ANNUAL REPORT FISCAL YEAR ENDING JUNE 30, 1991

KENTUCKY RETIREMENT SYSTEMS

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
COUNTY EMPLOYEES RETIREMENT SYSTEM
STATE POLICE RETIREMENT SYSTEM

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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
Frank W. Burke, Vice Chairman
William H. Cull
E. B. "Gene" Drake
Thomas C. Greenwell
John E. King
Timothy S. Mauntel
Cattie Lou Miller
James R. Ramsey

FROM: Pamala S. Johnson, General Manager

DATE: November 21, 1991

SUBJECT: **Annual Report for Fiscal Year Ending June 30, 1991**

As directed by KRS 61.645, I am pleased to present the Annual Report for the fiscal year ended June 30, 1991. 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

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

The second section is an exact copy of the audit report prepared by the firm of Deloitte & Touche. This report is included in accordance with Kentucky Revised Statute 61.645(12).

The third section consists of copies of the significant pages 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.

The fourth section provides you with 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 last section provides statistical information on membership, types of payments selected, retirement payments by county and information on retirements during the 1989-90 fiscal year. The following statistical tables present a summary of the actuarial and financial sections. These tables provide a snapshot of the systems. The final table shows administrative expenses, which now include banking and investment expenses in accordance with changes enacted by the 1990 General Assembly.

INVESTMENTS

The rate of return for the total fund based on market value was 8.4% 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 5.05% shown on page 140 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, 1991. 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.

SERVICES

During the 1988 General Assembly, laws were passed that provided (1) an early retirement incentive program, or "window," for state employees and state police officiers and (2) mandated participation by city police and fire departments. In six months time, the retirement office experienced the largest workload in its history -- more than in any previous 12 month-period.

It was thought that this volume of work would not be seen again in the foreseeable future. We were wrong.

The fiscal year ended June 30, 1991, saw the following increases over fiscal year 1988-89 workloads:

An increase of 27,100 letters written to active members.

An increase of 6,300 letters written to retired members.

An increase of 6,200 letters written to participating and potentially participating agencies.

An increase of 4,700 benefit calculations.

An increase of 12,900 calls from members.

An increase of 2,100 agency contribution reports requiring manual keying of employee contributions.

An increase of more than 100% in the number of investment sale/purchase transactions.

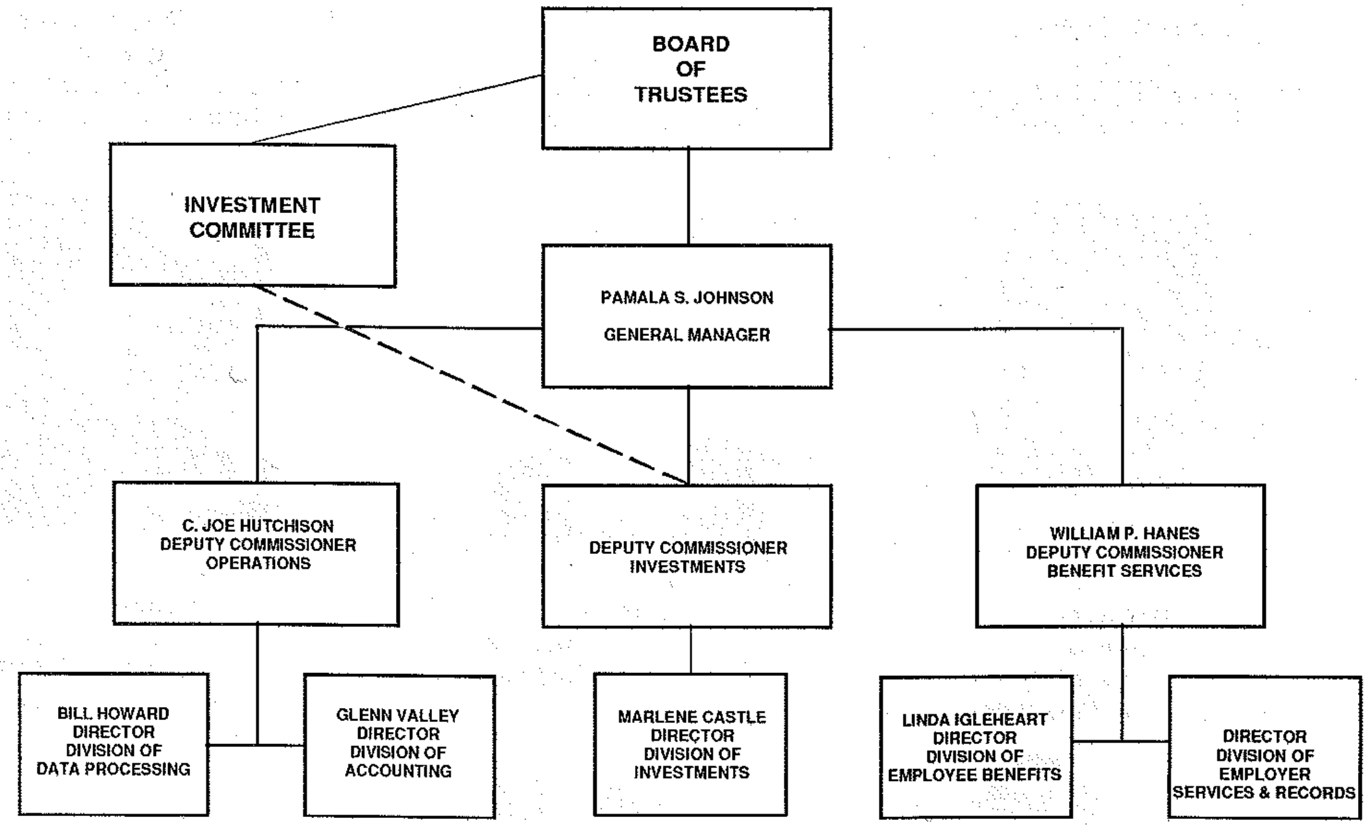
The workload required more than 13,000 hours of overtime by the staff.

During this period, the Data Processing Division converted all programs to a new computer system without a pause in services. At the same time, a new accounting/banking system was installed to improve financial record keeping.

In spite of the growing demands on the staff, the Kentucky Retirement Systems will strive to provide all members with the services and programs they rely on.

BOARD OF TRUSTEES

KENTUCKY RETIREMENT SYSTEMS ORGANIZATIONAL CHART



CONTRACTUAL ARRANGEMENTS

ACTUARIAL SERVICES:
William M. Mercer
1500 Meidinger Tower
Louisville, KY 40202

CUSTODIAN OF SECURITIES:
Farmers Bank & Capital Trust
Farmers Bank Plaza
Frankfort, KY 40601

LEGAL SERVICES:
Stoll Keenon & Park
326 West Main Street
Frankfort, KY 40601

AUDITING SERVICES:
Deloitte & Touche
510 West Broadway
Louisville, KY 40202

ASSET MANAGEMENT CONSULTANT:
William M. Mercer Asset Planning, Inc.
10 South Wacker Drive
Chicago, IL 60606

INVESTMENT COUNSELORS:
Heitman Advisory Corp.
180 North LaSalle Street
Suite 3600
Chicago, IL 60601

Investment Counselors of Maryland
803 Cathedral Street
Baltimore, MD 21201

Investment Advisors, Inc.
1100 Dain Tower
P.O. Box 357
Minneapolis, MN 55440

T. Rowe Price Associates, Inc.
100 East Pratt Street
Baltimore, MD 21202

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

FINANCIAL SECTION

REVENUES:
Employer Contributions
Investment Income
Investment Gain
Balances Transferred
TOTAL REVENUES

EXPENSES:
Retirement Benefits
Insurance Payments
Interest Credited on Accounts
Administrative Expense
Investment Expenses
TOTAL EXPENSES

INTRODUCTION TO FINANCIAL SECTION

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 following information shows that the systems have excellent financial strength. The combined assets of the Kentucky Employees Retirement System, County Employees Retirement System and State Police Retirement System totalled over $3.5 billion as of June 30, 1991, an increase of 8% over the previous fiscal year.

To assure that proper accounting methods are being used, the Board 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, 1991, was performed by the firm of Deloitte & Touche.

In addition to the annual audit by a certified public accounting firm, 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.

There were no party-in-interest transactions, no loans or leases in default and no "reportable" transactions during the fiscal year.

An exact copy of the "audit opinion" of Deloitte & Touche follows along with copies of their 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.

Deloitte & Touche

510 West Broadway
Louisville, Kentucky 40202-2284
Telephone: (502) 562-2000
Facsimile: (502) 562-2073

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, 1991 and for the year then ended, listed in the foregoing index to financial statements. 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 above named Systems' financial statements as of June 30, 1990 and for the year then ended were audited by other auditors whose report dated September 21, 1990, 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, the 1991 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, 1991, and the results of the Systems' operations for the year then ended in conformity with generally accepted accounting principles.

Deloitte & Touche

September 24, 1991

Member
DRT International

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

BALANCE SHEETS
JUNE 30, 1991 AND 1990

	1991	1990
ASSETS:		
Investments:		
Bonds (market value - 1991, $485,058,000; 1990, $601,034,000)	$ 468,577,127	$ 590,873,286
Common stocks (market value - 1991, $1,130,891,000; 1990, $884,678,000)	916,912,932	724,097,226
First mortgage real estate loans (market value - 1991, $14,487,000; 1990, $2,412,000)	15,821,387	2,441,842
Real estate investment trusts (market value - 1991, $124,122,000; 1990, $80,475,000)	116,347,129	69,574,505
Securities purchased under agreements to resell (market value approximates cost)	375,614,417	389,922,931
Total investments	1,893,272,992	1,776,909,790
Cash on deposit with State Treasurer	440,592	86,608
Members and employers contributions receivable	11,865,481	10,757,325
Accrued investment income	12,237,397	15,282,493
Other assets		15,287
TOTAL	1,917,816,462	1,803,051,503
LIABILITIES:		
Members refunds, insurance fund transfers and investment expenses payable	4,601,531	3,729,765
NET ASSETS AVAILABLE FOR BENEFITS (Members' Contribution Account - 1991, $406,549,680; 1990, $361,738,121 and Retirement Allowance Account - 1991, $1,506,665,251; 1990, $1,437,583,617)	$1,913,214,931	$1,799,321,738
FUND BALANCE:		
Actuarial present value of projected benefits payable to current retirees and beneficiaries	$ 886,727,902	$ 827,243,746
Actuarial present value of projected benefits payable to terminated vested participants	21,673,167	25,488,961
Actuarial present value of credited projected benefits for active members:		
Member contributions	388,216,559	341,194,364
Employer financed portion	828,752,719	675,456,328
Total actuarial present value of credited projected benefits	2,125,370,347	1,869,383,399
Unfunded actuarial present value of credited projected benefits	(212,155,416)	(70,061,661)
TOTAL FUND BALANCE	$1,913,214,931	$1,799,321,738

See notes to financial statements.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN MEMBERS' CONTRIBUTION ACCOUNT
YEARS ENDED JUNE 30, 1991 AND 1990

	1991	1990
REVENUES:		
Members contributions	$ 52,845,103	$ 45,270,305
Interest credited to members' balances transferred from Retirement Allowance Account	13,721,080	12,286,706
Total revenues	66,566,183	57,557,011
EXPENSES:		
Refunds to former members	6,438,085	5,896,851
Retired members' balances transferred to Retirement Allowance Account	15,316,539	8,291,080
Total expenses	21,754,624	14,187,931
EXCESS OF REVENUES OVER EXPENSES	44,811,559	43,369,080
MEMBERS' CONTRIBUTION ACCOUNT: BEGINNING OF YEAR	361,738,121	318,369,041
END OF YEAR	$406,549,680	$361,738,121

See notes to financial statements.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN RETIREMENT ALLOWANCE ACCOUNT
YEARS ENDED JUNE 30, 1991 AND 1990

	1991	1990
REVENUES:		
Employers contributions	$ 77,269,700	$ 68,593,246
Investment income	107,923,634	126,895,778
Net realized gain on disposal of investments	6,521,702	82,681,267
Retired members' balances transferred from Members' Contribution Account	15,316,539	8,291,080
Total revenues	207,031,575	286,461,371
EXPENSES:		
Retirement benefits for members	100,824,770	90,420,645
Contributions transferred to the Kentucky Retirement Systems Insurance Fund	19,961,382	14,510,920
Interest credited to members' balances transferred to Members' Contribution Account	13,721,080	12,286,706
Administrative expenses	2,091,405	1,459,398
Investment expenses	1,351,304	440,142
Total expenses	137,949,941	119,117,811
EXCESS OF REVENUES OVER EXPENSES	69,081,634	167,343,560
RETIREMENT ALLOWANCE ACCOUNT: BEGINNING OF YEAR	1,437,583,617	1,270,240,057
END OF YEAR	$1,506,665,251	$1,437,583,617

See notes to financial statements.

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 statue 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 trust 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.

e. 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.

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 305 at June 30, 1991.

For the years ended June 30, 1991 and 1990, 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. Such contribution rates are determined by the Board of Trustees of the Kentucky Retirement Systems each biennium. Participating employers contributed 7.45% and 15.05% (14% for the year ended June 30, 1990), respectively, of members' non-hazardous and hazardous compensation for the year ended June 30, 1991.

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, 1981, 6% thereafter through June 30, 1986 and 4% thereafter.

At June 30, membership in the System consisted of:

	1991	1990
Retirees and beneficiaries currently receiving benefits and terminated members entitled to benefits but not yet receiving them:		
Non-hazardous positions	25,258	25,622
Hazardous positions	267	280
Total	25,525	25,902
Current members:		
Vested:		
Non-hazardous positions	27,742	27,622
Hazardous positions	1,568	326
Nonvested:		
Non-hazardous positions	17,049	17,229
Hazardous positions	1,604	275
Total	73,488	71,354

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.

3. FUNDING STATUS AND PROGRESS

Generally accepted governmental accounting and 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, 1991 and 1990 was $2,288,611,147 and $2,055,489,412, respectively. The resulting unfunded pension benefit obligation was $375,396,216 and $256,167,674 at June 30, 1991 and 1990, 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 1991 and 1990 was determined by the System's consulting actuary, William M. Mercer, Inc., as part of an actuarial valuation as of June 30, 1991 and 1990, 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.

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, 1991 and 1990 were determined as part of an actuarial valuation as of June 30, 1990 and 1989, respectively, and were as follows:

	1991	1990
Employer	$ 68,423,239	$ 56,519,868
Member	43,533,350	41,199,372
TOTAL	$111,956,589	$ 97,719,240

Such contributions were to consist of:

	1991	1990
Normal cost	$ 80,104,418	$ 69,467,953
Amortization of the unfunded actuarial accrued liability	12,475,110	13,139,894
Administrative expenses	3,420,912	1,523,808
Group hospital and medical insurance premiums	15,956,149	13,587,585
TOTAL	$111,956,589	$ 97,719,240

Contributions received consisted of:

	1991	1990
Employer (7.45% of the covered payroll for non-hazardous positions for 1991 and 1990 and 15.05% and 14.00% for hazardous positions for 1991 and 1990, respectively)	$ 77,269,700	$ 68,593,246
Member (5% of the covered payroll for non-hazardous positions and 7% for hazardous positions for 1991 and 1990)	52,845,103	45,270,305
TOTAL	$130,114,803	$113,863,551

The 1988 Kentucky General Assembly acted to reduce contributions to the Retirement Systems by $1.5 million and $1.8 million for the years ended June 30, 1990 and 1989, respectively. Such reduction was affected by returning a portion of employer contributions to the Commonwealth's General Fund. The amount of the reduction was allocated between the System and the State Police Retirement System based upon each system's relative percentage of covered payroll. This resulted in the System returning $1,394,375 and $1,743,000 of employer contributions to the General Fund of the Commonwealth of Kentucky for the years ended June 30, 1990 and 1989, respectively.

The Appropriations Act of 1990 enacted by the 1990 Kentucky General Assembly reversed the action taken by the 1988 Kentucky General Assembly by acting to return the funds appropriated from the systems with interest added thereon. Effective June 30, 1990, the System received $3,543,708 of the appropriations which had been withheld over the previous two years.

5. EIGHT YEAR HISTORICAL TREND INFORMATION

Eight 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	(6) Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4) / (5)
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

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.

Revenues by Source

Fiscal Year	Member Contributions	Employer Contributions	Investment Income	Other Income	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

Expenses by Type

Fiscal Year	Benefit Payments	Administrative Expenses	Refunds	Other 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

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:

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.

- Certificates 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 System's investments are categorized below to give an indication of the level of risk assumed by the entity at June 30, 1991. Category 1 includes investments that are insured or registered or for which the securities 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, 1991				
	Category				
	1	2	3	Carrying Amount	Market Value
United States Government bonds		$ 220,184,650		$ 220,184,650	$ 223,562,000
Government National Mortgage Association and similar bonds		105,197,346		105,197,346	113,847,000
Corporate bonds	$21,260,470	120,916,706		142,177,176	146,641,000
Convertible bonds			$ 1,017,955	1,017,955	1,008,000
Common stocks		916,912,932		916,912,932	1,130,891,000
First mortgage real estate loans			15,821,387	15,821,387	14,487,000
Real estate investment trusts			116,347,129	116,347,129	124,122,000
Securities purchased under agreements to resell		375,614,417		375,614,417	375,614,000
Total investments	$21,260,470	$1,738,826,051	$133,186,471	$1,893,272,992	$2,130,172,000

Investments at June 30, 1991, included approximately $214 million of securities loaned under various lending programs.

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.

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% and 1.59% for non-hazardous and 6.17% and 5.74% for hazardous positions for the years ended June 30, 1991 and 1990, respectively.

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 $3,000,000 per policy 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. All major claims have been denied. 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.

COUNTY EMPLOYEES RETIREMENT SYSTEM

COUNTY EMPLOYEES RETIREMENT SYSTEM

BALANCE SHEETS
JUNE 30, 1991 AND 1990

	1991	1990
ASSETS:		
Investments:		
Bonds (market value - 1991, $279,548,000; 1990, $365,332,000)	$ 270,111,181	$ 359,932,908
Common stocks (market value - 1991, $876,403,000; 1990, $600,305,000)	747,111,835	516,084,853
First mortgage real estate loans (market value - 1991, $9,289,000; 1990, $288,000)	10,124,614	292,029
Real estate investment trusts (market value - 1991, $79,710,000; 1990, $51,065,000)	75,313,134	44,554,750
Securities purchased under agreements to resell (market value approximates cost)	223,993,377	274,717,537
Total investments	1,326,654,141	1,195,582,077
Cash on deposit with State Treasurer	499,863	91,948
Members and employers contributions receivable	12,463,161	10,698,258
Past service credit contribution receivable	52,577,347	58,189,845
Accrued investment income	7,482,817	9,484,087
Other assets		17,647
TOTAL	1,399,677,329	1,274,063,862
LIABILITIES:		
Members refunds, insurance fund transfers and investment expenses payable	3,450,324	3,997,595
NET ASSETS AVAILABLE FOR PLAN BENEFITS (Members' Contribution Account - 1991, $289,073,219; 1990, $254,282,752 and Retirement Allowance Account - 1991, $1,107,153,786; 1990, $1,015,783,515)	$1,396,227,005	$1,270,066,267
FUND BALANCE:		
Actuarial present value of projected benefits payable to current retirees and beneficiaries	$ 533,730,563	$ 414,437,109
Actuarial present value of projected benefits payable to terminated vested participants	15,183,655	21,505,175
Actuarial present value of credited projected benefits for active members:		
Member contributions	279,301,024	242,006,912
Employer financed portion	680,565,641	621,270,666
Total actuarial present value of credited projected benefits	1,508,780,883	1,299,219,862
Unfunded actuarial present value of credited projected benefits	(112,553,878)	(29,153,595)
TOTAL FUND BALANCE	$1,396,227,005	$1,270,066,267

See notes to financial statements.

COUNTY EMPLOYEES RETIREMENT SYSTEM

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN MEMBERS' CONTRIBUTION ACCOUNT
YEARS ENDED JUNE 30, 1991 AND 1990

	1991	1990
REVENUES:		
Members contributions	$ 50,027,929	$ 41,650,282
Interest credited to members' balances transferred from Retirement Allowance Account	9,356,568	8,279,504
Total revenues	59,384,497	49,929,786
EXPENSES:		
Refunds to former members	5,404,817	6,346,247
Retired members' balances transferred to Retirement Allowance Account	19,189,213	14,493,797
Total expenses	24,594,030	20,840,044
EXCESS OF REVENUES OVER EXPENSES	34,790,467	29,089,742
MEMBERS' CONTRIBUTION ACCOUNT:		
BEGINNING OF YEAR	254,282,752	225,193,010
END OF YEAR	$289,073,219	$254,282,752

See notes to financial statements.

COUNTY EMPLOYEES RETIREMENT SYSTEM

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN RETIREMENT ALLOWANCE ACCOUNT
YEARS ENDED JUNE 30, 1991 AND 1990

	1991	1990
REVENUES:		
Employers contributions	$ 77,403,269	$ 80,658,140
Investment income	75,889,593	86,852,951
Net realized gain on disposal of investments	1,292,434	45,450,457
Retired members' balances transferred from Members' Contribution Account	19,189,213	14,493,797
Total revenues	173,774,509	227,455,345
EXPENSES:		
Retirement benefits for members	53,341,986	41,158,196
Contributions transferred to the Kentucky Retirement Systems Insurance Fund	16,562,994	13,054,106
Interest credited to members' balances transferred to Members' Contribution Account	9,356,568	8,279,504
Administrative expenses	1,585,753	1,551,164
Investment expenses	1,556,937	488,486
Total expenses	82,404,238	64,531,456
EXCESS OF REVENUES OVER EXPENSES	91,370,271	162,923,889
RETIREMENT ALLOWANCE ACCOUNT:		
BEGINNING OF YEAR	1,015,783,515	852,859,626
END OF YEAR	$1,107,153,786	$1,015,783,515

See notes to financial statements.

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 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 statue and may be changed only 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 trust 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.

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, 1991, the number of participating local government employers was:

Boards of Education	175
County agencies	192
City agencies	141
Libraries	73
Other	292
Total	873

For the years ended June 30, 1991 and 1990, participating members contributed 5% and 4.25%, respectively 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. Such contribution rates are determined by the Board of Trustees of the Kentucky Retirement Systems each biennium. Participating employers contributed 6.35% and 14%, respectively, of members' non-hazardous and hazardous compensation for the year ended June 30, 1990, and 7.68% and 15.43%, respectively, for the year ended June 30, 1991.

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, 1981, 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:

	1991	1990
Retirees and beneficiaries currently receiving benefits and terminated members entitled to benefits but not yet receiving them:		
Non-hazardous positions	21,447	21,295
Hazardous positions	1,172	929
Total	22,619	22,224
Current members:		
Vested:		
Non-hazardous positions	26,824	24,756
Hazardous positions	3,039	2,592
Nonvested:		
Non-hazardous positions	25,126	23,814
Hazardous positions	1,728	1,866
Total	79,336	75,252

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.

3. FUNDING STATUS AND PROGRESS

Generally accepted governmental accounting and 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 Sheets. 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, 1991 and 1990 was $1,654,338,706 and $1,423,323,666, respectively. The resulting unfunded pension benefit obligation was $258,111,701 and $162,257,399 at June 30, 1991 and 1990, 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 1991 and 1990 was determined by the System's consulting actuary, William M. Mercer, Inc., as part of an actuarial valuation as of June 30, 1991 and 1990, 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.

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 percentage of payroll method to amortize the unfunded actuarial accrued liability.

Actuarially determined contribution requirements for the years ended June 30, 1991 and 1990 were determined as part of an actuarial valuation as of June 30, 1990 and 1989, respectively, and were as follows:

	1991	1990
Employer	$ 74,746,877	$ 56,902,021
Member	41,252,919	33,304,194
Total	$115,999,796	$ 90,206,215

Such contributions were to consist of:

	1991	1990
Normal cost	$ 88,860,981	$ 73,047,371
Amortization of the unfunded actuarial accrued liability	7,901,773	3,223,433
Administrative expenses	4,013,570	1,619,046
Group hospital and medical insurance premiums	15,223,472	12,316,365
TOTAL	$115,999,796	$ 90,206,215

Contributions received consisted of:

	1991	1990
Employer (7.68% and 6.35% of the covered payroll for non-hazardous positions and 15.43% and 14% for hazardous positions for 1991 and 1990, respectively)	$ 77,403,269	$ 80,658,140
Member (5% and 4.25% of the covered payroll for non-hazardous positions for 1991 and 1990, respectively, and 7% for hazardous positions for 1991 and 1990)	50,027,929	41,650,282
TOTAL	$127,431,198	$122,308,422

5. EIGHT YEAR HISTORICAL TREND INFORMATION

Eight 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	(6) Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4) / (5)
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	60[illegible],815,800	479,360,458	126.0	(124,455,342)	484,796,988	N/A
1987	[illegible]730,727	607,890,713	119.7	(119,840,014)	544,184,376	N/A
1988	83[illegible],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

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 strong the PERS.

Fiscal Year	Revenues by Source Member Contributions	Employer Contributions	Investment Income	Other Income	Total
1984	$16,040,197	$ 25,280,243	$35,005,604	$ 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

Fiscal Year	Expenses by Type Benefit Payments	Administrative Expenses	Refunds	Other 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

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:

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 United States Government issues.

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

- Certificates 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 System's investments are categorized below to give an indication of the level of risk assumed by the entity at June 30, 1991. Category 1 includes investments that are insured or registered or for which the securities 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, 1991				
	Category				
	1	2	3	Carrying Amount	Market Value
United States Government bonds		$ 136,697,781		$ 136,697,781	$ 138,802,000
Government National Mortgage Association and similar bonds		58,736,564		58,736,564	64,246,000
Corporate bonds	$ 11,170,756	63,013,008		74,183,764	76,012,000
Convertible bonds			$ 493,072	493,072	488,000
Common stocks		747,111,835		747,111,835	876,403,000
First mortgage real estate loans			10,124,614	10,124,614	9,289,000
Real estate investment trust			75,313,134	75,313,134	79,710,000
Securities purchased under agreements to resell		223,993,377		223,993,377	223,993,000
Total investments	$ 11,170,756	$1,229,552,565	$85,930,820	$1,326,654,141	$1,468,943,000

Investments at June 30, 1991, included approximately $154 million of securities loaned under various lending programs.

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.

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 1.38% and 1.2% for non-hazardous and 5.11% and 4.65% for hazardous positions for the years ended June 30, 1991 and 1990, respectively.

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 $3,000,000 per policy 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. All major claims have been denied. 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.

STATE POLICE RETIREMENT SYSTEM

STATE POLICE RETIREMENT SYSTEM

BALANCE SHEETS
JUNE 30, 1991 AND 1990

	1991	1990
ASSETS:		
Investments:		
Bonds (market value - 1991, $41,990,000; 1990, $53,818,000)	$ 40,680,524	$ 53,127,770
Common stocks (market value - 1991, $87,684,000; 1990, $67,440,000)	69,609,114	53,771,820
First mortgage real estate loans (market value - 1991, $1,008,000; 1990, $129,000)	1,100,250	130,419
Real estate investment trusts (market value - 1991, $9,949,000; 1990, $6,584,000)	9,286,348	5,670,665
Securities purchased under agreements to resell (market value approximates cost)	28,729,839	30,942,492
Total investments	149,406,075	143,643,166
Cash on deposit with State Treasurer	9,500	1,803
Members and employers contributions receivable	809,993	350,482
Accrued investment income	1,028,122	1,317,561
Other assets		299
TOTAL	151,253,690	145,313,311
LIABILITIES:		
Members refunds, insurance fund transfers and investment expenses payable	435,616	287,760
NET ASSETS AVAILABLE FOR BENEFITS (Members' Contribution Account - 1991, $23,937,209; 1990, $21,695,121 and Retirement Allowance Account - 1991, $126,880,865; 1990, $123,330,430)	$150,818,074	$145,025,551
FUND BALANCE:		
Actuarial present value of projected benefits payable to current retirees and beneficiaries	$ 82,243,354	$ 79,262,878
Actuarial present value of projected benefits payable to terminated vested participants	259,371	388,116
Actuarial present value of credited projected benefits for active members:		
Member contribution	23,773,620	21,418,665
Employer financed portion	56,744,572	46,688,778
Total actuarial present value of credited projected benefits	163,020,917	147,758,437
Unfunded actuarial present value of credited projected benefits	(12,202,843)	(2,732,886)
TOTAL FUND BALANCE	$150,818,074	$145,025,551

See notes to financial statements.

STATE POLICY RETIREMENT SYSTEM

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN MEMBERS' CONTRIBUTION ACCOUNT
YEARS ENDED JUNE 30, 1991 AND 1990

	1991	1990
REVENUES:		
Members contributions	$ 2,347,772	$ 2,040,017
Interest credited to members' balances transferred from Retirement Allowance Account	835,335	761,728
Total revenues	3,183,107	2,801,745
EXPENSES:		
Refunds to former members	42,561	69,128
Retired members' balances transferred to Retirement Allowance Account	898,458	534,155
Total expenses	941,019	603,283
EXCESS OF REVENUES OVER EXPENSES	2,242,088	2,198,462
MEMBERS' CONTRIBUTION ACCOUNT:		
BEGINNING OF YEAR	21,695,121	19,496,659
END OF YEAR	$23,937,209	$21,695,121

See notes to financial statements.

STATE POLICE RETIREMENT SYSTEM

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN RETIREMENT ALLOWANCE ACCOUNT
YEARS ENDED JUNE 30, 1991 AND 1990

	1991	1990
REVENUES:		
Employers contributions	$ 6,038,636	$ 4,655,297
Investment income	8,809,299	10,411,631
Net realized gain on disposal of investments	568,316	7,498,946
Retired members' balances transferred from Members' Contribution Account	898,458	534,155
Total revenues	16,314,709	23,100,029
EXPENSES:		
Retirement benefits for members	8,959,087	8,504,914
Contributions transferred to the Kentucky Retirement Systems Insurance Fund	2,789,669	2,303,306
Interest credited to members' balances transferred to Members' Contribution Account	835,335	761,728
Administrative expenses	150,807	30,397
Investment expenses	29,376	23,148
Total expenses	12,764,274	11,623,493
EXCESS OF REVENUES OVER EXPENSES	3,550,435	11,476,536
RETIREMENT ALLOWANCE ACCOUNT: BEGINNING OF YEAR	123,330,430	111,853,894
END OF YEAR	$126,880,865	$123,330,430

See notes to financial statements.

NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1991 AND 1990

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 statue 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. Discount and premiums are amortized using the straight-line method from the date of acquisition to the stated or expected maturity. Common stocks, securities purchased under agreement to resell and investments in real estate trust 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.

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. Such contribution rates are determined by the Board of Trustees of the Kentucky Retirement Systems each biennium. For the years ended June 30, 1991 and 1990, the employer contributed 20.31% and 18.25% of members' compensation, respectively.

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, 1981, 6% thereafter through June 30, 1986 and 4% thereafter.

At June 30, membership in the System consisted of:

	1991	1990
Retirees and beneficiaries currently receiving benefits and terminated members entitled to benefits but not yet receiving them	491	512
Current members:		
Vested	764	734
Nonvested	227	230
Total	1,482	1,476

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.

3. FUNDING STATUS AND PROGRESS

Generally accepted governmental accounting and 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 Sheets. 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, 1991 and 1990 was $170,009,955 and $154,007,622, respectively. The resulting unfunded pension benefit obligation was $19,191,881 and $8,982,071 at June 30, 1991 and 1990, 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 1991 and 1990 was determined by the System's consulting actuary, William M. Mercer, Inc., as part of an actuarial valuation as of June 30, 1991 and 1990, 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	- 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.

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, 1991 and 1990 were determined as part of an actuarial valuation as of June 30, 1990 and 1989, respectively, and were as follows:

	1991	1990
Employer	$5,083,382	$4,570,437
Member	1,817,979	1,699,755
Total	$6,901,361	$6,270,192

Such contributions were to consist of:

	1991	1990
Normal cost	$3,934,362	$3,784,452
Amortization of the unfunded actuarial accrued liability	437,418	288,020
Administrative expenses	67,518	31,746
Group hospital and medical insurance premiums	2,462,063	2,165,974
Total	$6,901,361	$6,270,192

Contributions received consisted of:

	1991	1990
Employer (20.31% and 18.25% of the covered payroll for 1991 and 1990, respectively)	$6,038,636	$4,655,297
Member (7% of the covered payroll for 1991 and 1990)	2,347,772	2,040,017
Total	$8,386,408	$6,695,314

The 1988 Kentucky General Assembly acted to reduce contributions to the Retirement Systems by $1.5 million and $1.8 million for the years ended June 30, 1990 and 1989, respectively. Such reduction was affected by returning a portion of employer contributions to the Commonwealth's General Fund. The amount of the reduction was allocated between the Kentucky Employees Retirement System and the System based upon each system's relative percentage of covered payroll. This resulted in the System returning $43,125 and $57,000 of employer contributions to the General Fund of the Commonwealth of Kentucky for the years ended June 30, 1990 and 1989, respectively.

The Appropriations Act of 1990 enacted by the 1990 Kentucky General Assembly reversed the action taken by the 1988 Kentucky General Assembly by acting to return the funds appropriated from the systems with interest added thereon. Effective June 30, 1990, the System received $112,992 of the appropriations which had been withheld over the previous two years.

5. EIGHT YEAR HISTORICAL TREND INFORMATION

Eight 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	(6) Unfunded Pension Benefit Obligation as a Percentage of Covered Payroll (4) / (5)
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

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.

	Revenues by Source				
Fiscal Year	Member Contributions	Employer Contributions	Investment Income	Other Income	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

	Expenses by Type					
Fiscal Year	Benefit Payments	Administrative Expenses	Refunds	Other Expenses	Contributions Transferred to Insurance Fund	Total
1984	$2,890,091	$11,969	$117,414	$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

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:

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 United States Government issues.

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

- Certificates 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 System's investments are categorized below to give an indication of the level of risk assumed by the entity at June 30, 1991. Category 1 includes investments that are insured or registered or for which the securities 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, 1991				
	Category				
	1	2	3	Carrying Amount	Market Value
United States Government bonds		$ 19,296,030		$ 19,296,030	$ 19,636,000
Government National Mortgage Association and similar bonds		9,164,413		9,164,413	9,787,000
Corporate bonds	$ 1,801,735	10,338,818		12,140,553	12,488,000
Convertible bonds			$ 79,528	79,528	79,000
Common stocks		69,609,114		69,609,114	87,684,000
First mortgage real estate loans			1,100,250	1,100,250	1,008,000
Real estate investment trusts			9,286,348	9,286,348	9,949,000
Securities purchased under agreements to resell		28,729,839		28,729,839	28,730,000
Total investments	$ 1,801,735	$137,138,214	$ 10,466,126	$149,406,075	$169,361,000

Investments at June 30, 1991, included approximately $16 million of securities loaned under various lending programs.

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.

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 the year ended June 30, 1991 and 8.92% for the year ended June 30, 1990.

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 $3,000,000 per policy 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. All major claims have been denied. 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.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

BALANCE SHEETS
JUNE 30, 1991 AND 1990

	1991	1990
ASSETS:		
Investments:		
Bonds (market value - 1991, $56,312,000; 1990, $46,861,000)	$ 55,446,662	$ 46,774,593
Common stock (market value - 1991, $24,148,000)	21,212,453	
Securities purchased under agreement to resell (market value approximates cost)	15,993,967	17,751,815
Total investments	92,653,082	64,526,408
Employers contributions receivable	3,520,641	2,720,419
Accrued investment income	1,231,448	924,545
Other assets	500,000	500,000
TOTAL	97,905,171	68,671,372
LIABILITY:		
Payable to Kentucky Retirement Systems	3,547	987
NET ASSETS AVAILABLE FOR BENEFITS	$ 97,901,624	$ 68,670,385
FUND BALANCE:		
Actuarial present value of projected medical benefits payable to current retirees and beneficiaries	$ 305,874,386	$ 252,729,333
Actuarial present value of project medical benefits payable to active members	1,395,975,721	1,231,701,111
Total actuarial present value of projected medical benefits	1,701,850,107	1,484,430,444
Unfunded actuarial present value of credited projected medical benefits	(1,603,948,483)	(1,415,760,059)
TOTAL FUND BALANCE	$ 97,901,624	$ 68,670,385

See notes to financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN FUND BALANCE
YEARS ENDED JUNE 30, 1991 AND 1990

	1991	1990
ALLOCATED TO KENTUCKY EMPLOYES RETIREMENT SYSTEM		
REVENUES:		
Employers contributions transferred from Kentucky Employees Retirement System	$19,961,382	$14,510,920
Investment income	2,841,795	2,272,331
Net realized gain on disposal of investments	65,290	25,099
Total revenues	22,868,467	16,808,350
EXPENSES - Insurance premium payments	9,042,063	7,792,736
EXCESS OF REVENUES OVER EXPENSES	13,826,404	9,015,614
FUND BALANCE:		
Beginning of year	32,722,932	23,707,318
End of year	$46,549,336	$32,722,932
ALLOCATED TO COUNTY EMPLOYES RETIREMENT SYSTEM		
REVENUES:		
Employers contributions transferred from County Employees Retirement System	$16,562,994	$13,054,106
Investment income	2,574,432	1,933,662
Net realized gain on disposal of investments	47,623	14,660
Total revenues	19,185,049	15,002,428
EXPENSES - Insurance premium payments	6,195,241	4,585,058
EXCESS OF REVENUES OVER EXPENSES	12,989,808	10,417,370
FUND BALANCE:		
Beginning of year	29,430,936	19,013,566
End of year	$42,420,744	$29,430,936
ALLOCATED TO STATE POLICE RETIREMENT SYSTEMS		
REVENUES:		
Employers contributions transferred from State Police Retirement System	$ 2,789,669	$ 2,303,306
Investment income	571,315	460,714
Net realized gain on disposal of investments	12,195	3,470
Total revenues	3,373,179	2,767,490
EXPENSES - Insurance premium payments	958,152	835,006
EXCESS OF REVENUES OVER EXPENSES	2,415,027	1,932,484
FUND BALANCE:		
Beginning of year	6,516,517	4,584,033
End of year	$ 8,931,544	$ 6,516,517

See notes to financial statements.

NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1991 AND 1990

1. SIGNIFICANT ACCOUNTING POLICY

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 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 date of acquisition to the stated or expected maturity date. Common stock 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.

2. DESCRIPTION OF THE FUND

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 System (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 $6,376,000 and $5,758,000 for the Kentucky Employees Retirement System, $4,459,000 and $3,602,000 for the County Employees Retirement System, and $64,000 and $44,000 for the State Police Retirement System in 1991 and 1990, 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 23,251 retirees as of June 30, 1991. 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 amount 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 was determined through an actuarial valuation performed at June 30, 1990 and 1989, respectively, as follows:

	1991	1990
Non-Hazardous		
Kentucky Employees Retirement System	1.77%	1.59%
County Employees Retirement System	1.38%	1.21%
Hazardous		
Kentucky Employees Retirement System	6.17%	5.74%
County Employees Retirement System	5.11%	4.65%
State Police Retirement System	9.48%	8.92%

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

	1991	1990
Required Contributions		
Kentucky Employes Retirement System	$15,956,149	$13,587,585
County Employes Retirement System	15,223,472	12,316,365
State Police Retirement System	2,462,063	2,165,974
Total	$33,641,684	$28,069,924
Actual Contributions		
Kentucky Employes Retirement System	$19,961,382	$14,510,920
County Employes Retirement System	16,562,994	13,054,106
State Police Retirement System	2,789,669	2,303,306
Total	$39,314,045	$29,868,332

3. 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, 1991 and 1990, respectively. Such is titled "total actuarial present value of projected medical benefits" shown on the Balance Sheets.

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 medical benefits
Health Cost Inflation	- 10% per annum

4. 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:

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.

- Certificates 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 entity at June 30, 1991. Category 1 includes investments that are insured or registered or for which the securities are held by the Kentucky Retirement Systems or its agent in the System's name. Category 2 includes uninsured and unregistered investments for which the collateralized securities are held by the broker's or dealer's trust department or agent in System's name.

	June 30, 1991			
	Category			
	1	2	Carrying Amount	Market Value
United States Government bonds		$35,193,577	$ 35,193,577	$ 36,049,000
Government National Mortgage Association and similar bonds		7,765,620	7,765,620	7,712,000
Corporate bonds	$1,801,735	10,685,730	12,487,465	12,551,000
Common stock		21,212,453	21,212,453	24,148,000
Securities purchased under agreement to resell		15,993,967	15,993,967	15,994,000
Total investments	$1,801,735	$90,851,347	$92,653,082	$96,454,000

Investments at June 30, 1991, included approximately $12 million of securities loaned under various lending programs.

Deloitte & Touche

510 West Broadway
Louisville, Kentucky 40202-2284
Telephone: (502) 562-2000
Facsimile: (502) 562-2073

<u>INDEPENDENT AUDITORS' REPORT</u>

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, 1991, and have issued our report thereon dated September 24, 1991.

We conducted our audit in accordance with generally accepted auditing standards and <u>Government Auditing Standards</u>, 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, 1991, 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 of 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 control 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.

Deloitte & Touche

September 24, 1991

Deloitte & Touche

510 West Broadway
Louisville, Kentucky 40202-2284
Telephone: (502) 562-2000
Facsimile: (502) 562-2073

INDEPENDENT AUDITORS' REPORT

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, 1991 and for the year then ended, and have issued our report thereon dated September 24, 1991.

We conducted our audit in accordance with generally accepted auditing standards and Government Auditing Standard, 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, contracts, 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.

Deloitte & Touche

September 24, 1991

ACTUARIAL SECTION

UNFUNDED ACCRUED LIABILITIES

NORMAL COST

ACCRUED BENEFIT LIABILITY

EMPLOYER CONTRIBUTION RATE

ACTUARIAL ASSETS

VESTED ACCRUED BENEFIT LIABILITY

NON-VESTED BENEFITS

INTRODUCTION
TO
ACTUARIAL SECTION

An actuarial valuation is a mathematical means of determining liabilities (the cost of benefits guaranteed each member) and the adequateness 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 guarantee those benefits to those who are currently members and those who will become 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 investments and benefit improvements. Their decisions can affect the systems' ability to provide not only continuing payments to those currently drawing benefits, but also to provide the necessary assets to guarantee benefit payments to future generations.

The Board's actuarial consultant, the firm of William M. Mercer, Inc., has performed the actuarial valuations for six fiscal years. The firm also conducted the experience study that was used to provide the current actuarial assumptions. Those assumptions were adopted by the Board in December of 1989. The actuarial assumptions are necessary to project the liabilities of the systems.

The normal costs of the systems are being funded as a percent of payroll, as indicated in the report. The remaining unfunded liabilities are being amortized over a 30-year period. This statutory requirement assures that the systems will remain sound, and that current unfunded liabilities will be fully funded in 30 years.

WILLIAM M.
MERCER
INCORPORATED

November 8, 1991

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

Members of the Board:

The thirty-fifth annual actuarial valuation of the Kentucky Employees Retirement System, the thirty-second annual actuarial valuation of the County Employees Retirement System, and the thirty-third 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, 1991.

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

/cjh

THIRTY-FIFTH ANNUAL ACTUARIAL VALUATION

JUNE 30, 1991

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the thirty-fifth 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, 1991.

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-43. 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-4.

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 is being increased each year by a percentage amount which will result in reaching the Entry Age Normal funding rate within a 20 year period measured from 1987.

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-4). The actuarial assumptions applicable to other employees are described on the following page.

Actuarial Value of Assets

The actuarial value of assets is determined using the book value of the assets as of the valuation date, plus accrued investment income and member and employer contributions receivable, less member refunds and investment expenses payable. 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	7/1/91 Rate	Rate Increase Date	Rate Increase Rate
Single	$124.27*	11/1/91	$150.00*
Family	261.97*	11/1/91	315.00*
Medicare	58.25*	1/1/92	64.08**
High Option	88.40*	1/1/92	97.24**

*Actual rates
**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:

Age	Active Mortality Males	Active Mortality Females	Disabled Mortality Males	Disabled Mortality 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 1991 ACTUARIAL VALUATION

Actuarial Balance Sheet

Table I, which follows, is the actuarial balance sheet of the Kentucky Employees Retirement System as of June 30, 1991. 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, 1991.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 1991 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 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 employe'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, 1991

ACTUARIAL ASSETS		
Fund Assets at Book Value*		$1,917,816,462
Actuarial Present Value of Future Member Contributions		633,610,280
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 551,167,202	
For Unfunded Actuarial Accrued Liability	375,396,216	
Total		$ 926,563,418
Total Actuarial Assets		$3,477,990,160
ACTUARIAL LIABILITIES		
Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 886,727,902	
Vested Retirement	16,979,067	
Vested Membership	4,694,100	
Total - Inactive		$ 908,401,069
Active Members:		
Retirement Benefits	$2,141,701,509	
Disability Benefits	123,620,714	
Withdrawal Benefits (Vested and Refund of Contributions)	168,279,123	
Survivor Benefits	131,386,214	
Total - Active		$2,564,987,560
Refunds and Expenses Payable		$ 4,601,531
Total Actuarial Liabilities		$3,477,990,160
ACCRUED BENEFIT LIABILITY **		
Vested Benefits		$1,371,688,660
Non-Vested Benefits		$ 76,305,739

* The approximate market value of assets as of June 30, 1991 is $2,175,740,760 (2,127,403,199 for Non-Hazardous and $48,337,561 for Hazardous).
The actuarial value of assets as of June 30, 1991 is $1,913,214,931 (book value of assets less refunds and expenses payable).
The Members' Contribution Account as of June 30, 1991 is $406,549,680.

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

TABLE II
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
DETERMINATION OF CONTRIBUTION RATE-JUNE 30, 1991

		PERCENT*
UNFUNDED ACTUARIAL ACCRUED LIABILITY		
Total Actuarial Accrued Liability	$2,288,611,147	232.90%
Assets at Actuarial Value	1,913,214,931	194.70%
Unfunded Actuarial Accrued Liability	$ 375,396,216	38.20%
Contribution - Payment on Unfunded Actuarial Accrued Liability	$ 18,683,469	1.90%
NORMAL COST		
Retirement Benefits	$ 77,030,202	7.84%
Disability Benefits	5,318,014	.54%
Withdrawal Benefits (Vested and Refund of Contributions)	8,731,593	.89%
Survivor Benefits	4,802,787	.49%
Total Normal Cost	$ 95,882,596	9.76%
Less: Employee Contributions	49,979,279	5.09%
Normal Cost - State	$ 45,903,317	4.67%
TOTAL ANNUAL EMPLOYER COST		
Non-Hazardous Duty Cost		
Normal Cost	$ 39,780,439	4.32%**
Payment on Unfunded Actuarial Accrued Liability	18,278,390	1.99%**
Administrative Expenses	3,455,049	.38%**
Group Hospital and Medical Insurance Premiums	18,123,019	1.97%**
Total Annual Cost	$ 79,636,897	8.66%**
Hazardous Duty Cost		
Normal Cost	$ 6,122,878	9.77%***
Payment on Unfunded Actuarial Accrued Liability	405,079	.65%***
Administrative Expenses	244,461	.39%***
Group Hospital and Medical Insurance Premiums	4,225,724	6.74%***
Total Annual Cost	$ 10,998,142	17.55%***

*Based on estimated annual salaries of $982,646,400.
**Based on estimated annual salaries of $919,950,204 for Non-Hazardous Position Employees.
***Based on estimated annual salaries of $62,696,196 for Hazardous Position Employees.

TABLE III
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS-JUNE 30, 1991

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	$1,167,528,531	$28,391,453	$1,195,919,984
Disability Benefits	57,162,069	732,863	57,894,932
Withdrawal Benefits (Vested and Refund of Contributions)	53,802,755	329,404	54,132,159
Survivor Benefits	71,259,466	1,003,537	72,263,003
Actuarial Accrued Liability - Actives	$1,349,752,821	$30,457,257	$1,380,210,078
Inactive Members			
Retired Members and Beneficiaries	$ 869,131,499	$17,596,403	$ 886,727,902
Vested Retirement	16,655,159	323,908	16,979,067
Vested Membership	4,617,740	76,360	4,694,100
Actuarial Accrued Liability - Inactives	$ 890,404,398	$17,996,671	$ 908,401,069
Total Actuarial Accrued Liability	$2,240,157,219	$48,453,928	$2,288,611,147
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$2,240,157,219	$48,453,928	$2,288,611,147
Less Actuarial Value of Assets	1,872,900,026	40,314,905	1,913,214,931
Unfunded Actuarial Accrued Liability	$ 367,257,193	$ 8,139,023	$ 375,396,216
NORMAL COST			
Retirement Benefits	$ 67,773,620	$ 9,256,582	$ 77,030,202
Disability Benefits	4,995,684	322,330	5,318,014
Withdrawal Benefits (Vested and Refund of Contributions)	8,451,352	280,241	8,731,593
Survivor Benefits	4,352,174	450,613	4,802,787
Total Normal Cost	$ 85,572,830	$10,309,766	$ 95,882,596
Less Employee Contributions	45,792,391	4,186,888	49,979,279
Total Normal Cost - State	$ 39,780,439	$ 6,122,878	$ 45,903,317
ACCRUED BENEFIT LIABILITY*			
Vested Benefits	$1,339,024,139	$32,664,521	$1,371,688,660
Non-Vested Benefits	64,758,229	11,547,510	76,305,739

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

TABLE IV
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1991
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	$ 429,589,803	$ 9,082,887	$ 438,672,690
Disability Benefits	11,423,982	358,461	11,782,443
Withdrawal Benefits (Vested and Refund of Contributions)	56,866,223	862,878	57,729,101
Survivor Benefits	0	0	0
Total Active Members	$ 497,880,008	$10,304,226	$ 508,184,234
Inactive Members			
Retired Members and Beneficiaries	$ 869,131,499	$17,596,403	$ 886,727,902
Vested Retirement	16,655,159	323,908	16,979,067
Vested Membership	4,617,740	76,360	4,694,100
Total-Inactive Members	$ 890,404,398	$17,996,671	$ 908,401,069
Total Actuarial Present Value of Vested Accumulated Benefits	$1,388,284,406	$28,300,897	$1,416,585,303
ACTUARIAL PRESENT VALUE OF NON-VESTED ACCUMULATED BENEFITS			
Active Members			
Retirement Benefits	$ 72,926,479	$ 6,052,861	$ 78,979,340
Disability Benefits	32,657,281	999,660	33,656,941
Withdrawal Benefits (Vested and Refund of Contributions)	1,561,271	127,579	1,688,850
Survivor Benefits	35,335,031	1,386,010	36,721,041
Total - Active Members	$ 142,480,062	$ 8,566,110	$ 151,046,172
Inactive Members	$ 0	$ 0	$ 0
Total Actuarial Present Value of Non-Vested Accumulated Benefits	$ 142,480,062	$ 8,566,110	$ 151,046,172

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, 1991
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	16,333	173	16,506
Vested Retirements	1,708	21	1,729
Vested Membership	7,217	73	7,290
Total Inactive Members	25,258	267	25,525
Active Members			
Vested Members	27,742	1,568	29,310
Nonvested Members	17,049	1,604	18,653
Total Active Members	44,791	3,172	47,963
Total Members	70,049	3,439	73,488
B. UNFUNDED PENSION BENEFIT OBLIGATION			
Pension Benefit Obligation			
Retirees and Beneficiaries Currently Receiving Benefits and Terminated Members Not Yet Receiving Benefits	$ 890,404,398	$17,996,671	$ 908,401,069
Current Members			
Accumulated Employee Contributions and Credited Interest	378,474,473	9,742,086	388,216,559
Employer Financed - Vested	778,820,447	16,497,561	795,318,008
Employer Financed - Nonvested	30,824,012	2,610,699	33,434,711
Total Pension Benefit Obligation	2,078,523,330	46,847,017	2,125,370,347
Net Assets at Cost Value	$1,872,900,026	$40,314,905	$1,913,214,931
Unfunded Pension Benefit Obligation	205,623,304	6,532,112	212,155,416

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

TABLE VI
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1991
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	844	17	861
	- 75% Paid	643	20	663
	- 50% Paid	284	9	293
	- 25% Paid	183	7	190
	- 0% Paid	694	0	694
(2) Family; Pre-Medicare	- 100% Paid	1	25	26
	- 75% Paid	0	19	19
	- 50% Paid	64	4	68
	- 25% Paid	389	2	391
	- 0% Paid	26	0	26
(3) Parent Plus; Pre-Medicare	- 100% Paid	0	1	1
	- 75% Paid	0	1	1
	- 50% Paid	5	0	5
	- 25% Paid	2	1	3
	- 0% Paid	21	0	21
(4) Medicare Regular	- 100% Paid	46	0	46
	- 75% Paid	266	3	269
	- 50% Paid	463	5	468
	- 25% Paid	449	0	449
	- 0% Paid	652	0	652
(5) Medicare High Option	- 100% Paid	3,226	31	3,257
	- 75% Paid	1,430	14	1,444
	- 50% Paid	1,290	2	1,292
	- 25% Paid	816	3	819
	- 0% Paid	3	0	3
Vested Retirements		1,708	21	1,729
Vested Membership		7,217	73	7,290
Active Members		44,791	3,172	47,963
B. UNFUNDED MEDICAL BENEFIT OBLIGATION				
Medical Benefit Obligation				
Retirees and Beneficiaries		$161,743,721	$ 7,031,040	$168,774,761
Active Members		606,002,071	29,897,218	635,899,289
Total Medical Benefit Obligation		767,745,792	36,928,258	804,674,050
Net Assets at Cost Value		$ 41,572,585	$ 4,976,750	$ 46,549,335
Unfunded Medical Benefit Obligation		726,173,207	31,951,508	758,124,715

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

SECTION IV

COMMENTS AND CERTIFICATION

Comments

The total Actuarial Accrued Liability has increased from $2,055,489,412 on June 30, 1990 to $2,288,611,147 on June 30, 1991. The Unfunded Actuarial Accrued Liability has increased from $256,167,674 to $375,396,216. Total actuarial value of assets as of June 30, 1991 was equal to $1,913,214,931.

The Unfunded Actuarial Accrued Liability increased from 29.48% to 38.20% as a percentage of annual payroll and increased from 12.5% to 16.4% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 1991.

The change in contribution rate between the 1990 and 1991 valuations is a function of actual plan experience. 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, 1990 Contribution Rate	7.76%	15.23%
Investment Return	0.16%	0.06%
Salary Increases	0.60%	0.96%
Decrements Experience*	(0.05%)	0.69%
Change in Group Hospital and Medical Premium Rate	0.20%	0.57%
Change in Administrative Expense Rate	(0.01%)	0.04%
June 30, 1991 Contribution Rate	8.66%	17.55%

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

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 6.69%. An additional 1.97% is required to fund medical insurance for retirees, bringing the total required contribution to 8.66%. This exceeds the current 7.65% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1992 should be increased from the current 7.65% level to 8.66%, 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 10.81%. An additional 6.74% is required to fund medical insurance for retirees, bringing the total required contribution to 17.55%. This exceeds the current 15.05% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1992 should be increased from the current 15.05% level to 17.55%, 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, 1992 valuation.

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

KENTUCKY EMPLOYEES RETIREMENT SYSTEM

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

*Includes capitalized appreciation of investments.

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.

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

November 8, 1991

Date

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.

THIRTY-SECOND ANNUAL ACTUARIAL VALUATION

JUNE 30, 1991

COUNTY EMPLOYEES RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the thirty-second 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, 1991.

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-43. 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, and annual interest at the assumed rate on the Unfunded Actuarial Accrued Liability. 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-4.

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 is being increased each year by a percentage amount which will result in reaching the Entry Age Normal funding rate within a 20 year period measured from 1987.

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 applicable to other employees are described on page C-4.

Actuarial Value of Assets

The actuarial value of assets is determined as the book value of the assets as of the valuation date, plus accrued investment income and member and employer contribution receivables, less member refunds and investment expenses payable. 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:

Plan Type	7/1/91 Rate	Rate Increase Date	Rate Increase Rate
Single	$124.27*	11/1/91	$150.00*
Family	261.97*	11/1/91	315.00*
Medicare	58.25*	1/1/92	64.08**
High Option	88.40*	1/1/92	97.24**

*Actual rates
**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 1991 ACTUARIAL VALUATION

Actuarial Balance Sheet

Table I, which follows, is the actuarial balance sheet of the County Employees Retirement System as of June 30, 1991. 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, 1991.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 1991 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 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 employe'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, 1991

ACTUARIAL ASSETS

Fund Assets at Book Value*		$1,399,677,329
Actuarial Present Value of Future Member Contributions		568,412,642
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$ 629,395,510	
For Unfunded Actuarial Accrued Liability	258,111,701	
Total		$ 887,507,211
Total Actuarial Assets		$2,855,597,182

ACTUARIAL LIABILITIES

Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 533,730,563	
Vested Retirement	10,663,245	
Vested Membership	4,520,410	
Total - Inactive		$ 548,914,218
Active Members:		
Retirement Benefits	$1,953,482,498	
Disability Benefits	103,574,148	
Withdrawal Benefits (Vested and Refund of Contributions)	140,377,889	
Survivor Benefits	105,798,105	
Total - Active		$2,303,232,640
Refunds and Expenses Payable		$ 3,450,324
Total Actuarial Liabilities		$2,855,597,182

ACCRUED BENEFIT LIABILITY **

Vested Benefits	$ 950,974,655
Non-Vested Benefits	$ 116,858,348

* The approximate market value of assets as of June 30, 1991 is $1,510,892,169 ($1,174,865,850 for Non-Hazardous and $336,026,319 for Hazardous).
The actuarial value of assets as of June 30, 1991 is $1,396,227,005 (book value of assets less refunds and expenses payable).
The Members' Contribution Account as of June 30, 1991 is $289,073,219.

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

TABLE II
COUNTY EMPLOYEES RETIREMENT SYSTEM
DETERMINATION OF CONTRIBUTION RATE-JUNE 30, 1991

UNFUNDED ACTUARIAL ACCRUED LIABILITY		PERCENT*
Total Actuarial Accrued Liability	$1,654,338,706	186.50%
Assets at Actuarial Value	1,396,227,005	157.40%
Unfunded Actuarial Accrued Liability	$ 258,111,701	29.10%
Contribution - Payment on Unfunded Actuarial Accrued Liability	$ 12,846,219	1.45%
NORMAL COST		
Retirement Benefits	$ 82,342,624	9.28%
Disability Benefits	5,123,499	.58%
Withdrawal Benefits (Vested and Refund of Contributions)	8,142,488	.92%
Survivor Benefits	4,719,260	.53%
Total Normal Cost	$ 100,327,871	11.31%
Less: Employee Contributions	46,261,760	5.22%
Normal Cost - State	$ 54,066,111	6.09%
TOTAL ANNUAL EMPLOYER COST		
Non-Hazardous Duty Cost		
Normal Cost	$ 43,200,347	5.68% **
Payment on Unfunded Actuarial Accrued Liability	7,849,343	1.03% **
Administrative Expenses	4,009,160	.53% **
Group Hospital and Medical Insurance Premiums	12,011,469	1.58% **
Total Annual Cost	$ 67,070,319	8.82% **
Hazardous Duty Cost		
Normal Cost	$ 10,865,764	8.57%***
Payment on Unfunded Actuarial Accrued Liability	4,996,876	3.94%***
Administrative Expenses	366,692	.29%***
Group Hospital and Medical Insurance Premiums	7,190,324	5.67%***
Total Annual Cost	$ 23,419,656	18.47%***

*Based on estimated annual salaries of $887,033,040.
**Based on estimated annual salaries of $760,219,560 for Non-Hazardous Position Employees.
***Based on estimated annual salaries of $126,813,480 for Hazardous Position Employees.

TABLE III
COUNTY EMPLOYEES RETIREMENT SYSTEM
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS-JUNE 30, 1991

	Non-Hazardous Position Employees	Hazardous Position Employees	Total
ACTUARIAL ACCRUED LIABILITY			
Active Members			
Retirement Benefits	$ 734,441,962	$246,487,696	$ 980,929,658
Disability Benefits	37,710,833	2,921,891	40,632,724
Withdrawal Benefits (Vested and Refund of Contributions)	32,848,442	2,796,950	35,645,392
Survivor Benefits	43,205,858	5,010,856	48,216,714
Actuarial Accrued Liability - Actives	$ 848,207,095	$257,217,393	$1,105,424,488
Inactive Members			
Retired Members and Beneficiaries	$ 361,341,286	$172,389,277	$ 533,730,563
Vested Retirement	9,989,085	674,160	10,663,245
Vested Membership	4,403,828	116,582	4,520,410
Actuarial Accrued Liability - Inactives	$ 375,734,199	$173,180,019	$ 548,914,218
Total Actuarial Accrued Liability	$1,223,941,294	$430,397,412	$1,654,338,706
UNFUNDED ACTUARIAL ACCRUED LIABILITY			
Total Actuarial Accrued Liability	$1,223,941,294	$430,397,412	$1,654,338,706
Less Actuarial Value of Assets	1,066,228,951	329,998,054	1,396,227,005
Unfunded Actuarial Accrued Liability	$ 157,712,343	$100,399,358	$ 258,111,701
NORMAL COST			
Retirement Benefits	$ 65,161,781	$ 17,180,843	$ 82,342,624
Disability Benefits	4,789,916	333,583	5,123,499
Withdrawal Benefits (Vested and Refund of Contributions)	6,959,125	1,183,363	8,142,488
Survivor Benefits	4,043,702	675,558	4,719,260
Total Normal Cost	$ 80,954,524	$ 19,373,347	$ 100,327,871
Less Employee Contributions	37,754,177	8,507,583	46,261,760
Total Normal Cost - State	$ 43,200,347	$ 10,865,764	$ 54,066,111
ACCRUED BENEFIT LIABILITY*			
Vested Benefits	$ 672,083,642	$278,891,013	$ 950,974,655
Non-Vested Benefits	49,557,205	67,301,143	116,858,348

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

TABLE IV
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1991
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	$277,069,555	$ 97,319,217	$374,388,772
Disability Benefits	7,253,860	1,191,807	8,445,667
Withdrawal Benefits (Vested and Refund of Contributions)	33,736,347	6,870,337	40,606,684
Survivor Benefits	0	0	0
Total Active Members	$318,059,762	$105,381,361	$423,441,123
Inactive Members			
Retired Members and Beneficiaries	$361,341,286	$172,389,277	$533,730,563
Vested Retirement	9,989,085	674,160	10,663,245
Vested Membership	4,403,828	116,582	4,520,410
Total-Inactive Members	$375,734,199	$173,180,019	$548,914,218
Total Actuarial Present Value of Vested Accumulated Benefits	$693,793,961	$278,561,380	$972,355,341
ACTUARIAL PRESENT VALUE OF NON-VESTED ACCUMULATED BENEFITS			
Active Members			
Retirement Benefits	$ 41,022,440	$42,943,786	$ 83,966,226
Disability Benefits	25,129,433	1,611,460	26,740,893
Withdrawal Benefits (Vested and Refund of Contributions)	4,127,425	(245,011)	3,882,414
Survivor Benefits	20,558,866	4,655,319	25,214,185
Total - Active Members	$ 90,838,164	$48,965,554	$139,803,718
Inactive Members	$ 0	$ 0	$ 0
Total Actuarial Present Value of Non-Vested Accumulated Benefits	$ 90,838,164	$48,965,554	$139,803,718

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, 1991
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	11,328	1,058	12,386
Vested Retirements	1,343	36	1,379
Vested Membership	8,776	78	8,854
Total Inactive Members	21,447	1,172	22,619
Active Members			
Vested Members	26,824	3,039	29,863
Nonvested Members	25,126	1,728	26,854
Total Active Members	51,950	4,767	56,717
Total Members	73,397	5,939	79,336
B. UNFUNDED PENSION BENEFIT OBLIGATION			
Pension Benefit Obligation			
Retirees and Beneficiaries Currently Receiving Benefits and Terminated Members Not Yet Receiving Benefits	$375,734,199	$173,180,019	$ 548,914,218
Current Members			
Accumulated Employee Contributions and Credited Interest	215,548,181	63,752,843	279,301,024
Employer Financed - Vested	468,509,668	162,786,643	631,296,311
Employer Financed - Nonvested	40,635,933	8,633,397	49,269,330
Total Pension Benefit Obligation	1,100,427,981	408,352,902	1,508,780,883
Net Assets at Cost Value	$1,066,348,089	$329,998,054	$1,396,227,005
Unfunded Pension Benefit Obligation	34,199,030	78,354,848	112,553,878

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

TABLE VI
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1991
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 12

A. NUMBER OF MEMBERS		Non-Hazardous Position Employees	Hazardous Position Employees	Total
Inactive Members				
Contracts in Force - Retirees and Dependents				
(1) Single; Pre-Medicare	- 100% Paid	331	132	463
	- 75% Paid	300	47	347
	- 50% Paid	265	25	290
	- 25% Paid	282	1	283
	- 0% Paid	367	1	368
(2) Family; Pre-Medicare	- 100% Paid	1	201	202
	- 75% Paid	3	441	444
	- 50% Paid	20	29	49
	- 25% Paid	278	7	285
	- 0% Paid	20	0	20
(3) Parent Plus; Pre-Medicare	- 100% Paid	0	3	3
	- 75% Paid	1	6	7
	- 50% Paid	6	1	7
	- 25% Paid	2	2	4
	- 0% Paid	9	0	9
(4) Medicare Regular	- 100% Paid	18	1	19
	- 75% Paid	158	1	159
	- 50% Paid	418	4	422
	- 25% Paid	561	0	561
	- 0% Paid	321	0	321
(5) Medicare High Option	- 100% Paid	1,048	40	1,088
	- 75% Paid	665	21	686
	- 50% Paid	883	7	890
	- 25% Paid	954	1	955
	- 0% Paid	7	1	8
Vested Retirements		1,343	36	1,379
Vested Membership		8,776	78	8,854
Active Members		51,950	4,767	56,717

B. UNFUNDED MEDICAL BENEFIT OBLIGATION

	Non-Hazardous	Hazardous	Total
Medical Benefit Obligation			
Retirees and Beneficiaries	$ 78,139,973	$ 39,086,102	$117,226,075
Active Members	502,615,842	203,170,892	705,786,734
Total Medical Benefit Obligation	580,755,815	242,256,994	823,012,809
Net Assets at Cost Value	$ 28,301,162	$ 14,119,582	$ 42,420,744
Unfunded Medical Benefit Obligation	552,454,653	228,137,412	780,592,065

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

SECTION VII

COMMENTS AND CERTIFICATION

Comments

The total Actuarial Accrued Liability has increased from $1,432,323,666 on June 30, 1990 to $1,654,338,706 on June 30, 1991. The Unfunded Actuarial Accrued Liability increased from $162,257,399 to $258,111,701. Total actuarial value of assets as of June 30, 1991 was equal to $1,396,227,005.

The Unfunded Actuarial Accrued Liability increased from 20.53% to 29.10% as a percentage of annual payroll and from 11.3% to 15.6% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 1991.

The change in contribution rate between the 1990 and 1991 valuations is a function of actual plan experience. 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. Because of the significant impact of new entrants this year, especially in the Hazardous system, this analysis should be viewed as a very rough estimate. The following table shows the results of this computation:

	Non-Hazardous Position Employees	Hazardous Position Employees
June 30, 1990 Contribution Rate	8.20%	16.79%
Investment Return	0.13%	0.31%
Salary Increases	0.47%	0.10%
Decrements Experience*	(0.17%)	0.71%
Change in Group Hospital and Medical Premium Rate	0.20%	0.56%
Change in Administrative Expense Rate	(0.01%)	0.00%
June 30, 1991 Contribution Rate	8.82%	18.47%

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

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 7.24%. An additional 1.58% is required to fund medical insurance for retirees, bringing the total required contribution to 8.82%. This exceeds the current 7.95% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1992 be increased from the current 7.95% level to 8.82%, 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 12.80%. An additional 5.67% is required to fund medical insurance for retirees, bringing the total required contribution to 18.47%. This exceeds the current 16.10% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1992 be increased from the current 16.10% level to 18.47%, 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, 1992 valuation.

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

COUNTY EMPLOYEES RETIREMENT SYSTEM

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

*Includes capitalized appreciation of investments.

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 8, 1991

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 employe'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.

THIRTY-THIRD ANNUAL ACTUARIAL VALUATION

JUNE 30, 1991

STATE POLICE RETIREMENT SYSTEM

FRANKFORT, KENTUCKY

SECTION I

INTRODUCTION

The results of the thirty-third 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, 1991.

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-29. 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-4.

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 which will result in reaching the Entry Age Normal funding rate within a 20 year period measured from 1987.

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 as the book value of the assets as of the valuation date, plus accrued investment income and member and employer contributions receivable, less member refunds and investment expenses payable. 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	7/1/91 Rate	Rate Increase Date	Rate Increase Rate
Single	$124.27*	11/1/91	$150.00*
Family	261.97*	11/1/91	315.00*
Medicare	58.25*	1/1/92	64.08**
High Option	88.40*	1/1/92	97.24**

*Actual rates
**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 - Handled in same manner as under KERS and CERS systems.

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 1991 ACTUARIAL VALUATION

Actuarial Balance Sheet

Table I, which follows, is the actuarial balance sheet of the State Police Retirement System as of June 30, 1991. 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, 1991.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 1991 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 employe'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, 1991

ACTUARIAL ASSETS

Fund Assets at Book Value*		$ 151,253,690
Actuarial Present Value of Future Member Contributions		19,487,364
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	$23,111,242	
For Unfunded Actuarial Accrued Liability	19,191,881	
Total		$ 42,303,123
Total Actuarial Assets		$ 213,044,177

ACTUARIAL LIABILITIES

Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	$ 82,243,354	
Vested Retirement	215,976	
Vested Membership	43,395	
Total - Inactive		$ 82,502,725
Active Members:		
Retirement Benefits	$120,952,377	
Disability Benefits	1,746,457	
Withdrawal Benefits (Vested and Refund of Contributions)	3,804,831	
Survivor Benefits	3,602,171	
Total - Active		$ 130,105,836
Refunds and Expenses Payable and Payables to other Systems		$ 435,616
Total Actuarial Liabilities		$ 213,044,177

ACCRUED BENEFIT LIABILITY **

Vested Benefits	$ 118,251,690
Non-Vested Benefits	$ 24,034,895

* The approximate market value of assets as of June 30, 1991 is $178,292,082.
The actuarial value of assets as of June 30, 1991 is $150,818,074 (book value of assets less refunds and expenses payable).
The Members' Contribution Account as of June 30, 1991 is $23,937,209

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

TABLE II
STATE POLICE RETIREMENT SYSTEM
DETERMINATION OF CONTRIBUTION RATE-JUNE 30, 1991

		PERCENT*
ACTUARIAL ACCRUED LIABILITY		
Active Members		
Retirement Benefits	$ 83,897,396	286.58%
Disability Benefits	1,027,246	3.51%
Withdrawal Benefits (Vested and Refund of Contributions)	607,053	2.07%
Survivor Benefits	1,975,535	6.75%
Actuarial Accrued Liability - Active	$ 87,507,230	298.91%
Inactive Members		
Retired Members and Beneficiaries	$ 82,243,354	280.93%
Vested Retirement	215,976	.74%
Vested Membership	43,395	.15%
Actuarial Accrued Liability - Inactives	$ 82,502,725	281.82%
Total Actuarial Accrued Liability	170,009,955	580.73%
UNFUNDED ACTUARIAL ACCRUED LIABILITY		
Total Actuarial Accrued Liability	$170,009,955	580.72%
Assets at Actuarial Value	150,818,074	515.16%
Unfunded Actuarial Accrued Liability	$ 19,191,881	65.56%
Contribution - Payment on Unfunded Actuarial Accrued Liability	$ 934,625	3.19%
NORMAL COST		
Retirement Benefits	$ 3,888,592	13.28%
Disability Benefits	76,771	.26%
Withdrawal Benefits (Vested and Refund of Contributions)	344,995	1.18%
Survivor Benefits	174,097	.59%
Total Normal Cost	$ 4,484,455	15.31%
Less: Employee Contributions	2,049,298	7.00%
Normal Cost - State Police	$ 2,435,157	8.31%

TOTAL ANNUAL EMPLOYER COST - STATE POLICE

Normal Cost	$ 2,435,157	8.32%
Payment of Unfunded Actuarial Accrued Liability	934,625	3.19%
Administrative Expenses	73,338	.25%
Group Hospital and Medical Insurance Premiums	2,950,990	10.08%
Total Annual Cost	$ 6,394,110	21.84%

*Based on estimated annual salaries of $29,275,692.

TABLE III
STATE POLICE RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1991
INFORMATION REQUIRED UNDER FASB STATEMENT NO. 35

ACTUARIAL PRESENT VALUE OF VESTED ACCUMULATED BENEFITS	
Active Members	
Retirement Benefits	$ 32,462,824
Disability Benefits	475,450
Withdrawal Benefits (Vested and Refund of Contributions)	2,295,995
Survivor Benefits	0
Total Active Members	$ 35,234,269
Inactive Members	
Retired Members and Beneficiaries	$ 82,243,354
Vested Retirement	215,976
Vested Membership	43,395
Total-Inactive Members	$ 82,502,725
Total Actuarial Present Value of Vested Accumulated Benefits	$117,736,994
ACTUARIAL PRESENT VALUE OF NON-VESTED ACCUMULATED BENEFITS	
Active Members	
Retirement Benefits	$ 14,986,712
Disability Benefits	418,855
Withdrawal Benefits (Vested and Refund of Contributions)	(250,743)
Survivor Benefits	1,668,071
Total - Active Members	$ 16,822,895
Inactive Members	$ 0
Total Actuarial Present Value of Non-Vested Accumulated Benefits	$ 16,822,895

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, 1991
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 5

A. NUMBER OF MEMBERS

Inactive Members	
Retired Members and Beneficiaries	437
Vested Retirements	9
Vested Membership	45
Total Inactive Members	491
Active Members	
Vested Members	764
Nonvested Members	227
Total Active Members	991
Total Members	1,482

B. UNFUNDED PENSION BENEFIT OBLIGATION

Pension Benefit Obligation	
Retirees and Beneficiaries Currently Receiving Benefits and Terminated Members Not Yet Receiving Benefits	$ 82,502,725
Current members	
Accumulated Employee Contributions and Credited Interest	23,773,620
Employer Financed - Vested	55,893,281
Employer Financed - Nonvested	851,291
Total Pension Benefit Obligation	163,020,917
Net Assets at Cost Value	$150,818,074
Unfunded Pension Benefit Obligation	12,202,843

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

TABLE V
STATE POLICE RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1991
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	54
	- 75% Paid	43
	- 50% Paid	3
	- 25% Paid	1
	- 0% Paid	0
(2) Family; Pre-Medicare	- 100% Paid	124
	- 75% Paid	101
	- 50% Paid	3
	- 25% Paid	0
	- 0% Paid	0
(3) Parent +	- 100% Paid	3
	- 75% Paid	2
	- 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	41
	- 75% Paid	20
	- 50% Paid	3
	- 25% Paid	1
	- 0% Paid	0
Vested Retirements		9
Vested Membership		45
Active Members		991

B. UNFUNDED MEDICAL BENEFIT OBLIGATION

Medical Benefit Obligation	
Retirees and Beneficiaries	$ 19,873,550
Active Members	54,289,698
Total Medical Benefit Obligation	74,163,248
Net Assets at Cost Value	$ 8,931,544
Unfunded Medical Benefit Obligation	65,231,704

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

SECTION IV

COMMENTS AND CERTIFICATION

Comments

The total Actuarial Accrued Liability increased from $154,007,622 on June 30, 1990 to $170,009,955 on June 30, 1991. The Unfunded Actuarial Accrued Liability has increased from $8,982,071 to $19,191,881. Total actuarial value of assets as of June 30, 1991 was equal to $150,818,074.

The Unfunded Actuarial Accrued Liability increased from 34.59% to 65.56% as a percentage of annual payroll and increased 5.8% to 11.3% as a percentage of the Actuarial Accrued Liability in the year ended June 30, 1991.

The change in contribution rate between the 1990 and 1991 valuations is a function of actual plan experience. 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, 1990 Contribution Rate	19.57%
Investment Return	0.42%
Salary Increases	2.54%
Other Decrements*	(1.28%)
Change in Group Hospital and Medical Premium Rate	0.60%
Change in Administrative Expense Rate	(0.01%)
June 30, 1991 Contribution Rate	21.84%

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

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 11.76%. An additional 10.08% is required to fund medical insurance for retirees, bringing the total required contribution to 21.84%. This exceeds the current 19.57% budgeted contribution rate. Therefore, it is our opinion that the contribution rate beginning July 1, 1992 should be increased from the current 19.57% level to 21.84%, 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, 1992 valuation.

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

STATE POLICE RETIREMENT SYSTEM

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

*Includes capitalized appreciation of investments.

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 8, 1991

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.

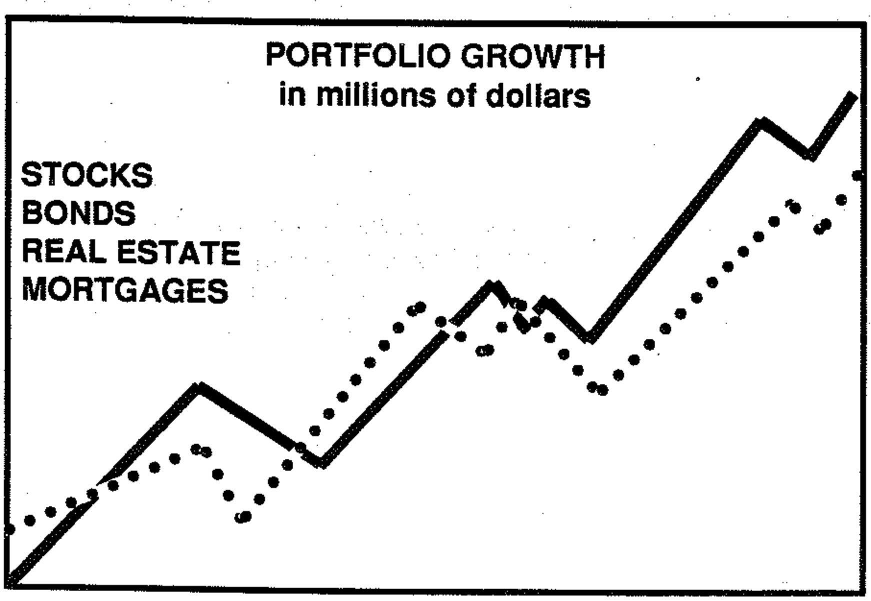
Medical Insurance

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.

INVESTMENT SECTION



INTRODUCTION TO INVESTMENT SECTION

The Kentucky Retirement Systems—Kentucky Employees Retirement System, County Employees Retirement System and State Police Retirement System—were created to provide present and future retirement benefits for the members. 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 always seeking means of enhancing revenues and protecting against losses in any particular investment area.

The Board continues to invest in such a way that benefits can be paid from the income of those investments and not from contributions or by liquidating the assets themselves. This ensures that the unfunded liabilities will continue to decrease over time and adequate monies should be available for improving benefits without substantial increases in the contribution rates of its members and participating employers.

To accomplish this goal, the Board contracts for the services of professional and experienced investment advisors.

In addition to these contracted advisors, the Investment Staff of the Retirement Systems, 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.

As a result of an asset allocation review, the Board has begun presenting investment information by specific groups within the three retirement systems. Thus, you will see the hazardous groups of the county and state systems presented separately. Because these groups have their own actuarial experience and, therefore, specific financial needs, the Board has invested the assets of those groups into the types of investments most suited to meet those needs.

WILLIAM M.
MERCER
ASSET PLANNING, INC.

Barbara L Brightman, CFA
Principal

November 18, 1991

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

Members of the Board:

The fiscal year ended June 30, 1991 marked the completion of the first full year of experience under the new investment management structure for the Kentucky Retirement Systems. The total assets of the combined Systems grew from $3.5 billion at the beginning of the Fiscal Year, to nearly $3.9 billion at year end.

The environment for investing afforded by the capital markets was positive, but less robust than during the prior year. Managers generally had a difficult time outperforming the popular market indices. Due to the anticipation of the Middle East invasion, and then its onset, volatility was particularly high.

In this environment, the Systems' assets produced a rate of return of 8.4% at market. Each of the ten portfolios achieved a positive rate of return calculated on market values. While most of the restructuring was accomplished before the beginning of this Fiscal Year, returns were impacted slightly during the first quarter as managers completed establishing their portfolios.

In comparison to the above, the stock market, as represented by the S&P 500, returned 7.5%. Broader market indices, such as the Value Line Index, suffered declines indicating that the average stock did not perform as well as larger capitalization issues overall.

In general, bonds performed better than stocks, when measured on a market value basis. Declining interest rates brought on by the recession caused bond prices to appreciate. The fixed income market, as represented by the Lehman Brothers Government/Corporate Bond Index produced a 10.2% rate of return at market.

10 South Wacker Drive
Chicago IL 60606 7485

Telephone 312 902 7700

A Marsh & McLennan Company

The Systems' asset allocation and manager structures remain as they were reconfigured as of April, 1990. The actual allocation of the assets at market is consistent with the targets, which are set forth as follows:

	Target Asset Allocation	Actual Asset Allocation
Equities	55.0%	55.6%
Fixed Income	25.0	22.0
Real Estate	10.0	5.7
Cash Equivalents	10.0	16.7

Please note that while real estate investments are under and cash is over target allocations, a portion of the cash equivalents have been earmarked for real estate investments, as opportunities are presented.

Mercer is continuing to monitor the overall program's progress toward its goals, as well as the performance of each of the individual portfolios versus its objectives. We are pleased to report that during this initial year, the performance has been satisfactory, and that we recommend no changes be made at the current time. While the new program has been in place only a short time, we are confident that it will meet the Systems' needs over the long term.

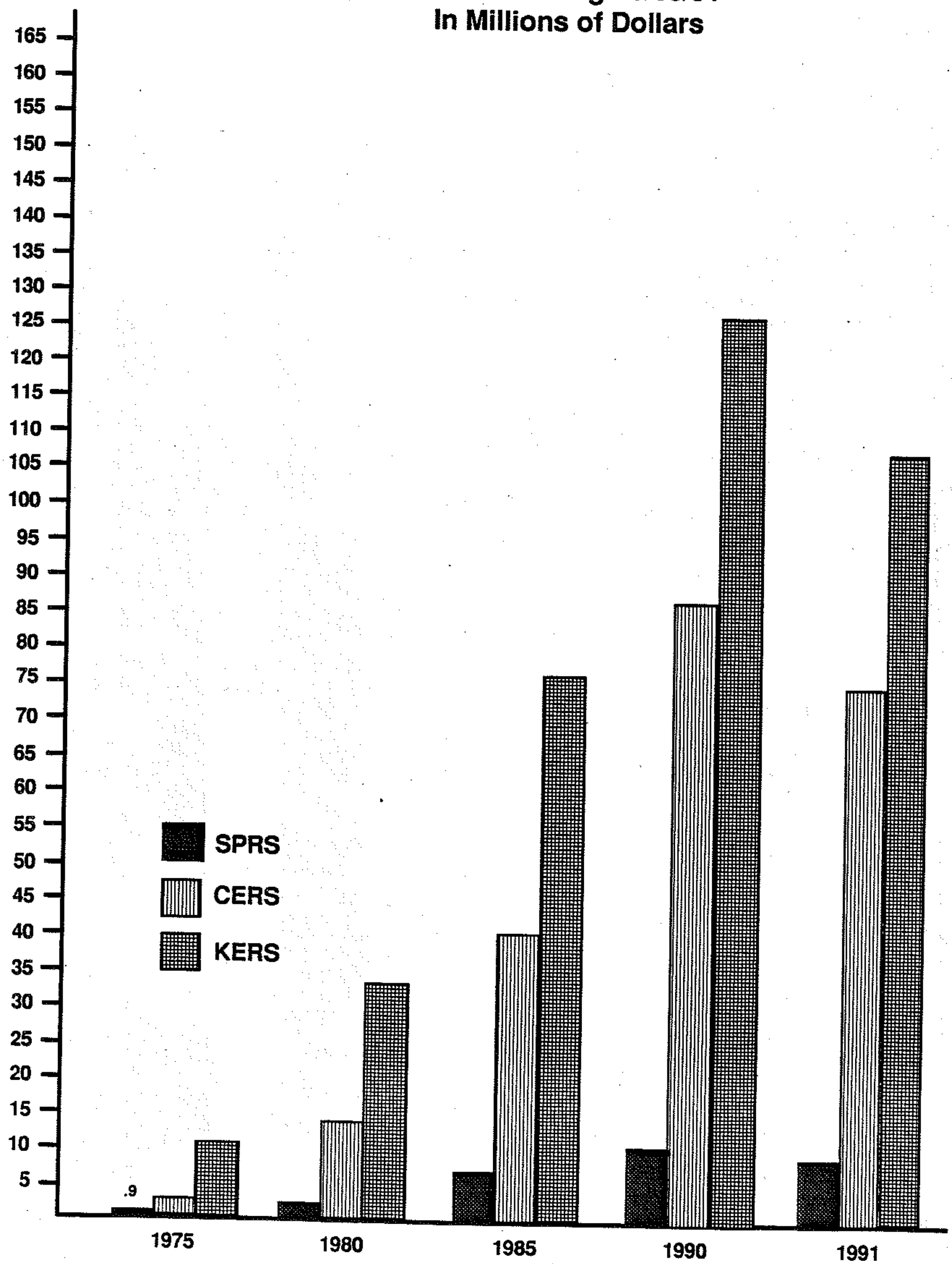
Respectfully submitted,

Barbara Brightman

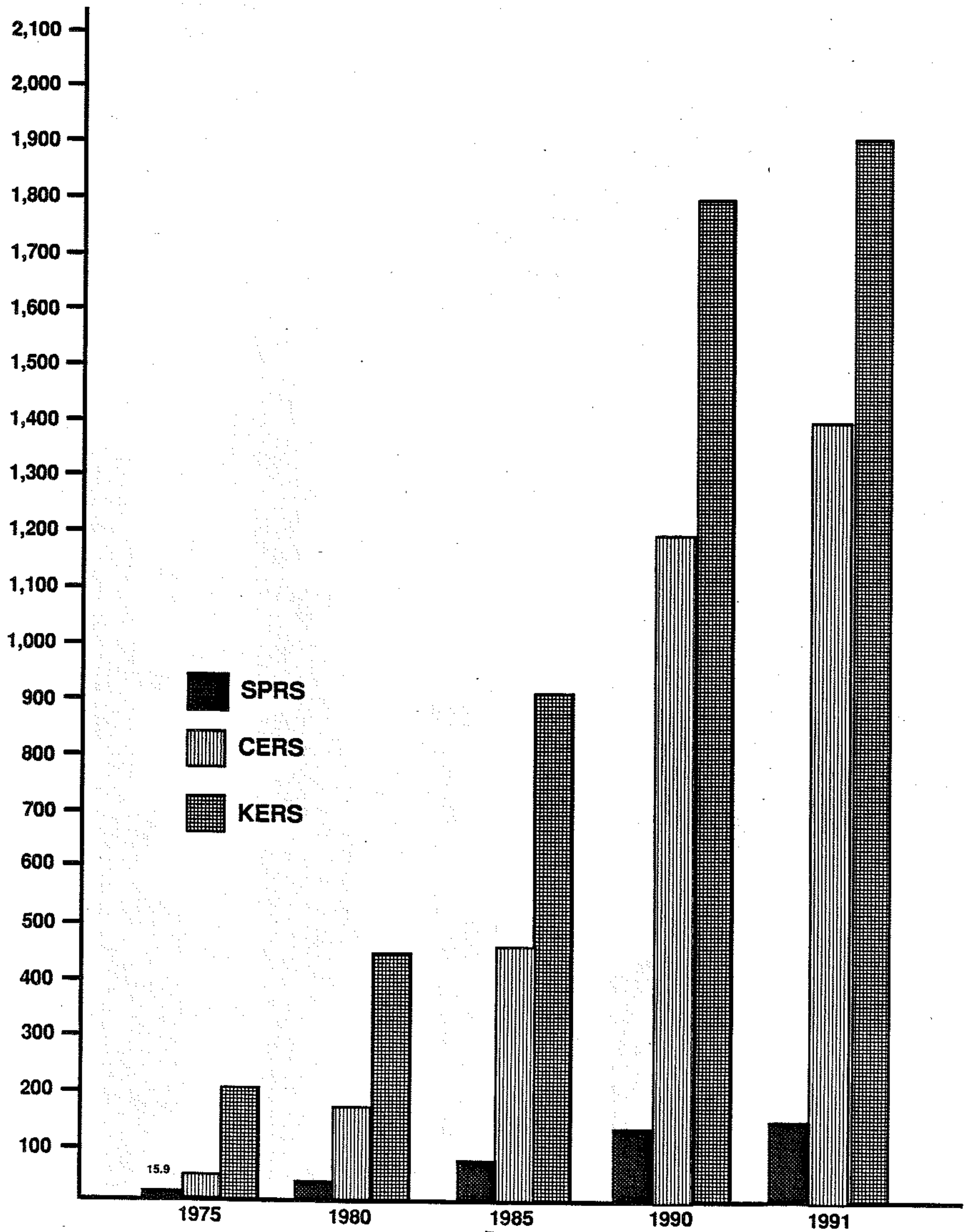
Barbara L. Brightman, CFA
Principal

BLB/lk/KLF
C48.kev

PORTFOLIO INCOME GROWTH
(Interest and Dividends)
6/30/75 through 6/30/91
In Millions of Dollars



PORTFOLIO GROWTH
(at book value)
6/30/75 through 6/30/91
In Millions of Dollars



REAL ESTATE INVESTMENTS OF KENTUCKY RETIREMENT SYSTEMS

FULLY-OWNED PROPERTIES:

Danville Manor, Danville, KY
Big Sandy Village, Pikeville, KY
Perimeter Park West, Building A, Frankfort, 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
First Bank Place West, Minneapolis, MN
Tri-County Corporate Center, Cincinnati, OH
Villa Marina Center, Marina Del Rey, CA
O'Hare Executive Tower, Rosemont, IL

Heitman Fund II:

ARA Tower, Philadelphia, PA
Rutherford B. Hayes Building, Crystal City, VA
McKinley Mall, Hamburg, NY
Capitol Bank of Commerce, Sacremento, 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 Prarie, MN
St. Louis Centre, St. Louis, MO
MIL-HREF Properties, Milwaukee, WI
Valley Bank Building, Reno, NV
Old Capitol Center, Iowa City, IO
Midway Mall, Sherman, TX
MAI Basic Four World Complex Headquarters,Tustin, CA

Heitman Fund III:

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

Other Heitman Investments:

Genessee Valley Center, Flint, MI
California Land Venture (Residential Land Development--Various California Counties)
One O'Hare Center, Rosemont, IL
Corporate Plaza, Louisville, KY
Ontario Place, Chicago, IL
Westside Pavilion, Los Angeles, CA

The Yarmouth Group, Inc.

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

TCW Realty Advisors

921 Ardmore Ave, Itasca, IL
Sammamish Highland Center, Seatle, WA
Inglewood Plaza, Seatle, WA
Coral Plaza, Brentwood, CA
Pine Lake Village Center, Seatle, WA

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/91
NONHAZARDOUS STATE EMPLOYEES (KERS)

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$148,961,134.91	$262,780,766.79	$135,949,805.56	$372,526,468.30	$ 920,218,175.56
% of Total Par Value	16%	29%	15%	40%	100%
Book Value	$146,351,326.01	$233,540,041.64	$123,192,458.43	$372,526,468.30	$ 875,610,294.38
% of Total Book Value	17%	27%	14%	43%	100%
Market Value	$150,760,455.48	$237,298,557.28	$130,383,955.11	$372,526,468.30	$ 890,969,436.17
% of Total Market Value	17%	27%	15%	42%	100%
Potential Gain (Or Loss)	$ 4,409,129.47	$ 3,758,515.64	$ 7,191,496.68	.00	$ 15,359,141.79
Indicated Annual Income	$ 13,862,089.70	$ 21,326,928.68	$ 10,674,857.52	$ 22,571,685.54	$ 68,435,561.44
Current Yield — Book Value	9.47	9.13	8.67	6.06	7.82
— Market Value	9.19	8.99	8.19	6.06	7.68
Yield to Maturity — Mkt Value	8.76	8.01	8.44	6.06	7.41
Average Coupon	9.31	8.12	7.85	6.06	7.44
Average Maturity (Years)	10.26	11.04	20.12	.08	7.82

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$114,351,308.59	$122,003,413.47	$ 7,652,104.88	$ 7,281,720.37	6.37	5.97

COMMON STOCK

NO. OF SHARES	BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED DIVIDEND INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
26,342,293	$903,274,941.23	$1,114,430,336.74	$211,155,395.51	$ 33,982,958.89	3.76	3.05

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 146,351,326.01	8%	$ 150,760,455.48	7%	$ 13,862,089.70	9.47	9.19
Governments	$ 233,540,041.64	12%	$ 237,298,557.28	11%	$ 21,326,928.68	9.13	8.99
Mortgages	$ 123,192,458.43	7%	$ 130,383,955.11	6%	$ 10,674,857.52	8.67	8.19
Short Term	$ 372,526,468.30	20%	$ 372,526,468.30	18%	$ 22,571,685.54	6.06	6.06
Real Estate	$ 114,351,308.59	6%	$ 122,003,413.47	6%	$ 7,281,720.37	6.37	5.97
Common Stock	$ 903,274,941.23	47%	$1,114,430,336.74	52%	$ 33,982,958.89	3.76	3.05
Total Portfolio	$1,893,236,544.20	100%	$2,127,403,186.38	100%	$109,700,240.70	5.79	5.16

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/91
HAZARDOUS STATE EMPLOYEES (KERS-H)

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$ 2,942,783.86	$ 4,277,462.11	$ 1,885,914.72	$10,565,496.25	$ 19,671,656.94
% of Total Par Value	15%	22%	10%	53%	100%
Book Value	$ 2,898,317.30	$ 3,754,142.99	$ 1,736,755.29	$10,565,496.25	$ 18,954,711.83
% of Total Book Value	15%	20%	9%	56%	100%
Market Value	$ 2,970,972.11	$ 3,798,072.83	$ 1,822,975.79	$10,565,496.25	$ 19,157,516.98
% of Total Market Value	15%	20%	10%	55%	100%
Potential Gain (Or Loss)	$ 72,654.81	$ 43,929.84	$ 86,220.50	.00	$ 202,805.15
Indicated Annual Income	$ 270,846.77	$ 335,980.59	$ 153,635.27	$ 640,801.52	$ 1,401,264.15
Current Yield — Book Value	9.34	8.95	8.85	6.07	7.39
— Market Value	9.12	8.85	8.43	6.07	7.31
Yield to Maturity — Mkt Value	8.73	8.11	8.57	6.07	7.15
Average Coupon	9.20	7.85	8.15	6.07	7.12
Average Maturity (Years)	9.63	11.75	21.66	.08	6.12

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$ 1,995,820.61	$ 2,119,012.26	$ 123,191.65	$ 132,061.04	6.62	6.23

COMMON STOCK

NO. OF SHARES	BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED DIVIDEND INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
658,326	$22,975,770.02	$ 27,061,032.08	$ 4,085,262.06	$ 829,627.94	3.61	3.07

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
orporates	$ 2,898,317.30	7%	$ 2,970,972.11	6%	$ 270,846.77	9.34	9.12
overnments	$ 3,754,142.99	9%	$ 3,798,072.83	8%	$ 335,980.59	8.95	8.85
ortgages	$ 1,736,755.29	4%	$ 1,822,975.79	4%	$ 153,635.27	8.85	8.43
hort Term	$ 10,565,496.25	24%	$ 10,565,496.25	22%	$ 640,801.52	6.07	6.07
eal Estate	$ 1,995,820.61	5%	$ 2,119,112.26	4%	$ 132,061.04	6.62	6.23
ommon Stock	$ 22,975,770.02	51%	$ 27,061,032.08	56%	$ 829,627.94	3.61	3.07
otal Portfolio	$ 43,926,302.46	100%	$ 48,337,561.32	100%	$ 2,362,953.13	5.38	4.89

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/91
NONHAZARDOUS COUNTY EMPLOYEES (CERS)

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$ 65,491,478.43	$138,474,350.95	$ 65,373,302.58	$177,390,113.67	$446,729,245.63
% of Total Par Value	15%	31%	15%	39%	100%
Book Value	$ 64,373,815.73	$124,341,017.75	$ 59,298,529.85	$177,390,113.67	$425,403,477.00
% of Total Book Value	15%	29%	14%	42%	100%
Market Value	$ 65,884,537.08	$126,361,218.92	$ 63,181,477.37	$177,390,113.67	$432,817,347.04
% of Total Market Value	15%	29%	15%	41%	100%
Potential Gain (Or Loss)	$ 1,510,721.35	$ 2,020,201.17	$ 3,882,947.52	.00	$ 7,413,870.04
Indicated Annual Income	$ 6,007,505.42	$ 5,281,906.89	$ 11,320,872.84	$ 10,769,455.64	$ 33,379,740.79
Current Yield — Book Value	9.33	9.10	8.91	6.07	7.85
— Market Value	9.12	8.96	8.36	6.07	7.71
Yield to Maturity — Mkt Value	8.69	8.01	8.52	6.07	7.42
Average Coupon	9.17	8.18	8.08	6.07	7.47
Average Maturity (Years)	9.78	10.98	21.34	.08	7.99

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$ 61,067,667.68	$ 64,717,343.98	$ 3,649,676.30	$ 3,909,447.49	6.40	6.04

COMMON STOCK

NO. OF SHARES	BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED DIVIDEND INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
16,229,780	$574,864,641.34	$677,331,159.42	$102,446,518.08	$20,775,301.75	3.61	3.07

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 64,373,815.73	6%	$ 65,884,537.08	6%	$ 6,007,505.42	9.33	9.12
Governments	$ 124,341,017.75	12%	$ 126,361,218.92	11%	$11,320,872.84	9.10	8.96
Mortgages	$ 59,298,529.85	6%	$ 63,181,477.37	5%	$ 5,281,906.89	8.91	8.36
Short Term	$ 177,390,113.67	17%	$ 177,390,113.67	15%	$10,769,455.64	6.07	6.07
Real Estate	$ 61,067,667.68	6%	$ 64,717,343.98	6%	$ 3,909,447.49	6.40	6.04
Common Stock	$ 574,864,641.34	53%	$ 677,331,159.42	57%	$20,775,301.75	3.61	3.07
Total Portfolio	$1,061,335,786.02	100%	$1,174,865,850.44	100%	$58,064,490.03	5.47	4.94

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/91
HAZARDOUS COUNTY EMPLOYEES (CERS-H)

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$ 15,682,828.56	$ 29,640,346.95	$ 14,010,615.68	$53,678,429.18	$113,012,220.37
% of Total Par Value	14%	26%	12%	48%	100%
Book Value	$ 15,443,805.50	$ 27,293,453.20	$ 12,836,549.16	$53,678,429.18	$109,252,237.04
% of Total Book Value	14%	25%	12%	49%	100%
Market Value	$ 15,783,833.26	$ 27,716,586.59	$ 13,609,969.25	$53,678,429.18	$110,788,818.28
% of Total Market Value	14%	25%	12%	49%	100%
Potential Gain (Or Loss)	$ 340,027.76	$ 423,133.39	$ 773,420.09	.00	$ 1,536,581.24
Indicated Annual Income	$ 1,434,139.05	$ 2,450,385.71	$ 1,152,831.03	$ 3,254,113.54	$ 8,291,469.33
Current Yield — Book Value	9.29	8.98	8.98	6.06	7.59
— Market Value	9.09	8.84	8.47	6.06	7.48
Yield to Maturity — Mkt Value	8.64	8.03	8.55	6.06	7.25
Average Coupon	9.14	8.27	8.23	6.06	7.34
Average Maturity (Years)	9.24	11.01	21.16	.08	6.83

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$ 14,245,466.74	$ 14,992,221.92	$ 746,755.18	$ 877,319.09	6.16	5.85

COMMON STOCK

NO. OF SHARES	BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED DIVIDEND INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
5,228,208	$182,041,603.09	$210,245,278.83	$ 28,203,675.74	$ 6,444,548.98	3.54	3.07

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 15,443,805.50	5%	$ 15,783,833.26	5%	$ 1,434,139.05	9.29	9.09
Governments	$ 27,293,453.20	9%	$ 27,716,586.59	8%	$ 2,450,385.71	8.98	8.84
Mortgages	$ 12,836,549.16	4%	$ 13,609,969.25	4%	$ 1,152,831.03	8.98	8.47
Short Term	$ 53,678,429.18	18%	$ 53,678,429.18	16%	$ 3,254,113.54	6.06	6.06
Real Estate	$ 14,245,466.74	5%	$ 14,992,221.92	4%	$ 877,319.09	6.16	5.85
Common Stock	$ 182,041,603.09	59%	$ 210,245,278.83	63%	$ 6,444,548.98	3.54	3.07
Total Portfolio	$ 305,539,306.87	100%	$ 336,026,319.03	100%	$15,613,337.40	5.11	4.65

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/91
STATE POLICE (SPRS)

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$ 13,753,957.94	$ 24,979,168.20	$ 11,900,231.96	$30,171,092.60	$ 80,804,450.70
% of Total Par Value	17%	31%	15%	37%	100%
Book Value	$ 13,512,248.45	$ 22,443,382.21	$ 10,847,559.28	$30,171,092.60	$ 76,974,282.54
% of Total Book Value	18%	29%	14%	39%	100%
Market Value	$ 13,867,662.53	$ 22,874,645.38	$ 11,377,617.89	$30,171,092.60	$ 78,291,018.40
% of Total Market Value	17%	29%	15%	39%	100%
Potential Gain (Or Loss)	$ 355,414.08	$ 431,263.17	$ 530,058.61	.00	$ 1,316,735.86
Indicated Annual Income	$ 1,264,847.97	$ 2,047,463.98	$ 917,543.27	$ 1,831,107.56	$ 6,060,962.78
Current Yield — Book Value	9.36	9.12	8.46	6.07	7.87
— Market Value	9.12	8.95	8.06	6.07	7.74
Yield to Maturity — Mkt Value	8.72	8.01	8.36	6.07	7.46
Average Coupon	9.20	8.20	7.71	6.07	7.50
Average Maturity (Years)	9.87	10.25	19.49	.08	7.75

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$ 9,286,348.13	$ 9,948,654.95	$ 662,306.82	$ 587,152.90	6.32	5.90

COMMON STOCK

NO. OF SHARES	BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED DIVIDEND INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
2,156,719	$ 71,689,378.94	$ 90,057,408.69	$ 18,368,029.75	$ 2,739,620.60	3.82	3.04

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 13,512,248.45	9%	$ 13,867,662.53	8%	$ 1,264,847.97	9.36	9.12
Governments	$ 22,443,382.21	14%	$ 22,874,645.38	13%	$ 2,047,463.98	9.12	8.95
Mortgages	$ 10,847,559.28	7%	$ 11,377,617.89	6%	$ 917,543.27	8.46	8.06
Short Term	$ 30,171,092.60	19%	$ 30,171,092.60	17%	$ 1,831,107.56	6.07	6.07
Real Estate	$ 9,286,348.13	6%	$ 9,948,654.95	6%	$ 587,152.90	6.32	5.90
Common Stock	$ 71,689,378.94	45%	$ 90,057,408.69	50%	$ 2,739,620.60	3.82	3.04
Total Portfolio	$ 157,950,009.61	100%	$ 178,297,082.04	100%	$ 9,387,736.28	5.94	5.27

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/91
INSURANCE FUND PORTFOLIO

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$12,500,000.00	$35,800,000.00	$7,810,588.90	$15,993,966.89	$72,104,555.79
% of Total Par Value	17%	50%	11%	22%	100%
Book Value	$12,487,464.64	$35,193,576.28	$7,765,620.06	$15,993,966.89	$71,440,627.87
% of Total Book Value	17%	50%	11%	22%	100%
Market Value	$12,551,170.00	$36,048,503.51	$7,712,314.18	$15,993,966.89	$72,305,954.58
% of Total Market Value	17%	50%	11%	22%	100%
Potential Gain (Or Loss)	$ 63,705.36	$ 854,927.23	$ -53,305.88	.00	$ 865,326.71
Indicated Annual Income	$ 1,111,500.00	$ 2,979,062.50	$ 700,400.05	$ 972,637.11	$ 5,763,599.66
Current Yield — Book Value	8.90	8.46	9.02	6.08	8.07
— Market Value	8.86	8.26	9.08	6.08	7.97
Yield to Maturity — Mkt Value	8.64	8.08	9.05	6.08	7.84
Average Coupon	8.89	8.32	8.97	6.08	7.99
Average Maturity (Years)	5.94	7.85	21.99	.08	7.33

COMMON STOCK

NO. OF SHARES	BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED DIVIDEND INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
535,855	$21,212,453.89	$24,147,745.47	$2,935,291.58	$ 782,201.00	3.69	3.24

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$12,487,464.64	13%	$12,551,170.00	13%	$1,111,500.00	8.90	8.86
Governments	$35,193,576.28	39%	$36,048,503.51	37%	$2,979,062.50	8.46	8.26
Mortgages	$ 7,765,620.06	8%	$ 7,712,314.18	8%	$ 700,400.05	9.02	9.08
Short Term	$15,993,966.89	17%	$15,993,966.89	17%	$ 972,637.11	6.08	6.08
Common Stock	$21,212,453.89	23%	$24,147,745.47	25%	$ 782,201.00	3.69	3.24
Total Portfolio	$92,653,081.76	100%	$96,453,700.05	100%	$6,545,800.66	7.06	6.79

KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/91
ALL SYSTEMS COMBINED

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	$246,832,183.70	$460,152,095.00	$229,119,870.50	$644,331,600.00	$1,580,435,749.20
% of Total Par Value	16%	29%	14%	41%	100%
Book Value	$242,579,512.99	$411,372,037.79	$207,911,852.01	$644,331,600.00	$1,506,195,002.79
% of Total Book Value	16%	27%	14%	43%	100%
Market Value	$249,267,460.46	$418,049,081.00	$220,375,995.41	$644,331,600.00	$1,532,024,136.87
% of Total Market Value	16%	27%	14%	43%	100%
Potential Gain (Or Loss)	$ 6,687,947.47	$ 6,677,043.21	$ 12,464,143.40	.00	$ 25,829,134.08
Indicated Annual Income	$ 22,839,428.91	$ 37,481,631.80	$ 18,180,773.98	$ 39,067,163.80	$ 117,568,998.49
Current Yield — Book Value	9.42	9.11	8.74	6.06	7.81
— Market Value	9.16	8.97	8.25	6.06	7.67
Yield to Maturity — Mkt Value	8.73	8.02	8.46	6.06	7.40
Average Coupon	9.25	8.15	7.94	6.06	7.44
Average Maturity (Years)	10.04	10.98	20.51	.08	7.77

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
$200,946,611.75	$213,780,646.58	$12,834,034.83	$12,787,700.89	6.36	5.98

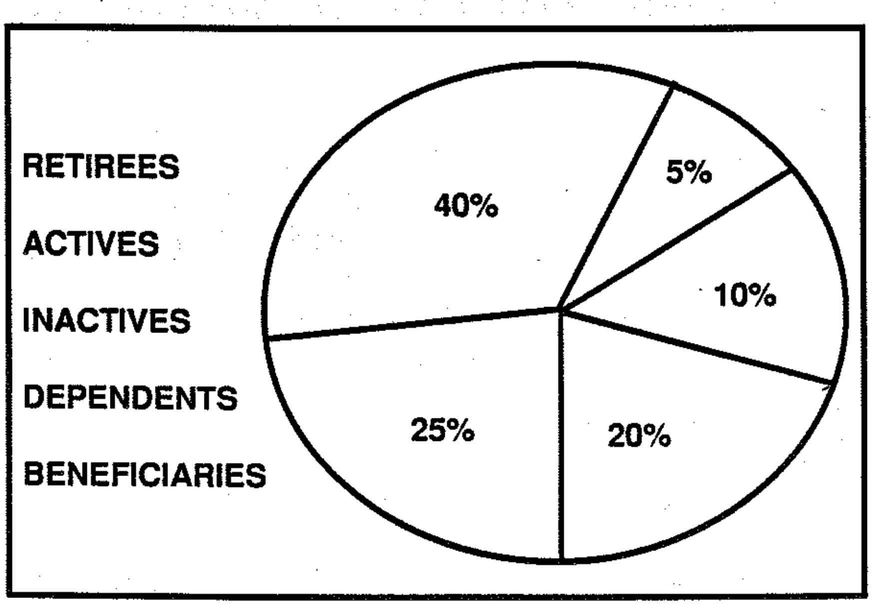
COMMON STOCK

NO. OF SHARES	BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED DIVIDEND INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
50,615,326	$1,754,846,334.62	$2,119,125,215.76	$364,278,881.14	$ 64,772,058.16	3.69	3.06

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	$ 242,579,512.99	7%	$ 249,267,460.46	6%	$ 22,839,428.91	9.42	9.16
Governments	$ 411,372,037.79	12%	$ 418,049,081.00	11%	$ 37,481,631.80	9.11	8.97
Mortgages	$ 207,911,852.01	6%	$ 220,375,995.41	6%	$ 18,180,773.98	8.74	8.25
Short Term	$ 644,331,600.00	19%	$ 644,331,600.00	17%	$ 39,067,163.80	6.06	6.06
Real Estate	$ 200,946,611.75	6%	$ 213,780,646.58	6%	$ 12,787,700.89	6.36	5.98
Common Stock	$1,754,846,334.62	50%	$2,119,125,215.76	54%	$ 64,772,058.16	3.69	3.06
Total Portfolio	$3,461,987,949.16	100%	$3,864,929,999.21	100%	$195,128,757.54	5.64	5.05

STATISTICAL SECTION



INTRODUCTION
TO
STATISTICAL SECTION

This section presents statistical information in the form of charts and tables to provide the reader with further data about the Retirement Systems. Some of this information is in the form of charts that graphically illustrate the trends in membership and portfolio growth. All information is presented as of June 30, 1991, though some of the information is inclusive of all activity since the inception of the systems.

RETIREMENT PAYMENTS

The first table shows average monthly benefits being paid based on years of service credit. The next three tables show the benefit payments for each system by the payment option selected by the member or surviving beneficiary. Because of legislation passed in 1974, those members who have accounts in the Kentucky Employees Retirement System, County Employees Retirement System, State Police Retirement System, Legislators Retirement Plan or Kentucky Teachers' Retirement System may have their accounts combined for determining eligibility for benefits and the salary to be used to determine those benefits. However, each system pays a separate benefit based on the service in that system.

For this reason, any particular system may pay only a small amount of the member's total benefit. While these small payments are important to the retiree, they do tend to distort the statistics contained in the tables.

In addition, the monthly benefits shown include all living retirees or beneficiaries who were drawing a payment from the systems. In fact, more than 12,000 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.

The following table shows a comparison by system of the number of retirees and their years of service at the time of retirement.

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	208	514	3281	3575	2743	2276	1662	1449	747
CERS	242	675	3726	3087	1692	1430	764	448	251
SPRS	3	8	15	15	29	105	150	74	6

The first chart following this introduction shows average monthly benefit payments for these same service ranges. The statistics for those retiring during fiscal year 1990-91 are as follows:

SYSTEM	AVE. FINAL COMP.	AVE. MO. BENE.	% RETIRING WITH YRS. SVC. Under 20	20-25	25-30	30+
KERS	$22,861	$ 721.51	55%	17%	19%	9%
CERS	$19,269	$ 693.38	60%	17%	14%	9%
SPRS	$31,783	$1,602.31	13%	47%	33%	7%

Table 5 presents a county-by-county summary of total retirement payments over the fiscal year. This table gives an indication of the importance of retirees' income to their communities and shows that the majority of our retired members continue to live within the state.

MEMBERSHIP

Table 6 provides a picture of the growth in membership of the three systems. This table clearly shows the continuing growth of the County Employees Retirement System, which has now passed KERS in the numbers of both active and inactive members. Following are the membership totals as of June 30, 1991:

	ACTIVE	INACTIVE	RETIRED
KERS	45,279	10,718	16,252
KERS-Hazardous	3,187	243	170
CERS	52,555	12,226	11,012
CERS-Hazardous	4,847	234	992
SPRS	1,003	112	437
TOTAL	**106,871**	**23,533**	**28,863**

FINANCIAL AND ACTUARIAL STATISTICS

Tables 7 through 9 provide a compilation of important information about each system drawn from the financial and actuarial reports. These tables provide a summary of the systems assets and liabilities and show the adequacies of the current contribution rates in funding benefits at current levels.

SOURCE AND USE OF FUNDS

Table 10 provides a breakdown of each dollar, its source and where it goes, since the inception of the Retirement Systems.

ADMINISTRATIVE EXPENSE

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

TABLE 1
ANALYSIS OF MONTHLY RETIREMENT BENEFITS
as of June 30, 1991
AVERAGE MONTHLY BENEFIT IN DOLLARS PER YEARS OF SERVICE

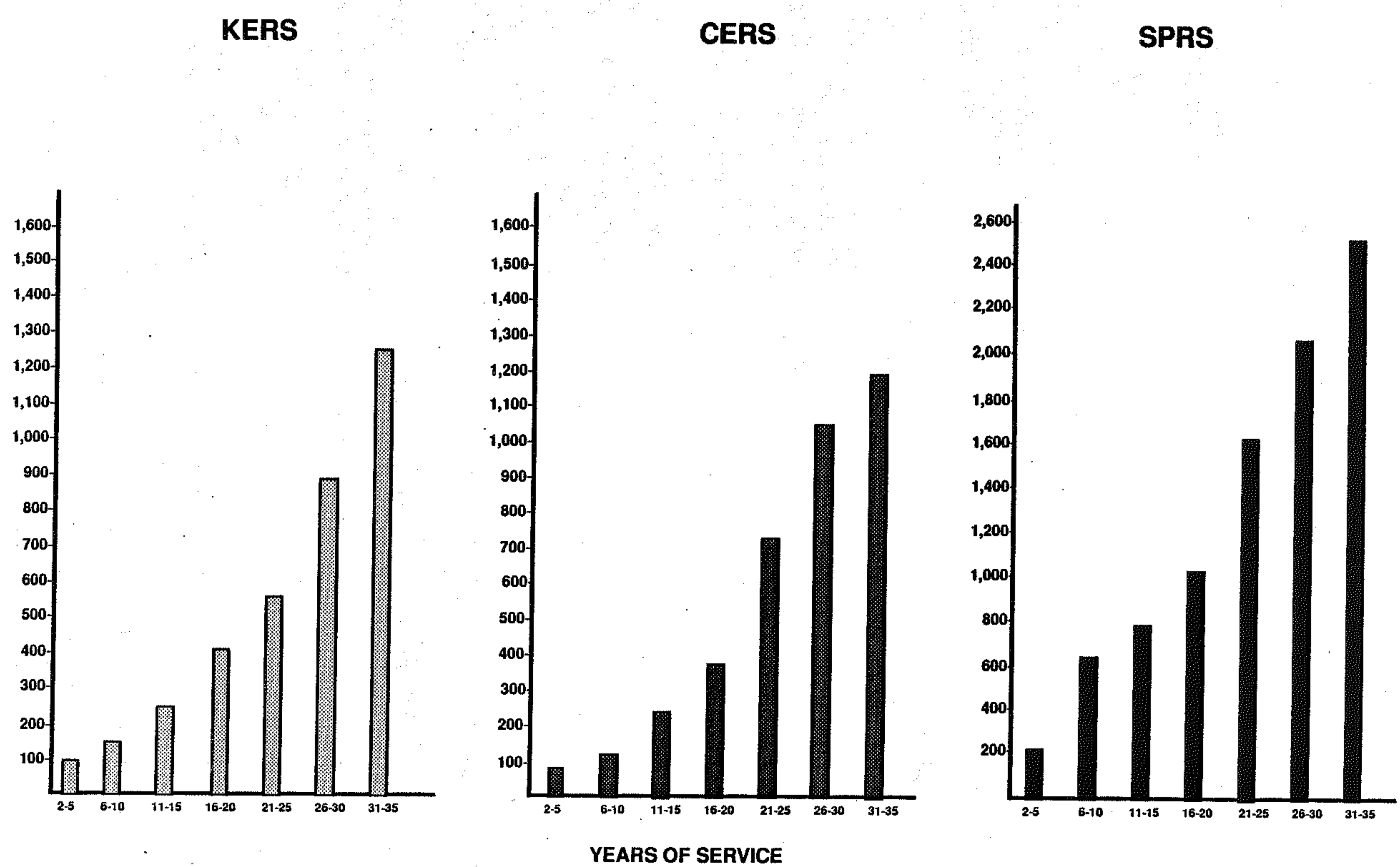


TABLE 2
KENTUCKY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT BENEFITS BY PLAN
FOR THE PERIOD ENDING JUNE 30, 1991

	Number Of Cases	Total	Average	Monthly Benefits	
				Low	High
NORMAL					
Basic	2,262	$ 912,436.16	$ 403.37	$ 1.88	$4,016.98
Straight Life Annuity	2	637.07	318.53	186.35	450.72
Life - 10 Years Certain (Member)	648	251,322.87	387.84	1.36	2,997.09
Life - 10 Years Certain (Beneficiary)	53	20,543.96	387.62	29.91	2,061.72
10 Years Certain (Member)	2	2,916.14	1,458.07	1,358.32	1,557.82
Life - 15 Years Certain (Member)	62	36,504.88	588.78	37.66	3,372.19
Life - 15 Years Certain (Beneficiary)	9	3,738.25	415.36	76.68	1,049.97
Survivorship 100% (Member)	622	231,644.60	372.41	2.56	2,613.27
Survivorship 100% (Beneficiary)	428	116,382.01	271.92	2.27	2,080.87
Pop-Up Option	99	68,077.20	687.64	6.01	4,087.70
Survivorship 66 2/3% (Member)	192	115,690.73	602.55	7.95	2,901.28
Survivorship 66 2/3% (Beneficiary)	45	12,575.12	279.44	25.67	954.62
Survivorship 50% (Member)	357	209,196.86	585.98	3.10	3,942.92
Survivorship 50% (Beneficiary)	191	53,562.70	280.43	40.23	864.10
Soc. Sec. - Basic (Under 62)	3	5,012.37	1,670.79	1,073.32	2,493.66
Soc. Sec. - Survivorship (Under 62)	4	7,127.74	1,781.93	1,124.49	2,610.93
Soc. Sec. - Survivorship (Over 62)	2	2,085.03	1,042.51	1,014.56	1,070.47
TOTALS AND AVERAGES	4,981	$2,049,453.69	$ 411.45	$ 1.36	$4,087.70
EARLY					
Basic	3,517	$1,624,722.27	$ 461.96	$ .73	$3,670.84
Life - 10 Years Certain (Member)	1,208	510,593.31	422.67	1.61	2,922.16
Life - 10 Years Certain (Beneficiary)	64	22,089.75	345.15	40.47	2,054.95
10 Years Certain (Member)	3	3,892.78	1,297.59	192.37	2,070.24
Life - 15 Years Certain (Member)	157	90,046.50	573.54	10.36	2,477.75
Life - 15 Years Certain (Beneficiary)	14	5,818.38	415.59	96.88	1,233.74
Life - 20 Years Certain (Member)	73	42,225.46	578.43	17.58	2,505.69
Life - 20 Years Certain (Beneficiary)	1	1,857.06	1,857.06	1,857.06	1,857.06
Survivorship 100% (Member)	1,158	527,351.54	455.39	2.54	3,734.83
Survivorship 100% (Beneficiary)	333	104,860.26	314.89	15.95	3,050.95
Pop-Up Option	337	280,045.11	830.99	1.39	3,329.87
Survivorship 66 2/3% (Member)	384	376,755.12	981.13	10.71	3,441.90
Survivorship 66 2/3% (Beneficiary)	62	22,306.76	359.78	44.35	1,324.13
Survivorship 50% (Member)	587	472,388.85	804.66	7.74	3,947.31
Survivorship 50% (Beneficiary)	154	39,866.91	258.87	54.93	991.14
Soc. Sec. - Basic (Under 62)	556	598,711.43	1,076.81	4.93	3,883.83
Soc. Sec. - Survivorship (Under 62)	368	540,770.22	1,469.48	23.69	3,795.37
Soc. Sec. - Survivorship (Over 62)	222	151,254.69	681.32	16.27	3,042.79
TOTALS AND AVERAGES	9,198	$5,415,506.40	$ 588.76	$ .73	$3,947.31
DISABILITY					
Basic	426	$ 194,973.72	$ 457.68	$ 22.37	$2,146.83
Life - 10 Years Certain (Member)	187	86,877.19	464.58	3.48	1,985.10
Life - 10 Years Certain (Beneficiary)	72	35,366.88	491.20	32.11	1,396.36
10 Years Certain (Beneficiary)	2	1,002.72	501.36	227.81	774.91
Life - 15 Years Certain (Member)	29	15,088.12	520.28	176.27	1,131.06
Life - 15 Years Certain (Beneficiary)	21	11,995.46	571.21	179.19	1,186.51
Life - 20 Years Certain (Member)	27	12,426.67	460.24	187.99	873.68
Life - 20 Years Certain (Beneficiary)	13	9,811.19	754.70	157.55	1,178.38
Survivorship 100% (Member)	185	64,103.61	346.50	5.88	2,556.13
Survivorship 100% (Beneficiary)	277	96,241.29	347.44	51.69	1,587.04
Pop-Up Option	53	27,456.93	518.05	4.01	1,573.63
Survivorship 66 2/3% (Member)	32	17,300.87	540.65	140.20	1,500.78
Survivorship 66 2/3% (Beneficiary)	37	9,870.73	266.77	4.63	855.45
Survivorship 50% (Member)	89	41,452.90	465.76	3.29	1,632.43
Survivorship 50% (Beneficiary)	71	15,271.66	215.09	75.32	688.44
Soc. Sec. - Basic (Under 62)	18	14,078.18	782.12	174.25	1,626.95
Soc. Sec. - Survivorship (Under 62)	8	5,988.53	748.56	27.82	1,410.70
Soc. Sec. - Survivorship (Over 62)	7	2,916.60	416.65	76.91	1,050.23
TOTALS AND AVERAGES	1,554	$ 662,223.25	$ 426.14	$ 3.29	$2,556.13
DEATH BEFORE RETIREMENT					
Basic	1	$ 345.82	$ 345.82	$ 345.82	$ 345.82
Lump Sum	1	355.55	355.55	355.55	355.55
5 Years Certain	72	47,313.49	657.13	29.74	3,421.46
10 Years Certain	180	92,629.63	514.60	60.14	2,648.42
Survivorship 100%	447	182,453.99	408.17	2.01	2,815.41
Soc. Sec. - Basic (Under 62)	1	292.03	292.03	292.03	292.03
Soc. Sec. - Basic (Over 62)	12	7,485.88	623.82	71.76	1,357.58
Soc. Sec. - Survivorship(Under 60)	1	807.59	807.59	807.59	807.59
Soc. Sec. - Survivorship(Over 60)	7	1,192.55	170.36	56.77	327.98
TOTALS AND AVERAGES	722	$ 332,876.53	$ 461.04	$ 2.01	$3,421.46
SYSTEM TOTALS AND AVERAGES	**16,455**	**$8,460,059.87**	**$ 514.13**	**$ .73**	**$4,087.70**

TABLE 3
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT BENEFITS BY PLAN
FOR THE PERIOD ENDING JUNE 30, 1991

	Number Of Cases	Total	Monthly Benefits Average	Low	High
NORMAL					
Basic	1,958	$ 485,190.09	$ 247.79	$ .37	$3,681.10
Life - 10 Years Certain (Member)	661	155,634.22	235.45	11.94	3,238.38
Life - 10 Years Certain (Beneficiary)	62	11,534.83	186.04	29.01	848.21
10 Years Certain (Member)	16	34,508.24	2,156.76	915.89	3,299.86
10 Years Certain (Beneficiary)	2	3,494.97	1,747.48	1,310.89	2,184.08
Life - 15 Years Certain (Member)	63	15,989.47	253.80	28.14	1,182.16
Life - 15 Years Certain (Beneficiary)	9	3,264.27	362.69	58.44	1,118.87
Life - 20 Years Certain (Member)	2	3,748.17	1,874.08	1,714.29	2,033.88
Survivorship 100% (Member)	606	149,780.00	247.16	4.58	2,314.64
Survivorship 100% (Beneficiary)	252	51,145.59	202.95	18.95	1,496.24
Pop-Up Option	133	59,843.93	449.95	13.59	3,221.81
Survivorship 66 2/3% (Member)	130	82,479.21	634.45	29.68	3,852.18
Survivorship 66 2/3% (Beneficiary)	33	10,982.36	332.79	44.10	1,194.05
Survivorship 50% (Member)	207	112,189.58	541.97	32.43	3,153.90
Survivorship 50% (Beneficiary)	88	19,523.43	221.85	43.33	1,412.85
Soc. Sec. - Basic (Under 62)	4	7,982.68	1,995.67	1,632.52	2,589.17
Soc. Sec. - Survivorship (Under 62)	15	26,762.76	1,784.18	903.88	2,870.71
Soc. Sec. - Survivorship (Over 62)	19	18,399.32	968.38	590.47	2,192.23
TOTALS AND AVERAGES	4,260	$1,252,453.12	$ 294.00	$ .37	$3,852.18
EARLY					
Basic	2,568	$ 777,723.66	$ 302.85	$ 2.45	$3,289.61
Life - 10 Years Certain (Member)	998	277,101.73	277.65	3.65	2,432.51
Life - 10 Years Certain (Beneficiary	66	15,968.53	241.94	4.35	1,040.75
10 Years Certain (Member)	19	46,234.02	2,433.36	1,096.37	4,709.08
10 Years Certain (Beneficiary)	1	571.49	571.49	571.49	571.49
Life - 15 Years Certain (Member)	170	74,253.62	436.78	23.59	3,008.33
Life - 15 Years Certain (Beneficiary)	9	2,787.26	309.69	50.54	1,399.00
Life - 20 Years Certain (Member)	89	57,547.27	646.59	26.95	2,695.17
Life - 20 Years Certain (Beneficiary)	2	2,609.14	1,304.57	43.37	2,565.77
Survivorship 100% (Member)	793	273,318.56	344.66	8.60	3,065.89
Survivorship 100% (Beneficiary)	171	43,809.41	256.19	6.44	1,544.04
Pop-Up Option	432	358,627.23	830.15	13.32	5,081.17
Survivorship 66 2/3% (Member)	204	153,000.28	750.00	40.73	3,001.18
Survivorship 66 2/3% (Beneficiary)	21	5,096.27	242.67	58.25	796.13
Survivorship 50% (Member)	345	242,167.18	701.93	22.63	3,296.17
Survivorship 50% (Beneficiary)	62	12,246.04	235.50	28.44	631.13
Soc. Sec. - Basic (Under 62)	175	151,680.87	866.74	6.95	2,518.12
Soc. Sec. - Survivorship (Under 62)	256	347,334.46	1,356.77	21.66	2,802.91
Soc. Sec. - Survivorship (Over 62)	55	21,471.61	390.39	5.10	2,900.83
TOTALS AND AVERAGES	6,426	$2,863,548.63	$ 445.61	$ 2.45	$5,081.17
DISABILITY					
Basic	342	$ 138,795.22	$ 405.83	$ 4.84	$2,030.11
Life - 10 Years Certain (Member)	145	52,754.53	363.82	22.76	1,198.16
Life - 10 Years Certain (Beneficiary)	51	17,119.56	335.67	29.52	939.37
10 Years Certain (Member)	4	6,066.47	1,516.61	1,124.50	1,776.49
10 Years Certain (Beneficiary)	1	885.50	885.50	885.50	885.50
Life - 15 Years Certain (Member)	35	14,623.57	417.81	49.84	1,196.49
Life - 15 Years Certain (Beneficiary)	17	6,501.03	382.41	64.94	760.84
Life - 20 Years Certain (Member)	25	9,595.38	383.81	4.09	1,408.76
Life - 20 Years Certain (Beneficiary)	14	6,504.74	464.62	91.41	1,301.32
Survivorship 100% (Member)	143	54,928.41	384.11	47.39	1,281.53
Survivorship 100% (Beneficiary)	125	34,509.68	276.07	47.98	1,159.72
Pop-Up Option	57	27,160.49	476.49	55.14	1,536.45
Survivorship 66 2/3% (Member)	27	14,312.91	530.10	39.01	1,381.74
Survivorship 66 2/3% (Beneficiary)	12	2,269.17	189.09	56.09	538.25
Survivorship 50% (Member)	58	24,147.23	416.33	74.67	1,153.72
Survivorship 50% (Beneficiary)	29	5,169.04	178.24	53.91	398.63
Soc. Sec. - Basic (Under 62)	14	11,368.34	812.02	118.39	1,636.86
Soc. Sec. - Survivorship (Under 62)	14	11,583.23	827.37	130.21	1,711.30
Dependent Child	35	7,154.67	204.41	161.80	251.44
TOTALS AND AVERAGES	1,148	$ 445,449.07	$ 388.02	$ 4.09	$2,030.11
DEATH BEFORE RETIREMENT					
Basic	1	$ 2,699.57	$2,699.57	$2,699.57	$2,699.57
5 Years Certain	86	40,959.97	476.27	49.67	2,630.20
Life - 10 Years Certain	1	89.91	89.91	89.91	89.91
10 Years Certain	157	45,203.80	287.92	2.81	2,026.78
Survivorship 100%	227	58,857.60	259.28	19.93	1,092.83
Soc. Sec. - Basic (Under 60)	7	5,199.68	742.81	38.67	1,426.27
Soc. Sec. - Survivorship (Over 60)	1	270.38	270.38	270.38	270.38
Dependent Child	1	217.42	217.42	217.42	217.42
TOTALS AND AVERAGES	481	$ 153,498.33	$ 319.12	$ 2.81	$2,699.57
SYSTEM TOTALS AND AVERAGES	**12,315**	**$4,714,949.15**	**$ 382.86**	**$ .37**	**$5,081.17**

TABLE 4
STATE POLICE RETIREMENT SYSTEM
BENEFITS BY PLAN
FOR THE PERIOD ENDING JUNE 30, 1991

	Number Of Cases	Total	Monthly Benefits Average	Low	High
NORMAL					
Basic	9	$ 11,334.60	$1,259.40	$ 102.08	$2,605.66
Life - 10 Years Certain (Member)	7	14,198.35	2,028.33	1,042.59	4,026.56
10 Years Certain (Member)	8	21,182.72	2,647.84	235.85	4,310.50
Life - 20 Years Certain (Member)	2	5,094.11	2,547.05	2,418.97	2,675.14
Survivorship 100% (Member)	21	30,266.91	1,441.28	123.45	2,922.48
Survivorship 100% (Beneficiary)	5	6,521.92	1,304.38	652.26	2,320.53
Survivorship 66 2/3% (Member)	8	16,411.57	2,051.44	1,173.23	2,793.33
Survivorship 50% (Member)	13	21,842.03	1,680.15	939.49	2,576.01
Survivorship 50% (Beneficiary)	3	2,004.06	668.02	523.62	802.41
Soc. Sec. - Survivorship (Under 62)	11	29,237.85	2,657.98	561.96	4,029.89
Soc. Sec. - Survivorship (Over 62)	8	9,812.53	1,226.56	597.08	1,473.17
TOTALS AND AVERAGES	95	$167,906.65	$1,767.43	$ 102.08	$4,310.50
EARLY					
Basic	16	$ 31,839.57	$1,989.97	$ 289.02	$3,009.88
Life - 10 Years Certain (Member)	12	26,210.86	2,184.23	1,587.85	3,246.72
Life - 10 Years Certain (Beneficiary)	1	1,957.81	1,957.81	1,957.81	1,957.81
10 Years Certain (Member)	16	45,744.63	2,859.03	1,750.83	3,752.67
Life - 15 Years Certain (Member)	2	4,727.06	2,363.53	1,303.30	3,423.76
Life - 15 Years Certain (Beneficiary)	1	2,090.14	2,090.14	2,090.14	2,090.14
Life - 20 Years Certain (Member)	6	9,571.06	1,595.17	704.37	2,293.99
Survivorship 100% (Member)	34	62,126.10	1,827.23	260.58	3,820.31
Survivorship 100% (Beneficiary)	1	1,924.72	1,924.72	1,924.72	1,924.72
Pop-Up Option	18	28,358.57	1,575.47	107.20	3,284.13
Survivorship 66 2/3% (Member)	13	25,051.30	1,927.02	1,130.30	3,115.60
Survivorship 50% (Member)	19	29,732.40	1,564.86	127.64	2,972.68
Soc. Sec. - Basic (Under 62)	17	33,681.19	1,981.24	342.71	2,848.89
Soc. Sec. - Survivorship (Under 62)	107	218,081.97	2,038.14	191.12	3,770.33
Soc. Sec. - Survivorship (Over 62)	2	3,032.02	1,516.01	1,160.71	1,871.31
TOTALS AND AVERAGES	265	$524,129.40	$1,977.84	$ 107.20	$3,820.31
DISABILITY					
Basic	7	$ 5,769.24	$ 824.17	$ 295.89	$1,429.84
Life - 10 Years Certain (Member)	1	1,233.48	1,233.48	1,233.48	1,233.48
10 Years Certain (Member)	5	8,680.38	1,736.07	1,202.92	2,973.99
Life - 15 Years Certain (Member)	1	1,304.63	1,304.63	1,304.63	1,304.63
Life - 20 Years Certain (Member)	2	3,733.80	1,866.90	1,189.20	2,544.60
Survivorship 100% (Member)	8	10,359.54	1,294.94	738.97	2,248.81
Survivorship 100% (Beneficiary)	2	2,272.58	1,136.29	811.57	1,461.01
Survivorship 50% (Member)	1	1,547.86	1,547.86	1,547.86	1,547.86
Soc. Sec. - Survivorship (Under 62)	1	1,966.63	1,966.63	1,966.63	1,966.63
TOTALS AND AVERAGES	28	$ 36,868.14	$1,316.71	$ 295.89	$2,973.99
DEATH BEFORE RETIREMENT					
Basic	2	$ 1,290.98	$ 645.49	$ 282.67	$1,008.31
10 Years Certain	2	4,638.09	2,319.04	896.68	3,741.41
Survivorship 100%	11	11,388.72	1,035.33	234.07	2,101.01
Dependent Child	2	353.69	176.84	159.60	194.09
TOTALS AND AVERAGES	17	$ 17,671.48	$1,039.49	$ 159.60	$3,741.41
SYSTEM TOTALS AND AVERAGES	**405**	**$746,575.67**	**$1,843.39**	**$ 102.08**	**$4,310.50**

TABLE 5
RETIREMENT PAYMENTS BY COUNTY

Adair	$ 586,098
Allen	$ 412,502
Anderson	**$ 2,204,620**
Ballard	$ 293,892
Barren	**$ 1,459,406**
Bath	$ 643,156
Bell	$ 761,188
Boone	**$ 1,064,447**
Bourbon	$ 928,234
Boyd	**$ 1,721,054**
Boyle	**$ 1,871,893**
Bracken	$ 166,134
Breathitt	$ 499,365
Breckinridge	$ 358,154
Bullitt	**$ 1,366,149**
Butler	$ 365,495
Caldwell	$ 703,247
Calloway	**$ 1,702,014**
Campbell	**$ 1,830,968**
Carlisle	$ 166,873
Carroll	$ 471,210
Carter	$ 762,493
Casey	$ 417,576
Christian	**$ 3,007,962**
Clark	$ 691,734
Clay	$ 669,273
Clinton	$ 216,774
Crittenden	$ 236,323
Cumberland	$ 234,634
Daviess	**$ 3,253,004**
Edmonson	$ 177,473
Elliott	$ 133,447
Estill	$ 459,100
Fayette	**$ 7,998,230**
Fleming	$ 586,067
Floyd	$ 991,732
Franklin	**$21,905,072**
Fulton	$ 324,988
Gallatin	$ 170,615
Garrard	$ 485,258
Grant	**$ 1,003,477**
Graves	**$ 1,374,901**
Grayson	$ 649,087
Green	$ 303,015
Greenup	$ 475,117
Hancock	$ 185,771
Hardin	**$ 2,094,999**
Harlan	$ 833,158
Harrison	$ 519,397
Hart	$ 481,255
Henderson	**$ 1,619,682**
Henry	**$ 1,257,868**
Hickman	$ 266,277
Hopkins	**$ 2,262,810**
Jackson	$ 272,633
Jefferson	**$31,400,768**
Jessamine	$ 672,171
Johnson	$ 728,366
Kenton	**$ 2,890,358**
Knott	$ 442,106
Knox	$ 545,649
Larue	$ 696,515
Laurel	**$ 1,699,607**
Lawrence	$ 361,373
Lee	$ 371,428
Leslie	$ 298,158
Letcher	$ 477,117
Lewis	$ 293,428
Lincoln	$ 712,713
Livingston	$ 487,729
Logan	$ 827,332
Lyon	$ 618,916
McCracken	**$ 3,020,762**
McCreary	$ 361,521
McLean	$ 399,706
Madison	**$ 1,891,799**
Magoffin	$ 265,588
Marion	$ 610,736
Marshall	**$ 1,201,780**
Martin	$ 246,285
Mason	$ 515,812
Meade	$ 454,491
Menifee	$ 199,527
Mercer	**$ 1,285,031**
Metcalfe	$ 443,254
Monroe	$ 217,200
Montgomery	$ 626,209
Morgan	$ 458,040
Muhlenberg	$ 698,251
Nelson	$ 980,838
Nicholas	$ 221,284
Ohio	$ 582,355
Oldham	**$ 1,830,607**
Owen	**$ 1,283,105**
Owsley	$ 215,498
Pendleton	$ 393,803
Perry	$ 718,709
Pike	**$ 1,242,472**
Powell	$ 301,277
Pulaski	**$ 2,451,609**
Robertson	$ 119,053
Rockcastle	$ 546,701
Rowan	**$ 1,339,041**
Russell	$ 564,128
Scott	**$ 1,314,252**
Shelby	**$ 2,403,656**
Simpson	$ 400,790
Spencer	$ 455,303
Taylor	$ 525,747
Todd	$ 567,998
Trigg	$ 679,003
Trimble	$ 455,056
Union	$ 598,468
Warren	**$ 4,090,488**
Washington	$ 394,649
Wayne	$ 579,846
Webster	$ 379,852
Whitley	**$ 1,144,260**
Wolfe	$ 338,480
Woodford	**$ 1,262,584**

PAYMENTS TO RETIREES LIVING IN OTHER STATES
$6,361,074

TOTAL PAYMENTS FOR FISCAL YEAR ENDING JUNE 30, 1991
$167,059,013

TABLE 6
MEMBERSHIP GROWTH
6/30/75 through 6/30/91

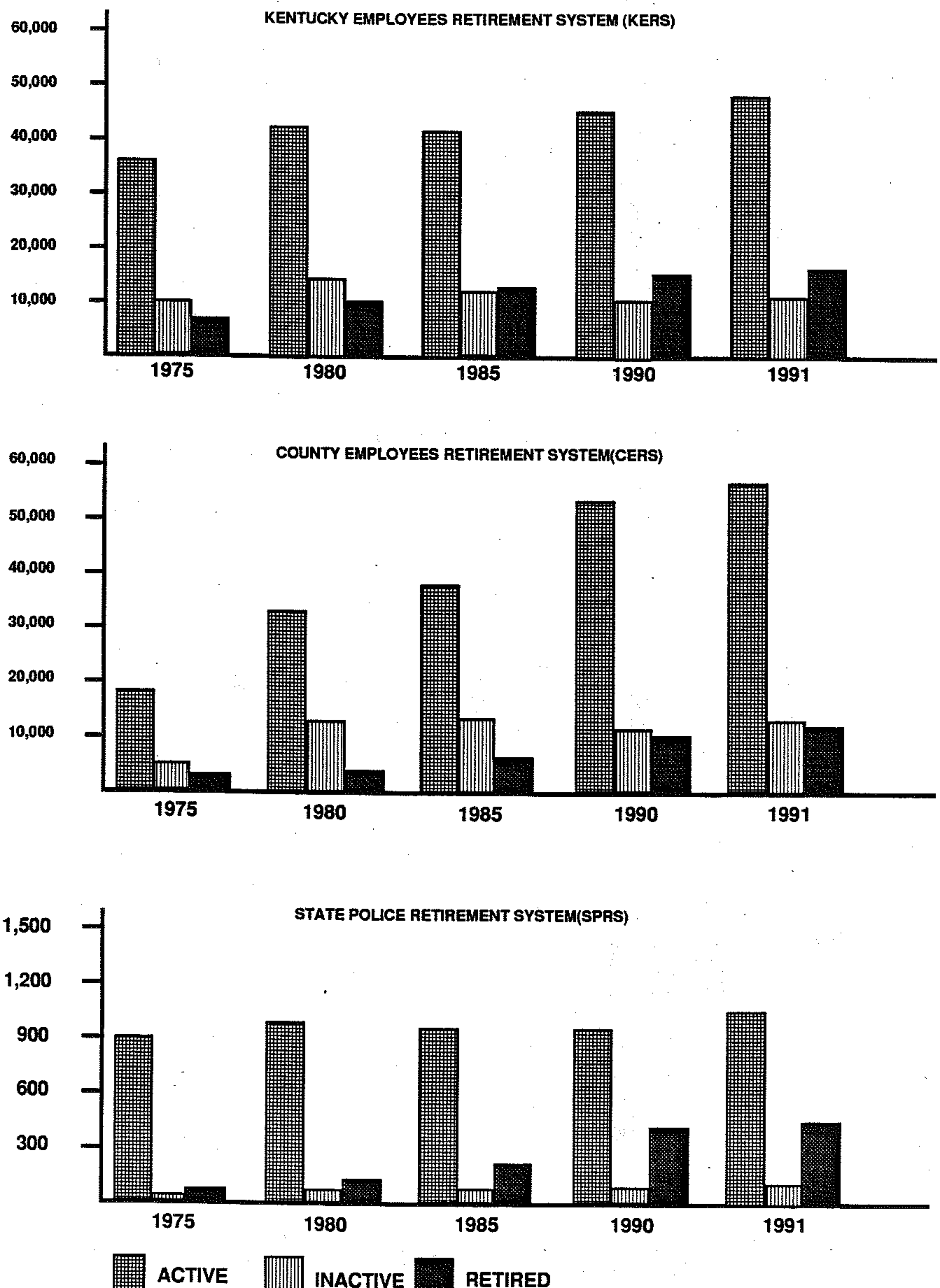


TABLE 7

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
FINANCIAL AND ACTUARIAL STATISTICS

FINANCIAL STATISTICS	6/30/87	6/30/88	6/30/89	6/30/90	6/30/91
Total Assets	$1,266,111,911	$1,428,335,169	$1,593,913,511	$1,803,051,503	$1,917,816,462
Investment Income	$ 97,094,173	$ 89,409,521	$ 120,760,531	$ 126,895,778	$ 107,923,634
Total Retirement Payments	$ 52,414,394	$ 60,060,355	$ 80,377,963	$ 90,420,645	$ 100,824,770
Total Refund Payments	$ 5,061,156	$ 5,860,974	$ 7,145,907	$ 5,896,851	$ 6,438,085
ACTUARIAL STATISTICS:					
Total Accrued Liability	$1,384,259,808	$1,561,743,738	$1,734,607,903	$2,055,489,412	$2,288,611,147
Unfunded Past Service Liability	$ 120,259,389	$ 135,687,336	$ 145,998,805	$ 256,167,674	$ 375,396,216
Percent Unfunded	8.7%	8.7%	8.4%	12.5%	16.4%
Vested Accrued Benefit Liability	$ 812,932,915	$ 914,976,279	$1,074,546,800	$1,298,362,909	$1,447,994,399
Estimated Annual Salaries	$ 757,822,116	$ 803,594,136	$ 822,362,508	$ 869,109,220	$ 982,646,400
Contribution for Unfunded Past Service Liability	$ 10,823,346	$ 12,211,861	$ 13,139,894	$ 12,475,110	$ 18,683,469
ACTUARIAL COST-NONHAZARDOUS:					
Normal	8.05%	8.33%	8.35%	9.14%	9.32%
Past Service	1.47%	1.56%	1.63%	1.46%	1.99%
Administrative	.16%	.18%	.19%	*.39%	.38%
Hospital/Medical Insurance	1.31%	1.44%	1.59%	1.77%	1.97%
TOTAL COST	10.99%	11.51%	11.76%	12.76%	13.66%
CONTRIBUTION RATES-NONHAZARDOUS:					
Member	5.00%	5.00%	5.00%	5.00%	5.00%
Employer	7.45%	7.45%	**7.45%	7.45%	7.65%
TOTAL RATES	12.45%	12.45%	12.45%	12.45%	12.65%
ACTUARIAL COST-HAZARDOUS:					
Normal	15.62%	16.10%	16.38%	15.85%	16.77%
Past Service	-1.50%	-1.69%	-.52%	-.14%	.65%
Administrative	.15%	.18%	.07%	*.35%	.39%
Hospital/Medical Insurance	4.94%	5.31%	5.74%	6.17%	6.74%
TOTAL COST	19.21%	19.90%	21.67%	22.23%	24.55%
CONTRIBUTION RATES-HAZARDOUS:					
Member	7.00%	7.00%	7.00%	7.00%	7.00%
Employer	14.00%	14.00%	**14.00%	***15.05%	15.05%
TOTAL RATES	21.00%	21.00%	21.00%	22.05%	22.05%

*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 .22% in actual contributions received for nonhazardous employees and a decrease of .34% for hazardous employees.

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

TABLE 8

COUNTY EMPLOYEES RETIREMENT SYSTEM
FINANCIAL AND ACTUARIAL STATISTICS

FINANCIAL STATISTICS:	6/30/87	6/30/88	6/30/89	6/30/90	6/30/91
Total Assets	$728,750,892	$840,779,847	$1,085,904,834	$1,274,063,862	$1,399,677,329
Investment Income	$ 54,428,479	$ 52,252,320	$ 76,400,250	$ 86,852,951	$ 75,889,593
Total Retirement Payments	$ 18,065,794	$ 26,982,299	$ 31,719,667	$ 41,158,196	$ 53,341,986
Total Refund Payments	$ 4,382,655	$ 4,451,755	$ 5,208,722	$ 6,346,247	$ 5,404,817
ACTUARIAL STATISTICS:					
Total Accrued Liability	$678,442,760	$829,346,323	$1,113,868,548	$1,432,323,666	$1,654,338,706
Unfunded Past Service Liability	-0-	-0-	$ 35,815,913	$ 162,257,399	$ 258,111,701
Percent Unfunded	0%	0%	3.2%	11.3%	15.6%
Vested Accrued Benefit Liability	$412,426,510	$492,628,502	$ 728,176,932	$ 907,488,244	$1,067,833,003
Estimated Annual Salaries	$544,184,376	$615,028,632	$ 686,528,758	$ 790,407,492	$ 887,033,040
Contribution for Unfunded Past Service Liability	-0-	-0-	$ 3,223,433	$ 7,901,773	$ 12,846,219
ACTUARIAL COST-NONHAZARDOUS:					
Normal	8.45%	9.10%	9.08%	10.60%	10.68%
Past Service	-.74%	.06%	-.35%	.68%	1.03%
Administrative	.18%	.23%	.25%	*.54%	.53%
Hospital/Medical Insurance	.95%	1.07%	1.21%	1.38%	1.58%
TOTAL COST	8.84%	10.46%	10.19%	13.20%	13.82%
CONTRIBUTION RATES-NONHAZARDOUS:					
Member	4.25%	4.25%	4.25%	5.00%	5.00%
Employer	5.75%	5.75%	6.35%	*7.68%	7.95%
TOTAL RATES	10.00%	10.00%	10.60%	12.68%	12.95%
ACTUARIAL COST-HAZARDOUS:					
Normal	15.92%	16.47%	16.34%	15.50%	15.57%
Past Service	-1.80%	-2.89%	5.34%	2.89%	3.94%
Administrative	.53%	.57%	.06%	*.29%	.29%
Hospital/Medical Insurance	3.31%	4.21%	4.65%	5.11%	5.67%
TOTAL COST	17.96%	17.36%	26.39%	23.79%	25.47%
CONTRIBUTION RATES-HAZARDOUS:					
Member	7.00%	7.00%	7.00%	7.00%	7.00%
Employer	14.00%	14.00%	14.00%	**15.43%	16.10%
TOTAL RATES	21.00%	21.00%	21.00%	22.43%	23.10%

*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

	6/30/87	6/30/88	6/30/89	6/30/90	6/30/91
FINANCIAL STATISTICS:					
Total Assets	$110,356,994	$121,168,785	$131,570,867	$145,313,311	$151,253,690
Investment Income	$ 8,763,083	$ 7,520,682	$ 10,164,070	$ 10,411,631	$ 8,809,299
Total Retired Payments	$ 5,107,017	$ 5,693,316	$ 7,742,826	$ 8,504,914	$ 8,959,087
Total Refund Payments	$ 127,181	$ 108,814	$ 42,926	$ 69,128	$ 42,561
ACTUARIAL STATISTICS:					
Total Accrued Liability	$111,541,989	$120,128,367	$134,550,773	$154,007,622	$170,009,955
Unfunded Past Service Liability	$ 1,347,385	-0-	$ 3,200,220	$ 8,982,071	$ 19,191,881
Percent Unfunded	1.2%	0%	2.4%	5.8%	11.3%
Vested Accrued Benefit Liability	$ 91,564,168	$ 98,838,353	$111,757,322	$130,035,708	$142,286,585
Estimated Annual Salaries	$ 23,859,024	$ 24,014,472	$ 24,282,216	$ 25,971,132	$ 29,275,692
Contribution for Unfunded Past Service Liability	$ 121,265	-0-	$ 288,020	$ 437,418	$ 934,625
ACTUARIAL COST:					
Normal	15.37%	15.54%	15.59%	15.15%	15.32%
Past Service	.51%	-.33%	1.19%	1.68%	3.19%
Administrative	.10%	.13%	.13%	*.26%	.25%
Hospital/Medical Insurance	7.02%	8.32%	8.92%	9.48%	10.00%
TOTAL COST:	23.00%	23.66%	25.83%	26.57%	28.84%
CONTRIBUTION RATES:					
Member	7.00%	7.00%	7.00%	7.00%	7.00%
Employer	18.25%	18.25%	18.25%	***20.31%	19.57%
TOTAL RATES	25.25%	25.25%	**25.25%	27.31%	26.57%

*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.

TABLE 10

KENTUCKY RETIREMENT SYSTEMS
STATEMENT OF SOURCE AND USE OF FUNDS
BY SYSTEM SINCE INCEPTION THROUGH JUNE 30, 1991

BREAKDOWN PER DOLLAR						TOTAL AMOUNTS				
KERS	CERS	SPRS	KERS-H	CERS-H	SOURCE OF FUNDS	KERS	CERS	SPRS	KERS-H	CERS-H
$ .23	$ .25	$ .19	$.27	$.22	Member Contributions	$ 658,198,661	$ 360,476,301	$ 41,459,097	$15,545,977	$ 92,089,643
.29	.33	.28	.32	.43	Employer Contributions	810,981,265	462,718,792	61,489,579	18,149,233	177,666,377
.38	.33	.43	.32	.26	Investment Income	1,080,432,132	461,756,418	95,570,745	17,866,132	106,340,490
.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	8,194,868	-0-	3,741	10,680,767
.10	.08	.10	.09	.06	Other Receipts	267,161,947	118,226,239	22,544,958	5,009,582	25,061,178
$1.00	$1.00	$1.00	$1.00	$1.00	TOTAL SOURCES	$2,818,868,943	$1,411,560,428	$221,570,479	$56,604,983	$411,877,908
					USE OF FUNDS					
$ .66	$ .75	$ .68	$ .71	$ .80	Invested Assets	$1,872,467,143	$1,065,759,814	$150,808,573	$40,307,209	$329,967,268
.25	.16	.26	.19	.14	Retirement Payments	695,841,383	225,063,893	57,468,901	10,989,658	57,715,198
.04	.04	.01	.04	.02	Refunds	104,122,871	54,480,837	2,380,017	2,117,453	9,741,903
.04	.04	.05	.05	.03	Interest to Members	123,773,154	53,248,792	9,618,333	2,651,627	12,001,185
.01	.01	.00	.01	.01	Administration of Prof. Services	20,581,106	12,970,518	906,165	335,622	2,432,695
.00	.00	.00	.00	.00	Other Disbursements	2,083,286	36,514	388,490	203,414	19,659
$1.00	$1.00	$1.00	$1.00	$1.00	TOTAL USES	$2,818,868,943	$1,411,560,428	$221,570,479	$56,604,983	$411,877,908

KERS-H= Hazardous
CERS-H= Hazardous

TABLE 11
KENTUCKY RETIREMENT SYSTEMS
ADMINISTRATIVE EXPENSE
BY FISCAL YEAR

	1986-87	1987-88	1988-89	1989-90	1990-91
PERSONNEL COSTS:					
Salaries & Fringe Benefits	$1,310,165.87	$1,525,200.00	$1,737,917.88	$1,936,370.13	$2,425,450.41
CONTRACTUAL SERVICES:					
Auditor	16,600.00	18,000.00	19,850.00	20,750.00	$ 22,400.00
Actuary	25,000.00	0.00	0.00	51,733.00	48,500.00
Janitorial Services	11,021.00	0.00	6,745.00	0.00	0.00
Legal Services	18,486.23	33,663.10	44,612.46	45,165.21	96,829.28
Medical	34,485.87	42,997.62	47,903.13	52,618.48	60,526.13
Investment Consultant					*26,527.26
Security Custody & Banking Services					*146,672.59
Investment Advisors					*2,763,875.98
Miscellaneous	4,482.89	455.07	1,170.00	750.00	541.66
TOTAL	$1,420,241.86	$1,620,315.79	$1,858,198.47	$2,107,386.82	$5,591,323.31
OPERATING EXPENSES:					
Postage & Freight	$ 196,610.61	$ 174,262.18	$ 228,492.66	$ 281,264.93	$ 214,728.45
Utilities	24,729.70	22,718.39	18,883.87	25,853.22	28,846.58
Telephone	21,930.59	33,238.28	50,861.96	32,581.04	27,226.63
Travel	25,866.52	28,982.99	28,331.08	26,514.89	41,914.97
Printing & Duplicating	47,640.86	58,481.56	57,675.17	73,939.58	56,962.67
Maintenance-Equipment	45,604.13	27,592.71	37,145.04	33,649.58	29,321.58
Maintenance-Bldg. & Grnds.	2,192.06	1,060.98	875.81	795.81	1,771.40
Laundry	536.72	519.59	672.02	319.04	337.94
Assessed Car Rental	2,459.61	6,142.87	7,056.87	5,108.84	4,448.92
Supplies-Office	18,231.94	12,739.98	24,925.69	28,268.47	23,831.52
Supplies-Data Processing	31,370.53	24,604.81	26,713.99	36,161.14	27,787.80
Supplies-Janitorial	63.70	47.40	0.00	0.00	0.00
Rental-Building	164,247.96	101,138.68	99,729.05	166,000.00	179,725.00
Rental-Data Processing	.00	2,087.43	6,389.33	6,099.89	3,639.48
Rental-Office Equipment	11,929.50	11,666.45	17,129.34	16,341.37	18,154.29
Insurance	4,347.29	5,255.54	97,101.20	12,709.00	56,826.00
Bonds	1,776.25	1,776.25	1,776.25	2,704.97	1,776.25
Dues & Subscriptions	7,874.64	4,475.64	3,018.13	3,450.97	4,703.03
Employee Training Expense	2,549.70	4,411.26	6,300.98	7,761.72	8,828.15
Miscellaneous	2,234.49	5,997.08	8,197.35	5,605.89	6,963.95
Photo Supplies (Micrographics)	36,929.60	3,041.28	1,574.74	8,934.72	20,106.38
Furniture Office Equipment	11,633.02	5,196.58	8,038.86	9,720.71	6,660.14
Lease Purchase Office Equipment	39,394.56	41,590.74	39,342.66	9,264.18	155,294.88
Conference Expenses	550.00	2,195.00	3,270.00	3,479.58	4,919.50
TOTAL	$ 700,703.98	$ 579,223.67	$ 773,502.05	$ 796,529.54	$ 924,775.51
Capital Outlay	$ 262,912.00	$ 46,451.76	$ 96,104.15	$ 97,893.18	$ 216,250.02
TOTAL ADMINISTRATIVE EXPENSE	$2,383,857.84	$2,245,991.22	$2,727,804.67	$3,001,809.54	$6,732,348.84

*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

	1986-87	1987-88	1988-89	1989-90	1990-91
Kentucky Employees Retirement System	$1,168,090.34	$1,100,535.70	$1,309,346.24	$1,380,832.39	$3,393,103.82
County Employees Retirement System	1,191,928.92	1,122,995.61	1,391,180.38	1,593,960.86	3,170,936.30
State Police Retirement System	23,838.58	22,459.91	27,278.05	27,016.29	168,308.72
	$2,383,857.84	$2,245,991.22	$2,727,804.67	$3,001,809.54	$6,732,348.84