Kentucky Retirement Systems

Annual Report

June 30, 1993

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

TABLE OF CONTENTS

KENTUCKY RETIREMENT SYSTEMS
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Kentucky Employees Retirement System
County Employees Retirement System
State Police Retirement System

Pamala S. Johnson
General Manager
Phone 502-564-4646
FAX# 502-564-5656

MEMORANDUM

TO: Members of the Board of Trustees
John D. Robey, Chairman
John E. King, Vice Chairman
Frank W. Burke
E. B. "Gene" Drake
Gordon C. Duke
Cattie Lou Miller
Gordon L. Mullis, Jr.
Frank X. Quickert, Jr.
James R. Ramsey

FROM: Pamala S. Johnson, General Manager

DATE: November 18, 1993

SUBJECT: Annual Report for Fiscal Year Ending June 30, 1993

As directed by KRS 61.645, I present the Annual Report for the fiscal year ended June 30, 1993. The four sections of the report provide financial information, actuarial information, investment information and other statistical information. Appropriate certifications from an independent accounting firm and an independent actuarial firm are included.

Copies of this report will be made available to Retirement System members by sending copies to each participating employer in the Kentucky Employees Retirement System, County Employees Retirement System and State Police Retirement System. Copies will also be distributed to legislative personnel, state libraries and other interested parties.

Pamala S. Johnson

Pamala S. Johnson
General Manager

INTRODUCTION

by
Pamala S. Johnson, General Manager

Members of the Retirement Systems,

This report represents a full and complete disclosure of the financial and actuarial status of the Kentucky Employees Retirement System, County Employees Retirement System and State Police Retirement Systems.

CONTENTS

The pages that follow this introduction provide an introduction to the Board, management and organization of the retirement systems.

The **Financial Section** is an exact copy of the audit report prepared by the Auditor of Public Accounts. This report is included in accordance with Kentucky Revised Statute 61.645(12).

The **Actuarial Section** consists of copies of the actuarial report compiled by the firm of William M. Mercer, Inc., containing the information necessary to determine the adequacy of funding and the systems' liabilities is included in the same format as presented to the Board. Only detailed statistical tables were omitted for space reasons.

The **Investment Section** provides information on the retirement systems' investments. Included are portfolio summaries for the retirement systems and the Insurance Fund. Also shown are comparisons of portfolio growth and income growth, giving a historical perspective.

The **Statistical Section** provides statistical information on membership, types of payments selected, retirement payments, key financial and actuarial data, source and use of funds and administrative expenses during the 1992-93 fiscal year, as well as historical data in some cases.

INVESTMENTS

The rate of return for the total fund based on market value was 12.3% for the fiscal year. The rate of return includes appreciation of assets as well as interest and dividend income received throughout the year. This figure should not be confused with the indicated yield based on market value of 3.86% shown in the portfolio summary for all systems combined in the Investment Section of this report. Indicated yield projects the yield of the portfolio forward into the future. It only includes interest and dividends that are projected to be received from securities owned as of June 30, 1993. The indicated yield is calculated based on interest income projected to be received from fixed income investments during the next year and dividends projected to be received from dividend-paying stocks during the next year.

FEDERAL TAX LAW CHANGE

January 1, 1993, the Kentucky Retirement Systems implemented the mandatory federal income tax withholding provisions that affect members who take a refund of contributions prior to retirement age and members who select a lump sum benefit at retirement. Implementation required additional notification to all affected members and establishment of procedures to handle the additional withholding and to allow for direct rollovers of funds from the retirement systems to qualified plans.

SUIT FILED OVER CONTRIBUTION RATE

On April 27, 1993, the Board of Trustees filed suit in Franklin Circuit Court seeking to resolve the conflict between the employer contribution rates determined by the Board under KRS 61.565 and the employer rates set out in the Biennial Budget. The rates affect the Kentucky Employees Retirement System and the State Police Retirement System. The suit asks that the section of the budget setting the contribution rate be declared unconstitutional.

Local government employers continue to pay the rates determined by the Board under KRS 61.565.

SERVICES

Demand for services continued to grow during the year, as illustrated by the following statistics.

During the 1992-93 fiscal year, benefits counselors saw 6,280 visitors and responded to 124,000 telephone calls. Counselors prepared 31,000 benefit and service purchase estimates.

Field representatives gave 16 preretirement conferences attended by 2,238 members and visited 327 agencies.

Records staff filed more than 350,000 documents and added nearly 14,000 new member files to the growing records keeping operation.

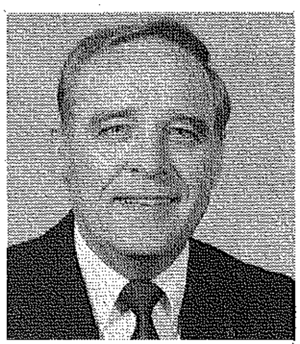
Meanwhile the accounting staff processed nearly 6,800 refunds during the year. In addition, accountants posted 2,538 service purchases or repayments of refunds.

During the fiscal year, the retirement staff worked more than 12,500 hours of overtime to meet the demands for service.

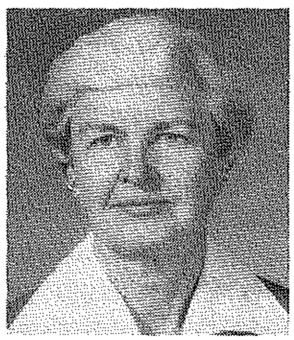
Frank W. Burke
Louisville
Elected by CERS Members
Term Expires March 31, 1997
Retired CERS

E. B. "Gene" Drake
Frankfort
Elected by KERS Members
Term Expires March 31, 1994
Retired KERS

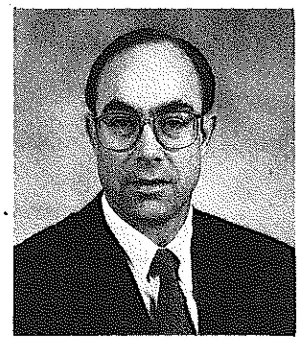
Gordon C. Duke
Frankfort
Appointed by Governor
Term Expires March 31, 1995



John E. King
Lexington
Elected by CERS Members
Term Expires March 31, 1997
Inactive CERS

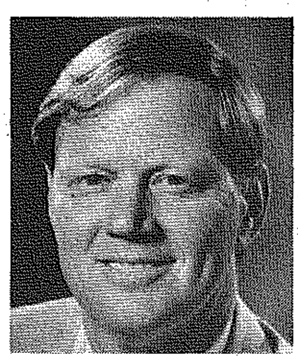


Cattie Lou Miller
Frankfort
Elected by KERS Members
Term Expires March 31, 1994
Retired KERS

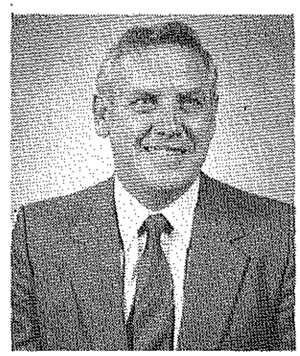


Gordon L. Mullis, Jr.
Lexington
ExOfficio

Frank X. Quickert, Jr.
Louisville
Appointed by Governor
Term Expires March 31, 1996

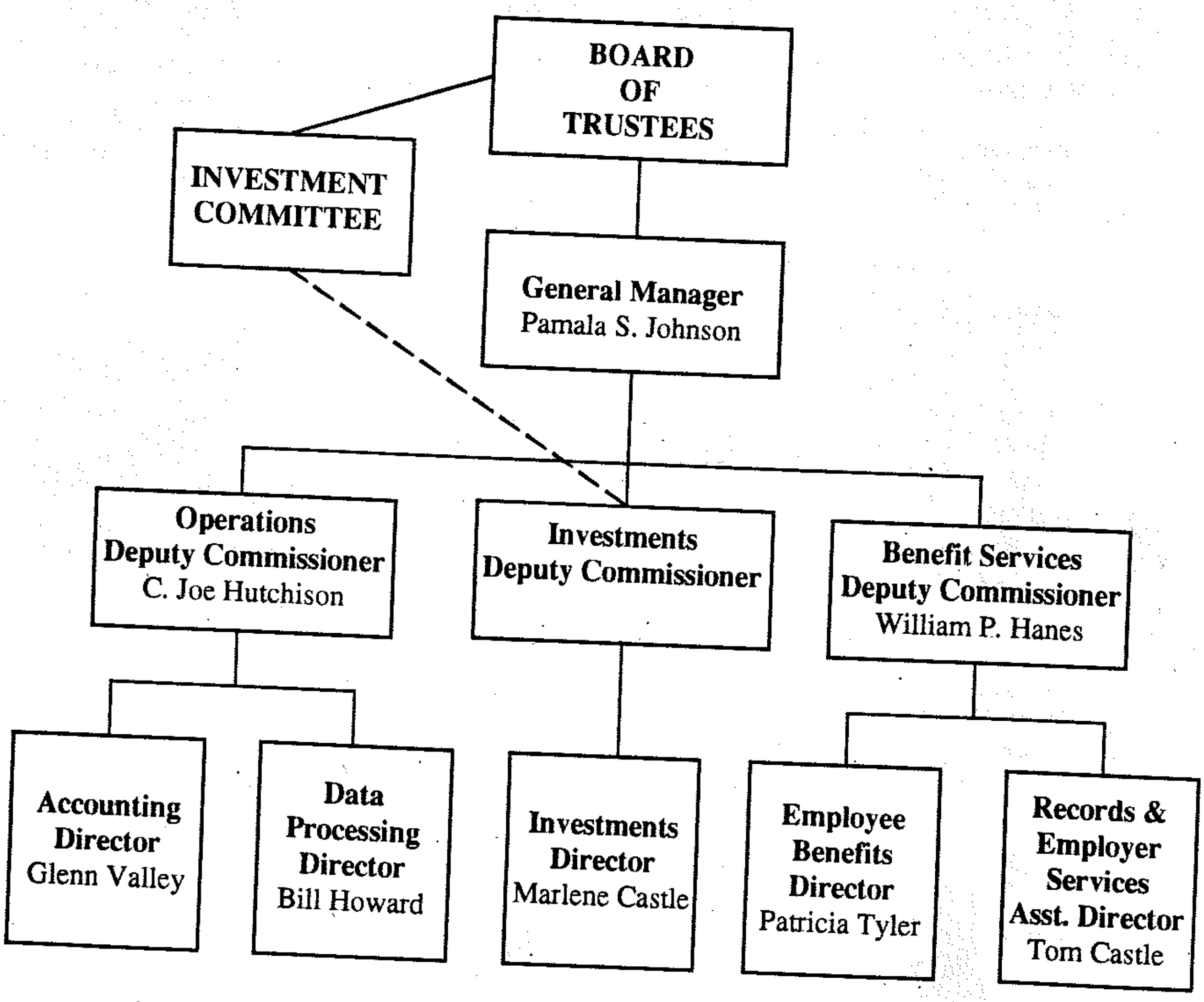


James R. Ramsey
Bowling Green
Appointed by Governor
Term Expires March 31, 1996



John D. Robey
Chairman
Lawrenceburg
Elected by SPRS Members
Term Expires March 31, 1995
Retired SPRS

Kentucky Retirement Systems Organizational Chart



CONTRACTUAL ARRANGEMENTS

ACTUARIAL SERVICES:

William M. Mercer, Inc.
1500 Meidinger Tower
Louisville, KY 40202

ASSET MANAGEMENT:

William M. Mercer Asset Planning, Inc.
10 South Wacker Drive
Chicago, IL 60606

AUDITING SERVICES:

A. B. Chandler III
Auditor of Public Accounts
Room 144, Capitol Annex
Frankfort, KY 40601

CUSTODIAN OF SECURITIES:

Farmers Bank & Capital Trust
Farmers Bank Plaza
Frankfort, KY 40601

LEGAL SERVICES:

Johnson & Judy, Stoll, Keenon & Park
326 West Main Street
Frankfort, KY 40601

INVESTMENT COUNSELORS:

Heitman Advisory Corporation
Suite 3600
180 North LaSalle Street
Chicago, IL 60601

Investment Counselors of Maryland
803 Cathedral Street
Baltimore, MD 21201

Investment Advisers, Inc.
3700 First Bank Place
Minneapolis, MN 55440

Lincoln Capital Management Company
Suite 2100
200 South Wacker Drive
Chicago, IL 60606

National Asset Management Corp.
101 South Fifth Street
Louisville, KY 40202

The Yarmouth Group, Inc.
Swiss Bank Tower
10 East 50th Street
New York, NY 10022

TCW Realty Advisors
Suite 1800
865 South Figueroa
Los Angeles, CA 90017

Weaver C. Barksdale & Associates, Inc.
Suite 550
30 Burton Hills Boulevard
Nashville, TN 37215

Financial Section

FINANCIAL SECTION INTRODUCTION

The Retirement Systems assets are held in trust for the purpose of providing retirement benefits many years in the future. Since these benefits are guaranteed by Kentucky law to each eligible participant, it is the responsibility of the Board of Trustees to see that the systems are soundly funded and that all investments, receipts, payments and expenses are fully accounted for.

The combined assets of the Kentucky Employees Retirement System, County Employees Retirement System and State Police Retirement System totalled over $4.1 billion (book value) as of June 30, 1993, an increase of 7.5% over the previous fiscal year.

To assure that proper accounting methods are being used, the Board generally contracts with a private accounting firm to perform an independent audit of the assets and liabilities of the three systems. The audit for the fiscal year ended June 30, 1993, was performed by the Auditor of Public Accounts who contracted with the firm of Eskew & Gresham, PSC, to assist with the audit.

In addition to the annual audit, other procedures are employed to insure the safety of the systems' assets. Each year a surprise audit is conducted by the internal auditor of the securities' custodian. Adequate bonding arrangements are in force for those individuals who have access to securities, and the General Manager is under a special fidelity bond. A plan is in place and tested regularly to ensure that the systems assets are protected and programs can be continued in the event of natural disasters.

An exact copy of the audit opinion of the Auditor of Public Accounts follows along with copies of the audited financial statements and accompanying notes. The financial statements were completed in accordance with the requirements set forth in the National Council on Government Accounting, Statement 1, as adopted in Statement 1 of the Governmental Accounting Standards Board. This statement requires that financial statements be presented on an accrual basis and stipulates that certain disclosures be included in the notes to financial statements.

Eskew&Gresham

INDEPENDENT AUDITORS' REPORT

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the accompanying financial statements of the Kentucky Employees Retirement System, County Employees Retirement System, State Police Retirement System and Kentucky Retirement Systems Insurance Fund as of June 30, 1993 and for the year then ended. These financial statements are the responsibility of the Systems' management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Kentucky Employees Retirement System, County Employees Retirement System, State Police Retirement System and Kentucky Retirement Systems Insurance Fund as of June 30, 1992 were audited by other auditors whose report dated September 18, 1992 expressed an unqualified opinion on those statements.

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

In our opinion, such financial statements present fairly, in all material respects, the financial position of the Kentucky Employees Retirement System, County Employees Retirement System, State Police Retirement System and Kentucky Retirement Systems Insurance Fund as of June 30, 1993, and the results of the Systems' operations for the year then ended in conformity with generally accepted accounting principles.

September 15, 1993

Eskew & Gresham, PSC.

Eskew & Gresham, PSC Certified Public Accountants 2500 Meidinger Tower Louisville, Kentucky 40202 (502) 584-2500

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
BALANCE SHEETS

	June 30 1993	June 30 1992
ASSETS		
Investments (Note 6):		
Bonds (market value - 1993, $536,264,439; 1992, $472,182,379)	$ 506,231,887	$ 444,636,623
Common stocks (market value - 1993, $1,509,456,521; 1992, $1,273,639,099)	1,104,232,473	977,607,838
First mortgage real estate loans (market value - 1993, $106,491,975; 1992, $168,658,326)	99,129,842	154,675,954
Real estate investment trusts (market value - 1993, $175,655,686; 1992, $146,209,826)	186,942,014	145,429,680
Securities purchased under agreements to resell (market value approximates cost)	338,083,780	328,178,366
Total investments	$2,234,619,996	$2,050,528,461
Cash on deposit with State Treasurer	485,188	280,720
Members and employers' contributions receivable	8,287,077	7,732,057
Unfunded employers contribution receivable (Note 2)	11,250,802	-0-
Accrued investment income	14,942,580	13,814,817
TOTAL ASSETS	$2,269,585,643	$2,072,356,055
LIABILITIES		
Members' refunds, insurance fund transfers and accrued expenses payable	$ 6,961,835	$ 5,509,364
Unfunded insurance fund transfer payable (Note 2)	2,439,733	-0-
Unfunded deferred employer contribution (Note 2)	8,811,069	-0-
TOTAL LIABILITIES	$ 18,212,637	$ 5,509,364
NET ASSETS AVAILABLE FOR BENEFITS (Members' Contribution Account - 1993, $508,625,824; 1992 $462,173,091; and Retirement Allowance Account - 1993, $1,742,747,182; 1992 $1,604,673,600)	$2,251,373,006	$2,066,846,691
FUND BALANCE:		
Actuarial present value of projected benefits payable to current retirees and beneficiaries	$1,005,136,959	$ 921,745,202
Actuarial present value of projected benefits payable to terminated vested participants	27,045,952	23,794,757
Actuarial present value of credited projected benefits for active members:		
Members contributions	485,652,787	442,303,920
Employers financed portion	967,784,849	929,410,185
Total actuarial present value of credited projected benefits	$2,485,620,547	$2,317,254,064
Unfunded actuarial present value of credited projected benefits	(234,247,541)	(250,407,373)
TOTAL FUND BALANCE	$2,251,373,006	$2,066,846,691

See notes to financial statements.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN
MEMBERS' CONTRIBUTION ACCOUNT

	Year Ended June 30	
	1993	1992
REVENUES:		
Members' contributions	$ 59,611,966	$ 58,523,130
Interest credited to members' balances transferred from Retirement Allowance Account	17,412,052	15,669,861
Total revenues	$ 77,024,018	$ 74,192,991
EXPENSES:		
Refunds to former members	$ 6,749,192	$ 6,451,752
Retired members' balances transferred to Retirement Allowance Account	23,822,093	12,117,828
Total expenses	$ 30,571,285	$ 18,569,580
EXCESS OF REVENUES OVER EXPENSES	$ 46,452,733	$ 55,623,411
MEMBERS' CONTRIBUTION ACCOUNT:		
BEGINNING OF YEAR	462,173,091	406,549,680
END OF YEAR	$508,625,824	$462,173,091

See notes to financial statements.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN
RETIREMENT ALLOWANCE ACCOUNT

	Year Ended June 30 1993	1992
REVENUES:		
Employers' contributions	$ 90,568,496	$ 87,261,933
Investment income	105,909,575	106,061,993
Net realized gain on disposals of investments	81,207,989	44,136,334
Retired members' balances transferred from Members' Contribution Account	23,822,093	12,117,828
Total revenues	$ 301,508,153	$ 249,578,088
EXPENSES:		
Retirement benefits to members	$ 119,619,683	$ 110,034,282
Contributions transferred to the Kentucky Retirement Systems Insurance Fund	22,370,387	22,001,052
Interest credited to members' balances transferred to Members' Contribution Account	17,412,052	15,669,861
Administrative expenses	2,205,305	2,130,915
Investment expenses	1,827,144	1,733,629
Total expenses	$ 163,434,571	$ 151,569,739
EXCESS OF REVENUES OVER EXPENSES	$ 138,073,582	$ 98,008,349
RETIREMENT ALLOWANCE ACCOUNT: BEGINNING OF YEAR	1,604,673,600	1,506,665,251
END OF YEAR	$1,742,747,182	$1,604,673,600

See notes to financial statements.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1993 AND 1992

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation - The financial statements of Kentucky Employees Retirement System (the System) are prepared on the accrual basis, and conform to generally accepted governmental accounting and financial reporting principles in all material respects.

B. Component Unit - The System is a component unit of the Commonwealth of Kentucky. As such, the Commonwealth of Kentucky is the primary government in whose financial reporting entity the System is included.

The System was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.515. The System's administrative budget and employer contribution rates are subject to approval by the Kentucky General Assembly. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

C. Investments - Investments in bonds and first mortgage real estate loans are stated at amortized cost. Discounts and premiums are amortized using the straight-line method from the date of acquisition to the stated or expected maturity date. Common stocks, securities purchased under agreement to resell and investments in real estate trusts are carried at cost.

Realized gains or losses on investments are recorded for the difference between the proceeds from sale or maturity and the average cost of investments sold or redeemed. Realized gains or losses are also recorded for exchanges of investments, based upon the difference at the time of the exchange between the carrying value and the market value of the investment exchanged.

D. Expense Allocation - The System, the County Employees Retirement System, and the State Police Retirement System are collectively administered by the Kentucky Retirement Systems. Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

NOTE 2 - DESCRIPTION OF THE PLAN

The System is a defined benefit plan which covers substantially all regular full-time employees of any state department, board or agency directed by Executive Order to participate in the System. The Plan provides for retirement, disability and death benefits. The number of participating state employers was 362 at June 30, 1993.

NOTE 2 - DESCRIPTION OF THE PLAN (CONTINUED)

For the years ended June 30, 1993 and 1992, participating members contributed 5% of creditable compensation to the System. Members occupying hazardous positions, as defined by statute, contribute at the rate of 7% of creditable compensation. Employer contribution rates are intended to fund the System's normal cost on a current basis plus an amount equal to the amortization of unfunded past service costs over thirty years, using the level percentage of payroll method. Participating employers contributed 7.65% of members' non-hazardous compensation and 15.05% of members' hazardous compensation for 1993 and 1992.

The actuarial recommended rate for 1993 was 8.66% of members' non-hazardous compensation and 17.55% of members' hazardous compensation. These rates have not been approved by the Kentucky General Assembly. The System has filed suit against the State to require that the full funding be made. The System has recorded the difference in contribution rates as a receivable and an offsetting deferral. The insurance fund transfer payable represents the portion of the unpaid balance which is attributable to the insurance fund.

Vesting in a retirement benefit begins immediately upon entry into the System. The participant has a fully vested interest after the completion of sixty months of service, twelve of which are current service. At a minimum, terminated employees are refunded their contributions with credited interest at 3% compounded annually through June 30, 1980, 6% thereafter through June 30, 1986 and 4% thereafter.

At June 30, membership in the System consisted of:

	1993	1992
Retirees and beneficiaries currently receiving benefits and terminated members entitled to benefits but not yet receiving them:		
Non-hazardous positions	30,134	29,319
Hazardous positions	621	478
Total	30,755	29,797
Current members:		
Vested:		
Non-hazardous positions	29,534	29,053
Hazardous positions	1,804	1,693
Nonvested:		
Non-hazardous positions	16,138	16,310
Hazardous positions	1,453	1,539
Total	79,684	78,392

Further information regarding the plan agreement, vesting and benefit provisions is contained in the pamphlet Summary Plan Description. Copies of this pamphlet are available from the office of the Kentucky Retirement Systems.

NOTE 3 - FUNDING STATUS AND PROGRESS

Generally accepted governmental accounting and financial reporting principles requires that the financial statements disclose the "pension benefit obligation" determined using the projected unit credit actuarial method. Such obligation is titled "total actuarial present value of credited projected benefits" shown on the balance sheet. State statutes require the use of the entry age normal actuarial cost method to determine the pension benefit obligation. Using this method, the pension benefit obligation at June 30, 1993 and 1992 was $2,703,771,076 and $2,525,190,930, respectively. The System has adopted a five year moving average of market value to book value in determining the actuarial net assets available for benefits. Using the method, the net assets available for benefits at June 30, 1993 and 1992 was $2,585,209,537 and $2,354,482,321, respectively. The resulting unfunded pension benefit obligation was $118,561,539 and $170,708,609 at June 30, 1993 and 1992, respectively.

The pension benefit obligation is a standardized 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 member service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess the System's 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 (PERS). The measure is independent of the actuarial funding method used to determine contributions to the System (see Note 4).

The pension benefit obligation for 1993 and 1992 was determined by the System's consulting actuary, William M. Mercer, Inc., as part of an actuarial valuation as of June 30, 1993 and 1992, respectively. The significant actuarial assumptions underlying the actuarial computations using the projected unit credit actuarial method and the entry age normal actuarial cost method are the same and are as follows:

Assumed rate of return on investments	- 8% per annum
Mortality basis	- 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees
Employee turnover	- Graduated select and ultimate rates based on 1989 experience study
Retirement age	- Based upon experience, with 20% weight (50% weight for hazardous duty employees), at age 55-64, to the earliest age at which an employee could retire with 100% of the accrued benefits
Salary increases	- 6 1/2% per annum

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1993 AND 1992
(CONTINUED)

NOTE 4 - CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

The System's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate sufficient assets to pay benefits when due. Level percentage of payroll employer contribution rates are determined using the entry age normal actuarial cost method. The System also uses the level percentage of payroll method to amortize the unfunded actuarial accrued liability.

Actuarially determined contribution requirements for the years ended June 30, 1993 and 1992 were determined as part of an actuarial valuation as of June 30, 1992 and 1991, respectively, and were as follows:

	1993	1992
Employer	$ 98,567,107	$ 90,635,039
Member	54,192,873	49,979,279
Total	$152,759,980	$140,614,318
Such contributions were to consist of:		
Normal cost	$103,862,726	$ 95,882,596
Amortization of the unfunded actuarial accrued liability	8,652,449	18,683,469
Administrative expenses	4,095,124	3,699,510
Group hospital and medical insurance premiums	36,149,681	22,348,743
Total	$152,759,980	$140,614,318
Contributions received consisted of:		
Employer (7.65% of the covered payroll for non-hazardous positions and 15.05% for hazardous positions for 1993 and 1992)	$ 90,568,496	$ 87,261,933
Member (5% of the covered payroll for non-hazardous positions and 7% for hazardous positions for 1993 and 1992)	59,611,966	58,523,130
Total	$150,180,462	$145,785,063

NOTE 5 - TEN YEAR HISTORICAL TREND INFORMATION

Ten year historical trend information designed to provide information about the System's progress in accumulating sufficient assets to pay benefits when due is presented below.

Fiscal Year	(1) Net Assets Available For Benefits	(2) Pension Benefit Obligation	(3) Percentage Funded (1)/(2)	(4) Unfunded (Funds in Excess of) Pension Benefit Obligation (2) - (1)	(5) Annual Covered Payroll	Unfunded Pension Benefit Obligation of Covered Payroll
1984	$ 814,553,823	$ 900,125,692	90.5%	$ 85,571,869	$ 627,726,168	13.6%
1985	934,480,773	982,009,399	95.2%	47,528,626	676,557,336	7.0%
1986	1,079,353,421	1,110,593,823	97.2%	31,240,402	713,878,356	4.4%
1987	1,264,000,419	1,238,746,096	102.0%	(25,254,323)	757,822,116	N/A
1988	1,426,056,402	1,400,013,802	101.9%	(26,042,600)	803,594,136	N/A
1989	1,588,609,098	1,566,923,178	101.4%	(21,685,920)	822,362,508	N/A
1990	1,799,321,738	1,869,383,399	96.3%	70 061,661	869,109,220	8.1%
1991	1,913,214,931	2,125,370,347	90.0%	212,155,416	982,646,400	21.6%
1992	2,066,846,691	2,317,254,064	89.2%	250,407,373	1,065,985,572	23.5%
1993	2,251,373,006	2,485,620,547	90.6%	234,247,541	1,094,395,992	21.4%

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 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 PERS. 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 the System's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the PERS.

NOTE 5 - TEN YEAR HISTORICAL TREND INFORMATION (CONTINUED)

Ten year historical trend information relating to revenues and expenses by source and type, respectively, is presented below:

Revenues By Source

Fiscal Year	Members Contributions	Employers Contributions	Investment Income	Net Realized Gain on Disposals of Investments	Total
1984	$26,075,180	$46,925,821	$ 68,498,499	$ 5,812,966	$147,312,466
1985	27,760,271	49,189,066	78,509,704	12,959,165	168,418,206
1986	29,228,638	52,686,054	84,346,598	32,275,130	198,536,420
1987	40,563,400	56,679,470	97,094,173	58,938,113	253,275,156
1988	43,065,763	60,507,339	89,409,521	47,362,518	240,345,141
1989	43,642,903	78,673,797	120,760,531	20,922,372	263,999,603
1990	45,270,305	68,593,246	126,895,778	82,681,267	323,440,596
1991	52,845,103	77,269,700	107,923,634	6,521,702	244,560,139
1992	58,523,130	87,261,933	106,061,993	44,136,334	295,983,390
1993	59,611,966	90,568,496	105,909,575	81,207,989	337,298,026

Expenses By Type

Fiscal Year	Benefit Payments	Administrative Expenses	Refunds	Investment Expenses	Contributions Transferred to Insurance Fund	Total
1984	$35,467,174	$ 623,177	$4,686,153	$ 197,994	$ 1,880,023	$ 42,854,521
1985	39,225,080	722,085	5,171,940	249,975	3,122,176	48,491,256
1986	43,962,495	838,804	5,105,361	279,607	3,477,505	53,663,772
1987	52,414,394	1,235,905	5,061,156	272,111	9,644,592	68,628,158
1988	60,060,355	1,122,416	5,860,974	334,270	10,911,143	78,289,158
1989	80,377,963	1,345,174	7,145,907	315,939	12,261,924	101,446,907
1990	90,420,645	1,459,398	5,896,851	440,142	14,510,920	112,727,956
1991	100,824,770	2,091,405	6,438,085	1,351,304	19,961,382	130,666,946
1992	110,034,282	2,130,915	6,451,752	1,733,629	22,001,052	142,351,630
1993	119,619,683	2,205,305	6,749,192	1,827,144	22,370,387	152,771,711

NOTE 6 - INVESTMENTS

The Board of Trustees of the System shall give priority to the investment of funds in obligations considered to improve the industrial development and enhance the economic welfare of the Commonwealth. Appointed investment managers use the following guidelines and restrictions in the selection of securities and timing of transactions as long as the security is not a prohibited investment under Kentucky Revised Statutes:

NOTE 6 - INVESTMENTS (CONTINUED)

Equity Investments - Investments may be made in common stocks, securities convertible into common stock and in preferred stocks of publicly traded corporations.

Fixed Income Investments - Publicly traded bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with current market and economic conditions. Investments may be made in any debt instrument issued by the U. S. Government or an agency of the U. S. Government.

Mortgages - Investments may be made in real estate mortgages on a direct issue basis or in the form of mortgage pool instruments guaranteed by an agency of the U. S. Government or by the Commonwealth of Kentucky.

Equity Real Estate - Investments may be made for the purpose of creating a diversified portfolio of income-producing properties with moderate to low levels of risk.

Guaranteed Insurance Contracts - Investments may be made in guaranteed contracts issued by legal reserve life insurance companies authorized to conduct business in the Commonwealth of Kentucky and such other states as may be required.

Mutual Fund Investments - Investments may be made in mutual funds which hold common stocks or fixed income securities.

Cash Equivalent Securities - The following short-term investment vehicles, excluding commercial paper which requires specific purchase approval by the Investment Committee of the Kentucky Retirement Systems, are considered acceptable:

- Securities Purchased Under Agreements to Resell - Repurchase agreements which are collateralized by U. S. Government issues.
- U. S. Government Issues - All obligations of the U. S. Government and its agencies.
- Certificate of Deposit - Investments may be made in only the 25 largest money center banks in the United States (in terms of total assets) or in banks domiciled in the Commonwealth of Kentucky and having capital and unrestricted surplus of at least $100 million.

NOTE 6 - INVESTMENTS (CONTINUED)

The System's investments are categorized below to give an indication of the level of risk assumed by the System at June 30, 1993. Category 1 includes investments that are either insured or registered or for which the investments are held by the System or its agent in the System's name. Category 2 includes uninsured and unregistered investments that are held by the broker's or dealer's trust department or agent in the System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the broker or dealer, or by its trust department or agent but not in the System's name.

June 30, 1993

	Category 1	Category 2	Category 3	Carrying Amount	Market Value
United States Government bonds	$ -0-	$ 339,598,611	$ -0-	$ 339,598,611	$ 357,749,193
Corporate bonds	19,398,387	147,234,889	-0-	166,633,276	178,515,246
Common stocks	-0-	1,104,232,473	-0-	1,104,232,473	1,509,456,521
First mortgage real estate loans	1,876,384	-0-	97,253,458	99,129,842	106,491,975
Securities purchased under agreements to resell	-0-	338,083,780	-0-	338,083,780	338,083,780
	$21,274,771	$1,929,149,753	$97,253,458	$2,047,677,982	$2,490,296,715
Real estate investment trusts				186,942,014	175,655,686
Total investments				$2,234,619,996	$2,665,952,401

Investments at June 30, 1993, included approximately $273 million of securities loaned under various collateralized lending programs.

NOTE 7 - INCOME TAX STATUS

The Internal Revenue Service has ruled that the Plan qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under present income tax law.

NOTE 8 - TRANSFERS TO INSURANCE FUND

By action of the 1978 General Assembly, the Kentucky Retirement Systems Insurance Fund (the "Insurance Fund") was established to provide a group hospital and medical insurance plan for recipients of a retirement allowance from the System. The Insurance Fund is funded by the transfer of a portion of employer contributions to the System. The percentage of creditable compensation transferred to the Insurance Fund by the System was 1.77% for non-hazardous and 6.17% for hazardous positions for 1993 and 1992, respectively.

NOTE 9 - RISKS OF LOSS

The System is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $100,000 for a single claim and $250,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims made against the Board of Trustees of Kentucky Retirement Systems or any of its staff as a result of actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $25,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement of all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on three years' claims experience and number of covered employees. Claims experience is weighted seventy percent (70%) and number of employees is weighted thirty percent (30%). Expectations of current and future obligations are also factored into the premium calculation.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board which were settled during the year with a liability accruing to the System.

NOTE 10 - CONTINGENCIES

In the normal course of business, the System is involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. The System does not anticipate any material losses as a result of the contingent liabilities.

COUNTY EMPLOYEES RETIREMENT SYSTEM

COUNTY EMPLOYEES RETIREMENT SYSTEM
BALANCE SHEETS

	June 30 1993	June 30 1992
ASSETS		
Investments (Note 6):		
Bonds (market value - 1993, $210,778,483; 1992, $279,548,000)	$ 197,789,566	$ 230,552,967
Common stocks (market value - 1993, $1,381,283,052; 1992, $1,084,233,384)	1,078,979,202	888,063,859
First mortgage real estate loans (market value - 1993, $49,652,622; 1992, $94,152,353)	44,669,475	85,557,087
Real estate investment trusts (market value - 1993, $124,860,523; 1992, $102,950,473)	132,466,863	102,848,045
Securities purchased under agreements to resell (market value approximates cost)	249,778,605	177,668,471
Total investments	$1,703,683,711	$1,484,690,429
Cash on deposit with State Treasurer	767,226	270,317
Members and employers' contributions receivable	16,674,122	13,309,201
Past service credit contribution receivable	39,140,937	52,112,858
Accrued investment income	7,652,636	8,044,440
TOTAL ASSETS	$1,767,918,632	$1,558,427,245
LIABILITIES		
Members' refunds, insurance fund transfers and accrued expenses payable	$ 4,472,166	$ 3,535,705
NET ASSETS AVAILABLE FOR BENEFITS (Members' Contribution Account - 1993, $395,243,936; 1992, $339,656,749; and Retirement Allowance Account - 1993, $1,368,202,530; 1992 $1,215,234,791)	$1,763,446,466	$1,554,891,540
FUND BALANCE:		
Actuarial present value of projected benefits payable to current retirees and beneficiaries	$ 656,629,739	$ 583,019,143
Actuarial present value of projected benefits payable to terminated vested participants	18,581,543	17,518,133
Actuarial present value of credited projected benefits for active members:		
Members contributions	383,617,159	329,026,662
Employers financed portion	843,278,358	767,081,345
Total actuarial present value of credited projected benefits	$1,902,106,799	$1,696,645,283
Unfunded actuarial present value of credited projected benefits	(138,660,333)	(141,753,743)
TOTAL FUND BALANCE	$1,763,446,466	$1,554,891,540

See notes to financial statements.

COUNTY EMPLOYEES RETIREMENT SYSTEM
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN
MEMBERS' CONTRIBUTION ACCOUNT

	Year Ended June 30 1993	1992
REVENUES:		
Members' contributions	$ 67,301,254	$ 58,815,250
Interest credited to members' balances transferred from Retirement Allowance Account	12,867,112	10,965,062
Total revenues	$ 80,168,366	$ 69,780,312
EXPENSES:		
Refunds to former members	$ 5,373,355	$ 5,829,864
Retired members' balances transferred to Retirement Allowance Account	19,207,824	13,366,918
Total expenses	$ 24,581,179	$ 19,196,782
EXCESS OF REVENUES OVER EXPENSES	$ 55,587,187	$ 50,583,530
MEMBERS' CONTRIBUTION ACCOUNT:		
BEGINNING OF YEAR	339,656,749	289,073,219
END OF YEAR	$395,243,936	$339,656,749

See notes to financial statements.

COUNTY EMPLOYEES RETIREMENT SYSTEM
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN
RETIREMENT ALLOWANCE ACCOUNT

	Year Ended June 30 1993	1992
REVENUES:		
Employers' contributions	$ 115,230,643	$ 89,149,505
Investment income	73,074,069	73,386,287
Net realized gain on disposals of investments	57,648,299	30,365,722
Retired members' balances transferred from Members' Contribution Account	19,207,824	13,366,918
Total revenues	$ 265,160,835	$ 206,268,432
EXPENSES:		
Retirement benefits for members	$ 72,607,003	$ 64,992,604
Contributions transferred to the Kentucky Retirement Systems Insurance Fund	22,545,855	18,391,009
Interest credited to members' balances transferred to Members' Contribution Account	12,867,112	10,965,062
Administrative expenses	2,678,882	2,458,990
Investment expenses	1,494,244	1,379,762
Total expenses	$ 112,193,096	$ 98,187,427
EXCESS OF REVENUES OVER EXPENSES	$ 152,967,739	$ 108,081,005
RETIREMENT ALLOWANCE ACCOUNT:		
BEGINNING OF YEAR	1,215,234,791	1,107,153,786
END OF YEAR	$1,368,202,530	$1,215,234,791

See notes to financial statements.

COUNTY EMPLOYEES RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1993 AND 1992

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation - The financial statements of County Employees Retirement System (the System) are prepared on the accrual basis, and conform to generally accepted governmental accounting and financial reporting principles in all material respects.

B. Component Unit - The System is a component unit of the Commonwealth of Kentucky. As such, the Commonwealth of Kentucky is the primary government in whose financial reporting entity the System is included.

The System was created by the Kentucky General Assembly pursuant to the provisions of KRS 78.520. The System's administrative budget and employer contribution rates are subject to approval by the Kentucky General Assembly. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

C. Investments - Investments in bonds and first mortgage real estate loans are stated at amortized cost. Discounts and premiums are amortized using the straight-line method from the date of acquisition to the stated or expected maturity date. Common stocks, securities purchased under agreement to resell and investments in real estate trusts are carried at cost.

Realized gains or losses on investments are recorded for the difference between the proceeds from sale or maturity and the average cost of investments sold or redeemed. Realized gains or losses are also recorded for exchanges of investments, based upon the difference at the time of the exchange between the carrying value and the market value of the investment exchanged.

D. Expense Allocation - The System, the Kentucky Employees Retirement System, and the State Police Retirement System are collectively administered by the Kentucky Retirement Systems. Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

NOTE 2 - DESCRIPTION OF THE PLAN

The System is a defined benefit plan which covers substantially all regular full-time employees of each county and school board, and any additional eligible local agencies electing to participate in the System. The Plan provides for retirement, disability and death benefits. At June 30, 1993, the number of participating local government employers was:

Board of Education	174
County agencies	217
County attorneys	81
City agencies	157
Libraries	75
Other	253
Total	957

NOTE 2 - DESCRIPTION OF THE PLAN (CONTINUED)

For the years ended June 30, 1993 and 1992, participating members contributed 5% of creditable compensation to the System. Members occupying hazardous positions, as defined by statute, contribute at the rate of 7% of creditable compensation. Employer contribution rates are intended to fund the System's normal cost on a current basis plus an amount equal to the amortization of unfunded past service costs over thirty years, using the level percentage of payroll method. Participating employers contributed 8.82% and 18.47%, respectively, of members' non-hazardous compensation and hazardous compensation for the year ended June 30, 1993, and 7.95% and 16.10%, respectively, for the year ended June 30, 1992.

Vesting in a retirement benefit begins immediately upon entry into the System. The participant has a fully vested interest after the completion of sixty months of service, twelve of which are current service. At a minimum, terminated employees are refunded their contributions with credited interest at 3% compounded annually through June 30, 1980, 6% thereafter through June 30, 1986 and 4% thereafter.

Participating local government employees are permitted to purchase credits for member services rendered from the date of full-time employment to the participation election date of the employer. Receivables for past service credits are amortized in amounts sufficient to fund the related cost plus interest thereon over a period not to exceed thirty years.

At June 30, membership in the System consisted of:

	1993	1992
Retirees and beneficiaries currently receiving benefits and terminated members entitled to benefits but not yet receiving them:		
Non-hazardous positions	26,890	25,193
Hazardous positions	1,584	1,387
Total	28,474	26,580
Current members:		
Vested:		
Non-hazardous positions	30,895	28,794
Hazardous positions	3,541	3,185
Nonvested:		
Non-hazardous positions	27,540	26,742
Hazardous positions	2,054	1,863
Total	92,504	87,164

Further information regarding the plan agreement, vesting and benefit provisions is contained in the pamphlet Summary Plan Description. Copies of this pamphlet are available from the office of the Kentucky Retirement Systems.

NOTE 3 - FUNDING STATUS AND PROGRESS

Generally accepted governmental accounting and financial reporting principles requires that the financial statements disclose the "pension benefit obligation" determined using the projected unit credit actuarial method. Such obligation is titled "total actuarial present value of credited projected benefits" shown on the balance sheet. State statutes require the use of the entry age normal actuarial cost method to determine the pension benefit obligation. Using this method, the pension benefit obligation at June 30, 1993 and 1992 was $2,079,930,047 and $1,861,978,403, respectively. The System has adopted a five year moving average of market value to book value in determining the actuarial net assets available for benefits. Using this method, the net assets available for benefits at June 30, 1993 and 1992 was $1,985,680,709 and $1,735,038,908. The resulting unfunded pension benefit obligation was $94,249,338 and $126,939,495 at June 30, 1993 and 1992, respectively.

The pension benefit obligation is a standardized 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 member service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess the System's 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 (PERS). The measure is independent of the actuarial funding method used to determine contributions to the System (see Note 4).

The pension benefit obligation for 1993 and 1992 was determined by the System's consulting actuary, William M. Mercer, Inc., as part of an actuarial valuation as of June 30, 1993 and 1992, respectively. The significant actuarial assumptions underlying the actuarial computations using the projected unit credit actuarial method and the entry age normal actuarial cost method are the same and are as follows:

Assumed rate of return on investments	- 8% per annum
Mortality basis	- 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees
Employee turnover	- Graduated select and ultimate rates based on 1989 experience study
Retirement age	- Based upon experience, with 20% weight (50% weight for hazardous duty employees), at age 55-64, to the earliest age at which an employee could retire with 100% of the accrued benefits
Salary increases	- 6 1/2% per annum

COUNTY EMPLOYEES RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1993 AND 1992
(CONTINUED)

NOTE 4 - CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

The System's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate sufficient assets to pay benefits when due. Level percentage of payroll employer contribution rates are determined using the entry age normal actuarial cost method. The System also uses the level percentage of payroll method to amortize the unfunded actuarial accrued liability.

Actuarially determined contribution requirements for the years ended June 30, 1993 and 1992 were determined as part of an actuarial valuation as of June 30, 1992 and 1991, respectively, and were as follows:

	1993	1992
Employer	$101,233,849	$ 90,489,975
Member	51,834,467	46,261,760
Total	$153,068,316	$136,751,735

Such contributions were to consist of:

	1993	1992
Normal cost	$112,453,932	$100,327,871
Amortization of the unfunded actuarial accrued liability	6,464,013	12,846,219
Administrative expenses	5,128,212	4,375,852
Group hospital and medical insurance premiums	29,022,159	19,201,793
Total	$153,068,316	$136,751,735

Contributions received consisted of:

	1993	1992
Employer (8.82% and 7.95% of the covered payroll for non-hazardous positions for 1993 and 1992, respectively, and 18.47% and 16.10% for hazardous positions for 1993 and 1992, respectively)	$115,230,643	$ 89,149,505
Member (5% of the covered payroll for non-hazardous positions and 7% for hazardous positions for 1993 and 1992)	67,301,254	58,815,250
Total	$182,531,897	$147,964,755

NOTE 5 - TEN YEAR HISTORICAL TREND INFORMATION

Ten year historical trend information designed to provide information about the System's progress in accumulating sufficient assets to pay benefits when due is presented below.

Fiscal Year	(1) Net Assets Available For Benefits	(2) Pension Benefit Obligation	(3) Percentage Funded (1)/(2)	(4) Unfunded (Funds in Excess of) Pension Benefit Obligation (2) - (1)	(5) Annual Covered Payroll	Unfunded Pension Benefit Obligation of Covered Payroll
1984	$ 406,187,431	$ 374,960,289	108.3%	$(31,227,142)	$ 403,461,792	N/A
1985	478,043,221	413,059,045	115.7%	(64,984,176)	433,135,800	N/A
1986	603,815,800	479,360,458	126.0%	(124,455,342)	484,796,988	N/A
1987	727,730,727	607,890,713	119.7%	(119,840,014)	544,184,376	N/A
1988	839,578,896	742,334,380	113.1%	(97,244,516)	615,028,632	N/A
1989	1,078,052,635	1,008,842,489	106.9%	(69,210,146)	728,176,932	N/A
1990	1,270,066,267	1,299,219,862	97.8%	29,153,595	790,407,492	3.7%
1991	1,396,227,005	1,508,780,883	92.5%	112,553,878	887,033,040	12.7%
1992	1,554,891,540	1,696,645,283	91.6%	141,753,743	994,447,776	14.3%
1993	1,763,446,466	1,902,106,799	92.7%	138,660,333	1,074,056,004	12.9%

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 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 PERS. 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 the System's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the PERS.

NOTE 5 - TEN YEAR HISTORICAL TREND INFORMATION (CONTINUED)

Ten year historical trend information relating to revenues and expenses by source and type, respectively, is presented below:

Revenues By Source

Fiscal Year	Members Contributions	Employers Contributions	Investment Income	Net Realized Gain on Disposals of Investments	Total
1984	$16,040,197	$25,280,243	$ 35,305,604	$ 4,127,955	$ 80,753,999
1985	17,487,421	27,131,182	40,147,552	7,576,022	92,342,177
1986	28,187,039	61,400,912	44,216,104	16,705,975	150,510,030
1987	28,071,411	42,060,265	54,428,479	28,353,575	152,913,730
1988	30,401,026	44,811,097	52,252,320	23,584,203	151,048,646
1989	63,609,817	140,659,744	76,400,250	6,466,883	287,136,694
1990	41,650,282	80,658,140	86,852,951	45,450,457	254,611,830
1991	50,027,929	77,403,269	75,889,593	1,292,434	204,613,225
1992	58,815,250	89,149,505	73,386,287	30,365,722	251,716,764
1993	67,301,254	115,230,643	73,074,069	57,648,299	313,254,265

Expenses By Type

Fiscal Year	Benefit Payments	Administrative Expenses	Refunds	Investment Expenses	Contributions Transferred to Insurance Fund	Total
1984	$13,066,260	$ 561,747	$3,331,153	$ 96,104	$ 667,073	$ 17,722,337
1985	14,843,697	650,173	3,570,707	124,145	1,297,665	20,486,387
1986	17,329,099	750,409	4,974,503	141,858	1,541,564	24,737,433
1987	18,065,794	1,116,914	4,382,655	148,337	5,285,103	28,998,803
1988	26,982,299	1,135,267	4,451,755	189,618	6,441,538	39,200,477
1989	31,719,667	1,420,006	5,208,722	183,132	10,131,427	48,662,954
1990	41,158,196	1,551,164	6,346,247	488,486	13,054,106	62,598,199
1991	53,341,986	1,585,753	5,404,817	1,556,937	16,562,994	78,452,487
1992	64,992,604	2,458,990	5,829,864	1,379,762	18,391,009	93,052,229
1993	72,607,003	2,678,882	5,373,355	1,494,244	22,545,855	104,699,339

NOTE 6 - INVESTMENTS

The Board of Trustees of the System shall give priority to the investment of funds in obligations considered to improve the industrial development and enhance the economic welfare of the Commonwealth. Appointed investment managers use the following guidelines and restrictions in the selection of securities and timing of transactions as long as the security is not a prohibited investment under Kentucky Revised Statutes:

NOTE 6 - INVESTMENTS (CONTINUED)

Equity Investments - Investments may be made in common stocks, securities convertible into common stock and in preferred stocks of publicly traded corporations.

Fixed Income Investments - Publicly traded bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with current market and economic conditions. Investments may be made in any debt instrument issued by the U. S. Government or an agency of the U. S. Government.

Mortgages - Investments may be made in real estate mortgages on a direct issue basis or in the form of mortgage pool instruments guaranteed by an agency of the U. S. Government or by the Commonwealth of Kentucky.

Equity Real Estate - Investments may be made for the purpose of creating a diversified portfolio of income-producing properties with moderate to low levels of risk.

Guaranteed Insurance Contracts - Investments may be made in guaranteed contracts issued by legal reserve life insurance companies authorized to conduct business in the Commonwealth of Kentucky and such other states as may be required.

Mutual Fund Investments - Investments may be made in mutual funds which hold common stocks or fixed income securities.

Cash Equivalent Securities - The following short-term investment vehicles, excluding commercial paper which requires specific purchase approval by the Investment Committee of the Kentucky Retirement Systems, are considered acceptable:

- Securities Purchased Under Agreements to Resell - Repurchase agreements which are collateralized by U. S. Government issues.

- U. S. Government Issues - All obligations of the U. S. Government and its agencies.

- Certificate of Deposit - Investments may be made in only the 25 largest money center banks in the United States (in terms of total assets) or in banks domiciled in the Commonwealth of Kentucky and having capital and unrestricted surplus of at least $100 million.

NOTE 6 - INVESTMENTS (CONTINUED)

The System's investments are categorized below to give an indication of the level of risk assumed by the System at June 30, 1993. Category 1 includes investments that are either insured or registered or for which the investments are held by the System or its agent in the System's name. Category 2 includes uninsured and unregistered investments that are held by the broker's or dealer's trust department or agent in the System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the broker or dealer, or by its trust department or agent but not in the System's name.

June 30, 1993

	Category 1	Category 2	Category 3	Carrying Amount	Market Value
United States Government bonds	$ -0-	$ 129,924,242	$ -0-	$ 129,924,242	$ 137,882,159
Corporate bonds	7,287,877	60,577,447	-0-	67,865,324	72,896,324
Common stocks	-0-	1,078,979,202	-0-	1,078,979,202	1,381,283,052
First mortgage real estate loans	1,501,120	-0-	43,168,355	44,669,475	49,652,622
Securities purchased under agreements to resell	-0-	249,778,605	-0-	249,778,605	249,778,605
	$8,788,997	$1,519,259,496	$ 43,168,355	$1,571,216,848	$1,891,492,762
Real estate investment trusts				132,466,863	124,860,523
Total investments				$1,703,683,711	$2,016,353,285

Investments at June 30, 1993, included approximately $108 million of securities loaned under various collateralized lending programs.

NOTE 7 - INCOME TAX STATUS

The Internal Revenue Service has ruled that the Plan qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under present income tax law.

NOTE 8 - TRANSFERS TO INSURANCE FUND

By action of the 1978 General Assembly, the Kentucky Retirement Systems Insurance Fund (the "Insurance Fund") was established to provide a group hospital and medical insurance plan for recipients of a retirement allowance from the System. The Insurance Fund is funded by the transfer of a portion of employer contributions to the System. The percentage of creditable compensation transferred to the Insurance Fund by the System was 1.58% and 1.38% for non-hazardous and 5.67% and 5.11% for hazardous positions for 1993 and 1992, respectively.

NOTE 9 - RISKS OF LOSS

The System is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $100,000 for a single claim and $250,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims made against the Board of Trustees of Kentucky Retirement Systems or any of its staff as a result of actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $25,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement of all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on three years' claims experience and number of covered employees. Claims experience is weighted seventy percent (70%) and number of employees is weighted thirty percent (30%). Expectations of current and future obligations are also factored into the premium calculation.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board which were settled during the year with a liability accruing to the System.

NOTE 10 - CONTINGENCIES

In the normal course of business, the System is involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. The System does not anticipate any material losses as a result of the contingent liabilities.

STATE POLICE RETIREMENT SYSTEM

STATE POLICE RETIREMENT SYSTEM
BALANCE SHEETS

	June 30 1993	June 30 1992
ASSETS		
Investments (Note 6):		
Bonds (market value - 1993, $41,404,270; 1992, $38,795,384)	$ 39,053,657	$ 36,511,413
Common stocks (market value - 1993, $114,451,778; 1992, $98,968,464)	81,564,830	74,161,412
First mortgage real estate loans (market value - 1993, $8,461,883; 1992, $13,804,911)	7,974,238	12,716,048
Real estate investment trusts (market value - 1993, $13,680,760; 1992, $11,352,792)	14,588,801	11,292,130
Securities purchased under agreements to resell (market value approximates cost)	24,754,449	23,167,928
Total investments	$167,935,975	$157,848,931
Cash on deposit with State Treasurer	29,744	14,649
Members and employers' contributions receivable	374,702	422,526
Unfunded employers contribution receivable (Note 2)	699,576	-0-
Accrued investment income	1,148,995	1,133,895
TOTAL ASSETS	$170,188,992	$159,420,001
LIABILITIES		
Members' refunds, insurance fund transfers and accrued expenses payable	$ 418,857	$ 442,111
Unfunded insurance fund transfer payable (Note 2)	184,917	-0-
Unfunded deferred employer contribution (Note 2)	514,659	-0-
TOTAL LIABILITIES	$ 1,118,433	$ 442,111
NET ASSETS AVAILABLE FOR BENEFITS (Members' Contribution Account - 1993, $27,264,582; 1992, $26,762,547: and Retirement Allowance Account - 1993, $141,805,977; 1992, $132,215,343)	$169,070,559	$158,977,890
FUND BALANCE:		
Actuarial present value of projected benefits payable to current retirees and beneficiaries	$ 95,523,070	$ 84,885,964
Actuarial present value of projected benefits payable to terminated vested participants	278,263	178,802
Actuarial present value of credited projected benefits for active members:		
Members contributions	27,096,473	26,620,629
Employers financed portion	61,327,543	63,684,801
Total actuarial present value of credited projected benefits	$184,225,349	$175,370,196
Unfunded actuarial present value of credited projected benefits	(15,154,790)	(16,392,306)
TOTAL FUND BALANCE	$169,070,559	$158,977,890

See notes to financial statements.

STATE POLICE RETIREMENT SYSTEM
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN
MEMBERS' CONTRIBUTION ACCOUNT

	Year Ended June 30 1993	1992
REVENUES:		
Members' contributions	$ 2,545,875	$ 2,529,860
Interest credited to members' balances transferred from Retirement Allowance Account	959,242	933,729
Total revenues	$ 3,505,117	$ 3,463,589
EXPENSES:		
Refunds to former members	$ 39,772	$ 35,421
Retired members' balances transferred to Retirement Allowance Account	2,963,310	602,830
Total expenses	$ 3,003,082	$ 638,251
EXCESS OF REVENUES OVER EXPENSES	$ 502,035	$ 2,825,338
MEMBERS' CONTRIBUTION ACCOUNT:		
BEGINNING OF YEAR	26,762,547	23,937,209
END OF YEAR	$27,264,582	$26,762,547

See notes to financial statements.

STATE POLICE RETIREMENT SYSTEM
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN
RETIREMENT ALLOWANCE ACCOUNT

	Year Ended June 30 1993	1992
REVENUES:		
Employers' contributions	$ 6,113,532	$ 6,193,359
Investment income	8,239,832	8,430,390
Net realized gain on disposals of investments	6,569,702	3,603,549
Retired members' balances transferred from Members' Contribution Account	2,963,310	602,830
Total revenues	$ 23,886,376	$ 18,830,128
EXPENSES:		
Retirement benefits for members	$ 10,220,001	$ 9,372,766
Contributions transferred to the Kentucky Retirement Systems Insurance Fund	2,921,685	2,999,385
Interest credited to members' balances transferred to Members' Contribution Account	959,242	933,729
Administrative expenses	55,702	56,665
Investment expenses	139,112	133,105
Total expenses	$ 14,295,742	$ 13,495,650
EXCESS OF REVENUES OVER EXPENSES	$ 9,590,634	$ 5,334,478
RETIREMENT ALLOWANCE ACCOUNT: BEGINNING OF YEAR	132,215,343	126,880,865
END OF YEAR	$141,805,977	$132,215,343

See notes to financial statements.

STATE POLICE RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1993 AND 1992

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation - The financial statements of State Police Retirement System (the System) are prepared on the accrual basis, and conform to generally accepted governmental accounting and financial reporting principles in all material respects.

B. Component Unit - The System is a component unit of the Commonwealth of Kentucky. As such, the Commonwealth of Kentucky is the primary government in whose financial reporting entity the System is included.

The System was created by the Kentucky General Assembly pursuant to the provisions of KRS 16.510. The System's administrative budget and employer contribution rates are subject to approval by the Kentucky General Assembly. Employee contribution rates are set by statute and may be changed only by the Kentucky General Assembly.

C. Investments - Investments in bonds and first mortgage real estate loans are stated at amortized cost. Discounts and premiums are amortized using the straight-line method from the date of acquisition to the stated or expected maturity date. Common stocks, securities purchased under agreement to resell and investments in real estate trusts are carried at cost.

Realized gains or losses on investments are recorded for the difference between the proceeds from sale or maturity and the average cost of investments sold or redeemed. Realized gains or losses are also recorded for exchanges of investments, based upon the difference at the time of the exchange between the carrying value and the market value of the investment exchanged.

D. Expense Allocation - The System, the Kentucky Employees Retirement System, and the County Employees Retirement System are collectively administered by the Kentucky Retirement Systems. Administrative and investment expenses of the Kentucky Retirement Systems are allocated in proportion to the number of active members participating in each plan and the carrying value of plan investments, respectively.

NOTE 2 - DESCRIPTION OF THE PLAN

The System is a defined benefit plan which covers substantially all regular full-time employees of the Kentucky State Police. The Plan provides for retirement, disability and death benefits.

Participating members contribute 7% of creditable compensation to the System. Employer contribution rates are intended to fund the System's normal cost on a current basis plus an amount equal to the amortization of unfunded past service costs over thirty years, using the level percentage of payroll method. For the years ended June 30, 1993 and 1992, the employer contributed 19.57% of members' compensation.

NOTE 2 - DESCRIPTION OF THE PLAN (CONTINUED)

The actuarial recommended rate for 1993 was 21.84% of members' compensation. This rate has not been approved by the Kentucky General Assembly. The System has filed suit against the State to require that the full funding be made. The System has recorded the difference in contribution rates as a receivable and offsetting deferral. The insurance fund transfer payable represents the portion of the unpaid balance which is attributable to the insurance fund.

Vesting in a retirement benefit begins immediately upon entry into the System. The participant has a fully vested interest after the completion of sixty months of service, twelve of which are current service. At a minimum, terminated employees are refunded their contributions with credited interest at 3% compounded annually through June 30, 1980, and 6% thereafter through June 30, 1986 and 4% thereafter.

At June 30, membership in the System consisted of:

	1993	1992
Retirees and beneficiaries currently receiving benefits and terminated members entitled to benefits but not yet receiving them	612	552
Current members:		
Vested	740	788
Nonvested	217	175
Total	1,569	1,515

Further information regarding the plan agreement, vesting and benefit provisions is contained in the pamphlet Summary Plan Description. Copies of this pamphlet are available from the office of the Kentucky Retirement Systems.

NOTE 3 - FUNDING STATUS AND PROGRESS

Generally accepted governmental accounting and financial reporting principles requires that the financial statements disclose the "pension benefit obligation" determined using the projected unit credit actuarial method. Such obligation is titled "total actuarial present value of credited projected benefits" shown on the balance sheet. State statutes require the use of the entry age normal actuarial cost method to determine the pension benefit obligation. Using this method, the pension benefit obligation at June 30, 1993 and 1992 was $191,653,594 and $182,996,056, respectively. The System has adopted a five year moving average of market value to book value in determining the actuarial net assets available for benefits. Using this method, the net assets available for benefits at June 30, 1993 and 1992 was $200,320,968 and $187,791,011. This results in the pension benefit obligation being fully funded at June 30, 1993 and 1992.

NOTE 3 - FUNDING STATUS AND PROGRESS (CONTINUED)

The pension benefit obligation is a standardized 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 member service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess the System's 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 (PERS). The measure is independent of the actuarial funding method used to determine contributions to the System (see Note 4).

The pension benefit obligation for 1993 and 1992 was determined by the System's consulting actuary, William M. Mercer, Inc., as part of an actuarial valuation as of June 30, 1993 and 1992, respectively. The significant actuarial assumptions underlying the actuarial computations using the projected unit credit actuarial method and the entry age normal actuarial cost method are the same and are as follows:

Assumed rate of return on investments	- 8% per annum
Mortality basis	- 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year
Employee turnover	- Graduated select and ultimate rates based on 1989 experience study
Retirement age	- Assume 50% will retire upon completion of twenty years of service, all others will retire at age 55
Salary increases	- 6 1/2% per annum

NOTE 4 - CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE

The System's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate sufficient assets to pay benefits when due. Level percentage of payroll employer contribution rates are determined using the entry age normal actuarial cost method. The System also uses the level percentage of payroll method to amortize the unfunded actuarial accrued liability.

STATE POLICE RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1993 AND 1992
(CONTINUED)

NOTE 4 - CONTRIBUTIONS REQUIRED AND CONTRIBUTIONS MADE (CONTINUED)

Actuarially determined contribution requirements for the years ended June 30, 1993 and 1992 were determined as part of an actuarial valuation as of June 30, 1992 and 1991, respectively, and were as follows:

	1993	1992
Employer	$6,831,809	$6,394,110
Member	2,182,610	2,049,298
Total	$9,014,419	$8,443,408

Such contributions were to consist of:

Normal cost	$4,764,148	$4,484,455
Amortization of the unfunded actuarial accrued liability	(247,887)	934,625
Administrative expenses	83,764	73,338
Group hospital and medical insurance premiums	4,414,394	2,950,990
Total	$9,014,419	$8,443,408

Contributions received consisted of:

Employer (19.57% of the covered payroll for 1993 and 1992)	$6,113,532	$6,193,359
Member (7% of the covered payroll for 1993 and 1992)	2,545,875	2,529,860
Total	$8,659,407	$8,723,219

STATE POLICE RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1993 AND 1992
(CONTINUED)

NOTE 5 - TEN YEAR HISTORICAL TREND INFORMATION

Ten year historical trend information designed to provide information about the System's progress in accumulating sufficient assets to pay benefits when due is presented below.

Fiscal Year	(1) Net Assets Available For Benefits	(2) Pension Benefit Obligation	(3) Percentage Funded (1)/(2)	(4) Unfunded (Funds in Excess of) Pension Benefit Obligation (2) - (1)	(5) Annual Covered Payroll	Unfunded Pension Benefit Obligation of Covered Payroll
1984	$ 74,980,517	$ 86,051,927	87.1%	$ 11,071,410	$ 23,718,048	46.7%
1985	85,016,242	94,143,453	90.3%	9,127,211	23,383,018	39.0%
1986	96,667,699	100,048,563	96.6%	3,380,864	24,524,652	13.8%
1987	110,194,604	106,252,354	103.7%	(3,942,250)	23,859,024	N/A
1988	120,998,549	115,615,315	104.7%	(5,383,234)	24,014,472	N/A
1989	131,350,553	130,093,821	101.0%	(1,256,732)	24,282,216	N/A
1990	145,025,551	147,758,437	98.2%	2,732,886	25,971,132	10.5%
1991	150,818,074	163,020,917	92.5%	12,202,843	29,275,692	41.7%
1992	158,977,890	175,370,196	90.7%	16,392,306	31,285,572	52.4%
1993	169,070,559	184,225,349	91.8%	15,154,790	30,600,684	49.5%

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 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 PERS. 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 the System's progress made in accumulating sufficient assets to pay benefits when due. Generally, the smaller this percentage, the stronger the PERS.

NOTE 5 - TEN YEAR HISTORICAL TREND INFORMATION (CONTINUED)

Ten year historical trend information relating to revenues and expenses by source and type, respectively, is presented below:

Revenues By Source

Fiscal Year	Members Contributions	Employers Contributions	Investment Income	Net Realized Gain on Disposals of Investments	Total
1984	$ 1,695,919	$ 4,446,090	$ 6,260,996	$ 91,813	$ 12,494,818
1985	1,861,882	4,483,240	6,993,220	652,568	13,990,910
1986	1,944,859	4,380,911	7,453,314	2,698,426	16,477,510
1987	1,944,780	4,481,033	8,763,083	5,188,413	20,377,309
1988	2,158,349	4,575,097	7,520,682	4,165,099	18,419,227
1989	1,994,453	6,596,928	10,164,070	1,550,779	20,306,230
1990	2,040,017	4,655,297	10,411,631	7,498,946	24,605,891
1991	2,347,772	6,038,636	8,809,299	568,316	17,764,023
1992	2,529,860	6,193,359	8,430,390	3,603,549	20,757,158
1993	2,545,875	6,113,532	8,239,832	6,569,702	23,468,941

Expenses By Type

Fiscal Year	Benefit Payments	Administrative Expenses	Refunds	Investment Expenses	Contributions Transferred to Insurance Fund	Total
1984	$ 2,890,091	$ 11,969	$ 127,414	$ 18,773	$ 223,140	$ 3,271,387
1985	3,496,109	14,363	180,746	23,880	240,087	3,955,185
1986	4,356,837	17,560	73,447	25,716	352,493	4,826,053
1987	5,107,017	23,379	127,181	23,752	1,569,076	6,850,405
1988	5,693,316	23,810	108,814	28,363	1,760,979	7,615,282
1989	7,742,826	28,418	42,926	26,929	2,113,127	9,954,226
1990	8,504,914	30,397	69,128	23,148	2,303,306	10,930,893
1991	8,959,087	150,807	42,561	29,376	2,789,669	11,971,500
1992	9,372,766	56,665	35,421	133,105	2,999,385	12,597,342
1993	10,220,001	55,702	39,772	139,112	2,921,685	13,376,272

NOTE 6 - INVESTMENTS

The Board of Trustees of the System shall give priority to the investment of funds in obligations considered to improve the industrial development and enhance the economic welfare of the Commonwealth. Appointed investment managers use the following guidelines and restrictions in the selection of securities and timing of transactions as long as the security is not a prohibited investment under Kentucky Revised Statutes:

NOTE 6 - INVESTMENTS (CONTINUED)

Equity Investments - Investments may be made in common stocks, securities convertible into common stock and in preferred stocks of publicly traded corporations.

Fixed Income Investments - Publicly traded bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with current market and economic conditions. Investments may be made in any debt instrument issued by the U. S. Government or an agency of the U. S. Government.

Mortgages - Investments may be made in real estate mortgages on a direct issue basis or in the form of mortgage pool instruments guaranteed by an agency of the U. S. Government or by the Commonwealth of Kentucky.

Equity Real Estate - Investments may be made for the purpose of creating a diversified portfolio of income-producing properties with moderate to low levels of risk.

Guaranteed Insurance Contracts - Investments may be made in guaranteed contracts issued by legal reserve life insurance companies authorized to conduct business in the Commonwealth of Kentucky and such other states as may be required.

Mutual Fund Investments - Investments may be made in mutual funds which hold common stocks or fixed income securities.

Cash Equivalent Securities - The following short-term investment vehicles, excluding commercial paper which requires specific purchase approval by the Investment Committee of the Kentucky Retirement Systems, are considered acceptable:

- Securities Purchased Under Agreements to Resell - Repurchase agreements which are collateralized by U. S. Government issues.

- U. S. Government Issues - All obligations of the U. S. Government and its agencies.

- Certificate of Deposit - Investments may be made in only the 25 largest money center banks in the United States (in terms of total assets) or in banks domiciled in the Commonwealth of Kentucky and having capital and unrestricted surplus of at least $100 million.

NOTE 6 - INVESTMENTS (CONTINUED)

The System's investments are categorized below to give an indication of the level of risk assumed by the System at June 30, 1993. Category 1 includes investments that are either insured or registered or for which the investments are held by the System or its agent in the System's name. Category 2 includes uninsured and unregistered investments that are held by the broker's or dealer's trust department or agent in the System's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the broker or dealer, or by its trust department or agent but not in the System's name.

June 30, 1993

	Category 1	Category 2	Category 3	Carrying Amount	Market Value
United States Government bonds	$ -0-	$ 26,385,001	$ -0-	$ 26,385,001	$ 27,855,097
Corporate bonds	1,309,108	11,359,548	-0-	12,668,656	13,549,173
Common stocks	-0-	81,564,830	-0-	81,564,830	114,451,778
First mortgage real estate loans	34,116	-0-	7,940,122	7,974,238	8,461,883
Securities purchased under agreements to resell	-0-	24,754,449	-0-	24,754,449	24,754,449
	$1,343,224	$144,063,828	$7,940,122	$153,347,174	$189,072,380
Real estate investment trusts				14,588,801	13,680,760
Total investments				$167,935,975	$202,753,140

Investments at June 30, 1993, included approximately $21 million of securities loaned under various collateralized lending programs.

NOTE 7 - INCOME TAX STATUS

The Internal Revenue Service has ruled that the Plan qualifies under Section 401(a) of the Internal Revenue Code and is, therefore, not subject to tax under present income tax law.

NOTE 8 - TRANSFERS TO INSURANCE FUND

By action of the 1978 General Assembly, the Kentucky Retirement Systems Insurance Fund (the "Insurance Fund") was established to provide a group hospital and medical insurance plan for recipients of a retirement allowance from the System. The Insurance Fund is funded by the transfer of a portion of employer contributions to the System. The percentage of creditable compensation transferred to the Insurance Fund by the System was 9.48% for 1993 and 1992.

NOTE 9 - RISKS OF LOSS

The System is exposed to various risks of loss related to torts; thefts of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Under the provisions of the Kentucky Revised Statutes, the Kentucky Board of Claims is vested with full power and authority to investigate, hear proof, and to compensate persons for damages sustained to either person or property as a result of negligence of the agency or any of its employees. Awards are limited to $100,000 for a single claim and $250,000 in aggregate per occurrence. Awards and a pro rata share of the operating cost of the Board of Claims are paid from the fund of the agency having a claim or claims before the Board.

Claims made against the Board of Trustees of Kentucky Retirement Systems or any of its staff as a result of actual or alleged breach of fiduciary duty are insured with a commercial insurance policy. Coverage provided is limited to $5,000,000 with a deductible amount of $25,000. Defense costs incurred in defending such claims will be paid by the insurance company. However, the total defense cost and claims paid shall not exceed the total aggregate coverage of the policy.

Claims for job-related illnesses or injuries to employees are insured by the state's self-insured workers' compensation program. Payments approved by the program are not subject to maximum limitations. A claimant may receive reimbursement of all medical expenses related to the illness or injury and up to sixty-six and two-thirds percent (66 2/3%) of wages for temporary disability. Each agency pays premiums based on three years' claims experience and number of covered employees. Claims experience is weighted seventy percent (70%) and number of employees is weighted thirty percent (30%). Expectations of current and future obligations are also factored into the premium calculation.

Only claims pertaining to workers' compensation have been filed during the past three fiscal years. There were no claims which were appealed to the Kentucky Workers' Compensation Board which were settled during the year with a liability accruing to the System.

NOTE 10 - CONTINGENCIES

In the normal course of business, the System is involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. The System does not anticipate any material losses as a result of the contingent liabilities.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
BALANCE SHEETS

	June 30 1993	June 30 1992
ASSETS		
Investments (Note 4):		
Bonds (market value - 1993, $95,230,328; 1992, $59,582,981)	$ 89,674,706	$ 55,394,464
Common stocks (market value - 1993, $53,996,484; 1992, $42,789,682)	43,626,860	36,956,041
First mortgage real estate loans (market value - 1993, $4,811,394)	4,562,012	-0-
Securities purchased under agreements to resell (market value approximates cost)	21,042,665	33,216,835
Total investments	$ 158,906,243	$ 125,567,340
Employers contributions receivable	4,231,032	3,782,080
Unfunded transfer receivable from Kentucky Employees and State Police Retirement Systems	2,624,650	-0-
Accrued investment income	2,631,177	1,290,429
Other assets	500,000	500,000
TOTAL ASSETS	$ 168,893,102	$ 131,139,849
LIABILITIES		
Payable to Kentucky Retirement Systems	$ 55,525	$ 366
Unfunded deferred transfer from Kentucky Employees and State Police Retirement Systems	2,624,650	-0-
TOTAL LIABILITIES	$ 2,680,175	$ 366
NET ASSETS AVAILABLE FOR BENEFITS	$ 166,212,927	$ 131,139,483
FUND BALANCE:		
Actuarial present value of projected benefits payable to current retirees and beneficiaries	$ 534,671,942	$ 383,359,369
Actuarial present value of projected benefits payable to terminated vested participants	1,982,737,482	1,748,657,417
Total actuarial present value of projected medical benefits	$2,517,409,424	$2,132,016,786
Unfunded actuarial present value of credited projected medical benefits	(2,351,196,497)	(2,000,877,303)
TOTAL FUND BALANCE	$ 166,212,927	$ 131,139,483

See notes to financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN FUND BALANCE

	Year Ended June 30 1993	1992
ALLOCATED TO KENTUCKY EMPLOYEES RETIREMENT SYSTEM		
REVENUES:		
Employers contributions transferred from Kentucky Employees Retirement System	$22,370,387	$22,001,052
Investment income	3,923,709	4,504,334
Net realized gain on disposal of investments	1,643,967	86,728
Total revenues	$27,938,063	$26,592,114
EXPENSES:		
Insurance premium payments	$12,703,906	$10,675,823
Investment expenses	26,208	-0-
Total expenses	$12,730,114	$10,675,823
EXCESS OF REVENUES OVER EXPENSES	$15,207,949	$15,916,291
FUND BALANCE:		
BEGINNING OF YEAR	62,465,627	46,549,336
END OF YEAR	$77,673,576	$62,465,627
ALLOCATED TO COUNTY EMPLOYEES RETIREMENT SYSTEM		
REVENUES:		
Employers contributions transferred from County Employees Retirement System	$22,545,855	$18,391,009
Investment income	3,356,906	4,246,588
Net realized gain on disposal of investments	1,372,459	68,026
Total revenues	$27,275,220	$22,705,623
EXPENSES:		
Insurance premium payments	$ 9,952,879	$ 8,170,467
Investment expenses	24,370	-0-
Total expenses	$ 9,977,249	$ 8,170,467
EXCESS OF REVENUES OVER EXPENSES	$17,297,971	$14,535,156
FUND BALANCE:		
BEGINNING OF YEAR	56,955,900	42,420,744
END OF YEAR	$74,253,871	$56,955,900
ALLOCATED TO STATE POLICE RETIREMENT SYSTEM		
REVENUES:		
Employers contributions transferred from State Police Retirement System	$ 2,921,685	$ 2,999,385
Investment income	747,520	890,481
Net realized gain on disposal of investments	315,462	17,461
Total revenues	$ 3,984,667	$ 3,907,327
EXPENSES:		
Insurance premium payments	$ 1,412,196	$ 1,120,915
Investment expenses	4,947	-0-
Total expenses	$ 1,417,143	$ 1,120,915
EXCESS OF REVENUES OVER EXPENSES	$ 2,567,524	$ 2,786,412
FUND BALANCE:		
BEGINNING OF YEAR	11,717,956	8,931,544
END OF YEAR	$14,285,480	$11,717,956

See notes to financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1993 AND 1992

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation - The financial statements of the Kentucky Retirement Systems Insurance Fund (the Fund) are prepared on the accrual basis, and conform to generally accepted governmental accounting and financial reporting principles in all material respects.

B. Component Unit - The Fund is a component unit of the Commonwealth of Kentucky. As such, the Commonwealth of Kentucky is the primary government in whose financial reporting entity the Fund is included.

The Fund was created by the Kentucky General Assembly pursuant to the provisions of KRS 61.701. The Fund's employer contribution rates are subject to approval by the Kentucky General Assembly.

C. Investments - Investments in bonds are stated at amortized cost. Discounts and premiums are amortized using the straight-line method from the date of acquisition to the stated or expected maturity date. Common stocks and securities purchased under agreement to resell are carried at cost.

Realized gains or losses on investments are recorded for the difference between the proceeds from sale or maturity and the average cost of investments sold or redeemed. Realized gains or losses are also recorded for exchanges of investments, based upon the difference at the time of the exchange between the carrying value and the market value of the investment exchanged.

NOTE 2 - DESCRIPTION OF THE PLAN

The Fund was established to provide accident and health insurance for members receiving benefits from the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement Systems (Systems). The Fund and members receiving benefits pay prescribed portions of the aggregate premiums paid to an insurance company for coverage. Insurance premium payments included in the accompanying financial statements represent that portion of premiums paid by the Fund. Insurance premiums withheld from benefit payments to members of the Systems approximated $8,062,000 and $7,137,000 for the Kentucky Employees Retirement System, $6,351,000 and $5,362,000 for the County Employees Retirement System, and $51,000 and $55,000 for the State Police Retirement System in 1993 and 1992, respectively. The Fund pays the same proportion of medical insurance premiums for the spouse or beneficiary and dependents of retired hazardous members or hazardous members killed in the line of duty. The Fund pays benefits for 27,861 retirees as of June 30, 1993.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1993 AND 1992
(CONTINUED)

NOTE 2 - DESCRIPTION OF THE PLAN (CONTINUED)

The allocation of the insurance premiums paid by the Fund and amounts withheld from members' benefits is based on the years of service with the Systems, as follows:

Years of Service	Percent Paid by Insurance Fund	Percent Paid by Member through Payroll Deduction
20 or more	100%	0%
15 - 19	75%	25%
10 - 14	50%	50%
4 - 9	25%	75%
Less than 4	0%	100%

The medical insurance contribution rate is being increased each year by a percentage which will result in reaching the entry age normal funding rate within a 20 year period measured from 1987.

The percentages of employer contributions to the Systems which are in turn transferred to the Fund were as follows:

	1993	1992
Non-Hazardous:		
Kentucky Employees Retirement System	1.77%	1.77%
County Employees Retirement System	1.58%	1.38%
Hazardous:		
Kentucky Employees Retirement System	6.17%	6.17%
County Employees Retirement System	5.67%	5.11%
State Police Retirement System	9.48%	9.48%

The required and actual contributions to the Fund from the System were as follows:

	1993	1992
Required contributions:		
Kentucky Employees Retirement System	$36,149,681	$22,348,743
County Employees Retirement System	29,022,159	19,201,793
State Police Retirement System	4,414,394	2,950,990
Total	$69,586,234	$44,501,526
Actual contributions:		
Kentucky Employees Retirement System	$22,370,387	$22,001,052
County Employees Retirement System	22,545,855	18,391,009
State Police Retirement System	2,921,685	2,999,385
Total	$47,837,927	$43,391,446

NOTE 2 - DESCRIPTION OF THE PLAN (CONTINUED)

The employer contribution for Kentucky Employees Retirement Systems and State Police Retirement Systems are being funded at rates less than those determined by actuarial valuation. This has the effect of reducing the amount allocated to the Fund. The Systems have filed suit to require the full funding of the contributions. The Fund has recorded a receivable and an offsetting deferral for the unfunded amount.

NOTE 3 - FUNDING STATUS AND PROGRESS

The "medical benefit obligation" is a standardized measure of the present value of medical benefits, adjusted for the effects of health costs inflation, 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 the Fund's funding status on a going-concern basis. The medical benefit obligation was determined as part of an actuarial valuation performed as of June 30, 1993 and 1992, respectively. Such is titled "total actuarial present value of projected medical benefits" shown on the Balance Sheet.

The significant actuarial assumptions underlying the actuarial computations are as follows:

Actuarial cost method	- Entry age normal cost method
Assumed rate of return on investments	- 8% per annum
Mortality basis	- 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees
Retirement age	- Based upon experience, with 20-50% weight, at age 55-64, to the earliest age at which an employee could retire with 100% of the accrued benefits.
Health cost inflation	- 10% per annum

NOTE 4 - INVESTMENTS

The Board of Trustees of the Fund shall give priority to the investment of funds in obligations considered to improve the industrial development and enhance the economic welfare of the Commonwealth. Appointed investment managers use the following guidelines and restrictions in the selection of securities and timing of transactions as long as the security is not a prohibited investment under Kentucky Revised Statutes:

NOTE 4 - INVESTMENTS (CONTINUED)

Equity Investments - Investments may be made in common stocks, securities convertible into common stock and in preferred stocks of publicly traded corporations.

Fixed Income Investments - Publicly traded bonds are to be selected and managed to assure an appropriate balance in quality and maturities consistent with current market and economic conditions. Investments may be made in any debt instrument issued by the U. S. Government or an agency of the U. S. Government.

Mortgages - Investments may be made in real estate mortgages on a direct issue basis or in the form of mortgage pool instruments guaranteed by an agency of the U. S. Government or by the Commonwealth of Kentucky.

Equity Real Estate - Investments may be made for the purpose of creating a diversified portfolio of income-producing properties with moderate to low levels of risk.

Guaranteed Insurance Contracts - Investments may be made in guaranteed contracts issued by legal reserve life insurance companies authorized to conduct business in the Commonwealth of Kentucky and such other states as may be required.

Mutual Fund Investments - Investments may be made in mutual funds which hold common stocks or fixed income securities.

Cash Equivalent Securities - The following short-term investment vehicles, excluding commercial paper which requires specific purchase approval by the Investment Committee of the Kentucky Retirement Systems, are considered acceptable:

- Securities Purchased Under Agreements to Resell - Repurchase agreements which are collateralized by U. S. Government issues.

- U. S. Government Issues - All obligations of the U. S. Government and its agencies.

- Certificate of Deposit - Investments may be made in only the 25 largest money center banks in the United States (in terms of total assets) or in banks domiciled in the Commonwealth of Kentucky and having capital and unrestricted surplus of at least $100 million.

The Fund's investments are categorized below to give an indication of the level of risk assumed by the Fund at June 30, 1993. Category 1 includes investments that are either insured or registered or for which the investments are held by the Fund or its agent in the Fund's name. Category 2 includes uninsured and unregistered investments that are held by the broker's or dealer's trust department or agent in the Fund's name. Category 3 includes uninsured and unregistered investments for which the securities are held by the broker or dealer, or by its trust department or agent but not in the Fund's name.

NOTE 4 - INVESTMENTS (CONTINUED)

June 30, 1993

	Category 1	Category 2	Category 3	Carrying Amount	Market Value
United States Government bonds	$ -0-	$ 69,676,658	$ -0-	$ 69,676,658	$ 73,599,571
Corporate bonds	-0-	19,998,048	-0-	19,998,048	21,630,757
Common stocks	-0-	43,626,860	-0-	43,626,860	53,996,484
First mortgage real estate loans	-0-	-0-	4,562,012	4,562,012	4,811,394
Securities purchased under agreements to resell	-0-	21,042,665	-0-	21,042,665	21,042,665
Total investments	$ -0-	$154,344,231	$4,562,012	$158,906,243	$175,080,871

Investments at June 30, 1993, included approximately $48 million of securities loaned under various collateralized lending programs.

NOTE 5 - CONTINGENCIES

In the normal course of business, the Fund is involved in various litigation concerning the right of participants or their beneficiaries to receive benefits. The Fund does not anticipate any material losses as a result of the contingent liabilities.

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL STRUCTURE RELATED MATTERS NOTED IN A FINANCIAL STATEMENT AUDIT CONDUCTED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of the Kentucky Employees Retirement System, the County Employees Retirement System, the State Police Retirement System and the Kentucky Retirement System Insurance Fund (the "Kentucky Retirement Systems") as of and for the year ended June 30, 1993, and have issued our report thereon dated September 15, 1993.

We conducted our audit in accordance with generally accepted auditing standards and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements.

In planning and performing our audit of the financial statements of the Kentucky Retirement Systems for the year ended June 30, 1993, we considered its internal control structure in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control structure.

The management of the Kentucky Retirement Systems is responsible for establishing and maintaining an internal control structure. In fulfilling this responsibility, estimates and judgments by management are required to assess the expected benefits and related costs of internal control structure policies and procedures. The objectives of an internal control structure are to provide management with reasonable, but not absolute, assurance that assets are safeguarded against loss from unauthorized use or disposition, and that transactions are executed in accordance with management's authorization and recorded properly to permit the preparation of financial statements in accordance with generally accepted accounting principles. Because of inherent limitations in any internal control structure, errors or irregularities may nevertheless occur and not be detected. Also, projection of any evaluation of the structure to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of policies and procedures may deteriorate.

For the purpose of this report, we have classified the significant internal control structure policies and procedures in the following categories:

- Contributions and other revenues
- Retirement benefits and other expenses
- Investments
- Member demographics

For all of the internal control structure categories listed above, we obtained an understanding of the design of relevant policies and procedures and whether they have been placed in operation, and we assessed control risk.

Our consideration of the internal control structure would not necessarily disclose all matters in the internal control structure that might be material weaknesses under standards established by the American Institute of Certified Public Accountants. A material weakness is a reportable condition in which the design or operation of one or more of the specific internal controls structure elements does not reduce to a relatively low level the risk that errors or irregularities in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in normal course of performing their assigned functions. We noted no matters involving the internal control structure and its operation that we consider to be material weaknesses as defined above.

This report is intended for the information of the Board of Trustees, management and the Commonwealth of Kentucky Auditor of Public Accounts. This restriction is not intended to limit the distribution of this report, which is a matter of public record.

September 15, 1993

Eskew + Gresham, PSC.

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE WITH LAWS AND REGULATIONS BASED ON AN AUDIT OF THE FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have audited the financial statements of the Kentucky Employees System, the County Employees Retirement System, the State Police Retirement System and the Kentucky Retirement System Insurance Fund (the "Kentucky Retirement Systems") as of June 30, 1993 and for the year then ended, and have issued our report thereon dated September 15, 1993.

We conducted our audit in accordance with generally accepted auditing standards and Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

Compliance with laws, regulations, contracts, and grants applicable to the Kentucky Retirement Systems is the responsibility of the Kentucky Retirement Systems management. As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we performed tests of the Kentucky Retirement Systems' compliance with certain provisions of laws, regulations, and grants. However, our objective was not to provide an opinion on overall compliance with such provisions.

The results of our tests indicate that, with respect to the items tested, the Kentucky Retirement Systems complied, in all material respects, with the provisions referred to in the preceding paragraph. With respect to items not tested, nothing came to our attention that caused us to believe that the Kentucky Retirement Systems had not complied, in all material respects, with those provisions.

This report is intended for the information of the Board of Trustees, management and the Commonwealth of Kentucky Auditor of Public Accounts. This restriction is not intended to limit the distribution of this report, which is a matter of public record.

September 15, 1993

Eskew & Gresham, PSC.

Actuarial Section

ACTUARIAL SECTION
INTRODUCTION

An actuarial valuation is a mathematical means of determining liabilities (the cost of benefits guaranteed each member) and the adequacy of the assets and income of the systems. It is a way of looking into the future, based on past experience, to determine if the contributions being paid by the employee and employer, combined with projected investment income, are sufficient to pay the benefits guaranteed to retirees and current members.

Because pension plans, such as those administered by Kentucky Retirement Systems, must necessarily be oriented toward long-range goals, rather than short term receipts and expenses, the actuarial valuation provides the information that the Board of Trustees needs to make sound judgements on investment decisions. The Board must consider not only the systems' ability to pay current retirees' benefits, but also to pay benefits for all future retirees.

The Board's actuarial consultant, the firm of William M. Mercer, Inc., has performed the actuarial valuations which follow. The following pages represent a copy of the June 30, 1993 valuation, less statistical data too lengthy to include in this report. William M. Mercer, Inc., also conducted the five-year experience study upon which current actuarial assumptions are based. The actuarial assumptions used in these valuations were adopted by the Board of Trustees in December of 1989.

The benefits of the systems are funded in accordance with KRS 61.565 which requires that normal costs be funded as a percentage of payroll and that unfunded liabilities be amortized over a 30-year period. The medical insurance benefits are funded in accordance with KRS 61.702.

WILLIAM M.
MERCER
INCORPORATED

November 3, 1993

Board of Trustees
Kentucky Retirement Systems
Perimeter Park West
1260 Louisville Road
Frankfort, Kentucky 40601

Members of the Board:

The thirty-seventh annual actuarial valuation of the Kentucky Employees Retirement System, the thirty-fourth annual actuarial valuation of the County Employees Retirement System, and the thirty-fifth annual actuarial valuation of the State Police Retirement System have been completed and the reports prepared. The valuations were made on the basis of data provided by the Retirement System as of June 30, 1993.

On the basis of the assumptions as stated in each report and the data furnished us by the Administration of the Retirement Systems, it is certified that the valuations have been made by the use of generally accepted actuarial principles and that, if the recommendations of the reports are followed, adequate provision will be made for the funding of future benefits.

The three Retirement Systems are actuarially sound. Adequate provision is being made for the funding of the Actuarial Accrued Liabilities of the Kentucky Employees Retirement System, the County Employees Retirement System, and the State Police Retirement System as required by the Kentucky Revised Statutes, as appropriate funding rates have been established by the Board for this purpose.

Respectfully Submitted,
WILLIAM M. MERCER, INCORPORATED

By Stephen A. Gagel
Stephen A. Gagel, F.S.A.
Principal

/cga

1500 Meidinger Tower
Louisville KY 40202

502 561 4500

A Marsh & McLennan Company

THIRTY-SEVENTH ANNUAL ACTUARIAL VALUATION

JUNE 30, 1993

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the thirty-seventh annual actuarial valuation of the Kentucky Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 1993.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contributions for the ensuing fiscal year required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions beginning on page K-44. The basis of funding, as defined in KRS 61.565, provides that the actuarial valuation method is uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits as explained on page K-2. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated on page K-5.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide member's benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Actuarial cost method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there is a deterioration in the funded position of the medical premium benefit, in which case the rate levels will be reviewed to redetermine an appropriate current funding level.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation, as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance premium rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 1989 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 1989 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System (with the exception of the rate of retirement, as indicated on page K-5). The actuarial assumptions as used in this valuation are described beginning on page K-5.

<u>Actuarial Value of Assets</u>

The actuarial value of assets is determined in the following manner for the Retirement Fund:

1. Determine the ratio of the market value of Retirement Fund assets to book value as of the current valuation date and the four preceding valuation dates (but not using any valuation dates prior to June 30, 1989). All asset values include accrued investment income and member and employer contribution receivables, and exclude member refunds and investment expenses payable.

2. Determine the average ratio of market to book value as of these valuation dates.

3. Apply this average ratio to the book value (as adjusted for accrued investment income and member and employer contribution receivables, and member refunds and investment expenses payable) as of the current valuation date to derive valuation assets.

For the Insurance Fund, the actuarial value of assets is determined to be the book value of the assets in that fund as of the valuation date adjusted for any receivables and/or payables.

The different asset valuation methods for the Retirement Fund and the Insurance Fund are a result the following:

1. There is separate book and market value information for the Insurance Fund under all systems dating only from July, 1992. So it is not possible to presently use the same averaging method for the Insurance Fund as used for the Retirement Fund.

2. The magnitude of assets to liabilities for the Insurance Fund is such that the method of valuing assets will only negligibly affect current valuation results. Also, given the current method for transitioning into higher medical premium contribution rates over future years, the asset valuation method used for the Insurance Fund is not as critical as the asset valuation method used for the Retirement Fund.

The derivation of valuation assets for the Retirement Fund as of the current valuation date is as follows:

Non-Hazardous

	Book Value *	Market Value *	Ratio
June 30, 1993	2,185,895,811	2,591,588,544	118.55956%
June 30, 1992	2,014,998,203	2,385,564,675	118.39041%
June 30, 1991	1,872,900,026	2,127,403,199	113.58872%
June 30, 1990	1,768,724,348	1,954,895,264	110.52572%
June 30, 1989	1,562,628,227	1,762,451,856	112.78766%
... Average Ratio =			114.77041%
... Valuation Assets = (Average Ratio x Current Book Value)			2,508,761,584

Hazardous

	Book Value *	Market Value *	Ratio
June 30, 1993	65,477,196	74,363,956	113.57230%
June 30, 1992	51,848,488	67,592,928	130.36625%
June 30, 1991	40,314,905	48,337,561	119.89997%
June 30, 1990	30,597,390	34,319,733	112.16556%
June 30, 1989	25,980,871	27,999,924	107.77131%
... Average Ratio =			116.75508%
... Valuation Assets = (Average Ratio x Current Book Value)			76,447,953

* Reflects accrued investment income and member and employer contribution receivables, and member refunds and investment expenses payable; represents Retirement Fund assets exclusive of amounts in the Insurance Fund

Except for Table VI, the actuarial value of assets excludes any amounts in the Insurance Fund. Table VI uses only assets in the Insurance Fund, excluding all other amounts.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

ACTUARIAL ASSUMPTIONS

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1) Mortality:

(a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees.

(b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).

(2) Disablement - Graduated rates based on 1989 experience study.

(3) Termination of employment - Graduated select (non-hazardous only) and ultimate rates based on 1989 experience study.

(4) Retirement - Non-Hazardous:

Age	Retirement Rate
55-57	.03
58-59	.04
60-61	.05
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 & Over	1.00

At age 55-64 in lieu of the age related rate, 20% are assumed to retire as soon as eligible for unreduced benefits.

Hazardous: Assumed that 50% will retire as soon as eligible for unreduced benefits and balance will continue to age 60.

(5) Marital status

(a) Percentage married - 100%.

(b) Age difference - Males are assumed to be 3 years older than their spouses.

(6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed that the employee is survived by 2 dependent children, each age 6.

(7) Investment return - 8.00% per year, net of investment related expenses, compounded annually.

(8) Compensation progression - 6.50% per year, compounded annually.

(9) Retiree Medical Insurance - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly premium rates were assumed to be as follows:

Plan Type	7/1/93 Rate	Rate Increase Date	Rate Increase Rate
Single	$158.78*	1/1/95	$174.66**
Family	338.98*	1/1/95	372.88**
Parent Plus	239.54*	1/1/95	263.49**
Medicare	71.85*	1/1/94	79.04**
High Option	110.05*	1/1/94	121.06**

*Actual rates (effective 8/1/93 for pre-Medicare coverage)
**Assumed rates

In determining the medical premium funding rate in 1987, medical premiums were assumed to increase at an annual rate of 12%. In determining the target Entry Age Funding rate in valuations subsequent to 1987, it was assumed that medical premiums would grow at an annual rate of 10%. The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

Reserves in the Insurance Fund were used to offset the liability for premiums.

(10) Missing data - For those active members with incomplete data, the following assumptions were made:

- If reported salary was zero or blank, then monthly salary was assumed to be $700
- If reported age was blank, then assume current age equal to age 18 plus years of service reported

(11) Members with Multiple Service Records - For active members with service in more than one system, the liability has been valued as follows:

- Service under all systems is aggregated for purposes of determining benefit eligibility.
- Future service is projected only under the system in which the member is currently active.
- The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.
- The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

B. SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*

(1) Annual Rates of Mortality:

	Active Mortality		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

Age	Disablement	Ultimate Termination
25	0.02%	3.00%
30	0.03%	3.00%
40	0.07%	2.50%
50	0.28%	2.00%
55	0.53%	1.50%
60	0.93%	0.25%

(3) Select Rates of Termination:

Years of Service	Select Termination
1	25.0%
2	8.0%
3	5.0%
4	4.0%
5	3.5%

(4) Compensation Progression:

Age	Rate of Annual Increase	Compensation at Normal Retirement as Percentage Of Current Annual Compensation
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

*Sample rates for hazardous position employees are included in the State Police Retirement System valuation.

SECTION III

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

RESULTS OF THE 1993 ACTUARIAL VALUATION

Actuarial Balance Sheet

Table I, which follows, is the actuarial balance sheet of the Kentucky Employees Retirement System as of June 30, 1993. The "actuarial balance sheet" of the retirement system displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the expenses of administration, is shown in Table II. The required contribution is expressed both in dollars and as a percentage of the estimated annual State payroll as of June 30, 1993.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 1993 are described on page K-2. These costs are classified by type of benefit. The Normal Cost contribution rate of the State is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table III.

Accountant's Information

Table IV contains a calculation of the accumulated value of plan benefits as specified under FASB Statement No. 35. Under this calculation, the present value of future benefits payable and attributable to the employee's present accrued benefit is computed. The probabilities of termination, disability, mortality and retirement are the same for this calculation as those used in the regular valuation calculations. However, future increases in earnings and additional benefit accruals are not projected beyond the current valuation date.

Table V contains information needed to comply under GASB Statement No. 5. These calculations reflect the present value of benefits attributable to current years of service, but based on projected salary levels at the time a member's final benefits are determined.

Table VI contains information needed to comply under GASB Statement No. 12. These calculations reflect the liabilities for the medical premium benefit provided under the system.

TABLE I

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

ACTUARIAL BALANCE SHEET-JUNE 30, 1993

ACTUARIAL ASSETS		
Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable)*		$2,592,171,372
Actuarial Present Value of Future Member Contributions		694,646,688
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 603,265,943	
For Unfunded Actuarial Accrued Liability	118,561,539	
Total		$ 721,827,482
Total Actuarial Assets		$4,008,645,542
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$1,005,136,959	
Vested Retirement	19,972,265	
Vested Membership	7,073,687	
Total - Inactive		$1,032,182,911
Active Members:		
Retirement Benefits	$2,487,875,793	
Disability Benefits	141,543,786	
Withdrawal Benefits (Vested and Refund of Contributions)	189,499,405	
Survivor Benefits	150,581,812	
Total - Active		$2,969,500,796
Refunds and Expenses Payable		$ 6,961,835
Total Actuarial Liabilities		$4,008,645,542
ACCRUED BENEFIT LIABILITY **		
Vested Benefits		$1,607,418,414
Non-Vested Benefits		$ 95,574,891

* The approximate market value of assets as of June 30, 1993 is $2,665,952,500 (2,591,588,544 for Non-Hazardous and $74,363,956 for Hazardous).
The actuarial value of assets as of June 30, 1993 is $2,585,209,537.
The Members' Contribution Account as of June 30, 1993 is $508,625,824.

** Present value of accrued benefit deferred to normal retirement date.

TABLE II
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
DETERMINATION OF CONTRIBUTION RATE-JUNE 30, 1993

UNFUNDED ACTUARIAL ACCRUED LIABILITY		PERCENT*
Total Actuarial Accrued Liability	$2,703,771,076	247.06%
Assets at Actuarial Value	2,585,209,537	236.22%
Unfunded Actuarial Accrued Liability	$ 118,561,539	10.84%
Contribution - Payment on Unfunded Actuarial Accrued Liability	$ 6,759,902	.62%
NORMAL COST		
Retirement Benefits	$ 85,358,537	7.80%
Disability Benefits	5,941,763	.54%
Withdrawal Benefits (Vested and Refund of Contributions)	9,883,925	.90%
Survivor Benefits	5,299,649	.48%
Total Normal Cost	$ 106,483,874	9.72%
Less: Employee Contributions	55,582,027	5.08%
Normal Cost - State	$ 50,901,847	4.64%
TOTAL ANNUAL EMPLOYER COST		
Non-Hazardous Duty Cost		
Normal Cost	$ 44,395,030	4.33%**
Payment on Unfunded Actuarial Accrued Liability	6,345,743	62%**
Administrative Expenses	3,900,166	.38%**
Group Hospital and Medical Insurance Premiums	32,111,906	3.13%**
Total Annual Cost	$ 86,752,845	8.46%**
Hazardous Duty Cost		
Normal Cost	$ 6,506,817	9.51%***
Payment on Unfunded Actuarial Accrued Liability	414,159	.60%***
Administrative Expenses	272,331	.40%***
Group Hospital and Medical Insurance Premiums	5,072,627	7.41%***
Total Annual Cost	$ 12,265,934	17.92%***

*Based on estimated annual salaries of $1,094,395,992.
**Based on estimated annual salaries of $1,025,939,484 for Non-Hazardous Position Employees.
***Based on estimated annual salaries of $68,456,508 for Hazardous Position Employees.

NOTE: Determination of contribution rates in this table reflect benefits in effect on the valuation date prior to determination of any increase in retirement allowances as determined under KRS 61.691(1)

TABLE III
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS-JUNE 30, 1993

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	$1,400,609,368	$52,662,956	$1,453,272,324
Disability Benefits	67,793,077	1,354,609	69,147,686
Withdrawal Benefits (Vested and Refund of Contributions)	62,071,870	553,461	62,625,331
Survivor Benefits	84,779,400	1,763,424	86,542,824
Actuarial Accrued Liability - Actives	$1,615,253,715	$56,334,450	$1,671,588,165
Inactive Members			
Retired Members and Beneficiaries	$ 977,408,366	$27,728,593	$1,005,136,959
Vested Retirement	19,643,679	328,586	19,972,265
Vested Membership	6,844,355	229,332	7,073,687
Actuarial Accrued Liability - Inactives	$1,003,896,400	$28,286,511	$1,032,182,911
Total Actuarial Accrued Liability	$2,619,150,115	$84,620,961	$2,703,771,076
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$2,619,150,115	$84,620,961	$2,703,771,076
Less Actuarial Value of Assets	2,508,761,584	76,447,953	2,585,209,537
Unfunded Actuarial Accrued Liability			
• Portion Amortized from 1990	$ 277,246,180	$ (396,395)	$ 276,849,785
• Portion Amortized from 1991	109,330,436	8,978,888	118,309,324
• Portion Amortized from 1992	(218,270,770)	(2,283,251)	(220,554,021)
• Portion Amortized from 1993	(57,917,315)	1,873,766	(56,043,549)
• Total	110,388,531	8,173,008	118,561,539
NORMAL COST			
Retirement Benefits	$ 75,498,468	$ 9,860,069	$ 85,358,537
Disability Benefits	5,592,763	349,000	5,941,763
Withdrawal Benefits (Vested and Refund of Contributions)	9,554,544	329,381	9,883,925
Survivor Benefits	4,797,782	501,867	5,299,649
Total Normal Cost	$ 95,443,557	$11,040,317	$ 106,483,874
Less Employee Contributions	51,048,527	4,533,500	55,582,027
Total Normal Cost - State	$ 44,395,030	$ 6,506,817	$ 50,901,847
ACCRUED BENEFIT LIABILITY*			
Vested Benefits	$1,550,980,417	$56,437,997	$1,607,418,414
Non-Vested Benefits	72,980,371	22,594,520	95,574,891

*Present value of accrued benefit deferred to normal retirement date.

TABLE IV
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1993
INFORMATION REQUIRED UNDER FASB STATEMENT NO. 35

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL PRESENT VALUE OF VESTED ACCUMULATED BENEFITS			
Active Members			
Retirement Benefits	$ 527,241,007	$17,887,421	$ 545,128,428
Disability Benefits	13,996,397	657,986	14,654,383
Withdrawal Benefits (Vested and Refund of Contributions)	67,732,275	1,404,773	69,137,048
Survivor Benefits	0	0	0
Total Active Members	$ 608,969,679	$19,950,180	$ 628,919,859
Inactive Members			
Retired Members and Beneficiaries	$ 977,408,366	$27,728,593	$1,005,136,959
Vested Retirement	19,643,679	328,586	19,972,265
Vested Membership	6,844,355	229,332	7,073,687
Total-Inactive Members	$1,003,896,400	$28,286,511	$1,032,182,911
Total Actuarial Present Value of Vested Accumulated Benefits	$1,612,866,079	$48,236,691	$1,661,102,770
ACTUARIAL PRESENT VALUE OF NON-VESTED ACCUMULATED BENEFITS			
Active Members			
Retirement Benefits	$ 90,250,343	$ 9,680,419	$ 99,930,762
Disability Benefits	38,035,362	1,245,738	39,281,100
Withdrawal Benefits (Vested and Refund of Contributions)	1,373,494	257,255	1,630,749
Survivor Benefits	42,973,361	1,952,772	44,926,133
Total - Active Members	$ 172,632,560	$13,136,184	$ 185,768,744
Inactive Members	$ 0	$ 0	$ 0
Total Actuarial Present Value of Non-Vested Accumulated Benefits	$ 172,632,560	$13,136,184	$ 185,768,744

NOTE: All calculations in this Table IV have been developed as specified under FASB Statement No. 35.

TABLE V
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1993
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 5

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
A. NUMBER OF MEMBERS			
Inactive Members			
Retired Members and Beneficiaries	17,083	279	17,362
Vested Retirements	2,202	34	2,236
Vested Membership	10,849	308	11,157
Total Inactive Members	30,134	621	30,755
Active Members			
Vested Members	29,534	1,804	31,338
Nonvested Members	16,138	1,453	17,591
Total Active Members	45,672	3,257	48,929
Total Members	75,806	3,878	79,684
B. UNFUNDED PENSION BENEFIT OBLIGATION			
Pension Benefit Obligation			
Retirees and Beneficiaries Currently Receiving Benefits and Terminated Members Not Yet Receiving Benefits	$1,003,896,400	$28,286,511	$1,032,182,911
Current Members			
Accumulated Employee Contributions and Credited Interest	466,682,415	18,970,372	485,652,787
Employer Financed - Vested	900,542,606	28,777,932	929,320,538
Employer Financed - Nonvested	33,401,849	5,062,462	38,464,311
Total Pension Benefit Obligation	2,404,523,270	81,097,277	2,485,620,547
Net Assets at Actuarial Value	$2,508,761,584	$76,447,953	$2,585,209,537
Unfunded Pension Benefit Obligation	(104,238,314)	4,649,324	(99,588,990)

NOTE: (1) Pension Benefit Obligation based on Projected Unit Credit Actuarial Cost Method.

(2) Net assets at book value as of June 30, 1993 of $2,251,373,007 ($2,185,895,811 for Non-Hazardous and $65,477,196 for Hazardous).

TABLE VI
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1993
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

		Non-Hazardous Position Employees	Hazardous Position Employees	Total
A. NUMBER OF MEMBERS				
Inactive Members				
Contracts in Force - Retirees and Dependents				
(1) Single; Pre-Medicare	- 100% Paid	1,495	57	1,552
	- 75% Paid	233	9	242
	- 50% Paid	200	7	207
	- 25% Paid	81	11	92
	- 0% Paid	645	1	646
(2) Family; Pre-Medicare	- 100% Paid	384	65	449
	- 75% Paid	32	2	34
	- 50% Paid	24	3	27
	- 25% Paid	9	2	11
	- 0% Paid	9	0	9
(3) Parent Plus; Pre-Medicare	- 100% Paid	12	6	18
	- 75% Paid	3	1	4
	- 50% Paid	0	3	3
	- 25% Paid	1	0	1
	- 0% Paid	33	0	33
(4) Medicare Regular	- 100% Paid	37	1	38
	- 75% Paid	259	2	261
	- 50% Paid	429	6	435
	- 25% Paid	417	2	419
	- 0% Paid	614	0	614
(5) Medicare High Option	- 100% Paid	3,924	92	4,016
	- 75% Paid	1,425	17	1,442
	- 50% Paid	1,328	5	1,333
	- 25% Paid	721	5	726
	- 0% Paid	1,527	0	1,527
Vested Retirements		2,202	34	2,236
Vested Membership		10,849	308	11,157
Active Members		45,672	3,257	48,929
B. UNFUNDED MEDICAL BENEFIT OBLIGATION				
Medical Benefit Obligation				
Retirees and Beneficiaries		$ 270,764,922	$15,178,382	$ 285,943,304
Active Members		829,543,665	62,374,314	891,917,979
Total Medical Benefit Obligation		1,100,308,587	77,552,696	1,177,861,283
Net Assets at Actuarial Value*		$ 63,686,402	$13,987,173	$ 77,673,575
Unfunded Medical Benefit Obligation		1,036,622,185	63,565,523	1,100,187,708

NOTE: Medical Benefit Obligation based on Entry Age Normal Cost Method

*Actuarial value equal to book value for purposes of the Insurance Fund.

SECTION IV
COMMENTS AND CERTIFICATION

Comments

The total Actuarial Accrued Liability has increased from $2,525,190,930 on June 30, 1992 to $2,703,771,076 on June 30, 1993. The Unfunded Actuarial Accrued Liability has decreased from $170,708,609 to $118,561,539. Total actuarial value of assets as of June 30, 1993 was equal to $2,585,209,537.

The Unfunded Actuarial Accrued Liability decreased from 16.02% to 10.84% as a percentage of annual payroll and decreased from 6.8% to 4.4% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 1993.

The change in contribution rate between the 1992 and 1993 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	Hazardous Position Employees
June 30, 1992 Contribution Rate	8.66%	17.86%
Change due to State Contribution Shortfall		
- Retirement Related Benefits	0.04%	0.09%
- Medical Premium Benefits	0.01%	0.03%
Change in Unfunded Actuarial Accrued Liability Payment Percentage Due to Covered Payroll Experience	0.01%	0.02%
Investment Return	(0.21%)	(0.06%)
Salary Increases	(0.14%)	(0.15%)
Decrements Experience*	0.09%	0.13%
Change in Group Hospital and Medical Premium Rate (other than due to State Contribution Shortfall)	0.00%	0.00%
Change in Administrative Expense Rate	0.00%	0.00%
June 30, 1993 Contribution Rate	8.46%	17.92%

*Includes mortality, disability, termination of employment and retirement experience.

Under KRS 61.691(1), any rate margin for nonhazardous members of the Kentucky Employees Retirement System as determined in the valuation prior to the start of a biennium shall be used to determine an increase in retirement allowances for each year of the biennium. 50% of such rate margin shall be available for retirement allowance increases subject to a maximum average increase over any five year period of 5% per year. The development of the retirement allowance increase for the next biennium as determined under KRS 61.691(1) is as follows:

June 30, 1992 Contribution Rate for KERS Nonhazardous	8.66%
June 30, 1993 Contribution Rate for KERS Nonhazardous	8.46%
Rate Margin	0.20%
Amount of Rate Margin Available for Retirement Allowance Increases in 1994 and 1995 per KRS 61.691(1) (50% of Rate Margin)	0.10%
Retirement Allowance Increases for 1994 and 1995 Funded by Available Portion of Rate Margin	1.11% each year
Cost of Retirement Allowance Increase for 1994 and 1995 for this System as Determined Under KRS 61.691(1)	
• Non-Hazardous	0.10%
• Hazardous	0.05%

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees was determined at 5.33%. An additional 3.13% is required to fund medical insurance for retirees, bringing the required contribution up to 8.46%. Finally, an additional 0.10% is required to fund the retirement allowance increases over the next biennium as determined under KRS 61.691(1), bringing the total required contribution to 8.56%. This is less than the current 8.66% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1994 should be decreased from the current 8.66% level to 8.56%, and we so recommend.

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees was determined at 10.51%. An additional 7.41% is required to fund medical insurance for retirees, bringing the required contribution up to 17.92%. Finally, an additional 0.05% is required to fund the retirement allowance increases over the next biennium as determined under KRS 61.691(1), bringing the total required contribution to 17.97%. This exceeds the current 17.86% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1994 should be increased from the current 17.86% level to 17.97%, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 1994 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT RELATED BENEFITS

July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value Of Assets	Increase in Assets
1956	$ 16,200,000	$ 16,200,000	100.0%	$ 0	$ 0
1961	49,201,024	31,670,465	64.4%	17,530,559	4,479,508
1966	127,889,238	72,137,125	56.4%	55,752,113	9,085,814
1971	185,075,453	59,614,477	32.2%	125,460,976*	18,353,116
1975	296,343,758	77,434,549	26.1%	218,909,209*	26,529,526
1976	387,214,910	130,838,120	33.8%	256,376,790*	37,467,581
1977	446,255,236	149,511,331	33.5%	296,743,905*	40,367,115
1978	507,324,915	168,497,917	33.2%	338,826,998*	42,083,093
1979	592,095,113	202,676,662	34.2%	389,418,451*	50,591,453
1980	710,126,703	249,770,835	35.2%	460,355,868*	70,937,417
1981	692,160,395	164,735,129	23.8%	527,425,266	67,069,398
1982	810,250,589	195,803,691	24.2%	614,446,898	87,021,632
1983	862,291,959	152,196,081	17.7%	710,095,878	95,648,980
1984	1,016,088,830	201,535,007	19.8%	814,553,823	104,457,945
1985	1,104,429,988	169,949,215	15.4%	934,480,773	119,926,950
1986	1,245,083,143	166,635,243	13.4%	1,079,353,421	144,872,648
1987	1,384,259,808	120,259,389	8.7%	1,264,000,419	184,646,998
1988	1,561,743,738	135,687,336	8.7%	1,426,056,402	162,055,983
1989	1,734,607,903	145,998,805	8.4%	1,588,609,098	162,552,696
1990	2,055,489,412	256,167,674	12.5%	1,799,321,738	210,712,640
1991	2,288,611,147	375,396.216	16.4%	1,913,214,931	113,893,193
1992**	2,525,190,930	170,708,609	6.8%	2,354,482,321	441,267,390
1993	2,703,771,076	118,561,539	4.4%	2,585,209,537	230,727,216

*Includes capitalized appreciation of investments.

**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - MEDICAL PREMIUM BENEFITS

July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value Of Assets*	Increase In Assets
1990	719,493,806	686,770,874	95.5%	32,722,932	N/A
1991	804,674,050	758,124,715	94.2%	46,549,335	13,826,403
1992	1,001,703,695	939,238,069	93.8%	62,465,626	15,916,291
1993	1,177,861,283	1,100,187,708	93.4%	77,673,575	15,207,949

*Book value

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the Kentucky Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and that adequate provision is being made for the funding of future benefits.

Certified by:

Stephen A. Gagel

Stephen A. Gagel, F.S.A.

November 3, 1993

Date

William M. Mercer, Incorporated
1500 Meidinger Tower
Louisville Galleria
Louisville, Kentucky 40202
(502) 561-4500

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the Kentucky Employees Retirement System in July, 1956. The plan benefits have been improved several times, most recently as of August 1, 1990.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used.

Service

Service means the sum of prior service and current service as defined below:

(a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1956. In some instances prior service credit is granted for time spent in the military.

(b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1956. Current service credit may be granted for military service and educational leaves if special criteria are met.

(c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

Any state department, board, or agency shall participate in the System when directed to do so by the Executive Order of the Governor. Membership in the system consists of:

(a) all persons who become employees of a department after such department first participates,

(b) all persons who are employees on the date a department first participates and who elect within thirty days to become members and make contributions,

(c) all persons who are employees of any credit union whose membership is limited to state government employees,

(d) all persons who were professional staff employees of the Council on Public Higher Education or the Higher Education Assistance Authority and were making contributions to the system on the effective date of their respective Executive Order and filed a written election to continue in the System,

(e) all persons who were professional staff employees of the Kentucky Authority for Educational Television on or after July 1, 1974,

(f) members of the General Assembly and Constitutional officers of the General Assembly serving during the January, 1960 session or thereafter, and

(g) officers and employees of the General Assembly and their assistants if employed by the General Assembly during the January, 1960 session and thereafter, but only after serving during six sessions of the General Assembly.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 1.97% of the member's final compensation multiplied by his service will be payable. For hazardous positions, a monthly benefit equal to 2.49% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Minimum Benefit

The normal retirement benefit for members with 10 or more years of service, at least one of which is current service, shall not be less than $512 per year.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for hazardous members). For non-hazardous position employees with 25 or more years of service credit, additional years of service credit will be added up to a maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a $5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of $10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.49% rather than 1.97%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of $2,500 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (7% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

The board shall increase retirement allowances each year of the biennium by fifty percent (50%) of the rate margin for the nonhazardous members of the Kentucky Employees Retirement System as determined by the board's actuary in the annual actuarial valuation prior to the biennium with a maximum increase of five percent (5%) per year, as averaged over a five (5) year period. The first period for averaging shall be from July 1, 1986, to August 1, 1990. Each year thereafter, the next year shall be added and the first year shall be dropped from the five (5) year averaging period.

THIRTY-FOURTH ANNUAL ACTUARIAL VALUATION

JUNE 30, 1993

COUNTY EMPLOYEES RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the thirty-fourth annual actuarial valuation of the County Employees Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 1993.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions beginning on page C-44. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated on page C-5.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Actuarial cost method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate was increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there is a deterioration in the funded position of the medical premium benefit, in which case the rate levels will be reviewed to redetermine an appropriate current funding level.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation as allocated between Hazardous position and Non-Hazardous position employees.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance premium rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 1989 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 1989 experience study. Actuarial assumptions used for hazardous position employees are similar to actuarial assumptions adopted for the State Police Retirement System. The actuarial assumptions as used in this valuation are described beginning on page C-5.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for the Retirement Fund:

1. Determine the ratio of the market value of Retirement Fund assets to book value as of the current valuation date and the four preceding valuation dates (but not using any valuation dates prior to June 30, 1989). All asset values include accrued investment income and member and employer contribution receivables, and exclude member refunds and investment expenses payable.

2. Determine the average ratio of market to book value as of these valuation dates.

3. Apply this average ratio to the book value (as adjusted for accrued investment income and member and employer contribution receivables, and member refunds and investment expenses payable) as of the current valuation date to derive valuation assets.

For the Insurance Fund, the actuarial value of assets is determined to be the book value of the assets in that fund as of the valuation date adjusted for any receivables and/or payables.

The different asset valuation methods for the Retirement Fund and the Insurance Fund are a result the following:

1. There is separate book and market value information for the Insurance Fund under all systems dating only from July, 1992. So it is not possible to presently use the same averaging method for the Insurance Fund as used for the Retirement Fund.

2. The magnitude of assets to liabilities for the Insurance Fund is such that the method of valuing assets will only negligibly affect current valuation results. Also, given the current method for transitioning into higher medical premium contribution rates over future years, the asset valuation method used for the Insurance Fund is not as critical as the asset valuation method used for the Retirement Fund.

The derivation of valuation assets for the Retirement Fund as of the current valuation date is as follows:

Non-Hazardous

	Book Value *	Market Value *	Ratio
June 30, 1993	1,361,119,578	1,590,519,119	116.85374%
June 30, 1992	1,193,610,120	1,390,358,216	116.48345%
June 30, 1991	1,066,228,951	1,192,427,101	111.83593%
June 30, 1990	966,348,089	1,047,046,500	108.35086%
June 30, 1989	819,025,309	946,572,568	115.57305%
... Average Ratio =			113.81941%
... Valuation Assets = (Average Ratio x Current Book Value)			1,549,218,273

Hazardous

	Book Value *	Market Value *	Ratio
June 30, 1993	402,326,890	464,975,104	115.57147%
June 30, 1992	361,281,420	425,167,270	117.68313%
June 30, 1991	329,998,054	371,042,415	112.43776%
June 30, 1990	303,718,178	325,732,332	107.24822%
June 30, 1989	259,027,326	231,783,066	89.48209%
... Average Ratio =			108.48453%
... Valuation Assets = (Average Ratio x Current Book Value)			436,462,436

* Reflects accrued investment income and member and employer contribution receivables, and member refunds and investment expenses payable; represents Retirement Fund assets exclusive of amounts in the Insurance Fund

Except for Table VI, the actuarial value of assets excludes any amounts in the Insurance Fund. Table VI uses only assets in the Insurance Fund, excluding all other amounts.

COUNTY EMPLOYEES RETIREMENT SYSTEM

ACTUARIAL ASSUMPTIONS

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1) Mortality:

(a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees.

(b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).

(2) Disablement - Graduated rates based on 1989 experience study.

(3) Termination of employment - Graduated select (non-hazardous only) and ultimate rates based on 1989 experience study.

(4) Retirement - Non-Hazardous:

Age	Retirement Rate
55-57	.03
58-59	.04
60-61	.05
62	.25
63-64	.10
65	.50
66-67	.20
68	.25
69	.40
70 and Over	1.00

At age 55-64 in lieu of the age related rate, 20% are assumed to retire as soon as eligible for unreduced benefits.

Hazardous: Assumed that 50% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.

(5) Marital status

(a) Percentage married - 100%.

(b) Age difference - Males are assumed to be 3 years older than their spouses.

(6) Dependent children - For hazardous position employees under duty related death benefits, it is assumed that the employee is survived by 2 dependent children each age 6.

(7) Investment return - 8.00% per year, net of investment related expenses, compounded annually.

(8) Compensation progression - 6.50% per year, compounded annually.

(9) Retiree Medical Insurance - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly premium rates were assumed to be as follows:

	7/1/93	Rate Increase	
Plan Type	Rate	Date	Rate
Single	$158.78*	1/1/95	$174.66**
Family	338.98*	1/1/95	372.88**
Parent Plus	239.54*	1/1/95	263.49**
Medicare	71.85*	1/1/94	79.04**
High Option	110.05*	1/1/94	121.06**

*Actual rates (effective 8/1/93 for pre-Medicare coverage)
**Assumed rates

In determining the medical premium funding rate in 1987, medical premiums were assumed to increase at an annual rate of 12%. In determining the target Entry Age Funding rate in valuations subsequent to 1987, it was assumed that medical premiums would grow at an annual rate of 10%. The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

Reserves in the Insurance Fund were used to offset the liability for premiums.

(10) Missing data

- For those active members with incomplete data, the following assumptions were made:

  . If reported salary was zero or blank, then monthly salary was assumed to be $700

  . If reported age was blank, then assume current age equal to age 18 plus years of service reported

(11) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:

  . Service under all systems is aggregated for purposes of determining benefit eligibility.

  . Future service is projected only under the system in which the member is currently active.

  . The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.

  . The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

  For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

B. SAMPLE RATES FOR NON-HAZARDOUS POSITION EMPLOYEES*

(1) Annual Rates of Mortality:

	Active Mortality		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

(2) Annual Rates of Decrement:

Age	Disablement	Ultimate Termination
25	0.02%	3.00%
30	0.03%	3.00%
40	0.07%	2.50%
50	0.28%	2.00%
55	0.53%	1.50%
60	0.93%	0.25%

(3) Select Rates of Termination:

Years of Service	Select Termination
1	25.0%
2	8.0%
3	5.0%
4	4.0%
5	3.5%

(4) Compensation Progression:

Age	Rate of Annual Increase	Compensation at Normal Retirement as Percentage Of Current Annual Compensation
25	6.50%	1,241.6%
30	6.50%	906.2%
40	6.50%	482.8%
50	6.50%	257.2%
55	6.50%	187.7%
60	6.50%	137.0%

*Sample rates for hazardous position employees are included in the State Police Retirement System valuation.

SECTION III

COUNTY EMPLOYEES RETIREMENT SYSTEM

RESULTS OF THE 1993 ACTUARIAL VALUATION

Actuarial Balance Sheet

Table I, which follows, is the actuarial balance sheet of the County Employees Retirement System as of June 30, 1993. The "actuarial balance sheet" of the retirement system displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Determination of Contribution Rate

The rate of contribution by the participating Agencies required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the annual Normal Cost, medical insurance and the administrative costs of the System is shown in Table II. The required contribution is expressed both in dollars and as a percentage of the estimated payroll of the participating Agencies as of June 30, 1993.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 1993 are described on page C-2. These costs are classified by type of benefit. The Normal Cost contribution rate of the participating Agencies is determined by reducing the total Normal Cost by the expected employee contributions. A breakdown of actuarial liabilities and costs between Hazardous and Non-Hazardous position employees appears in Table III.

Accountant's Information

Table IV contains a calculation of the accumulated value of plan benefits as specified under FASB Statement No. 35. Under this calculation, the present value of future benefits payable and attributable to the employee's present accrued benefit is computed. The probabilities of termination, disability, mortality and retirement are the same for this calculation as those used in the regular valuation calculations. However, future increases in earnings and additional benefit accruals are not projected beyond the current valuation date.

Table V contains information needed to comply under GASB Statement No. 5. These calculations reflect the present value of benefits attributable to current years of service, but based on projected salary levels at the time a member's final benefits are determined.

Table VI contains information needed to comply under GASB Statement No. 12. These calculations reflect the liabilities for the medical premium benefit provided under the system.

TABLE I
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL BALANCE SHEET-JUNE 30, 1993

ACTUARIAL ASSETS

Fund Assets at Actuarial Value (Plus Refunds and Expenses Payable)*		$1,990,152,875
Actuarial Present Value of Future Member Contributions		684,964,897
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 766,453,235	
For Unfunded Actuarial Accrued Liability	94,249,338	
Total		$ 860,702,573
Total Actuarial Assets		$3,535,820,345

ACTUARIAL LIABILITIES

Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 656,629,739	
Vested Retirement	12,070,141	
Vested Membership	6,511,402	
Total - Inactive		$ 675,211,282
Active Members:		
Retirement Benefits	$2,426,265,034	
Disability Benefits	128,314,358	
Withdrawal Benefits (Vested and Refund of Contributions)	171,006,389	
Survivor Benefits	130,551,116	
Total - Active		$2,856,136,897
Refunds and Expenses Payable		$ 4,472,166
Total Actuarial Liabilities		$3,535,820,345

ACCRUED BENEFIT LIABILITY **

Vested Benefits	$1,195,384,478
Non-Vested Benefits	$ 152,452,344

* The approximate market value of assets as of June 30, 1993 is $2,055,494,223 ($1,590,519,119 for Non-Hazardous and $464,975,104 for Hazardous).
The actuarial value of assets as of June 30, 1993 is $1,985,680,709.
The Members' Contribution Account as of June 30, 1993 is $395,243,936.

** Present value of accrued benefit deferred to normal retirement date.

TABLE II

COUNTY EMPLOYEES RETIREMENT SYSTEM

DETERMINATION OF CONTRIBUTION RATE-JUNE 30, 1993

UNFUNDED ACTUARIAL ACCRUED LIABILITY		PERCENT*
Total Actuarial Accrued Liability	$2,079,930,047	193.65%
Assets at Actuarial Value	1,985,680,709	184.88%
Unfunded Actuarial Accrued Liability	$ 94,249,338	8.77%
Contribution - Payment on Unfunded Actuarial Accrued Liability	$ 5,259,804	.49%
NORMAL COST		
Retirement Benefits	$ 100,167,997	9.33%
Disability Benefits	6,263,525	.58%
Withdrawal Benefits (Vested and Refund of Contributions)	10,011,583	.93%
Survivor Benefits	5,701,846	.53%
Total Normal Cost	$ 122,144,951	11.37%
Less: Employee Contributions	56,051,670	5.22%
Normal Cost - State	$ 66,093,281	6.15%
TOTAL ANNUAL EMPLOYER COST		
Non-Hazardous Duty Cost		
Normal Cost	$ 52,589,701	5.73% **
Payment on Unfunded Actuarial Accrued Liability	802,880	.09% **
Administrative Expenses	4,999,215	.54% **
Group Hospital and Medical Insurance Premiums	21,673,725	2.36% **
Total Annual Cost	$ 80,065,521	8.72% **
Hazardous Duty Cost		
Normal Cost	$ 13,503,580	8.67%***
Payment on Unfunded Actuarial Accrued Liability	4,456,924	2.86%***
Administrative Expenses	476,579	.31%***
Group Hospital and Medical Insurance Premiums	9,854,405	6.33%***
Total Annual Cost	$ 28,291,488	18.17%***

*Based on estimated annual salaries of $1,074,056,004.

**Based on estimated annual salaries of $918,378,192 for Non-Hazardous Position Employees.

***Based on estimated annual salaries of $155,677,812 for Hazardous Position Employees.

NOTE: Determination of contribution rates in this table reflect benefits in effect on the valuation date prior to determination of any increase in retirement allowances as determined under KRS 61.691(1)

TABLE III

COUNTY EMPLOYEES RETIREMENT SYSTEM

CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS-JUNE 30, 1993

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	$ 950,836,909	$297,075,644	$1,247,912,553
Disability Benefits	48,189,583	3,641,371	51,830,954
Withdrawal Benefits (Vested and Refund of Contributions)	40,391,601	2,992,534	43,384,135
Survivor Benefits	55,376,432	6,214,691	61,591,123
Actuarial Accrued Liability - Actives	$ 1,094,794,525	$309,924,240	$1,404,718,765
Inactive Members			
Retired Members and Beneficiaries	$ 446,192,478	$210,437,261	$ 656,629,739
Vested Retirement	11,095,105	975,036	12,070,141
Vested Membership	6,287,936	223,466	6,511,402
Actuarial Accrued Liability - Inactives	$ 463,575,519	$211,635,763	$ 675,211,282
Total Actuarial Accrued Liability	$1,558,370,044	$521,560,003	$2,079,930,047
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$1,558,370,044	$521,560,003	$2,079,930,047
Less Actuarial Value of Assets	1,549,218,273	436,462,436	1,985,680,709
Unfunded Actuarial Accrued Liability			
• Portion Amortized from 1990	$ 101,235,214	$ 74,122,298	$ 175,357,512
• Portion Amortized from 1991	64,815,273	31,562,443	96,377,716
• Portion Amortized from 1992	(128,540,346)	(13,295,961)	(141,836,307)
• Portion Amortized from 1993	(28,358,370)	(7,291,213)	(35,649,583)
• Total	9,151,771	85,097,567	94,249,338
NORMAL COST			
Retirement Benefits	$ 78,901,342	$ 21,266,655	$ 100,167,997
Disability Benefits	5,843,218	420,307	6,263,525
Withdrawal Benefits (Vested and Refund of Contributions)	8,567,759	1,443,824	10,011,583
Survivor Benefits	4,865,783	836,063	5,701,846
Total Normal Cost	$ 98,178,102	$ 23,966,849	$ 122,144,951
Less Employee Contributions	45,588,401	10,463,269	56,051,670
Total Normal Cost - State	$ 52,589,701	$ 13,503,580	$ 66,093,281
ACCRUED BENEFIT LIABILITY*			
Vested Benefits	$ 851,666,724	$343,717,754	$1,195,384,478
Non-Vested Benefits	65,274,558	87,177,786	152,452,344

*Present value of accrued benefit deferred to normal retirement date.

TABLE IV
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1993
INFORMATION REQUIRED UNDER FASB STATEMENT NO. 35

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL PRESENT VALUE OF VESTED ACCUMULATED BENEFITS			
Active Members			
Retirement Benefits	$366,793,362	$122,372,886	$ 489,166,248
Disability Benefits	9,467,377	1,484,902	10,952,279
Withdrawal Benefits (Vested and Refund of Contributions)	43,443,540	7,738,203	51,181,743
Survivor Benefits	0	0	0
Total Active Members	$419,704,279	$131,595,991	$ 551,300,270
Inactive Members			
Retired Members and Beneficiaries	$446,192,478	$210,437,261	$ 656,629,739
Vested Retirement	11,095,105	975,036	12,070,141
Vested Membership	6,287,936	223,466	6,511,402
Total-Inactive Members	$463,575,519	$211,635,763	$ 675,211,282
Total Actuarial Present Value of Vested Accumulated Benefits	$883,279,798	$343,231,754	$1,226,511,552
ACTUARIAL PRESENT VALUE OF NON-VESTED ACCUMULATED BENEFITS			
Active Members			
Retirement Benefits	$ 53,543,225	$ 45,022,022	$ 98,565,247
Disability Benefits	31,772,353	2,039,737	33,812,090
Withdrawal Benefits (Vested and Refund of Contributions)	4,951,800	40,291	4,992,091
Survivor Benefits	27,024,647	5,907,827	32,932,474
Total - Active Members	$117,292,025	$ 53,009,877	$ 170,301,902
Inactive Members	$ 0	$ 0	$ 0
Total Actuarial Present Value of Non-Vested Accumulated Benefits	$117,292,025	$ 53,009,877	$ 170,301,902

NOTE: All calculations in this Table IV have been developed as specified under FASB Statement No. 35.

TABLE V
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1993
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 5

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
A. NUMBER OF MEMBERS			
Inactive Members			
Retired Members and Beneficiaries	12,791	1,325	14,116
Vested Retirements	1,833	54	1,887
Vested Membership	12,266	205	12,471
Total Inactive Members	26,890	1,584	28,474
Active Members			
Vested Members	30,895	3,541	34,436
Nonvested Members	27,540	2,054	29,594
Total Active Members	58,435	5,595	64,030
Total Members	85,325	7,179	92,504
B. UNFUNDED PENSION BENEFIT OBLIGATION			
Pension Benefit Obligation			
Retirees and Beneficiaries Currently Receiving Benefits and Terminated Members Not Yet Receiving Benefits	$463,575,519	$211,635,763	$ 675,211,282
Current Members			
Accumulated Employee Contributions and Credited Interest	301,170,877	82,446,282	383,617,159
Employer Financed - Vested	592,280,109	189,196,131	781,476,240
Employer Financed - Nonvested	50,348,982	11,453,136	61,802,118
Total Pension Benefit Obligation	1,407,375,487	494,731,312	1,902,106,799
Net Assets at Actuarial Value	$1,549,218,273	$436,462,436	$1,985,680,709
Unfunded Pension Benefit Obligation	(141,842,786)	58,268,876	(83,573,910)

NOTE: (1) Pension Benefit Obligation based on Projected Unit Credit Actuarial Cost Method.

(2) Net assets at book value as of June 30, 1993 of $1,763,446,468 ($1,361,119,578 for Non-Hazardous and $402,326,890 for Hazardous).

TABLE VI

COUNTY EMPLOYEES RETIREMENT SYSTEM

ACCOUNTANT'S INFORMATION - JUNE 30, 1993

INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

		Non-Hazardous Position Employees	Hazardous Position Employees	Total
A. NUMBER OF MEMBERS				
Inactive Members				
Contracts in Force - Retirees and Dependents				
(1) Single; Pre-Medicare	- 100% Paid	665	233	898
	- 75% Paid	255	22	277
	- 50% Paid	317	12	329
	- 25% Paid	135	3	138
	- 0% Paid	392	0	392
(2) Family; Pre-Medicare	- 100% Paid	227	722	949
	- 75% Paid	41	11	52
	- 50% Paid	60	3	63
	- 25% Paid	27	0	27
	- 0% Paid	6	0	6
(3) Parent Plus; Pre-Medicare	- 100% Paid	9	53	62
	- 75% Paid	3	2	5
	- 50% Paid	3	4	7
	- 25% Paid	3	1	4
	- 0% Paid	46	0	46
(4) Medicare Regular	- 100% Paid	22	1	23
	- 75% Paid	168	3	171
	- 50% Paid	449	3	452
	- 25% Paid	566	2	568
	- 0% Paid	357	0	357
(5) Medicare High Option	- 100% Paid	1,442	134	1,576
	- 75% Paid	806	23	832
	- 50% Paid	1,178	18	1,196
	- 25% Paid	808	7	815
	- 0% Paid	786	2	788
Vested Retirements		1,833	54	1,887
Vested Membership		12,266	205	12,471
Active Members		58,435	5,595	64,030
B. UNFUNDED MEDICAL BENEFIT OBLIGATION				
Medical Benefit Obligation				
Retirees and Beneficiaries		$149,718,760	$ 68,884,685	$ 218,603,445
Active Members		754,914,975	270,739,622	1,025,654,597
Total Medical Benefit Obligation		904,633,735	339,624,307	1,244,258,042
Net Assets at Actuarial Value*		$ 47,845,958	$ 26,407,914	$ 74,253,872
Unfunded Medical Benefit Obligation		856,787,777	313,216,393	1,170,004,170

NOTE: Medical Benefit Obligation based on Entry Age Normal Cost Method

*Actuarial value equal to book value for purposes of the Insurance Fund.

SECTION VII
COMMENTS AND CERTIFICATION

Comments

The total Actuarial Accrued Liability has increased from $1,861,978,403 on June 30, 1992 to $2,079,930,047 on June 30, 1993. The Unfunded Actuarial Accrued Liability decreased from $126,939,495 to $94,249,338. Total actuarial value of assets as of June 30, 1993 was equal to $1,985,680,709.

The Unfunded Actuarial Accrued Liability decreased from 12.77% to 8.77% as a percentage of annual payroll and from 6.8% to 4.5% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 1993.

The change in contribution rate between the 1992 and 1993 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

	Non-Hazardous Position Employees	Hazardous Position Employees
June 30, 1992 Contribution Rate	8.82%	18.49%
Change in Unfunded Actuarial Accrued Liability payment Percentage Due to Covered Payroll Experience	(0.01%)	(0.18%)
Investment Return	(0.15%)	(0.28%)
Salary Increases	(0.08%)	(0.12%)
Decrements Experience*	0.15%	0.26%
Change in Group Hospital and Medical Premium Rate	0.00%	0.00%
Change in Administrative Expense Rate	(0.01%)	0.00%
June 30, 1993 Contribution Rate	8.72%	18.17%

*Includes mortality, disability, termination of employment and retirement experience.

Under KRS 61.691(1), any rate margin for nonhazardous members of the Kentucky Employees Retirement System as determined in the valuation prior to the start of a biennium shall be used to determine an increase in retirement allowances for each year of the biennium. 50% of such rate margin shall be available for retirement allowance increases subject to a maximum average increase over any five year period of 5% per year. The development of the retirement allowance increase for the next biennium as determined under KRS 61.691(1) is as follows:

June 30, 1992 Contribution Rate for KERS Nonhazardous	8.66%
June 30, 1993 Contribution Rate for KERS Nonhazardous	8.46%
Rate Margin	0.20%
Amount of Rate Margin Available for Retirement Allowance Increases in 1994 and 1995 per KRS 61.691(1) (50% of Rate Margin)	0.10%
Retirement Allowance Increases for 1994 and 1995 Funded by Available Portion of Rate Margin	1.11% each year
Cost of Retirement Allowance Increase for 1994 and 1995 for this System as Determined Under KRS 61.691(1)	
• Non-Hazardous	0.05%
• Hazardous	0.15%

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Non-Hazardous position employees is 6.36%. An additional 2.36% is required to fund medical insurance for retirees, bringing the required contribution up to 8.72%. Finally, an additional 0.05% is required to fund the retirement allowance increases over the next biennium as determined under KRS 61.691(1), bringing the total required contribution to 8.77%. This is less than the current 8.82% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1994 should be decreased from the current 8.82% level to 8.77%, and we so recommend.

The annual contribution rate required by the participating Agencies to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses for Hazardous position employees is 11.84%. An additional 6.33% is required to fund medical insurance for retirees, bringing the required contribution up to 18.17%. Finally, an additional 0.15% is required to fund the retirement allowance increase over the next biennium as determined under KRS 61.691(1), bringing the total required contribution to 18.32% This is less than the current 18.49% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1994 be decreased from the current 18.49% level to 18.32%, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 1994 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

COUNTY EMPLOYEES RETIREMENT SYSTEM - RETIREMENT RELATED BENEFITS

July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value Of Assets	Increase in Assets
1960	$ 5,602,131	$ 4,737,680	84.6%	$ 864,451	$ 864,451
1965	12,510,487	6,897,273	55.1%	5,613,214	1,255,742
1971	40,305,948	16,885,927	41.9%	23,420,022*	4,850,170
1975	85,322,085	24,467,454	28.7%	60,854,631*	11,704,780
1976	128,824,236	50,089,614	38.9%	78,734,622*	17,879,991
1977	152,900,347	52,474,756	34.3%	100,425,591*	21,690,969
1978	175,194,867	50,394,913	28.8%	124,799,954*	24,374,363
1979	213,834,377	60,742,472	28.4%	153,091,905*	28,291,951
1980	266,018,621	75,787,680	28.5%	190,230,941*	37,139,036
1981	260,872,162	27,101,917	10.4%	233,770,245	43,539,304
1982	306,087,531	20,552,642	6.7%	285,534,889	51,764,644
1983	340,705,763	0	0.0%	343,155,769	57,620,880
1984	421,336,269	15,148,838	3.6%	406,187,431	63,031,662
1985	463,618,532	0	0.0%	478,043,221	71,855,790
1986	535,948,094	0	0.0%	603,815,800	125,772,579
1987	678,442,760	0	0.0%	727,730,727	123,914,927
1988	829,346,323	0	0.0%	839,578,635	111,848,169
1989	1,113,868,548	35,815,913	3.2%	1,078,052,635	238,473,739
1990	1,432,323,666	162,257,399	11.3%	1,270,066,267	192,013,632
1991	1,654,338,706	258,111,701	15.6%	1,396,227,005	126,160,738
1992**	1,861,978,403	126,939,495	6.8%	1,735,038,908	338,811,903
1993	2,079,930,047	94,249,338	4.5%	1,985,680,709	250,641,801

*Includes capitalized appreciation of investments.
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM - MEDICAL PREMIUM BENEFITS

July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value Of Assets*	Increase In Assets
1990	700,151,838	670,720,901	95.8%	29,430,937	N/A
1991	823,012,809	780,592,065	94.8%	42,420,744	12,989,807
1992	1,041,905,457	984,949,556	94.5%	56,955,901	14,535,157
1993	1,244,258,042	1,170,004,170	94.0%	74,253,872	17,297,971

*Book value

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the County Employees Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and that adequate provision is being made for the funding of future benefits.

Certified by:

Stephen A. Gagel

Stephen A. Gagel, F.S.A.

November 3, 1993

Date

William M. Mercer, Incorporated
1500 Meidinger Tower
Louisville Galleria
Louisville, Kentucky 40202
(502) 561-4500

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the County Employees Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 1990.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used.

Service

Service means the sum of prior service and current service as defined below:

(a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.

(b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.

(c) Employers may elect to purchase up to 6 months additional service credit based on an employee's unused sick leave.

Eligibility

Any county or political subdivision or instrumentality, including school boards or urban county government may participate in the System upon approval by the Board. Membership in the system consists of:

(a) all persons who become employees of a county after such county first participates,

(b) all persons who are employees on the date a county first participates and who elect within thirty days to become members and make contributions.

Membership does not include employees of a county who are members of some other state, county, or local retirement system, supported in whole or in part by public funds.

Normal Retirement Date

A member may elect to retire upon: (1) attaining age 65 for non-hazardous positions, or attaining age 55 for hazardous positions, and (2) having contributed to the System. Upon completion of 27 years of service credit, 15 of which are current service for non-hazardous positions, or completion of 20 years of service credit for hazardous positions, a member may elect to retire with an unreduced benefit.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after: (1) for non-hazardous positions, attainment of age 55 and completion of 60 months of service credit at least 12 of which are current, or at any age after 25 years of service, or (2) for hazardous positions, attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

For non-hazardous positions, upon attainment of age 65 and completion of 48 months of service, of which 12 months are current service, a monthly benefit equal to 2.20% of the member's final compensation multiplied by his service will be payable. For hazardous positions, a monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member, with less than 48 months for non-hazardous positions or 60 months for hazardous positions, who retires on or after the normal retirement date is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a non-hazardous position employee has 27 or more years of service credit, 15 of which are current, or a hazardous position employee has 20 or more years of service credit, an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 65th birthday (55th for members in a hazardous position) up to a maximum of service credited to the last day of paid employment. Except for members with 25 or more (20 or more for hazardous) years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 25 years (20 years for hazardous members). For non-hazardous position employees with 25 or more years of service, additional years of service credit will be added up to maximum combined limit of 30, or actual service if greater. For hazardous position employees with 20 or more years of service credit, actual service will be used.

A member in a hazardous position who is disabled in the line of duty is entitled to a retirement benefit of not less than 25% of the member's final monthly rate of pay plus 10% of his final monthly rate of pay for each dependent child. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable to hazardous employees if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, or after 48 months service if the member is age 65 or over, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member in a hazardous position dies in the line of duty and has a spouse as beneficiary, a $5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member in a hazardous position dies in the line of duty and has a dependent as beneficiary, a lump sum payment of $10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a hazardous duty member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee using 2.50% rather than 2.20%.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of $2,500 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include a life annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 5% of gross compensation (7% for hazardous positions). On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The cost of participation for any beneficiaries or dependents is borne by the retiree (except that dependents of hazardous position employees and legislators will have the same percentage paid by the system as the member). The retirement system will pay a portion of the cost of participation for the retiree based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a hazardous member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a hazardous member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

The board shall increase retirement allowances each year of the biennium by fifty percent (50%) of the rate margin for the nonhazardous members of the Kentucky Employees Retirement System as determined by the board's actuary in the annual actuarial valuation prior to the biennium with a maximum increase of five percent (5%) per year, as averaged over a five (5) year period. The first period for averaging shall be from July 1, 1986, to August 1, 1990. Each year thereafter, the next year shall be added and the first year shall be dropped from the five (5) year averaging period.

THIRTY-FIFTH ANNUAL ACTUARIAL VALUATION

JUNE 30, 1993

STATE POLICE RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the thirty-fifth annual actuarial valuation of the State Police Retirement System are presented in this report. The actuarial valuation was made on the basis of the data provided by the System as of June 30, 1993.

The purpose of the actuarial valuation is to determine the actuarial condition of the Retirement System and the rate of employer contribution for the ensuing fiscal year as required to support the System.

The plan provisions utilized in this valuation are described in the Summary of Principal Plan Provisions beginning on page S-32. The basis of funding is defined in KRS 61.565 and provides that the actuarial valuation method would be uniform for all benefits provided by the System. The Entry Age Normal Actuarial cost method has been used for all benefits. KRS 61.565 provides that each employer participating in the System shall contribute an amount equal to the Normal Cost contribution rate, and an amount sufficient to amortize the Unfunded Actuarial Accrued Liability over 30 years using the level-percentage-of-payroll method. This is the standard used herein to determine whether the funding of the System is adequate.

The actuarial valuation results are based upon the employee census and asset data supplied by the office of the System, and upon the actuarial assumptions as stated on page S-5.

SECTION II

ACTUARIAL CONSIDERATIONS

Description of Actuarial Methods

The actuarial valuation is the means by which the contingent liabilities and contribution rates of a retirement system are evaluated and determined. It provides a guide to the System as to the financing required during years of active service to accumulate the funds needed to provide members' benefits. It also makes it possible to estimate beforehand the cost of proposed changes in the System so that action can be taken in the light of the cost consequences.

The methods of valuation are prescribed by KRS 61.565. The Entry Age Normal Actuarial cost method was used to determine costs of all benefits with the exception of the retiree medical insurance benefit. Under this method the employer's contribution to the retirement system consists of Normal Cost, a payment to fund the Unfunded Actuarial Accrued Liability, medical insurance, and administrative expenses. The Normal Cost represents the contribution (as a level percent of payroll) that completely funds benefits at retirement if made from a person's entry into employment until his retirement. The Actuarial Accrued Liability represents the sum of money and investments that would be held in the fund if the retirement system had been in effect since the date each member was first employed.

The medical insurance contribution rate was originally determined in the 1987 valuation as the level percent of payroll necessary to fund projected medical insurance premiums over the next sixteen years (taking into account the level of reserves in the Insurance Fund). Beginning in 1988, this rate is being increased each year by a percentage amount needed to reach the Entry Age Normal funding rate within a 20 year period measured from 1987. This was continued through the 1992 valuation. In the 1992 valuation, an acceleration of the scheduled increases in the medical insurance contribution rate was recommended where possible. This acceleration in these rates was coupled with a deferral of future increases until the time of the next experience study, unless there is a deterioration in the funded position of the medical premium benefit, in which case the rate levels will be reviewed to redetermine an appropriate current funding level.

The amount of the administrative expense was based on the budgeted amount for the twelve months following the date of the valuation.

Actuarial Assumptions

Since the actuarial valuation involves estimates of benefits payable in the future, it is necessary that assumptions be made as to the interest earnings, rates of mortality, withdrawal, retirement, and disability, and the rate at which salaries will increase. In addition, an assumption must be made relative to increases in medical insurance premium rates in order to value the liability for the medical insurance benefit.

It is desirable that the actuarial assumptions be reviewed periodically to see whether past experience and probable future experience justifies the continued use of these actuarial assumptions. Such a study was performed subsequent to the 1989 actuarial valuation and new actuarial assumptions were adopted by the Board for use in the subsequent actuarial valuations, until such time as another experience study is performed. This valuation reflects assumptions based on the 1989 experience study.

Actuarial Value of Assets

The actuarial value of assets is determined in the following manner for the Retirement Fund:

1. Determine the ratio of the market value of Retirement Fund assets to book value as of the current valuation date and the four preceding valuation dates (but not using any valuation dates prior to June 30, 1989). All asset values include accrued investment income and member and employer contribution receivables, and exclude member refunds and investment expenses payable.

2. Determine the average ratio of market to book value as of these valuation dates.

3. Apply this average ratio to the book value (as adjusted for accrued investment income and member and employer contribution receivables, and member refunds and investment expenses payable) as of the current valuation date to derive valuation assets.

For the Insurance Fund, the actuarial value of assets is determined to be the book value of the assets in that fund as of the valuation date adjusted for any receivables and/or payables.

The different asset valuation methods for the Retirement Fund and the Insurance Fund are a result the following:

1. There is separate book and market value information for the Insurance Fund under all systems dating only from July, 1992. So it is not possible to presently use the same averaging method for the Insurance Fund as used for the Retirement Fund.

2. The magnitude of assets to liabilities for the Insurance Fund is such that the method of valuing assets will only negligibly affect current valuation results. Also, given the current method for transitioning into higher medical premium contribution rates over future years, the asset valuation method used for the Insurance Fund is not as critical as the asset valuation method used for the Retirement Fund.

The derivation of valuation assets for the Retirement Fund as of the current valuation date is as follows:

	Book Value *	Market Value *	Ratio
June 30, 1993	169,070,558	202,753,319	119.92231%
June 30, 1992	158,977,890	198,369,414	124.77799%
June 30, 1991	150,818,074	178,297,082	118.21997%
June 30, 1990	145,025,551	165,133,597	113.86517%
June 30, 1989	131,350,553	151,884,326	115.63280%

... Average Ratio = 118.48365%

... Valuation Assets = 200,320,968
(Average Ratio x Current Book Value)

* Reflects accrued investment income and member and employer contribution receivables, and member refunds and investment expenses payable; represents Retirement Fund assets exclusive of amounts in the Insurance Fund

Except for Table V, the actuarial value of assets excludes any amounts in the Insurance Fund. Table V uses only assets in the Insurance Fund, excluding all other amounts.

STATE POLICE RETIREMENT SYSTEM

ACTUARIAL ASSUMPTIONS

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1) Mortality:

(a) Active & retired lives - 1983 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year.

(b) Disabled lives - Social Security Administration Disability Mortality Rates - Actuarial Study No. 75 (current rates used by PBGC for disabled lives receiving Social Security).

(2) Disablement - Graduated rates based on 1989 experience study.

(3) Termination of employment - Graduated rates based on 1989 experience study.

(4) Retirement - 50% will retire as soon as eligible for unreduced benefits and balance will continue to age 55.

(5) Marital status

(a) Percentage married - 100%.

(b) Age difference - Males are assumed to be 3 years older than their spouses.

(6) Dependent children - For duty related death benefits, it is assumed that the employee is survived by 2 dependent children, each age 6.

(7) Investment return - 8.00% per year, net of investment related expenses, compounded annually.

(8) Compensation progression - 6.50% per year, compounded annually.

(9) Retiree Medical Insurance - It was assumed that future retirees would select medical coverage in the same proportion that current retirees have selected coverage. Monthly premium rates were assumed to be as follows:

Plan Type	7/1/93 Rate	Rate Increase Date	Rate Increase Rate
Single	$158.78*	1/1/95	$174.66**
Family	338.98*	1/1/95	372.88**
Parent Plus	239.54*	1/1/95	263.49**
Medicare	71.85*	1/1/94	79.04**
High Option	110.05*	1/1/94	121.06**

*Actual rates (effective 8/1/93 for pre-Medicare coverage)
**Assumed rates

In determining the medical premium funding rate in 1987, medical premiums were assumed to increase at an annual rate of 12%. In determining the target Entry Age Funding rate in valuations subsequent to 1987, it was assumed that medical premiums would grow at an annual rate of 10%. The assumed rate of growth in number of retirees receiving medical insurance was based on assumed retirement and mortality patterns used throughout the valuation.

Reserves in the Insurance Fund were used to offset the liability for premiums.

(10) Missing data - For those active members with incomplete data, the following assumptions were made:

- If reported salary was zero or blank, then monthly salary was assumed to be $1,713

- If reported age was blank, then assume current age equal to age 18 plus years of service reported

(11) Members with Multiple Service Records

- For active members with service in more than one system, the liability has been valued as follows:

  - Service under all systems is aggregated for purposes of determining benefit eligibility.

  - Future service is projected only under the system in which the member is currently active.

  - The actual benefit under each system is determined based only on service (past and projected future service, if applicable) under that system.

  - The liability is determined under each system based on the actuarial assumptions used for the system in which the member is currently active. This liability is then included in the valuation of the system in which the service has been earned (or is projected to be earned).

  For inactive members with service in more than one system, the benefit attributable to the service under each system is determined, and the liability for that benefit is then included in the valuation of the system in which the service was earned.

B. SAMPLE RATES

(1) Annual Rates of Mortality:

	Active Mortality*		Disabled Mortality	
Age	Males	Females	Males	Females
25	0.05%	0.03%	4.83%	2.63%
30	0.06%	0.03%	3.62%	2.37%
40	0.12%	0.07%	2.82%	2.09%
50	0.40%	0.16%	3.83%	2.57%
55	0.61%	0.25%	4.82%	2.95%
60	0.92%	0.42%	6.03%	3.31%

*Plus 0.05% duty death rate prior to retirement.

(2) Annual Rates of Decrement:

Age	Disablement	Ultimate Termination
25	0.03%	3.04%
30	0.03%	3.38%
40	0.09%	1.50%
50	0.35%	0.00%
55	0.66%	0.00%
60	1.16%	0.00%

(3) Compensation Progression:

Age	Rate of Annual Increase	Compensation at Normal Retirement as Percentage Of Current Annual Compensation
25	6.50%	661.4%
30	6.50%	482.8%
40	6.50%	257.2%
50	6.50%	137.0%

SECTION III

STATE POLICE RETIREMENT SYSTEM

RESULTS OF THE 1993 ACTUARIAL VALUATION

Actuarial Balance Sheet

Table I, which follows, is the actuarial balance sheet of the State Police Retirement System as of June 30, 1993. The "actuarial balance sheet" of the retirement system displays the fundamental relationship between actual assets, future contributions, and future benefits. The asset side of the balance sheet is comprised of actual fund assets plus the actuarial present value of future contributions on behalf of current members. The actuarial present values of all projected benefit payments to present active and inactive members make up the balance sheet liabilities.

Determination of Contribution Rate

The rate of contribution by the State required to provide 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, the employer share of the Normal Cost, medical insurance and the administrative costs of the System is shown in Table II. The required contribution is expressed both in dollars and as a percentage of the estimated annual covered payroll as of June 30, 1993.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 1993 are described on page S-2. These costs are classified by type of benefit. The Normal Cost contribution rate of the State is determined by reducing the total Normal Cost by the expected employee contributions.

Accountant's Information

Table III contains a calculation of the accumulated value of plan benefits as specified under FASB Statement No. 35. Under this calculation, the present value of future benefits payable and attributable to the employee's present accrued benefit is computed. The probabilities of termination, disability, mortality and retirement are the same for this calculation as those used in the regular valuation calculations. However, future increases in earnings and additional benefit accruals are not projected beyond the current valuation date.

Table IV contains information needed to comply under GASB Statement No. 5. These calculations reflect the present value of benefits attributable to current years of service, but based on projected salary levels at the time a member's final benefits are determined.

Table V contains information needed to comply under GASB Statement No. 12. These calculations reflect the liabilities for the medical premium benefit provided under the system.

TABLE I

STATE POLICE RETIREMENT SYSTEM

ACTUARIAL BALANCE SHEET-JUNE 30, 1993

ACTUARIAL ASSETS

Fund Assets at Actuarial Value (Plus Refunds and and Expenses Payable)*		$ 200,739,825
Actuarial Present Value of Future Member Contributions		20,144,280
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$23,946,172	
For Unfunded Actuarial Accrued Liability	(8,667,374)	
Total		$ 15,278,798
Total Actuarial Assets		$ 236,162,903

ACTUARIAL LIABILITIES

Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 95,523,070	
Vested Retirement	220,859	
Vested Membership	57,404	
Total - Inactive		$ 95,801,333
Active Members:		
Retirement Benefits	$130,261,130	
Disability Benefits	1,901,845	
Withdrawal Benefits (Vested and Refund of Contributions)	3,819,533	
Survivor Benefits	3,960,205	
Total - Active		$ 139,942,713
Refunds and Expenses Payable and Payables to other Systems		$ 418,857
Total Actuarial Liabilities		$ 236,162,903

ACCRUED BENEFIT LIABILITY **

Vested Benefits	$ 138,282,956
Non-Vested Benefits	$ 27,491,244

* The approximate market value of assets as of June 30, 1993 is $202,753,319.
The actuarial value of assets as of June 30, 1993 is $200,320,968.
The Members' Contribution Account as of June 30, 1993 is $27,264,582.

** Present value of accrued benefit deferred to normal retirement date.

TABLE II
STATE POLICE RETIREMENT SYSTEM
DETERMINATION OF CONTRIBUTION RATE-JUNE 30, 1993

		PERCENT*
ACTUARIAL ACCRUED LIABILITY		
Active Members		
Retirement Benefits	$ 92,021,038	300.72%
Disability Benefits	1,133,961	3.71%
Withdrawal Benefits (Vested and Refund of Contributions)	466,193	1.52%
Survivor Benefits	2,231,069	7.29%
Actuarial Accrued Liability - Active	$ 95,852,261	313.24%
Inactive Members		
Retired Members and Beneficiaries	$ 95,523,070	312.16%
Vested Retirement	220,859	.72%
Vested Membership	57,404	.19%
Actuarial Accrued Liability - Inactives	$ 95,801,333	313.07%
Total Actuarial Accrued Liability	191,653,594	626.31%
UNFUNDED ACTUARIAL ACCRUED LIABILITY		
Total Actuarial Accrued Liability	$191,653,594	626.31%
Assets at Actuarial Value	200,320,968	654.63%
Unfunded Actuarial Accrued Liability		
• Portion Amortized from 1990	$ 9,707,253	$31.72%
• Portion Amortized from 1991	10,505,408	34.33%
• Portion Amortized from 1992	(25,173,599)	(82.26%)
• Portion Amortized from 1993	(3,706,436)	(12.11%)
• Total	(8,667,374)	(28.32%)
Contribution - Payment on Unfunded Actuarial Accrued Liability	$ (392,064)	(1.28%)
NORMAL COST		
Retirement Benefits	$ 4,049,358	13.23%
Disability Benefits	83,231	.27%
Withdrawal Benefits (Vested and Refund of Contributions)	366,270	1.20%
Survivor Benefits	188,119	.62%
Total Normal Cost	$ 4,686,978	15.32%
Less: Employee Contributions	2,137,595	6.99%
Normal Cost - State Police	$ 2,549,383	8.33%

TOTAL ANNUAL EMPLOYER COST - STATE POLICE

Normal Cost	$ 2,549,383	8.33%
Payment of Unfunded Actuarial Accrued Liability	(392,064)	(1.28%)
Administrative Expenses	77,809	.25%
Group Hospital and Medical Insurance Premiums	4,326,937	14.14%
Total Annual Cost	$ 6,562,065	21.44%

*Based on estimated annual salaries of $30,600,684.

NOTE: Determination of contribution rates in this table reflect benefits in effect on the valuation date prior to determination of any increase in retirement allowances as determined under KRS 61.691(1)

TABLE III
STATE POLICE RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1993
INFORMATION REQUIRED UNDER FASB STATEMENT NO. 35

ACTUARIAL PRESENT VALUE OF VESTED ACCUMULATED BENEFITS	
Active Members	
Retirement Benefits	$ 39,099,934
Disability Benefits	533,163
Withdrawal Benefits (Vested and Refund of Contributions)	2,219,831
Survivor Benefits	0
Total Active Members	$ 41,852,928
Inactive Members	
Retired Members and Beneficiaries	$ 95,523,070
Vested Retirement	220,859
Vested Membership	57,404
Total-Inactive Members	$ 95,801,333
Total Actuarial Present Value of Vested Accumulated Benefits	$137,654,261
ACTUARIAL PRESENT VALUE OF NON-VESTED ACCUMULATED BENEFITS	
Active Members	
Retirement Benefits	$ 13,494,279
Disability Benefits	472,139
Withdrawal Benefits (Vested and Refund of Contributions)	(176,369)
Survivor Benefits	1,933,997
Total - Active Members	$ 15,724,046
Inactive Members	$ 0
Total Actuarial Present Value of Non-Vested Accumulated Benefits	$ 15,724,046

NOTE: All calculations in this Table III have been developed as specified under FASB Statement No. 35.

TABLE IV

STATE POLICE RETIREMENT SYSTEM

ACCOUNTANT'S INFORMATION - JUNE 30, 1993

INFORMATION REQUIRED UNDER GASB STATEMENT NO. 5

A. NUMBER OF MEMBERS	
Inactive Members	
Retired Members and Beneficiaries	502
Vested Retirements	16
Vested Membership	94
Total Inactive Members	612
Active Members	
Vested Members	740
Nonvested Members	217
Total Active Members	957
Total Members	1,569
B. UNFUNDED PENSION BENEFIT OBLIGATION	
Pension Benefit Obligation	
Retirees and Beneficiaries Currently Receiving Benefits and Terminated Members Not Yet Receiving Benefits	$ 95,801,333
Current members	
Accumulated Employee Contributions and Credited Interest	27,096,473
Employer Financed - Vested	60,108,393
Employer Financed - Nonvested	1,219,150
Total Pension Benefit Obligation	184,225,349
Net Assets at Actuarial Value	$200,320,968
Unfunded Pension Benefit Obligation	(16,095,619)

NOTE: (1) Pension Benefit Obligation based on Projected Unit Credit Actuarial Cost Method

(2) Net assets at book value as of June 30, 1993 of $169,070,558.

TABLE V
STATE POLICE RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1993
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

A. NUMBER OF MEMBERS

Inactive Members

Contracts in Force - Retirees and Dependents

(1) Single; Pre-Medicare	- 100% Paid	103
	- 75% Paid	1
	- 50% Paid	3
	- 25% Paid	0
	- 0% Paid	0
(2) Family; Pre-Medicare	- 100% Paid	235
	- 75% Paid	3
	- 50% Paid	0
	- 25% Paid	1
	- 0% Paid	0
(3) Parent +	- 100% Paid	16
	- 75% Paid	0
	- 50% Paid	0
	- 25% Paid	0
	- 0% Paid	0
(4) Medicare Regular	- 100% Paid	0
	- 75% Paid	0
	- 50% Paid	1
	- 25% Paid	0
	- 0% Paid	0
(5) Medicare High Option	- 100% Paid	120
	- 75% Paid	3
	- 50% Paid	2
	- 25% Paid	1
	- 0% Paid	1
Vested Retirements		16
Vested Membership		94
Active Members		957

B. UNFUNDED MEDICAL BENEFIT OBLIGATION

Medical Benefit Obligation	
Retirees and Beneficiaries	$ 30,125,193
Active Members	65,164,906
Total Medical Benefit Obligation	95,290,099
Net Assets at Actuarial Value*	$ 14,285,479
Unfunded Medical Benefit Obligation	81,004,620

NOTE: Medical Benefit Obligation based on Entry Age Normal Actuarial Cost Method

*Actuarial value equal to book value for purposes of the Insurance Fund.

SECTION IV
COMMENTS AND CERTIFICATION

Comments

The total Actuarial Accrued Liability increased from $182,996,056 on June 30, 1992 to $191,653,594 on June 30, 1993. The Unfunded Actuarial Accrued Liability remains at $0. Total actuarial value of assets as of June 30, 1993 was equal to $200,320,968.

The Unfunded Actuarial Accrued Liability remained at 0.00% as a percentage of annual payroll and 0.0% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 1993.

The change in contribution rate between the 1992 and 1993 valuations is a function of actual plan experience since the last valuation. A formal gain and loss analysis would identify the portion of the contribution rate change attributable to each element of plan experience and benefit change. However, undertaking such an analysis would be extremely time consuming and expensive. In lieu of the formal analysis, we have estimated the impact of the various components of gain and loss based on changes in statistical averages of each group. The following table shows the results of this computation:

June 30, 1992 Contribution Rate	21.84%
Change due to State Contribution Shortfall	
- Retirement Related Benefits	0.08%
- Medical Premium Benefits	0.03%
Change in Unfunded Actuarial Accrued Liability Payment Percentage Due to Covered Payroll Experience	(0.06%)
Investment Return	(0.37%)
Salary Increases	(0.66%)
Other Decrements*	0.60%
Change in Group Hospital and Medical Premium Rate (other than due to State Contribution Shortfall)	0.00%
Change in Administrative Expense Rate	(0.02%)
June 30, 1993 Contribution Rate	21.44%

*Includes mortality, disability, termination of employment and retirement experience.

Under KRS 61.691(1), any rate margin for nonhazardous members of the Kentucky Employees Retirement System as determined in the valuation prior to the start of a biennium shall be used to determine an increase in retirement allowances for each year of the biennium. 50% of such rate margin shall be available for retirement allowance increases subject to a maximum average increase over any five year period of 5% per year. The development of the retirement allowance increase for the next biennium as determined under KRS 61.691(1) is as follows:

June 30, 1992 Contribution Rate for KERS Nonhazardous	8.66%
June 30, 1993 Contribution Rate for KERS Nonhazardous	8.46%
Rate Margin	0.20%
Amount of Rate Margin Available for Retirement Allowance Increases in 1994 and 1995 per KRS 61.691(1) (50% of Rate Margin)	0.10%
Retirement Allowance Increases for 1994 and 1995 Funded by Available Portion of Rate Margin	1.11% each year
Cost of Retirement Allowance Increase for 1994 and 1995 for this System as Determined Under KRS 61.691(1)	0.34%

The annual State contribution rate required to provide the Normal Cost, 30 year amortization of the Unfunded Actuarial Accrued Liability under the level-percentage-of-payroll method, and pay administrative expenses is 7.30%. An additional 14.14% is required to fund medical insurance for retirees, bringing the required contribution up to 21.44%. Finally, an additional 0.34% is required to fund the retirement allowance increases over the next biennium as determined under KRS 61.691(1), bringing the total required contribution to 21.78%. This is less than the current 21.84% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1994 should be decreased from the current 21.84% level to 21.78%, and we so recommend.

The recommended contribution rates are based on current statutory benefits. The budgeted contribution rates will again be reviewed in the June 30, 1994 valuation.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to retirement related benefits at selected intervals since the inception of the System.

STATE POLICE RETIREMENT SYSTEM - RETIREMENT RELATED BENEFITS

July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value Of Assets	Increase in Assets
1958	$ 1,450,000	$ 1,450,000	100.0%	$ 0	$ 0
1963	4,553,258	2,008,476	44.1%	2,544,782	619,167
1968	9,079,139	3,288,103	36.2%	5,791,036	789,709
1971	11,828,727	2,441,888	20.6%	9,386,839*	1,339,726
1974	17,737,434	3,179,448	17.9%	14,557,986*	1,935,105
1975	23,182,081	6,169,445	26.6%	17,012,636*	2,454,650
1976	28,693,129	8,231,367	28.7%	20,461,762*	3,449,126
1977	34,561,413	10,436,161	30.2%	24,125,252*	3,663,490
1978	49,950,102	21,440,957	42.9%	28,509,145*	4,383,893
1979	55,391,206	21,487,985	38.8%	33,903,221*	5,394,076
1980	67,580,562	26,663,397	39.5%	40,917,165*	7,013,944
1981	71,526,728	23,296,425	32.6%	48,230,303	7,313,138
1982	78,713,172	21,383,042	27.2%	57,330,130	9,099,827
1983	81,944,546	16,187,460	19.8%	65,757,086	8,426,956
1984	91,180,668	16,200,151	17.8%	74,980,517	9,223,431
1985	99,269,825	14,253,583	14.4%	85,016,242	10,035,725
1986	105,559,951	8,892,252	8.4%	96,667,699	11,651,457
1987	111,541,989	1,347,385	1.2%	110,194,604	13,526,905
1988	120,128,367	0	0.0%	120,998,549	10,803,945
1989	134,550,773	3,200,220	2.4%	131,350,553	10,352,004
1990	154,007,622	8,982,071	5.8%	145,025,551	13,674,998
1991	170,009,955	19,191,881	11.3%	150,818,074	5,792,523
1992**	182,996,056	0	0.0%	187,791,011	36,972,937
1993	191,653,594	0	0.0%	200,320,968	12,529,957

*Includes capitalized appreciation of investments.
**Change in asset valuation method effective in this valuation from book value to a five year average of market to book values.

The following table shows the total Actuarial Accrued Liability, the Unfunded Actuarial Accrued Liability, percent unfunded and the growth of the invested assets relative to medical premium benefits since 1990.

STATE POLICE RETIREMENT SYSTEM - MEDICAL PREMIUM BENEFITS

July 1 of Year Shown	Total Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Percent Unfunded	Actuarial Value Of Assets*	Increase In Assets
1990	64,784,801	58,268,284	89.9%	6,516,517	N/A
1991	74,163,248	65,231,704	88.0%	8,931,544	2,415,027
1992	88,407,634	76,689,678	86.7%	11,717,956	2,786,412
1993	95,290,099	81,004,620	85.0%	14,285,479	2,567,523

*Book value

Certification

On the basis of the actuarial assumptions given and the data furnished by the General Manager of the State Police Retirement System, it is certified that the actuarial valuation has been made by the use of accepted actuarial principles and that adequate provision is being made for the funding of future benefits.

Certified by:

Stephen A. Gagel

Stephen A. Gagel, F.S.A.

November 3, 1993

Date

William M. Mercer, Incorporated
1500 Meidinger Tower
Louisville Galleria
Louisville, Kentucky 40202
(502) 561-4500

SECTION VI

SUMMARY OF PRINCIPAL PLAN PROVISIONS

Effective Date

The state of Kentucky established the State Police Retirement System in July, 1958. The plan benefits have been improved several times, most recently as of August 1, 1991.

Plan Year

A plan year is a twelve month period beginning on July 1.

Final Compensation

Final compensation is the average salary during the five highest paid fiscal years. If the months of service credit during the highest five year period is less than forty-eight, one or more additional fiscal years shall be used.

Service

Service means the sum of prior service and current service as defined below:

(a) Prior service is credited for regular full-time employment of at least 100 hours of work per month with a participating agency before July 1, 1958. In some instances prior service credit is granted for time spent in the military.

(b) Current service is obtained for regular full-time employment which averages at least 100 hours of work per month with participating agencies after July 1, 1958. Current service credit may be granted for military service and educational leaves if special criteria are met.

(c) Service is increased by unused sick leave, up to a maximum of six months, for purposes of computing eligibility and the amount of benefits.

Eligibility

The Bureau of State Police shall participate in the System. Membership in the system consists of:

(a) all regular full-time officers of the Kentucky State Police who are entitled to exercise the powers of police officers,

(b) no person who is age 31 or over shall be eligible to become an employee of the Kentucky State Police.

Normal Retirement Date

A member may elect to retire upon attaining age 55 and having contributed to the System. Upon completion of 20 years of service credit, 15 of which are current service, a member may declare the normal retirement date to be some date prior to age 55.

Early Retirement Date

A member may elect to retire before the normal retirement date at any time after attainment of age 50 and completion of 15 years of service credit.

Normal Retirement Benefits

A monthly benefit equal to 2.50% of the member's final compensation multiplied by his service will be payable upon attainment of age 55 and completion of 60 months of service of which 12 months are current service. A member who retires on or after the normal retirement date with less than 60 months of service is entitled to a retirement allowance which pays the actuarial equivalent of twice the member's accumulated contributions for life.

Early Retirement Benefits

A member who elects early retirement is entitled to a monthly benefit reduced for each month by which the early retirement date precedes the first date on which the member would qualify for an unreduced benefit. If a member has 20 or more years of service credit (15 of which are current), an unreduced benefit is payable.

Disability Benefits

A member with 60 months of service, 12 of which must be current service, is entitled to a retirement allowance computed in the same manner as the normal retirement benefit with service and final compensation determined as of the disability date. Service credit shall be added on to total service for the period from the last day of paid employment to the 55th birthday up to a maximum of service credited to the last day of paid employment. Except for members with 20 or more years of service on the last day of paid employment, the maximum combined service credit (total service and added service) shall not exceed 20 years. For members with 20 or more years of service credit, actual service will be used. The retirement benefit shall not be less than 25% of the member's final monthly rate of pay for those disabled in the line of duty. Ten percent of final monthly rate of pay for each dependent child is also payable if disability occurs in line of duty. The maximum dependent child's benefit is 40% of the member's final monthly rate of pay. A partial disability benefit may be payable if the disability is not total and permanent. The disability will be reduced to a rate determined by the Board.

Death Benefits

If a member dies prior to retirement, but after 60 months of service, 12 of which are current and who is a contributing member, or after 12 years of service, one of which is current and who is not a contributing member, a benefit will be payable to the beneficiary based on the member's age, years of service and final compensation at the date of death. The benefit will be equal to the amount payable had the employee retired and elected a joint and 100% survivorship payment form.

If a member dies in the line of duty and has a spouse as beneficiary, a $5,000 lump sum payment will be made and a benefit of 25% of the member's final monthly rate of pay will be payable until death or remarriage. If the member dies in the line of duty and has a dependent as beneficiary, a lump sum payment of $10,000 will be made. Monthly payments shall be made for each dependent child equal to 10% of the member's final monthly rate of pay, but not greater than 40% of the member's final monthly rate of pay. The beneficiary of a member with 5 or more years of service, one of which is current, may elect a death benefit computed in the same manner as a non-hazardous employee under KERS and CERS, using 2.50% rather than the non-hazardous benefit rate.

Upon the death of a retired member, who had a minimum of 48 months of service credit, a death benefit of $2,500 is payable.

Optional Forms of Payment

Joint and survivor annuities which provide a reduced benefit for the life of the member, with the benefit at the same or at a further reduced rate continuing after the member's death until the death of the designated beneficiary may be elected by the member prior to retirement. Other optional forms include an annuity with 10, 15 or 20 years of payments guaranteed and a Social Security adjustment with or without survivor rights.

Contributions

Members contribute 7% of gross compensation until age 55. On each June 30, interest is credited at the rate to be determined by the Board on the accumulated contributions the member had in his account on the previous June 30. Upon termination a member may withdraw the contributions with interest, but will be entitled to no benefit payments.

Medical Insurance

Recipients of a retirement benefit may elect to participate in a voluntary hospital/medical group insurance plan for themselves as well as any beneficiaries or dependents. The retirement system will pay a portion of the cost of participation for the retiree and dependents based on years of service credit as follows:

Less than 4 years	0%
4 - 9 years	25%
10 - 14 years	50%
15 - 19 years	75%
20 or more years	100%

If a member is disabled in the line of duty, the retirement system will pay 100% of the cost of the member, spouse and eligible dependents. If a member is killed in the line of duty, the retirement system will pay 100% of the cost of the beneficiary and eligible dependents as long as they remain eligible for a monthly benefit payment.

Increase in Retirement Allowances

The board shall increase retirement allowances each year of the biennium by fifty percent (50%) of the rate margin for the nonhazardous members of the Kentucky Employees Retirement System as determined by the board's actuary in the annual actuarial valuation prior to the biennium with a maximum increase of five percent (5%) per year, as averaged over a five (5) year period. The first period for averaging shall be from July 1, 1986, to August 1, 1990. Each year thereafter, the next year shall be added and the first year shall be dropped from the five (5) year averaging period.

Investment Section

INVESTMENT SECTION
INTRODUCTION

The Kentucky Employees Retirement System, County Employees Retirement System and State Police Retirement System were created to provide retirement benefits to employees of both state and local government agencies in Kentucky. Charged with the responsibility of investing the assets to attain this goal, the members of the Board of Trustees follow a policy of preserving capital, while seeking means of enhancing revenues and protecting against losses in any particular investment area.

The Board invests the assets of the systems with the goal of paying benefits from investment income and decreasing unfunded liabilities. The Board recognizes its fiduciary duty not only to invest the funds in formal compliance with the Prudent Man Rule, but also to manage the funds in continued recognition of the basic long term nature of the systems. In order to maintain quality while maximizing the long range return, the Board diversifies the investment of the assets among classes of securities. The Board has set these objectives:

> Long-Term: The total assets of the systems should achieve a return measured over two market cycles (estimated to be six to ten years) which exceeds the rate of inflation for the period, as measured by the National Consumer Price Index, by at least 4%.
>
> Short-Term: The returns of the particular asset classes of the managed funds of the systems, measured on a year-to-year basis, should exceed the returns achieved by comparable unmanaged market indices.

In accomplishing these goals, the Board contracts for the services of professional and experienced advisors. The Board also contracts with the firm of William M. Mercer Asset Planning, Inc. to provide services in the allocation of assets, selection of investment managers, and the review of performance of the managers.

In addition to these contracted advisors, the Investment Division manages an Index Equity Fund of selected common stocks. The aim of this fund is to perform as well as or better than the Standard & Poor 500 Stock Index.

Because the hazardous and nonhazardous groups within the systems have specific financial needs, the investment information is presented for each group separately.

WILLIAM M.
MERCER

November 18, 1993

Board of Trustees
Kentucky Retirement Systems
1260 Louisville Road
Perimeter Park West
Frankfort, KY 40601

Members of the Board:

On June 30, 1993, Kentucky Retirement Systems concluded its third fiscal year of experience under the new investment management structure. Total assets of the combined Retirement Systems, excluding the Insurance Fund, increased during the course of the year from $3.7 billion to $4.1 billion at book value. The Insurance Fund's book value grew from $125.6 million to $158.9 million. Once again, the Systems enjoyed strong, double digit investment returns, which more than offset benefit payments.

The stock and bond markets both achieved above-average returns during the fiscal year, as the economy entered a slow recovery and inflation remained under control. Sharply declining interest rates and low short-term yields caused investors to re-deploy cash into stocks, fueling strength in the market. Wide disparities in returns among various stocks and sectors of the market afforded active managers the opportunity to add value over the market averages. The S&P 500 returned 13.6% during the fiscal year, while the median manager in the Mercer Equity Universe gained 17.2%.

The stubbornly slow recovery, an accommodative monetary posture by the Federal Reserve Board, and low inflation allowed interest rates to continue their secular decline. After out-performing stocks during the previous two years, bond returns nearly matched the equity market again. The Lehman Brothers Aggregate Bond Index, a broad-based fixed income market index, earned 11.8%, including both income and the capital appreciation which occurred as interest rates declined.

10 South Wacker Drive
Chicago IL 60606 7485

Telephone 312 902 7500

A Marsh & McLennan Company

The yield curve flattened from the record spread between long and short-term interest rates at the beginning of the fiscal year, as long yields declined more than short-term rates. The yield of the 30-year Treasury bond reached an all-time record low, breaking the psychologically important 6% barrier. Like equity managers, fixed income managers took advantage of the environment and generally added value relative to the broad market averages. The median manager in the Mercer Fixed Income Universe returned 12.2%.

The Retirement Systems' assets earned a rate of return of 12.3% during the fiscal year. The strong returns achieved in the stock and bond portfolios were dampened somewhat by an above-target cash allocation, and sub-par returns in real estate. Real estate appears to be at or near the bottom of one of the worst cycles in history. Depreciation more than offset income in the portfolio, although experience improved toward the end of the fiscal year. While oversupply still impacts certain geographical areas and property types, transaction frequency has improved, and opportunistic buyers are visible in the marketplace.

The Retirement Systems' asset allocation and manager structures remained as they were reconfigured as of April, 1990. As of fiscal year end, the actual allocation of the assets was roughly in line with the targets, as follows:

	Target Asset Allocation	Allocation at Market Value	Allocation at Book Value
Equities	55.0%	61.5%	55.2%
Fixed Income	25.0%	19.5%	21.8%
Real Estate	10.0%	6.4%	8.1%
Cash Equivalents	10.0%	12.6%	14.9%

During the fiscal year, the Insurance Fund earned 11.3%. The primary source of the return difference between the Retirement Systems and the Insurance

Fund was the difference in the targeted allocation to fixed income securities. As of June 30, 1993, the allocation of the Insurance Fund assets, in comparison to its targets, was as follows:

	Target Asset Allocation	Allocation at Market Value	Allocation at Book Value
Equities	27.5%	30.8%	27.5%
Fixed Income	62.5%	57.2%	59.3%
Cash Equivalents	10.0%	12.0%	13.2%

William M. Mercer Asset Planning, Inc. monitors the overall programs' progress toward their goals during each calendar quarter, and evaluates the performance of each manager on at least a quarterly basis. A formal report is presented to the Board each April.

We are very pleased to report that during the past fiscal year, as well as the three-year period since the reconfigured programs' inception, the performance has been satisfactory. We recommend no changes to either the targets or the manager structure at the current time. We are confident that the program will meet the Retirement Systems' and Insurance Fund's goals over the long term.

Respectfully submitted,

WILLIAM M. MERCER ASSET PLANNING, INC.

Barbara L. Brightman

Barbara L. Brightman, CFA
Principal

BLB/sb/KLF

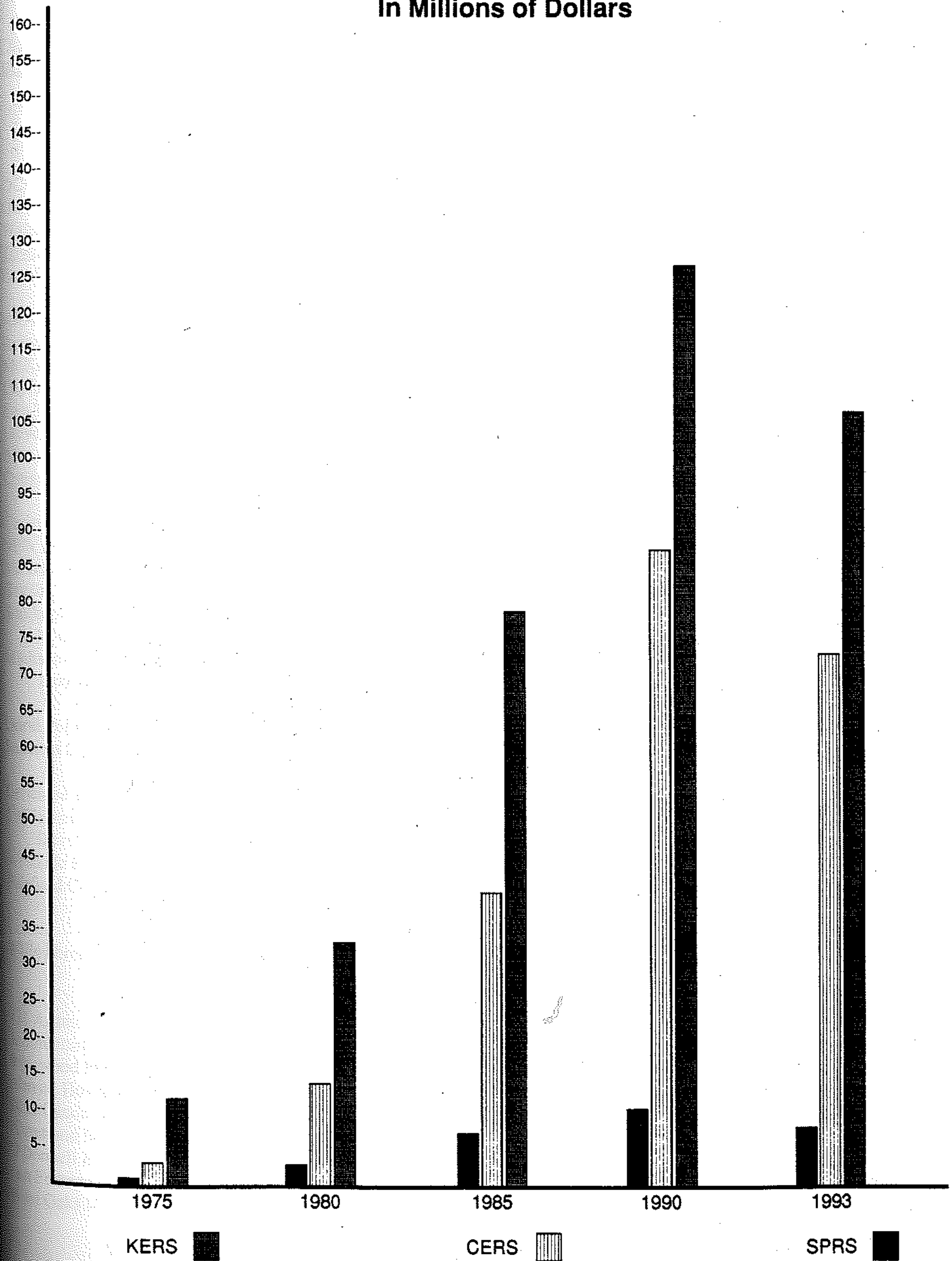
KENTUCKY RETIREMENT SYSTEMS

PERFORMANCE BY CLASS
1988 THROUGH 1993

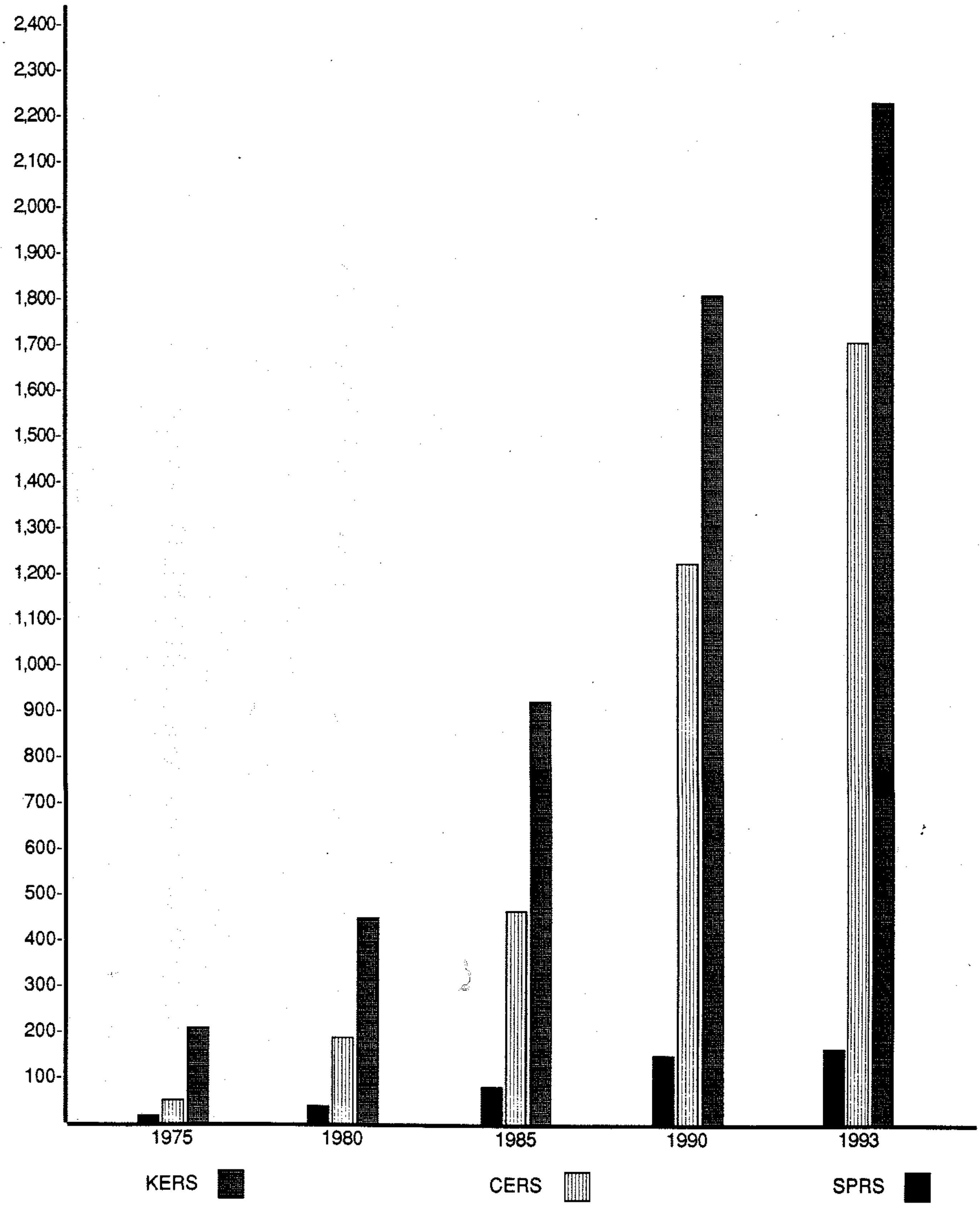
The following chart shows performance by class for the past six fiscal years.

YEAR	STOCKS	BONDS	REAL ESTATE	SHORT TERM	TOTAL PORTFOLIO
1988	-6.848%	8.315%	10.881%	7.366%	1.136%
1989	16.861%	13.001%	9.592%	9.038%	13.148%
1990	17.117%	7.813%	8.053%	9.560%	11.658%
1991	6.451%	11.237%	1.480%	7.813%	8.264%
1992	13.705%	13.982%	-2.592%	5.119%	11.668%
1993	**16.028%**	**12.060%**	**-1.757%**	**3.484%**	**12.252%**

PORTFOLIO INCOME GROWTH
(Interest and Dividends)
6/30/75 through 6/30/93
In Millions of Dollars



PORTFOLIO GROWTH
(At Book Value)
6/30/75 through 6/30/93
In Millions of Dollars



KENTUCKY RETIREMENT SYSTEMS
REAL ESTATE INVESTMENTS

FULLY-OWNED PROPERTIES:

Danville Manor, Danville, KY
Big Sandy Village, Pikeville, KY
Perimeter Park West, Building A, Frankfort, KY
Racquet Club Apartments, Lexington, KY

PROPERTIES PARTICIPATED IN:

Heitman Fund I:

OCP Industrial Properties, Orlando, FL
Oakwood Mall, Enid, OK
Water Tower Place, Chicago, IL
Towne Mall, Elizabethtown, KY
East Ohio Building, Cleveland, OH
One Financial Plaza, Minneapolis, MN
Tri-County Corporate Center, Cincinnati, OH
Villa Marina Center, Marina Del Rey, CA
6400 Shafer Court, Rosemont, IL

Heitman Fund II:

ARA Tower, Philadelphia, PA
Rutherford B. Hayes Building, Crystal City, VA
McKinley Mall, Hamburg, NY
Capitol Bank of Commerce, Sacramento, CA
East Towne Mall, Knoxville, TN
Lloyd Center Mall, Portland, OR
Blue Ash Business Properties, Blue Ash, OH
Congressional Place, Long Beach, CA
MN-TX Business Center, Eden Prairie, MN
St. Louis Centre, St. Louis, MO
MIL-HREF Properties, Milwaukee, WI
Bank of America Plaza, Reno, NV
Old Capitol Center, Iowa City, IO
Midway Mall, Sherman, TX
I-5/Jamboree Business Center, Tustin, CA

Heitman Fund III:

Chester A. Arthur Building, Washington, DC
MIW Properties, MN, MI, IL, IN, WI
Minneapolis Centre, Minneapolis, MN
Griffin Towers, Santa Ana, CA
Southern Louisiana Industrial Properties, Baton Rouge/ New Orleans, LA
Madison Heights Business Park, Madison Heights/ Troy/Novi, MI
Towne Square North/Towne Square Mall/ University Mall/ Owensboro, KY/ Carbondale, IL
One Corporate Plaza, Blue Ash, OH
1818 Market Street, Philadelphia, PA
Columbia Mall, Bloomsburg, PA
Honey Creek Square, Terre Haute, IN
Eastwood Mall, Niles, OH

Heitman Fund V:

Doral Pointe Apartments, Miami, FL
Sarasota Square Mall, Sarasota, FL
Oak View Mall, Omaha, NE

Other Heitman Investments:

Genessee Valley Center, Flint, MI
California Land Venture (Residential Land Development—Various California Counties)
Westside Pavilion, Los Angeles, CA
Fairfield Commons, Dayton, OH
One O'Hare Center, Rosemont, IL
Corporate Plaza, Louisville, KY
Ontario Place, Chicago, IL
University Square Mall, Tampa, FL
Sarasota Square Mall, Sarasota, FL

The Yarmouth Group, Inc.

Willowbrook Mall, Houston, TX
Scottsdale Fashion Square, Scottsdale, AZ

TCW Realty Advisors

921 Ardmore Ave., Itasca, IL
Sammamish Highland Center, Seattle, WA
Inglewood Plaza, Seattle, WA
Merritt, Howard County, MD
7465 Candelwood Road, Howard County, MD
Hammond Ferry Road, Baltimore, MD
O'Donnell Business Park, Kent, WA
San Fernando (retail), San Fernando, CA
West Oaks Mall, Houson, TX
Coral Plaza, Brentwood, CA
Pine Lake Village Center, Seattle, WA
6940 San Tomas, Howard County, MD
Cutter Mill Road, Great Neck, NY
8155 Stayton Drive, Jessup, MD
Imperial Center East-JV, Brea, CA
Loehmann's Plaza-Lakegrove, Lakegrove, NY
Portola Plaza, Mission Viejo, CA
Trabuco Hills Plaza, Mission Viejo, CA

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: JUNE 30, 1993
NONHAZARDOUS STATE EMPLOYEES (KERS)

FIXED INCOME

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$159,626,116.90	$312,300,723.01	$ 99,543,703.22	$326,941,208.73	$898,411,751.86
% of Par Value	18%	35%	11%	36%	100%
Book Value	$163,895,205.47	$335,350,755.19	$ 97,775,453.27	$326,941,208.73	$923,962,622.66
% of Book Value	18%	36%	11%	35%	100%
Market Value	$175,594,061.37	$353,276,196.37	$105,052,370.15	$326,941,208.73	$960,863,836.62
% of Market Value	18%	37%	11%	34%	100%
Potential Gain or Loss	$ 11,698,855.90	$ 17,925,441.18	$ 7,276,916.88	$ 0.00	$ 36,901,213.96
Indicated Annual Income	$ 13,053,400.69	$ 25,393,301.09	$ 8,030,541.60	$ 11,290,200.60	$ 57,767,443.98
Current Yield -- Book Value	7.96	7.57	8.21	3.45	6.25
-- Market Value	7.43	7.19	7.64	3.45	6.01
Yield to Maturity -- Market Value	5.97	5.18	7.27	3.45	4.92
Average Coupon	8.18	8.13	8.07	3.45	6.43
Average Maturity (Years)	7.25	9.36	18.24	.08	6.60

REAL ESTATE

BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$182,232,292.50	$171,135,801.44	-$11,096,491.06	$10,646,733.68	5.84	6.22

COMMON STOCK

NO. OF SHARES	BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
34,756,375	$1,064,150,686.96	$1,459,496,352.88	$395,345,665.92	$37,749,727.49	3.55	2.59

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCT.	MARKET VALUE	PCT.	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 163,895,205.47	8%	$ 175,594,061.37	7%	$ 13,053,400.69	7.96	7.43
Governments	$ 335,350,755.19	15%	$ 353,276,196.37	14%	$ 25,393,301.09	7.57	7.19
Mortgages	$ 97,775,453.27	5%	$ 105,052,370.15	4%	$ 8,030,541.60	8.21	7.64
Short Term	$ 326,941,208.73	15%	$ 326,941,208.73	13%	$ 11,290,200.60	3.45	3.45
Real Estate	$ 182,232,292.50	8%	$ 171,135,801.44	7%	$ 10,646,733.68	5.84	6.22
Common Stock	$1,064,150,686.96	49%	$1,459,496,352.88	55%	$ 37,749,727.49	3.55	2.59
Total Portfolio	$2,170,345,602.12	100%	$2,591,495,990.94	100%	$106,163,905.15	4.89	4.10

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: JUNE 30, 1993
HAZARDOUS STATE EMPLOYEES (KERS-H)

FIXED INCOME

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$2,665,945.00	$3,922,520.89	$1,362,269.54	$11,142,571.74	$19,093,307.17
% of Par Value	14%	21%	7%	58%	100%
Book Value	$2,738,071.04	$4,247,855.37	$1,356,543.31	$11,142,571.74	$19,485,041.46
% of Book Value	14%	22%	7%	57%	100%
Market Value	$2,921,184.33	$4,472,996.97	$1,439,604.88	$11,142,571.74	$19,976,357.92
% of Market Value	15%	22%	7%	56%	100%
Potential Gain or Loss	$ 183,113.29	$ 225,141.60	$ 83,061.57	$ 0.00	$ 491,316.46
Indicated Annual Income	$ 214,348.28	$ 320,617.36	$ 111,110.49	$ 379,533.20	$ 1,025,609.33
Current Yield -- Book Value	7.83	7.55	8.19	3.41	5.26
-- Market Value	7.34	7.17	7.72	3.41	5.13
Yield to Maturity -- Market Value	5.90	5.24	7.26	3.41	4.41
Average Coupon	8.04	8.17	8.16	3.41	5.37
Average Maturity (Years)	6.77	10.00	17.77	.08	4.32

REAL ESTATE

BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$4,709,721.63	$4,519,884.77	-$189,836.86	$267,576.09	5.68	5.92

COMMON STOCK

NO. OF SHARES	BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
1,247,863	$40,081,785.88	$49,828,552.85	$9,746,766.97	$1,283,491.03	3.20	2.58

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCT.	MARKET VALUE	PCT.	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 2,738,071.04	4%	$ 2,921,184.33	4%	$ 214,348.28	7.83	7.34
Governments	$ 4,247,855.37	7%	$ 4,472,996.97	6%	$ 320,617.36	7.55	7.17
Mortgages	$ 1,356,543.31	2%	$ 1,439,604.88	2%	$ 111,110.49	8.19	7.72
Short Term	$11,142,571.74	17%	$11,142,571.74	15%	$ 379,533.20	3.41	3.41
Real Estate	$ 4,709,721.63	7%	$ 4,519,884.77	6%	$ 267,576.09	5.68	5.92
Common Stock	$40,081,785.88	63%	$49,828,552.85	67%	$1,283,491.03	3.20	2.58
Total Portfolio	$64,276,548.97	100%	$74,324,795.54	100%	$2,576,676.45	4.01	3.47

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: JUNE 30, 1993
NONHAZARDOUS COUNTY EMPLOYEES (CERS)

FIXED INCOME

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$51,794,885.75	$ 94,098,454.95	$37,287,813.07	$194,706,406.44	$377,887,560.21
% of Par Value	14%	25%	10%	51%	100%
Book Value	$52,898,864.73	$100,606,328.10	$35,145,228.43	$194,706,406.44	$383,356,827.70
% of Book Value	14%	26%	9%	51%	100%
Market Value	$57,005,319.80	$106,946,623.51	$39,300,723.50	$194,706,406.44	$397,959,073.25
% of Market Value	14%	27%	10%	49%	100%
Potential Gain or Loss	$ 4,106,455.07	$ 6,340,295.41	$ 4,155,495.07	$ 0.00	$ 14,602,245.55
Indicated Annual Income	$ 4,383,835.87	$ 7,774,142.16	$ 3,010,092.30	$ 6,644,618.60	$ 21,812,688.93
Current Yield -- Book Value	8.29	7.73	8.56	3.41	5.69
-- Market Value	7.69	7.27	7.66	3.41	5.48
Yield to Maturity -- Market Value	5.91	5.19	7.20	3.41	4.57
Average Coupon	8.46	8.26	8.07	3.41	5.77
Average Maturity (Years)	5.97	9.00	19.17	.08	4.99

REAL ESTATE

BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$103,761,853.06	$97,616,547.13	-$6,145,305.93	$6,135,240.41	5.91	6.29

COMMON STOCK

NO. OF SHARES	BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
26,472,625	$847,219,594.58	$1,084,112,802.87	$236,893,208.29	$27,928,337.43	3.30	2.58

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCT.	MARKET VALUE	PCT.	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 52,898,864.73	4%	$ 57,005,319.80	4%	$ 4,383,835.87	8.29	7.69
Governments	$ 100,606,328.10	8%	$ 106,946,623.51	7%	$ 7,774,142.16	7.73	7.27
Mortgages	$ 35,145,228.43	3%	$ 39,300,723.50	2%	$ 3,010,092.30	8.56	7.66
Short Term	$ 194,706,406.44	15%	$ 194,706,406.44	12%	$ 6,644,618.60	3.41	3.41
Real Estate	$ 103,761,853.06	8%	$ 97,616,547.13	6%	$ 6,135,240.41	5.91	6.29
Common Stock	$ 847,219,594.58	62%	$1,084,112,802.87	69%	$27,928,337.43	3.30	2.58
Total Portfolio	$1,334,338,275.34	100%	$1,579,688,423.25	100%	$55,876,266.77	4.19	3.54

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: JUNE 30, 1993
HAZARDOUS COUNTY EMPLOYEES (CERS-H)

FIXED INCOME

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$14,632,204.04	$27,495,765.45	$ 9,812,948.68	$55,072,198.89	$107,013,117.06
% of Par Value	14%	26%	9%	51%	100%
Book Value	$14,966,458.84	$29,317,913.76	$ 9,525,213.78	$55,072,198.89	$108,881,785.27
% of Book Value	14%	27%	9%	50%	100%
Market Value	$15,891,004.69	$30,935,535.58	$10,351,898.97	$55,072,198.89	$112,250,638.13
% of Market Value	14%	28%	9%	49%	100%
Potential Gain or Loss	$ 924,545.85	$ 1,617,621.82	$ 826,685.19	$ 0.00	$ 3,368,852.86
Indicated Annual Income	$ 1,174,852.17	$ 2,181,639.61	$ 797,648.48	$ 1,878,347.27	$ 6,032,487.53
Current Yield -- Book Value	7.85	7.44	8.37	3.41	5.54
-- Market Value	7.39	7.05	7.71	3.41	5.37
Yield to Maturity -- Market Value	5.76	5.18	7.12	3.41	4.53
Average Coupon	8.03	7.93	8.13	3.41	5.64
Average Maturity (Years)	6.12	9.45	17.93	.08	4.95

REAL ESTATE

BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$28,705,010.37	$27,243,975.66	-$1,461,034.71	$1,680,375.62	5.85	6.17

COMMON STOCK

NO. OF SHARES	BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
7,291,190	$231,759,607.38	$296,488,469.09	$64,728,861.71	$7,707,245.07	3.33	2.60

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCT.	MARKET VALUE	PCT.	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 14,966,458.84	4%	$ 15,891,004.69	4%	$ 1,174,852.17	7.85	7.39
Governments	$ 29,317,913.76	8%	$ 30,935,535.58	7%	$ 2,181,639.61	7.44	7.05
Mortgages	$ 9,525,213.78	3%	$ 10,351,898.97	2%	$ 797,648.48	8.37	7.71
Short Term	$ 55,072,198.89	15%	$ 55,072,198.89	13%	$ 1,878,347.27	3.41	3.41
Real Estate	$ 28,705,010.37	8%	$ 27,243,975.66	6%	$ 1,680,375.62	5.85	6.17
Common Stock	$231,759,607.38	62%	$296,488,469.09	68%	$ 7,707,245.07	3.33	2.60
Total Portfolio	$369,346,403.02	100%	$435,983,082.88	100%	$15,420,108.22	4.17	3.54

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: JUNE 30, 1993
STATE POLICE (SPRS)

FIXED INCOME

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$12,369,539.17	$24,611,380.70	$8,022,493.15	$24,754,449.35	$69,757,862.37
% of Par Value	18%	35%	12%	35%	100%
Book Value	$12,668,656.04	$26,385,000.89	$7,974,331.95	$24,754,449.35	$71,782,438.23
% of Book Value	18%	37%	11%	34%	100%
Market Value	$13,549,353.17	$27,855,096.70	$8,461,882.62	$24,754,449.35	$74,620,781.84
% of Market Value	18%	37%	12%	33%	100%
Potential Gain or Loss	$ 880,697.13	$ 1,470,095.81	$ 487,550.67	$ 0.00	$ 2,838,343.61
Indicated Annual Income	$ 1,014,234.97	$ 2,020,214.32	$ 642,093.49	$ 855,997.99	$ 4,532,540.77
Current Yield -- Book Value	8.01	7.66	8.05	3.46	6.31
-- Market Value	7.49	7.25	7.59	3.46	6.07
Yield to Maturity -- Market Value	5.87	5.19	7.25	3.46	4.93
Average Coupon	8.20	8.21	8.00	3.46	6.50
Average Maturity (Years)	6.54	9.50	17.82	.08	6.59

REAL ESTATE

BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$14,588,801.51	$13,680,759.90	-$908,041.61	$845,279.62	5.79	6.18

COMMON STOCK

NO. OF SHARES	BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
2,742,617	$81,564,830.12	$114,430,822.67	$32,865,992.55	$2,958,508.22	3.63	2.59

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCT.	MARKET VALUE	PCT.	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 12,668,656.04	8%	$ 13,549,353.17	7%	$1,014,234.97	8.01	7.49
Governments	$ 26,385,000.89	16%	$ 27,855,096.70	14%	$2,020,214.32	7.66	7.25
Mortgages	$ 7,974,331.95	5%	$ 8,461,882.62	4%	$ 642,093.49	8.05	7.59
Short Term	$ 24,754,449.35	15%	$ 24,754,449.35	12%	$ 855,997.99	3.46	3.46
Real Estate	$ 14,588,801.51	9%	$ 13,680,759.90	7%	$ 845,279.62	5.79	6.18
Common Stock	$ 81,564,830.12	47%	$114,430,822.67	56%	$2,958,508.22	3.63	2.59
Total Portfolio	$167,936,069.86	100%	$202,732,364.41	100%	$8,336,328.61	4.96	4.11

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: JUNE 30, 1993
INSURANCE FUND

FIXED INCOME

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$19,436,020.00	$64,350,000.00	$4,577,696.68	$21,042,664.85	$109,406,381.53
% of Par Value	18%	59%	4%	19%	100%
Book Value	$19,998,047.50	$69,676,657.91	$4,562,012.45	$21,042,664.85	$115,279,382.71
% of Book Value	18%	60%	4%	18%	100%
Market Value	$21,630,756.90	$73,599,570.51	$4,811,393.64	$21,042,664.85	$121,084,385.90
% of Market Value	18%	61%	4%	17%	100%
Potential Gain or Loss	$ 1,632,709.40	$ 3,922,912.60	$ 249,381.19	$ 0.00	$ 5,805,003.19
Indicated Annual Income	$ 1,681,666.55	$ 5,181,750.04	$ 395,675.44	$ 768,847.64	$ 8,027,939.67
Current Yield -- Book Value	8.41	7.44	8.67	3.65	6.96
-- Market Value	7.77	7.04	8.22	3.65	6.63
Yield to Maturity -- Market Value	6.31	5.33	8.16	3.65	5.30
Average Coupon	8.65	8.05	8.64	3.65	7.34
Average Maturity (Years)	8.80	11.69	20.42	.08	9.31

COMMON STOCK

NO. OF SHARES	BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
1,294,982	$43,626,860.02	$53,966,483.94	$10,339,623.92	$1,480,998.42	3.39	2.74

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCT.	MARKET VALUE	PCT.	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 19,998,047.50	13%	$ 21,630,756.90	12%	$1,681,666.55	8.41	7.77
Governments	$ 69,676,657.91	44%	$ 73,599,570.51	42%	$5,181,750.04	7.44	7.04
Mortgages	$ 4,562,012.45	3%	$ 4,811,393.64	3%	$ 395,675.44	8.67	8.22
Short Term	$ 21,042,664.85	13%	$ 21,042,664.85	12%	$ 768,847.64	3.65	3.65
Common Stock	$ 43,626,860.02	27%	$ 53,966,483.94	31%	$1,480,998.42	3.39	2.74
Total Portfolio	$158,906,242.73	100%	$175,050,869.84	100%	$9,508,938.09	5.98	5.43

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: JUNE 30, 1993
ALL SYSTEMS COMBINED

FIXED INCOME

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$241,088,690.86	$462,428,845.00	$156,029,227.66	$612,616,835.15	$1,472,163,598.67
% of Par Value	16%	31%	11%	42%	100%
Book Value	$247,167,256.12	$495,907,853.31	$151,776,770.74	$612,616,835.15	$1,507,468,715.32
% of Book Value	16%	33%	10%	41%	100%
Market Value	$264,960,923.36	$523,486,449.13	$164,606,480.12	$612,616,835.15	$1,565,670,687.76
% of Market Value	17%	33%	11%	39%.	100%
Potential Gain or Loss	$ 17,793,667.24	$ 27,578,595.82	$ 12,829,709.38	$ 0.00	$ 58,201,972.44
Indicated Annual Income	$ 19,840,671.98	$ 37,689,914.54	$ 12,591,486.36	$ 21,048,697.66	$ 91,170,770.54
Current Yield -- Book Value	8.03	7.60	8.30	3.44	6.05
-- Market Value	7.49	7.20	7.65	3.44	5.82
Yield to Maturity -- Market Value	5.94	5.19	7.24	3.44	4.80
Average Coupon	8.23	8.15	8.07	3.44	6.19
Average Maturity (Years)	6.87	9.31	18.42	.08	6.03

REAL ESTATE

BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$333,997,679.07	$314,196,968.90	-$19,800,710.17	$19,575,205.42	5.86	6.23

COMMON STOCK

NO. OF SHARES	BOOK VALUE/ COST	MARKET VALUE	POTENTIAL GAIN OR LOSS	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
72,510,670	$2,264,776,504.92	$3,004,357,000.36	$739,580,495.44	$77,627,309.24	3.43	2.58

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCT.	MARKET VALUE	PCT.	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 247,167,256.12	6%	$ 264,960,923.36	5%	$ 19,840,671.98	8.03	7.49
Governments	$ 495,907,853.31	12%	$ 523,486,449.13	11%	$ 37,689,914.54	7.60	7.20
Mortgages	$ 151,776,770.74	4%	$ 164,606,480.12	3%	$ 12,591,486.36	8.30	7.65
Short Term	$ 612,616,835.15	15%	$ 612,616,835.15	13%	$ 21,048,697.66	3.44	3.44
Real Estate	$ 333,997,679.07	8%	$ 314,196,968.90	6%	$ 19,575,205.42	5.86	6.23
Common Stock	$2,264,776,504.92	55%	$3,004,357,000.36	62%	$ 77,627,309.24	3.43	2.58
Total Portfolio	$4,106,242,899.31	100%	$4,884,224,657.02	100%	$188,373,285.20	4.59	3.86

Statistical Section

STATISTICAL SECTION INTRODUCTION

This section presents statistical information about the retirement systems. Some of this information is in the form of graphs which illustrate trends in membership and benefits. Information is presented as of June 30, 1992, though some of the information is inclusive of all activity since the inception of the systems.

RETIREMENT PAYMENTS

Table 1 shows average monthly benefits being paid based on years of service credit. Tables 2, 3 and 4 show the benefits paid by each system under the options selected by the members or beneficiaries. These tables do not include dependent children, reemployed members or members whose payments ceased during the year due the option selected or death.

Members who have accounts in the Kentucky Employees Retirement System, County Employees Retirement System, State Police Retirement System, Kentucky Teachers' Retirement System or Legislators Retirement Plan may have their accounts combined at the time of retirement to determine eligibility for benefits and the salary to be used in calculating those benefits. Each system then pays a benefit based on actual service in the system. For this reason, a member may benefit from even a small amount of service in one of these systems. However, these small payments from a particular system, while part of the member's larger total benefit, tend to distort the statistics presented here.

In addition, the monthly benefits shown include all living retirees or beneficiaries who were drawing a payment from the systems during the year. More than 14,000 recipients are over age 70, and there are hundreds of accounts on which benefits have been paid for more than 20 years. Since benefit factors and salaries were lower years ago, these also contribute to a distortion of the "average" benefit.

Following are some statistics on those members who retired in fiscal year 1992-93. The averages are based on those members retiring during the fiscal year--KERS: 1,193, CERS: 1,209 and SPRS: 56--but does not include members who took a lump sum payment or members who died.

SYSTEM	AVERAGE FINAL COMP.	AVERAGE MO. BENEFIT	SERVICE RANGES/% OF RETIREES			
			Under 20	20-25	25-30	30+
KERS	$25,694	$ 892.09	45%	19%	23%	13%
CERS	$19,266	$ 636.51	64%	19%	10%	7%
SPRS	$38,054	$1,867.18	9%	54%	30%	7%

The following table provides a comparison of retirees in the three systems based on years of service at the time of retirement. Table 1 on the next page indicates the average monthly benefits for these same service ranges.

SERVICE RANGES IN YEARS/PERCENTAGE OF RETIREES

	UNDER 2	2-5	6-10	11-15	16-20	21-25	26-30	31-35	35+
KERS	2%	3%	19%	21%	17%	14%	11%	9%	4%
CERS	2%	5%	28%	25%	14%	13%	7%	4%	2%
SPRS	1%	2%	3%	3%	7%	31%	36%	16%	1%

Table 5 presents a county-by-county summary of total retirement payments over the fiscal year. As indicated by bold type, the retired payroll exceeded $1 million in 37 counties. This gives an indication of the importance of retirees' income to their communities and shows that a majority of retirees remain in Kentucky.

DISABILITY RETIREMENTS

During the fiscal year 1992-93, there were 504 applications for disability retirement. Of those, 369 or 73% were approved for disability retirement. The figures in Tables 2, 3 and 4, show that 3,176 or 10% of the current 31,737 recipients are drawing a disability benefit. Disability recipients are subject to an annual medical and financial review.

MEMBERSHIP

Table 6 provides a picture of the membership of the three systems and the change over time. The County Employees Retirement System continues to grow. Following are the membership totals for the systems, showing the numbers of members in hazardous positions. These figures include all member and beneficiary accounts at June 30, 1993, and will exceed the number of members and beneficiaries indicated in Tables 2, 3 and 4, because retired member accounts whose payments have ceased are included (such as retired reemployed members, discontinued disability retirees, hazardous members whose 10 Year Certain payments have ceased or members deceased since January 1).

	ACTIVE	INACTIVE	RETIRED	TOTAL
KERS	45,757	11,467	17,582	74,806
KERS-HAZARDOUS	3,238	406	281	3,925
CERS	58,626	13,405	13,167	85,198
CERS-HAZARDOUS	5,596	352	1,255	7,203
SPRS	953	128	489	1,570
TOTAL	**114,170**	**25,758**	**33,774**	**173,702**

FINANCIAL AND ACTUARIAL STATISTICS

Tables 7, 8 and 9 provide a compilation of important information about each system drawn from the Auditor's and Actuary's reports. These tables provide a summary of assets and liabilities and show the determination of the current employer contribution rates. Five years of historical data is given .

SOURCE AND USE OF FUNDS

Table 10 provides a breakdown of each dollar, its source and where it is spent, since the inception of the retirement systems.

ADMINISTRATIVE EXPENSE

Table 11 provides a five-year history of administrative expenses.

TABLE 1
ANALYSIS OF MONTHLY RETIREMENT BENEFITS
AS OF JUNE 30, 1993
AVERAGE MONTHLY BENEFIT IN DOLLARS PER YEARS OF SERVICE

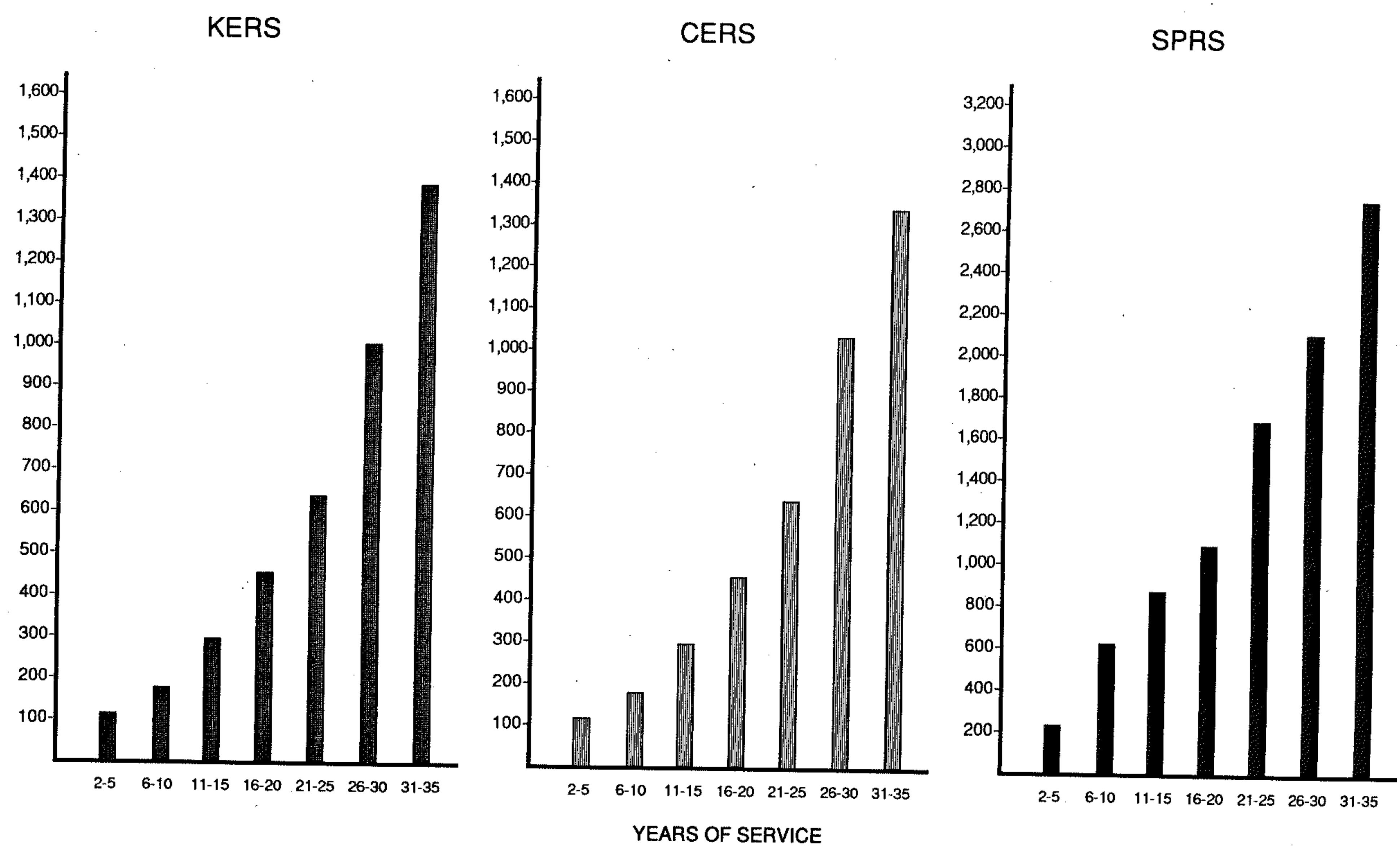


TABLE 2
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT BENEFITS BY PLAN
FOR THE PERIOD ENDING JUNE 30, 1993

	NUMBER OF CASES	TOTAL	AVERAGE	MONTHLY BENEFITS LOW	HIGH
NORMAL					
Basic	2,198	$ 983,030.21	$ 447.23	$ 2.00	$4,282.12
Life--10 Years Certain (Member)	631	275,125.74	436.01	1.44	3,194.91
Life--10 Years Certain (Beneficiary)	39	18,632.79	477.76	41.11	2,197.81
10 Years Certain	1	1,447.97	1,447.97	1,447.97	1,447.97
Life--15 Years Certain (Member)	77	49,899.82	648.04	40.14	3,594.77
Life--15 Years Certain (Beneficiary)	10	5,011.82	501.18	81.74	1,119.27
Survivorship 100% (Member)	589	252,081.34	427.98	2.74	3,907.21
Survivorship 100% (Beneficiary)	453	132,570.87	292.65	2.41	2,307.33
Pop-Up	151	106,139.34	702.90	6.40	4,357.51
Pop-Up (Basic)	8	11,495.34	1,436.91	217.91	4,143.58
Survivorship 66 2/3% (Member)	181	118,266.86	653.40	8.47	3,092.78
Survivorship 66 2/3% (Beneficiary)	60	19,290.84	321.51	27.37	1,037.55
Survivorship 50% (Member)	356	232,557.12	653.25	3.30	4,213.17
Survivorship 50% (Beneficiary)	203	62,746.99	309.09	27.10	973.71
Social Security Basic--Under 62	4	5,935.24	1,483.81	579.57	2,658.25
Social Security Survivorship--Under 62	5	7,162.75	1,432.55	1,198.71	1,735.89
Social Security Survivorship--Over 62	5	6,686.50	1,337.30	1,009.27	2,072.00
TOTALS AND AVERAGES	4,971	$2,288,081.54	$ 460.28	$ 1.44	$4,357.51
EARLY					
Basic	3,659	$1,913,109.68	$ 522.85	$ .78	$3,913.13
Life--10 Years Certain (Member)	1,273	616,056.41	483.94	1.60	3,205.29
Life--10 Years Certain (Beneficiary)	47	18,125.81	385.65	43.14	2,190.58
10 Years Certain (Member)	3	6,122.26	2,040.75	1,737.78	2,206.88
10 Years Certain (Beneficiary)	1	205.07	205.07	205.07	205.07
Life--15 Years Certain (Member)	193	121,046.43	627.18	.51	2,641.29
Life--15 Years Certain (Beneficiary)	21	12,231.08	582.43	97.83	2,467.77
Life--20 Years Certain (Member)	100	70,833.70	708.33	10.26	2,899.01
Life--20 Years Certain (Beneficiary)	5	5,060.74	1,012.14	136.24	1,979.64
Survivorship 100% (Member)	1,132	609,969.33	538.84	2.71	4,232.19
Survivorship 100% (Beneficiary)	387	124,750.19	322.35	17.01	3,252.32
Pop-Up	453	391,731.19	864.74	1.47	3,549.66
Pop-Up (Basic)	20	23,346.51	1,167.32	38.75	3,981.35
Survivorship 66 2/3% (Member)	399	426,265.78	1,068.33	11.41	3,669.09
Survivorship 66 2/3% (Beneficiary)	78	32,016.36	410.46	47.28	1,561.03
Survivorship 50% (Member)	603	537,642.86	891.61	8.25	4,207.85
Survivorship 50% (Beneficiary)	181	54,107.77	298.93	6.47	1,485.82
Social Security Basic--Under 62	632	715,700.41	1,132.43	5.25	4,004.68
Social Security Survivorship--Under 62	388	595,460.21	1,534.69	16.15	3,968.15
Social Security Survivorship--Over 62	303	237,887.46	785.10	3.13	3,243.64
TOTALS AND AVERAGES	9,878	$6,511,669.25	$ 659.20	$ .51	$4,232.19
DISABILITY					
Basic	476	$ 245,879.15	$ 516.55	$ 4.24	$2,288.53
Life--10 Years Certain (Member)	209	110,371.67	528.09	3.72	1,835.80
Life--10 Years Certain (Beneficiary)	63	37,843.98	600.69	34.23	2,116.12
10 Years Certain (Beneficiary)	1	829.18	829.18	829.18	829.18
Life--15 Years Certain (Member)	39	24,131.80	618.76	187.90	1,601.25
Life--15 Years Certain (Beneficiary)	28	16,649.04	594.60	191.01	1,264.82
Life--20 Years Certain (Member)	44	24,437.26	555.39	2.67	1,393.84
Life--20 Years Certain (Beneficiary)	20	15,239.37	761.96	167.95	1,256.16
Survivorship 100% (Member)	187	78,426.02	419.39	41.93	2,724.85
Survivorship 100% (Beneficiary)	303	110,551.15	364.85	6.26	1,691.79
Pop-Up	90	48,798.92	542.21	4.27	1,677.49
Pop-Up (Basic)	1	863.75	863.75	863.75	863.75
Survivorship 66 2/3% (Member)	33	20,657.84	625.99	149.46	1,677.55
Survivorship 66 2/3% (Beneficiary)	40	11,676.90	291.92	4.94	911.92
Survivorship 50% (Member)	97	53,399.09	550.50	99.16	3,175.46
Survivorship 50% (Beneficiary)	77	17,641.82	229.11	1.76	733.88
Social Security Basic--Under 62	20	22,125.51	1,106.27	248.72	2,198.34
Social Security Survivorship--Under 62	12	10,074.83	839.56	29.65	1,774.14
Social Security Survivorship--Over 62	9	4,250.88	472.32	81.98	1,119.54
TOTALS AND AVERAGES	1,749	$ 853,848.16	$ 488.19	$ 1.76	$3,175.46
DEATH BEFORE RETIREMENT					
Life Annuity	483	$ 222,118.20	$ 459.87	$ 2.31	$3,001.24
Lump Sum	1	379.02	379.02	379.02	379.02
5 Years Certain	65	44,772.11	688.80	31.70	3,650.70
10 Years Certain	134	87,520.48	653.13	68.94	2,823.23
Social Security Basic--Under 62	1	311.30	311.30	311.30	311.30
Social Security Basic--Under 60	20	9,510.65	475.53	16.77	1,447.19
TOTALS AND AVERAGES	704	$ 364,611.76	$ 517.91	$ 2.31	$3,650.70
SYSTEM TOTALS AND AVERAGES	**17,302**	**$10,018,210.71**	**$579.02**	**$ .51**	**$4,357.51**

Not included in totals are payments to 6 dependent children of disabled or deceased hazardous duty members.

TABLE 3
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT BENEFITS BY PLAN
FOR THE PERIOD ENDING JUNE 30, 1993

	NUMBER OF CASES	TOTAL	MONTHLY BENEFITS AVERAGE	LOW	HIGH
NORMAL					
Basic	2,103	$ 582,408.85	$ 276.94	$ .39	$3,846.75
Life--10 Years Certain (Member)	723	192,992.97	266.93	12.32	3,384.11
Life--10 Years Certain (Beneficiary)	57	13,668.78	239.80	14.50	886.38
10 Years Certain (Member)	20	41,291.35	2,064.56	20.60	3,484.51
10 Years Certain (Beneficiary)	1	2,282.36	2,282.36	2,282.36	2,282.36
Life--15 Years Certain (Member)	76	21,202.10	278.97	29.41	1,235.36
Life--15 Years Certain (Beneficiary)	13	4,125.27	317.32	61.07	1,169.22
Life--20 Years Certain (Member)	2	3,916.83	1,958.41	1,791.43	2,125.40
Survivorship 100% (Member)	577	157,669.85	273.25	4.79	2,227.80
Survivorship 100% (Beneficiary)	288	63,164.17	219.32	19.80	2,418.80
Pop-Up	195	96,686.20	495.82	1.91	3,369.31
Pop-Up (Basic)	4	1,721.80	430.45	36.78	708.98
Survivorship 66 2/3% (Member)	149	107,675.94	722.65	31.02	4,068.12
Survivorship 66 2/3% (Beneficiary)	38	10,898.67	286.80	24.00	1,247.78
Survivorship 50% (Member)	215	137,841.92	641.12	33.89	3,935.06
Survivorship 50% (Beneficiary)	98	21,967.19	224.15	35.46	1,476.43
Social Security Basic--Under 62	5	9,381.18	1,876.23	1,039.29	2,705.68
Social Security Survivorship--Under 62	14	25,627.85	1,830.56	792.82	2,623.57
Social Security Survivorship--Over 62	24	26,040.27	1,085.01	493.77	2,764.60
TOTALS AND AVERAGES	4,602	$1,520,563.55	$ 330.41	$ .39	$4,068.12
EARLY					
Basic	2,918	$ 987,121.36	$ 338.28	$ 2.56	$4,145.20
Life--10 Years Certain (Member)	1,127	338,192.87	300.08	3.81	2,905.61
Life--10 Years Certain (Beneficiary)	56	13,673.41	244.16	4.55	1,087.58
10 Years Certain (Member)	25	62,901.19	2,516.04	1,296.93	4,920.99
10 Years Certain (Beneficiary)	1	597.21	597.21	597.21	597.21
Life--15 Years Certain (Member)	226	104,905.49	464.18	24.65	3,143.70
Life--15 Years Certain (Beneficiary)	16	6,458.29	403.64	52.81	1,461.96
Life--20 Years Certain (Member)	119	79,993.03	672.21	29.64	2,818.39
Life--20 Years Certain (Beneficiary)	4	4,269.99	1,067.49	45.32	2,681.23
Survivorship 100% (Member)	836	322,307.71	385.53	2.12	3,214.43
Survivorship 100% (Beneficiary)	204	55,445.61	271.79	6.73	1,613.52
Pop-Up	604	504,767.99	835.70	4.30	5,309.82
Pop-Up (Basic)	21	21,892.45	1,042.49	96.16	2,075.90
Survivorship 66 2/3% (Member)	237	201,087.53	848.47	42.56	3,136.23
Survivorship 66 2/3% (Beneficiary)	24	6,232.58	259.69	60.87	831.96
Survivorship 50% (Member)	401	311,353.02	776.44	23.65	3,444.50
Survivorship 50% (Beneficiary)	67	17,826.15	266.06	29.72	1,319.49
Social Security Basic--Under 62	214	195,323.07	912.72	2.57	2,633.09
Social Security Survivorship--Under 62	311	435,243.42	1,399.49	44.43	2,931.39
Social Security Survivorship--Over 62	83	44,187.49	532.37	.20	3,031.37
TOTALS AND AVERAGES	7,494	$3,713,779.86	$ 495.56	$ .20	$5,309.82
DISABILITY					
Basic	428	$ 192,718.93	$ 450.27	$ 5.06	$2,121.46
Life--10 Years Certain (Member)	186	79,404.09	426.90	23.78	1,792.14
Life--10 Years Certain (Beneficiary)	52	20,474.59	393.74	68.74	1,220.03
10 Years Certain (Member)	3	4,824.16	1,608.05	1,175.10	1,856.43
10 Years Certain (Beneficiary)	1	925.35	925.35	925.35	925.35
Life--15 Years Certain (Member)	42	22,095.07	526.07	59.44	1,428.65
Life--15 Years Certain (Beneficiary)	25	9,481.43	379.25	52.08	948.47
Life--20 Years Certain (Member)	41	22,112.16	539.32	4.27	1,640.02
Life--20 Years Certain (Beneficiary)	20	9,013.01	450.65	32.43	1,359.88
Survivorship 100% (Member)	168	75,691.19	450.54	27.86	1,440.33
Survivorship 100% (Beneficiary)	151	45,920.20	304.10	50.14	1,227.33
Pop-Up	92	45,013.84	489.28	57.62	1,610.99
Pop-Up (Basic)	1	465.63	465.63	465.63	465.63
Survivorship 66 2/3% (Member)	33	20,212.94	612.51	40.77	1,443.92
Survivorship 66 2/3% (Beneficiary)	15	4,107.24	273.81	58.61	830.99
Survivorship 50% (Member)	77	40,376.34	524.36	5.78	2,020.50
Survivorship 50% (Beneficiary)	33	6,226.06	188.66	55.97	416.57
Social Security Basic--Under 62	17	11,781.22	693.01	123.72	1,710.52
Social Security Survivorship--Under 62	14	15,761.34	1,125.81	136.07	2,395.05
Social Security Survivorship--Over 62	2	624.51	312.25	165.96	458.55
TOTALS AND AVERAGES	1,401	$ 627,229.30	$ 447.70	$ 4.27	$2,395.05
DEATH BEFORE RETIREMENT					
Life Annuity	260	$ 79,399.97	$ 305.38	$ 20.83	$2,276.08
Lump Sum	1	682.25	682.25	682.25	682.25
5 Years Certain	84	51,042.52	607.64	24.81	4,089.87
10 Years Certain	132	45,673.11	346.00	13.62	2,705.48
Social Security Basic--Under 60	8	4,364.86	545.60	40.41	1,490.45
TOTALS AND AVERAGES	485	$ 181,162.71	$ 373.53	$ 13.62	$4,089.87
SYSTEM TOTALS AND AVERAGES	**13,982**	**$6,042,735.42**	**$432.17**	**$ .20**	**$5,309.82**

Not included in totals are payments to 73 dependent children of disabled or deceased hazardous duty members.

TABLE 4
STATE POLICE RETIREMENT SYSTEM
RETIREMENT BENEFITS BY PLAN
FOR THE PERIOD ENDING JUNE 30, 1993

	NUMBER OF CASES	MONTHLY BENEFITS TOTAL	AVERAGE	LOW	HIGH
NORMAL					
Basic	8	$ 9,305.10	$1,163.13	$ 108.82	$2,500.50
Life--10 Years Certain (Member)	7	15,135.53	2,162.21	1,111.41	4,292.34
10 Years Certain (Member)	3	3,744.16	1,248.05	339.32	2,986.97
Life--20 Years Certain (Member)	2	5,430.34	2,715.17	2,578.63	2,851.71
Survivorship 100% (Member)	19	30,705.11	1,616.05	131.60	3,115.38
Survivorship 100% (Beneficiary)	7	8,511.96	1,215.99	528.48	2,473.69
Pop-Up Option	1	3,178.59	3,178.59	3,178.59	3,178.59
Survivorship 66 2/3% (Member)	9	19,043.17	2,115.90	1,250.67	2,977.70
Survivorship 50% (Member)	14	26,842.84	1,917.34	1,001.51	3,559.15
Survivorship 50% (Beneficiary)	3	2,136.35	712.11	558.18	855.38
Social Security Survivorship--Under 62	4	13,711.06	3,427.76	2,807.11	4,295.88
Social Security Survivorship--Over 62	15	23,142.91	1,542.86	156.95	2,732.86
TOTALS AND AVERAGES	92	$160,887.12	$1,748.77	$ 108.82	$4,295.88
EARLY					
Basic	21	$ 42,303.51	$2,014.45	$ 167.35	$3,208.54
Life--10 Years Certain (Member)	12	27,948.41	2,329.03	1,692.65	3,461.02
10 Years Certain (Member)	10	27,420.10	2,742.01	18.63	3,567.48
10 Years Certain (Beneficiary)	1	4,000.37	4,000.37	4,000.37	4,000.37
Life--15 Years Certain (Member)	3	6,342.77	2,114.25	1,303.69	3,649.75
Life--20 Years Certain (Member)	7	12,268.54	1,752.64	750.86	2,445.40
Survivorship 100% (Member)	37	69,607.74	1,881.29	277.78	4,072.46
Survivorship 100% (Beneficiary)	1	2,051.75	2,051.75	2,051.75	2,051.75
Pop-Up	38	61,554.84	1,619.86	54.82	2,703.92
Pop-Up (Basic)	3	9,534.81	3,178.27	2,249.55	4,086.06
Survivorship 66 2/3% (Member)	15	31,266.29	2,084.41	1,204.90	3,321.24
Survivorship 66 2/3% (Beneficiary)	1	995.88	995.88	995.88	995.88
Survivorship 50% (Member)	23	39,174.09	1,703.22	136.06	3,168.89
Social Security Basic--Under 62	19	39,396.61	2,073.50	365.33	3,036.93
Social Security Survivorship--Under 62	120	256,902.48	2,140.85	203.74	4,019.18
Social Security Survivorship--Over 62	7	10,313.55	1,473.36	503.35	1,994.83
TOTALS AND AVERAGES	318	$641,081.74	$2,015.98	$ 18.63	$4,086.06
DISABILITY					
Basic	8	$ 7,425.13	$ 928.14	$ 315.42	$1,524.21
Life--10 Years Certain (Member)	1	1,314.90	1,314.90	1,314.90	1,314.90
10 Years Certain (Member)	2	2,976.72	1,488.36	1,339.41	1,637.31
Life--15 Years Certain (Member)	1	1,390.74	1,390.74	1,390.74	1,390.74
Life--20 Years Certain (Member)	2	3,980.25	1,990.12	1,267.69	2,712.56
Survivorship 100% (Member)	8	11,075.02	1,384.37	787.74	2,397.25
Survivorship 100% (Beneficiary)	2	2,422.59	1,211.29	865.14	1,557.45
Survivorship 50% (Member)	1	1,650.03	1,650.03	1,650.03	1,650.03
Social Security Survivorship--Under 62	1	2,096.44	2,096.44	2,096.44	2,096.44
TOTALS AND AVERAGES	26	$ 34,331.82	$1,320.45	$ 315.42	$2,712.56
DEATH BEFORE RETIREMENT					
Life Annuity	15	$ 16,392.01	$1,092.80	$ 249.52	$2,239.70
10 Years Certain	2	4,944.22	2,472.11	955.86	3,988.36
TOTALS AND AVERAGES	17	$ 21,336.23	$1,255.07	$ 249.52	$3,988.36
SYSTEM TOTALS AND AVERAGES	**453**	**$857,636.91**	**$1,893.23**	**$ 18.63**	**$4,295.88**

Not included in totals are payments to 13 dependent children of disabled or deceased members.

TABLE 5
RETIREMENT PAYMENTS BY COUNTY

Adair	$ 749,272	**Grant**	**$ 1,260,570**	Mason	$ 571,253
Allen	$ 467,117	**Graves**	**$ 1,606,748**	Meade	$ 456,035
Anderson	**$ 2,802,307**	Grayson	$ 847,663	Menifee	$ 206,488
Ballard	$ 422,249	Green	$ 405,834	**Mercer**	**$ 1,615,806**
Barren	**$ 1,766,442**	Greenup	$ 620,160	Metcalfe	$ 545,200
Bath	$ 681,396	Hancock	$ 210,518	Monroe	$ 322,826
Bell	$ 927,295	**Hardin**	**$ 2,795,213**	Montgomery	$ 798,568
Boone	**$ 1,353,891**	**Harlan**	**$ 1,090,544**	Morgan	$ 631,921
Bourbon	**$ 1,064,027**	Harrison	$ 624,917	Muhlenberg	$ 779,668
Boyd	**$ 2,204,892**	Hart	$ 516,334	**Nelson**	**$ 1,276,330**
Boyle	**$ 2,306,305**	**Henderson**	**$ 2,043,489**	Nicholas	$ 262,295
Bracken	$ 193,431	**Henry**	**$ 1,185,951**	Ohio	$ 646,953
Breathitt	$ 610,737	Hickman	$ 244,284	**Oldham**	**$ 2,262,503**
Breckinridge	$ 456,019	**Hopkins**	**$ 2,564,400**	**Owen**	**$ 1,449,465**
Bullitt	**$ 1,814,627**	Jackson	$ 308,415	Owsley	$ 222,786
Butler	$ 437,612	**Jefferson**	**$37,259,492**	Pendleton	$ 506,614
Caldwell	$ 801,454	Jessamine	$ 861,372	Perry	$ 799,464
Calloway	**$ 2,079,309**	Johnson	$ 850,422	**Pike**	**$ 1,608,858**
Campbell	**$ 2,106,464**	**Kenton**	**$ 3,862,529**	Powell	$ 359,231
Carlisle	$ 279,213	Knott	$ 604,797	**Pulaski**	**$ 3,146,700**
Carroll	$ 537,433	Knox	$ 661,207	Robertson	$ 112,482
Carter	$ 903,692	Larue	$ 726,508	Rockcastle	$ 584,945
Casey	$ 501,164	**Laurel**	**$ 1,787,180**	**Rowan**	**$ 1,512,508**
Christian	**$ 3,438,672**	Lawrence	$ 449,517	Russell	$ 642,696
Clark	$ 781,333	Lee	$ 437,012	**Scott**	**$ 1,634,233**
Clay	$ 998,449	Leslie	$ 329,397	**Shelby**	**$ 3,720,333**
Clinton	$ 207,210	Letcher	$ 492,156	Simpson	$ 433,879
Crittenden	$ 319,233	Lewis	$ 340,926	Spencer	$ 532,962
Cumberland	$ 286,431	Lincoln	$ 751,804	Taylor	$ 631,631
Daviess	**$ 4,250,846**	Livingston	$ 533,940	Todd	$ 658,742
Edmonson	$ 204,796	Logan	$ 930,755	Trigg	$ 917,938
Elliott	$ 216,544	Lyon	$ 693,923	Trimble	$ 492,631
Estill	$ 576,185	**McCracken**	**$ 3,590,300**	Union	$ 669,435
Fayette	**$ 9,855,844**	McCreary	$ 400,177	**Warren**	**$ 5,221,045**
Fleming	$ 652,052	McLean	$ 346,699	Washington	$ 485,363
Floyd	**$ 1,271,373**	**Madison**	**$ 2,590,939**	Wayne	$ 715,603
Franklin	**$25,988,654**	Magoffin	$ 322,724	Webster	$ 528,321
Fulton	$ 355,855	Marion	$ 721,462	**Whitley**	**$ 1,436,355**
Gallatin	$ 164,414	**Marshall**	**$ 1,436,096**	Wolfe	$ 393,075
Garrard	$ 639,600	Martin	$ 241,774	**Woodford**	**$ 1,605,962**

PAYMENTS TO RETIREES LIVING IN OTHER STATES
$8,673,568

TOTAL PAYMENTS FOR FISCAL YEAR ENDING JUNE 30, 1993
$203,294,658

TABLE 6
MEMBERSHIP GROWTH
6/30/75 through 6/30/93

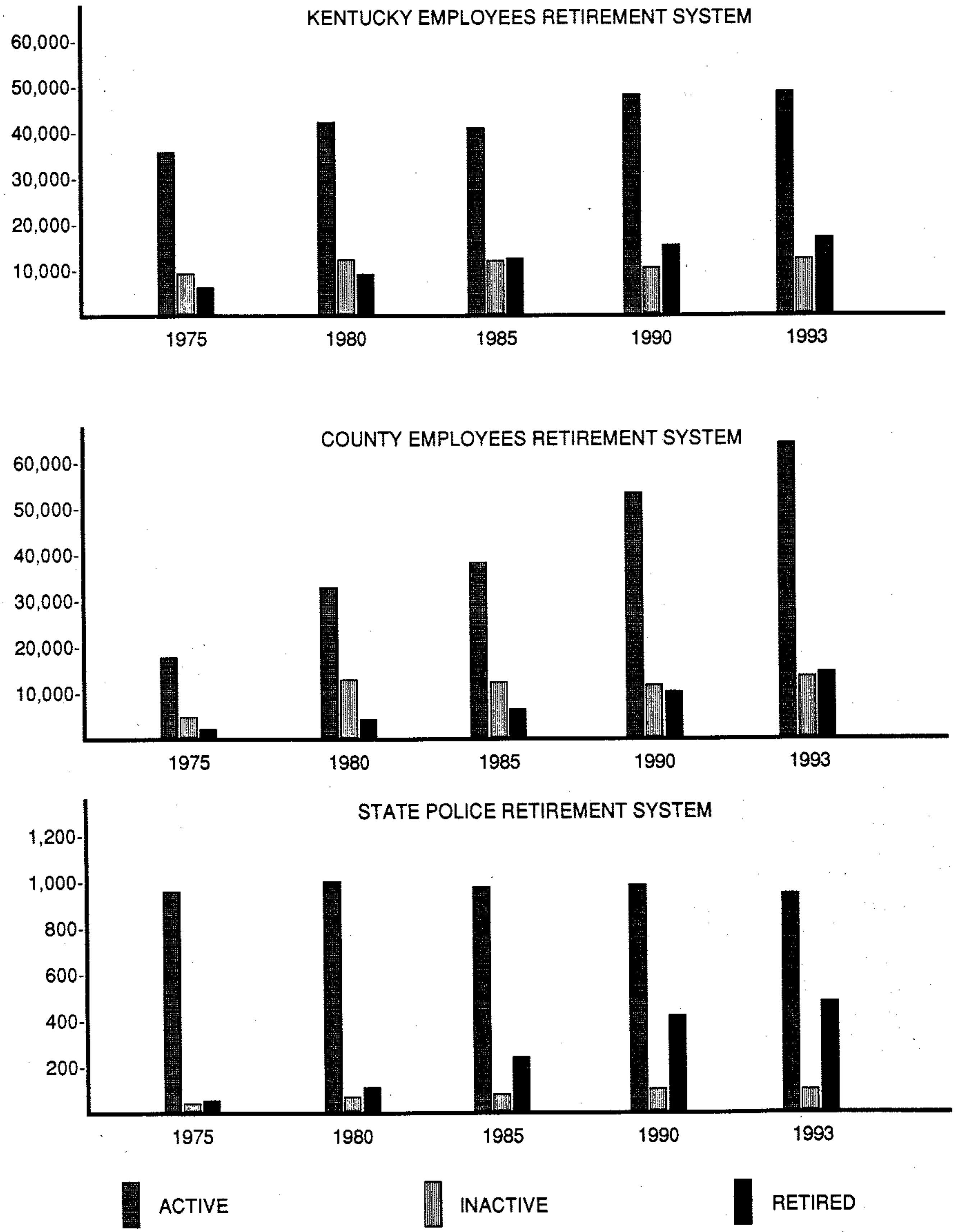


TABLE 7
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
FINANCIAL AND ACTUARIAL STATISTICS

FINANCIAL STATISTICS	6/30/89	6/30/90	6/30/91	6/30/92	6/30/93
Total Assets	$1,593,913,511	$1,803,051,503	$1,917,816,462	(BK)$2,072,356,055	(BK)$2,269,585,643
Investment Income	$ 120,760,531	$ 126,895,778	$ 107,923,634	$ 106,061,993	$ 105,909,575
Total Retirement Payments	$ 80,377,963	$ 90,420,645	$ 100,824,770	$ 110,034,282	$ 119,619,683
Total Refund Payments	$ 7,145,907	$ 5,896,851	$ 6,438,085	$ 6,451,752	$ 6,749,192
ACTUARIAL STATISTICS:					
Total Assets at Actuarial Value				$2,354,482,321	$2,585,209,537
Total Accrued Liability	$1,734,607,903	$2,055,489,412	$2,288,611,147	$2,525,190,930	$2,703,771,076
Unfunded Past Service Liability	$ 145,998,805	$ 256,167,674	$ 375,396,216	$ 170,708,609	$ 118,561,539
Percent Unfunded	8.4%	12.5%	16.4%	6.8%	4.4%
Vested Accrued Benefit Liability	$1,074,546,800	$1,298,362,909	$1,447,994,399	$1,576,337,372	$1,702,993,305
Estimated Annual Salaries	$ 822,362,508	$ 869,109,220	$ 982,646,400	$1,065,985,572	$1,094,395,992
Contribution for Unfunded Past Service Liability	$ 13,139,894	$ 12,475,110	$ 18,683,469	$ 8,652,449	$ 6,759,902
ACTUARIAL COST-NONHAZARDOUS:					
Normal	8.35%	9.14%	9.32%	9.32%	9.33%
Past Service	1.63%	1.46%	1.99%	.84%	.62%
Administrative	.19%	*.39%	*.38%	*.38%	*.38%
Hospital/Medical Insurance	1.59%	1.77%	1.97%	3.12%	3.13%
Raise to Recipients per KRS 61.691(1)					.10%
TOTAL COST	11.76%	12.76%	13.66%	13.66%	13.56%
CONTRIBUTION RATES-NONHAZARDOUS:					
Member	5.00%	5.00%	5.00%	5.00%	5.00%
Employer	**7.45%	7.45%	7.65%	****8.66%	****8.66%
TOTAL RATES	12.45%	12.45%	12.65%	13.66%	13.66%
ACTUARIAL COST-HAZARDOUS:					
Normal	16.38%	15.85%	16.77%	16.62%	16.51%
Past Service	-.52%	-.14%	.65%	.46%	.60%
Administrative	.07%	*.35%	*.39%	*.40%	*.40%
Hospital/Medical Insurance	5.74%	6.17%	6.74%	7.38%	7.41%
Raise to Recipients per KRS 61.691(1)					.05%
TOTAL COST	21.67%	22.23%	24.55%	24.86%	24.97%
CONTRIBUTION RATES-HAZARDOUS:					
Member	7.00%	7.00%	7.00%	7.00%	7.00%
Employer	**14.00%	***15.05%	15.05%	****17.55%	****17.86%
TOTAL RATES	21.00%	22.05%	22.05%	24.55%	24.86%

*The rate shown reflects the percentage for budgeted expenses and investment fees as required by legislation enacted by the 1990 General Assembly. Prior years do not include investment fees.

**Budgetary reduction in the amount contributed by State Government resulted in a decrease of .24% in actual contributions received.

***Employer rate shown became effective 8/1/90 to reflect legislative changes and new actuarial assumptions.

****The contribution rate shown is the rate adopted by the Board of Trustees. The actual employer rates paid by state agencies were 7.65% for nonhazardous employees and 15.05% for hazardous employees in accordance with provisions in the state budget.

TABLE 8
COUNTY EMPLOYEES RETIREMENT SYSTEM
FINANCIAL AND ACTUARIAL STATISTICS

FINANCIAL STATISTICS:	6/30/89	6/30/90	6/30/91	6/30/92	6/30/93
Total Assets	$1,085,904,834	$1,274,063,862	$1,396,277,329	(BK)$1,558,427,245	(BK)$1,767,918,632
Investment Income	$ 76,400,250	$ 86,852,951	$ 75,889,593	$ 73,386,287	$ 73,074,069
Total Retirement Payments	$ 31,719,667	$ 41,158,196	$ 53,341,986	$ 64,992,604	$ 72,607,003
Total Refund Payments	$ 5,208,722	$ 6,346,247	$ 5,404,817	$ 5,829,864	$ 5,373,355
ACTUARIAL STATISTICS:					
Total Assets at Actuarial Value				$1,735,038,908	$1,985,680,709
Total Accrued Liability	$1,113,868,548	$1,432,323,666	$1,654,338,706	$1,861,978,403	$2,079,930,047
Unfunded Past Service Liability	$ 35,815,913	$ 162,257,399	$ 258,111,701	$ 126,939,495	$ 94,249,338
Percent Unfunded	3.2%	11.3%	15.6%	6.8%	4.5%
Vested Accrued Benefit Liability	$ 728,176,932	$ 907,488,244	$1,067,833,003	$1,196,294,816	$1,347,836,822
Estimated Annual Salaries	$ 686,528,758	$ 790,407,492	$ 887,033,040	$ 994,447,776	$1,074,056,004
Contribution for Unfunded Past Service Liability	$ 3,223,433	$ 7,901,773	$ 12,846,219	$ 6,464,013	$ 5,259,804
ACTUARIAL COST-NONHAZARDOUS:					
Normal	9.08%	10.60%	10.68%	10.69%	10.73%
Past Service	-.35%	.68%	1.03%	.22%	.09%
Administrative	.25%	*.54%	*.53%	*.55%	*.54%
Hospital/Medical Insurance	1.21%	1.38%	1.58%	2.36%	2.36%
Raise to Recipients per KRS 61.691(1)					.05%
TOTAL COST	10.19%	13.20%	13.82%	13.82%	13.77%
CONTRIBUTION RATES-NONHAZARDOUS:					
Member	4.25%	5.00%	5.00%	5.00%	5.00%
Employer	6.35%	**7.68%	7.95%	8.82%	8.82%
TOTAL RATES	10.60%	12.68%	12.95%	13.82%	13.82%
ACTUARIAL COST-HAZARDOUS:					
Normal	16.34%	15.50%	15.57%	15.57%	15.67%
Past Service	5.34%	2.89%	3.94%	3.28%	2.86%
Administrative	.06%	*.29%	*.29%	*.31%	*.31%
Hospital/Medical Insurance	4.65%	5.11%	5.67%	6.33%	6.33%
Raise to Recipients per KRS 61.691(1)					.15%
TOTAL COST	26.39%	23.79%	25.47%	25.49%	25.32%
CONTRIBUTION RATES-HAZARDOUS:					
Member	7.00%	7.00%	7.00%	7.00%	7.00%
Employer	14.00%	**15.43%	16.10%	18.47%	18.49%
TOTAL RATES	21.00%	22.43%	23.10%	25.47%	25.49%

*The rate shown reflects the percentage for budgeted expenses and investment fees as required by legislation enacted by the 1990 General Assembly. Prior years do not include investment fees.

**Employer rate shown became effective 8/1/90 to reflect legislative changes and new actuarial assumptions.

TABLE 9
STATE POLICE RETIREMENT SYSTEM
FINANCIAL AND ACTUARIAL STATISTICS

FINANCIAL STATISTICS:	6/30/89	6/30/90	6/30/91	6/30/92	6/30/93
Total Assets	$131,570,867	$145,313,311	$151,253,690	(BK)$159,420,001	(BK)$170,188,992
Investment Income	$ 10,164,070	$ 10,411,631	$ 8,809,299	$ 8,430,390	$ 8,239,832
Total Retired Payments	$ 7,742,826	$ 8,504,914	$ 8,959,087	$ 9,372,766	$ 10,220,001
Total Refund Payments	$ 42,926	$ 69,128	$ 42,561	$ 35,421	$ 39,772
ACTUARIAL STATISTICS:					
Total Assets at Actuarial Value				$187,791,011	$200,320,968
Total Accrued Liability	$134,550,773	$154,007,622	$170,009,955	$182,996,056	$191,653,594
Unfunded Past Service Liability	$ 3,200,220	$ 8,982,071	$ 19,191,881	$ 0	$ 0
Percent Unfunded	2.4%	5.8%	11.3%	0.0%	0.0%
Vested Accrued Benefit Liability	$111,757,322	$130,035,708	$142,286,585	$154,375,127	$165,774,200
Estimated Annual Salaries	$ 24,282,216	$ 25,971,132	$ 29,275,692	$ 31,285,572	$ 30,600,684
Contribution for Unfunded Past Service Liability	$ 288,020	$ 437,418	$ 934,625	$ 0	$ 0
ACTUARIAL COST:					
Normal	15.59%	15.15%	15.32%	15.25%	15.33%
Past Service	1.19%	1.68%	3.19%	-.79%	-1.28%
Administrative	.13%	*.26%	*.25%	*.27%	*.25%
Hospital/Medical Insurance	8.92%	9.48%	10.00%	14.11%	14.14%
Raise to Recipients per KRS 61.691(1)					.34%
TOTAL COST:	25.83%	26.57%	28.84%	28.84%	28.78%
CONTRIBUTION RATES:					
Member	7.00%	7.00%	7.00%	7.00%	7.00%
Employer	18.25%	***20.31%	19.57%	****21.84%	****21.84%
TOTAL RATES	**25.25%	27.31%	26.57%	28.84%	28.84%

*The rate shown reflects the percentage for budgeted expenses and investment fees as required by legislation enacted by the 1990 General Assembly. Prior years do not include investment fees.

**Budgetary reduction in the amount contributed by State Government resulted in a decrease of .24% in actual contributions received.

***Employer rate shown became effective 8/1/90 to reflect legislative changes and new actuarial assumptions.

****The contribution rate shown is the rate adopted by the Board of Trustees. The actual employer rates paid by the Kentucky State Police was 19.57% in accordance with provisions in the state budget.

TABLE 10

KENTUCKY RETIREMENT SYSTEMS
STATEMENT OF SOURCE AND USE OF FUNDS
BY SYSTEM SINCE INCEPTION THROUGH JUNE 30, 1993

BREAKDOWN PER DOLLAR						TOTAL AMOUNTS				
KERS	CERS	SPRS	KERS-H	CERS-H		KERS	CERS	SPRS	KERS-H	CERS-H
					SOURCE OF FUNDS					
$ .24	$ .26	$ .19	$.32	$.23	Member Contributions	$ 796,737,393	$ 482,281,609	$ 48,427,803	$ 28,224,255	$120,233,014
.27	.32	.26	.34	.40	Employer Contributions	931,749,555	590,551,384	67,875,398	30,441,739	212,931,126
.38	.32	.43	.25	.26	Investment Income	1,288,420,099	584,813,650	112,307,394	22,430,881	139,199,716
.00	.00	.00	.00	.00	Special Appropriation	1,864,578	187,810	506,100	30,318	39,453
.00	.01	.00	.00	.03	Alternate & Term. Participation	230,360	10,317,559	0	3,741	15,662,450
.11	.09	.12	.09	.08	Other Receipts	387,870,267	173,567,937	32,263,294	7,526,964	41,534,545
$1.00	$1.00	$1.00	$1.00	$1.00	TOTAL SOURCES	$3,406,872,252	$1,841,719,949	$261,379,989	$ 88,657,898	$529,600,304
					USE OF FUNDS					
$ .64	$ .74	$ .65	$ .74	$ .76	Invested Assets	$2,185,627,470	$1,360,633,597	$169,050,811	$ 65,467,266	$402,259,703
.27	.18	.29	.16	.18	Retirement Payments	922,115,041	325,110,636	77,061,667	14,353,678	95,282,876
.03	.03	.01	.04	.02	Refunds	116,151,684	64,709,319	2,455,210	3,289,584	10,716,639
.05	.04	.04	.05	.03	Interest to Members	154,847,337	71,328,220	11,511,304	4,659,356	17,753,931
.01	.01	.01	.01	.01	Administration of Prof. Services	27,766,398	19,901,181	1,300,997	885,016	3,567,213
.00	.00	.00	.00	.00	Other Disbursements	364,322	36,996	0	2,998	19,942
$1.00	$1.00	$1.00	$1.00	$1.00	TOTAL USES	$3,406,872,252	$1,841,719,949	$261,379,989	$ 88,657,893	$529,600,304

KERS-H= Hazardous
CERS-H= Hazardous

TABLE 11
KENTUCKY RETIREMENT SYSTEMS
ADMINISTRATIVE EXPENSE
BY FISCAL YEAR

	1988-89	1989-90	1990-91	1991-92	1992-93
PERSONNEL COSTS:					
Salaries & Fringe Benefits	$1,737,917.88	$1,936,370.13	$2,425,450.41	$2,857,136.01	$3,009,894.08
CONTRACTUAL SERVICES:					
Auditor	19,850.00	20,750.00	$ 22,400.00	$ 22,145.00	$ 21,118.00
Actuary	0.00	51,733.00	48,500.00	47,767.00	42,950.00
Janitorial Services	6,745.00	0.00	0.00	0.00	0.00
Legal Services	44,612.46	45,165.21	96,829.28	92,729.83	76,513.67
Medical	47,903.13	52,618.48	60,526.13	62,728.97	71,733.54
Investment Consultant			*26,527.26	*55,000.00	*40,000.00
Security Custody & Banking Services			*146,672.59	*162,215.87	*182,489.34
Investment Advisors			*2,763,875.98	*3,252,869.65	*3,516,025.30
Miscellaneous	1,170.00	750.00	541.66	0.00	572.00
TOTAL	$1,858,198.47	$2,107,386.82	$5,591,323.31	$6,552,592.33	$6,961,295.93
OPERATING EXPENSES:					
Postage & Freight	$ 228,492.66	$ 281,264.93	$ 214,728.45	$ 320,829.38	$ 284,364.41
Utilities	18,883.87	25,853.22	28,846.58	29,683.56	31,847.41
Telephone	50,861.96	32,581.04	27,226.63	38,743.05	68,108.93
Travel	28,331.08	26,514.89	41,914.97	32,723.24	34,958.23
Printing & Duplicating	57,675.17	73,939.58	56,962.67	47,113.25	97,305.83
Maintenance-Equipment	37,145.04	33,649.58	29,321.58	64,253.76	48,523.86
Maintenance-Bldg. & Grnds.	875.81	795.81	1,771.40	1,063.32	1,228.90
Laundry	672.02	319.04	337.94	584.62	1,696.17
Assessed Car Rental	7,056.87	5,108.84	4,448.92	4,457.04	5,105.19
Supplies-Office	24,925.69	28,268.47	23,831.52	29,097.93	33,795.37
Supplies-Data Processing	26,713.99	36,161.14	27,787.80	38,806.81	40,555.50
Rental-Building	99,729.05	166,000.00	179,725.00	193,550.04	371,040.00
Rental-Data Processing	6,389.33	6,099.89	3,639.48	10,506.13	7,055.14
Rental-Office Equipment	17,129.34	16,341.37	18,154.29	14,974.68	26,764.67
Insurance	97,101.20	12,709.00	56,826.00	56,011.00	49,488.10
Bonds	1,776.25	2,704.97	1,776.25	1,776.25	1,776.25
Dues & Subscriptions	3,018.13	3,450.97	4,703.03	4,105.02	5,206.35
Employee Training Expense	6,300.98	7,761.72	8,828.15	11,673.27	12,436.16
Miscellaneous	8,197.35	5,605.89	6,963.95	3,506.56	16,538.44
Photo Supplies (Micrographics)	1,574.74	8,934.72	20,106.38	13,484.24	46,298.60
Furniture Office Equipment	8,038.86	9,720.71	6,660.14	2,968.75	5,434.59
Lease Purchase Office Equipment	39,342.66	9,264.18	155,294.88	77,294.88	77,294.88
Conference Expenses	3,270.00	3,479.58	4,919.50	3,620.50	1,415.00
TOTAL	$ 773,502.05	$ 796,529.54	$ 924,775.51	$1,000,827.28	$1,268,237.98
Capital Outlay	$ 96,104.15	$ 97,893.18	$ 216,250.02	$ 24,646.00	$ 95,506.14
TOTAL ADMINISTRATIVE EXPENSE	**$2,727,804.67**	**$3,001,809.54**	**$6,732,348.84**	**$7,578,065.61**	**$8,325,040.05**

*The 1990 General Assembly added these items to the budget, payable from administrative expense, effective July 1, 1990. Prior years' expenses were considered off budget.

DISTRIBUTION OF COST BY SYSTEM

	1988-89	1989-90	1990-91	1991-92	1992-93
Kentucky Employees Retirement System	$1,309,346.24	$1,380,832.39	$3,393,103.82	$3,760,236.16	$3,996,019.22
County Employees Retirement System	1,391,180.38	1,593,960.86	**3,170,936.30	**3,621,557.56	4,135,879.90
State Police Retirement System	27,278.05	27,016.29	168,308.72	196,271.90	193,140.93
	$2,727,804.67	$3,001,809.54	$6,732,348.84	$7,578,065.61	$8,325,040.05

**CERS portion of administrative expense, excluding investment fees, is greater than 50%. Inclusion of investment fees changed the distribution. KERS portfolio is larger and, thus, has higher fees.