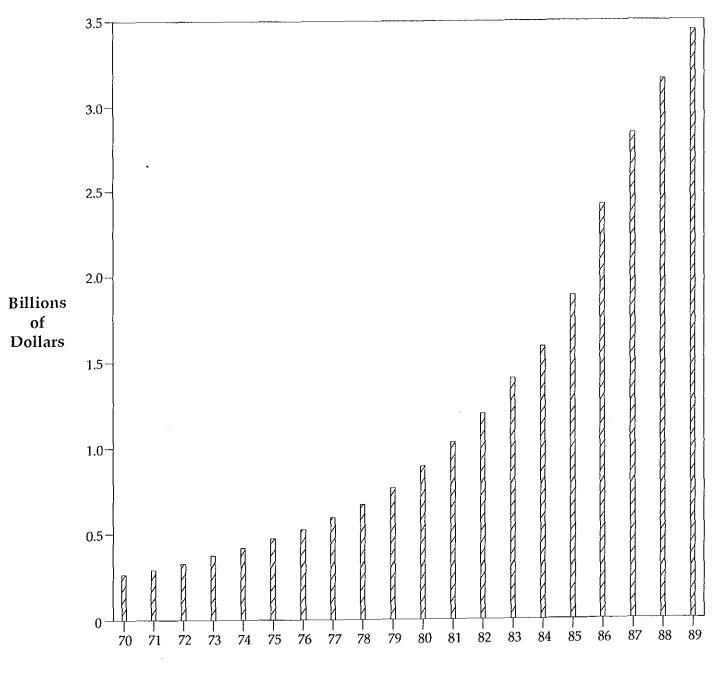
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Distribution of Investments June 30, 1989



Investment Portfolio Growth Fixed Income at Par Value Equities at Cost

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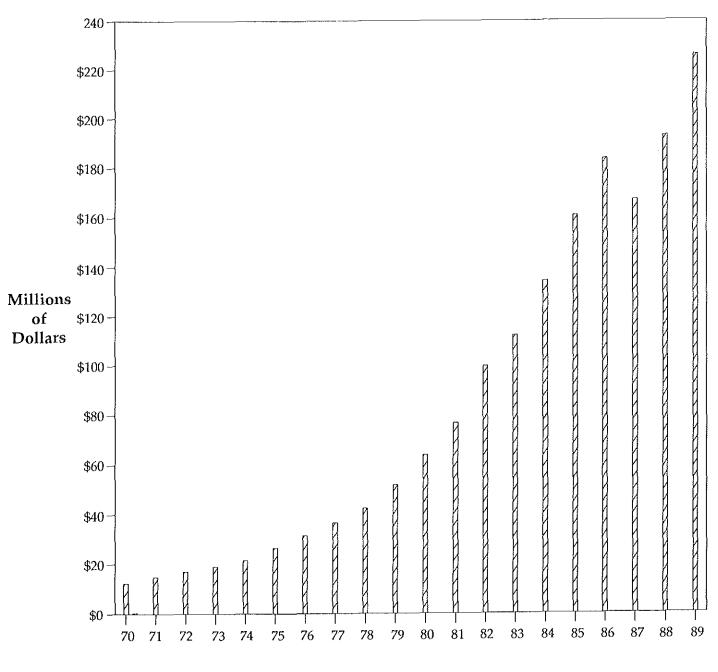


Fiscal Year

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Investment Income Growth (Includes Amortization Excludes Net Gain)

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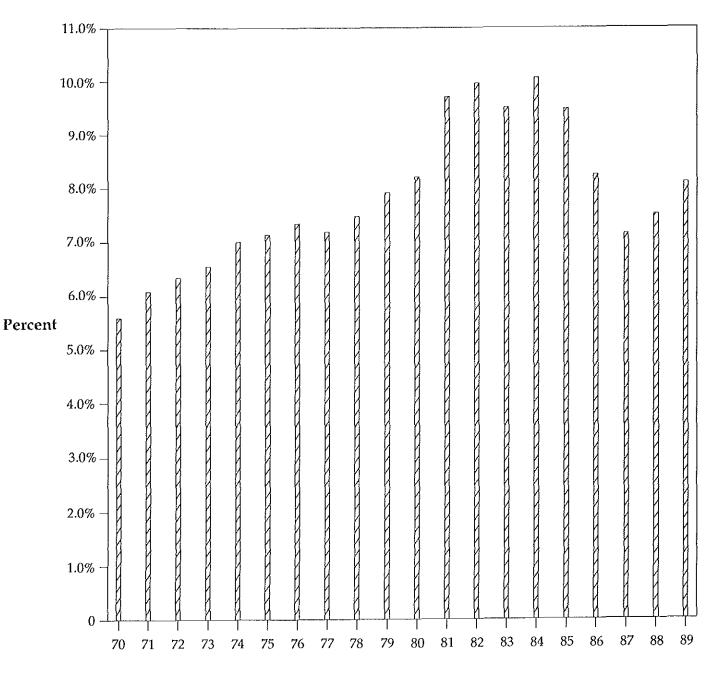
Fiscal Year

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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

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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

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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
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\$ 440,693,940.47

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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

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CORPORATE BONDS (continued)

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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

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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)

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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

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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

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\$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

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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

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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

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