

PERFORMANCE AUDIT REPORT

**Kansas Public Employees Retirement System
Reviewing Investment Practices and Performance
For Fiscal Year 1992**

**A Report to the Legislative Post Audit Committee
State of Kansas
May 1993**

Legislative Post Audit Committee

Legislative Division of Post Audit

THE LEGISLATIVE POST Audit Committee and its audit agency, the Legislative Division of Post Audit, are the audit arm of Kansas government. The programs and activities of State government now cost about \$6 billion a year. As legislators and administrators try increasingly to allocate tax dollars effectively and make government work more efficiently, they need information to evaluate the work of governmental agencies. The audit work performed by Legislative Post Audit helps provide that information.

We conduct our audit work in accordance with applicable government auditing standards set forth by the U.S. General Accounting Office. These standards pertain to the auditor's professional qualifications, the quality of the audit work, and the characteristics of professional and meaningful reports. The standards also have been endorsed by the American Institute of Certified Public Accountants and adopted by the Legislative Post Audit Committee.

The Legislative Post Audit Committee is a bipartisan committee comprising five senators and five representatives. Of the Senate members, three are appointed by the President of the Senate and two are appointed by the Senate Minority Leader. Of the Representatives, three are appointed by the Speaker of the House and two are appointed by the Minority Leader.

Audits are performed at the direction of the Legislative Post Audit Committee. Legislators or

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PERFORMANCE AUDIT REPORT

KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM REVIEWING INVESTMENT PRACTICES AND PERFORMANCE FOR FISCAL YEAR 1992

OBTAINING AUDIT INFORMATION

This audit was conducted by Berberich Trahan & Co., a certified public accounting firm, under contract with the Legislative Division of Post Audit. If you need any additional information about the audit's findings, please contact Randy Tongier, Financial and Compliance Audit Manager, at the Division's offices.

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REPORT ON SELECTED INVESTMENT PRACTICES OF THE KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM

Legislative Division of Post Audit:

The Legislative Division of Post Audit contracted with our firm to complete a performance audit of certain selected investment practices of the Kansas Public Employees Retirement System. We were asked to specifically address the following three questions:

1. How well have the Kansas Public Employees Retirement System's investment managers performed in relation to the market as a whole and in relation to other selected systems.?
2. How is the rate of return on the Retirement System's investments determined and how does this compare with other selected states?
3. How are the System's investment managers compensated and how does this compare with other selected systems?

We conducted our performance audit in accordance with the standards for performance audits contained in Governmental Auditing Standards issued by the Comptroller General of the United States except, as instructed, we did not verify information provided by the Retirement System or its consultants.

To answer the above questions, we reviewed the Retirement System's current investment policies and interviewed staff members from the Retirement System. We also reviewed the Retirement System's records concerning investment manager compensation and rate of return for the System's investments. The method by which the rates of return were calculated was reviewed and tested to assure reliance upon this data. We also surveyed a sample of other state retirement systems to determine how those states handled their retirement funds.

The pertinent data gathered in answering the above questions as well as our findings and recommendations follow. We would be happy to discuss these finding and recommendations with you.

Berberich Trahan & Co., P.A.

April 9, 1993



**KANSAS PUBLIC EMPLOYEES RETIREMENT SYSTEM:
REVIEWING INVESTMENT PRACTICES AND
PERFORMANCE FOR FISCAL YEAR 1992**

Summary of Audit Findings

Under State law, the Kansas Public Employees Retirement System's (KPERS) Board of Trustees is responsible for managing the Kansas Public Employees Retirement Fund. The Board has delegated its authority to make investments to numerous investment managers under contract with the Retirement System. These investment managers make various types of investments for the Retirement Fund.

The System monitors the investment practices of their external managers through the efforts of internal staff and other hired consultants. The System has contracted with an investment performance consultant to calculate the rates of return that individual investment managers are achieving on their investments of the System's funds. Further, the System has acquired the expertise of other investment consultants for determining a target asset mix, and for selecting and retaining investment managers.

The System's Board of Trustees began allowing its investment managers to make direct placement investments meeting certain criteria in the mid-1970s. The scope of these investments broadened in the mid-1980s. However, beginning in fiscal year 1989, the System began to recognize significant losses from its direct placement investments, peaking with the fiscal year 1991 loss of approximately \$65 million invested in Home Savings Association.

To address concerns about the System's investment practices and losses, the Joint Committee on KPERS Investment Practices was established by the 1991 Legislature. Legislation was passed during the 1992 session (Kansas Statute 74-4921), that requires an annual performance audit to be conducted. To facilitate the Joint Committee's work, the Legislative Post Audit Committee authorized a performance audit (92PA31) to be completed. The following points were addressed during this audit.

How well have the Kansas Public Employees Retirement System's investment managers performed in relation to the market as a whole and in relation to other selected systems? The System has contracted with sixteen outside investment firms to manage the System's assets. The System's funds may be invested in Domestic Equity, Domestic Fixed Income, International Equity, International Fixed Income, Direct Placement, and Real Estate funds, with any excess funds being invested on a short-term basis in a cash fund.

For fiscal year 1992, the investments by these managers resulted in an overall rate of return of 12.8%. This rate of return is calculated by the System's investment performance consultant, CDA Investment Technologies, Inc. (CDA). The System's investments performed above average when compared to industry benchmarks. However, when comparing the System's results to those of ten other selected state systems, KPERS' return is about average for the year.

The System should continue to utilize the internal monitoring system that began development early in fiscal year 1992 to assure that the investment managers are performing as desired. Further, it appears that the continued use of investment consultants in selecting and retaining investment managers is a necessary means by which the System's investment performance can be maintained.

How is the rate of return on the Retirement System's investments determined and how does this compare with other selected states? The System employs an investment performance consultant, CDA, to calculate the rates of return on investments. This consultant obtains income and expense data from the investment managers through the System's custodian bank. CDA calculates a monthly time-weighted rate of return for each of the System's different asset types as well as for each investment manager.

Past audits of the System uncovered the fact that discrepancies could exist in the rate of return calculation. At the time of the prior audit, Callan Associates was performing the investment performance calculations. Callan resigned effective September 13, 1991. CDA was hired as the investment performance consultant effective December 12, 1991. The System's internal investment staff examined each direct placement and real estate investment in detail from its inception through June 30, 1991 to assure that all items were properly recorded. Once these investments were corrected, CDA performed a recalculation of the rates of return for prior years.

The System calculates its rates of return in much the same manner as other systems do. All of the systems surveyed use either a monthly or quarterly time-weighted return calculation. Further, all but one of the systems surveyed use an outside consultant to calculate their rates of return.

By employing a new investment performance consultant, a new custodian bank, and by hiring more internal staff to monitor the direct placement portfolio and real estate investments, the System has developed a good infrastructure for assuring the accurate reporting of information upon which the rates of return are calculated. It is important for the System to continue to monitor the activity of all of its investments.

How are the System's investment managers compensated and how does this compare with other selected systems? During fiscal year 1992, the System paid external managers \$14 million to handle its investments which had a carrying value of approximately \$4.2 billion as of June 30, 1992. Most of the System's investment managers are hired under an individually negotiated fee structure that is based upon the market value of the assets managed. The System's direct placement manager and real estate managers are compensated on a flat fee basis. Further, the System has hired three investment consultants to perform various tasks on a flat fee, per project basis.

The System had used directed brokerage fees, or "soft dollars", to compensate its investment performance consultant. However, the System changed performance consultants during fiscal year 1992. Board policy dictates that the System no longer use "soft dollars". As an alternative, the System has entered into a commission recapture program. The System has requested that certain domestic equity managers direct 35% of their commission dollars through two specified brokerage firms as long as competitive execution can be obtained. In turn, these brokerage firms rebate a certain percentage of the commissions earned, directly to the System. During fiscal year 1992, the amount of commissions recaptured amounted to approximately \$100,000.

The Kansas System's practice of using negotiated fee structures for compensation is also followed by most other systems. The System paid approximately \$14.0 million in investment manager fees during fiscal year 1992. These fees represent 0.315 percent of assets managed. This ranks as the second highest among the seven systems that responded to the survey. Further, the \$14.0 million includes approximately \$4.2 million in fees paid to its direct placement and real estate managers who are being compensated on a flat fee basis to manage these investments which are comprised of many troubled assets. After taking this into account, it appears that the external management fees paid by the System are comparable to other state retirement systems.

Background of the Kansas Public Employees Retirement System

The Kansas Public Employees Retirement System (KPERS) was established in 1961 to provide a systematic retirement plan for public employees in Kansas. In addition to the retirement plan, the System provides group life and disability insurance coverage for its members.

The Retirement System is actually an umbrella organization that is made up of three separate membership groups -- the Kansas Public Employees Retirement System, the Kansas Police and Firemen's Retirement System, and the Kansas Retirement System for Judges. The System covers most public employees in Kansas, such as state and local government employees. On June 30, 1992, the system had over 122,000 active members and 1,200 participating employers.

To pay the various retirement, disability, and death benefits to eligible members and beneficiaries, the Retirement System accumulates assets by receiving employee and employer contributions and earnings on its investments. As of June 30, 1992, the System's investments were valued at approximately \$4.2 billion. Those investments included corporate stocks and bonds, government notes, real estate, and direct placement investments in certain companies. The investments provide income to the System through interest, dividends, and profits from sales. The System also holds interest-producing short-term investments.

The Retirement System is governed by a seven-member Board of Trustees. Board members are appointed by the Governor, with the advise and consent of the Senate, to overlapping four-year terms of office. The Board appoints an Executive Secretary to manage the System's daily operations. The Retirement System employs about 65 full-time staff members in six areas: member services, data processing, records and reports, accounting, administrative services, and investments. The System's employees provide the general administration and operation of the Retirement Fund, including various activities involving employer and employee contributions and member benefits. The investment department consists of seven full-time employees who monitor the System's investments. In addition, the Board has designated a two-member direct placement sub-committee which meets with staff to review transactions and provide oversight for the direct placement investments. The System's administrative expenses, including employee salaries and wages, are paid from the Kansas Public Employees Retirement System fund.

The Retirement System's employees do not actually perform many of the System's investment-related activities. Rather, the Board contracts with various outside managers and consultants to provide these services, and the System's investment staff monitors the performance of those managers and consultants. In general, the System contracts with the following types of consultants and investment managers:

- **Actuaries** to help determine the probable obligations of the Retirement System, the contributions required, recommended rates for employer contributions, and other factors.
- **Investment managers** to select and make actual investments within certain guidelines established by the Board.

- **Investment consultants** to recommend the Retirement System's investment mix and allocations to individual managers, to assist with developing investment guidelines, and to evaluate and monitor investment performance.
- **Investment custodians** to administer and account for the securities held by the Retirement System.
- **Appraisers** to perform valuations of the real estate properties owned by the Retirement System.

Fees for these outside managers and consultants are generally paid from the KPERS fund. As of June 30, 1992, there were sixteen outside investment managers under contract with the Retirement System.

As noted above, the System hires investment managers to select and make actual investments for the System. Investment managers are meticulously selected based upon many criteria which include the type of investments that the manager specializes in, and the investment strategy of the investment manager as well as performance for other clients.

The necessary pool of investment managers is largely determined by the investment mix desired by the system. The following chart indicates the actual and targeted investment mixes for the System for 1992. It is important to note that in fiscal year 1992, the System hired an investment consultant to evaluate the System's investment mix. This mix is partially determined by guidelines issued by the state legislature. During the 1992 Legislative session, a bill was passed whereby the System was allowed to invest a maximum of sixty percent of its funds in equities. This represents a ten percent increase from the prior law. The result of this study was a new target investment mix. This mix is indicated in the chart below as the fiscal year 1993 target.

KPERS Investment Mix -- Target Vs. Actual

<u>Asset Type</u>	<u>Market Value</u>			
	<u>Per Annual Report June 30, 1992</u>	<u>Actual Mix For FY 1992</u>	<u>Target For FY 1992</u>	<u>Target For FY 1993</u>
Domestic equity	\$ 1,522,000,000	34.2%	30.0%	45.0%
International equity	300,000,000	6.7%	6.0%	15.0%
Domestic bonds	1,798,000,000	40.4%	34.0%	23.0%
International bonds	256,000,000	5.8%	3.0%	2.0%
Real estate	361,000,000	8.1%	15.0%	6.0%
Alternative investments	153,000,000	3.4%	7.0%	4.0%
Cash equivalents	<u>60,000,000</u>	<u>1.4%</u>	<u>5.0%</u>	<u>5.0%</u>
	<u>\$ 4,450,000,000</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

The System has a diverse investment mix when comparing it to the mix of other state systems. The Kansas System has chosen to invest in seven types of investments. No other system surveyed invests in more types of investments. Further, the System does not appear to be overly invested in any type of investment, when comparing the System's mix to that of other states. Of the eleven systems surveyed including KPERS, Kansas is one of only four systems that invests in International Equity and one of only two states that invests in International Fixed Income investments. The investment mixes of the ten systems surveyed, as well as the Kansas System's mix, is presented in the following chart:

**Investment Mixes for Selected State Systems
As of June 30, 1992 except as noted below**

<u>State</u>	<u>Domestic Equity</u>	<u>Intern't'l Equity</u>	<u>Domestic Fixed Income</u>	<u>Intern't'l Fixed Income</u>	<u>Real Estate</u>	<u>Cash & Equivalents</u>	<u>Alternative Investments</u>
Kansas	34.20%	6.70%	40.40%	5.80%	8.10%	1.40%	3.40%
Colorado (a)	36.72%	11.91%	41.13%	1.84%	4.70%	1.78%	1.92%
Indiana	-	-	100.00%	-	-	-	-
Iowa	26.79%	3.92%	41.05%	-	7.03%	1.28%	19.93%
Kentucky	59.03%	-	22.56%	-	5.83%	12.58%	-
Minnesota	29.21%	-	41.62%	-	-	24.47%	4.70%
Mississippi	39.45%	2.46%	56.38%	-	-	1.71%	-
Missouri	54.37%	-	39.09%	-	4.77%	0.26%	1.52%
Nebraska (c)	3.20%	-	96.80%	-	-	-	-
Oklahoma (b)	52.60%	-	39.96%	-	7.42%	-	-
Wisconsin	44.20%	-	34.30%	-	2.50%	18.30%	0.70%

(a) Reported as of 12/31/91

(b) Information obtained from June 30, 1991 Annual Report

(c) Domestic Fixed Income investments include IPG Contract and GIC's which represent 54% and 41%, respectively of the total asset mix.

How Well Have the Kansas Public Employees Retirement System's Investment Managers Performed?

Under State law, the Kansas Public Employees Retirement System's Board of Trustees is responsible for managing the Kansas Public Employees Retirement Fund. The Board has delegated its authority to make investments to numerous outside investment managers under contract with the Retirement System. At June 30, 1992, KPERS had contracted with sixteen external investment managers to manage the funds of the System. These managers are ultimately selected by the Board of Trustees of the System. However, the KPERS investment staff and its consultants have been given the task of doing much of the preliminary work in selecting the final pool of investment manager candidates, for the Board to discuss and approve.

The Board, through adherence to Kansas statutes, has designated that the System's funds may be invested in Domestic Equity, Domestic Fixed Income, International Equity, International Fixed Income, Direct Placements, and Real Estate funds, with any excess funds being invested on a short-term basis in a cash fund. The exception to this would be that the common stock of banks, savings & loans, and credit unions cannot be purchased. KPERS will select managers that specialize in each specific type of investment. This includes an analysis of the number of managers needed for each part of the asset mix. Further, within each asset type, a particular investment manager may tend to invest in a particular mix of companies (e.g. growth, value, small cap, large cap, high dividend, etc.).

Schedule of Investment Management Firms

Investment Management Firm	Type of Investment	Investment Strategy	Date Hired by Retirement System
Loomis, Sayles and Co., Inc. Pasadena, CA	Domestic equity	Mid/Large Cap value stocks	April 1989
Wells Fargo Bank San Francisco, CA	Domestic equity	Investments track Standard & Poors 500 index	December 1989
Pilgrim, Baxter, Greig & Associates Wayne, PA	Domestic equity	Two portfolios: one with Mid-Cap growth stocks, the other with Small-Cap growth stocks	February 1984
Delaware Investment Advisers Philadelphia, PA	Domestic equity	Mid/Large Cap value stocks	April 1989
Provident Investment Counsels, Inc. Pasadena, CA	Domestic equity	Two portfolios: one with Large-cap growth, the other with small-cap growth	February 1984
Alliance Capital Management, Inc. New York, NY	International equity	Active International EAFE	January 1987
Nomura Capital Management Corp. Minneapolis, MN	International equity	Active International EAFE	January 1987

Schedule of Investment Management Firms
(Continued)

<u>Investment Management Firm</u>	<u>Type of Investment</u>	<u>Investment Strategy</u>	<u>Date Hired by Retirement System</u>
Loomis, Sayles and Co., Inc. Boston, MA	Domestic fixed income	High yield bonds	February 1988
Pacific Investment Management Co. Newport Beach, CA	Domestic fixed income	Core - invests in U.S. corporate bonds and government agency securities with overall maturities. Also allowed to invest up to 20% of KPERS assets in the PIMCO international fund	July 1981
Wells Fargo Bank San Francisco, CA	Domestic fixed income	Quasi-Passive investments in intermediate to long-term U.S. government and corporate bonds	October 1991
Julius Baer Investment Management, Inc. New York, NY	International fixed income	Actively managed Foreign Government fixed income securities	June 1987
The O'Connor Group (a) New York, NY	Real estate	Direct investments in real estate and in a commingled real estate fund.	August 1985
L & B Real Estate Counsel Dallas, TX	Real estate	Commingled fund investments in commercial real estate	August 1989
Pacholder Associates, Inc.	Direct placements	Private placements	May 1991
Morris Anderson	Direct placements	Private placements	March 1992
Payden & Rygel Investment Counsel	Cash	Short- and intermediate-term fixed income investments	December 1985

(a) Ceased providing services January 1993.

Once selected, the System's investment staff is responsible for overseeing that each manager is performing their duties as expected. The System has employed three consultants in an effort to assist them with this responsibility. Included among these consultants is CDA who provides a performance analysis of each investment manager. In addition, the direct placement and real estate portfolios utilize a unique multi-party approval process which requires prior approval by the System's investment staff and/or the Board for significant transactions.

The System's performance vs. the market (5 year comparison)

As noted on the following schedule, the System's investments out-performed the market average on an overall basis for fiscal year 1992. The only investment type where the System's return was lower than the market was real estate. This lower return is mainly due to a depressed real estate market, and investments which incurred large valuation decreases. Further, this is the first year that external, independent appraisals were performed on the real estate portfolio.

	<u>Annual Rate of Return for Fiscal Year . . .</u>					<u>3-Year Annual Return</u>	<u>5-Year Annual Return</u>
	<u>1992</u>	<u>1991</u>	<u>1990</u>	<u>1989</u>	<u>1988</u>		
KPERS domestic equity	15.1%	5.1%	18.6%	13.3%	-9.2%	12.8%	8.1%
Standard & Poor's 500 (a)	13.3%	7.4%	16.4%	20.5%	-6.9%	12.3%	9.7%
Standard & Poor's 500 (South Africa Free) (b)	14.7%	5.9%	14.5%	20.4%	-7.4%	11.6%	9.2%
KPERS domestic fixed income	17.2%	10.6%	6.0%	13.9%	7.0%	11.2%	10.9%
Lehman Brothers gov't./corp. index (c)	14.2%	10.2%	7.1%	12.3%	7.4%	10.5%	10.2%
KPERS international equities	2.7%	-11.2%	25.6%	13.7%	5.6%	4.6%	6.6%
MSCI EAFE Index (USD) (d)	-0.7%	-11.5%	3.2%	9.5%	4.1%	-3.2%	0.7%
KPERS int'l. fixed income	28.9%	10.6%	7.8%	0.8%	18.1%	15.4%	12.8%
Salomon Non-US world gov't. bond (e)	27.3%	9.9%	7.3%	-2.2%	12.1%	14.5%	10.5%
KPERS real estate	-13.3%	-1.4%	8.0%	5.5%	5.8%	-2.6%	0.6%
NCREIF real estate index (f)	-6.7%	-1.1%	5.6%	7.1%	7.1%	-0.9%	2.2%

The System's performance vs. the market (5 year comparison) (Continued)

	<u>Annual Rate of Return for Fiscal Year . . .</u>					<u>3-Year Annual Return</u>	<u>5-Year Annual Return</u>
	<u>1992</u>	<u>1991</u>	<u>1990</u>	<u>1989</u>	<u>1988</u>		
KPERS direct placement (g)	26.5%	-37.8%	3.9%	8.0%	9.5%	-6.5%	-0.7%
KPERS cash and equivalents 90-day treasury bill index (h)	9.0%	9.3%	8.6%	8.9%	7.4%	9.0%	8.6%
Consumer price index (i)	5.2%	7.6%	8.5%	8.5%	6.8%	7.1%	7.3%
KPERS total fund	3.1%	4.5%	4.8%	5.3%	3.7%	4.1%	4.3%
KPERS accounting rate of return (j)	12.8%	0.3%	12.1%	12.0%	-0.6%	8.2%	7.1%
KPERS accounting rate of return (j)	9.8%	3.3%	7.2%	7.8%	12.1%	6.7%	8.0%

- (a) Standard & Poor's 500 Index contains a representative sample of common stocks that trade on the New York and American Stock Exchange and some over-the-counter stocks. The index is weighted by market capitalization and calculated on a total return basis with dividends reinvested.
- (b) Standard & Poor's 500 South African Fee Index is the Standard & Poor's 500 Index less the common stocks of companies which are engaged in business in the Republic of South Africa and are listed in Section I of the Investors Responsibility Research Code (IRRC).
- (c) Lehman Brothers Gov't./Corp. Bond Index is a composite of all publicly issued, non-convertible debt ranked at least BAA by Moody's, BBB by S&P Corporation or, in the case of bank bonds, BBB by Fitch Investors Service. The bonds must have at least \$1 million outstanding principal and a minimum of one-year maturity. The index is weighted by the market value of each issue.
- (d) Morgan Stanley Capital International (MSCI) EAFE Index contains approximately 1,053 companies from 18 countries. The index represents the stock exchanges of Europe, Australia, New Zealand and the Far East. The index is market value-weighted and calculated with the net dividends, after foreign taxes have been withheld, reinvested.
- (e) Salomon Non-U.S. World Government Bond Index is designed to provide a measure of performance of fixed-rate securities in the international government bond market. The following eight countries are included in the index: Japan, United Kingdom, West Germany, France, Canada, Netherlands, Australia, and Switzerland. All issues must have a maturity of one year or more.
- (f) NCREIF Real Estate Index is maintained by the National Council of Real Estate Investment Fiduciaries and measures income producing properties owned by commingled funds.
- (g) No comparable rates of return exist because of the nature of the investments.
- (h) 90 Day Treasury Bill Index measures the performance of the most current three month Treasury Bill.
- (i) Consumer Price Index measures the relative price changes of a selected group of goods and services. CPI is frequently used as a measure of inflation.
- (j) Accounting rate of return represents net income divided by average investment cost basis.

The System's performance vs. the market (5 year comparison) (Continued)

The System's **Domestic Equity** fund return (15.1%) was greater than Standard & Poor's 500 SAF return rate of 14.7%. This is a positive factor considering that in fiscal year 1991 the System's return was below S&P's. Further, it should be noted that the System's annualized return over the last five years is still lower than S&P's. However, the three year annualized return of the System is greater than S&P's. This shows an improvement in the performance of the System's **Domestic Equity** fund.

During fiscal year 1992, the System's **Domestic Fixed Income** fund continued to out-perform the market which is represented by Lehman Brothers government/corporate index. This marks the second year in a row that this has occurred. Further, the System's three- and five-year annualized returns are above the market's average. The System's **International Equity** fund has consistently had a higher total return than the market over the past five years. The same can also be said for the **International Fixed Income** fund.

For the last two years, the System's **Real Estate** investments have lagged behind the NCREIF benchmark. This is mainly due to a depressed real estate market, and investments which incurred large valuation decreases. Further, this is the first year that external, independent appraisals were performed on the real estate portfolio. The System is attempting to improve the portfolio by hiring a new investment officer, and by maintaining more internal controls over these investments.

The **Direct Placement** portfolio performance has been volatile over the past several years. As a result of significant valuation impairments which were recognized by the System at June 30, 1991, the returns for that year were extremely negative. The 1992 fiscal year returns reflect the receipt of income and principal on investments with a lower adjusted cost basis. The System is also attempting to improve this portfolio by hiring a new investment officer, and by maintaining more internal controls over the investments. The System had not been monitoring this portfolio's rate of return in comparison with any benchmarks for the last two years due to the changes that were occurring to the investments. However, effective February 12, 1993, the Board has adopted an investment policy whereby the portfolio's manager will be expected to achieve a time-weighted rate of return that exceeds the S&P 500 rate of return by 8% or more.

The System's Performance vs. the Market (fiscal year 1992 by manager)

It is important not only to compare the System's performance by asset type, but also to compare each manager's performance to a benchmark rate of return. For fiscal year 1992, the individual investment managers of the System performed in a manner similar to that of the market. This is illustrated by the following chart:

<u>Investment Management Firm</u>	<u>Type of Investment</u>
Loomis, Sayles and Co., Inc. Pasadena, California	Domestic equity
Wells Fargo Bank San Francisco, California	Domestic equity
Pilgrim, Baxter, Greig and Associates Wayne, Pennsylvania	Domestic equity
Delaware Investment Advisers Philadelphia, Pennsylvania	Domestic equity
Provident Investment Counsel, Inc. Pasadena, California	Domestic equity
Alliance Capital Management, Inc. New York, New York	International equity
Nomura Capital Management Corp. Minneapolis, Minnesota	International equity
Loomis, Sayles and Co., Inc. Boston, Massachusetts	Domestic fixed income
Pacific Investment Management Co. Newport Beach, California	Domestic fixed income
Wells Fargo Bank San Francisco, California	Domestic fixed income
Julius Baer Investment Management, Inc. New York, New York	International fixed income
The O'Connor Group (b) New York, New York	Real estate
L & B Real Estate Counsel Dallas, Texas	Real estate
Pacholder & Morris Anderson	Direct Placements
Payden & Rygel Investment Counsel	Cash
Total Managed by Outside Managers	
Other investments managed by KPERS	
Less: Allowance for losses reserve	
Totals	

(a) Investment manager started in October, 1991. Therefore, no annual rate of return could be appropriately calculated. The rate shown is for the nine months ended June 30, 1992.

(b) Ceased providing services January 1993.

<u>Market Value of Assets Managed As of 6/30/92 (in millions)</u>	<u>Carrying Value of Assets Managed As of 6/30/92 (in millions)</u>	<u>Rate of Return for Year Ended June 30, 1992</u>	<u>Market Rate of Return for Similar Investment Type</u>
\$ 209.0	\$ 194.4	15.4%	14.7%
358.6	319.7	13.0%	14.7%
222.4	175.0	10.8%	14.7%
359.6	339.1	13.8%	14.7%
375.9	172.0	23.7%	14.7%
160.3	167.4	3.7%	-0.7%
153.1	157.1	1.6%	-0.7%
549.3	551.1	18.8%	14.2%
509.8	498.7	18.3%	14.2%
328.2	323.7	(a) 8.4%	14.2%
131.3	129.5	28.9%	27.3%
227.5	327.5	5.1%	-6.7%
100.0	100.0	-21.0%	-6.7%
159.4	251.3	26.5%	21.3%
<u>\$ 568.8</u>	<u>\$ 561.9</u>	<u>9.0%</u>	<u>4.2%</u>
4,413.2	4,268.4	<u>12.8%</u>	<u>11.7%</u>
36.8	39.4		
<u>\$ _____</u>	<u>\$ -125.7</u>		
<u>\$ 4,450.0</u>	<u>\$ 4,182.1</u>		

The System's Performance vs. the Market (fiscal year 1992 by manager) (Continued)

Provident Investment Counsel, Inc. reported the greatest rate of return for the domestic equity managers. Their return of 23.7% well out-paced that of the market (14.7%). On the downside, both Wells Fargo Bank (13.0%) and Pilgrim, Baxter, Greig and Associates (10.8%) were out-performed by the market.

From the domestic fixed income side, both the managers that were employed by the System for the entire year out-performed the market, and both had similar rates of return. No conclusion can be reached regarding Wells Fargo's performance as they were actively managing funds for only nine months of the year.

Both of the international equity managers out-performed the market, with Alliance Capital Management, Inc. showing the greatest rate of return. Julius Baer Investment Management, Inc. is the only international fixed income manager, and their results out-performed the market.

The System's returns by investment type vs. the returns of other states

As part of our analysis of the System's investment performance, we surveyed ten other state systems. We asked the other systems to respond to numerous questions, one of which was to report their rate of return by investment type. The results of our survey are shown on the following schedule. **It is important to note that the rates of return for three of the states are reported as of dates that vary from those of the other states, Therefore, comparisons between these states is difficult. Also, some states either did not have investments of a particular type, or they chose not to respond to this part of the survey.**

State	Domestic Equity	Intern't'l Equity	Domestic Fixed Income	Intern't'l Fixed Income	Real Estate	Cash & Equivalents	Alternative Investments	Overall
Kansas (c)	15.1%	2.7%	17.2%	28.9%	-13.3%	9.0%	26.5%	12.8%
Colorado (b)	29.6%	4.3%	16.9%	(a)	-7.5%	9.1%	10.0%	20.1%
Indiana (c)	N/A	N/A	14.9%	N/A	N/A	N/A	N/A	14.9%
Iowa (c)	12.0%	5.7%	16.9%	N/A	-23.8%	6.1%	(e)	8.4%
Kentucky (c)	13.6%	N/A	14.1%	N/A	-0.8%	5.1%	N/A	11.7%
Minnesota (c)	14.3%	N/A	14.7%	N/A	N/A	5.4%	(d)	14.5%
Mississippi (c)	13.7%	5.2%	15.3%	N/A	N/A	4.9%	N/A	14.0%
Missouri (c)	12.5%	N/A	16.0%	N/A	4.8%	4.9%	(a)	13.5%
Nebraska (b)	(a)	N/A	(a)	N/A	N/A	N/A	N/A	8.6%
Oklahoma (c)	(a)	N/A	(a)	N/A	(a)	N/A	N/A	11.6%
Wisconsin (f)	14.3%	N/A	14.9%	N/A	(a)	9.4%	(a)	6.7%

(a) Information not given by System

(b) Information presented for year ended 12/31/91

(c) Information presented for year ended 6/30/92

(d) Reported a 51.9% return on Venture Capital and a 5.7% return on Oil & Gas

(e) Reported a 16.0% return on Tactical Allocation Investments, a 2.8% return on LBOs, and a 22.6% return on Venture Capital

(f) Information presented for year ended 6/30/91

The System's returns by investment type vs. the returns of other states (Continued)

The Kansas System's **overall return** of 12.8% rated as the sixth highest among the eleven states surveyed. The System performed at or above other states at the individual asset type level. The **Domestic Equity** investments of the System had a return rate (15.1%) that ranked second among the states surveyed. This rate ranked behind Colorado (29.6%) and directly above Minnesota (14.3%). The System's return on **International Equity** (2.7%) ranked last among the four states that invest in International equities. The highest return (14.3%) was reported by Colorado, followed by Iowa (5.7%) and Mississippi (5.2%).

Domestic Fixed Income investments of the System had a rate of return (17.2%) that ranked first among the states surveyed. However, it was closely followed by Colorado and Iowa (16.9%). Kansas is the only state to invest in **International Fixed Income** funds.

The System's return on **Real Estate** investments (-13.3%) appears to be a poor return. However, it ranks fourth among the seven states that invest in real estate. Further, it should be noted that this was the first year that independent appraisals of the real estate properties had occurred. Missouri had the highest return (4.8%), while Iowa's return (-23.8%) was the worst reported. Only two states reported investing in **Alternative Investments**. Kansas reported a 26.5% return, while Colorado showed a 10.0% return. The System's return (9.0%) ranks third, right behind Wisconsin (9.4%) and Colorado (9.1%) on investments in **Cash and Equivalents**.

Conclusion

For the year ended June 30, 1992, the System's investment managers performed above average in comparison with the market as a whole, and on an individual investment type level. The only area where the System did not perform well was with the real estate investments. This is largely attributable to the poor real estate market, and the fact that the System has invested in some investments that occurred large valuation changes due to the fact that 1992 was the first year in which an independent appraisal of all real estate investments was performed. The System's assets performed at a level equal to that of other states that were surveyed. The System's overall rate of return (12.8%) was sixth among the eleven states. The System's oversight capabilities appear adequate to insure that the assets of the System are being properly managed.

Recommendations:

1. The System should continue to utilize both internal investment analysts and outside consulting firms to review the performance of the fund's assets to assure that the rates of return are at the level desired while risk is minimized.
2. The System should continue to use its internally developed monitoring system to assure the investment income and expense are properly reported.

How is the rate of return on the Retirement System's investments determined and how does this compare with other selected states?

In its annual financial report, the Kansas Public Employees Retirement System presents a time-weighted rate of return that indicates how well the Retirement System's investments performed during the year. For fiscal year 1992, the Retirement System reported a time-weighted rate of return of 12.8 percent for its entire portfolio. This rate of return is calculated by the System's investment performance consultant, CDA. CDA was hired by the System effective December 1, 1991. The return earned on investments includes interest and dividend income, as well as increases and decreases in the market value of the investments.

CDA calculates separate time-weighted rates of return for each of the Retirement System's different type of investments, such as stocks and bonds, and for each investment manager who handles funds for the System. Further, CDA compares each investment manager's performance to that of a well-established benchmark, such as the return on 90-day U.S. Treasury Bills or Standard and Poor's 500 Index (a composite fund of 500 common stocks).

Follow-up on prior year comments

During the Legislative Division of Post Audit's 92PA31 report, issued in August 1991, it was noted that the method by which the System's previous performance consultant, Callan Associates, calculated the rates of return had produced overstated rates on the direct placement portfolio. The overstatements stem from the fact that the following situations had occurred:

- Callan's calculations did not take into account accrued income that was earned by Retirement system investments but was never actually received.
- Callan's calculations did not take into account income that was paid to the Retirement System in the form of stock with questionable value.
- Callan's calculations did not take into account estimated losses on investments that have been recognized by the Retirement System but not reported by individual investment managers.

All of these items were in the area of direct placements. While Post Audit could not conclude that the same errors had occurred for real estate investments, they felt it was likely that they had occurred.

In order to address some of the issues that created the overstatement of the rates of return, the Legislative Division of Post Audit recommended implementing a review program of the direct placement and real estate investments. This review of each asset investment, along with a monitoring system to be developed by an outside accounting firm, were to provide the details of the incorrect transactions of the direct placement and real estate investments. This review was scheduled to be completed with the rates of return recalculated by late September 1991. However, the project proved to be larger than expected. Therefore, the direct placement review and subsequent rate of return recalculation was not completed until December 1992. At this time, the review of the real estate investments began. This included a reappraisal of each property by an independent appraiser and subsequent recalculation of the rates of return which was completed by late February 1993.

Through the System's in-depth review of each direct placement and real estate investment, it appears that the System has been able to rectify all the problems that had caused the overstated rates of return that were previously reported. Further, the System has taken the position of not allowing its direct placement investments to pay stock dividends that are of questionable value.

One of the major causes of the over-reporting of income stems from the fact that the direct placement investment managers were compensated based upon the performance of the assets managed. This caused the managers to potentially overstate the earnings and values of the investments they managed. The System has changed its compensation procedures for direct placement investment managers. These managers are now compensated on a flat fee basis. This will hopefully allow the managers to report the true gains and losses on these investments, thereby providing accurate data by which the rates of return are calculated.

The System has also attempted to ensure accurate performance figures in the areas of direct placement and real estate by hiring two internal investment officers. The duties of these officers will include overseeing the daily operations of the direct placement and real estate investments. This should provide another means by which only appropriate income amounts are reported to CDA for the rate of return calculation. CDA uses market values of the investments when making its calculations. Their returns are shown on a time-weighted basis, and are calculated on a monthly basis.

An analysis of the method of calculation of the rates of return was completed during the engagement. This included comparing the calculation and reporting method to the industry standards. It also included recalculating a selected rate of return to verify that the method in place was being used properly.

It was determined that the method by which the System has its rates of return calculated and presented are appropriate in comparison with industry standards. Further, it appears that CDA is properly calculating the rates of return from the information they are given.

The method used by CDA and the System in calculating the rates of return was compared with the methods used by selected other retirement systems. This is documented on the following schedule. From this schedule it is shown that the System uses the same calculation method, monthly time-weighted, as four other systems do. The other method that is used by the retirement systems responding to our survey is the quarterly time-weighted method. This method is acceptable; however, the monthly time-weighted method employed by the Kansas System provides a more accurate performance calculation.

<u>State System</u>	<u>Rate of Return is Calculated by...</u>	<u>Type of Rate of Return is...(a)</u>	<u>Overall Rate of Return for...</u>		
			<u>1990</u>	<u>1991</u>	<u>1992</u>
Kansas	Consultant	Monthly time-weighted	12.1%	0.3%	12.8%
Colorado	Consultant	Monthly time-weighted	1.5%	20.1%	(b)
Indiana	Consultant	Quarterly time-weighted	10.8%	10.8%	14.9%
Iowa	Consultant	Quarterly time-weighted	8.4%	8.4%	8.4%
Kentucky	Retirement System	Monthly time-weighted	6.1%	8.3%	11.7%
Minnesota	Consultant	Monthly time-weighted	10.8%	6.7%	14.5%
Mississippi	Consultant	Quarterly time-weighted	10.4%	9.4%	14.0%
Missouri	Consultant	Quarterly time-weighted	6.1%	5.5%	13.5%
Nebraska	Consultant	Quarterly time-weighted	8.3%	(d)	8.6%
Oklahoma	Consultant	Quarterly time-weighted	11.0%	7.8%	11.6%
Wisconsin	Consultant	Monthly time-weighted	7.1%	6.7%	(c)

(a) The frequency of the calculation (monthly or quarterly) determines the effect of cash flows received at different time of the year. A monthly calculation should produce more accurate rates than a quarterly calculation, but both methods are acceptable

(b) Information not available as year end is December 31

(c) Information not available due to report not yet being issued

(d) System chose not to respond to this question

Conclusion

The System employs an investment performance consultant to calculate the rates of return on investments. This consultant obtains income and expense data from the investment managers through the custodian bank. This information is verified and reconciled by the System and the consultant before the rate of return calculation is made. The calculation is a monthly time-weighted rate of return. This method is used by four of the other state systems that were surveyed. The other states use the less accurate quarterly time-weighted method. All of the systems except one have their rates of return calculated by outside consultants.

It appears that through the effort of the System's internal investment staff, the errors that had skewed the investment performance results in the past have been corrected. The asset by asset review of the direct placement and real estate investments was completed in early 1993. Once this was completed, the investment performance consultant was able to recalculate the rates of return on all investments from fiscal years 1988 through 1992.

Recommendations

1. The System should continue to monitor the investment income and expenses to assure that appropriate information is being used by the investment performance consultant when calculating the rates of return.
2. The System should assure that the investment performance consultant is calculating investment rates of return in an accurate and appropriate manner by periodically checking their calculations.

How are the System's investment managers compensated and how does this compare with other selected systems?

The Retirement System's Board of Trustees contracts with various outside investment managers to select and manage the System's investments. These investment managers generally receive a management fee based on the market value of the System's funds they handle. Each investment manager's contract is individually negotiated by the System's investment management staff with the assistance of consultants hired by the System. The schedule at Appendix A summarizes the contracts that exist between the System and its investment managers.

As noted in the Legislative Division of Post Audit's 92PA31 report, some managers, including the direct placement managers and one real estate manager had historically been paid income incentive fees which were based on the performance of the investments. Also, the direct placement managers and one real estate manager had historically been paid for selling investments at a profit under certain circumstances.

As further reported in the 92PA31 report, late in fiscal year 1991 the System's Board of Trustees changed how the System compensates direct placement managers from a base management fee plus incentive fees, to a flat monthly rate. The Board also issued a moratorium on all new direct placement investments. The previous fee structure had been criticized by the accounting firm that conducted the System's financial-compliance audits. Under that fee structure, and the Board's policy allowing investment managers to establish the value of the investments they managed, direct placement managers were paid fees based on investments that the System acknowledged were permanently impaired.

Within the last year the System has terminated its contract with its two previous direct placement managers and replaced them with two other managers. These managers are compensated on a fixed fee basis. Further, the System is now requiring third-party appraisals of all real estate investments, rather than having the value being reported by the real estate investment manager. All real estate investments were reappraised as of June 30, 1992. During each subsequent year, beginning in fiscal year 1994, one-half of the portfolio will be reappraised. In addition, a detailed annual evaluation is prepared for each direct placement investment which is reviewed and approved by the three-party approval process.

The system had used directed brokerage fees, or "soft dollars", to compensate its investment consultant. Due to the potential conflicts of interest involved in the use of "soft dollars", the Board has established a policy that prohibits the use of "soft dollars" to pay fund expenses. Therefore, to provide a method by which the System could reduce its trading commissions while eliminating the potential conflict of interest concerns, the System has entered into a commissions recapture program. The System has requested that certain of its domestic equity managers direct 35% of their commission dollars through two specified brokerage firms as long as competitive execution can be obtained. In turn, these firms rebate a certain percentage of the commissions earned, directly to KPERS. During fiscal year 1992, the amount of recaptured commissions amounted to approximately \$100,000.

The Kansas System's method of compensation for its investment managers other than real estate and direct placement, whereby fees are paid as a percent of assets managed, is much the same as nine of the other states surveyed. Minnesota is the only state that differs. They pay external managers based upon a performance based fee system. The Kansas System pays its real estate and direct placement managers based on a flat fee basis. These managers also receive expense reimbursements for pre-approved expenses. None of the other systems surveyed noted that they reimbursed manager expenses.

The other states were also asked to disclose the amount of fees paid to external managers. Only seven of the states would respond to this question. Most did not respond in detail. The fees paid ranged from \$93,991 for Nebraska's one external manager to \$12.8 million for the forty-five external managers hired by the Iowa system. Kansas paid the eighteen managers that were employed during 1992 \$14.0 million. This is detailed in the following schedule.

<u>State</u>	<u>Number of External Managers</u>	<u>Total Assets (a)</u>	<u>Internally Managed Assets (a)</u>	<u>Externally Managed Assets (a)</u>	<u>External Management Fees (a)</u>	<u>Fees as a Percent of Assets Managed</u>
Kansas	18	\$ 4,200	\$ 0	\$ 4,200	\$ 14,000	0.315
Colorado	16	11,492	8,989	2,530	(b)	N/A
Indiana	4	4,210	0	4,210	(b)	N/A
Iowa	45	6,200	79	6,121	12,800	0.209
Kentucky	7	4,400	1,900	2,500	(b)	N/A
Minnesota	17	19,700	7,092	11,608	11,000	0.095
Mississippi	17	5,932	101	5,831	7,000	0.120
Missouri	11	2,065	104	1,961	5,100	0.260
Nebraska	1	320	304	16	0.093	0.581
Oklahoma	13	2,072	0	2,072	5,800	0.280
Wisconsin	9	21,800	(b)	(b)	4,650	N/A

- (a) Number express in millions
(b) The state did not respond to this question

While Kansas has paid the most to compensate its managers, it should be noted that each system has various contract arrangements. Further, as shown by the preceding schedule, each state has a different value of assets that are externally managed. Therefore, no conclusion can be reached about the amount of compensation that the Kansas System's managers receive in comparison with other states. It is the desire of the System's management to remain fair yet competitive in its fee compensation. It is anticipated that the assistance granted the System by its hired consultants in selecting and hiring investment managers will also result in a competitive fee structure, as well as enhanced performance.

Conclusions

The System has hired external investment firms to provide assistance in managing the System's assets. During fiscal year 1992, the System paid external investment managers \$14 million to handle its investments. The System also reimbursed its managers approximately \$ 4 million for pre-approved expenses. Most of the System's investment managers are hired under an individually negotiated fee structure that is based upon the market value of the assets managed. The System's direct placement managers are compensated on a flat fee basis. The System has hired three investment consultants to perform various tasks on a flat fee per project basis. The manner in which these investment consultants are compensated appears to be reasonable and corresponds to the methods used by other state systems.

The Kansas System paid more to have its assets managed than any other state that responded to the survey. However, no conclusion can be reached regarding this fact as not all states responded to part of the survey. Further, each state relies on external investment managers in varying degrees. In addition, it should be noted that the System paid \$ 4.2 million of its \$ 14.0 million for management of its real estate and direct placement portfolio on a flat-fee basis.

The System had used directed brokerage fees, or "soft dollars", to compensate its investment performance consultant. However, the System changed consultants during fiscal year 1992 and entered into a commission recapture program. During fiscal year 1992, the amount of commissions recaptured amounted to approximately \$100,000. This practice appears appropriate as it results in less expense incurred by the System.

Recommendations

1. The System should continue to evaluate each of its external managers to assure they are receiving appropriate returns on their investments in comparison with the fees that are being paid.
2. The System should continue to track the commission recapture program to assure that the system is taking full advantage of this program.

PERFORMANCE AUDIT REPORT

**Kansas Public Employee Retirement System:
Reviewing Investment Practices and Performance for Fiscal Year 1992
Report Dated June 30, 1992**

Summary of Investment Manager Compensation
Agreements and Fiscal Year 1992 Compensation

The Following pages contain a summary of the contractual terms that exist between the System and its external investment management firms.

Firm/Type of Compensation	Fee Description
Domestic Equity Fund Managers: Market Research and Management Corp Base Management Fee: (Note: Terminated in March, 1992)	.50% of first \$20 million in assets managed - .25% on assets in excess of \$20 million
Loomis, Sayles and Co., Inc. Base Management Fee:	.30% of first 100 million in assets managed - .20% of next \$100 million in assets managed - .10% on assets in excess of \$200 million
Wells Fargo Bank Base Management Fees:	.48% of first \$500,000 in assets managed - .32% of next \$1.5 million in assets managed - .08% of next \$48 million in assets managed - .048% of next \$25 million in assets managed - .032% of next \$25 million in assets managed - .016% on assets in excess of \$100 million
Pilgrim, Baxter, Greig and Associates Base Management Fee: PBG Growth/Opportunity Partners, L.P. Income Incentive Fee:	.75% of first \$25 million in assets managed - .50% of next \$25 million in assets managed - .25% on assets in excess of \$50 million 20% of Adjusted Excess Return (Excess Return = (Annual Return - average T-Bill rate) - (Deficit Excess Return from prior year, less than 0%) + (Surplus Excess Return from prior year, more than 25%))
Delaware Investment Advisers Base Management Fee:	.30% of first \$200 million in assets managed - .20% on assets in excess of \$200 million
Provident Investment Counsel, Inc. Base Management Fee: Steller Fund - Base Management Fee:	.585% on first \$50 million in assets managed - .29% on next \$50 million in assets managed - .25% on assets in excess of \$100 million 1% of funds under management (limited to \$30 million invested) (Percent of shares times month end market value times .01/12)
International Equity Fund Managers: Alliance Capital Management Corp. Base Management Fee: Income Incentive Fee:	.425% of first \$50 million in assets managed - .1875% on next \$50 million in assets managed - .09% on assets in excess of \$100 million Rate varies from .175 to .575 of the return in excess of the "Morgan Stanley Capital International Europe, Australia, Far East Index"
Nomura Capital Management, Inc. Base Management Fee:	.50% of the first \$50 million in assets managed - .35% of the next \$50 million in assets managed - .25% on assets in excess of \$100 million

Fees for Assets Under Management - Market Value (Millions)				
\$100	\$200	\$300	\$400	Payment Procedures
\$300,000	\$550,000	\$800,000	\$1,050,000	Payable quarterly in advance based on market value at end of each quarter
\$300,000	\$500,000	\$600,000	\$700,000	Payable quarterly in arrears - (calculated on quarterly basis using the quarter ending market value of the investment capital of the account, including cash or its equivalent)
\$65,600	\$81,600	\$97,600	\$113,600	Payable quarterly in arrears based on three month average market value
\$437,500	\$687,500	\$687,500	\$1,187,500	Payable quarterly in arrears based on the quarter ending market value Fees assessed by fund manager directly to fund
\$300,00	\$600,000	\$800,000	\$1,000,000	Payable quarterly in arrears (calculated on quarterly basis using the closing market value of the securities at the end of each quarter)
\$437,500	\$687,500	\$937,500	\$1,187,500	Payable quarterly in arrears based on beginning market value Payable monthly through partial sales of investment
\$306,250	\$396,250	\$486,250	\$576,250	Payable quarterly in arrears (based on the assets under management on the date of payment) Payable quarterly in arrears
\$425,000	\$675,000	\$925,000	\$1,175,000	Payable quarterly in arrears following close of each quarter

Firm/Type of Compensation	Fee Description
<p>Domestic Fixed Income Fund Managers:</p> <p>Loomis Sayles and Co., Inc.</p> <p>Base Management Fee:</p>	<p>.50% of the first \$10 million in assets managed - .30% on next \$90 million in assets managed - .20% on assets in excess of \$100 million</p>
<p>Pacific Investment Management Co.</p> <p>Base Management Fee:</p>	<p>.25% of the first \$600,000 in assets managed - .20% on the balance</p>
<p>Wells Fargo Bank</p> <p>Base Management Fee:</p>	<p>If investment in Fixed Income Tactical Asset allocation is greater than \$75 million, use .0032% for total fund. Otherwise, use the following schedules: Fixed Income Tactical Asset: .24% on first \$25 million - .16% on next \$25 million - .12% on balance. Intermediate Corporate, Long Corporate, and Long Government Bond Index Funds: .48% on first \$500,000 - .32% on next \$1.5 million - .08% on next \$48 million - .048% on next \$25 million - .032% on balance.</p>
<p>International Fixed Income Fund Managers:</p> <p>Pacific Investment Management Co.</p> <p>Pacific Investment Management Institutional Trust - Base Management Fee: (limited to 20% of KPERS managed funds)</p>	<p>Fees paid per PIMCO fee schedule noted above.</p>
<p>Julius Baer Investment Management Inc.</p> <p>Base Management Fee:</p>	<p>.60% of first \$20 million in assets managed - .50% on next \$20 million in assets managed - .20% on next \$60 million in assets managed - .10% on assets in excess of \$100 million</p>
<p>Real Estate Fund Managers:</p> <p>The O'Connor Group (ceased providing services January 1993)</p> <p>Base Management Fee:</p> <p>Income Incentive Fee:</p> <p>Acquisition Fee:</p> <p>Financing/Disposition Fee:</p> <p>Retail Property Trust:</p>	<p>.125 % of fist \$100 million total book value of all real estate investments - .0938% of book value above \$100 million.</p> <p>10% of the amount of adjusted net income from all real estate investments after KPERS has received a 10% per annum cumulative, non-compounded return on its adjusted cash investments and the excess of realized gains over realized losses.</p> <p>1.25% of the total consideration paid or incurred by KPERS in connection with the acquisition of real estate investment.</p> <p>1% of the financing (excluding financing included in computation of acquisition fee) or refinancing, or the gross sales price of any real estate investment.</p> <p>.50% of aggregate net equity invested in properties - .05% of aggregate net book value of all short-term investments</p>
<p>L & B Real Estate Counsel</p> <p>Base Management Fee:</p>	<p>.65% of the valuation of the real property assets including debt.</p>
<p>Direct Placement Fund Managers:</p> <p>Pacholder & Associates</p> <p>Base Management Fee:</p> <p>Morris Anderson</p> <p>Base Management Fee:</p>	<p>\$120,000 per month</p> <p>\$120,000 per month</p>

Fees for Assets Under Management - Market Value (Millions)				
\$100	\$200	\$300	\$400	Payment Procedures
\$320,000	\$520,000	\$720,000	\$920,000	Payable quarterly in arrears based on market value of account, including cash, at end of the prior quarter
\$200,300	\$400,300	\$600,300	\$800,300	Payable quarterly in arrears based on ending market value
\$200,000	\$400,000	\$600,000	\$800,000	Payable quarterly in arrears based on market value at end of each quarter
\$200,300	\$400,300	\$600,300	\$800,300	Payable quarterly based on the percentage of total shares held by KPERS
\$340,000	\$440,000	\$540,000	\$640,000	Payable quarterly in arrears
\$125,000	\$218,800	\$312,600	\$406,400	To be paid within 10 days after end of each fiscal quarter To be paid within 30 days after end of each fiscal quarter To be paid upon closing To be paid upon closing Fees deducted from fund earnings prior to dividend payments to shareholders
\$650,000	\$1,300,000	\$1,950,000	\$2,600,000	Payable monthly in arrears based on valuation of real property. Payment assessed by manager prior to the distribution to participants
\$1,444,000	\$1,440,000	\$1,440,000	\$1,440,000	Paid monthly in arrears
\$1,440,000	\$1,440,000	\$1,440,000	\$1,440,000	Paid monthly in arrears

APPENDIX B

SCHEDULE OF INVESTMENT MANAGER COMPENSATION
Fiscal Year Ended June 30, 1992

<u>Investment Management Firm</u>	<u>Market Value of Assets Managed (in millions)</u>	<u>Compensation Paid</u>	<u>Investment Manager Expenses Paid</u>	<u>Custodial Bank Fees Paid</u>	<u>Other Compensation Paid to Managers</u>	<u>Total Compensation and Expenses</u>
<u>Domestic Equity Management</u>						
Loomis, Sayles and Co., Inc.	\$ 209.0	\$ 505,089	\$ -	\$ 42,957	\$ -	\$ 548,046
Wells Fargo Bank	358.6	91,538	-	53,162	-	144,700
Pilgrim, Baxter, Greig and Associates	222.4	760,383	-	60,860	-	821,243
Delaware Investment Advisers	359.6	884,012	-	73,284	-	957,296
Provident Investment Counsel, Inc.	375.9	1,925,197	-	95,159	-	2,020,356
<u>International Equity Management</u>						
Alliance Capital Management, Inc.	160.3	586,719	21,724	130,013	-	738,456
Nomura Capital Management Corp.	153.1	562,712	21,724	127,110	-	711,546
<u>Domestic Fixed Income</u>						
Loomis, Sayles and Co., Inc.	549.3	1,125,451	-	107,762	-	1,233,213
Pacific Investment Management Company	509.8	1,345,755	131	133,029	-	1,478,915
Wells Fargo Bank	328.2	198,878	-	-	-	198,878
<u>International Fixed Income</u>						
Julius Baer Investment Management, Inc.	131.3	368,698	-	111,554	-	480,252
<u>Real Estate Management</u>						
The O'Connor Group	227.5	1,324,337	1,797,145	65,415	-	3,186,897
L & B Real Estate Counsel	100.0	667,941	-	21,420	-	689,361
<u>Direct Placements Management</u>						
Pacholder & Morris Anderson	159.4	2,826,452	871,622	211,668	-	3,909,742
<u>Cash Investment Management</u>						
Payden & Rygel Investment Counsel	568.8	362,800	-	83,905	-	446,705
<u>Other</u>						
KPERS-Holding (a)	36.8	-	2,535,489	188,189	1,051,371	2,723,678
Other managers (b)	0.0	501,752	510,213	45,324	-	2,108,660
TOTALS	\$ 4,450	\$ 14,037,714	\$ 5,758,048	\$ 1,550,811	\$ 1,051,371	\$ 22,397,944

Note: All amounts are stated as of or for the year ended June 30, 1992.

(a) KPERS - Holding includes investments that are managed by KPERS' internal investment management staff. Included among these investment are Capital Towers, MGIC Notes and Columbia Gas.

(b) Other managers fees and expenses represent the amounts paid to managers which were employed by the System at some point during fiscal year 1992, but were not employed by the System at June 30, 1992.

PERFORMANCE AUDIT REPORT

**Kansas Public Employee Retirement System:
Reviewing Investment Practices and Performance for Fiscal Year 1992
Report Dated June 30, 1992**

**Summary of Selected Other States
Retirement Systems' Investment Practices**

Surveys were sent to retirement systems in 10 other states: Colorado, Indiana, Iowa, Kentucky, Minnesota, Mississippi, Missouri, Nebraska, Oklahoma, and Wisconsin. The following pages contain the states' responses to questions about the investment practices of their retirement systems. The Appendix also shows how the Kansas Public Employees Retirement System handles its investments.

Questions	Kansas	Colorado	Indiana	Iowa	Kentucky
1. What is the name of the retirement system?	Kansas Public Employees Retirement System (includes state and local government employees, police and firemen and judges).	Public Employees' Retirement Association of Colorado (includes state school district, judicial, and local government employees).	Public Employees Retirement Fund of Indiana (includes only state employees).	Iowa Public Employees Retirement System (includes state, county, and municipal employees and teachers).	Kentucky Retirement System (includes state and county employees and members of state police).
2. What were the system's total assets?	\$4.2 billion as of 6/30/92	\$11.5 billion as of 12/31/91	\$3.5 billion as of 6/30/91	\$6.2 billion as of 6/30/92	\$4.4 billion as of 6/30/92
3. What is the composition of the governing board and how are the members selected?	For fiscal year 1992, seven member board appointed by Governor and confirmed by the Senate to overlapping four-year terms. As of July 1, 1993, nine member board. The State Treasurer along with four members appointed by the governor and confirmed by the Senate, one appointed by the president of the Senate and one appointed by the Speaker of the House. Two members elected by the members and retirants of the System.	Sixteen member board: fourteen members are elected by mail ballot from their respective division members to serve four-year terms, and two members are designated by statute (the State Auditor and the State Treasurer).	Five member board appointed by the Governor, but limited to three members from the Governor's party.	Nine member board: six members appointed by Governor (three executives from Iowa life insurance, banking and industrial firms and three members of the Retirement System); one member of the House of Representatives appointed by the House Speaker; one member of the Senate appointed by the Senate Majority Leader; and the Director of the Department of Personnel (ex-officio & non-voting).	Nine member board: four members appointed by the Governor and five members elected by members of the retirement system.
4. Are there minimum qualifications for board members?	No specific qualifications for fiscal year 1992. Beginning July 1, 1993, the six appointed members shall have had at least five years experience in the field of investment management or analysis, actuarial analysis, or administration of an employee benefit plan.	Members elected by division employees, must be actively employed by that division.	One of the five members must be a vested Public Employees Retirement Fund Member	No specific qualifications.	One trustee appointed by the governor must be knowledgeable about the impact of pension requirements on local governments.
5. What fiduciary standards govern the system's investment policy?	Prudent person rule and statement of investment policy.	Prudent person rule and other statutory limitations.	Prudent person rule, and the state constitution restricting investments in equities.	Prudent person rule.	Prudent person rule, statement of investment policy, and state statutes.

(a) The Minnesota Board of Investment manages the state's cash accounts, and school trust funds in addition to the retirement funds for state employees and others. The information presented is only for the public employees' retirement system.

Minnesota	Mississippi	Missouri	Nebraska	Oklahoma	Wisconsin
Minnesota State Board of Investment (includes state employees, teachers, and other public employees). (a)	Public Employees Retirement System of Mississippi (includes state and municipal employees, and the highway patrol).	Missouri State Employees Retirement System (includes state employees, judges, and other judicial employees).	Nebraska State Employees Retirement System (includes only state employees).	Oklahoma Public Retirement System (includes only state employees).	Wisconsin Retirement System (includes state, school and local government employees). (b)
\$19.7 billion as of 6/30/92	\$5.9 billion as of 6/30/92	\$2.1 billion as of 6/30/92	\$320.1 million as of 12/31/91	\$2.0 billion as of 6/30/92	\$21.8 billion as of 6/30/91
Five member board comprised of the Governor (chair), Secretary of State, Attorney General, State Auditor, and State Treasurer	Nine member board: the State Treasurer, one member appointed by the Governor, and seven members elected by various constituencies of the Retirement System	Eleven member board: two members appointed by the President Pro-Tem of the Senate; two by the Speaker of the House; two by the Governor. Three members elected by Retirement System members; the State Treasurer; and the State Commissioner of Administration.	Seven member board appointed by the Governor or includes four current members and one retired member of the Retirement System and two members from the public.	Thirteen member board: three members appointed by the Governor; two by the Speaker of the House; two by the Senate President Pro-Tem; one by the Supreme Court; the Chairman of the Corporation Commission; the Director of State Finance; the Secretary of State Tax Commission; the Administrator of the Office of Personnel Management; and the State Insurance Commission	Eight member board: five members appointed by the Governor; the Secretary of the Department of Administration; and two participants in the Wisconsin Retirement System.
No specific qualifications.	Six of the nine members must have at least 10 years of creditable Retirement System service in the institution they represent.	No specific qualifications.	No specific qualifications.	One Speaker appointee, one President Pro Tem appointee, and two Governor appointees should have experience in investment funds, banking, law or accounting.	Four of the Governor's appointees must have at least ten years of investment experience.
Prudent person rule (maximum percentage of asset allocations are mandated by statute and restrictions to ensure the quality of the investments).	Prudent person rule with further restrictive statutes.	Prudent person rule.	Prudent person rule (the state's portion of the fund must be invested in guaranteed investment).	Prudent person rule (international and venture capital investments not allowed by state statute).	Prudent person rule.

(b) The Wisconsin Investment Board is responsible for the assets of the state, the Retirement System and other smaller funds. The information presented is only for the public employees' retirement.

Questions	Kansas	Colorado	Indiana	Iowa	Kentucky
6. Is there legislative review/oversight of the retirement system and its investment policy?	No legislative body oversees investment policy on an ongoing basis.	The Association meets with the Legislative Audit Committee and Joint Budget Committee each year to review actual statute, investments and other activities. The Senate and House Finance Committees also have oversight.	The Pension Management Oversight Commission meets in between legislative sessions to review pension activities.	No legislative body oversees investment policy on an ongoing basis.	The Contract Review Committee reviews every contract, including investment manager and consulting services contracts. Several other committees also review the retirement system as part of the overall administrative and budgetary review of state agencies and programs.
7. Are the system's investments managed in-house or by external managers?	Both in-house and external managers but primarily by external managers.	Both in-house and external managers.	All investments are managed by external investment managers.	All investments are managed by external investment managers.	Both in-house and external managers.
8. What is the size of the staff responsible for in-house investments?	Seven staff members with various levels of qualifications.	Eleven staff members. All analysts have a bachelor's degree and most also have or are pursuing a master's degree. Most are Certified Financial Analyst (CFA) or have other specialty designation. Most possess 10+ years experience.	Not applicable.	Not applicable.	Eight staff members with bachelor's degree or experience in related field.
9. How many external managers are there and how much are they paid?	Eighteen external investment managers were paid \$14.0 million for fiscal year 1992.	Sixteen external investment managers (d).	Four external investment managers (d).	Forty-five external investment managers and partnerships. Fees paid during fiscal year 1992 were approximately \$12.8 million.	Seven external investment manager (d).
10. What is the fee structure and terms for external managers?	Fees paid as a percent of assets managed for all managers other than direct placement, which are compensated on a flat fee. Alternative investment managers are reimbursed for pre-approved expenses.	Fees paid as a percent of assets managed. Some managers are set up on a performance fee basis. Managers are not reimbursed for expenses.	One manager is paid based on a fee schedule. Three managers are paid fixed fee amounts. Managers are not reimbursed for any expenses.	Fees paid as a percent of assets managed. Some managers are set up on a performance fee basis. Managers are not reimbursed for expenses.	Fees are negotiated annually based on the market value of securities under management. Managers are not reimbursed for expenses.
11. How do you ensure the accuracy of fee and expense billing from external managers?	Compare fee billings to custodian's records and re-calculate fees.	Valuation of the portfolio is taken from a third party. Invoices are recalculated to ensure accuracy before they are approved for payment.	For the one manager who is on a fee schedule, the system uses the market value of the managed assets determine by the custodian and applies the fee schedule to the value.	Fees are calculated in-house and billings are verified against these calculations.	Fees are negotiated; market value appraisals are performed internally.

(d) The retirement system did not provide the amounts paid to external managers

Minnesota	Mississippi	Missouri	Nebraska	Oklahoma	Wisconsin
No legislative body oversees investment policy on an ongoing basis.	The Speaker of the House of Representatives may designate two representatives to attend any meeting of the Board of Trustees.	The Joint Committee on Public Employee Retirement reviews detailed annual financial reports submitted by the Retirement System.	The Legislative Retirement Committee reviews the system's activities.	The Retirement Committee and Pension Oversight Commission oversees the System's activities.	No legislative body oversees investment policy on an ongoing basis.
Both in-house and external managers.	External investment managers (short-term cash is managed internally until distributed to external managers).	Both in-house and external managers.	Both in-house and external managers.	All investments are managed by external investment managers.	Both in-house and external managers.
Four staff members are directly responsible for in-house managed assets.	One staff member (manages short-term cash equivalents).	Seven staff members with institutional work experience in investments or academic backgrounds in accounting, finance or business.	One staff member with 15 years experience in brokerage business.	Not applicable.	Sixty-five staff positions in six investment divisions (Public Bonds, Private Placements, Mortgages and Real Estate, Common Stocks, Special Equities, and Liquid Assets).
Seventeen external investment managers were paid \$11.0 million in fiscal year 1992.	Seventeen external investment managers were paid fees totaling approximately \$7.0 million for fiscal year 1992.	Eleven external investment managers were paid \$5.1 million in fiscal year 1992.	One external investment manager. Fees for 1991 were \$93,331	Thirteen external investment managers. An estimated \$5.8 million in fiscal year 1992.	Nine external investment managers. An estimated \$4.65 million were paid in fees during fiscal year 1991.
External managers are compensated on a performance based fee system.	Fees paid as a percent of assets managed. Percent varies by type of asset managed. Managers are not reimbursed for expenses.	Fees paid as a percent of assets managed. Percent varies by type of asset managed. Managers are not reimbursed for expenses.	Fees paid as a percentage of assets managed. No reimbursement paid for expenses.	Fees paid as a percentage of assets managed. No reimbursement paid for expenses.	Fees paid as a percentage of assets managed. No reimbursement paid for expenses.
Fees are calculated in-house and billings are verified against these calculations.	Fees are reconciled quarterly using external consultant's securities pricing service.	Fee billings based on valuations are verified for accuracy using valuations provided by both managers and the custodian.	Retirement system audits fees.	The System's accounting division audits billings.	Fees are calculated in-house and billings are verified against these calculations

Questions	Kansas	Colorado	Indiana	Iowa	Kentucky
12. What are the system's asset allocation target percentages?	45% Domestic equity 23% Domestic fixed income 15% Internal equity 2% International fixed income 4% Direct placements 6% Real estate 5% Cash & equivalents	35% Domestic equity 10% International stocks 35% Bonds 10% Real estate 5% Guaranteed notes 5% Alternative investments	Fixed income 100% breakdown available	28% Domestic equity 8% International equity 8% Domestic tactical 20% Domestic bonds 15% Passive bonds 7% International bonds 8% Real estate 1% Venture capital 5% Special equity/debt	55% Equity 25% Fixed income 10% Cash 10% Real estate
13. What are the system's actual asset allocations?	34.0% Domestic equity 30.8% Domestic fixed income 7.0% International equity 2.9% International fixed income 3.6% Direct placements 9.0% Real estate 12.7% Cash & equivalents	36.7% Domestic stocks 11.9% International stocks 41.2% Domestic bonds 1.8% International bond 4.7% Real estate 1.9% Alternative investments 1.8% Cash and short term investments	100% Fixed income.	28% Domestic equity 4% International equity 10% Domestic tactical 32% Domestic bonds 6% Passive bonds 3% International bonds 7% Real estate 1% Venture capital 8% Special equity/debt 1% Short term cash	57% Equity 24% Fixed income 13% Cash 6% Real estate
14. Are investments made in direct placements or venture capital? If so, what amount and percent of the system's assets?	Yes - direct placements. As of 6/30/92, \$159.3 million or 3.6% of total investments.	Both - the Association participates in venture capital investments as a limited partner. Holdings include seed, early and later stage investments in a variety of industry sectors. Private placement holdings resemble bond instruments. As of 12/31/91, the Association had 2.6% of its investments in private placements and 0.9% in venture capital. Limits in any given category are determined by asset allocation guidelines and ranges established by the Board.	No.	These types of investments are made by managers and partnerships. There are no statutory limitations. Policy states maximum investment in venture capital of 3%	Private or direct placement bonds may be purchased only upon specific approval of each issue by the investment committee of the board of trustees. Private placements have consisted primarily of Title IX bonds. Less than 1% of total assets are in private placements.
15. How does the System manage or oversee the venture capital and direct placements?	The Board of Trustees established allocations and guidelines for direct placements. The Board placed a moratorium on new direct placements. All additions made to investments must be approved by a three-party approval system. Further, an in-house monitoring system has been put in place.	In many instances, the Executive Director has a seat on the board of advisors of the various venture capital partnerships. Performance is calculated on a quarterly basis. Results are monitored by the management and the Board. The general partner or executive officer of the various outside managers are invited once a year to address the Board regarding investment activity.	Not applicable.	Retirement System staff participate on governing boards and periodically review investment performance with the general partners.	No special oversight procedures for private placements.

Minnesota	Mississippi	Missouri	Nebraska	Oklahoma	Wisconsin
60% Domestic stocks 24% Domestic bonds 10% Real estate 2.5% Venture capital 2.5% Resource funds 1% Unallocated cash	40% Domestic equity 4% International equity 56% Domestic fixed income	55% of total assets in equity and 45% in fixed income and real estate.	No asset allocation policy.	45-55% Equity 37.5-42.5% Fixed income 2.5-7.5% Real estate 5-10% Small capitalization stocks 0-10% Cash equivalents	45% Fixed income 55% Equity
59.7% Common stocks 28.9% Bonds 6.4% Real estate 3.4% Venture capital 1.0% Resource funds 0.6% Unallocated cash	34.4% Domestic equity 2.8% International equity 56.0% Domestic fixed income 5.7% Short-term managers 1.1% Short-term in-house	54.0% Domestic equities 39.0% Domestic fixed income 4.8% Real estate 1.5% Venture capital 0.7 % Cash/cash equivalents	54.0% IPG contract 41.0% GIC's 3.0% Equities 2.0% Fixed income	52.6% Equity 34.0% Fixed income 7.4% Real estate 6.0% Cash equivalents	34.3 Public bonds and private placements 44.2% Common & preferred stocks & convertibles 18.3% State investment fund 0.7% Mortgages 2.5% Real estate owned
By statute, the State Board of Investment may make investments in venture capital only with four other partners. Up to 35% of a fund's assets may be invested in alternative investments which are venture capital, resource, high yield bonds, international securities and real estate.	No.	In 1987, pursuant to statutory guidelines, the Board redirected venture capital funding to an in-state small business investment program. In late 1989, the Board terminated all funding plans for venture capital programs. Less than two percent of the System's assets was committed to venture capital when the Board terminated funds for such investments. As of 6/30/92 the System had \$31 million, or 1.5%, of its assets in venture capital.	No.	No.	Yes. New fiscal 1991 private placements were categorized by credit quality and industry group. Over 55% of the new fixed rate purchases were rated A or better in FY 91. Fundings of new private placements during FY 91 totaled \$401.7 million.
Venture capital managers are monitored by staff and a subcommittee of the Investment Advisory Committee on a regular basis with an in-house meeting at least annually and regular reports.	Not applicable.	Outside investment managers were given full discretion and fiduciary responsibility for most of the System's venture capital commitments. At this time no additional funding for such investments is planned.	Not applicable.	Not applicable.	Most direct placements are with large national companies, many of which are publicly traded. The System is willing to do other direct placements, 98% of these are a debt type of security. Five staff members are responsible for direct placements. These people research, study, and arrange deals with the guidance of the system's legal staff.

Questions	Kansas	Colorado	Indiana	Iowa	Kentucky
16. Are investments made in real estate? If so, what amount and percent of the system's assets?	Yes. As of 6/30/92: \$402.5 million or 9.0% of total investments.	Yes - three commingled funds and several direct investment properties. The focus of the existing and planned portfolio is on "core" real estate. As of 12/31/91: 5.2% of asset market value. No restrictions on asset allocations guidelines.	No.	Yes and as of 6/30/91 there were no statutory limitations. Policy states maximum investment of 16%.	Yes. The systems has invested in commingled funds and in separate account investments. As of 6/30/92, real estate investments were 6% of the total fund with a market value of \$260,513,091. The target allocation for real estate is 10% which is a board policy decision.
17. How does the System manage or oversee the real estate investments?	The Board of Trustees established allocations and guidelines for real estate investments. Outside valuations are to be performed on each property. Further, all additional amounts expended on real estate investments must be approved by a three-party approval system.	Outside real estate asset manager oversees the properties and a real estate consultant evaluates the real estate manager's performance.	N/A	Staff participates on boards and actively reviews portfolios. There are also periodic presentations to the Investment Board by managers. The System retains a real estate consultant.	Each property recommendation is thoroughly reviewed by the investment committee prior to making recommendation for board approval. Each proposed property is visited by board members or staff before approval. There are periodic presentations made to the investment committee by managers to review and give current status reports on properties held.
18. How does the system calculate the rate of return for the overall portfolio?	Monthly Weighted Average	Monthly Weighted Average	Quarterly Weighted Average	Quarterly Weighted Average	Monthly Weighted Average
19. Who calculates the rate of return?	Consultant	Consultant	Consultant	Consultant	System staff
20. What was the rate of return for the latest fiscal year?	12.8% for year ended June 30, 1992	20.1% for year ended 12/31/91	14.9% for year ended June 30, 1992	8.4% for year ended 6/30/92	11.7% for year ended 6/30/92

Minnesota	Mississippi	Missouri	Nebraska	Oklahoma	Wisconsin
Yes, through commingled funds, limited partnership bases. By state statutes, the MSBI must participate with four other parties and have no more than 20% of an investment. Allocation target is 10% of Basic Retirement Funds. No dollar amount was provided.	No.	Yes. For FY 1992, 4.8% (\$98 million) of the funds were in real estate. The Board directed that the fund is to have not less than 2.5% nor more than 10% in real estate at any given time.	No.	Yes - open end funds. 7.4% - \$116 million.	Yes. As of 6/30/91, the value of real estate portfolio was at an estimated \$831 million.
Real estate managers are reviewed on an ongoing basis by staff and subcommittee of the Investment Advisory Committee with at least annual meetings and regular reports.	N/A	The real estate portfolio is monitored by four in-house staff members. There is no fully discretionary advisor or real estate consultant currently retained by the system. Property acquisitions have been put on hold.	N/A	Monitored through reports by investors and presentations to the board, and from the financial adviser.	All real estate investments are arranged, acquired, and managed by in-house staff.
Monthly Weighted Average	Quarterly Weighted Average	Quarterly Weighted Average	Quarterly Weighted Average	Quarterly Weighted Average	Monthly Weighted Average
Consultant	Consultant	Consultant	Consultant	Consultant	Consultant
14.5% for year ended 6/30/92	14.0% for year ended 6/30/92	13.5% for year ended 6/30/92	8.6% for year ended 12/31/91	11.6% for year ended 6/30/92	6.7% for year ended 6/30/91





Kansas Public Employees Retirement System

May 10, 1993

Mr. John T. Berberich
Berberich & Trahan & Co., PA
1300 Merchants National Bank Bldg.
Topeka, Kansas 66612-1268

Dear Mr. Berberich:

We appreciate the opportunity to respond to the performance audit findings and recommendations of Berberich, Trahan & Co., PA, for the fiscal year ended June 30, 1992. The Retirement System's comments for each specific finding and recommendation are listed below.

Fiscal Year 1992 PERFORMANCE AUDIT REPORT

How well have the Retirement System's investment managers performed in relation to the market as a whole and in relation to other selected systems?

The report correctly notes that the Retirement System experienced a total return on the total fund investments of 12.8 percent for the fiscal year ending June 30, 1992. However, we are concerned about the methodology that was used to compare the Retirement System's return results to selected other public funds. The first concern is that three of the retirement systems (Colorado, Nebraska, and Wisconsin) were reporting for time periods other than June 30, 1992, making comparisons inappropriate. (The S&P 500 stock index, for example, produced a return of 13.3 percent for the year ending June 30, 1992, a return of 30.4 percent for the year ending December 31, 1991, and a return of 7.4 percent for the year ending June 30, 1991.) Therefore, while the report concludes that Colorado PERA's domestic equity performance beat the Retirement System's domestic equity performance for the year ending June 30, 1992, what is really being compared is the Retirement System's June 30, 1992 performance with Colorado's December 31, 1991 performance, a time period in which the stock market produced superior returns. For the year ending December 31, 1991, the Retirement System's domestic equity portfolio produced a total return of 39.8 percent actually exceeding Colorado's domestic equity performance. While the Colorado return looks very good relative to the Retirement System in this report, the fact that it is based on a different time period means that it should not be used in the analysis since it leads to erroneous conclusions. For analogous reasons, the results of Nebraska SERS and the Wisconsin Retirement System should also be excluded from the analysis.

Mr. John T. Berberich
May 10, 1993
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The second concern is that the assets of the retirement systems selected for this analysis may not be comparable with the assets of the Kansas Public Employees Retirement System. This would also render the analysis fairly meaningless. For example, the Indiana PERS is restricted to 100 percent investment in fixed income securities. Nebraska also limits its investments to fixed income securities. Furthermore, 95 percent of these investments are guaranteed fixed income contracts. Therefore, the domestic fixed income performance results of the Nebraska system are not comparable to a system which invests in publicly-traded fixed income securities, let alone to the results of a system which invests in seven different asset classes of securities. In addition, restrictions on investments such as prohibitions against South Africa or restrictions against the use of bank stocks will affect comparability.

Another concern is that the report concludes that the return on the Retirement System's real estate investments "appears to be a poor return". While we would not argue that a negative 13.3 percent return in any year does not meet the investment objective for real estate investments, it is very important to remember that the Retirement System is an institutional investor with a long-term time horizon. We would suggest that a 10-15 year time horizon is necessary to appropriately evaluate real estate investment results. Furthermore, the one-year results cannot be evaluated in a vacuum. The results are based on an appraised market value. (The report correctly noted that the June 30, 1992 appraisal was the first time that the entire real estate portfolio had been appraised by an independent MAI appraiser retained by the Retirement System.) However, the appraisals reflect the fact that the recessionary economic environment has adversely affected demand for commercial space, rent levels, income streams and, therefore, appraised values. It is important to remember that these properties are not distressed properties in the hands of distressed sellers -- they are not for sale. The audit report contains no information about the timing, frequency, or nature of market value appraisals on the real estate holdings of the other systems surveyed. Furthermore, the type of real estate investments made by the various systems may not have comparable performance (equity vs. debt investments, separate account vs. REIT investments, etc.) results in any given time period.

We agree with the recommendation that the System continue to use internal staff and external consulting firms to calculate and review investment performance. In fact, on July 1, 1992, we also began to utilize the performance measurement and reporting capabilities of the System's new global master custodial bank, The Boston Safe Deposit and Trust Co. We continue to refine the use of the investment monitoring and reporting system for all assets, which includes the monitoring and reporting of investment income and expenses and performance analysis and reporting.

How is the rate of return on the Retirement System's investments determined and how does this compare with other selected states?

We agree with this recommendation. We will continue to monitor the receipt and reporting of investment income and expenses. We will continue to

Mr. John T. Berberich
May 10, 1993
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utilize the investment performance reporting capabilities of the Boston Safe system and internal staff to double-check the CDA performance reports.

How are the System's investment managers compensated and how does this compare with other selected systems?

We agree with the recommendations, and will continue to monitor and report external managers' performance and fee levels. We will also continue to monitor and report the performance of the brokerage commission recapture program.

However, we do have some concerns with the analysis presented here. Our concerns include the lack of comparability of the asset mixes of the public pension systems surveyed. The type of asset class under management, (i.e., domestic equity vs. international fixed income) as well as the manager style (i.e., indexed domestic equity vs. active small cap growth domestic equity) may have a large impact on the level of manager fees paid by the fund. For example, indexed domestic equity management fees are generally less than 25 basis points, while active small cap manager fees may range from 50 to 150 basis points. The size of the assets under management is also a factor, with managers providing substantial fee breaks for large accounts. For a system such as Minnesota, which pays performance-based fees, the performance of the manager in the time period under review (relative to the market) will have a major impact on the level of fees. While Minnesota showed the lowest fee levels, they also produced a return level substantially below six of the other systems surveyed. Depending on the size of the fund, what may be saved in lower investment management fees may be more than offset by the opportunity cost of better investment performance.

The Retirement System participates in the Greenwich Associates' Annual Survey of the investment management practices of large U.S. tax-exempt funds, including 314 public pension funds. For 1992, the survey found that the mean public fund average annual fee paid to an outside investment manager was 33.3 basis points (0.333 percent). Therefore, we feel that the Retirement System's manager fee levels, at 31.5 basis points, are very reasonable in comparison with other public funds.

The report makes note of the fact that the Retirement System reimbursed investment managers for pre-approved expenses, and that none of the other systems surveyed did so. While this may be true, it is also true that none of the other systems surveyed have the very unique portfolio of troubled direct placement investments that belongs to the Retirement System. The only expenses being reimbursed to direct placement managers at this time are legal fees and other professional fees which we have pre-approved as necessary for the prudent management of the direct placement portfolio. (For example, the owners of the Overland Park Merchandise Mart have filed for bankruptcy. The necessary legal fees are pre-approved by the Retirement System.)

Mr. John T. Berberich
May 10, 1993
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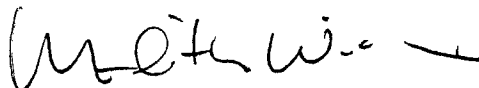
Furthermore, about half of the \$4.0 million cited in the report as pre-approved expenses was actually property level expenses of the real estate portfolio for payment of such necessary items as real estate property taxes -- not monies paid to compensate or reimburse investment managers.

Now that the corrected performance history of the Retirement System is available, we would suggest that subsequent performance audits look at longer time periods. We would also suggest that subsequent audits consider a broader universe of public funds for comparison purposes, and utilize comparison fund performance results with the same time periods, similar distributions of asset classes, and similar types of assets under management in order to make the analysis more meaningful. In addition, reviewing the performance of individual managers against the benchmarks for their particular style of management would be more appropriate.

The Retirement System is pleased at the progress noted in its monitoring and reporting of the investment performance and related fees of the external investment managers. The Board of Trustees and its staff will continue to emphasize accountability by all investment managers, advisors, custodians, and consultants to ensure that the \$5 billion in member assets is invested and handled in a prudent, cost-effective manner. The investment staff assembled to handle these activities includes six staff members with masters' degrees, three of whom are Chartered Financial Analysts (and one candidate for the Level III exam this year) and, a combined total investment experience of over 41 years.

We look forward to discussing the findings and recommendations of this audit with the members of the Legislative Post Audit Committee. Upon the public release of the final audit report, it will be placed on the agenda of the next scheduled meeting of the Retirement System's Board of Trustees.

Sincerely,



Meredith Williams
Executive Secretary