
KENTUCKY RETIREMENT SYSTEMS

**ANNUAL REPORT
FOR THE FISCAL YEAR ENDING
JUNE 30, 1987**

**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

Bobby J. McKee
General Manager
Phone 502-564-4646

MEMORANDUM

TO: Members of the Board of Trustees
John D. Robey, Chairman
Vernon C. McGinty, Vice Chairman
Iris R. Barrett
Frank W. Burke
Thomas C. Greenwell
John E. King
Lynda G. Lobb
Cattie Lou Miller
Nancy L. Ray

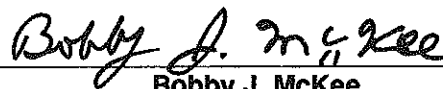
FROM: Bobby J. McKee, General Manager

DATE: November 19, 1987

SUBJECT: Annual Report for Fiscal Year Ending June 30, 1987

As directed by KRS 61.645, I am pleased to present the Annual Report for the fiscal year ended June 30, 1987. 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.



Bobby J. McKee
General Manager



A MESSAGE FROM THE GENERAL MANAGER

Dear Members of the Retirement Systems,

Those of you who are reading this report are interested in knowing in-depth about your retirement system—its assets and where they are invested, its actuarial soundness and the makeup of the membership.

CONTENTS OF THIS REPORT

The introductory section, of which this is a part, includes the makeup of the Board of Trustees and an organizational chart for the Retirement Systems.

The second section provides you with the report of Eskew & Gresham, who prepared the independent audit of the Retirement Systems. This report is included in whole, in accordance with KRS 61.645(12).

The third section provides you with the significant tables and remarks from the annual actuarial valuation for the fiscal year 1986-87 as prepared by William M. Mercer-Meidinger-Hansen, Inc. Although the detailed statistical data used in making the valuation is not included, sufficient information is provided on each system to allow you to view the actuarial status of each system.

The fourth section consists of tables and graphs showing the year-end status of the systems' investments. Investment income for the year totalled \$143,350,814.12. If you are comparing this report with last year's, you will also notice that the Insurance Fund portfolio has been diversified and includes government bonds and government insured mortgages in addition to cash equivalents. This diversification will insure that

the Insurance Fund will grow to provide insurance benefits even as medical insurance costs escalate.

Finally, the statistical section offers you an overview of the systems. I have included in the introduction some interesting statistics on members who retired during the 1986-87 fiscal year. These statistics give a more accurate picture of the average retiree's monthly benefit under present benefit levels. The tables immediately following present averages for all retirees or their beneficiaries who retired since the systems were established and who are currently drawing benefits.

The actuarial and financial statistics provided in this section summarize the key information from the audit and actuarial reports. If you are looking for the one table that will provide you with the best portrait of your system, you may want to turn to Tables 7, 8 and 9 in the statistical section. Then if you desire more detailed information you can refer to the full reports provided in the front of this report.

Table 11, on the last page, provides you with five years of administrative expenses and how those expenses were divided among the three Retirement Systems.

A HISTORICAL PERSPECTIVE

In preparing this report, I found it interesting to look back on the past years in terms of what has been accomplished by the Retirement Systems.

The First Annual Report, issued in November 1957, contained nine pages of information about the system. Assets totalled \$2,779,368. It was noted that the 4.194% yield on investments was the highest in the nation for a state retirement system. Active membership was slightly more than 16,000 employees. A member retiring at age 65 with 23 years of service could expect to draw a monthly lifetime benefit of almost \$65.

As of June 30, 1987, the Kentucky Employees Retirement System had nearly 44,000 active members and more than 13,000 recipients. The assets of this system alone totalled more than \$1.2 billion. The average employee retiring at age 65 from KERS last fiscal year with 23 years of service could have expected a monthly retirement benefit of \$692.

Regarding the System's investments, the Index Fund, managed by myself and the investment staff of the Retirement Systems, had a rate of return of 24.515% for the year ending June 30, 1987, a rate probably unimaginable in 1956 and 6.3% higher than one of the Retirement Systems' contracted investment consulting firms.

REVIEW OF OPERATIONS

Since the inception of KERS, the Retirement Systems have seen considerable growth. This past fiscal year, the Retirement Office experienced the results of that growth and of a concerned and enlightened membership. Fiscal year 1986-87 was a year of tremendous work and accomplishment.

In fiscal year 1985-86, our office averaged 5,600 calls from members per month. In 1986-87, the number of calls increased to an average of 10,200 calls per month.

More members visited the office for in-person counseling. In fiscal year 1985-86, we averaged 410 visitors per month. In fiscal year 1986-87, an average of 640 members visited each month, nearly 30 per day.

Each month our six Benefits Counselors performed 200 calculations for retiring members, 500 service purchase calculations and 700 benefit estimates.

Our Retired Benefits Branch averaged 1,300 calls per day and saw an average of 30 visitors per month. The five-person office is responsible for the \$7 million monthly retirement benefits and for keeping up with insurance coverage, premium collection and

issuance of death benefits, as well as other changes, such as a change in address, tax withholding, etc.

As you can see, our staff has been very busy. In fact, in 10 months time, our staff had put in 4,669 hours of overtime. This is the equivalent of one person working full-time for 2 1/2 years.

During this last fiscal year, the Retirement Systems took extra steps to protect the systems' assets and to assure continuation of benefits and programs in the event of some natural disaster. A Disaster Recovery Plan was created and successfully tested. This plan includes off-site storage of computer programs and member records, as well as provisions for continuing retirement payments and investment transactions even in the event of complete disruption or destruction of the retirement office.

IN SUMMARY

This report is intended to provide complete and accurate information as a basis for making management decisions, as a means of determining compliance with legal provisions and as a reference for those who want or need to know the status of the Retirement Systems.

This report will be provided to the Kentucky General Assembly along with the Board's legislative proposals prior to the 1988 session of the legislature.

I trust you will find this report understandable and comprehensive. In closing, I would like to thank members of the Board of Trustees for their leadership this past year and the staff of the Retirement Systems who have worked hard to provide a high level of services.



Bobby J. McKee
General Manager

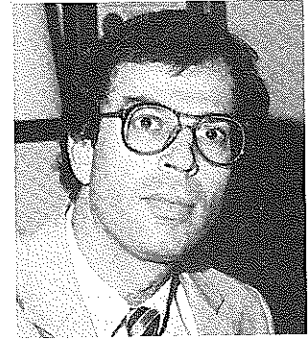
BOARD OF TRUSTEES



Iris R. Barrett
Frankfort
Elected by KERS Members
Term Expires 3/31/90



Frank W. Burke
Louisville
Elected by CERS Members
Term Expires 3/31/89



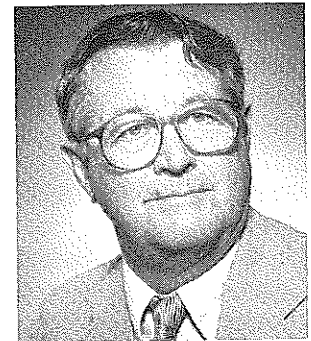
Thomas C. Greenwell
Frankfort
Ex Officio
Commissioner of State
Department of Personnel



John E. King
Lexington
Elected by CERS Members
Term Expires 3/31/89



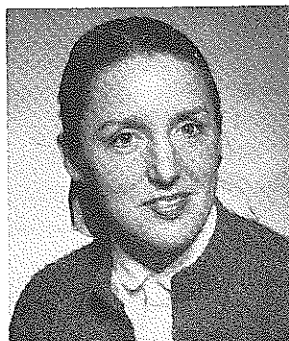
Lynda G. Lobb
Greensburg
Appointed by Governor
Term Expires 3/31/88



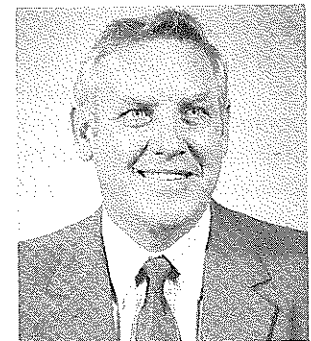
Vernon C. McGinty
Vice Chairman
Louisville
Appointed by Governor
Term Expired 3/31/87



Cattie Lou Miller
Frankfort
Elected by KERS Members
Term Expires 3/31/90

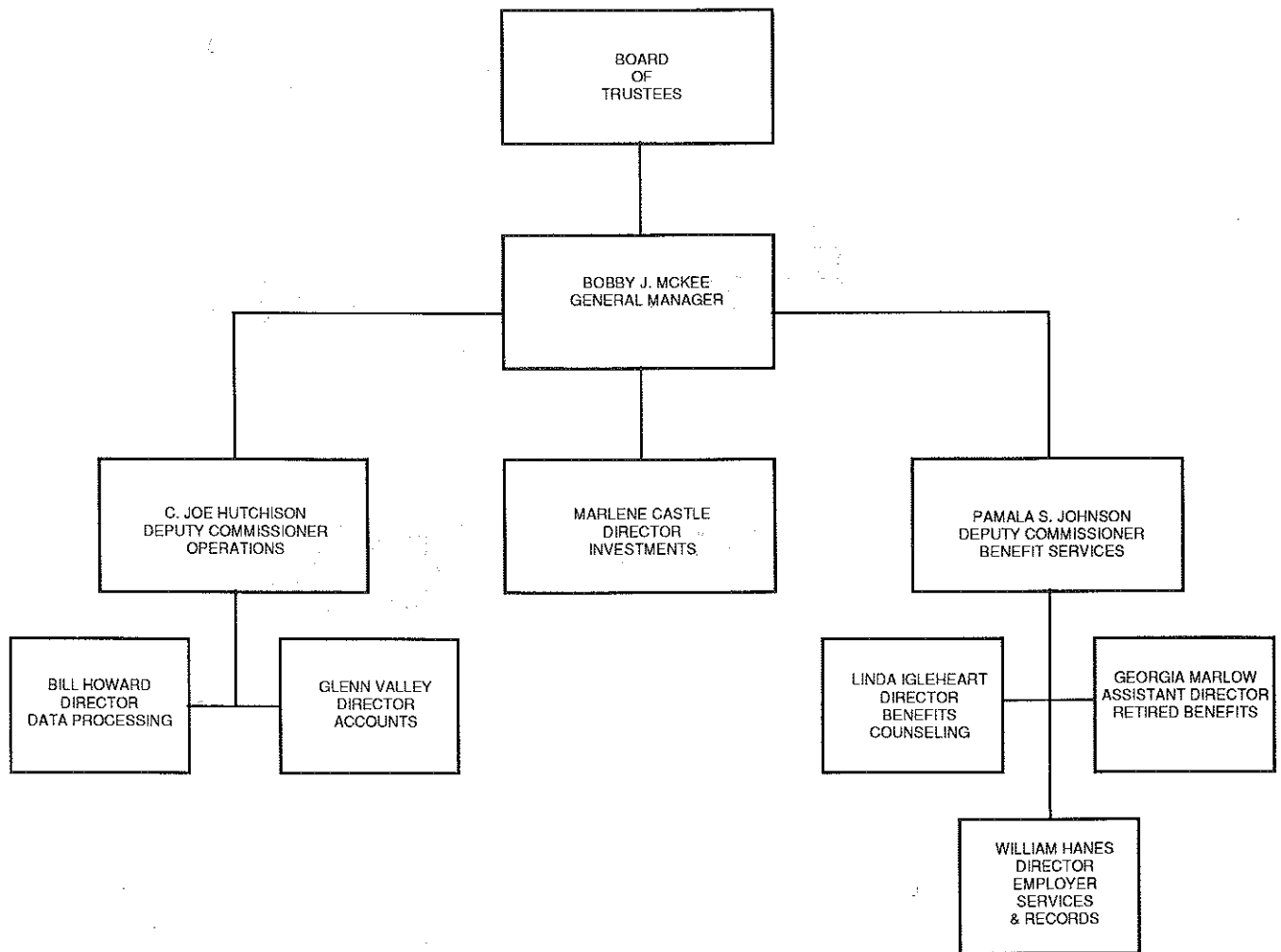


Nancy L. Ray
Crestwood
Appointed by Governor
Term Expires 3/31/88



John D. Robey
Chairman
Elizabethtown
Elected by SPRS Members
Term Expires 3/31/91

KENTUCKY RETIREMENT SYSTEMS ORGANIZATIONAL CHART



CONTRACTUAL ARRANGEMENTS

ACTUARIAL SERVICES:

William M. Mercer-Meidinger-Hansen
2600 Meidinger Tower
Louisville, KY 40202

CUSTODIAN OF SECURITIES:

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

LEGAL SERVICES:

Johnson & Judy, Stoll Kennon & Park
236 West Main Street
Frankfort, KY 40601

AUDITING SERVICES:

Eskew & Gresham, P.S.C.
700 Centre Building
10100 Linn Station Road
Louisville, KY 40223

ASSET MANAGEMENT

CONSULTANT:

William M. Mercer-Meidinger-Hansen
2600 Meidinger Tower
Louisville, KY 40202

INVESTMENT COUNSELORS:

Capital Supervisors
20 North Clark Street
Suite 700
Chicago, IL 60602

Heitman Advisory Corp.
1800 North LaSalle Street
Suite 3600
Chicago, IL 60601

Munder Capital Management
260 East Brown Street
Suite 100
Birmingham, MI 48011

FINANCIAL SECTION

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 Employes Retirement System, County Employes Retirement System and State Police Retirement System totalled over \$2.1 billion as of June 30, 1987, an increase of 18% 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, 1987, was performed by the firm of Eskew & Gresham, PSC.

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 Eskew & Gresham 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.

Eskew & Gresham, PSC

Certified Public Accountants
700 Centre Building
10100 Linn Station Road
Louisville, Kentucky 40223
502-426-3700
Telex: Eskham Lex 213495

Board of Trustees
Kentucky Retirement Systems
Frankfort, Kentucky

We have examined the balance sheets of the Kentucky Employes Retirement System, County Employes Retirement System, State Police Retirement System and Kentucky Retirement Systems Insurance Fund as of June 30, 1987 and 1986, and the related statements of revenues, expenses and changes in members' contribution account and retirement allowance account and changes in financial position of the Kentucky Employes Retirement System, County Employes Retirement System and the State Police Retirement System and the statements of revenues, expenses and changes in fund balance and changes in financial position of the Kentucky Retirement Systems Insurance Fund for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial position of the Kentucky Employes Retirement System, County Employes Retirement System, State Police Retirement System and Kentucky Retirement Systems Insurance Fund at June 30, 1987 and 1986, and the results of their operations, the changes in members' contribution account and retirement allowance account of the Kentucky Employes Retirement System, County Employes Retirement System and State Police Retirement System, the changes in fund balance of the Kentucky Retirement Systems Insurance Fund and the changes in their financial position for the year then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

September 21, 1987

Eskew + Gresham, PSC

KENTUCKY EMPLOYES RETIREMENT SYSTEM

KENTUCKY EMPLOYES RETIREMENT SYSTEM
BALANCE SHEETS
JUNE 30, 1987 AND 1986

	1987	1986
ASSETS		
Investments (Note 7):		
United States Government securities	\$ 197,372,125	\$ 153,251,606
Government National Mortgage Association and similar securities	240,313,124	178,119,038
Corporate bonds and notes	145,458,294	162,270,633
Convertible bonds		1,227,057
Common stocks	505,580,243	316,269,846
First mortgage real estate loans	4,495,227	5,299,914
Real estate investment trust	43,097,735	46,465,875
Securities purchased under agreement to resell	<u>103,843,862</u>	<u>195,813,002</u>
	<u>\$1,240,160,610</u>	<u>\$1,058,716,971</u>
Cash on deposit with State Treasurer	29,483	16,120
Member and employer contributions receivable	6,365,619	3,825,660
Accrued investment income	19,543,666	13,444,779
Prepaid retirement benefits		4,352,509
Other assets	<u>12,533</u>	<u>31,332</u>
	<u>\$1,266,111,911</u>	<u>\$1,080,387,371</u>
 LIABILITIES AND FUND BALANCE		
Member refunds, insurance fund transfers and investment expenses payable	\$ 2,111,492	\$ 1,033,950
Fund balance:		
Members' Contribution Account	\$ 270,332,009	\$ 241,706,858
Retirement Allowance Account	<u>993,668,410</u>	<u>837,646,563</u>
	<u>\$1,264,000,419</u>	<u>\$1,079,353,421</u>
	<u>\$1,266,111,911</u>	<u>\$1,080,387,371</u>

See notes to financial statements.

KENTUCKY EMPLOYES RETIREMENT SYSTEM
 STATEMENTS OF REVENUES, EXPENSES AND CHANGES
 IN MEMBERS' CONTRIBUTION ACCOUNT
 FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Revenues:		
Member contributions	\$ 40,563,400	\$ 29,228,638
Interest credited to members' balances transferred from Retirement Allowance Account	<u>8,957,819</u>	<u>12,114,381</u>
Total revenues	\$ 49,521,219	\$ 41,343,019
Expenses:		
Refunds to former members	\$ 5,061,156	\$ 5,105,361
Retired members' balances transferred to Retirement Allowance Account	<u>15,834,912</u>	<u>9,597,352</u>
Total expenses	\$ 20,896,068	\$ 14,702,713
Excess of revenues over expenses	\$ 28,625,151	\$ 26,640,306
Members' Contribution Account at beginning of year	<u>241,706,858</u>	<u>215,066,552</u>
Members' Contribution Account at end of year	\$270,332,009	\$241,706,858

See notes to financial statements.

KENTUCKY EMPLOYES RETIREMENT SYSTEM
 STATEMENTS OF REVENUES, EXPENSES AND CHANGES
 IN RETIREMENT ALLOWANCE ACCOUNT
 FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Revenues:		
Employer contributions	\$ 56,679,470	\$ 52,686,054
Investment income	97,094,173	84,346,598
Net realized gain on disposal of investments	58,938,113	32,275,130
Retirement members' balances transferred from Members' Contribution Account	<u>15,834,912</u>	<u>9,597,352</u>
Total revenues	\$228,546,668	\$178,905,134
Expenses:		
Retirement benefits for members	\$ 52,414,394	\$ 43,962,495
Contributions transferred to the Kentucky Retirement Systems Insurance Fund	9,644,592	3,477,505
Interest credited to members' balances transferred to Members' Contribution Account	8,957,819	12,114,381
Administrative expenses	1,235,905	838,804
Investment expenses	<u>272,111</u>	<u>279,607</u>
Total expenses	\$ 72,524,821	\$ 60,672,792
Excess of revenues over expenses	\$156,021,847	\$118,232,342
Retirement Allowance Account at beginning of year	<u>837,646,563</u>	<u>719,414,221</u>
Retirement Allowance Account at end of year	\$993,668,410	\$837,646,563

See notes to financial statements.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
 STATEMENTS OF CHANGES IN FINANCIAL POSITION
 FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Source of funds:		
Excess of revenues over expenses	\$184,646,998	\$144,872,648
Deduct amortization of investment discount and premium, net, not providing funds	<u>2,744,947</u>	<u>4,422,426</u>
Funds provided from operations	\$181,902,051	\$140,450,222
Proceeds from sale, maturity or exchange of investments, less net gain of \$58,938,113 in 1987 and \$32,275,130 in 1986, included above	387,547,241	382,006,715
Decrease in accrued investment income		100,791
Decrease in prepaid retirement benefits	4,352,509	
Decrease in other assets	18,799	18,798
Increase in member refunds, insurance fund transfers and investment expenses payable	<u>1,077,542</u>	<u>347,410</u>
Total funds provided	\$574,898,142	\$522,923,936
Application of funds:		
Investments purchased or exchanged	\$566,245,933	\$517,650,100
Increase in member and employer contributions receivable	2,539,959	686,524
Increase in accrued investment income	6,098,887	
Increase in prepaid retirement benefits		4,352,509
Decrease in payable to County Employees Retirement System		<u>278,240</u>
Total funds applied	\$574,884,779	\$522,967,373
Increase (decrease) in cash	\$ 13,363	\$ (43,437)
Cash on deposit with State Treasurer at beginning of year	<u>16,120</u>	<u>59,557</u>
Cash on deposit with State Treasurer at end of year	\$ 29,483	\$ 16,120

See notes to financial statements.

KENTUCKY EMPLOYES RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1987 AND 1986

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation - The financial statements of Kentucky Employes Retirement System (the System) are prepared on the accrual basis, and generally conform to the provisions of the National Council on Governmental Accounting's Statement 1.

B. Investment Securities - Investments in bonds and first mortgage real estate loans are stated at amortized cost. Discount and premium are amortized using the straight-line method from the date of acquisition to stated or expected maturity. Common stocks, securities purchased under agreement to resell and investment in real estate investment trust are carried at cost.

Net realized gain or loss on investments represents 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.

C. Members' Contribution and Retirement Allowance Accounts - These accounts are funded by contributions and investment income. The Members' Contribution Account represents the accumulation of active members' contributions plus interest credited to members' accounts. The Retirement Allowance Account is comprised of retired members' contribution balances including interest credited thereon and accumulated employer contributions plus cumulative excess of revenues over expenses less interest credited to members' contribution accounts.

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

NOTE 2 - DESCRIPTION OF THE PLAN

The Kentucky Employes Retirement 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 265 at June 30, 1987.

For the years ended June 30, 1987 and 1986, participating employees contributed 5% and 4%, 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 one percent (1%) of unfunded past service costs per annum plus interest at the actuarial assumed rate. Such contribution rates are determined by the Board of Trustees of Kentucky Retirement Systems each biennium. Participating employers contributed at 7.45% and 14%, respectively, of members' non-hazardous and hazardous compensation for the year ended June 30, 1987 and 7.25% and 14%, respectively, for the year ended June 30, 1986.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 2 - DESCRIPTION OF THE PLAN (CONTINUED)

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:

	1987	1986
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them:		
Non-hazardous positions	23,617	22,761
Hazardous positions	107	439
Total	23,724	23,200
Current employees:		
Vested:		
Non-hazardous positions	27,342	27,375
Hazardous positions	155	157
Nonvested:		
Non-hazardous positions	15,361	14,480
Hazardous positions	413	346
Total	43,271	42,358

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

NOTE 3 - ACCUMULATED BENEFITS

Accumulated plan benefits are those future periodic payments, including lump-sum distributions, that are attributable under the Plan's provisions to services rendered by the employees to the valuation date. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or their beneficiaries, (b) beneficiaries of employees who are deceased, and (c) present employees or their beneficiaries. Benefits under the Plan are based on employees' average compensation during their five highest paid years. Accumulated plan benefits for active employees are based on their compensation as of the valuation date. Benefits payable under all circumstances - retirement, death, and termination of employment - are included to the extent they are deemed attributable to employee service rendered to the valuation date.

The System's consulting actuary, William M. Mercer-Meidinger-Hansen, Inc., estimates the actuarial present value of accumulated plan benefits, which is the amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (taking into account mortality) between the valuation date and the expected date of payment.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 3 - ACCUMULATED BENEFITS (CONTINUED)

Accumulated plan benefit information follows:

	June 30	
	1987	1986
Vested benefits:		
Participants currently receiving payments	\$459,404,473	\$380,935,479
Other participants	<u>333,854,067</u>	<u>320,394,075</u>
	\$793,258,540	\$701,329,554
Non-vested benefits	<u>83,427,449</u>	<u>76,893,813</u>
Total accumulated plan benefits	\$876,685,989	\$778,223,367

The more significant assumptions underlying the actuarial computations, including those which enter only into the determination of funding levels (cost method, turnover, retirement age, and salary increase), are as follows:

Actuarial cost method	-	Entry age normal cost method
Assumed rate of return on investments	-	8% per annum
Mortality basis	-	1971 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 1985 experience study
Retirement age	-	Based upon experience, with 20% weight, at age 55-64, to the earliest age at which an employee could retire with 100% of the accrued benefits
Salary increase	-	7 1/2% per annum

NOTE 4 - FUNDING STATUS AND PROGRESS

The amount shown below as "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess 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.

The pension benefit obligation for 1987 and 1986 was determined as part of an actuarial valuation at June 30, 1987 and 1986, respectively. The significant actuarial assumptions are the same as those used for the accumulated plan benefits computations for those years.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 4 - FUNDING STATUS AND PROGRESS (CONTINUED)

The unfunded (funds in excess of) pension benefit obligation was \$(25,254,323) and \$31,240,402 at June 30, 1987 and 1986, respectively.

	1987	1986
Pension benefit obligation:		
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$ 473,863,105	\$ 398,785,549
Current members -		
Accumulated employee contributions and credited interest	258,408,667	230,528,697
Employer-financed vested	487,032,819	462,870,056
Employer-financed nonvested	<u>19,441,505</u>	<u>18,409,521</u>
Total pension benefit obligation	\$1,238,746,096	\$1,110,593,823
Net assets available for benefits, at cost	<u>1,264,000,419</u>	<u>1,079,353,421</u>
Unfunded (funds in excess of) pension benefit obligation	\$ (25,254,323)	\$ 31,240,402

NOTE 5 - 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 actuarial funding method. The System also uses the level percentage of payroll method to amortize the unfunded liability.

Actuarially determined contribution requirements of \$82,894,422 (\$47,145,959 employer and \$35,748,463 employee) for the years ended June 30, 1987 and \$68,897,057 (\$41,727,009 employer and \$27,170,048 employee) for the year ended June 30, 1986 were determined through an actuarial valuation performed at June 30, 1986 and 1985, respectively. These contributions were to consist of: (a) \$57,972,889 for 1987 and \$50,323,073 for 1986 normal cost; (b) \$14,997,172 for 1987 and \$14,445,683 for 1986 amortization of the unfunded actuarial accrued liability; (c) \$820,005 for 1987 and \$842,013 for 1986 administrative expenses; and (d) \$9,104,356 for 1987 and \$3,286,288 for 1986 group hospital and medical insurance premiums. For 1987 contributions received totaled \$97,242,870 of which the employer portion was \$56,679,470 (7.45% of the covered payroll for non-hazardous positions and 14% for hazardous positions) and the employee portion was \$40,563,400 (5% of the covered payroll for non-hazardous positions and 7% for hazardous positions). For 1986 contributions received totaled \$81,914,692 of which the employer portion was \$52,686,054 (7.25% of the covered payroll for non-hazardous positions and 14% for hazardous positions) and employee portion was \$29,228,638 (4% of the covered payroll for non-hazardous positions and 7% for hazardous positions).

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 6 - FOUR-YEAR HISTORICAL TREND INFORMATION

Four-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.

Analysis of Funding Progress

Fiscal Year	(1)	(2)	(3)	(4)	(5)	(6)
	Net Assets Available For Benefits	Pension Benefit Obligation	Percentage Funded (1) ÷ (2)	Unfunded (Funds in Excess of) Pension Benefit Obligation (2) - (1)	Annual Covered Payroll	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	-

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded (funds in excess of) 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	Employee 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

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

KENTUCKY EMPLOYES RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1987 AND 1986
(CONTINUED)

NOTE 7 - 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 State Statutes:

Equity Investments - Investments may be made in common stock securities convertible into common stock and in preferred stock 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 U.S. Government issued debt instrument or issue by an agency of the U.S. Government with an initial maturity of over one year and which are guaranteed by 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 do 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, with the exception of commercial paper which requires specific purchase approval by the Investment Committee, are considered acceptable:

- Repurchase Agreements -- 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 of banks domiciled in the Commonwealth of Kentucky and having capital and unrestricted surplus of at least \$100 million.

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 7 - INVESTMENTS (CONTINUED)

The System's investments are categorized below to give an indication of level of risk assumed by the entity at June 30, 1987. Category 1 includes investments that are insured or registered or for which the collateralized securities are held by the System 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 the System's name.

	June 30, 1987		Carrying Amount	Market Value	June 30, 1986 Market Value
	Category				
	1	2			
United States Government securities	\$ 6,632,016	\$ 190,740,109	\$ 197,372,125	\$ 202,953,000	\$ 168,389,000
Government National Mortgage Association and similar securities	36,931,101	203,382,023	240,313,124	245,032,000	191,981,000
Corporate bonds and notes	25,382,505	120,075,789	145,458,294	147,906,000	171,335,000
Common stocks		505,580,243	505,580,243	744,366,000	520,496,000
Securities purchased under agreement to resell		103,843,862	103,843,862	103,844,000	195,813,000
	\$68,945,622	\$1,123,622,026	\$1,192,567,648	\$1,444,101,000	\$1,248,014,000
Convertible bonds					1,753,000
First mortgage real estate loans			4,495,227	4,578,000	5,694,000
Real estate investment trust			43,097,735	48,033,000	48,983,000
Total Investments			\$1,240,160,610	\$1,496,712,000	\$1,304,444,000

Investments at June 30, 1987, include securities loaned under various lending programs.

NOTE 8 - INCOME TAX STATUS

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

NOTE 9 - TRANSFERS TO INSURANCE FUND

By action of the 1978 General Assembly, the Kentucky Retirement Systems Insurance Fund was established to provide a group hospital and medical insurance plan for recipients of a retirement allowance from the Kentucky Employees Retirement System. The Insurance Fund is funded by the transfer of a portion of employer contributions to the retirement system. The percentage of creditable compensation transferred to the Insurance Fund by the Kentucky Employees Retirement System was 1.23% and 0.48% for non-hazardous and 4.90% and 1.09% for hazardous positions for the years ended June 30, 1987 and 1986, respectively.

COUNTY EMPLOYES RETIREMENT SYSTEM

COUNTY EMPLOYEES RETIREMENT SYSTEM
BALANCE SHEETS
JUNE 30, 1987 AND 1986

	1987	1986
ASSETS		
Investments (Note 7):		
United States Government securities	\$113,173,524	\$ 80,648,212
Government National Mortgage Association and similar securities	137,351,159	97,802,390
Corporate bonds and notes	73,818,716	81,205,782
Convertible bonds		904,745
Common stocks	285,101,128	156,940,783
First mortgage real estate loans	485,338	578,932
Real estate investment trust	26,190,728	27,201,669
Securities purchased under agreement to resell	<u>61,418,061</u>	<u>99,157,098</u>
	<u>\$697,538,654</u>	<u>\$544,439,611</u>
Cash on deposit with State Treasurer	26,634	14,570
Member and employer contributions receivable	7,931,544	16,018,192
Past service credit contribution receivable	12,517,790	35,614,930
Accrued investment income	10,730,103	6,985,046
Prepaid retirement benefits		1,534,528
Other assets	<u>6,167</u>	<u>15,417</u>
	<u>\$728,750,892</u>	<u>\$604,622,294</u>
 LIABILITIES AND FUND BALANCE		
Member refunds, insurance fund transfers and investment expenses payable	\$ 1,020,165	\$ 806,494
 Fund balance:		
Members' Contribution Account	\$153,378,173	\$133,493,649
Retirement Allowance Account	<u>574,352,554</u>	<u>470,322,151</u>
	<u>\$727,730,727</u>	<u>\$603,815,800</u>
	\$728,750,892	\$604,622,294

See notes to financial statements.

COUNTY EMPLOYEES RETIREMENT SYSTEM
 STATEMENTS OF REVENUES, EXPENSES AND CHANGES
 IN MEMBERS' CONTRIBUTION ACCOUNT
 FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Revenues:		
Member contributions	\$ 28,071,411	\$ 28,187,039
Interest credited to members' balances transferred from Retirement Allowance Account	<u>4,932,209</u>	<u>6,560,168</u>
Total revenues	\$ 33,003,620	\$ 34,747,207
Expenses:		
Refunds to former members	\$ 4,382,655	\$ 4,974,503
Retired members' balances transferred to Retirement Allowance Account	<u>8,736,441</u>	<u>6,209,001</u>
Total expenses	\$ 13,119,096	\$ 11,183,504
Excess of revenues over expenses	\$ 19,884,524	\$ 23,563,703
Members' Contribution Account at beginning of year	<u>133,493,649</u>	<u>109,929,946</u>
Members' Contribution Account at end of year	\$153,378,173	\$133,493,649

See notes to financial statements.

COUNTY EMPLOYEES RETIREMENT SYSTEM
 STATEMENTS OF REVENUES, EXPENSES AND CHANGES
 IN RETIREMENT ALLOWANCE ACCOUNT
 FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Revenues:		
Employer contributions	\$ 42,060,265	\$ 61,400,912
Investment income	54,428,479	44,216,104
Net realized gain on disposal of investments	28,353,575	16,705,957
Retirement members' balances transferred from Members' Contribution Account	<u>8,736,441</u>	<u>6,209,001</u>
Total revenues	\$133,578,760	\$128,531,974
Expenses:		
Retirement benefits for members	\$ 18,065,794	\$ 17,329,099
Contributions transferred to the Kentucky Retirement Systems Insurance Fund	5,285,103	1,541,564
Interest credited to members' balances transferred to Members' Contribution Account	4,932,209	6,560,168
Administrative expenses	1,116,914	750,409
Investment expenses	<u>148,337</u>	<u>141,858</u>
Total expenses	\$ 29,548,357	\$ 26,323,098
Excess of revenues over expenses	\$104,030,403	\$102,208,876
Retirement Allowance Account at beginning of year	<u>470,322,151</u>	<u>368,113,275</u>
Retirement Allowance Account at end of year	\$574,352,554	\$470,322,151

See notes to financial statements.

COUNTY EMPLOYEES RETIREMENT SYSTEM
STATEMENTS OF CHANGES IN FINANCIAL POSITION
FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Source of funds:		
Excess of revenues over expenses	\$123,914,927	\$125,772,579
Deduct amortization of investment discount and premium, net, not providing funds	<u>1,365,355</u>	<u>2,108,183</u>
Funds provided from operations	\$122,549,572	\$123,664,396
Proceeds from sale, maturity or exchange of investments, less net gain of \$28,353,575 in 1987 and \$16,705,957 in 1986, included above	\$193,554,306	188,724,888
Decrease in receivable from Kentucky Retirement Employees Retirement System and State Police Retirement System		659,766
Decrease in member and employer contributions receivable	8,086,648	
Decrease in past service credit contribution receivable	23,097,140	
Decrease in prepaid retirement benefits	1,534,528	
Decrease in other assets	9,250	9,251
Increase in member refunds, insurance fund transfers and investment expenses payable	<u>213,671</u>	<u>268,532</u>
Total funds provided	\$349,045,115	\$313,326,833
Application of funds:		
Investments purchased or exchanged	\$345,287,994	\$266,962,953
Increase in member and employer contributions receivable		12,379,432
Increase in past service credit contribution receivable		32,388,971
Increase in accrued investment income	3,745,057	100,209
Increase in prepaid retirement benefits	<u>1,534,528</u>	<u>1,534,528</u>
Total funds applied	\$349,033,051	\$313,366,093
Increase (decrease) in cash	\$ 12,064	\$ (39,260)
Cash on deposit with State Treasurer at beginning of year	<u>14,570</u>	<u>53,830</u>
Cash on deposit with State Treasurer at end of year	\$ 26,634	\$ 14,570

See notes to financial statements.

COUNTY EMPLOYEES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation - The financial statements of County Employees Retirement System (the System) are prepared on the accrual basis, and generally conform to the provisions of the National Council on Governmental Accounting's Statement 1.

B. Investment Securities - Investments in bonds and first mortgage real estate loans are stated at amortized cost. Discount and premium are amortized using the straight-line method from the date of acquisition to stated or expected maturity. Common stocks, securities purchased under agreement to resell and investment in real estate investment trust are carried at cost.

Net realized gain or loss on investments represents 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.

C. Members' Contribution and Retirement Allowance Accounts - These accounts are funded by contributions and investment income. The Members' Contribution Account represents the accumulation of active members' contributions plus interest credited to members' accounts. The Retirement Allowance Account is comprised of retired members' contribution balances including interest credited thereon and accumulated employer contributions plus cumulative excess of revenues over expenses less interest credited to members' contribution accounts.

Employees are permitted to purchase credits for member service from the date of plan adoption to the participation 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.

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

NOTE 2 - DESCRIPTION OF THE PLAN

The County Employees Retirement System is a defined benefit plan which covers substantially all regular full-time employees of each county and school board, and any additional local agencies electing to participate in the System. The Plan provides for retirement, disability and death benefits. At June 30, 1987, the number of participating local government employers was:

Boards of Education	178
County agencies	116
City agencies	78
Libraries	55
Other	133
Total	<u>562</u>

COUNTY EMPLOYES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 2 - DESCRIPTION OF THE PLAN (CONTINUED)

For the years ended June 30, 1987 and 1986, participating employees contributed 4.25% and 4%, 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 one percent (1%) of unfunded past service costs per annum plus interest at the actuarial assumed rate. Such contribution rates are determined by the Board of Trustees of Kentucky Retirement Systems each biennium. Participating employers contributed at 5.75% and 5.25% of members' non-hazardous compensation, for the years ended June 30, 1987 and 1986, respectively. For both years, participating employers contributed at 14% of members hazardous compensation.

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, 1987, membership in the System consisted of:

	1987	1986
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them:		
Non-hazardous positions	18,097	17,940
Hazardous positions	251	176
Total	18,348	18,116
Current employees:		
Vested:		
Non-hazardous positions	21,941	20,365
Hazardous positions	1,037	558
Nonvested:		
Non-hazardous positions	20,035	18,626
Hazardous positions	412	918
Total	43,425	40,467

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

COUNTY EMPLOYEES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 3 - ACCUMULATED BENEFITS

Accumulated plan benefits are those future periodic payments, including lump-sum distributions, that are attributable under the Plan's provisions to services rendered by the employees to the valuation date. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or their beneficiaries, (b) beneficiaries of employees who are deceased, and (c) present employees or their beneficiaries. Benefits under the Plan are based on employees' average compensation during their five highest paid years. Accumulated plan benefits for active employees are based on their compensation as of the valuation date. Benefits payable under all circumstances - retirement, death, and termination of employment - are included to the extent they are deemed attributable to employee service rendered to the valuation date.

The System's consulting actuary, William M. Mercer-Meidinger-Hansen, Inc., estimates the actuarial present value of accumulated plan benefits, which is the amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (taking into account mortality) between the valuation date and the expected date of payment.

Accumulated plan benefit information follows:

	June 30	
	1987	1986
Vested benefits:		
Participants currently receiving payments	\$185,651,395	\$148,805,965
Other participants	182,739,589	145,866,048
	\$368,390,984	\$294,672,013
Non-vested benefits	55,026,575	43,257,549
Total accumulated plan benefits	\$423,417,559	\$337,929,562

The more significant assumptions underlying the actuarial computations, including those which enter only into the determination of funding levels (cost method, turnover, retirement age, and salary increase), are as follows:

Actuarial cost method	- Entry age normal cost method
Assumed rate of return on investments	- 8% per annum
Mortality basis	- 1971 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employees

COUNTY EMPLOYES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 3 - ACCUMULATED BENEFITS (CONTINUED)

Employee turnover	- Graduated select and ultimate rates based on 1985 experience study
Retirement age	- Based upon experience, with 20% weight, at age 55-64, to the earliest age at which an employee could retire with 100% of the accrued benefits
Salary increase	- 7 1/2% per annum

NOTE 4 - FUNDING STATUS AND PROGRESS

The amount shown below as "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess 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.

The pension benefit obligation for 1987 and 1986 was determined as part of an actuarial valuation at June 30, 1987 and 1986, respectively. The significant actuarial assumptions are the same as those used for the accumulated plan benefits computations for those years.

The funds in excess of pension benefit obligation was \$119,840,014 and \$124,455,342 at June 30, 1987 and 1986, respectively.

	1987	1986
Pension benefit obligation:		
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$196,265,177	\$160,334,443
Current members -		
Accumulated employee contributions and credited interest	146,071,392	126,444,261
Employer-financed vested	245,610,552	176,789,197
Employer-financed nonvested	<u>19,943,592</u>	<u>15,792,557</u>
Total pension benefit obligation	\$607,890,713	\$479,360,458
Net assets available for benefits, at cost	<u>727,730,727</u>	<u>603,815,800</u>
Funds in excess of pension benefit obligation	\$119,840,014	\$124,455,342

COUNTY EMPLOYES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 5 - 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 actuarial funding method. The System also uses the level percentage of payroll method to amortize the unfunded liability.

Actuarially determined contribution requirements of \$49,574,018 (\$28,307,909 employer and \$21,266,109 employee) for the years ended June 30, 1987 and \$37,013,360 (\$19,349,776 employer and \$17,663,584 employee) for the year ended June 30, 1986 were determined through an actuarial valuation performed at June 30, 1986 and 1985, respectively. These contributions were to consist of: (a) \$43,909,820 for 1987 and \$34,893,207 for 1986 normal cost; (b) \$741,158 for 1987 and \$673,610 for 1986 administrative expenses; and (c) \$4,923,040 for 1987 and \$1,446,543 for 1986 group hospital and medical insurance premiums. For 1987 contributions received totaled \$70,131,676 of which the employer portion was \$42,060,265 (5.75% of the covered payroll for non-hazardous positions and 14% for hazardous positions) and the employee portion was \$28,071,411 (4.25% of the covered payroll for non-hazardous positions and 7% for hazardous positions). For 1986 contributions received totaled \$89,587,951 of which the employer portion was \$61,400,912 (5.25% of the covered payroll for non-hazardous positions and 14.0% for hazardous positions) and the employee portion was \$28,187,039 (4% of the covered payroll for non-hazardous positions and 7% for hazardous positions).

NOTE 6 - FOUR-YEAR HISTORICAL TREND INFORMATION

Four-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.

Analysis of Funding Progress

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	-
1985	478,043,221	413,059,045	115.7	(64,984,176)	433,135,800	-
1986	603,815,800	479,360,458	126.0	(124,455,342)	484,796,988	-
1987	727,730,727	607,890,713	119.7	(119,840,014)	544,184,376	-

COUNTY EMPLOYES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 6 - FOUR-YEAR HISTORICAL TREND INFORMATION (CONTINUED)

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded (funds in excess of) 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.

Fiscal Year	Revenues by Source				
	Employee Contributions	Employer Contributions	Investment Income	Other Income	Total
1984	\$16,040,197	\$25,580,243	\$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	16,705,957	150,510,030
1987	28,071,411	42,060,265	54,428,479	28,353,575	152,913,730

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	650,073	3,570,707	124,145	1,297,765	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

NOTE 7 - 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 State Statutes:

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

COUNTY EMPLOYEES RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1987 AND 1986
(CONTINUED)

NOTE - 7 INVESTMENTS (CONTINUED)

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 U.S. Government issued debt instrument or issue by an agency of the U.S. Government with an initial maturity of over one year and which are guaranteed by 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 do 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, with the exception of commercial paper which requires specific purchase approval by the Investment Committee, are considered acceptable:

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

COUNTY EMPLOYEES RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE - 7 INVESTMENTS (CONTINUED)

The System's investments are categorized below to give an indication of level of risk assumed by the entity at June 30, 1987. Category 1 includes investments that are insured or registered or for which the collateralized securities are held by the System 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 the System's name.

	June 30, 1987		Carrying Amount	Market Value	June 30, 1986 Market Value
	Category				
	1	2			
United States Government securities	\$ 2,585,480	\$110,588,044	\$113,173,524	\$116,144,000	\$ 89,581,000
Government National Mortgage Association and similar securities	23,127,657	114,223,502	137,351,159	141,000,000	106,740,000
Corporate bonds and notes	10,234,155	63,584,561	73,818,716	74,903,000	85,766,000
Common stocks		285,101,128	285,101,128	402,573,000	251,269,000
Securities purchased under agreement to resell		61,418,061	61,418,061	61,418,000	99,157,000
	<u>\$35,947,292</u>	<u>\$634,915,296</u>	<u>\$670,862,588</u>	<u>\$796,038,000</u>	<u>\$632,513,000</u>
Convertible bonds					1,367,000
First mortgage real estate loans			485,338	498,000	632,000
Real estate investment trust			<u>26,190,728</u>	<u>29,066,000</u>	<u>28,692,000</u>
Total Investments			\$697,538,654	\$825,602,000	\$663,204,000

Investments at June 30, 1987, include securities loaned under various lending programs.

NOTE 8 - INCOME TAX STATUS

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

NOTE 9 - TRANSFERS TO INSURANCE FUND

By action of the 1978 General Assembly, the Kentucky Retirement Systems Insurance Fund was established to provide a group hospital and medical insurance plan for recipients of a retirement allowance from the County Employees Retirement System. The Insurance Fund is funded by the transfer of a portion of employer contributions to the retirement system. The percentage of creditable compensation transferred to the Insurance Fund by the County Employees Retirement System was .92% and 0.31% for non-hazardous and 2.36% and 0.99% for hazardous positions for the years ended June 30, 1987 and 1986, respectively.

STATE POLICE RETIREMENT SYSTEM

STATE POLICE RETIREMENT SYSTEM
BALANCE SHEETS
JUNE 30, 1987 AND 1986

	1987	1986
ASSETS		
Investments (Note 7):		
United States Government securities	\$ 18,229,329	\$13,562,226
Government National Mortgage Association and similar securities	20,322,898	15,273,662
Corporate bonds and notes	12,364,168	15,298,405
Convertible bonds		60,095
Common stocks	45,238,558	29,100,159
First mortgage real estate loans	266,737	318,146
Real estate investment trust	3,567,229	3,879,081
Securities purchased under agreement to resell	8,188,344	17,344,788
	<u>\$108,177,263</u>	<u>\$94,836,562</u>
Cash on deposit with State Treasurer	567	310
Member and employer contributions receivable	446,617	261,675
Accrued investment income	1,731,353	1,193,684
Prepaid retirement benefits		419,005
Other assets	1,194	2,984
	<u>\$110,356,994</u>	<u>\$96,714,220</u>
 LIABILITIES AND FUND BALANCE		
Member refunds, insurance fund transfers and investment expenses payable	\$ 162,390	\$ 46,521
Fund balance:		
Members' Contribution Account	\$ 19,060,890	\$17,987,582
Retirement Allowance Account	91,133,714	78,680,117
	<u>\$110,194,604</u>	<u>\$96,667,699</u>
	\$110,356,994	\$96,714,220

See notes to financial statements.

STATE POLICE RETIREMENT SYSTEM
 STATEMENTS OF REVENUES, EXPENSES AND CHANGES
 IN MEMBERS' CONTRIBUTION ACCOUNT
 FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Revenues:		
Member contributions	\$ 1,944,780	\$ 1,944,859
Interest credited to members' balances transferred from Retirement Allowance Account	<u>664,388</u>	<u>923,107</u>
Total revenues	\$ 2,609,168	\$ 2,867,966
Expenses:		
Refunds to former members	\$ 127,181	\$ 73,447
Retired members' balances transferred to Retirement Allowance Account	<u>1,408,679</u>	<u>1,560,558</u>
Total expenses	\$ 1,535,860	\$ 1,634,005
Excess of revenues over expenses	\$ 1,073,308	\$ 1,233,961
Members' Contribution Account at beginning of year	<u>17,987,582</u>	<u>16,753,621</u>
Members' Contribution Account at end of year	\$19,060,890	\$17,987,582

See notes to financial statements.

STATE POLICE RETIREMENT SYSTEM
 STATEMENTS OF REVENUES, EXPENSES AND CHANGES
 IN RETIREMENT ALLOWANCE ACCOUNT
 FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Revenues:		
Employer contributions	\$ 4,481,033	\$ 4,380,911
Investment income	8,763,083	7,453,314
Net realized gain on disposal of investments	5,188,413	2,698,426
Retirement members' balances transferred from Members' Contribution Account	<u>1,408,679</u>	<u>1,560,558</u>
Total revenues	\$19,841,208	\$16,093,209
Expenses:		
Retirement benefits for members	\$ 5,107,017	\$ 4,356,837
Contributions transferred to the Kentucky Retirement Systems Insurance Fund	1,569,076	352,493
Interest credited to members' balances transferred to Members' Contribution Account	664,387	923,107
Administrative expenses	23,379	17,560
Investment expenses	<u>23,752</u>	<u>25,716</u>
Total expenses	\$ 7,387,611	\$ 5,675,713
Excess of revenues over expenses	\$12,453,597	\$10,417,496
Retirement Allowance Account at beginning of year	<u>78,680,117</u>	<u>68,262,621</u>
Retirement Allowance Account at end of year	\$91,133,714	\$78,680,117

See notes to financial statements.

STATE POLICE RETIREMENT SYSTEM
 STATEMENTS OF CHANGES IN FINANCIAL POSITION
 FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Source of funds:	\$13,526,905	\$11,651,457
Excess of revenues over expenses		
Deduct amortization of investment discount and premium, net, not providing funds	<u>510,695</u>	<u>481,830</u>
Funds provided from operations	\$13,016,210	\$11,169,627
Proceeds from sale, maturity or exchange of investments, less net gain of \$5,188,413 in 1987 and \$2,698,426 in 1986, included above	35,865,408	31,559,069 23,237
Decrease in accrued investment income	419,005	
Decrease in prepaid retirement benefits	1,790	1,790
Decrease in other assets		
Increase in member refunds, insurance fund transfers and investment expenses payable	<u>115,869</u>	<u> </u>
Total funds provided	\$49,418,282	\$42,753,723
Application of funds:	\$48,695,414	\$41,902,971
Investments purchased or exchanged		
Increase in member and employer contributions receivable	184,942	47,935
Increase in accrued investment income	537,669	419,005
Increase in prepaid retirement benefits		
Decrease in member refunds, insurance fund transfers and investment expenses payable		3,121
Decrease in due to County Employees Retirement System	<u> </u>	<u>381,526</u>
Total funds applied	\$49,418,025	\$42,754,558
Increase (decrease) in cash	\$ 257	\$ (835)
Cash on deposit with State Treasurer at beginning of year	<u>310</u>	<u>1,145</u>
Cash on deposit with State Treasurer at end of year	\$ 567	\$ 310

See notes to financial statements.

STATE POLICE RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1987 AND 1986

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Presentation - The financial statements of State Police Retirement System (the System) are prepared on the accrual basis, and generally conform to the provisions of the National Council on Governmental Accounting's Statement 1.

B. Investment Securities - Investments in bonds and first mortgage real estate loans are stated at amortized cost. Discount and premium are amortized using the straight-line method from the date of acquisition to stated or expected maturity. Common stocks, securities purchased under agreement to resell and investment in real estate investment trust are carried at cost.

Net realized gain or loss on investments represents 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.

C. Members' Contribution and Retirement Allowance Accounts - These accounts are funded by contributions and investment income. The Members' Contribution Account represents the accumulation of active members' contributions plus interest credited to members' accounts. The Retirement Allowance Account is comprised of retired members' contribution balances including interest credited thereon and accumulated employer contributions plus cumulative excess of revenues over expenses less interest credited to members' contribution accounts.

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

NOTE 2 - DESCRIPTION OF THE PLAN

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

Participating employees generally contribute 7% of creditable compensation to the System. Employer contribution rates are intended to fund the System's normal cost on a current basis and one percent (1%) of unfunded past service costs per annum plus interest at the actuarial assumed rate. Such contribution rates are determined by the Board of Trustees of Kentucky Retirement Systems each biennium. For the years ended June 30, 1987 and 1986, the employer contributed at 18.25% and 17.5%, respectively, of members' compensation.

STATE POLICE RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 2 - DESCRIPTION OF THE PLAN (CONTINUED)

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:

	1987	1986
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	374	345
Current employees:		
Vested	728	738
Nonvested	242	230
Total	970	968

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

NOTE 3 - ACCUMULATED BENEFITS

Accumulated plan benefits are those future periodic payments, including lump-sum distributions, that are attributable under the Plan's provisions to services rendered by the employees to the valuation date. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or their beneficiaries, (b) beneficiaries of employees who are deceased, and (c) present employees or their beneficiaries. Benefits under the Plan are based on employees' average compensation during their five highest paid years. Accumulated plan benefits for active employees are based on their compensation as of the valuation date. Benefits payable under all circumstances - retirement, death, and termination of employment - are included to the extent they are deemed attributable to employee service rendered to the valuation date.

The System's consulting actuary, William M. Mercer-Meidinger-Hansen, Inc., estimates the actuarial present value of accumulated plan benefits, which is the amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (taking into account mortality) between the valuation date and the expected date of payment.

STATE POLICE RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 3 - ACCUMULATED BENEFITS (CONTINUED)

Accumulated plan benefit information follows:

	June 30	
	1987	1986
Vested benefits:		
Participants currently receiving payments	\$48,778,567	\$41,571,401
Other participants	23,282,235	24,570,989
	\$72,060,802	\$66,142,390
Non-vested benefits	7,946,908	7,533,638
Total accumulated plan benefits	\$80,007,710	\$73,676,028

The more significant assumptions underlying the actuarial computations, including those which enter only into the determination of funding levels (cost method, turnover, retirement age, and salary increase), are as follows:

Actuarial cost method	-	Entry age normal cost method
Assumed rate of return on investments	-	8% per annum
Mortality basis	-	1971 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year
Employee turnover	-	Graduated rates based on 1985 experience study
Retirement age	-	40% will retire as soon as eligible for unreduced benefits and balance will continue to age 55
Salary increase	-	7 1/2% per annum

NOTE 4 - FUNDING STATUS AND PROGRESS

The amount shown below as "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credited projected benefits and is intended to help users assess 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.

The pension benefit obligation for 1987 and 1986 was determined as part of an actuarial valuation at June 30, 1986 and 1985, respectively. The significant actuarial assumptions are the same as those used for the accumulated plan benefits computations for those years.

STATE POLICE RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 4 - FUNDING STATUS AND PROGRESS (CONTINUED)

The unfunded (funds in excess of) pension benefit obligation was \$(3,942,250) and \$3,380,864 at June 30, 1987 and 1986, respectively.

	1987	1986
Pension benefit obligation:		
Retirees and beneficiaries currently receiving benefits and terminated employees not yet receiving benefits	\$ 49,264,732	\$ 42,542,121
Current members:		
Accumulated employee contributions and credited interest	18,729,668	17,580,155
Employer-financed vested	37,359,876	38,988,928
Employer-financed nonvested	<u>898,078</u>	<u>937,359</u>
Total pension benefit obligation	\$106,252,354	\$100,048,563
Net assets available for benefits, at cost	<u>110,194,604</u>	<u>96,667,699</u>
Unfunded (funds in excess of) pension benefit obligation	\$ (3,942,250)	\$ 3,380,864

NOTE 5 - 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 actuarial funding method. The System also uses the level percentage of payroll method to amortize the unfunded liability.

Actuarially determined contribution requirements of \$6,131,991 (\$4,423,781 employer and \$1,708,210 employee) for the year ended June 30, 1987 and \$5,385,799 (\$3,829,657 employer and \$1,556,142 employee) for the year ended June 30, 1986 were determined through an actuarial valuation performed at June 30, 1986 and 1985, respectively. These contributions were to consist of: (a) \$3,752,251 for 1987 and \$3,829,922 for 1986 normal cost; (b) \$800,303 for 1987 and \$1,211,555 for 1986 amortization of the unfunded actuarial accrued liability; (c) \$15,768 for 1987 and \$15,309 for 1986 administrative expenses; and (d) \$1,563,669 for 1987 and \$329,013 for 1986 group hospital and medical insurance premiums. For 1987 contributions received totaled \$6,425,813 of which the employer portion was \$4,481,033 (18.25% of the covered payroll) and the employee portion was \$1,944,780 (7% of the covered payroll). For 1986 contributions received totaled \$6,325,770 of which the employer portion was \$4,380,911 (17.5% of the covered payroll) and employee portion was \$1,944,859 (7% of the covered payroll).

STATE POLICE RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 6 - FOUR-YEAR HISTORICAL TREND INFORMATION

Four-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.

Analysis of Funding Progress

Fiscal Year	(1)	(2)	(3)	(4)	(5)	(6)
	Net Assets Available For Benefits	Pension Benefit Obligation	Percentage Funded (1) ÷ (2)	Unfunded (Funds in Excess of) Pension Benefit Obligation (2) - (1)	Annual Covered Payroll	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)	3,859,024	-

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded (funds in excess of) 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	Revenues by Source				Total
	Employee Contributions	Employer Contributions	Investment Income	Other Income	
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

Expenses by Type

Fiscal Year	Expenses by Type					Total
	Benefit Payments	Administrative Expenses	Refunds	Other Expenses	Contributions Transferred to Insurance Fund	
1984	\$2,890,091	\$11,969	\$117,414	\$18,773	\$ 233,140	\$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

STATE POLICE RETIREMENT SYSTEM
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 1987 AND 1986
(CONTINUED)

NOTE 7 - 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 State Statutes:

Equity Investments - Investments may be made in common stock securities convertible into common stock and in preferred stock 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 U.S. Government issued debt instrument or issue by an agency of the U.S. Government with an initial maturity of over one year and which are guaranteed by 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 do 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, with the exception of commercial paper which requires specific purchase approval by the Investment Committee, are considered acceptable:

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

STATE POLICE RETIREMENT SYSTEM
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 7 - INVESTMENTS (CONTINUED)

The System's investments are categorized below to give an indication of level of risk assumed by the entity at June 30, 1987. Category 1 includes investments that are insured or registered or for which the collateralized securities are held by the System 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 the System's name.

	June 30, 1987				June 30, 1986 Market Value
	Category		Carrying Amount	Market Value	
	1	2			
United States Government securities	\$ 483,304	\$17,746,025	\$ 18,229,329	\$ 18,604,000	\$ 14,818,000
Government National Mortgage Association and similar securities	3,312,777	17,010,121	20,322,898	20,645,000	16,257,000
Corporate bonds and notes	2,112,500	10,251,668	12,364,168	12,612,000	16,180,000
Common stocks		45,238,558	45,238,558	66,101,000	47,146,000
Securities purchased under agreement to resell		8,188,344	8,188,344	8,188,000	17,345,000
	<u>\$5,908,581</u>	<u>\$98,434,716</u>	<u>\$104,343,297</u>	<u>\$126,150,000</u>	<u>\$111,746,000</u>
Convertible bonds					72,000
First mortgage real estate loans			266,737	271,000	338,000
Real estate investment trust			<u>3,567,229</u>	<u>3,981,000</u>	<u>4,098,000</u>
Total Investments			\$108,177,263	\$130,402,000	\$116,254,000

Investments at June 30, 1987, include securities loaned under various lending programs.

NOTE 8 - INCOME TAX STATUS

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

NOTE 9 - TRANSFERS TO INSURANCE FUND

By action of the 1978 General Assembly, the Kentucky Retirement Systems Insurance Fund was established to provide a group hospital and medical insurance plan for recipients of a retirement allowance from the State Police Retirement System. The Insurance Fund is funded by the transfer of a portion of employer contributions to the retirement system. The percentage of creditable compensation transferred to the Insurance Fund by the State Police Retirement System was 6.38% for the year ended June 30, 1987 and 1.41% for the year ended June 30, 1986.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
BALANCE SHEETS
JUNE 30, 1987 AND 1986

	1987	1986
ASSETS		
Investments (Notes 2):		
United States Government securities	\$ 7,960,313	\$
Government National Mortgage Association and similar securities	4,595,394	
Securities purchased under agreement to resell	4,818,733	5,097,512
	<u>\$17,374,440</u>	<u>\$5,097,512</u>
Cash on deposit with State Treasurer		83
Employer contributions receivable	1,433,167	470,685
Accrued investment income	65,020	
Other assets		451,123
	<u>\$18,872,627</u>	<u>\$6,019,403</u>
 LIABILITIES AND FUND BALANCE		
Payable to Kentucky Retirement Systems	\$ 2,017,256	\$
Fund Balance allocated to:		
Kentucky Employes Retirement System	9,258,575	3,312,251
County Employes Retirement System	6,167,952	2,482,583
State Police Retirement System	1,428,844	224,569
	<u>\$16,855,371</u>	<u>\$6,019,403</u>
	\$18,872,627	\$6,019,403

See notes to financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
STATEMENTS OF REVENUES, EXPENSES
AND CHANGES IN FUND BALANCE
FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
ALLOCATED TO KENTUCKY EMPLOYEES RETIREMENT SYSTEM		
Revenues:		
Employer contributions transferred from Kentucky Employes Retirement System	\$9,644,592	\$3,477,505
Investment income	<u>243,893</u>	<u>205,984</u>
Total revenues	\$9,888,485	\$3,683,489
Expenses:		
Insurance premium payments	<u>3,942,161</u>	<u>3,361,521</u>
Excess (deficiency) of revenues over expenses	\$5,946,324	\$ 321,968
Fund balance at beginning of year	<u>3,312,251</u>	<u>2,990,283</u>
Fund balance at end of year	\$9,258,575	\$3,312,251
ALLOCATED TO COUNTY EMPLOYEES RETIREMENT SYSTEM		
Revenues:		
Employer contributions transferred from County Employes Retirement System	\$5,285,103	\$1,541,564
Investment income	<u>184,632</u>	<u>161,727</u>
Total revenues	\$5,469,735	\$1,703,291
Expenses:		
Insurance premium payments	<u>1,784,366</u>	<u>1,403,178</u>
Excess (deficiency) of revenues over expenses	\$3,685,369	\$ 300,113
Fund balance at beginning of year	<u>2,482,583</u>	<u>2,182,470</u>
Fund balance at end of year	\$6,167,952	\$2,482,583
ALLOCATED TO STATE POLICE RETIREMENT SYSTEMS		
Revenues:		
Employer contributions transferred from State Police Retirement System	\$1,569,076	\$ 352,493
Investment income	<u>31,826</u>	<u>11,729</u>
Total revenues	\$1,600,902	\$ 364,222
Expenses:		
Insurance premium payments	<u>396,627</u>	<u>314,799</u>
Excess of revenues over expenses	\$1,204,275	\$ 49,423
Fund balance at beginning of year	<u>224,569</u>	<u>175,146</u>
Fund balance at end of year	\$1,428,844	\$ 224,569

See note to financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
 STATEMENTS OF CHANGES IN FINANCIAL POSITION
 FOR THE YEARS ENDED JUNE 30, 1987 AND 1986

	1987	1986
Source of funds:		
Excess of revenues over expenses	\$10,835,968	\$ 671,504
Proceeds from sale, maturity or exchange of investments	71,844	
Decrease in employer contributions receivable		339,163
Decrease in other assets	451,123	
Increase in payable to Kentucky Retirement Systems	<u>2,017,256</u>	<u> </u>
Total funds provided	\$13,376,191	\$1,010,667
Application of funds:		
Investments purchased or exchanged	12,348,772	559,560
Increase in employer contributions receivable	962,482	
Increase in accrued investment income	65,020	
Increase in other assets	<u> </u>	<u>451,123</u>
Total funds applied	\$13,376,274	\$1,010,683
Increase (decrease) in cash	\$ (83)	\$ (16)
Cash on deposit with State Treasurer at beginning of year	<u>83</u>	<u>99</u>
Cash on deposit with State Treasurer at end of year	\$ -0-	\$ 83

See note to financial statements.

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986

NOTE 1 - SIGNIFICANT ACCOUNTING POLICY AND DESCRIPTION OF PLAN

The financial statements of the Fund are prepared on the accrual basis.

The Fund was established in 1978 to provide accident and health insurance for members receiving benefits from the Kentucky Employes Retirement System, County Employes Retirement System, and 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 \$1,868,000 and \$1,610,000 for the Kentucky Employes Retirement System, \$1,070,000 and \$871,000 for the County Employes Retirement System, and \$3,000 and \$2,000 for the State Police Retirement System in 1987 and 1986, respectively. Effective August 1, 1982, the Retirement System began paying the same proportion of medical insurance premiums for the spouse or beneficiary and dependents of retired hazardous members or hazardous employees killed in the line of duty. 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:

<u>Years of Service</u>	<u>Percent Paid by Insurance Fund</u>	<u>Percent Paid by Member through Payroll Deduction</u>
20	100%	0%
15	75%	25%
10	50%	50%
4	25%	75%
Less than 4	0%	100%

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

	1987	June 30 1986
<u>Non-Hazardous</u>		
Kentucky Employes Retirement System	1.23%	0.48%
County Employes Retirement System	.92%	0.31%
<u>Hazardous</u>		
Kentucky Employes Retirement System	4.90%	1.09%
County Employes Retirement	2.36%	0.99%
State Police Retirement System	6.38%	1.41%

KENTUCKY RETIREMENT SYSTEMS INSURANCE FUND
 NOTES TO FINANCIAL STATEMENTS
 YEARS ENDED JUNE 30, 1987 AND 1986
 (CONTINUED)

NOTE 2 - INVESTMENTS

The Fund has uninsured and unregistered investments for which the securities are held by the broker's or dealer's trust department or agent in Kentucky Retirement System's name. The approximate market value of investments follows:

	June 30	
	1987	1986
United States Government securities	\$ 7,548,000	\$
Government National Mortgage Association and similar securities	4,190,000	
Securities purchased under agreement to resell	4,819,000	5,098,000
	\$16,557,000	\$5,098,000

ACTUARIAL SECTION

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-Meidinger-Hansen, Inc., has performed the actuarial valuations for four fiscal years. The firm also conducted the five-year experience study that was used to provide the current actuarial assumptions. Those assumptions were adopted by the Board in May of 1986. The actuarial assumptions are necessary to project the liabilities of the systems.

The following reports, duplicated from the originals, indicate that every dollar of future liabilities is backed by \$.97 of assets. The remaining unfunded liabilities are being funded annually in accordance with the statutory requirement of 1% of the outstanding principal and payment of all accrued interest. This statutory requirement assures that the systems will remain sound.

October 27, 1987

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

Members of the Board:

The thirty-first annual actuarial valuation of the Kentucky Employes Retirement System, the twenty-eighth annual actuarial valuation of the County Employes Retirement System, and the twenty-ninth 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, 1987.

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. The Actuarial Accrued Liabilities of the Kentucky Employes Retirement System, the County Employes Retirement System, and the State Police Retirement System are being funded as required by the Kentucky Revised Status.

Respectfully Submitted,
WILLIAM M. MERCER-MEIDINGER-HANSEN, INC.

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

/cjb

THIRTY-FIRST ANNUAL ACTUARIAL VALUATION
JUNE 30, 1987
KENTUCKY EMPLOYES RETIREMENT SYSTEM
FRANKFORT, KENTUCKY

SECTION III

KENTUCKY EMPLOYES RETIREMENT SYSTEM
RESULTS OF THE 1987 ACTUARIAL VALUATION

Actuarial Balance Sheet

Table I, which follows, is the actuarial balance sheet of the Kentucky Employees Retirement System as of June 30, 1987. 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 9% of the Unfunded Actuarial Accrued Liability, 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, 1987.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 1987 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 employe contributions. A breakdown of costs between Hazardous and Non-Hazardous position employes 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 I
KENTUCKY EMPLOYES RETIREMENT SYSTEM
ACTUARIAL BALANCE SHEET-JUNE 30, 1987

ACTUARIAL ASSETS

Fund Assets at Book Value*		\$1,266,111,911
Actuarial Present Value of Future Member Contributions		481,046,310
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	\$ 280,764,923	
For Unfunded Actuarial Accrued Liability	<u>120,259,389</u>	
Total		<u>\$ 401,024,312</u>
Total Actuarial Assets		\$2,148,182,533

ACTUARIAL LIABILITIES

Actuarial Present Value of Future Benefits

Inactive Members:

Retired Members and Beneficiaries	\$ 459,404,473	
Vested Retirement	11,243,026	
Vested Membership	<u>3,215,606</u>	
Total - Inactive		\$ 473,863,105

Active Members:

Retirement Benefits	\$1,312,455,904	
Disability Benefits	84,109,626	
Withdrawal Benefits (Vested and Refund of Contributions)	160,222,090	
Survivor Benefits	<u>115,420,316</u>	
Total - Active		\$1,672,207,936

Refunds and Expenses Payable		<u>\$ 2,111,492</u>
------------------------------	--	---------------------

Total Actuarial Liabilities		\$2,148,182,533
-----------------------------	--	-----------------

ACCRUED BENEFIT LIABILITY **

Vested Benefits	\$ 773,638,485
Non-Vested Benefits	\$ 39,294,430

- * The approximate market value of assets as of June 30, 1987 is \$1,506,896,822.
The actuarial value of assets as of June 30, 1987 is \$1,264,000,419 (book value of assets less refunds and expenses payable).
The Members' Contribution Account as of June 30, 1987 is \$270,332,009.
- ** Present value of accrued benefit deferred to normal retirement date.

TABLE II
 KENTUCKY EMPLOYES RETIREMENT SYSTEM
DETERMINATION OF CONTRIBUTION RATE-JUNE 30, 1987

<u>UNFUNDED ACTUARIAL ACCRUED LIABILITY</u>		<u>PERCENT*</u>
Total Actuarial Accrued Liability	\$1,384,259,808	182.66%
Assets at Actuarial Value	<u>1,264,000,419</u>	<u>166.79%</u>
Unfunded Actuarial Accrued Liability	\$ 120,259,389	15.87%
Contribution - 9% of Unfunded Actuarial Accrued Liability	\$ 10,823,346	1.43%
<u>NORMAL COST</u>		
Retirement Benefits	\$ 45,554,119	6.01%
Disability Benefits	3,630,127	0.48%
Withdrawal Benefits (Vested and Refund of Contributions)	8,382,325	1.11%
Survivor Benefits	<u>4,111,378</u>	<u>0.54%</u>
Total Normal Cost	\$ 61,677,949	8.14%
Less: Employee Contributions	<u>37,953,985</u>	<u>5.01%</u>
Normal Cost - State	\$ 23,723,964	3.13%
<u>TOTAL ANNUAL EMPLOYER COST</u>		
<u>Non-Hazardous Duty Cost</u>		
Normal Cost	\$ 22,818,342	3.05%**
9% of Unfunded Actuarial Accrued Liability	10,980,989	1.47%**
Administrative Expenses	1,224,013	0.16%**
Group Hospital and Medical Insurance Premiums	<u>9,753,452</u>	<u>1.31%**</u>
Total Annual Cost	\$ 44,776,796	5.99%**
<u>Hazardous Duty Cost</u>		
Normal Cost	\$ 905,622	8.62%***
9% of Unfunded Actuarial Accrued Liability	(157,643)	(1.50%)**
Administrative Expenses	15,593	0.15%***
Group Hospital and Medical Insurance Premiums	<u>518,736</u>	<u>4.94%***</u>
Total Annual Cost	\$ 1,282,308	12.21%***

*Based on estimated annual salaries of \$757,822,116.

**Based on estimated annual salaries of \$747,315,756 for Non-Hazardous Position Employees.

***Based on estimated annual salaries of \$10,506,360 for Hazardous Position Employees.

TABLE III

KENTUCKY EMPLOYES RETIREMENT SYSTEM

CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS—JUNE 30, 1987

	<u>Non-Hazardous Position Employees</u>	<u>Hazardous Position Employees</u>	<u>Total</u>
<u>ACTUARIAL ACCRUED LIABILITY</u>			
<u>Active Members</u>			
Retirement Benefits	\$ 745,756,018	\$ 8,711,293	\$ 754,467,311
Disability Benefits	38,594,807	736,481	39,331,288
Withdrawal Benefits (Vested and Refund of Contributions)	51,261,637	21,517	51,283,154
Survivor Benefits	<u>64,758,974</u>	<u>555,976</u>	<u>65,314,950</u>
Actuarial Accrued Liability - Actives	\$ 900,371,436	\$ 10,025,267	\$ 910,396,703
<u>Inactive Members</u>			
Retired Members and Beneficiaries	\$ 452,099,089	\$ 7,305,384	\$ 459,404,473
Vested Retirement	11,235,800	7,226	11,243,026
Vested Membership	<u>3,140,345</u>	<u>75,261</u>	<u>3,215,606</u>
Actuarial Accrued Liability - Inactives	\$ 466,475,234	\$ 7,387,871	\$ 473,863,105
Total Actuarial Accrued Liability	\$ 1,366,846,670	\$ 17,413,138	\$ 1,384,259,808
<u>UNFUNDED ACTUARIAL ACCRUED LIABILITY</u>			
Total Actuarial Accrued Liability	\$ 1,366,846,670	\$ 17,413,138	\$ 1,384,259,808
Less Actuarial Value of Assets	<u>1,244,835,683</u>	<u>19,164,736</u>	<u>1,264,000,419</u>
Unfunded Actuarial Accrued Liability	\$ 122,010,987	\$(1,751,598)	\$ 120,259,389
<u>NORMAL COST</u>			
Retirement Benefits	\$ 44,247,279	\$ 1,306,840	\$ 45,554,119
Disability Benefits	3,493,033	137,094	3,630,127
Withdrawal Benefits (Vested and Refund of Contributions)	8,321,976	60,349	8,382,325
Survivor Benefits	<u>4,000,636</u>	<u>110,742</u>	<u>4,111,378</u>
Total Normal Cost	\$ 60,062,924	\$ 1,615,025	\$ 61,677,949
Less Employee Contributions	<u>37,244,582</u>	<u>709,403</u>	<u>37,953,985</u>
Total Normal Cost - State	\$ 22,818,342	\$ 905,622	\$ 23,723,964
<u>ACCRUED BENEFIT LIABILITY*</u>			
Vested Benefits	\$ 762,238,158	\$ 11,400,327	\$ 773,638,485
Non-Vested Benefits	33,030,614	6,263,816	39,294,430

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

TABLE IV
 KENTUCKY EMPLOYES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1987
INFORMATION REQUIRED UNDER FASB STATEMENT NO. 35

	<u>Non-Hazardous Position Employees</u>	<u>Hazardous Position Employees</u>	<u>Total</u>
<u>ACTUARIAL PRESENT VALUE OF VESTED ACCUMULATED BENEFITS</u>			
<u>Active Members</u>			
Retirement Benefits	\$262,046,925	\$ 2,479,471	\$264,526,396
Disability Benefits	7,153,778	224,878	7,378,656
Withdrawal Benefits (Vested and Refund of Contributions)	47,264,376	226,007	47,490,383
Survivor Benefits	<u>0</u>	<u>0</u>	<u>0</u>
Total Active Members	\$316,465,079	\$ 2,930,356	\$319,395,435
<u>Inactive Members</u>			
Retired Members and Beneficiaries	\$452,099,089	\$ 7,305,384	\$459,404,473
Vested Retirement	11,235,800	7,226	11,243,026
Vested Membership	<u>3,140,345</u>	<u>75,261</u>	<u>3,215,606</u>
Total-Inactive Members	\$466,475,234	\$ 7,387,871	\$473,863,105
Total Actuarial Present Value of Vested Accumulated Benefits	\$782,940,313	\$10,318,227	\$793,258,540

ACTUARIAL PRESENT VALUE OF
NON-VESTED ACCUMULATED BENEFITS

<u>Active Members</u>			
Retirement Benefits	\$ 28,435,754	\$ 1,245,955	\$ 29,681,709
Disability Benefits	20,496,722	517,223	21,013,945
Withdrawal Benefits (Vested and Refund of Contributions)	3,309,723	99,906	3,409,629
Survivor Benefits	<u>28,898,025</u>	<u>424,141</u>	<u>29,322,166</u>
Total - Active Members	\$ 81,140,224	\$ 2,287,225	\$ 83,427,449
<u>Inactive Members</u>	\$ 0	\$ 0	\$ 0
Total Actuarial Present Value of Non-Vested Accumulated Benefits	\$ 81,140,224	\$ 2,287,225	\$ 83,427,449

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, 1987
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 5

	<u>Non-Hazardous Position Employes</u>	<u>Hazardous Position Employes</u>	<u>Total</u>
<u>A. NUMBER OF MEMBERS</u>			
<u>Inactive Members</u>			
Retired Members and Beneficiaries	13,878	90	13,968
Vested Retirements	1,432	5	1,437
Vested Membership	<u>8,307</u>	<u>12</u>	<u>8,319</u>
Total Inactive Members	23,617	107	23,724
<u>Active Members</u>			
Vested Members	27,342	155	27,497
Nonvested Members	<u>15,361</u>	<u>413</u>	<u>15,774</u>
Total Active Members	<u>42,703</u>	<u>568</u>	<u>43,271</u>
<u>Total Members</u>	66,320	675	66,995
<u>B. UNFUNDED PENSION BENEFIT OBLIGATION</u>			
<u>Pension Benefit Obligation</u>			
Retirees and Beneficiaries Currently Receiving Benefits and Terminated Members Not Yet Receiving Benefits	\$ 466,475,234	\$ 7,387,871	\$ 473,863,105
Current Members			
Accumulated Employee Contributions and Credited Interest	253,364,507	5,044,160	258,408,667
Employer Financed - Vested	484,091,230	2,941,589	487,032,819
Employer Financed - Nonvested	<u>18,084,869</u>	<u>1,356,636</u>	<u>19,441,505</u>
Total Pension Benefit Obligation	1,222,015,840	16,730,256	1,238,746,096
<u>Net Assets at Cost Value</u>	<u>\$1,244,835,683</u>	<u>\$19,164,736</u>	<u>\$1,264,000,419</u>
<u>Unfunded Pension Benefit Obligation</u>	(22,819,843)	(2,434,480)	(25,254,323)

KENTUCKY EMPLOYES RETIREMENT SYSTEM

ACTUARIAL ASSUMPTIONS

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1) Mortality:

- (a) Active & retired lives - 1971 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 1985 experience study.

(3) Termination of employment

- Graduated select (non-hazardous only) and ultimate rates based on 1985 experience study.

(4) Retirement

- Non-Hazardous:

<u>Age</u>	<u>Retirement Rate</u>
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 40% 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 - 7.50% 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	7/1/87	Rate Increase	
	Rate	Date	Rate
Single	\$ 69.79*	11/1/87	\$ 79.71*
Family	166.79*	11/1/87	190.81*
Medicare	36.30*	1/1/88	40.66**
High Option	54.15*	1/1/88	60.65**

*Actual rates
 **Assumed rates

It was assumed that medical premiums would grow at an annual rate of 12%. The assumed rate of growth in number of retirees receiving medical insurance was assumed to be consistent with average growth patterns over recent years.

Reserves in the Insurance Fund were used to offset the liability for premiums over the sixteen year projection period.

TWENTY-EIGHTH ANNUAL ACTUARIAL VALUATION
JUNE 30, 1987
COUNTY EMPLOYEES RETIREMENT SYSTEM
FRANKFORT, KENTUCKY

SECTION III

COUNTY EMPLOYEES RETIREMENT SYSTEM

RESULTS OF THE 1987 ACTUARIAL VALUATION

Actuarial Balance Sheet

Table I, which follows, is the actuarial balance sheet of the County Employees Retirement System as of June 30, 1987. 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 9% of the Unfunded Actuarial Accrued Liability, 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, 1987.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 1987 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 employe contributions. A breakdown of costs between Hazardous and Non-Hazardous position employes 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 I
 COUNTY EMPLOYES RETIREMENT SYSTEM
ACTUARIAL BALANCE SHEET-JUNE 30, 1987

ACTUARIAL ASSETS

Fund Assets at Book Value*		\$ 728,750,892
Actuarial Present Value of Future Member Contributions		294,336,282
Actuarial Present Value of Future Employer Contributions		
For Normal Costs	\$281,855,333	
For Unfunded Actuarial Accrued Liability	<u>(49,287,967)</u>	
Total		\$ <u>232,567,366</u>
Total Actuarial Assets		\$1,255,654,540

ACTUARIAL LIABILITIES

Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	\$185,651,395	
Vested Retirement	7,059,589	
Vested Membership	<u>3,554,193</u>	
Total - Inactive		\$ 196,265,177
Active Members:		
Retirement Benefits	\$844,202,503	
Disability Benefits	55,189,383	
Withdrawal Benefits (Vested and Refund of Contributions)	92,913,474	
Survivor Benefits	<u>66,063,838</u>	
Total - Active		\$1,058,369,198
Refunds and Expenses Payable		\$ <u>1,020,165</u>
Total Actuarial Liabilities		\$1,255,654,540

ACCRUED BENEFIT LIABILITY **

Vested Benefits		\$ 364,973,149
Non-Vested Benefits		\$ 47,453,361

* The approximate market value of assets as of June 30, 1987 is \$832,443,025.
 The actuarial value of assets as of June 30, 1987 is \$727,730,727 (book value of assets less refunds and expenses payable).
 The Members' Contribution Account as of June 30, 1987 is \$153,378,173

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

TABLE II
 COUNTY EMPLOYEES RETIREMENT SYSTEM
DETERMINATION OF CONTRIBUTION RATE-JUNE 30, 1987

<u>UNFUNDED ACTUARIAL ACCRUED LIABILITY</u>		<u>PERCENT*</u>
Total Actuarial Accrued Liability	\$ 678,442,760	124.67%
Assets at Actuarial Value	<u>727,730,727</u>	<u>133.73%</u>
Unfunded Actuarial Accrued Liability	\$ (49,287,967)	(9.06%)
 Contribution - 9% of Unfunded Actuarial Accrued Liability	 \$ (4,435,915)	 (0.82%)
 <u>NORMAL COST</u>		
Retirement Benefits	\$ 37,213,257	6.84%
Disability Benefits	2,789,743	0.51%
Withdrawal Benefits (Vested and Refund of Contributions)	5,445,500	1.00%
Survivor Benefits	<u>3,030,506</u>	<u>0.56%</u>
Total Normal Cost	\$ 48,479,006	8.91%
Less: Employee Contributions	<u>23,917,088</u>	<u>4.40%</u>
 Normal Cost - State	 \$ 24,561,918	 4.51%
 <u>TOTAL ANNUAL EMPLOYER COST</u>		
<u>Non-Hazardous Duty Cost</u>		
Normal Cost	\$ 21,329,958	4.20%**
9% of Unfunded Actuarial Accrued Liability	(3,783,208)	(0.74%)**
Administrative Expenses	929,344	0.18%**
Group Hospital and Medical Insurance Premiums	<u>4,816,562</u>	<u>0.95%**</u>
Total Annual Cost	\$ 23,292,656	4.59%**
 <u>Hazardous Duty Cost</u>		
Normal Cost	\$ 3,231,960	8.92%***
9% of Unfunded Actuarial Accrued Liability	(652,707)	(1.80%)***
Administrative Expenses	191,069	0.53%***
Group Hospital and Medical Insurance Premiums	<u>1,199,763</u>	<u>3.31%***</u>
Total Annual Cost	\$ 3,970,085	10.96%***

*Based on estimated annual salaries of \$544,184,376.

**Based on estimated annual salaries of \$507,971,148 for Non-Hazardous Position Employees.

***Based on estimated annual salaries of \$36,213,228 for Hazardous Position Employees.

TABLE III
 COUNTY EMPLOYES RETIREMENT SYSTEM
CLASSIFICATION OF ACTUARIAL LIABILITIES AND COSTS—JUNE 30, 1987

	<u>Non-Hazardous Position Employees</u>	<u>Hazardous Position Employees</u>	<u>Total</u>
<u>ACTUARIAL ACCRUED LIABILITY</u>			
<u>Active Members</u>			
Retirement Benefits	\$328,589,128	\$ 81,043,913	\$ 409,633,041
Disability Benefits	18,381,896	2,923,421	21,305,317
Withdrawal Benefits (Vested and Refund of Contributions)	21,208,654	792,104	22,000,758
Survivor Benefits	<u>26,648,776</u>	<u>2,589,691</u>	<u>29,238,467</u>
Actuarial Accrued Liability - Actives	\$394,828,454	\$ 87,349,129	\$ 482,177,583
<u>Inactive Members</u>			
Retired Members and Beneficiaries	\$157,699,171	\$ 27,952,224	\$ 185,651,395
Vested Retirement	6,666,216	393,373	7,059,589
Vested Membership	<u>3,551,355</u>	<u>2,838</u>	<u>3,554,193</u>
Actuarial Accrued Liability - Inactives	\$167,916,742	\$ 28,348,435	\$ 196,265,177
Total Actuarial Accrued Liability	\$562,745,196	\$115,697,564	\$ 678,442,760
<u>UNFUNDED ACTUARIAL ACCRUED LIABILITY</u>			
Total Actuarial Accrued Liability	\$562,745,196	\$115,697,564	\$ 678,442,760
Less Actuarial Value of Assets	<u>604,780,853</u>	<u>122,949,874</u>	<u>727,730,727</u>
Unfunded Actuarial Accrued Liability	\$(42,035,657)	\$ (7,252,310)	\$ (49,287,967)
<u>NORMAL COST</u>			
Retirement Benefits	\$ 32,398,217	\$ 4,815,040	\$ 37,213,257
Disability Benefits	2,527,815	261,928	2,789,743
Withdrawal Benefits (Vested and Refund of Contributions)	5,107,315	338,185	5,445,500
Survivor Benefits	<u>2,777,056</u>	<u>253,450</u>	<u>3,030,506</u>
Total Normal Cost	\$ 42,810,403	\$ 5,668,603	\$ 48,479,006
Less Employee Contributions	<u>21,480,445</u>	<u>2,436,643</u>	<u>23,917,088</u>
Total Normal Cost - State	\$ 21,329,958	\$ 3,231,960	\$ 24,561,918
<u>ACCRUED BENEFIT LIABILITY*</u>			
Vested Benefits	\$301,826,290	\$ 63,146,859	\$ 364,973,149
Non-Vested Benefits	23,955,422	23,497,939	47,453,361

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

TABLE IV
COUNTY EMPLOYEES RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1987
INFORMATION REQUIRED UNDER FASB STATEMENT NO. 35

	<u>Non-Hazardous Position Employes</u>	<u>Hazardous Position Employes</u>	<u>Total</u>
<u>ACTUARIAL PRESENT VALUE OF VESTED ACCUMULATED BENEFITS</u>			
<u>Active Members</u>			
Retirement Benefits	\$114,341,924	\$31,083,523	\$145,425,447
Disability Benefits	3,234,948	1,048,937	4,283,885
Withdrawal Benefits (Vested and Refund of Contributions)	20,185,602	2,230,873	22,416,475
Survivor Benefits	<u>0</u>	<u>0</u>	<u>0</u>
Total Active Members	\$137,762,474	\$34,363,333	\$172,125,807
<u>Inactive Members</u>			
Retired Members and Beneficiaries	\$157,699,171	\$27,952,224	\$185,651,395
Vested Retirement	6,666,216	393,373	7,059,589
Vested Membership	<u>3,551,355</u>	<u>2,838</u>	<u>3,554,193</u>
Total-Inactive Members	\$167,916,742	\$28,348,435	\$196,265,177
Total Actuarial Present Value of Vested Accumulated Benefits	\$305,679,216	\$62,711,768	\$368,390,984
<u>ACTUARIAL PRESENT VALUE OF NON-VESTED ACCUMULATED BENEFITS</u>			
<u>Active Members</u>			
Retirement Benefits	\$ 15,630,211	\$ 9,263,880	\$ 24,894,091
Disability Benefits	11,539,831	1,459,244	12,999,075
Withdrawal Benefits (Vested and Refund of Contributions)	3,930,495	(28,001)	3,902,494
Survivor Benefits	<u>11,296,160</u>	<u>1,934,755</u>	<u>13,230,915</u>
Total - Active Members	\$ 42,396,697	\$12,629,878	\$ 55,026,575
<u>Inactive Members</u>	\$ 0	\$ 0	\$ 0
Total Actuarial Present Value of Non-Vested Accumulated Benefits	\$ 42,396,697	\$12,629,878	\$ 55,026,575

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, 1987
INFORMATION REQUIRED UNDER GASB STATEMENT NO. 5

	<u>Non-Hazardous Position Employees</u>	<u>Hazardous Position Employees</u>	<u>Total</u>
<u>A. NUMBER OF MEMBERS</u>			
<u>Inactive Members</u>			
Retired Members and Beneficiaries	8,172	223	8,395
Vested Retirements	1,074	16	1,090
Vested Membership	<u>8,851</u>	<u>12</u>	<u>8,863</u>
Total Inactive Members	18,097	251	18,348
<u>Active Members</u>			
Vested Members	21,941	1,037	22,978
Nonvested Members	<u>20,035</u>	<u>412</u>	<u>20,447</u>
Total Active Members	<u>41,976</u>	<u>1,449</u>	<u>43,425</u>
<u>Total Members</u>	60,073	1,700	61,773
<u>B. UNFUNDED PENSION BENEFIT OBLIGATION</u>			
<u>Pension Benefit Obligation</u>			
Retirees and Beneficiaries Currently Receiving Benefits and Terminated Members Not Yet Receiving Benefits	\$ 167,916,742	\$ 28,348,435	\$ 196,265,177
Current Members Accumulated Employee Contributions and Credited Interest	123,423,184	22,648,208	146,071,392
Employer Financed - Vested	189,379,644	56,230,908	245,610,552
Employer Financed - Nonvested	<u>17,883,207</u>	<u>2,060,385</u>	<u>19,943,592</u>
Total Pension Benefit Obligation	498,602,777	109,287,936	607,890,713
<u>Net Assets at Cost Value</u>	\$ <u>604,780,853</u>	\$ <u>122,949,874</u>	\$ <u>727,730,727</u>
<u>Unfunded Pension Benefit Obligation</u>	(106,178,076)	(13,661,938)	(119,840,014)

COUNTY EMPLOYES RETIREMENT SYSTEM

ACTUARIAL ASSUMPTIONS

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

(1) Mortality:

- (a) Active & retired lives - 1971 Group Annuity Mortality Table, plus a pre-retirement duty death rate of .0005 per year for hazardous duty employes.
- (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 1985 experience study.

- (3) Termination of employment - Graduated select (non-hazardous only) and ultimate rates based on 1985 experience study.

- (4) Retirement - Non-Hazardous:

<u>Age</u>	<u>Retirement Rate</u>
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 employes under duty related death benefits, it is assumed that the employe 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 - 7.50% 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	7/1/87 Rate	Rate Increase	
		Date	Rate
Single	\$ 69.79*	11/1/87	\$ 79.71*
Family	166.79*	11/1/87	190.81*
Medicare	36.30*	1/1/88	40.66**
High Option	54.15*	1/1/88	60.65**

*Actual rates
 **Assumed rates

It was assumed that medical premiums would grow at an annual rate of 12%. The assumed rate of growth in number of retirees receiving medical insurance was assumed to be consistent with average growth patterns over recent years.

Reserves in the Insurance Fund were used to offset the liability for premiums over the sixteen year projection period.

TWENTY-NINTH ANNUAL ACTUARIAL VALUATION
JUNE 30, 1987
STATE POLICE RETIREMENT SYSTEM
FRANKFORT, KENTUCKY

SECTION III

STATE POLICE RETIREMENT SYSTEM

RESULTS OF THE 1987 ACTUARIAL VALUATION

Actuarial Balance Sheet

Table I, which follows, is the actuarial balance sheet of the State Police Retirement System as of June 30, 1987. 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 9% of the Unfunded Actuarial Accrued Liability, 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, 1987.

The actuarial methods applied to determine the Normal Cost for the year commencing July 1, 1987 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 employe 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 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 I
STATE POLICE RETIREMENT SYSTEM
ACTUARIAL BALANCE SHEET-JUNE 30, 1987

ACTUARIAL ASSETS

Fund Assets at Book Value*	\$ 110,356,994
Actuarial Present Value of Future Member Contributions	19,856,549
Actuarial Present Value of Future Employer Contributions	
For Normal Costs	\$23,642,236
For Unfunded Actuarial Accrued Liability	<u>1,347,385</u>
Total	\$ 24,989,621
Total Actuarial Assets	\$ 155,203,164

ACTUARIAL LIABILITIES

Actuarial Present Value of Future Benefits		
Inactive Members:		
Retired Members and Beneficiaries	\$ 48,778,567	
Vested Retirement	412,847	
Vested Membership	<u>73,318</u>	
Total - Inactive		\$ 49,264,732
Active Members:		
Retirement Benefits	\$ 93,417,746	
Disability Benefits	4,449,636	
Withdrawal Benefits (Vested and Refund of Contributions)	3,442,312	
Survivor Benefits	<u>4,466,348</u>	
Total - Active		\$ 105,776,042
Refunds and Expenses Payable and Payables to other Systems		<u>\$ 162,390</u>
Total Actuarial Liabilities		\$ 155,203,164

ACCRUED BENEFIT LIABILITY **

Vested Benefits	\$ 72,577,901
Non-Vested Benefits	\$ 18,986,267

* The approximate market value of assets as of June 30, 1987 is \$131,888,963.
The actuarial value of assets as of June 30, 1987 is \$110,194,604 (book value of assets less refunds and expenses payable).
The Members' Contribution Account as of June 30, 1987 is \$19,060,890

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

TABLE II
STATE POLICE RETIREMENT SYSTEM
DETERMINATION OF CONTRIBUTION RATE-JUNE 30, 1987

<u>ACTUARIAL ACCRUED LIABILITY</u>		<u>PERCENT*</u>
<u>Active Members</u>		
Retirement Benefits	\$ 57,298,827	240.16%
Disability Benefits	2,321,724	9.73%
Withdrawal Benefits (Vested and Refund of Contributions)	458,634	1.92%
Survivor Benefits	<u>2,198,072</u>	<u>9.21%</u>
Actuarial Accrued Liability - Active	\$ 62,277,257	261.02%
<u>Inactive Members</u>		
Retired Members and Beneficiaries	\$ 48,778,567	204.44%
Vested Retirement	412,847	1.73%
Vested Membership	<u>73,318</u>	<u>0.31%</u>
Actuarial Accrued Liability - Inactives	\$ 49,264,732	206.48%
Total Actuarial Accrued Liability	111,541,989	467.50%
<u>UNFUNDED ACTUARIAL ACCRUED LIABILITY</u>		
Total Actuarial Accrued Liability	\$111,541,989	467.50%
Assets at Actuarial Value	<u>110,194,604</u>	<u>461.85%</u>
Unfunded Actuarial Accrued Liability	\$ 1,347,385	5.65%
Contribution - 9% of Unfunded Actuarial Accrued Liability	\$ 121,265	0.51%
<u>NORMAL COST</u>		
Retirement Benefits	\$ 3,040,362	12.74%
Disability Benefits	178,187	0.75%
Withdrawal Benefits (Vested and Refund of Contributions)	254,819	1.07%
Survivor Benefits	<u>190,193</u>	<u>0.80%</u>
Total Normal Cost	\$ 3,663,561	15.36%
Less: Employe Contributions	<u>1,666,608</u>	<u>6.99%</u>
Normal Cost - State Police	\$ 1,996,953	8.37%

TOTAL ANNUAL EMPLOYER COST - STATE POLICE

Normal Cost	\$ 1,996,953	8.37%
9% of Unfunded Actuarial Accrued Liability	121,265	0.51%
Administrative Expenses	23,839	0.10%
Group Hospital and Medical Insurance Premiums	<u>1,674,938</u>	<u>7.02%</u>
Total Annual Cost	<u>\$ 3,816,995</u>	<u>16.00%</u>

*Based on estimated annual salaries of \$23,859,024.

TABLE III

STATE POLICE RETIREMENT SYSTEM
ACCOUNTANT'S INFORMATION - JUNE 30, 1987
INFORMATION REQUIRED UNDER FASB STATEMENT NO. 35

ACTUARIAL PRESENT VALUE OF VESTED ACCUMULATED BENEFITS

<u>Active Members</u>	
Retirement Benefits	\$20,347,838
Disability Benefits	804,364
Withdrawal Benefits (Vested and Refund of Contributions)	1,643,868
Survivor Benefits	<u>0</u>
Total Active Members	\$22,796,070
<u>Inactive Members</u>	
Retired Members and Beneficiaries	\$48,778,567
Vested Retirement	412,847
Vested Membership	<u>73,318</u>
Total-Inactive Members	\$49,264,732
Total Actuarial Present Value of Vested Accumulated Benefits	\$72,060,802

ACTUARIAL PRESENT VALUE OF NON-VESTED ACCUMULATED BENEFITS

<u>Active Members</u>	
Retirement Benefits	\$ 5,313,399
Disability Benefits	1,082,573
Withdrawal Benefits (Vested and Refund of Contributions)	(4,775)
Survivor Benefits	<u>1,555,711</u>
Total - Active Members	\$ 7,946,908
<u>Inactive Members</u>	\$ 0
Total Actuarial Present Value of Non-Vested Accumulated Benefits	\$ 7,946,908

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, 1987

INFORMATION REQUIRED UNDER GASB STATEMENT NO. 5A. NUMBER OF MEMBERSInactive Members

Retired Members and Beneficiaries	295
Vested Retirements	18
Vested Membership	<u>61</u>
Total Inactive Members	374

Active Members

Vested Members	728
Nonvested Members	<u>242</u>
Total Active Members	<u>970</u>

<u>Total Members</u>	<u>1,344</u>
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B. UNFUNDED PENSION BENEFIT OBLIGATIONPension Benefit Obligation

Retirees and Beneficiaries Currently Receiving Benefits and Terminated Members Not Yet Receiving Benefits	\$ 49,264,732
Current members Accumulated Employee Contributions and Credited Interest	18,729,668
Employer Financed - Vested	37,359,876
Employer Financed - Nonvested	<u>898,078</u>

Total Pension Benefit Obligation	106,252,354
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<u>Net Assets at Cost Value</u>	<u>\$110,194,604</u>
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<u>Unfunded Pension Benefit Obligation</u>	(3,942,250)
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STATE POLICE RETIREMENT SYSTEM

ACTUARIAL ASSUMPTIONS

A. STATEMENT OF ACTUARIAL ASSUMPTIONS

- (1) Mortality:
 - (a) Active & retired lives - 1971 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 1985 experience study.
- (3) Termination of employment - Graduated rates based on 1985 experience study.
- (4) Retirement - 40% 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 employe 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 - 7.50% 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	7/1/87 Rate	Rate Increase	
		Date	Rate
Single	\$ 69.79*	11/1/87	\$ 79.71*
Family	166.79*	11/1/87	190.81*
Medicare	36.30*	1/1/88	40.66**
High Option	54.15*	1/1/88	60.65**

*Actual rates

**Assumed rates

It was assumed that medical premiums would grow at an annual rate of 12%. The assumed rate of growth in number of retirees receiving medical insurance was assumed to be consistent with average growth patterns over recent years.

Reserves in the Insurance Fund were used to offset the liability for premiums over the four year projection period.

(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 \$1,274
 - . If reported age was blank, then assume current age equal to age 18 plus years of service reported

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. Following this introduction are the statements of performance from these 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. That index had a rate of return of 25.2% for the period ending June 30. Under the management of the General Manager and the Investment Staff, the Index Equity Fund had a rate of return of 24.5%—off the goal by only 0.7%.



Capital Supervisors, Inc. / 20 North Clark Street, Suite 700, Chicago, Illinois 60602 / Phone (312) 236-8271

July 21, 1987

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

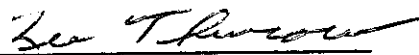
The year just ended was another decent year for our portion of the portfolio with total return 11.4%. Since the restructuring of the portfolio in 1983, total return has compounded at 15.5%. The most dramatic change during the year was the increase in common stock holdings. We added net to common stocks \$222 million. This arose because of a change in the cash reserve requirement and a more optimistic view toward stocks. Our sales during the year gave us gains slightly in excess of \$76 million.

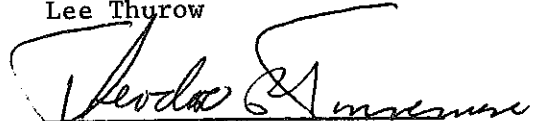
On the fixed income side we turned particularly active in the most recent quarter while purchasing a total of just over \$175 million face in the fiscal year. All but one issue was AAA credit. The exception, Pacific Bell, is AA and expected to be called in three years. Therefore, we continued to upgrade the quality of the portfolio through selective selling and the purchases. We consider quality or preservation of principal far more important than income at this point.

The bond swapping program slowed as corporates became a smaller part of the portfolio. Nevertheless \$60 million of face value issued were sold and replaced under this program resulting in both improved yield and quality.

We expect to continue the recent pattern of better than 10% return on the entire portfolio in the new fiscal year. The expanded stock holdings should lead the way. However, some word of caution is appropriate in that these results are well above historians' norms and some difficult years for investors will reappear.

Respectfully submitted,


Lee Thurow


Theodore R. Tonneman

LT/TRT:bj

MUNDER CAPITAL MANAGEMENT, INC.

July 24, 1987

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

Dear Trustees:

During the fiscal year ended June 30, 1987, the bond market provided very modest returns. The Kentucky Retirement Systems portfolio appreciated by 5.79%, which compares favorably to the 4.68% return of the Shearson/Lehman Bond Index. In absolute terms, the market value of the portfolio increased \$32,616,974 from \$321,166,347 to \$353,783,321 as of June 30, 1987. The portfolio's overweighting, relative to the Shearson/Lehman Bond Index, in corporate and mortgage-backed bonds was the primary reason for the superior return, as the spreads for both of those sectors tightened significantly.

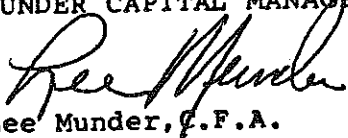
Interest rates increased dramatically during the fiscal year. The yield on the bellweather 30 year U.S. Treasury Bond increased 1.26% from 7.23% on June 30, 1986 to 8.49% on June 30, 1987. Nearly all of this increase occurred during the last quarter of the fiscal year, as the market faced one setback after another. Nervousness over a plummeting dollar, rising oil and commodity prices, and Paul Volcker's resignation as Chairman of the Federal Reserve, all evoked renewed inflationary fears.

During the year, we continuously adjusted the portfolio's characteristics to take advantage of market opportunities. Among the more significant was the increase of the portfolio's exposure in mortgage-backed bonds and callable corporate bonds during the fourth quarter. This adjustment was part of a strategy designed to take advantage of declining volatility in the market.

As the new fiscal year unfolds, there remain a number of question marks regarding the economy and interest rates. Monetary policy appears to be trapped between supporting the value of the dollar abroad, and maintaining domestic economic growth. Our outlook for interest rates is that they will remain confined to the 8.00%-9.00% trading range until the Market has a clearer picture of the state of the economy.

Best regards,

MUNDER CAPITAL MANAGEMENT, INC.


Lee Munder, C.F.A.
President

LM:dac

Heitman Financial

Norman Perlmutter
Chairman of the Board

July 29, 1987

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

Dear Trustees:

We are pleased to summarize the Kentucky Retirement Systems' investment in real estate through Heitman Advisory Corporation.

During the past year, Heitman Real Estate Fund I, in which the Kentucky Retirement Systems initially invested \$45,000,000, completed its acquisition phase. The portfolio contains three shopping centers, three office buildings, two industrial parks, and one primarily retail mixed-use property. The unusually low interest rates that prevailed during 1986 gave us the opportunity to place attractive financing on three of the investments and \$5,768,000 was returned to the Kentucky Retirement Systems. One of the investments, the 241,000 square foot Towne Mall Shopping Center in Elizabethtown, has become the dominant retail facility in the area. For 1986, the real estate assets of Fund I had an overall yield of 12.62%.

Heitman Real Estate Fund II, in which the Kentucky Retirement Systems invested \$20,500,000, continued its acquisition phase. When fully funded in mid-1987, Fund II will have investments in four shopping centers, five office buildings, two industrial parks, and one primarily retail mixed-use property. For 1986, the real estate assets of Fund II had an overall yield of 15.96%.

On January 21, 1987, the Kentucky Retirement Systems funded \$6,000,000 of its \$12,000,000 commitment to the Heitman Real Estate Fund III.

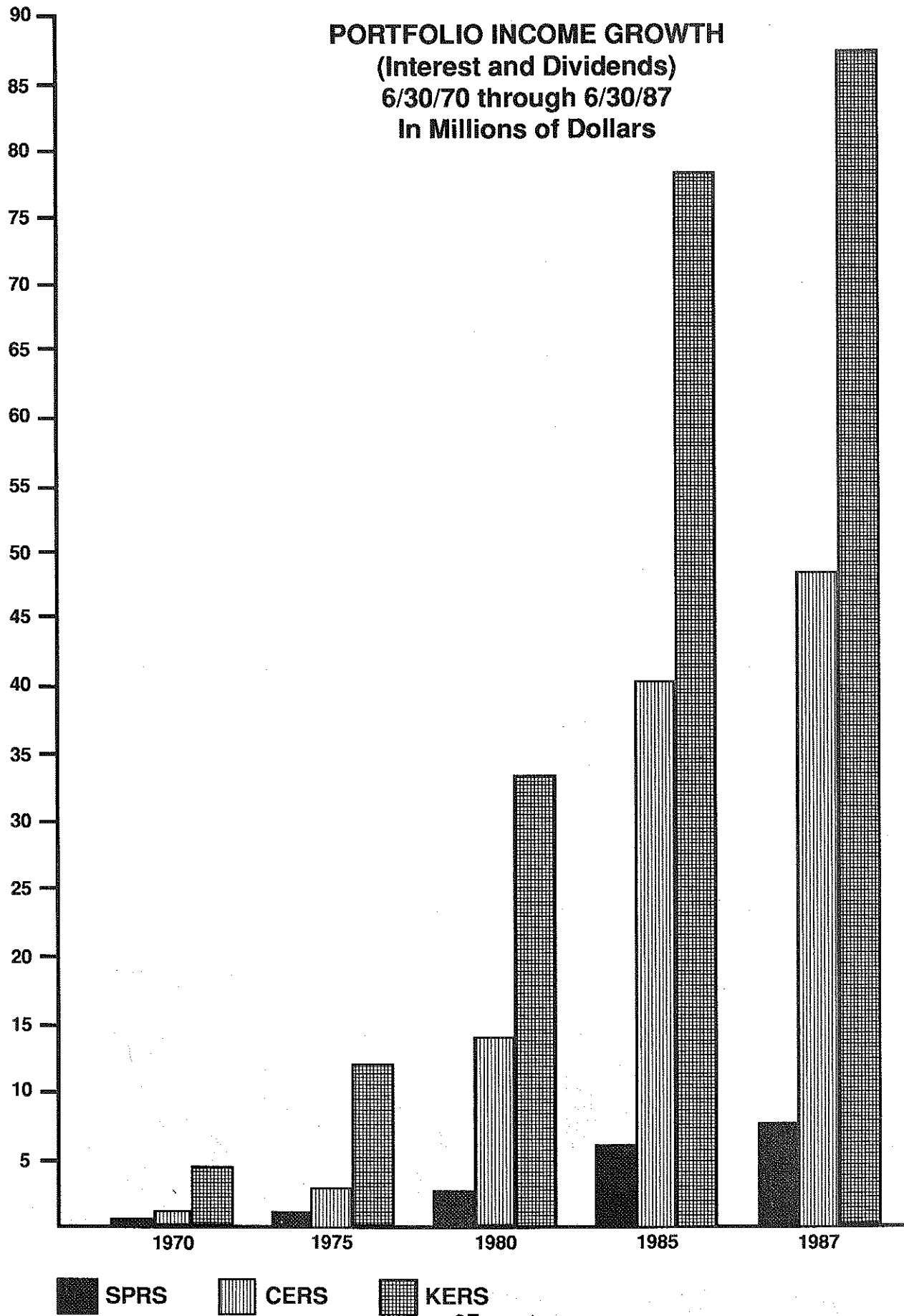
The Kentucky Retirement Systems Real Estate Separate Account has investments in Danville and Frankfort, Kentucky with a current equity value of \$8,375,000. These real estate assets had an overall return in 1986 of 25.07%. On June 30, 1987, a commitment was issued to acquire the Big Sandy Village Shopping Center in Pikeville, Kentucky for a cash investment of \$2,850,000.

1987 continues to be a favorable time for investment in high grade established shopping malls, office buildings, and industrial park properties and we will continue to pursue these investments for the Kentucky Retirement Systems.

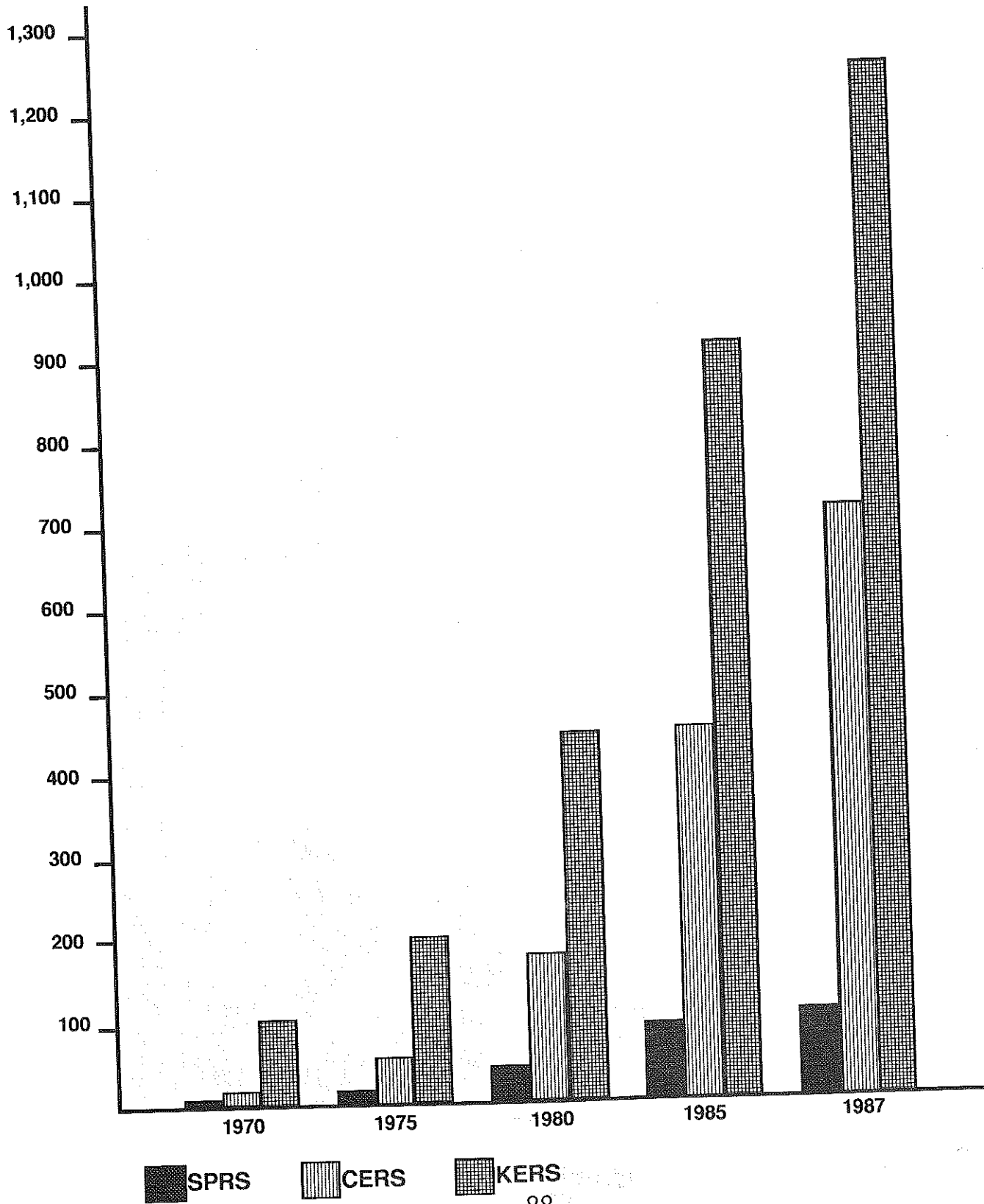
Sincerely,



PORTFOLIO INCOME GROWTH
(Interest and Dividends)
6/30/70 through 6/30/87
In Millions of Dollars



PORTFOLIO GROWTH
 (at book value)
 6/30/70 through 6/30/87
 In Millions of Dollars



**KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/87
STATE EMPLOYEES (KERS)**

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	\$143,927,027.79	\$269,377,465.35	\$282,527,481.66	\$106,124,804.72	\$801,956,779.52
% of Total Par Value	18%	34%	35%	13%	100%
Book Value	\$145,458,294.21	\$202,073,147.34	\$247,307,188.49	\$106,124,804.72	\$700,963,434.76
% of Total Book Value	21%	29%	35%	15%	100%
Market Value	\$147,906,033.21	\$207,411,030.33	\$251,886,076.25	\$106,124,804.72	\$713,327,944.51
% of Total Market Value	21%	29%	35%	15%	100%
Potential Gain (Or Loss)	\$ 2,447,739.00	\$ 5,337,882.99	\$ 4,578,887.76	.00	\$ 12,364,509.75
Indicated Annual Income	\$ 14,392,288.97	\$ 19,650,841.20	\$ 24,145,514.04	\$ 7,427,099.17	\$ 65,615,743.38
Current Yield — Book Value	9.89	9.72	9.76	7.00	9.36
— Market Value	9.73	9.47	9.59	7.00	9.20
Yield to Maturity — Mkt Value	9.42	8.43	9.48	7.00	8.79
Average Coupon	10.00	7.29	8.55	7.00	8.18
Average Maturity (Years)	14.39	9.91	21.47	.08	13.48

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
\$ 44,147,332.32	\$ 49,202,913.50	\$ 5,055,581.18	\$ 3,700,109.33	8.38	7.52

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
15,605,011	\$505,580,243.25	\$744,365,948.20	\$238,785,704.95	\$ 18,101,384.45	3.58	2.43

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	\$ 145,458,294.21	12%	\$ 147,906,033.21	10%	\$14,392,288.97	9.89	9.73
Governments	\$ 202,073,147.34	16%	\$ 207,411,030.33	14%	\$19,650,841.20	9.72	9.47
Mortgages	\$ 247,307,188.49	20%	\$ 251,886,076.25	17%	\$24,145,514.04	9.76	9.59
Short Term	\$ 106,124,804.72	8%	\$ 106,124,804.72	7%	\$ 7,427,099.17	7.00	7.00
Real Estate	\$ 44,147,332.32	4%	\$ 49,202,913.50	3%	\$ 3,700,109.33	8.38	7.52
Common Stock	\$ 505,580,243.25	40%	\$ 744,365,948.20	49%	\$18,101,384.45	3.58	2.43
Total Portfolio	\$1,250,691,010.33	100%	\$1,506,896,806.21	100%	\$87,417,237.16	6.99	5.80

**KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/87
COUNTY EMPLOYEES (CERS)**

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	\$ 73,208,832.25	\$146,151,281.55	\$166,570,998.94	\$ 63,301,888.04	\$449,233,000.78
% of Total Par Value	16%	33%	37%	14%	100%
Book Value	\$ 73,818,716.50	\$115,980,248.84	\$139,579,819.63	\$ 63,301,888.04	\$392,680,673.01
% of Total Book Value	18%	30%	36%	16%	100%
Market Value	\$ 74,901,312.46	\$118,804,641.35	\$143,086,240.10	\$ 63,301,888.04	\$400,094,081.95
% of Total Market Value	18%	30%	36%	16%	100%
Potential Gain (Or Loss)	\$ 1,082,595.96	\$ 2,824,392.51	\$ 3,506,420.47	.00	\$ 7,413,408.94
Indicated Annual Income	\$ 7,264,827.14	\$ 11,152,651.80	\$ 13,730,840.24	\$ 4,433,252.61	\$ 36,581,571.79
Current Yield — Book Value	9.84	9.62	9.84	7.00	9.32
— Market Value	9.70	9.39	9.60	7.00	9.14
Yield to Maturity — Mkt Value	9.38	8.36	9.48	7.00	8.75
Average Coupon	9.92	7.63	8.24	7.00	8.14
Average Maturity (Years)	13.79	9.15	22.35	.08	13.52

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
\$ 26,814,479.33	\$ 29,775,581.21	\$ 2,961,101.88	\$ 2,241,798.77	8.36	7.53

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
8,540,660	\$285,101,127.90	\$402,573,361.61	\$117,472,233.71	\$ 9,530,718.50	3.34	2.37

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	\$ 73,818,716.50	10%	\$ 74,901,312.46	9%	\$ 7,264,827.14	9.84	9.70
Governments	\$ 115,980,248.84	16%	\$ 118,804,641.35	14%	\$11,152,651.80	9.62	9.39
Mortgages	\$ 139,579,819.63	20%	\$ 143,086,240.10	17%	\$13,730,840.24	9.84	9.60
Short Term	\$ 63,301,888.04	9%	\$ 63,301,888.04	8%	\$ 4,433,252.61	7.00	7.00
Real Estate	\$ 26,814,479.33	4%	\$ 29,775,581.21	4%	\$ 2,241,798.77	8.36	7.53
Common Stock	\$ 285,101,127.90	41%	\$ 402,573,361.61	48%	\$ 9,530,718.50	3.34	2.37
Total Portfolio	\$ 704,596,280.24	100%	\$ 832,443,024.77	100%	\$48,354,089.06	6.86	5.81

**KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/87
STATE POLICE (SPRS)**

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	\$ 12,286,456.97	\$ 23,926,215.60	\$ 23,097,207.28	\$ 8,842,307.24	\$ 68,152,187.09
% of Total Par Value	18%	35%	34%	13%	100%
Book Value	\$ 12,364,167.95	\$ 18,686,894.78	\$ 20,909,737.21	\$ 8,842,307.24	\$ 60,803,107.18
% of Total Book Value	20%	31%	34%	15%	100%
Market Value	\$ 12,611,619.85	\$ 19,037,806.05	\$ 21,207,620.69	\$ 8,842,307.24	\$ 61,699,353.83
% of Total Market Value	20%	32%	34%	14%	100%
Potential Gain (Or Loss)	\$ 247,451.90	\$ 350,911.27	\$ 297,883.48	.00	\$ 896,246.65
Indicated Annual Income	\$ 1,228,245.64	\$ 1,790,862.12	\$ 2,022,523.94	\$ 619,074.74	\$ 5,660,706.44
Current Yield — Book Value	9.93	9.58	9.67	7.00	9.31
— Market Value	9.74	9.41	9.54	7.00	9.17
Yield to Maturity — Mkt Value	9.44	8.32	9.44	7.00	8.73
Average Coupon	10.00	7.48	8.76	7.00	8.31
Average Maturity (Years)	14.76	8.46	21.23	.08	12.84

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
\$ 3,660,880.34	\$ 4,088,717.67	\$ 427,837.33	\$ 307,333.36	8.40	7.52

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
1,420,528	\$ 45,238,558.26	\$ 66,100,891.18	\$ 20,862,332.92	\$ 1,611,448.10	3.56	2.44

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	\$ 12,364,167.95	11%	\$ 12,611,619.85	10%	\$ 1,228,245.64	9.93	9.74
Governments	\$ 18,686,894.78	17%	\$ 19,037,806.05	14%	\$ 1,790,862.12	9.58	9.41
Mortgages	\$ 20,909,737.21	19%	\$ 21,207,620.69	16%	\$ 2,022,523.94	9.67	9.54
Short Term	\$ 8,842,307.24	8%	\$ 8,842,307.24	7%	\$ 619,074.74	7.00	7.00
Real Estate	\$ 3,660,880.34	3%	\$ 4,088,717.67	3%	\$ 307,333.36	8.40	7.52
Common Stock	\$ 45,238,558.26	42%	\$ 66,100,891.18	50%	\$ 1,611,448.10	3.56	2.44
Total Portfolio	\$ 109,702,545.78	100%	\$ 131,888,962.68	100%	\$ 7,579,487.90	6.91	5.75

**KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/87
INSURANCE FUND PORTFOLIO**

DESCRIPTION	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	\$8,000,000.00	\$4,574,344.00	\$4,818,733.50	\$17,393,077.50
% of Total Par Value	46%	26%	28%	100%
Book Value	\$7,960,312.50	\$4,594,817.95	\$4,818,733.50	\$17,373,863.95
% of Total Book Value	46%	26%	28%	100%
Market Value	\$7,547,500.00	\$4,189,857.85	\$4,818,733.50	\$16,556,091.35
% of Total Market Value	46%	25%	29%	100%
Potential Gain (Or Loss)	\$ -412,812.50	\$ -404,960.10	\$.00	\$ -817,772.60
Indicated Annual Income	\$ 537,500.00	\$ 385,819.24	\$ 331,046.99	\$ 1,254,366.23
Current Yield — Book Value	6.75 7.12	8.40 9.21	6.87 6.87	7.22 7.58
Yield to Maturity — Mkt Value	8.07	9.34	6.87	8.07
Average Coupon	6.72	8.43	6.87	7.21
Average Maturity (Years)	5.27	22.69	.08	8.41

TOTAL PORTFOLIO

TYPE	PCTAGE OF BOOK VALUE PORTFOLIO		PCTAGE OF MARKET VALUE PORTFOLIO		INDICATED INCOME	INDICATED YIELD ON BOOK ON MARKET	
Governments	\$ 7,960,312.50	46%	\$ 7,547,500.00	46%	\$ 537,500.00	6.75	7.12
Mortgages	\$ 4,594,817.95	26%	\$ 4,189,857.85	25%	\$ 385,819.24	8.40	9.21
Short Term	\$ 4,818,733.50	28%	\$ 4,818,733.50	29%	\$ 331,046.99	6.87	6.87
Total Portfolio	\$17,373,863.95	100%	\$16,556,091.35	100%	\$1,254,366.23	7.22	7.58

**KENTUCKY RETIREMENT SYSTEMS
PORTFOLIO SUMMARY: 6/30/87
ALL SYSTEMS COMBINED**

DESCRIPTION	CORPORATES	GOVERNMENTS	MORTGAGES	SHORT TERM	TOTAL
Par Value	\$229,422,317.01	\$439,454,962.50	\$472,195,687.88	\$178,269,000.00	\$1,319,341,967.39
% of Total Par Value	17%	33%	36%	14%	100%
Book Value	\$231,641,178.66	\$336,740,290.96	\$407,796,745.33	\$178,269,000.00	\$1,154,447,214.95
% of Total Book Value	20%	30%	35%	15%	100%
Market Value	\$235,418,965.52	\$345,253,477.73	\$416,179,937.04	\$178,269,000.00	\$1,175,121,380.29
% of Total Market Value	20%	30%	35%	15%	100%
Potential Gain (Or Loss)	\$ 3,777,786.86	\$ 8,513,186.77	\$ 8,383,191.71	.00	\$ 20,674,165.34
Indicated Annual Income	\$ 22,885,361.75	\$ 32,594,355.12	\$ 39,898,878.22	\$ 12,479,426.52	\$ 107,858,021.61
Current Yield — Book Value	9.88	9.68	9.78	7.00	9.34
— Market Value	9.72	9.44	9.59	7.00	9.18
Yield to Maturity — Mkt Value	9.41	8.40	9.48	7.00	8.77
Average Coupon	9.98	7.42	8.45	7.00	8.18
Average Maturity (Years)	14.22	9.58	21.77	.08	13.46

REAL ESTATE

BOOK VALUE/COST	MARKET VALUE	POTENTIAL GAIN (OR LOSS)	INDICATED INCOME	CURRENT YIELD ON COST	CURRENT YIELD ON MARKET
\$ 74,622,691.99	\$ 83,067,212.38	\$ 8,444,520.39	\$ 6,249,241.46	8.37	7.52

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
25,566,199	\$835,919,929.41	\$1,213,040,200.99	\$377,120,271.58	\$ 29,243,551.05	3.50	2.41

TOTAL PORTFOLIO

TYPE	BOOK VALUE	PCTAGE OF PORTFOLIO	MARKET VALUE	PCTAGE OF PORTFOLIO	INDICATED INCOME	INDICATED YIELD ON BOOK	INDICATED YIELD ON MARKET
Corporates	\$ 231,641,178.66	11%	\$ 235,418,965.52	10%	\$ 22,885,361.75	9.88	9.72
Governments	\$ 336,740,290.96	16%	\$ 345,253,477.73	14%	\$ 32,594,355.12	9.68	9.44
Mortgages	\$ 407,796,745.33	20%	\$ 416,179,937.04	17%	\$ 39,898,878.22	9.78	9.59
Short Term	\$ 178,269,000.00	9%	\$ 178,269,000.00	7%	\$ 12,479,426.52	7.00	7.00
Real Estate	\$ 74,622,691.99	4%	\$ 83,067,212.38	3%	\$ 6,249,241.46	8.37	7.52
Common Stock	\$ 835,919,929.41	40%	\$1,213,040,200.99	49%	\$ 29,243,551.05	3.50	2.41
Total Portfolio	\$2,064,989,836.35	100%	\$2,471,228,793.66	100%	\$143,350,814.12	6.94	5.80

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, 1987, 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 section 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 Employes Retirement System, County Employes 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 there are 718 accounts on which benefits have been paid for more than 20 years. Since benefit factors and salaries were lower 20 years ago, these also contribute to a distortion of the "average" benefit.

To more clearly show current averages, we compiled data from the three systems on only those members who retired during the fiscal year ended June 30, 1987. Following are the results:

SYSTEM	AVE. FINAL COMP.	AVE. MO. BENE.	NO. RETIRING WITH YRS. SERV.			
			Under 20	20-25	25-30	30+
KERS	\$19,512	\$ 665.41	620	186	130	280
CERS	\$14,197	\$ 380.36	730	121	60	70
SPRS	\$33,781	\$1,770.67	6	8	13	11

From this it is clear that most members of KERS and CERS retire with less than 20 years service credit.

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, 1987:

	ACTIVE	INACTIVE	RETIRED
KERS	43,730	9,780	13,497
CERS	44,065	10,028	7,822
SPRS	977	80	288

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, 1987
AVERAGE MONTHLY BENEFIT IN DOLLARS
PER YEARS OF SERVICE

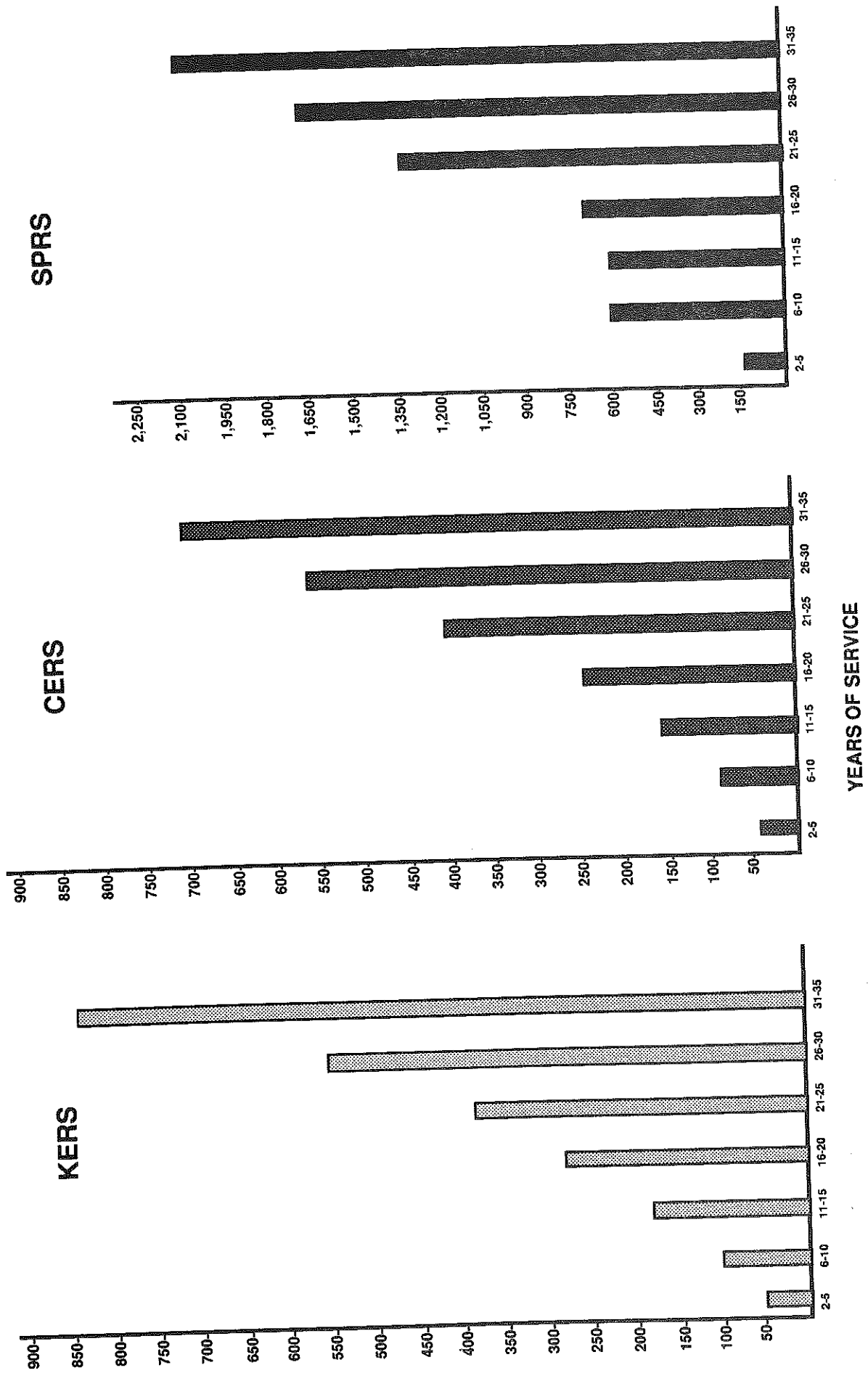


TABLE 2
KENTUCKY EMPLOYES RETIREMENT SYSTEM
RETIREMENT BENEFITS BY PLAN
FOR THE PERIOD ENDING JUNE 30, 1987

	Number Of Cases	Total	Monthly Benefits		
			Average	Low	High
NORMAL					
Basic	2,360	\$ 657,393.47	\$ 278.55	\$ 1.09	\$2,086.35
Straight Life Annuity	4	655.51	163.87	96.91	326.29
Life - 10 Years Certain (Member)	628	178,173.55	283.71	3.21	2,626.34
Life - 10 Years Certain (Beneficiary)	80	19,525.76	244.07	3.56	836.17
10 Years Certain (Member)	6	8,217.36	1,369.56	1,150.41	1,875.11
10 Years Certain (Beneficiary)	3	2,255.11	751.70	83.82	1,155.79
Life - 15 Years Certain (Member)	31	13,948.46	449.95	33.00	1,478.10
Life - 15 Years Certain (Beneficiary)	4	1,772.66	443.16	368.70	500.59
Survivorship 100% (Member)	683	171,539.40	251.15	1.66	1,999.96
Survivorship 100% (Beneficiary)	343	62,264.73	181.52	15.68	1,183.03
Pop-Up Option	14	5,599.54	399.96	99.32	1,006.76
Survivorship 66 2/3% (Member)	162	65,013.37	401.31	5.68	1,419.65
Survivorship 66 2/3% (Beneficiary)	25	5,253.67	210.14	40.65	612.16
Survivorship 50% (Member)	379	169,463.28	447.13	2.72	2,103.52
Survivorship 50% (Beneficiary)	148	31,058.20	209.85	18.02	706.84
Soc. Sec. - Survivorship (Under 62)	1	1,369.28	1,369.28	1,369.28	1,369.28
Soc. Sec. - Survivorship (Over 62)	1	938.05	938.05	938.05	938.05
TOTALS AND AVERAGES	4,872	\$1,394,441.40	\$ 286.21	\$ 1.09	\$2,626.34
EARLY					
Basic	2,940	\$ 896,127.38	\$ 304.80	\$ 1.88	\$3,216.75
Life - 10 Years Certain (Member)	1,003	300,143.44	299.24	4.30	2,242.31
Life - 10 Years Certain (Beneficiary)	62	17,144.46	276.52	41.37	1,484.31
10 Years Certain (Member)	2	3,242.65	1,621.32	1,428.51	1,814.14
Life - 15 Years Certain (Member)	72	29,506.00	409.80	31.00	2,028.60
Life - 15 Years Certain (Beneficiary)	5	1,285.44	257.08	100.73	776.73
Life - 20 Years Certain (Member)	35	12,714.54	363.27	16.48	1,982.66
Survivorship 100% (Member)	1,078	310,438.85	287.97	2.23	2,673.54
Survivorship 100% (Beneficiary)	244	53,746.44	220.27	16.92	1,495.74
Pop-Up Option	77	55,454.08	720.18	26.23	2,477.08
Survivorship 66 2/3% (Member)	287	184,600.62	643.20	9.39	2,753.99
Survivorship 66 2/3% (Beneficiary)	31	6,424.55	207.24	9.10	730.95
Survivorship 50% (Member)	487	258,044.55	529.86	10.65	3,074.27
Survivorship 50% (Beneficiary)	118	20,837.77	176.59	18.61	719.19
Soc. Sec. - Basic (Under 62)	116	125,297.04	1,080.14	9.59	3,130.06
Soc. Sec. - Basic (Over 62)	147	93,004.78	632.68	12.48	2,764.84
Soc. Sec. - Survivorship (Under 62)	177	200,088.51	1,130.44	25.84	2,259.04
Soc. Sec. - Survivorship (Over 62)	102	44,672.03	437.96	11.80	1,478.69
Soc. Sec. - Basic (Over 65)	1	157.83	157.83	157.83	157.83
TOTALS AND AVERAGES	6,984	\$2,612,930.96	\$ 374.13	\$ 1.88	\$3,216.75
DISABILITY					
Basic	373	\$ 118,322.27	\$ 317.21	\$ 2.24	\$1,552.31
Life - 10 Years Certain (Member)	170	50,948.88	299.69	10.02	1,021.68
Life - 10 Years Certain (Beneficiary)	87	28,710.91	330.01	29.46	1,223.63
10 Years Certain (Beneficiary)	1	199.63	199.63	199.63	199.63
Life - 15 Years Certain (Member)	11	5,706.77	518.79	157.02	1,017.80
Life - 15 Years Certain (Beneficiary)	1	258.82	258.82	258.82	258.82
Life - 20 Years Certain (Member)	8	3,707.09	463.38	198.19	765.61
Life - 20 Years Certain (Beneficiary)	3	1,665.05	555.01	374.29	718.31
Survivorship 100% (Member)	212	56,527.86	266.64	5.16	2,239.93
Survivorship 100% (Beneficiary)	239	57,305.40	239.77	48.35	1,035.08
Pop-Up Option	7	2,906.42	415.20	189.55	656.67
Survivorship 66 2/3% (Member)	36	13,665.57	379.59	6.09	1,315.13
Survivorship 66 2/3% (Beneficiary)	27	5,736.29	212.45	43.15	715.71
Survivorship 50% (Member)	87	29,734.09	341.77	3.48	1,254.51
Survivorship 50% (Beneficiary)	59	9,196.84	155.87	34.94	580.38
Soc. Sec. - Basic (Under 62)	3	2,335.47	778.49	603.21	953.24
Soc. Sec. - Basic (Over 62)	7	2,785.09	397.87	72.55	1,075.04
Soc. Sec. - Survivorship (Under 62)	3	2,578.94	859.64	429.24	1,543.27
Soc. Sec. - Survivorship (Over 62)	4	1,309.25	327.31	264.57	386.68
Dependent Child	1	139.34	139.34	139.34	139.34
TOTALS AND AVERAGES	1,339	\$ 393,739.98	\$ 294.05	\$ 2.24	\$2,239.93
DEATH BEFORE RETIREMENT					
Basic	1	\$ 303.04	\$ 303.04	\$ 303.04	\$ 303.04
Lump Sum	1	311.57	311.57	311.57	311.57
5 Years Certain	64	34,969.37	546.39	48.29	2,174.24
10 Years Certain	266	93,788.12	352.58	6.20	2,160.08
Survivorship 100%	398	123,097.65	309.29	1.90	2,445.80
Survivorship 50%	1	198.24	198.24	198.24	198.24
Soc. Sec. - Basic (Under 62)	1	230.72	230.72	230.72	230.72
Soc. Sec. - Basic (Over 62)	2	1,669.28	834.64	579.10	1,090.18
Soc. Sec. - Survivorship (Under 60)	8	3,866.39	483.29	49.26	993.89
Soc. Sec. - Survivorship (Over 60)	11	2,230.36	202.76	24.56	695.61
Dependent Child	1	92.16	92.16	92.16	92.16
TOTALS AND AVERAGES	754	\$ 260,756.90	\$ 345.83	\$ 1.90	\$2,445.80
SYSTEM TOTALS AND AVERAGES	13,949	\$4,661,869.24	\$ 334.20	\$ 1.09	\$3,216.75

TABLE 3
COUNTY EMPLOYEES RETIREMENT SYSTEM
RETIREMENT BENEFITS BY PLAN
FOR THE PERIOD ENDING JUNE 30, 1987

	Number Of Cases	Total	Monthly Benefits		
			Average	Low	High
NORMAL					
Basic	1,570	\$ 279,498.46	\$ 178.02	\$.27	\$3,225.73
Straight Life Annuity	1	124.39	124.39		124.39
Life - 10 Years Certain (Member)	538	93,253.14	173.33	7.35	2,837.78
Life - 10 Years Certain (Beneficiary)	72	11,033.97	153.24	18.84	1,020.52
10 Years Certain (Member)	14	19,027.91	1,359.13	73.24	2,610.05
10 Years Certain (Beneficiary)	3	3,151.73	1,050.57	570.04	1,325.43
Life - 15 Years Certain (Member)	30	6,322.95	210.76	24.66	980.46
Life - 15 Years Certain (Beneficiary)	1	674.27	674.27	674.27	674.27
Life - 20 Years Certain (Member)	1	1,782.29	1,782.29	1,782.29	1,782.29
Survivorship 100% (Member)	574	98,850.49	172.21	4.01	2,018.12
Survivorship 100% (Beneficiary)	183	26,451.30	144.54	13.97	1,311.15
Pop-Up Option	17	5,015.28	295.01	11.90	1,337.67
Survivorship 66 2/3% (Member)	84	29,364.73	349.58	30.19	1,792.89
Survivorship 66 2/3% (Beneficiary)	14	2,691.33	192.23	25.54	631.01
Survivorship 50% (Member)	170	49,849.32	293.23	1.63	1,686.77
Survivorship 50% (Beneficiary)	6	10,355.15	154.55	2.47	683.90
Soc. Sec. - Survivorship (Under 62)	67	8,515.31	1,419.21	1,126.43	1,766.24
Soc. Sec. - Survivorship (Over 62)	10	7,590.66	759.06	496.69	1,367.27
TOTALS AND AVERAGES	3,355	\$ 653,552.68	\$ 194.79	\$.27	\$3,225.73
EARLY					
Basic	1,695	\$ 330,196.33	\$ 194.80	\$ 2.14	\$2,613.08
Life - 10 Years Certain (Member)	709	125,915.76	177.59	3.20	2,113.73
Life - 10 Years Certain (Beneficiary)	57	10,730.24	188.24	4.16	929.35
10 Years Certain (Member)	6	12,684.97	2,114.16	960.75	4,811.10
10 Years Certain (Beneficiary)	1	500.79	500.79	500.79	500.79
Life - 15 Years Certain (Member)	63	14,941.98	237.17	26.92	1,225.94
Life - 15 Years Certain (Beneficiary)	3	520.69	173.56	119.20	229.66
Life - 20 Years Certain (Member)	23	4,655.65	202.41	23.62	1,213.52
Survivorship 100% (Member)	620	109,463.79	176.55	5.01	1,587.29
Survivorship 100% (Beneficiary)	112	20,834.66	186.02	5.64	1,325.57
Pop-Up Option	41	18,487.81	450.92	27.06	1,902.51
Survivorship 66 2/3% (Member)	116	47,274.16	407.53	16.85	1,800.60
Survivorship 66 2/3% (Beneficiary)	11	1,884.37	171.30	28.15	642.52
Survivorship 50% (Member)	206	88,481.99	429.52	7.45	2,321.18
Survivorship 50% (Beneficiary)	31	5,045.35	162.75	3.08	520.64
Soc. Sec. - Basic (Under 62)	30	31,538.32	1,051.27	9.39	2,238.59
Soc. Sec. - Basic (Over 62)	33	11,787.12	357.18	17.70	1,429.04
Soc. Sec. - Basic (Over 65)	1	113.47	113.47	113.47	113.47
Soc. Sec. - Survivorship (Under 62)	83	90,797.34	1,093.94	18.99	2,341.90
Soc. Sec. - Survivorship (Over 62)	25	7,472.09	298.88	15.32	1,382.88
TOTALS AND AVERAGES	3,866	\$ 933,326.88	\$ 241.41	\$ 2.14	\$4,811.10
DISABILITY					
Basic	223	\$ 61,918.24	\$ 277.66	\$ 4.24	\$1,778.98
Life - 10 Years Certain (Member)	102	24,962.36	244.72	4.49	806.59
Life - 10 Years Certain (Beneficiary)	57	14,118.99	247.70	5.26	806.80
10 Years Certain (Member)	2	1,693.19	846.52	422.59	1,270.67
Life - 15 Years Certain (Member)	14	4,524.00	323.14	104.10	665.10
Life - 15 Years Certain (Beneficiary)	1	56.90	56.90	56.90	56.90
Life - 20 Years Certain (Member)	7	1,015.43	145.06	27.19	216.91
Life - 20 Years Certain (Beneficiary)	4	1,750.24	437.56	154.84	1,140.34
Survivorship 100% (Member)	106	25,424.32	239.85	20.72	886.39
Survivorship 100% (Beneficiary)	94	17,472.25	185.87	24.96	631.97
Pop-Up Option	3	369.45	123.15	83.30	153.73
Survivorship 66 2/3% (Member)	15	3,752.28	250.15	4.42	662.86
Survivorship 66 2/3% (Beneficiary)	7	1,007.36	143.90	74.42	304.36
Survivorship 50% (Member)	41	11,658.02	284.34	65.43	1,011.00
Survivorship 50% (Beneficiary)	22	2,964.06	134.73	34.26	326.42
Soc. Sec. - Basic (Under 62)	1	549.67	549.67	549.67	549.67
Soc. Sec. - Basic (Over 62)	2	1,049.18	524.59	243.18	806.00
Soc. Sec. - Survivorship (Under 62)	2	1,212.70	606.35	585.85	626.85
Dependent Child	2				
TOTALS AND AVERAGES	703	\$ 175,498.64	\$ 249.64	\$ 4.24	\$1,778.98
DEATH BEFORE RETIREMENT					
Life - 10 Years Certain	1	\$ 52.24	\$ 50.24	\$ 50.24	\$ 50.24
10 Years Certain	204	44,812.88	219.87	2.46	1,559.41
Survivorship 100%	183	31,163.60	170.29	5.04	1,020.01
Soc. Sec. - Basic (Under 62)	1	1,236.57	1,236.57	1,236.57	1,236.57
Soc. Sec. - Basic (Over 62)	3	501.70	167.23	10.99	261.87
Dependent Child	2	307.16	153.58	150.97	156.19
Soc. Sec. - Survivorship (Under 60)	1	75.32	75.32	75.32	75.32
Soc. Sec. - Survivorship (Over 60)	2	262.81	131.40	55.63	207.18
5 Years Certain	65	14,546.16	223.78	25.19	1,102.22
TOTALS AND AVERAGES	462	\$ 92,956.44	\$ 201.20	\$ 2.46	\$1,559.41
SYSTEM TOTALS AND AVERAGES	8,386	\$1,855,334.64	\$ 221.24	\$.27	\$4,811.10

TABLE 4
STATE POLICE RETIREMENT SYSTEM
BENEFITS BY PLAN
FOR THE PERIOD ENDING JUNE 30, 1987

	Number Of Cases	Total	Monthly Benefits		
			Average	Low	High
NORMAL					
Basic	10	\$ 9,352.37	\$ 935.23	\$ 57.40	\$2,260.43
Life - 10 Years Certain (Member)	8	14,328.96	1,791.12	913.62	3,528.46
Life - 10 Years Certain (Beneficiary)	1	517.74	517.74	517.74	517.74
10 Years Certain (Member)	24	51,610.44	2,150.43	186.07	3,777.27
10 Years Certain (Beneficiary)	4	9,273.22	2,318.30	1,641.04	3,161.97
Life - 20 Years Certain (Member)	1	2,119.73	2,119.73	2,119.73	2,119.73
Survivorship 100% (Member)	19	24,941.24	1,312.69	127.58	2,524.67
Survivorship 100% (Beneficiary)	3	3,118.35	1,039.45	523.49	2,033.47
Survivorship 66 2/3% (Member)	8	14,280.66	1,785.08	1,000.63	2,447.78
Survivorship 50% (Member)	14	20,090.29	1,435.02	823.27	2,257.35
Survivorship 50% (Beneficiary)	2	1,104.77	552.38	424.51	680.26
Soc. Sec. - Survivorship (Under 62)	12	26,025.36	2,168.78	492.44	3,531.38
Soc. Sec. - Survivorship (Over 62)	5	5,642.11	1,128.42	860.34	1,263.46
TOTALS AND AVERAGES	111	\$182,405.24	\$1,643.29	\$ 57.40	\$3,777.27
EARLY					
Basic	5	\$ 8,722.01	\$1,744.40	\$1,421.70	\$2,124.54
Life - 10 Years Certain (Member)	10	18,139.01	1,813.90	1,391.43	2,203.02
10 Years Certain (Member)	18	47,640.11	2,646.67	1,713.26	3,374.07
Life - 15 Years Certain (Member)	2	2,973.66	1,486.83	1,142.08	1,831.58
Life - 20 Years Certain (Member)	3	4,380.22	1,460.07	617.23	2,010.22
Survivorship 100% (Member)	23	32,795.58	1,425.89	228.34	2,645.23
Survivorship 100% (Beneficiary)	1	1,659.16	1,659.16	1,659.16	1,659.16
Pop-Up Option	3	3,875.08	1,291.69	1,081.00	1,689.13
Survivorship 66 2/3% (Member)	9	14,103.99	1,567.11	1,227.97	1,952.46
Survivorship 50% (Member)	13	21,160.92	1,627.76	1,235.06	2,604.95
Soc. Sec. - Basic (Under 62)	8	14,985.96	1,873.24	576.82	2,454.20
Soc. Sec. - Survivorship (Under 62)	42	74,702.32	1,778.62	392.25	3,303.92
TOTALS AND AVERAGES	137	\$245,138.02	\$1,789.32	\$ 228.34	\$3,374.07
DISABILITY					
Basic	3	\$ 2,739.70	\$ 913.23	\$ 689.56	\$1,207.18
Life - 10 Years Certain (Member)	1	1,080.89	1,080.89	1,080.89	1,080.89
10 Years Certain (Member)	4	6,464.33	1,616.08	1,033.51	2,606.10
Life - 15 Years Certain (Member)	1	1,143.24	1,143.24	1,143.24	1,143.24
Life - 20 Years Certain (Member)	2	3,271.92	1,635.96	1,042.10	2,229.82
Survivorship 100% (Member)	5	5,389.51	1,077.90	647.56	1,802.07
Survivorship 100% (Beneficiary)	1	674.55	674.55	674.55	674.55
Survivorship 50% (Member)	1	1,356.39	1,356.39	1,356.39	1,356.39
Soc. Sec. - Survivorship (Under 62)	1	1,723.35	1,723.35	1,723.35	1,723.35
Dependent Child	2	434.38	217.19	188.32	246.06
TOTALS AND AVERAGES	21	\$ 24,278.26	\$1,156.10	\$ 188.32	\$2,606.10
DEATH BEFORE RETIREMENT					
10 Years Certain	3	\$ 5,241.74	\$1,747.24	\$ 720.89	\$3,278.58
Survivorship 100%	10	8,247.65	824.76	468.17	1,579.73
Dependent Child	3	1,284.43	428.14	135.74	851.53
TOTALS AND AVERAGES	16	\$ 14,773.82	\$ 923.36	\$ 135.74	\$3,278.58
DEFERRED					
	1	\$ 930.27	\$ 930.27	\$ 930.27	\$ 930.27
SYSTEM TOTALS AND AVERAGES	286	\$467,525.61	\$1,634.70	\$ 57.40	\$3,777.27

TABLE 5 RETIREMENT PAYMENTS BY COUNTY

Adair	\$	319,126	Grant	\$	570,048	Mason	\$	315,381
Allen	\$	248,230	Graves	\$	855,070	Meade	\$	283,240
Anderson	\$	1,046,089	Grayson	\$	339,574	Menifee	\$	104,329
Ballard	\$	205,925	Green	\$	202,780	Mercer	\$	819,454
Barren	\$	699,476	Greenup	\$	223,226	Metcalfe	\$	260,959
Bath	\$	280,568	Hancock	\$	123,564	Monroe	\$	111,502
Bell	\$	360,640	Hardin	\$	883,449	Montgomery	\$	324,620
Boone	\$	435,445	Harlan	\$	393,494	Morgan	\$	245,077
Bourbon	\$	528,446	Harrison	\$	440,352	Muhlenberg	\$	410,939
Boyd	\$	779,945	Hart	\$	217,712	Nelson	\$	610,967
Boyle	\$	1,038,976	Henderson	\$	705,115	Nicholas	\$	156,040
Bracken	\$	120,572	Henry	\$	697,239	Ohio	\$	362,663
Breathitt	\$	247,708	Hickman	\$	134,971	Oldham	\$	863,575
Breckinridge	\$	198,021	Hopkins	\$	1,064,451	Owen	\$	656,431
Bullitt	\$	459,342	Jackson	\$	158,484	Owsley	\$	147,869
Butler	\$	203,405	Jefferson	\$	14,236,312	Pendleton	\$	214,187
Caldwell	\$	480,348	Jessamine	\$	245,376	Perry	\$	362,839
Calloway	\$	992,259	Johnson	\$	307,768	Pike	\$	755,940
Campbell	\$	884,784	Kenton	\$	1,203,016	Powell	\$	134,958
Carlisle	\$	106,488	Knott	\$	231,491	Pulaski	\$	1,193,346
Carroll	\$	238,211	Knox	\$	397,027	Robertson	\$	86,246
Carter	\$	312,229	Larue	\$	329,635	Rockcastle	\$	309,189
Casey	\$	228,605	Laurel	\$	871,084	Rowan	\$	776,445
Christian	\$	1,686,954	Lawrence	\$	206,467	Russell	\$	322,198
Clark	\$	377,427	Lee	\$	148,662	Scott	\$	660,826
Clay	\$	256,039	Leslie	\$	126,371	Shelby	\$	1,123,502
Clinton	\$	128,941	Letcher	\$	248,759	Simpson	\$	221,633
Crittenden	\$	173,301	Lewis	\$	126,589	Spencer	\$	187,304
Cumberland	\$	129,543	Lincoln	\$	384,221	Taylor	\$	244,673
Daviess	\$	1,234,584	Livingston	\$	282,087	Todd	\$	331,341
Edmonson	\$	83,910	Logan	\$	490,358	Trigg	\$	398,560
Elliott	\$	92,551	Lyon	\$	359,138	Trimble	\$	229,733
Estill	\$	221,648	McCracken	\$	1,541,237	Union	\$	339,624
Fayette	\$	4,498,924	McCreary	\$	169,527	Warren	\$	1,790,780
Fleming	\$	417,032	McLean	\$	228,395	Washington	\$	251,902
Floyd	\$	472,039	Madison	\$	843,570	Wayne	\$	278,164
Franklin	\$	10,928,736	Magoffin	\$	155,189	Webster	\$	207,421
Fulton	\$	206,379	Marion	\$	300,498	Whitley	\$	519,019
Gallatin	\$	96,562	Marshall	\$	626,907	Wolfe	\$	154,749
Garrard	\$	282,818	Martin	\$	100,178	Woodford	\$	807,964

PAYMENTS TO RETIREES LIVING IN OTHER STATES

\$3,369,358

TOTAL PAYMENTS FOR FISCAL YEAR ENDING JUNE 30, 1987

\$83,816,754

TABLE 6
MEMBERSHIP GROWTH
6/30/70 through 6/30/87

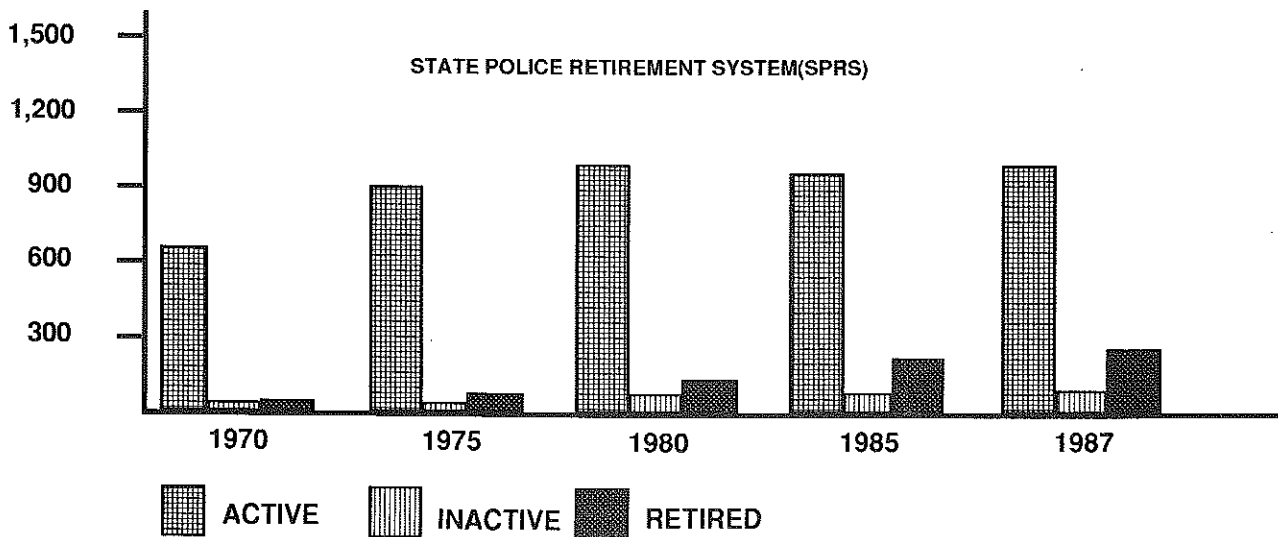
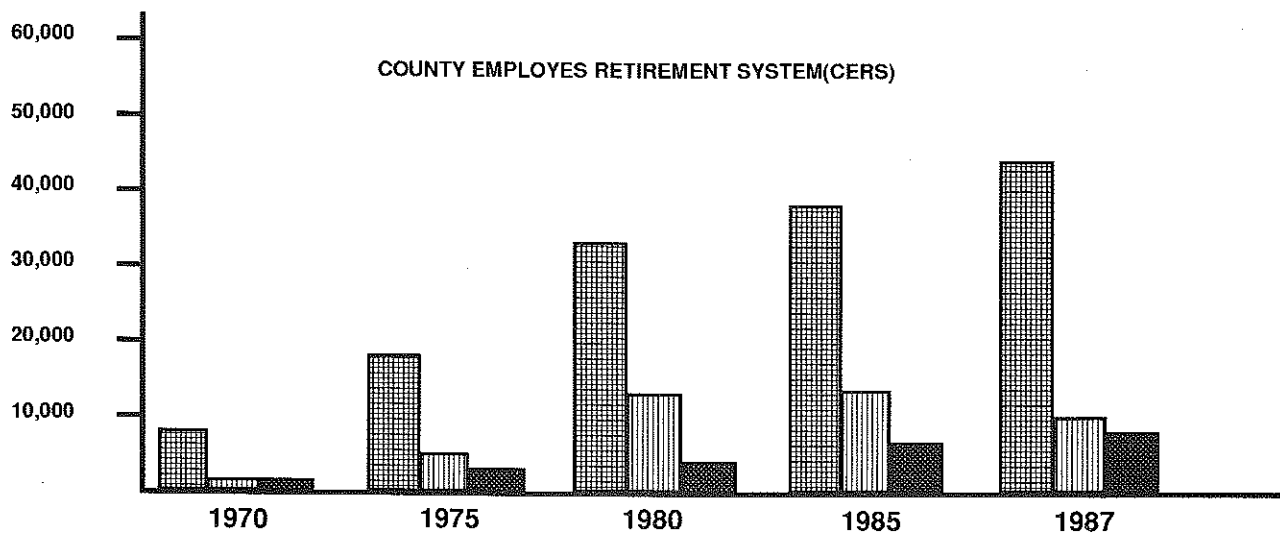
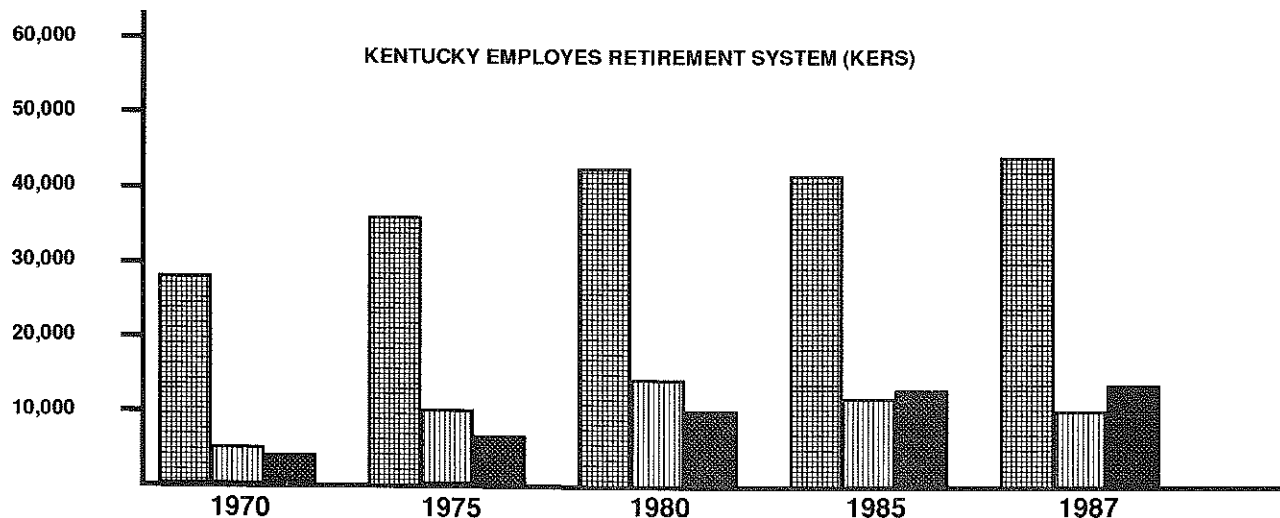


TABLE 7

KENTUCKY EMPLOYEES RETIREMENT SYSTEM
FINANCIAL AND ACTUARIAL STATISTICS

FINANCIAL STATISTICS	6/30/83	6/30/84	6/30/85	6/30/86	6/30/87
Total Assets					
Investment Income	\$710,477,505	\$ 815,654,049	\$ 935,445,553	\$1,080,387,371	\$1,266,111,911
Total Retirement Payments	\$ 57,799,616	\$ 68,498,499	\$ 78,509,704	\$ 84,346,598	\$ 97,094,173
Average Retirement Payment	\$ 31,396,362	\$ 35,467,174	\$ 39,225,080	\$ 43,962,495	\$ 52,414,394
Total Refund Payments	(a) \$222,63	\$238.03	(b) \$266.07	(c) \$278.58	(d) \$334.20
Indicated Current Yield:	\$ 3,996,820	\$ 4,686,153	\$ 5,171,940	\$ 5,105,361	\$ 5,061,156
Fixed Income	10.07	11.03	10.29	9.53	9.36
Common Stocks	6.27	5.33	5.43	4.63	3.58

ACTUARIAL STATISTICS:

Total Accrued Liability	\$862,291,959	\$1,016,088,830	\$1,104,429,988	\$1,245,083,143	\$1,384,259,808
Unfunded Past Service Liability	\$152,196,081	\$ 201,535,007	\$ 169,949,215	\$ 166,635,243	\$ 120,259,389
Percent Unfunded	17.7%	19.8%	15.4%	13.4%	8.7%
Vested Accrued Benefit Liability	\$550,006,161	\$ 618,806,590	\$ 639,003,667	\$ 719,695,970	\$ 812,932,915
Estimated Annual Salaries	\$581,492,676	\$ 627,726,168	\$ 676,557,336	\$ 713,878,356	\$ 757,822,116
Contribution for Unfunded Past Service Liability	\$ 12,936,667	\$ 17,130,476	\$ 14,445,683	\$ 14,997,172	\$ 10,823,346

ACTUARIAL COST-NONHAZARDOUS:

Normal	3.65%	3.36%	3.35%	3.04%	3.05%
Past Service	2.22%	2.75%	2.15%	2.13%	1.47%
Administrative	.09%	.12%	.12%	.12%	.16%
Hospital/Medical Insurance	.29%	.46%	.48%	1.23%	1.31%
Employee Contributions	4.00%	4.00%	4.00%	4.00%	5.00%
TOTAL COST	10.25%	10.69%	10.10%	10.52%	10.99%

CONTRIBUTION RATES-NONHAZARDOUS:

Member	4.00%	4.00%	4.00%	4.00%	5.00%
Employer	7.25%	7.25%	7.25%	7.25%	7.45%
TOTAL RATES	11.25%	11.25%	11.25%	11.25%	12.45%
RATE MARGIN:	1.00%	.56%	1.15%	*.73%	1.46%

ACTUARIAL COST-HAZARDOUS:

Normal	8.40%	9.66%	9.73%	8.68%	8.62%
Past Service	4.00%	1.29%	.88%	.00%	-1.50%
Administrative	.22%	.12%	.13%	.10%	.15%
Hospital/Medical Insurance	.78%	1.04%	1.09%	4.90%	4.94%
Employee Contributions	7.00%	7.00%	7.00%	7.00%	7.00%
TOTAL COST	20.40%	19.11%	18.83%	20.68%	19.21%

CONTRIBUTION RATES-HAZARDOUS:

Member	7.00%	7.00%	7.00%	7.00%	7.00%
Employer	18.25%	18.25%	17.00%	14.00%	14.00%
TOTAL RATES	25.25%	25.25%	24.00%	21.00%	21.00%
RATE MARGIN:	4.85%	6.14%	5.17%	.32%	1.79%

(a) Benefits to retirees increased 7/1/83 from 1/2% to 9 1/2%, depending on how long the recipient had received benefits.

(b) Benefits to retirees increased 1/1/85 by \$1 per month for each year of service credit at the time of retirement for those retired before 8/1/84.

(c) Benefits to retirees increased 7/1/86 by 4%.

(d) Benefits to retirees increased 7/1/87 by 4%.

* Employer and employee contribution rates increased 8/1/86 to offset benefit improvements enacted by the 1986 General Assembly.

TABLE 8

COUNTY EMPLOYEES RETIREMENT SYSTEM
FINANCIAL AND ACTUARIAL STATISTICS

	6/30/83	6/30/84	6/30/85	6/30/86	6/30/87
FINANCIAL STATISTICS:					
Total Assets	\$343,566,575	\$406,673,277	\$478,581,183	\$604,622,294	\$728,750,892
Investment Income	\$ 28,254,250	\$ 35,005,604	\$ 40,147,552	\$ 44,216,104	\$ 54,428,479
Total Retirement Payments	\$ 11,522,297	\$ 13,066,260	\$ 14,843,697	\$ 17,329,099	\$ 18,065,794
Average Retirement Payments	(a) \$159.32	\$166.37	(b) \$182.64	(c) \$185.93	(d) \$221.24
Total Refund Payments	\$ 2,791,345	\$ 3,331,153	\$ 3,570,707	\$ 4,974,503	\$ 4,382,655
Indicated Current Yield:					
Fixed Income	10.53	11.37	10.49	9.65	9.32
Common Stocks	6.08	5.23	5.32	4.43	3.34
ACTUARIAL STATISTICS:					
Total Accrued Liability	\$340,705,763	\$421,336,269	\$463,618,532	\$535,948,094	\$678,442,760
Unfunded Past Service Liability	-0-	\$ 15,148,838	-0-	-0-	-0-
Percent Unfunded	0%	3.6%	0%	0%	0%
Vested Accrued Benefit Liability	\$225,665,745	\$257,218,014	\$283,267,091	\$335,463,975	\$412,426,510
Estimated Annual Salaries	\$380,431,560	\$403,461,792	\$433,135,800	\$484,796,988	\$544,184,376
Contribution for Unfunded Past Service Liability	-0-	\$ 1,287,651	-0-	-0-	-0-
ACTUARIAL COST-NONHAZARDOUS:					
Normal	3.93%	3.80%	3.75%	4.23%	4.20%
Past Service	.00%	.30%	.00%	.00%	-.74%
Administrative	.12%	.15%	.15%	.15%	.18%
Hospital/Medical Insurance	.15%	.29%	.31%	.92%	.95%
Employee Contributions	4.00%	4.00%	4.00%	4.00%	4.25%
TOTAL COST	8.20%	8.54%	8.21%	9.30%	8.84%
CONTRIBUTION RATES-NONHAZARDOUS:					
Member	4.00%	4.00%	4.00%	4.00%	4.25%
Employer	10.25%	6.25%	6.25%	5.25%	5.75%
TOTAL RATES	2.05%	10.25%	10.25%	9.25%	10.00%
RATE MARGIN:		1.71%	2.04%	*-.05%	1.16%

ACTUARIAL COST-HAZARDOUS:

Normal	9.50%	9.46%	9.65%	11.15%	8.92%
Past Service	.00%	.93%	.00%	.00%	-1.80%
Administrative	.37%	.47%	.41%	.24%	.53%
Hospital/Medical Insurance	.78%	.91%	.99%	2.36%	3.31%
Employee Contributions	7.00%	7.00%	7.00%	7.00%	7.00%
TOTAL COST	17.65%	18.77%	18.05%	20.75%	17.96%

CONTRIBUTION RATES-HAZARDOUS:

Member	7.00%	7.00%	7.00%	7.00%	7.00%
Employer	15.00%	14.00%	14.00%	14.00%	14.00%
TOTAL RATES	22.00%	21.00%	21.00%	21.00%	21.00%
RATE MARGIN:	4.35%	2.23%	2.95%	.25%	3.04%

(a) Benefits to retirees increased 7/1/83 from 1/2% to 9 1/2%, depending on how long the recipient had received benefits.

(b) Benefits to retirees increased 1/1/85 by \$1 per month for each year of service credit at the time of retirement for those retired before 8/1/84.

(c) Benefits to retirees increased 7/1/86 by 4%.

(d) Benefits to retirees increased 7/1/87 by 4%.

* Employer and employee contribution rates increased 8/1/86 to offset benefit improvements enacted by the 1986 General Assembly.

TABLE 9
STATE POLICE RETIREMENT SYSTEM
FINANCIAL AND ACTUARIAL STATISTICS

	6/30/83	6/30/84	6/30/85	6/30/86	6/30/87
FINANCIAL STATISTICS:					
Total Assets	\$65,782,369	\$75,033,643	\$85,447,410	\$ 96,714,220	\$110,356,994
Investment Income	\$ 5,438,066	\$ 6,260,996	\$ 6,993,220	\$ 7,453,314	\$ 8,763,083
Total Retired Payments	\$ 2,642,581	\$ 2,890,091	\$ 3,496,109	\$ 4,356,837	\$ 5,107,017
Average Retirement Payment	(a) \$1,212.76	\$1,270.24	(b) \$1,396.42	(c) \$1,442.50	(d) \$1,634.70
Total Refund Payments	\$ 56,809	\$ 117,414	\$ 180,746	\$ 73,447	\$ 127,181
Indicated Current Yield:					
Fixed Income	9.85	11.00	10.11	9.45	9.31
Common Stocks	6.05	4.96	5.25	4.51	3.56
ACTUARIAL STATISTICS:					
Total Accrued Liability	\$81,944,546	\$91,180,668	\$99,269,825	\$105,559,951	\$111,541,989
Unfunded Past Service Liability	\$16,187,460	\$16,200,151	\$14,253,583	\$ 8,892,252	\$ 1,347,385
Percent Unfunded	19.7%	17.8%	14.4%	8.4%	1.2%
Vested Accrued Benefit Liability	\$51,505,988	\$67,913,641	\$76,632,066	\$ 84,495,868	\$ 91,564,168
Estimated Annual Salaries	\$22,231,152	\$23,718,048	\$23,993,016	\$ 24,524,652	\$ 23,859,024
Contribution for Unfunded Past Service Liability	\$ 1,375,934	\$ 1,377,013	\$ 1,211,555	\$ 800,303	\$ 121,265
ACTUARIAL COST:					
Normal	8.88%	9.42%	9.72%	8.33%	8.37%
Past Service	6.19%	5.81%	5.18%	3.26%	.51%
Administrative	.05%	.06%	.07%	.06%	.10%
Hospital/Medical Insurance	.97%	.99%	1.41%	6.38%	7.02%
Employee Contributions	7.00%	7.00%	7.00%	7.00%	7.00%
TOTAL COST:	23.09%	23.28%	23.38%	25.03%	23.00%
CONTRIBUTION RATES:					
Member	7.00%	7.00%	7.00%	7.00%	7.00%
Employer	18.50%	18.50%	18.50%	17.50%	18.25%
TOTAL RATES	25.50%	25.50%	25.50%	24.50%	25.25%
RATE MARGIN:					
	2.41%	2.22%	2.12%	*.53%	2.25%

(a) Benefits to retirees increased 7/1/83 from 1/2% to 9 1/2%, depending on how long the recipient had received benefits.

(b) Benefits to retirees increased 1/1/85 by \$1 per month for each year of service credit at the time of retirement for those retired before 8/1/84.

(c) Benefits to retirees increased 7/1/86 by 4%.

(d) Benefits to retirees increased 7/1/87 by 4%.

* Employer contribution rate increased 8/1/86 to offset benefit improvements enacted by the 1986 General Assembly.

TABLE 10

KENTUCKY RETIREMENT SYSTEMS
 STATEMENT OF SOURCE AND USE OF FUNDS
 BY SYSTEM SINCE INCEPTION THROUGH JUNE 30, 1987

BREAKDOWN PER DOLLAR		SOURCE OF FUNDS	TOTAL AMOUNTS	
KERS \$.24	SPRS \$.25		KERS \$	CERS \$
.33	.36	Member Contributions	441,842,064	236,764,179
.36	.32	Employer Contributions	601,948,340	345,617,757
.00	.00	Investment Income	651,420,027	300,764,635
.00	.00	Special Appropriation	1,894,897	227,263
.07	.07	Alternate & Term. Participation	233,811	4,566,040
\$1.00	\$1.00	Other Receipts	122,406,823	60,874,804
		TOTAL SOURCES	\$1,819,745,962	\$948,814,678
		USE OF FUNDS		
\$.69	\$.77	Invested Assets	\$1,264,179,933	\$728,043,119
.21	.14	Retirement Payments	375,159,401	131,322,428
.05	.05	Refunds	80,898,506	42,811,199
.04	.04	Interest to Members	79,346,281	35,137,267
.01	.00	Administration of Prof. Services	12,121,116	6,893,732
.00	.00	Other Disbursements	8,040,725	4,606,933
\$1.00	\$1.00	TOTAL USES	\$1,819,745,962	\$948,814,678
				SPRS \$ 29,895,782

**TABLE 11
KENTUCKY RETIREMENT SYSTEMS
ADMINISTRATIVE EXPENSE
BY FISCAL YEAR**

	1982-83	1983-84	1984-85	1985-86	1986-87
PERSONNEL COSTS:					
Salaries & Fringe Benefits	\$ 636,311.03	\$ 724,949.55	\$ 839,267.19	\$ 1,010,272.87	\$ 1,310,165.87
CONTRACTUAL SERVICES:					
Auditor	13,750.00	15,300.00	14,800.00	20,193.00	16,600.00
Actuary	25,500.00	25,350.00	22,000.00	42,028.33	25,000.00
Janitorial Services	4,195.90	3,976.94	3,293.88	3,508.94	11,021.00
Legal Services	628.00	.00	6,900.20	11,799.63	18,486.23
Medical	13,255.75	15,509.58	20,532.65	21,377.37	34,485.87
Miscellaneous	574.60	574.85	5,466.36	2,043.63	4,482.89
TOTAL	\$ 694,215.28	\$ 785,660.92	\$ 912,260.28	\$ 1,111,223.77	\$ 1,420,241.86
OPERATING EXPENSES:					
Postage & Freight	\$ 88,570.84	\$ 114,265.23	\$ 111,980.93	\$ 136,194.68	\$ 196,610.61
Utilities	11,352.64	10,973.40	10,735.85	11,484.54	24,729.70
Telephone	21,777.05	22,056.25	26,120.83	25,813.26	21,930.59
Travel	7,262.84	4,892.23	8,517.41	9,457.76	25,866.52
Printing & Duplicating	34,584.84	35,811.48	50,105.61	47,547.03	47,640.86
Maintenance-Equipment	14,979.45	16,838.06	26,202.58	30,721.20	45,604.13
Maintenance-Bldg. & Grnds.	1,166.82	5,738.60	1,032.15	3,360.63	2,192.06
Laundry	400.86	688.84	411.38	506.02	536.72
Assessed Car Rental	2,992.07	2,230.47	1,887.86	2,244.08	2,459.61
Supplies-Office	7,249.69	8,213.67	10,879.36	15,574.84	18,231.94
Supplies-Data Processing	6,302.51	12,817.56	19,265.09	14,889.23	31,370.53
Supplies-Janitorial	243.74	91.94	27.26	27.26	63.70
Rental-Building	26,650.00	26,650.00	26,650.00	26,650.00	164,247.96
Rental-Data Processing	56,844.98	57,000.00	45,692.54	23,836.40	.00
Rental-Office Equipment	17,404.01	24,591.84	24,101.20	11,584.89	11,929.50
Insurance	4,056.61	2,327.00	3,004.00	2,906.90	4,347.29
Bonds	5.00	1,776.25	1,776.25	677.01	1,776.25
Dues & Subscriptions	1,356.62	2,290.60	3,245.24	3,196.68	7,874.64
Employee Training Expense	726.78	1,964.05	1,501.40	1,694.80	2,549.70
Miscellaneous	393.32	16.07	2,525.99	707.44	2,234.49
Photo Supplies (Micrographics)	.00	17.50	.00	.00	36,929.60
Furniture Office Equipment	1,837.18	2,425.14	2,749.82	2,672.17	11,633.02
Lease Purchase Office Equipment	14,355.48	14,093.52	28,263.00	43,649.80	39,394.56
Conference Expenses	300.00	520.00	675.00	1,189.00	550.00
TOTAL	\$ 320,813.33	\$ 368,289.70	\$ 407,350.75	\$ 416,585.62	\$ 700,703.98
Capital Outlay	\$ 794.92	\$ 42,943.46	\$ 56,962.68	\$ 49,122.50	\$ 262,912.00
TOTAL ADMINISTRATIVE EXPENSE	\$ 1,015,823.53	\$ 1,196,894.08	\$ 1,376,573.71	\$ 1,576,931.89	\$ 2,383,857.84
DISTRIBUTION OF COST BY SYSTEM					
Kentucky Employees Retirement Syst.	\$ 558,702.94	\$ 623,177.92	\$ 757,115.54	\$ 804,235.26	\$ 1,168,090.34
County Employees Retirement Syst.	446,982.35	561,747.22	605,692.43	756,927.31	1,191,928.92
State Police Retirement Syst.	10,158.24	11,968.94	13,765.74	15,769.32	23,838.58
TOTAL	\$ 1,015,823.53	\$ 1,196,894.08	\$ 1,376,573.71	\$ 1,576,931.89	\$ 2,383,857.84

