

TABLE of CONTENTS

SECTION I: 1993 Annual Investment Report

SERS Board and Administrative Staff	2
Investment Objectives	4
Investment Policy	5
Investment Highlights	6
Asset Allocation	
Stocks	8
Bonds and Mortgages	10
Real Estate	12
Tactical Asset Allocation	14
Cash	15
Venture Capital	16
Alternative Investments	18
Commissions Paid by SERS Managers to Clearing Brokers	20

SECTION II: *Pennsylvania* Investments

Asset Allocation	
Stocks	23
Bonds and Mortgages	23
Real Estate	24
Cash	24
Venture Capital	26
Alternative Investments	28
SERS <i>Pennsylvania</i> Investments Summary	29

SECTION III: Report of Independent Accountants on Financial Statements

Report for the years ended December 31, 1992 and 1991

Investment Objectives

To assure an adequate accumulation of reserves in the fund at the least cost to the citizens of the commonwealth and to provide some protection against the erosion of principal by inflation, the minimum total return objectives of the SERS fund, including income and both realized and unrealized gains and losses over full economic cycles, are to:

Achieve and maintain the market value of the State Employees' Retirement Fund in excess of Accrued Benefit Liability;

Achieve a positive real Total Rate of Return, with inflation measured by use of the GDP Implicit Price Deflator. Achieve an Absolute Total Rate of Return not less than the actuarial investment return assumption;

Achieve in Equity Securities (Common Stock, Convertible Preferred Stock, and Convertible Bonds) a total return that exceeds the total return of the Wilshire 5000 Index;

Achieve in Fixed Income Securities, exclusive of residential and commercial mortgages, but including mortgage-backed securities, a total return that exceeds the total return of the SERS Bonds and Mortgages Custom Index, which is composed of the following four published indices:

- 30% Lehman Brothers Long Term Government Bond Index
- 20% Lehman Brothers Intermediate Government Bond Index
- 25% Lehman Brothers Corporate Bond Index
- 25% Lehman Brothers Mortgage-Backed Securities Index;

Achieve in Residential Mortgage Investments a total return superior to the total return of the Salomon Brothers Mortgage Pass-Through Security Total Rate of Return Index. Commercial mortgage investment return should be competitive with the total return on similar institutional portfolios and on other fixed income investments;

Achieve in Equity Real Estate Investments a total return that is competitive with market returns for similar types of real estate investments;

Achieve in Short-Term Securities a total return that exceeds the total return on U.S. Treasury Bills (90 days).

Investment Policy

As fiduciaries, the board will exercise that degree of judgment, skill and care under the circumstances then prevailing that persons of prudence, discretion and intelligence, who are familiar with such matters, exercise in the management of their own affairs in investment matters;

Where investment characteristics, including yield, risk and liquidity, are equivalent, board policy favors investments that have a positive impact on the economy of Pennsylvania;

The fund's overall investment objective is to provide a total rate of return, over full economic cycles, that exceeds the return of a fully diversified market portfolio within each asset class. The board seeks to meet this objective within acceptable risk parameters through adherence to a policy of diversification of investments by type, industry, quality and geographic location;

The board contracts with highly qualified investment advisors and consultants to provide expert, professional judgment in all investment decisions;

Guidelines are established for each category of asset used by the fund's investment advisors to provide a framework for monitoring quality, diversification and liquidity;

An annual Five Year Investment Plan is prepared to control the allocation of funds among investment advisors and categories of assets; and

All records of investment transactions are available for public inspection at the SERS offices.

The SERS Board adopted a formal Statement of Investment Policy in 1979, which has since been revised as necessary to reflect and incorporate legislative changes and capital market opportunities affecting the investment program.

The purpose of the statement is to formalize the board's investment objectives, policies and procedures, to establish guidelines for the investment of fund assets and to define the duties and responsibilities of the various entities involved in the investment process.

Investment Highlights

*The SERS
annualized five-year
investment rate of
return for
1989 through 1993
was 12.1%,
exceeding the
annualized
Consumer Price
Index
measure of 3.5%
over the same
five-year period.*

As of Dec. 31, 1993, the unaudited market value of SERS investments, including accruals, was \$13.65 billion, an increase of \$1.24 billion over the \$12.41 billion market value of the fund at the close of 1992. Based on market value of assets as of Sept. 30, 1993, SERS was the 24th largest public pension fund in the nation, and the 40th largest domestic pension fund overall.

More important for the approximately 81,000 current SERS retirees and beneficiaries and over 109,000 active employees, during 1993 the SERS fund officially reached fully funded status. Certified by the SERS actuary and affirmed by the SERS Board in July 1993, fully funded status means current SERS assets cover the pension obligation to all current retirees and beneficiaries and current active employees. A milestone, fully funded status is the direct result of the SERS prudent investment strategy.

For the year ended Dec. 31, 1993, SERS realized a 13.2% total investment rate of return after fees. The fund achieved a 13.8% total return in stocks compared to the 11.3% total return of the Wilshire 5000 Index. In bonds and mortgages, the fund achieved a 12.7% total return compared to the 11.6% total return of the SERS Bonds and Mortgages Custom Index.

The SERS annualized five-year investment rate of return for 1989 through 1993 was 12.1%, which exceeded the annualized Consumer Price Index measure of 3.5% over the same five-year period.

Investment Advisors

In 1993 SERS had 61 external investment advisors to manage portfolios:

- 15 stock investment advisors
- 1 tactical asset allocation investment advisor
- 9 bonds and mortgages investment advisors
- 2 cash investment advisors
- 12 real estate investment advisors
- 14 venture capital limited partnership managing general partners
- 8 alternative investment limited partnership managing general partners.

In addition, one bonds and mortgages investment advisor, one real estate investment advisor, three venture capital investment advisors, and two alternative investment advisors were approved by the SERS Board.

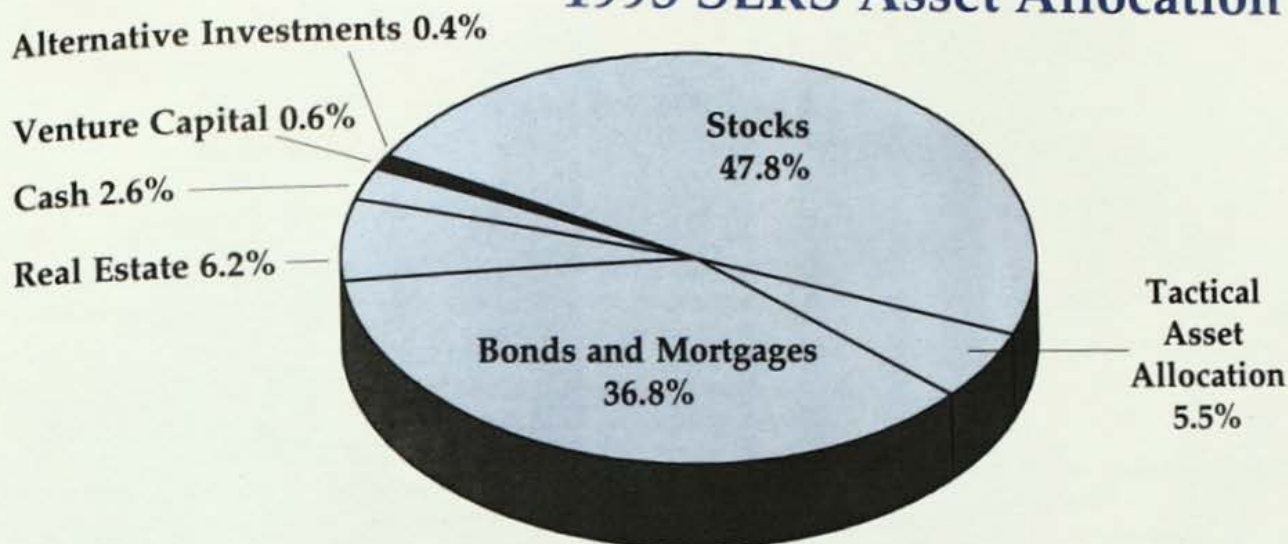
Investment Portfolios

In 1993 SERS had 80 investment portfolios/accounts:

- 18 stock portfolios
- 1 tactical asset allocation portfolio
- 10 bonds and mortgages portfolios
- 2 cash portfolios
- 20 real estate portfolios
- 20 venture capital limited partnership interests
- 9 alternative investment limited partnerships.

In addition, one stock portfolio, one bonds and mortgages portfolio, one cash portfolio, one real estate portfolio, three venture capital limited partnerships, and two alternative investment partnerships were approved by the SERS Board. Several investment advisors manage two to four portfolios for SERS.

1993 SERS Asset Allocation



SERS invests in seven asset classes and uses external investment advisors with various investment styles as a method to ensure overall fund diversification.

As of Dec. 31, 1993, the asset class allocation was:

- 47.8% stocks (\$6.517 billion)
- 36.8% bonds and mortgages (\$5.021 billion)
- 6.2% real estate (\$842.3 million)
- 5.5% tactical asset allocation (\$782 million)
- 2.6% cash (\$357.7 million)
- 0.6% venture capital (\$75.2 million)
- 0.4% alternative investments (\$54.5 million).

1993 SERS Pennsylvania Investments

\$1.16 Billion Invested in Pennsylvania



Where investment characteristics are equivalent, including yield, risk and liquidity, the SERS Board policy favors investments that have a positive impact on the economy of Pennsylvania.

As of Dec. 31, 1993, SERS had \$1.16 billion, or over 8.5% of the total fund, invested in Pennsylvania. Of this amount, SERS had placed nearly \$762 million in portfolios specially designed for in-Pennsylvania investment.

These Pennsylvania portfolios included a stock account, a private placement long-term loan account, a mortgage portfolio (conventional commercial, FHA projects and residential properties), several real estate portfolios, 23 venture capital limited partnerships, and one LBO limited partnership.

Stocks

*In equity securities,
it is an
investment objective of
SERS to achieve a
total return
exceeding the
Wilshire 5000 Index.
In 1993 the SERS rate
of return in stocks was
13.8%, ahead of
the 11.3%
return of the
Wilshire 5000 Index.
For the five-year
period 1989-1993,
on an annualized basis
the SERS rate of
return in stocks was
14.7%, ahead of the
14.6% return of the
Wilshire 5000 Index.*

The SERS Investment Plan diversifies stock investments and balances stock management styles. It is the practice of SERS to contract with external investment advisors to manage portfolios.

Policy

The SERS investment objective, over a full economic cycle, is to achieve in equity securities a total return that exceeds the total return of the Wilshire 5000 Index.

In 1993 the SERS rate of return in stocks was 13.8%, ahead of the 11.3% return of the Wilshire 5000 Index. For the period 1989-1993, on an annualized basis the SERS rate of return in stocks was 14.7%, surpassing the 14.6% rate of return of the Wilshire 5000 Index over the five-year period.

The SERS 1993 Investment Plan targeted an allocation of 46% of assets to stocks. In stocks, the plan targeted the investment of 90% in U.S. stocks and 10% in international stocks. It targeted the investment of 75% of U.S. stocks in large capitalization stocks and 25% in medium/small capitalization stocks, and provided for a balance in investment styles, value and growth. The 1993 plan targeted 48% of U.S. stocks to be indexed.

Market Value as of Dec. 31, 1993

Stocks had a \$6.52 billion market value, 47.8% of the SERS fund total \$13.65 billion market value, on Dec. 31, 1993.

Number of Investment Advisors

SERS had contracts with 15 external investment advisors to manage stock portfolios.

Number of Investment Portfolios

SERS had 18 stock portfolios managed by the 15 investment advisors. An additional portfolio also was approved by the SERS Board prior to Dec. 31, 1993, but was not funded by that point in time.

Type of Investment Portfolios

SERS had 14 U.S. stock portfolios with a total market value of \$5.77 billion (88.5% of stocks) and four international stock portfolios with a market value of \$749.7 million (11.5% of stocks).

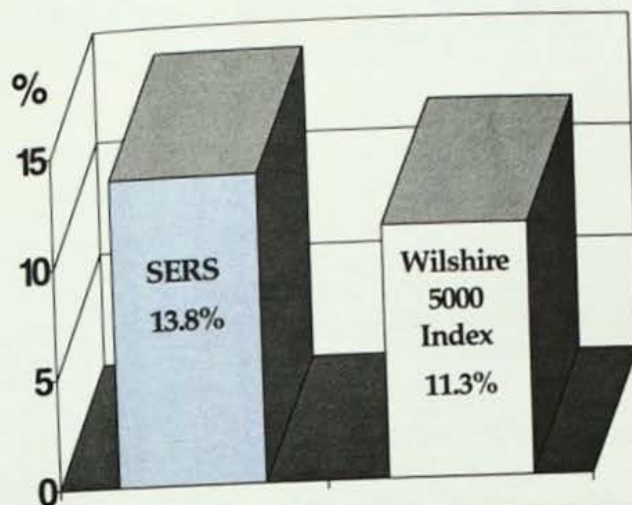
U.S. Stock Portfolios

SERS had 10 actively managed portfolios (43.7% of U.S. stocks) and four passively managed index portfolios (56.3% of U.S. stocks).

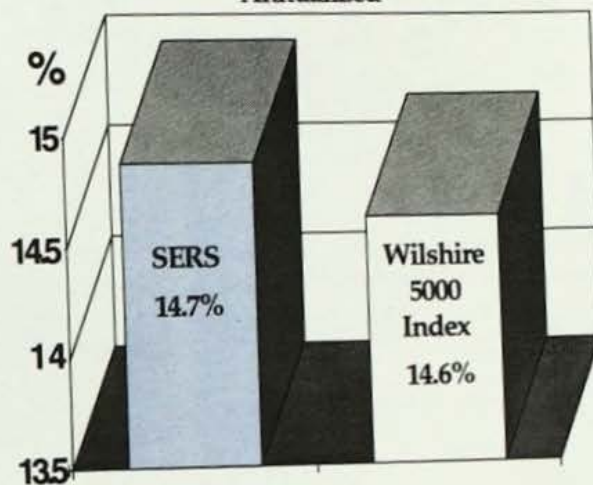
The active managers search out superior investment opportunities, while the passively managed portfolios provide board core diversification and are designed to track the performance of the market at a low cost.

The 10 actively managed U.S. portfolios can be broken down by style: value (20.5%), growth (21.0%), and core (8.1%). As of Dec. 31, 1993, 70.2% of U.S. stocks were allocated to large capitalization stocks and 29.8% to medium/small capitalization stocks.

Stocks: 1993
One-Year Rate of Return (after fees)



Stocks: 1989-1993
Five-Year Rate of Return (after fees)
Annualized



Stock Managers

*Market Value of Portfolio
as of Dec. 31, 1993
(\$ in millions)

Stock
Investment Manager

Investment Style

Domestic

1. Barrow, Hanley, Mewhinney & Strauss, Inc.
2. Dietche & Field Advisers, Inc.
3. Mellon Equity Associates Pennsylvania Index
Mellon Equity Associates Special Equity Account
4. Miller, Anderson & Sherrerd
5. Neuberger & Berman
6. Pilgrim Baxter & Associates
7. Provident Investment Counsel, Inc.
8. Sturdivant & Co., Inc.
9. Trinity Investment Management Corporation
10. Wells Fargo Nikko Investment Advisors
Equity Index Fund P (S&P 500)
Equity Growth Fund
Extended Equity Market Fund (W4500)
11. Zevenbergen Capital Inc.

large cap stock, value	\$698.1
med/small cap stock, relative value	75.1
med/small cap stock, core, index	80.0
med/small cap stock, core, structured	468.4
large cap stock, growth, structured	278.3
med/small cap stock, value	66.8
med/small cap stock, growth	240.2
large cap stock, growth	344.6
large cap stock, value	9.2
large cap stock, value, structured	332.8
large cap stock, core, index	2,036.7
large cap stock, growth, index	338.6
med/small cap stock, core, index	789.8
large cap stock, growth	8.5

International

1. Dunedin Fund Managers Ltd.
2. Miller, Anderson & Sherrerd
3. Morgan Grenfell Investment Services Limited
4. Scudder, Stevens & Clark, Inc.

international small cap stock	\$ 82.7
international stock, core	430.9
European stock	103.1
Pacific basin stock	132.9

Total

\$6,516.7

*Includes stocks and cash that the manager had available for investment.

Bonds and Mortgages

The SERS Investment Plan diversifies bond and mortgage investments and balances bond and mortgage management styles. It is the practice of SERS to contract with external investment advisors to manage portfolios.

In 1993 the SERS rate of return in fixed income securities was 12.7%, ahead of the 11.6% return of the SERS Bonds and Mortgages Custom Index. For the period 1989-1993, on an annualized basis the SERS fixed income securities rate of return was 11.7%, matching the custom index rate of return.

Policy

The SERS investment objective is to achieve in bonds and mortgages, over a full economic cycle, a total return that exceeds the total return of the SERS Bonds and Mortgages Custom Index. This index is composed of the following indices: 30% Lehman Brothers Long Term Government Bond Index; 20% Lehman Brothers Intermediate Government Bond Index; 25% Lehman Brothers Corporate Bond Index; and 25% Lehman Brothers Mortgage-Backed Securities Index.

In 1993 the SERS rate of return in fixed income securities was 12.7%, ahead of the 11.6% return of the SERS Bonds and Mortgages Custom Index. For the period 1989-1993, on an annualized basis the SERS fixed income securities rate of return was 11.7%, matching the custom index's rate of return over the five-year period.

The SERS 1993 Investment Plan targeted an allocation of 35.5% of assets to bonds and mortgages. Of this amount, 80% was targeted to active strategies, and 20% to passive strategies. The asset class is further classified according to core and specialty strategies, with 69% targeted to the core segment and 31% to the specialty segment. Specialty strategies include:

- Whole-loan mortgages, with an approximate target weight of 19% of total bonds and mortgages;
- High yield/special credits, with an approximate target weight of 11% of total bonds and mortgages; and
- Private placements, with an approximate target weight of 1% of total bonds and mortgages.

Market Value as of Dec. 31, 1993

Bonds and mortgages had a \$5.02 billion market value, 36.8% of the SERS fund total \$13.65 billion market value, on Dec. 31, 1993.

Number of Investment Advisors

SERS had contracts with nine external investment advisors to manage portfolios within the bonds and mortgages asset class. An additional investment advisor also was approved by the SERS Board prior to Dec. 31, 1993, but was not funded at that point in time.

Number of Investment Portfolios

SERS had a total of 10 portfolios within the bonds and mortgages asset class. An additional portfolio also was approved by the SERS Board prior to Dec. 31, 1993, but was not funded at that point in time.

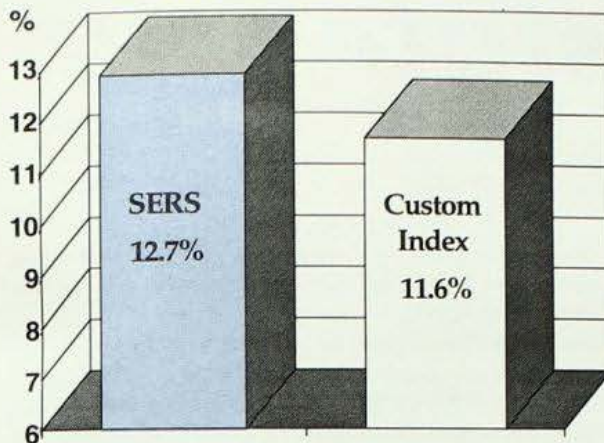
Type of Investment Portfolios

The bonds and mortgages asset class is divided into core and specialty segments. Core portfolios utilize a broad array of fixed income securities, while specialty portfolios focus on well-defined sectors within the fixed income market.

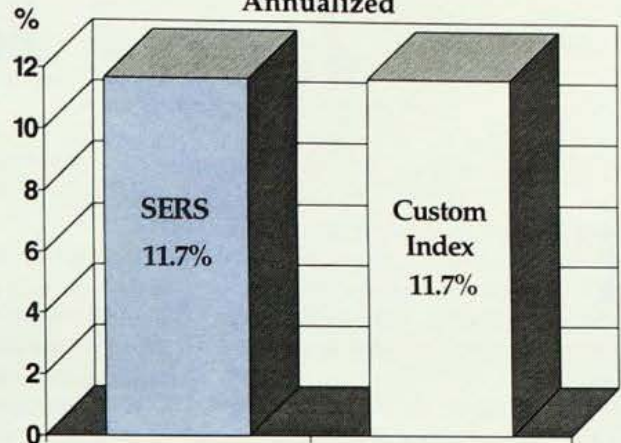
Core: SERS had three actively managed core bond portfolios with a market value of \$2.25 billion (44.7% of bonds and mortgages) and one passively managed core bond portfolio with a market value of \$1.23 billion (24.6% of bonds and mortgages).

Specialty: SERS had one whole-loan mortgage portfolio with a market value of \$851.6 million (17% of bonds and mortgages), three high yield/special credits portfolios with a market value of \$604.9 million (12.1% of bonds and mortgages), and two private placement portfolios with a market value of \$85.8 million (1.7% of bonds and mortgages).

Bonds and Mortgages: 1993 One-Year Rate of Return (after fees)



Bonds and Mortgages: 1989-1993 Five-Year Rate of Return (after fees) Annualized



Bonds and Mortgages Managers

*Market Value of Portfolio
as of Dec. 31, 1993
(\$ in millions)

Bonds and Mortgages Investment Manager

Investment Style

Core

1. P.G. Corbin Asset Management	active domestic fixed income	\$8.5
2. J.P. Morgan Investment Management	active domestic fixed income	428.3
3. Mellon Bond Associates	SERS Bonds and Mortgages Custom Index** (passive)	1,233.7
4. Miller, Anderson & Sherrerd	active domestic and international fixed income	1,808.4

Specialty

1. Cigna Investments, Inc.	private placement long-term fixed rate loans to Pennsylvania firms	1.7
2. John Hancock Mutual Life Insurance Company	privately placed fixed income securities	84.1
3. W. R. Huff Asset Management	high yield bonds	525.6
4. Legg Mason Real Estate Advisors	residential and commercial mortgages	851.6
5. Trust Company of the West, Special Credits Fund IIb	special credits	48.7
Trust Company of the West, Special Credits Fund III	special credits	30.6

Total

\$5,021.2

*Includes securities and cash that the manager had available for investment.

** SERS Bonds and Mortgages Custom Index:

- 20% — Lehman Brothers Intermediate Government Index
- 30% — Lehman Brothers Long Term Government Index
- 25% — Lehman Brothers Corporate Bond Index
- 25% — Lehman Brothers Mortgage-Backed Securities Index

Real Estate

The SERS Investment Plan diversifies real estate investments and balances real estate management styles. In accordance with the plan, SERS contracts with external investment advisors to manage portfolios.

In 1993 the SERS rate of return in real estate was 1.9%, well ahead of the 0.9% rate of the FRC Property Index. For the period 1989-1993, the SERS annualized rate of return in real estate was -0.3%, compared to the -0.5% rate of the FRC Property Index over the same five years.

SERS real estate investments are made through pooled fund investments and separate account portfolios where SERS owns the properties directly or with other co-investors.

Policy

The SERS investment objective, over a full economic cycle, is to achieve in equity real estate investments a total return that is competitive with market returns for similar types of real estate investments.

In 1993 the SERS Investment Plan targeted an eventual allocation of 9% of assets to real estate. Investments are made through pooled fund investments and separate account portfolios where SERS owns the properties directly or with other co-investors. The SERS real estate portfolio guidelines provide for diversification by:

- Property types
- Geographic location
- Development phase
- Transaction structures

Approximately 24% of the SERS real estate investments are located in Pennsylvania.

Market Value as of Dec. 31, 1993

Real estate had a \$842.3 million market value, 6.2% of the total fund's \$13.65 billion market value, on Dec. 31, 1993.

Number of Investment Advisors

SERS had contracts with 12 external investment advisors to manage real estate portfolios.

Number of Investment Portfolios

SERS had investments in 20 real estate portfolios managed by the 12 investment advisors.

Type of Investment Portfolios

As of Dec. 31, 1993, the composition of the real estate portfolio was:

87.1% equity ownership/12.9% equity-oriented mortgages*

47% pooled funds/53% separate accounts

26.6% office/12.2% industrial/40.1% retail/19.2% residential/.3% hotel and motel/1.7% other*

23.8% Pennsylvania/21.4% East (excluding Pennsylvania)/20.3% West/13.5% South/21.0% Midwest*

Note: 46.2% of the market value of the separate accounts was invested in 10 properties located in Pennsylvania.

* Data as of Sept. 30, 1993

Real Estate Managers

Portfolio Real Estate Investment Manager	SERS Initial Funding	Property Type	Transaction Structure	Market Value as of Dec. 31, 1993 (\$ in millions)
1. Aetna				
CERESA I	06-30-83	office, industrial	equity ownership	\$11.8
PMSA	09-30-83	diversified	equity oriented mtgs.	35.8
RESA	06-30-84	diversified	equity ownership	24.1
Apartment Fund	12-31-86	residential	equity ownership	9.9
2. Alex Brown	12-31-84	office, industrial retail, residential	equity ownership	19.0
3. Copley CIIF-II	08-08-88	industrial, other	equity ownership	12.6
4. Corporate Property Investors	12-08-83	office, industrial retail	equity ownership	110.6
5. Forest Investment Assoc.	10-30-92	timber	equity ownership	12.4
6. Heitman				
Separate account	12-28-87	office, industrial retail	equity ownership	203.0
California Land Venture	12-07-89	land	equity ownership	9.0
7. JMB				
Separate account	11-16-87	office, industrial retail	equity ownership	242.8
JMB Group Trust III	12-31-84	office, retail	equity ownership	34.7
8. John Hancock				
ERA	03-31-84	diversified	equity ownership	0.2
Apartment Fund	09-30-86	residential	equity ownership	12.5
9. Metric				
MIAF	09-05-89	residential	equity ownership	22.4
MIAF II	12-07-92	residential	equity ownership	21.8
10. Prudential				
PRACE I	12-31-83	office, industrial	equity ownership	5.4
PRACE II	12-31-84	industrial, residential	equity ownership	6.6
11. PSI III	08-16-88	industrial	equity ownership	17.7
12. Sentinel Corp.	07-31-84	office, industrial retail, residential	equity ownership	29.8
Total				\$842.3

Numbers may not add due to rounding.

Tactical Asset Allocation

Tactical asset allocation (TAA) is one of seven major asset classes that SERS uses to diversify the investment of the fund. TAA shifts assets among stocks, bonds and cash in response to changes in the economic outlook and expected market performance.

The SERS TAA rate of return in 1993 was 16.2%; the rate of return on an annualized basis was 13.4% from 1989 through 1993.

It is the practice of SERS to contract with external investment advisors to manage portfolios.

Policy

The 1993 SERS Investment Plan targeted an allocation of 5% of assets to TAA.

Market Value as of Dec. 31, 1993

TAA had a \$782 million market value, 5.7% of the total fund's \$13.65 billion market value, on Dec. 31, 1993.

Number of Investment Advisors

SERS had a contract with one external investment advisor, Wells Fargo Nikko Investment Advisors (WFNIA), to manage the TAA portfolio.

Number of Investment Portfolios

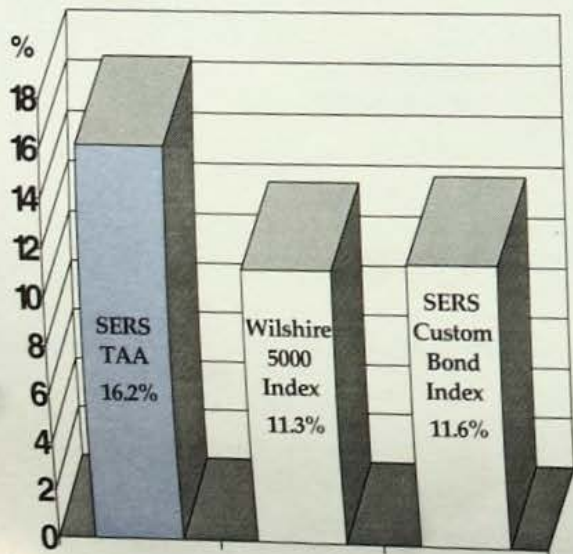
SERS had one TAA portfolio, the Enhanced 70/30 Normal U.S. Tactical Asset Allocation Fund, managed by the one investment advisor.

Type of Investment Portfolios

The WFNIA Enhanced 70/30 Normal U.S. Tactical Asset Allocation Fund is designed to offer an efficient means of seeking above-market returns from a portfolio diversified among equity, fixed income and cash markets. The Enhanced 70/30 Normal U.S. Tactical Asset Allocation Fund invests in three WFNIA collective funds. Proprietary technology is used to establish the optimal asset mix among these funds and to adjust the mix of these funds, which will vary as economic and security market conditions change. In an equilibrium situation, the SERS TAA portfolio would hold a 70% equity/30% bond asset mix. As of Dec. 31, 1993, the asset mix of the SERS TAA portfolio was 90% stock, 10% bonds and 0% cash. The asset allocation technology evaluates the expected returns, risks and correlations of each asset class to determine the optimal mix. The WFNIA proprietary dividend discount model generates the expected return inputs for stocks, while expected return inputs for bonds and cash are consensus-based. The asset allocation model is run daily, and changes can be implemented rapidly.

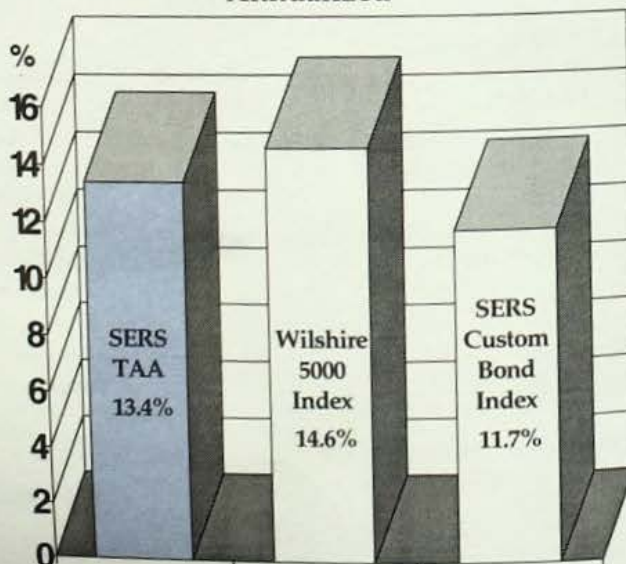
Tactical Asset Allocation: 1993

One-Year Rate of Return (after fees)



Tactical Asset Allocation: 1989-1993

Five-Year Rate of Return (after fees)
Annualized



Cash

Policy

The SERS investment objective, over a full economic cycle, is to achieve in short-term securities relative performance better than 90-Day U.S. Treasury Bills. The SERS 1993 Investment Plan targeted an allocation of 2% of assets to cash.

Market Value as of Dec. 31, 1993

Cash had a \$357.7 million market value, 2.6% of the total fund's \$13.65 billion market value on Dec. 31, 1993.

Number of Investment Advisors

SERS had a contract with one external investment advisor to manage a portfolio within the cash asset class. In addition, the Pennsylvania State Treasury Department serves as an investment advisor to SERS.

Number of Investment Portfolios

SERS had two portfolios within the cash asset class: one managed by the external advisor, and one managed by the Pennsylvania State Treasury Department. An additional portfolio was approved by the SERS Board prior to Dec. 31, 1993, but was not funded by that point in time.

Type of Investment Portfolios

SERS had one actively managed short duration fixed income portfolio with a market value of \$163.4 million (45.7% of cash), and one actively managed short-term portfolio with a market value of \$194.3 million (54.3% of cash). The short-term portfolio is managed by the Pennsylvania State Treasury Department. Treasury also manages excess cash balances held by other SERS investment advisors in other asset classes. In the aggregate, Treasury managed \$482.5 million on behalf of SERS and the SERS external investment advisors as of Dec. 31, 1993.

Cash is one of seven major asset classes that SERS uses to diversify the investment of the fund.

The SERS Investment Plan diversifies cash investments and balances cash management styles. It is the SERS practice to contract with external investment advisors to manage portfolios.

In 1993 the SERS rate of return in short-term securities was 7.6%,* well ahead of the 3.1% return on 90-Day U.S. Treasury Bills. For the period 1989-1993, the annualized SERS short-term securities rate of return was 9.1%,* also well above the 6.1% rate of return on 90-Day U.S. Treasury Bills over the same five years.

**Note: Returns for Treasury Investment Pool funds are not based on market values.*

Cash Managers

Cash Investment Manager	Investment Style	Market Value of Portfolio as of Dec. 31, 1993 (\$ in millions)*
1. Payden & Rygel	Short duration U.S. Treasury and Agency securities, corporate notes, money market instruments, and selected CMOs; the maximum duration of the portfolio may not exceed four years.	\$163.4
2. Pennsylvania State Treasury Department Short-Term Investment Pool **	Short term U.S. Treasury and Agency securities, corporate notes, and money market instruments; maximum maturity of individual securities cannot exceed two years. A 10% "basket clause" may be employed under the Fiscal Code.	194.3
Total		\$357.7

**Market value does not include cash maintained in the Short Term Investment Pool by SERS's other external investment advisors. In the aggregate, State Treasury managed \$482.5 million on behalf of SERS and SERS's external investment advisors as of Dec. 31, 1993.

Venture Capital

Venture capital is the financing of young, relatively small, rapidly growing companies that do not have access to public equity or debt-oriented institutional funding. SERS invests capital as a limited partner in venture capital limited partnerships that are established for the purpose of investing in and managing venture capital companies.

In 1993 the SERS rate of return in venture capital was estimated at 4.4%. For the period 1989-1993 the annualized SERS rate of return in venture capital was an estimated 6.4%. The SERS 1993 Investment Plan targeted an allocation of 1.5% of assets to the venture capital asset class, with the eventual allocation reaching 2%.

History

Act 1984-95, Section 4, which became effective June 29, 1984, specifies that SERS may invest up to 1% of the fund's assets in venture capital by acquiring equity or debt and equity interests in a business that is expected to grow substantially in the future. The intent of Act 1984-95 is to enhance the general welfare of Pennsylvania and its citizens through economic development. Act 1991-23, which became effective Aug. 5, 1991, amended Act 1984-95 by specifying that SERS may invest up to 2% of the fund in venture capital.

The SERS venture capital program includes 23 venture capital limited partnerships committed to include Pennsylvania-based companies as a part of their venture investment focus.

Market Value as of Dec. 31, 1993

The SERS venture capital investments had an estimated \$75.2 million market value, 0.6% of the total fund's \$13.65 billion market value, on Dec. 31, 1993. In addition, SERS had \$158.5 million in outstanding obligations to fund venture capital partnerships that represented 1.1% of the SERS total fund at year's end. As of Dec. 31, 1993, the market value of SERS venture capital investments added to future obligations to fund investments equaled \$233.7 million or 1.7% of the SERS total fund.

Number of Limited Partnerships

SERS has made commitments to 23 venture capital limited partnerships. As a result of these commitments as of Dec. 31, 1993, SERS had paid-in capital as a limited partner in 20 venture capital limited partnerships. Paid-in capital represents funds that have been drawn down by the venture capitalist and are readily available for investment. The remaining three venture partnerships had not closed as of Dec. 31, 1993.

SERS Venture Capital Program

The SERS venture capital program includes commitments to 23 venture capital limited partnerships. These partnerships are committed to include Pennsylvania-based companies as a part of their venture investment focus. The intent of these partnerships as a part of the overall venture program is to make venture capital investments in companies either headquartered in Pennsylvania or in companies that provide employment for Pennsylvania citizens. As of Sept. 30, 1993, SERS venture capital limited partnerships had invested approximately 40% of their portfolios in Pennsylvania companies since inception.

A major component of the venture program is to diversify company investments across industries. As of Sept. 30, 1993, the venture capital program was well diversified across various industry categories:

1%	advanced materials	11%	biotechnology
14%	computer related industries	34%	health-care related industries
6%	telecommunications	2%	electronic products
3%	retailing	1%	transportation services
1%	energy	14%	financial services
6%	industrial products	1%	environmental
1%	restaurants	3%	media services
2%	consumer products		

The venture program's financing stage focus varies: 15 of the limited partnerships have a diversified financing stage focus; two of the funds are focused on middle- and later-stage financing; five are focused on seed and early-stage financing; and one partnership intends to make diversified stage financing available to minority-owned enterprises.

SERS Venture Capital Committed, Drawn and Distributed

As of Dec. 31, 1993

The Capital Committed column represents SERS capital committed to each venture capital limited partnership. Capital Drawn is that portion of SERS capital commitments that was drawn or taken down by the venture capitalist and is readily available for investment. The Market Value of Distributions column shows the value of the distributions made from each limited partnership to SERS at the time of the transaction.

Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed (\$ in millions)	Capital Drawn (\$ in millions)	Market Value of Distributions (\$ in millions)
1. Advent VII	Diversified	7/30/93	\$25.0	\$2.5	\$0.0
2. APA/Fostin	Diversified	9/30/87	\$20.0	\$20.0	\$12.6
3. APA/Fostin II	Diversified	6/2/93	\$30.0	\$3.5	\$0.0
4. CEO Venture Fund-S	Diversified	7/29/87	\$1.0	\$1.0	\$0.4
5. CEO Venture Fund-II	Diversified	7/14/89	\$7.5	\$7.0	\$0.6
6. Edison Ventures III-PA	Diversified	*	\$25.0		
7. Fairview Capital	Minority	*	\$10.0		
8. Fostin Capital	Diversified	11/25/85	\$10.0	\$10.0	\$4.5
9. Fostin Capital-II	Diversified	10/5/89	\$7.5	\$6.3	\$0.8
10. Genesis Seed Fund	Seed	11/20/86	\$2.0	\$2.0	\$0.2
11. Grotech PA III	Diversified	6/29/90	\$3.0	\$2.5	\$0.3
12. Grotech PA IV	Diversified	11/1/93	\$25.0	\$2.5	
13. Healthcare Ventures III	Diversified	7/2/92	\$15.0	\$2.5	\$0.0
14. Keystone-II	Middle/Later	11/25/85	\$10.0	\$10.0	\$13.7
15. Keystone-IV	Middle/Later	7/21/93	\$15.0	\$2.5	\$0.0
16. NEA-VI	Early/Later	*	\$25.0	\$0.0	\$0.0
17. NEPA Venture	Seed/Early	8/29/85	\$2.0	\$2.0	\$0.5
18. NEPA Venture-II	Seed/Early	7/24/92	\$7.5	\$2.3	\$0.0
19. Pittsburgh Seed Fund	Seed	1/13/87	\$2.0	\$2.0	\$0.0
20. Point Venture Partners	Diversified	10/2/90	\$1.0	\$0.8	\$0.0
21. PNC Venture Group I	Diversified	11/25/85	\$5.0	\$5.0	\$3.7
22. TDH-II Limited	Diversified	11/25/85	\$9.0	\$9.0	\$12.4
23. Zero Stage Capital-II	Seed	4/30/87	\$2.0	\$2.0	\$0.1
Total			\$259.5	\$101.0	\$49.7

*No contracts to date. SERS Board approved NEA-VI at the January 1994 board meeting.

Alternative Investments

In 1993 the SERS Investment Plan targeted an allocation of 1% of assets to alternative investments, with an eventual allocation of 2%. In 1993 the SERS rate of return in alternative investments was estimated at 3.8%. For the period 1989-1993, the annualized SERS rate of return in alternative investments was an estimated 3.5%.

The SERS alternative investment program had commitments to six leveraged buyout partnership investments, three European venture capital/private equity partnership investments, one special situations/restructuring fund partnership investment and one partnership that specializes in private equity buyout investments while incorporating an Employee Stock Ownership Plan (ESOP) in its acquisition strategy.

Leveraged buyouts (LBO) involve acquiring companies using borrowed funds. Usually

the target company's assets serve as security for loans taken out by the acquirer. The acquirer repays the loans from cash flow of the acquired company. SERS invests as a limited partner in LBO partnerships formed for the purpose of providing funds, usually in the form of equity interests, for the acquisition of companies.

Special situations/restructuring investments operate under a philosophy of flexibility to adapt to market fluctuations and opportunities that exist from the deleveraging of debt-laden companies. Investments are usually made in successful companies that carry high debt levels and seek to de-leverage for a variety of reasons. De-leveraging is often used in an attempt to avoid a major restructuring or bankruptcy. Investments are usually "white squire" or friendly "influence block" in nature. A "white squire" invests in companies that could benefit from the capital and presence of a large and supportive shareholder.

SERS also is a limited partner in three European-based venture capital limited partnerships focused on private equity investing in France, Germany and the U.K. Unlike venture capital investing in the U.S., venture investing within Europe is private equity in nature, tends to occur at a much later stage and concentrates on lower technology industries.

Market Value as of Dec. 31, 1993

The SERS alternative investments program had an estimated \$54.5 million market value, or 0.4% of the total fund's \$13.65 billion market value on Dec. 31, 1993. In total, SERS had committed to invest \$175 million in the alternative investments asset class.

Alternative Investments Program

The alternative investments program has commitments to six buyout oriented partnerships: one is Pennsylvania focused; one is Midwest focused; one is focused in the West; and four are nationally focused. All are focused on small-to-medium capitalization companies. Only "friendly" acquisitions are pursued. All deals are non-hostile, privately negotiated, non-auction and completed with present management in place. The SERS special situations/restructuring partnership is nationally focused and invests in medium-to-larger capitalization companies.

The SERS acquisition/buyout partnership that utilizes an ESOP strategy makes only friendly acquisitions that are supported by a broad group of the company's management, who invariably participate in the equity investment. Ownership is further expanded to other employees in the organization through the implementation of an ESOP, which gives employees a sense of ownership and a financial stake in their company.

SERS European venture capital investments are comprised of private equity investments in companies based in the U.K. and Europe. The three partnerships focus on the U.K., France, Germany and German-speaking countries. All three funds plan to take advantage of changes occurring within Europe, including the elimination of a number of trade barriers in the European economic community, the reunification of Germany and the disintegration of the former Soviet Union. European venture capital investing focuses on small, rapidly growing companies that do not have access to traditional sources of capital.

SERS Alternative Investments Committed, Drawn and Distributed As of Dec. 31, 1993

The Capital Committed column represents SERS capital committed to each limited partnership. Capital Drawn is that portion of SERS capital commitments that was drawn or taken down by the general partner and is readily available for investment. The Distributions column shows the value of the distributions made from each limited partnership to SERS.

Alternative Investments Limited Partnership	Geographic Focus	SERS Initial Funding	Capital Committed (\$ in millions)	Capital Drawn (\$ in millions)	Market Value of Distributions (\$ in millions)
1. APA Capital Risque III	France	11/29/90	\$5.0	\$3.4	\$0.0
2. APA German Ventures	Germany	1/30/91	\$5.0	\$1.3	\$0.0
3. Brentwood Buyout Fund	National	11/21/88	\$10.0	\$10.0	\$1.6
4. Charterhouse Equity II	National	*	\$40.0	\$0.0	\$0.0
5. Code Hennessy & Simmons	Midwest	9/28/89	\$10.0	\$8.9	\$9.7
6. Hellman & Friedman II	National	1/7/92	\$25.0	\$14.1	\$3.5
7. Kelso KIA V	National	*	\$40.0	\$0.0	\$0.0
8. Madison Dearborn	National	2/23/93	\$15.0	\$2.9	\$0.0
9. Murphy & Fauver	National	10/11/88	\$5.0	\$5.0	\$0.2
10. RR& Z PA Fund #1	Pennsylvania	3/2/89	\$10.0	\$9.8	\$1.0
11. Schroder Ventures UK III	UK	8/29/89	\$10.0	\$4.5	\$0.4
Total			\$175.0	\$60.0	\$16.4

* No contract as of Dec. 31, 1993.

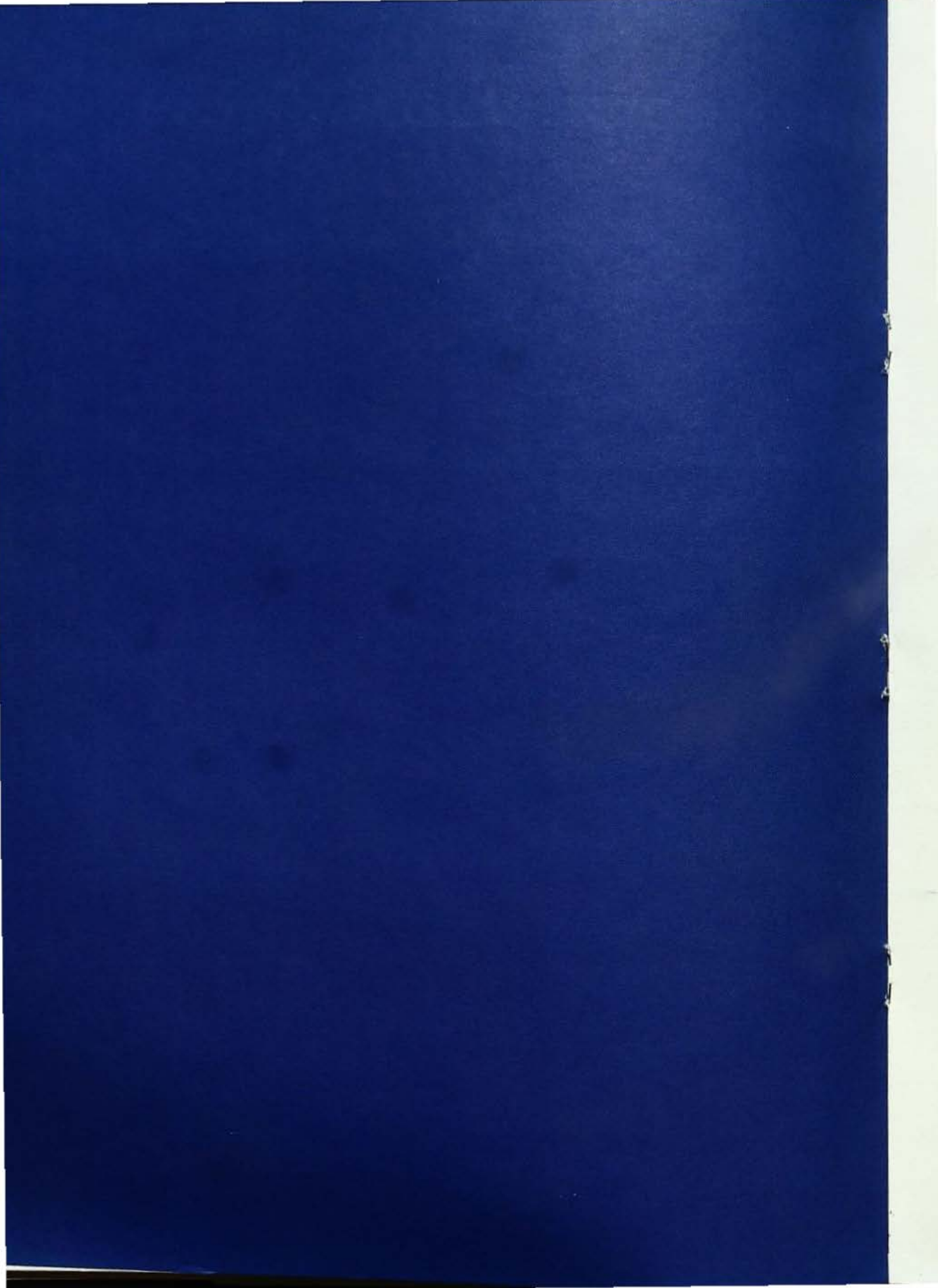
Commissions Paid by SERS Stock Managers to Clearing Brokers: 1993

Broker	Commissions	Broker	Commissions
Abel Noser Corp.	\$14,403.00	Kidder Peabody & Co. Inc.	\$113,409.00
Alex. Brown & Sons Inc.	25,282.00	Lakeview Securities Corp.	2,535.50
Alpha Management Inc.	17,971.78	Lazard Freres & Co.	17,220.00
Autranet	9,702.00	C. J. Lawrence Morgan Grenfell	60,883.00
Bear Stearns & Co.	237,758.96	W. R. Lazard & Laidlaw	32,002.00
Blair, William & Co.	10,066.00	Legg Mason Wook Walker Inc.	6,120.00
Bridge Trading	9,060.00	Lehman Brothers Inc.	70,037.00
Brimberg & Co.	18,558.00	Lynch Jones & Ryan	537,201.05
Broadcort Capital Corp.	140,615.50	Mabon Nugent & Co	6,754.00
BT Brokerage Corp-Single Price	2,817.12	Merrill Lynch	151,666.00
Cantor Fitzgerald & Co. Inc.	57,459.50	Moness Crespi	40,898.50
Capital Institutional Services	20,995.00	Montgomery Securities	69,159.56
Cleary Gull & Reiland	3,018.00	J. P. Morgan Securities	9,090.00
Correspondent Serv. Corp.	14,938.50	Morgan Keegan & Co. Inc.	9,384.00
County Natwest Securities Corp. USA	33,118.00	Morgan Stanley & Co. Inc.	136,111.00
Cowen & Co.	13,661.00	Neuberger & Berman	20,997.00
CS First Boston Corp.	467,066.81	Oppenheimer & Co. Inc.	31,219.00
Dean Witter Reynolds Inc.	15,159.58	Paine Webber Jackson & Curtis	128,042.00
Dillion Read & Co. Inc.	4,948.00	Pershing Div. DLJ	111,790.50
Donaldson Lufkin & Jenrette	2,118.00	Piper, Jaffray & Hopwood Inc.	9,818.00
Ewing Capital Inc.	25,053.72	Prudential Securities Inc.	31,719.30
Execution Services Inc.	86,055.33	Quaker Securities	10,223.00
Factset Data Systems Inc.	16,644.00	Quantitative Analysis	6,460.00
Fahnestock & Co. Inc.	24,989.00	Robertson Stephens & Co.	3,366.00
Fidelity Capital Markets	12,538.00	Roulston Research Corp.	3,600.00
First Albany Corp.	4,206.00	Russell, Frank, Securities Inc.	15,716.00
First Manhattan Co.	11,310.00	S E I Funds Evaluation	11,278.00
Furman Selz Mager Dietz & Birney	15,408.00	Salomon Brothers Inc.	103,275.80
Gerard Klauer Mattison & Co.	3,570.00	Sanford C. Bernstein & Co.	46,687.50
Goldman, Sachs & Co.	199,484.00	Smith Barney Harris Upham	48,495.50
Gordon Haskett	5,276.00	Smith Barney/Shearson Inc.	166,523.00
Halfant, Lawrence Inc.	19,306.00	Standard & Poors Securities	25,888.80
Hambrecht & Quist	3,101.00	UBS Securities Inc.	15,852.00
Instinet, Inc.	104,539.65	Utendahl Capital Partners	2,478.00
Interstate/Johnson Lane Corp.	6,529.00	Warburg, (S.G.), & Co. Inc.	5,694.00
Investment Performance Service	131,694.50	Wedbush Morgan Securities Inc.	4,740.00
Investment Technology Group Inc.	70,612.00	Weeden & Co.	42,435.00
IPS Brokerage Inc/BCC Clearing	6,472.00	Wessels, Arnold & Henderson	3,562.00
ISI Group, Inc.	2,334.00	Wheat First Securities Inc.	3,000.00
Janney Montgomery, Scott	23,024.00	Wilshire Associates	418,469.50
Jefferies & Co.	112,923.10	Yaeger Securities	23,262.50
Jensen Securities Co.	2,253.00	York Securities Inc.	143,352.00
Jones & Assoc.	2,373.00	Others	32,140.78
Josephthal Lyon & Ross	10,068.00		
Keefe Bruyette & Woods	19,302.00		
Kemper Securities Group	6,912.00		

Total Commissions

\$4,770,337.84

SECTION II: *Pennsylvania* Investments



Pennsylvania Investments

Members of the State Employees' Retirement Board, employees of SERS and agents of the board stand in a fiduciary relationship to the members of the system regarding the investments and disbursements of the fund. Subject to restrictions on investments contained in the Retirement Code and the Fiscal Code, the board has exclusive control and management of the fund and full power to invest the assets of the fund. The board adopted a formal Statement of Investment Policy in 1979, which has been revised to reflect and incorporate legislative changes governing investments.

Where investment characteristics including yield, risk and liquidity are equivalent, board policy favors investments that have a positive impact on the economy of Pennsylvania.

As of Dec. 31, 1993, SERS had \$1.16 billion (over 8.5% of the SERS total fund) invested in Pennsylvania. Of this amount, SERS had placed almost \$762 million in portfolios specially designed for Pennsylvania investments.

1993 SERS Asset Allocation (\$ in millions)

Asset Class	Market Value	Specially Designated Portfolios Pennsylvania Market Value	Total Pennsylvania Market Value
Stocks	\$6,516.7	\$ 80.0	\$289.3
Bonds and Mortgages	5,021.0	402.3	562.6
Real Estate	842.3	194.5	198.0
Tactical Asset Allocation	782.0		27.4
Cash	357.7		
Venture Capital	75.2	75.2	75.2
Alternative Investments	54.5	9.9	9.9
Total	\$13,649.5	\$761.9	\$1,162.4

Stocks

SERS has designed the Pennsylvania Equity Index portfolio to increase exposure to smaller "in-state" corporations. The portfolio includes some 250 corporations that are either Pennsylvania-based or employ Pennsylvanians equal to at least 25% of their total corporate employment. Mellon Equity Associates manages this passive account for SERS. As of Dec. 31, 1993, the portfolio's market value was \$80 million.

Some of the top performing Pennsylvania stocks in 1993: Elmwood Bancorp, Media (total return: +157%); Intelligent Electronics, Exton (total return: +145%); Systems & Computer Technology Corp., Malvern (total return: +128%); Kulicke & Soffa Industries, Willow Grove (total return: +124%); Dimark Inc., Langhorne (total return: +122%).

In addition to the Pennsylvania Equity Index portfolio, as of Dec. 31, 1993, SERS had \$209.3 million invested in Pennsylvania companies, including the commonwealth's large companies such as Bell Atlantic Corp., H.J. Heinz Co., USX Marathon Group and AMP Inc.

Bonds and Mortgages

As of Dec. 31, 1993, SERS had \$1.7 million invested in loans of the Pennsylvania Private Placement Separate Account. Designed by the Pennsylvania MILRITE Council and managed by Cigna, these investments provide long-term, fixed rate loans to established Pennsylvania firms that do not have access to the public bond markets.

At the end of the year, SERS had \$400.6 million invested in Pennsylvania mortgages (\$334.6 million in conventional commercial, \$18.8 million in FHA projects, and \$47.2 million in residential properties).

The residential segment of this portfolio was in the form of competitive rate mortgages distributed solely in Pennsylvania in accordance with SERS policy to originate all residential mortgages within the commonwealth.

The commercial segment of the portfolio is

Various projects financed under the SERS commercial mortgage program directly employ over 5,000 Pennsylvanians, not taking into account those employed in the projects' property-management and maintenance areas or considering the positive "ripple effect" on local economies.

SERS owns a 100% interest in Vartan Parc, one of Harrisburg's major downtown office buildings, which serves both as an investment and as SERS headquarters.

SERS is one of the largest investors in the Short Term Investment Pool managed by the Pennsylvania State Treasury Department.

comprised of competitive rate mortgages on various industrial, retail, apartment and office complexes within Pennsylvania. SERS mortgage advisor Legg Mason has committed to a "best-efforts" basis under its fiduciary responsibility to invest at least 50% of the entire SERS mortgage portfolio (commercial and residential combined) in Pennsylvania-based mortgages.

Pennsylvania commercial mortgages in the SERS portfolio include Super Rite Foods Warehouse, Harrisburg (SERS financing: \$20 million); Townline Apartments, Blue Bell (SERS financing: \$13.4 million); and Hanover Square Shopping Center, Hanover (SERS financing: \$14 million).

By conservative estimate, the various Pennsylvania projects financed under the SERS commercial mortgage program directly employ over 5,000 Pennsylvanians, not taking into account those employed in the projects' property-management and maintenance areas or considering the positive "ripple effect" on local economies.

As of Dec. 31, 1993, SERS also had approximately \$160.3 million invested in corporate securities issued by Pennsylvania-based companies and held in SERS's various externally-managed bond portfolios. Among these holdings was \$3.2 million in bonds issued by Pittsburgh-based USAir and \$2 million in bonds issued by the Conshohocken-based Hale Fire Pump Co.

Real Estate

In 1987 SERS established separate real estate portfolios managed by Heitman Advisory Corporation and JMB Institutional Realty. To date, these managers have met their commitment to invest approximately 50% of their initial allocation in Pennsylvania properties. As of Dec. 31, 1993, the two portfolios had invested in 10 Pennsylvania properties with a net market value of \$186.6 million out of a total portfolio market value of \$445.7 million.

As of Dec. 31, 1993, the SERS real estate portfolio contained 20 Pennsylvania investments totaling over 6.5 million square feet of office, retail, apartment and warehouse space. The gross market value of these investments totaled \$449 million, of which the SERS ownership share was \$198 million.

Among the Pennsylvania real estate investments:

Foster Plaza, Pittsburgh: A 10-building office park located on the main corridor from the airport to downtown;

1818 Market Street, Philadelphia: Purchased in 1988, renovated in 1991, now positioned to take full advantage of the office market recovery;

Heartland Properties, Reading and Harrisburg: combination of four bulk warehouse projects with excellent access to both the Pennsylvania Turnpike and interstate highways;

York Galleria, York: SERS owns a significant interest in this regional shopping mall, which has become the dominant mall in the area and contributed to the local job market since its completion in 1990;

Vartan Parc, Harrisburg: SERS owns a 100% interest in this major downtown office building, which serves both as an investment and as SERS headquarters.

In January 1994 SERS hired the Philadelphia-based firm of Radnor Advisers Inc. to invest an initial allocation of \$25 million exclusively within the commonwealth.

The firm will pursue all types of commercial real estate investments throughout Pennsylvania.

Cash

SERS is one of the largest investors in the Short Term Investment Pool managed by the Pennsylvania State Treasury Department. Although exact figures are unavailable, the pool has significant holdings of certificates of deposit issued by Pennsylvania-based financial institutions; short-term notes and commercial paper issued by Pennsylvania-based companies; notes and obligations of selected Pennsylvania state agencies; and FNMA mortgage-backed securities backed by loans issued under the Homestart program, which is designed to encourage home ownership by making mortgages available to lower, moderate and middle-income Pennsylvania households.

Real Estate Separate Account Pennsylvania Properties

Property	Location	Description	Market Value of SERS % (\$ in millions)	Manager
1. Bucks County Business Park	Middletown & Falls Township, Bucks Co.	Five, one-story office flex buildings including warehouse and distribution space	\$5.9	JMB Institutional Realty
2. Columbia Mall	Hemlock Township, Bloomsburg	Shopping Mall	\$17.9	Heitman Advisory
3. Foster Plaza II-VI	Borough of Greentree, Pittsburgh	Multi-story office buildings	\$30.5	JMB Institutional Realty
4. Foster Plaza IX plus land	Borough of Greentree, Pittsburgh	Multi-story office buildings	\$7.7	JMB Institutional Realty
5. Greenwood Square	Bensalem Township, Bucks County	Multi-phased flex office facility	\$10.9	JMB Institutional Realty
6. Heartland Properties	Reading, Harrisburg, Montgomeryville	Two industrial portfolios consisting of warehouse, distribution, and limited mfg. facilities	\$26.8	JMB Institutional Realty
7. Lincoln Green Apartments	Philadelphia	360-unit Apt. complex consisting of 288 one-bedroom units and 72 two-bedroom units	\$10.5	JMB Institutional Realty
8. 1818 Market Street	Philadelphia	40-story office tower with a 5-level parking garage	\$35.4	Heitman Advisory
9. York Galleria	York	Shopping Mall	\$21.9	Heitman Advisory
10. Vartan Parc	Harrisburg	10-story office building	\$19.1	JMB Institutional Realty
Total			\$186.6	

Venture Capital

To date, the SERS venture capital program has committed \$259.5 million to 23 venture capital partnership funds. The program targets partnerships that plan to make investments in companies either based in Pennsylvania or that employ Pennsylvanians. These partnerships are diversified among various geographic regions and financing stages and include five "seed funds" designated by Pennsylvania's Ben Franklin Partnership.

In 1987 SERS, in conjunction with the Pennsylvania Public School Employees' Retirement System (PSERS), created the APA/Fostin Pennsylvania Venture Capital Fund with a commitment of \$20 million from each system and managed by Alan Patricof Associates/Fostin Capital managers. Again in 1992 SERS and PSERS joined in committing \$30 million each to create APA/Fostin Pennsylvania Venture Capital Fund II to continue the focus on Pennsylvania venture capital investing.

Another key goal of the SERS venture capital program is to attract national funds into Pennsylvania investments. As of Sept. 30, 1993, SERS venture capital partnerships had attracted over \$183 million of out-of-state funds to finance active venture companies based in Pennsylvania. After more than nine years, the SERS program continues to enhance the pool of venture capital available to Pennsylvania-based companies, increasing business creation and job opportunities throughout the commonwealth. These national funds also bring in investment capital reserves, providing a significant opportunity for SERS to leverage its venture capital dollars while promoting economic growth.

SERS has been active in seed and early stage financing of Pennsylvania-based companies as well. For example, the SERS investment in NEPA Venture Fund has, during its nine year history, provided investments in 23 Pennsylvania-based start-up, technology-oriented companies. SERS's recent commitment to NEPA Venture Fund II will enable it to cover the Pittsburgh area, with the target of investing in up to five Pittsburgh-area start-up companies over the next five years.

Limited partnerships funded by SERS had made investments in 54 Pennsylvania companies as of Sept. 30, 1993. Pennsylvania companies plus non-Pennsylvania-based companies employ approximately 4,500 Pennsylvanians and have an estimated 1994 payroll of \$131.4 million. As of Dec. 31, 1993, \$101 million of the \$259.5 million committed to venture capital partnership funds had been drawn down for investment by the partnerships, and \$49.7 million had been returned to SERS.

Here are some examples of Pennsylvania investments funded by SERS venture capital partnerships:

Designer Foods, Chadds Ford: An example of Pennsylvania benefiting from an out-of-state investment; originally a start-up located in Wilmington, Del.; in 1993 SERS venture manager Grotech Partners moved this company to Chadds Ford;

Fore Systems, Pittsburgh: A leading provider of ATM networking products founded by four researchers from Carnegie Mellon University; Fore employs 55 people and ended its fiscal year profitably with over \$5 million in revenues;

Leonard Medical, Huntingdon Valley: A company developing endoscopic surgical instrumentation, its products have received the acclaim of leading surgeons around the world;

Metallized Paper Corporation of America, McKeesport: Founded with seed money from the SERS venture manager APA/Fostin Pennsylvania Fund, the company has attracted over \$21 million in investment capital, including \$5 million in equity from outside the state; employing over 50 Pennsylvanians, this is a classic example of a public-private partnership of low interest loans, incentive programs and opportunistic venture capital working together;

Mothers Work, Philadelphia: The leading manufacturer and retailer of upscale maternity clothing in the country with 95 stores in 22 states; the company brings in nearly \$40 million a year in taxable revenue to Pennsylvania; with its first institutional funding (in 1987) coming from SERS venture manager Keystone Venture Capital, the company employs 115 Pennsylvania residents at its eight state locations and indirectly employs another 100 as dedicated sub-contractors;

A key goal of the SERS venture capital program is to attract national funds into Pennsylvania investments. After more than nine years, the SERS venture program continues to enhance the pool of venture capital available to Pennsylvania-based companies, increasing business creation and job opportunities throughout the commonwealth.

Plaid Holdings, Franklin County: This Baltimore-based company is a good example of how the commonwealth benefits from investments made in other states; the second largest manufacturer of mens' tailored clothing in North America, Plaid is the largest private employer in Franklin County with a payroll of 1,200;

Swan Technologies, State College: A manufacturer and direct marketer of personal computers and accessories, the company currently generates over \$60 million in annual revenue, employing over 130 people;

Symphony Pharmaceuticals, Malvern: Founded at the Philadelphia University Science Center, the company received \$2.25 million in startup financing from SERS venture manager Fostin Capital, SR One and Euclid Partners in 1992;

Turtle Beach Systems, York: A pioneer in the fast-growing multimedia PC computing field, this company received \$600,000 of start-up financing from the SERS venture manager NEPA Venture Fund in 1991 and 1992; it was acquired in 1993 by Valley Forge, Pa.-based Integrated Circuit Systems Inc., which itself was backed by Keystone Venture Capital some years ago;

U.S. Dining, Norristown: This chain operates eight of its nine restaurants in Pennsylvania, backed by SERS venture manager Keystone Venture Capital. The company has revenue of nearly \$12 million and employs 375 Pennsylvania residents; its "sister" company, U.S. Restaurants, which is also backed by Keystone Venture Capital but not in a SERS venture fund, employs over 3,100 Pennsylvania residents at 58 in-state restaurants;

Zynaxis, Malvern: A biotechnology company formed in 1988 with the help of \$9.7 million in venture backing, including funds from SERS venture manager Grotech Partners; to date the company has generated \$33.5 million of capital.

Another key goal of the SERS venture capital program is to attract national funds into Pennsylvania investments.

SERS Venture Capital Portfolio Companies Investment and Payroll Impact of Active Investments on Pennsylvania as of Sept. 30, 1993

Number of Companies	Amount Invested	Additional Commitment	Non-SERS Partnership Dollars Co-Invested	Non-SERS Partnership Additional Commitment	Pa. Employees	Estimated 1993 Pa. Payroll
67	\$71,020,382	\$6,343,469	\$281,534,581	\$18,043,000	4,502	\$131,434,83

Number of Companies includes 54 Pennsylvania-based companies and 13 non-Pennsylvania-based companies with Pennsylvania employees. Total dollars invested counts active investments by a partnership in which SERS is a limited partner. Figures do not include investments that have been sold or written off. Additional Commitments are those made by each partnership in which SERS is invested.

SERS Venture Capital Portfolio Company Characteristics Current Portfolio as of Sept. 30, 1993

Number of Pennsylvania Companies	Investments at Cost	Current Valuation
54	\$53,538,470	\$61,651,531
Number of Non-Pennsylvania Companies	Investments at Cost	Current Valuation
91	\$127,572,351	\$152,745,886
Number of Companies Written Off	Number of Companies Sold	Number of Public Companies
54	60	21

Number of Pennsylvania Companies excludes those investments sold or written off. Investments at Cost include total partnership investments. SERS capital contributions represent a portion of each partnership's total capital.

Alternative Investments

SERS has funded \$10 million to one LBO limited partnership fund with a Pennsylvania focus. The fund, RR&Z Pennsylvania Fund #1, invests in non-hostile, "friendly," privately negotiated, non-auction deals that are completed with present management in place.

The SERS search for alternative investment fund managers includes a focus on Pennsylvania-based companies.

The LBO fund focuses on small-to-medium capitalization companies (between \$5 million and \$100 million). SERS believes this focus offers the largest potential return given the risk levels for these types of investments. Another SERS LBO fund manager, Brentwood Associates, has made two out of five investments in Pennsylvania and continues to build an investment strategy around its Pennsylvania-based companies.

The SERS search for alternative investment fund managers includes a focus on Pennsylvania-based companies. The SERS's most recent commitments to this asset class include Charterhouse Equity Partners and Kelso Investment Associates, which have focused on investing in Pennsylvania-based companies.

Following are some Pennsylvania companies funded by SERS alternative investments partnerships:

Bundy Industries, Coraopolis: A manufacturer of baking pans for the commercial baking industry, Bundy generates approximately \$6 million in annual sales and employs 85 Pennsylvania workers;

Ductmate Industries, Monongahela: This company, along with its subsequent acquisition of Ward Duct Connectors Industries, manufactures proprietary duct connector systems and related hardware for commercial and industrial heating, ventilating and air conditioning (HVAC) systems; Ductmate generates annual revenues of approximately \$19 million and employs 48;

Horizon Cellular Telephone Company, Doylestown: This provider of cellular telephone services to a rural area marketplace was a start-up venture conceived by Brentwood Associates, an SERS LBO manager, and is an excellent example of the power of leveraged dollars; the company currently is raising \$54 million in equity capital to build on its Pennsylvania base;

J-Pitt Steel Inc., Johnstown: Formerly the Bethlehem Steel Corporation's Bar Rod and Wire Division Gautier Mill, the company projects annual revenues of \$17 million, currently employs 60 Pennsylvanians and expects to add 12 workers within a year;

June Broadcasting: This radio broadcasting company was founded and backed by SERS LBO managers Murphy & Fauver; in 1993, June acquired radio station WNNK-AM & FM "WNNK 104" in Harrisburg, which employs 37; WNNK-FM is the number-one rated radio station in the Harrisburg area, and WNNK-AM has changed its call letters to WTCY-AM and re-targeted its programming to Harrisburg's African-American community;

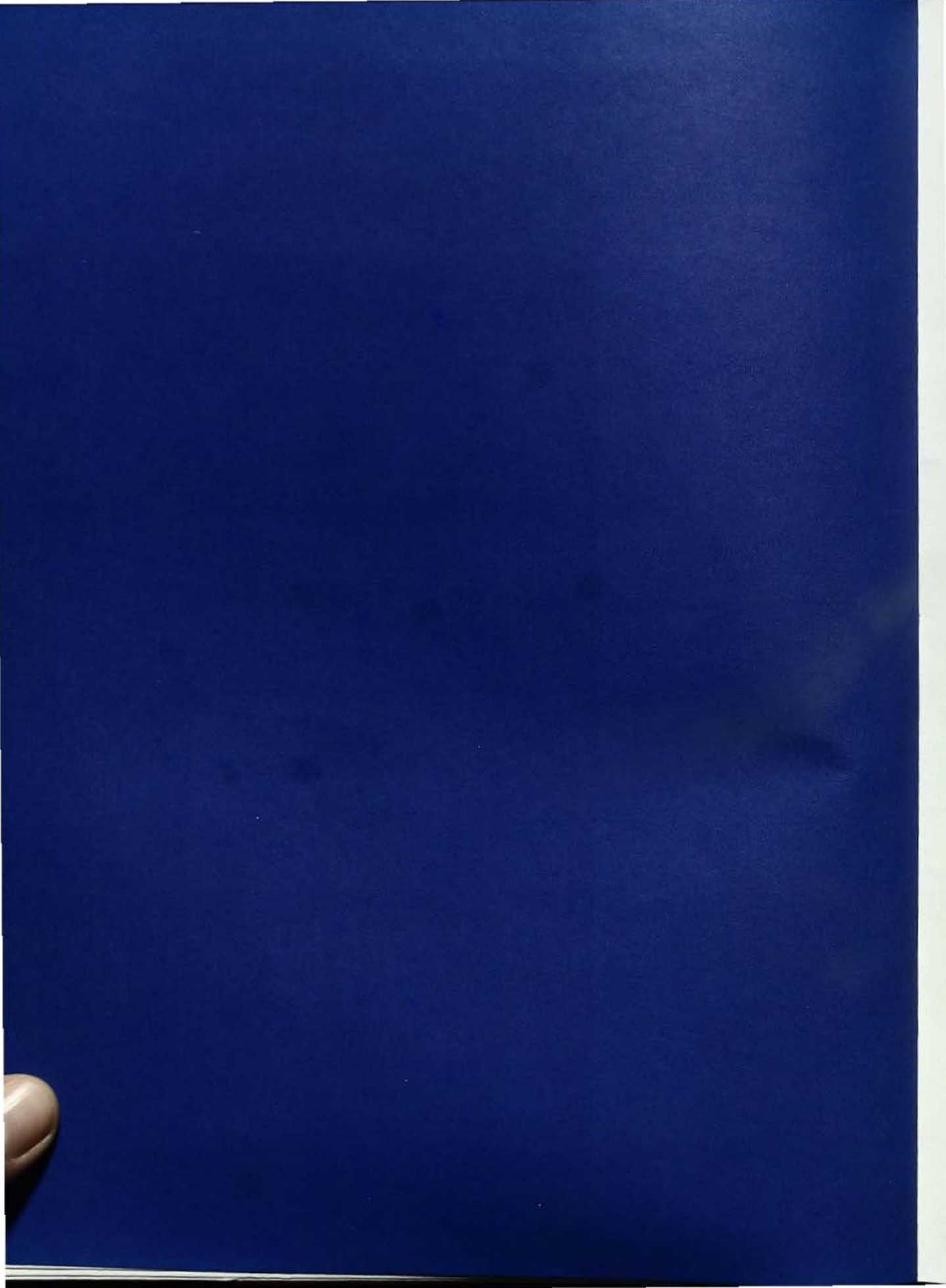
Legend Medical Services, Pittsburgh: Founded by two health-care professionals and principally backed by SERS LBO managers Murphy & Fauver, LMS acquires and operates a regional group of select nursing homes, focusing on the purchase of facilities in Pennsylvania and adjacent regions; their first acquisition was the West Hills Health Care Center in Coraopolis, which generates annual revenues in excess of \$4.5 million and employs over 120.

SERS Pennsylvania Investments Summary

	Specially Designed Pa. Portfolios Market Value As of Dec. 31, 1993	Total Pa. Portfolios Market Value As of Dec. 31, 1993
Stock		
Pennsylvania Index account	\$80,005,641.00	\$80,005,641.00
11 actively managed portfolios (excluding Pennsylvania Index account)		77,593,879.00
WFNIA - Equity Index Fund P		79,342,136.00
WFNIA - Extended Equity Market Fund		45,272,807.00
WFNIA - Equity Growth Fund		7,041,850.00
	\$80,005,641.00	\$289,256,313.00
Tactical Asset Allocation		
WFNIA - Asset Allocation Fund		\$27,419,291.00
Bonds and Mortgages and Cash		
Cigna Investments	\$1,675,638.00	\$1,675,638.00
Legg Mason		
FHA PA project mortgages (commercial)	18,832,405.00	18,832,405.00
commercial mortgages	334,593,190.00	334,593,190.00
residential mortgages	47,166,217.00	47,166,217.00
Other active bond portfolios		160,336,109.00
	\$402,267,450.00	\$562,603,559.00
Real Estate		
Pooled Funds (Alex. Brown and Metric specially designed)	\$7,862,177.00	\$11,405,160.00
Separate Accounts (net market value)	186,600,000.00	186,600,000.00
	\$194,462,177.00	\$198,005,160.00
Venture Capital	\$75,214,043.00	\$75,214,043.00
Alternative Investments		
RR&Z Pennsylvania Fund #1	\$9,926,496.00	\$9,926,496.00
Total	\$761,875,807.00	\$1,162,424,862.00

SECTION III: Report of Independent Accountants on Financial Statements

Report for the years ended December 31, 1992 and 1991



REPORT OF INDEPENDENT ACCOUNTANTS

Board of Trustees
Commonwealth of Pennsylvania
State Employees' Retirement System:

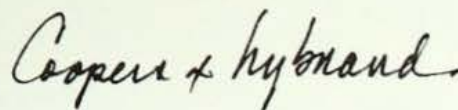
We have audited the statements of net assets available for benefits of the Commonwealth of Pennsylvania State Employees' Retirement System (System) as of December 31, 1992 and 1991 and the related statements of changes in net assets available for benefits for the years then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

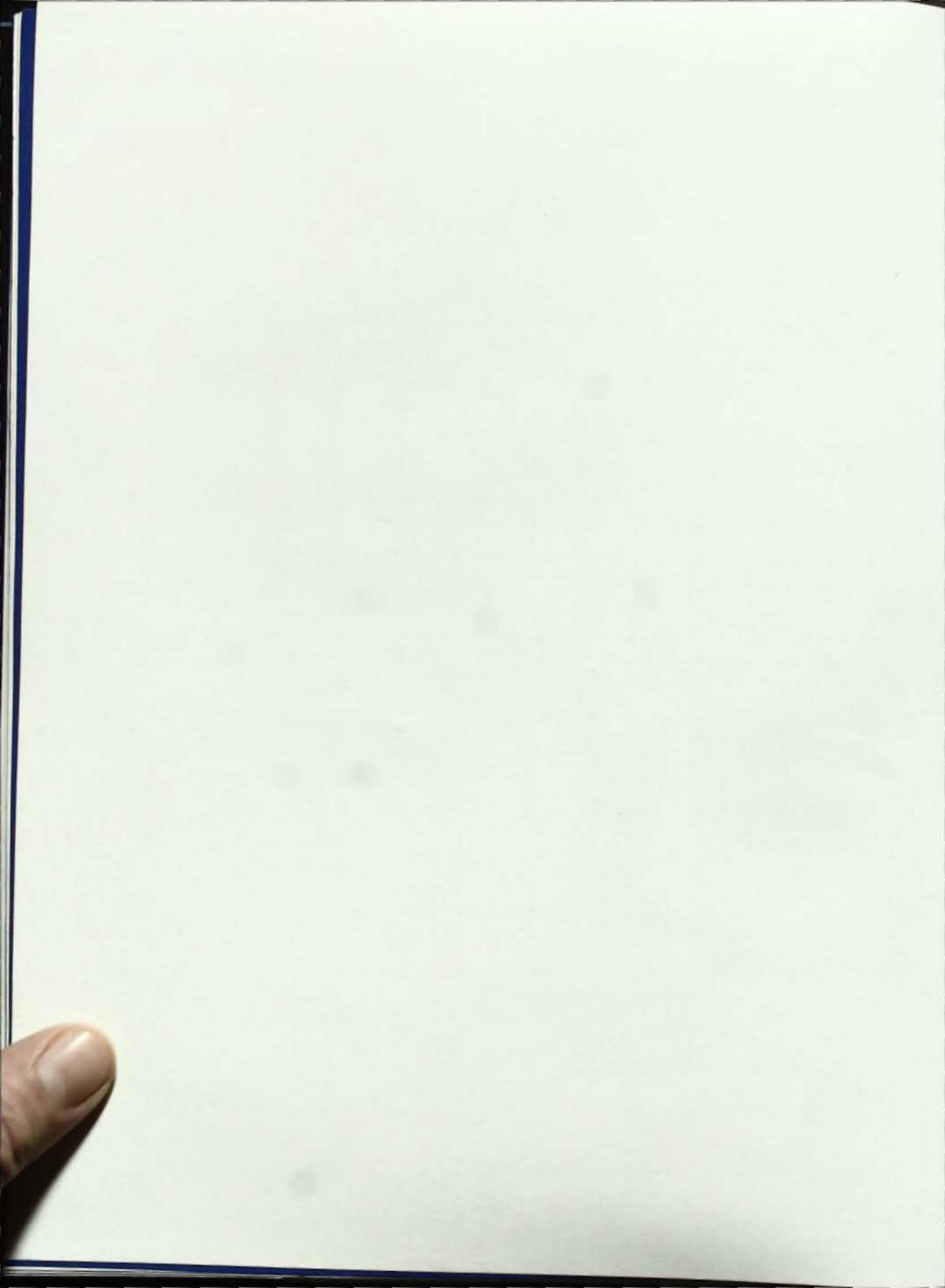
We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial status of the Commonwealth of Pennsylvania State Employees' Retirement System as of December 31, 1992 and 1991, and the changes in its financial status for the years then ended in conformity with generally accepted accounting principles.

As explained in Note 2, the financial statements include investments in real estate, mortgage loans and venture capital valued at \$1,741,009,000 and \$1,658,886,000 as of December 31, 1992 and 1991, respectively (14% of net assets as of December 31, 1992 and 1991), whose values have been estimated by the Board of Trustees, in the absence of readily ascertainable market values. We have reviewed the procedures used in arriving at the estimated values of such investments and have inspected underlying documentation, and, in the circumstances, we believe the procedures are reasonable and the documentation appropriate. However, because of the inherent uncertainty of valuation, those estimated values may differ significantly from the values that would have been used had a ready market for the securities existed, and the differences could be material.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The Supplementary Information is presented in accordance with Statement No. 5 of the Governmental Accounting Standards Board for purposes of additional analysis and is not a required part of the basic financial statements. Such information for the years 1982 through 1984 and 1988 through 1992 has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated, in all material respects, in relation to the basic financial statements taken as a whole. We previously audited and expressed unqualified opinions on the basic financial statements for the years 1982 through 1984 and 1988 through 1991. Such information for the years 1985 through 1987 has been subjected to the auditing procedures applied in the audits of the basic financial statements which were audited by other auditors, whose reports thereon expressed unqualified opinions, and, in their opinion, such information is fairly stated in all material respects in relation to the basic financial statements taken as a whole.





**COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYEES' RETIREMENT SYSTEM**

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

December 31, 1992 and 1991

	<u>1992</u>	<u>1991</u>
	(000's omitted)	
ASSETS		
Investments at fair value:		
United States Government securities	\$ 2,175,849	\$ 2,184,575
Corporate and foreign bonds and notes	1,690,588	1,151,317
Common and preferred stocks, including collective trust funds	6,320,202	6,400,135
Temporary investments	372,959	324,143
Mortgage loans	802,046	723,488
Real estate	834,087	838,323
Venture capital	<u>104,876</u>	<u>97,075</u>
Total investments	12,300,607	11,719,056
Contributions receivable:		
Employers	80,192	135,520
Emploees	2,031	2,496
Accrued investment income receivable	81,822	71,580
Due from brokers		25,753
Cash	<u>1</u>	<u>1</u>
Total assets	<u>12,464,653</u>	<u>11,954,406</u>
LIABILITIES		
Accounts payable and accrued expenses	(11,294)	(11,933)
Due to brokers		<u>(2,391)</u>
Total liabilities	<u>(11,294)</u>	<u>(14,324)</u>
Contingencies (Note 7)		
NET ASSETS AVAILABLE FOR BENEFITS	<u>\$12,453,359</u>	<u>\$11,940,082</u>

The accompanying notes are an integral part
of the financial statements.

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYEES' RETIREMENT SYSTEM

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

for the years ended December 31, 1992 and 1991

	<u>1992</u>	<u>1991</u>
	(000's omitted)	
ADDITIONS:		
Investment income:		
Net appreciation in fair value of investments	\$ 322,423	\$ 1,605,823
Interest	384,101	364,580
Dividends	123,425	153,560
Other	<u>58,110</u>	<u>53,071</u>
Less investment expenses	888,059	2,177,034
	<u>30,289</u>	<u>22,758</u>
Contributions:	857,770	2,154,276
Employers		
Employes	319,093	381,347
Total additions	<u>187,167</u>	<u>182,611</u>
	<u>1,364,030</u>	<u>2,718,234</u>
DEDUCTIONS:		
Benefits and refunds paid to participants	839,252	655,672
Administrative expenses	<u>11,501</u>	<u>8,380</u>
Total deductions	<u>850,753</u>	<u>664,052</u>
Net increase	513,277	2,054,182
Net assets available for benefits at beginning of year	<u>11,940,082</u>	<u>9,885,900</u>
Net assets available for benefits at end of year	<u>\$12,453,359</u>	<u>\$11,940,082</u>

The accompanying notes are an integral part
of the financial statements.

**COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYEES' RETIREMENT SYSTEM**

NOTES TO FINANCIAL STATEMENTS

1. Description of the System:

The State Employees' Retirement System (System) is the administrator of a cost-sharing multiple-employer retirement system established by the Commonwealth of Pennsylvania (Commonwealth) to provide pension benefits for employees of state government and certain independent agencies. At December 31, 1992, there were 110 participating state and independent agencies. The System is considered part of the Commonwealth of Pennsylvania financial reporting entity and is included in the Commonwealth's financial reports as a pension trust fund.

Membership in the System is mandatory for most state employees. Members and employees of the legislature and certain elected persons in the executive branch and certain other employees are not required, but are given the option to participate. At December 31, 1992, System membership consisted of:

Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	84,785
Current employees:	
Vested	63,519
Nonvested	<u>46,090</u>
Total members	<u>194,394</u>

The System provides retirement, death, and disability benefits. Retirement benefits vest after 10 years of credited service. Employees who retire at age 60, or with 35 years of service if under age 60, are entitled to a normal annual retirement benefit. Members of the legislature and certain employees classified in hazardous duty positions can retire with full benefits at age 50.

The general annual benefit is 2% of the member's highest three-year average salary times years of service. Members of the legislature who were members of the System before March 1, 1974 are entitled to a benefit of 7.5% of final average salary for each year of legislative service. State police are entitled to a benefit equal to a percentage of their highest annual salary, excluding their year of retirement. The benefit is 75% of salary for 25 or more years of service and 50% of salary for 20-24 years of service.

NOTES TO FINANCIAL STATEMENTS, Continued

Description of the System, continued:

Covered employees are required to contribute to the System at a rate of 5% of their gross pay, except for employees hired on or after July 22, 1983, who contribute at a rate of 6.25% of their gross pay. Higher contributions are required of legislators hired prior to March 1, 1974 and judges (18.75% and 7.5% to 10.0% of gross pay, respectively) who are entitled to increased benefits. The contributions are recorded in an individually identified account which is also credited with interest, calculated quarterly to yield 4% per annum, as mandated by statute. Accumulated employee contributions and credited interest, which amounted to \$1,994,567,000 and \$1,973,197,000 as of December 31, 1992 and 1991, respectively, vest immediately and are returned to the employee upon termination of service if the employee is not eligible for other benefits.

Participating agency contributions are also mandated by statute and are based upon an actuarially determined percentage of gross pay that is necessary to provide the System with assets sufficient to meet the benefits to be paid to System members.

According to the retirement code, all obligations of the System will be assumed by the Commonwealth should the System terminate.

2. Significant Accounting Policies:

Basis of Accounting:

The financial statements are prepared using the accrual basis of accounting. The System follows Statements No. 3, "Deposits with Financial Institutions, Investments (Including Repurchase Agreements), and Reverse Repurchase Agreements," and No. 5, "Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers," of the Governmental Accounting Standards Board (GASB) for reporting and disclosure purposes.

Valuation of Investments:

The System records its investments at fair value which is determined differently for each investment type. Marketable securities, which consist of debt and equity securities, are stated principally at market value. Securities traded on a national securities exchange are valued at the last reported sales price on the last day of business of each plan year. Securities which were not traded on the last day of the plan year or which were not traded on a national securities exchange are valued by the respective fund manager or other third parties based on similar securities sales. Temporary investments are valued at cost, which approximates market value.

NOTES TO FINANCIAL STATEMENTS, Continued

3. Funding Status and Progress, continued:

A comparative ten-year summary of the pension benefit obligation, which has been calculated in conformance with the requirements of GASB Statement No. 5, is presented as supplementary information following the notes to the financial statements. This information is presented for purposes of additional analysis of System progress in accumulating sufficient assets to pay benefits when due. The calculation of the pension benefit obligation under GASB Statement No. 5 differs from the calculation required under Financial Accounting Standards Board (FASB) Statement No. 35 of the actuarial present value of accumulated plan benefits principally by the consideration of future salary increases and the use of a 9.25% assumed rate of return on investments.

The significant actuarial assumptions used in the valuations of the actuarial present value of accumulated plan benefits under FASB Statement No. 35 as of December 31, 1992 and 1991 are as follows:

Mortality:

Superannuation (normal retirement) and early retirement	The 1971 Group Annuity Mortality Table
Disability	Modifications of the Federal Civil Service Disability Mortality Table
Assumed rate of return on investments	5.75% and 6.50% in 1992 and 1991, respectively

The accumulated plan benefit information at December 31, 1992 and 1991 is as follows:

	<u>1992</u>	<u>1991</u>
	(000's omitted)	
Actuarial present value of accumulated plan benefits:		
Vested benefits:		
Participants currently receiving payments	\$ 6,001,723	\$ 4,859,617
Other participants	<u>6,012,343</u>	<u>5,496,969</u>
	12,014,066	10,356,586
Nonvested benefits	<u>246,519</u>	<u>188,735</u>
 Total	 <u>\$12,260,585</u>	 <u>\$10,545,321</u>

NOTES TO FINANCIAL STATEMENTS, Continued

1. Description of the System, continued:

Covered employees are required to contribute to the System at a rate of 5% of their gross pay, except for employees hired on or after July 22, 1983, who contribute at a rate of 6.25% of their gross pay. Higher contributions are required of legislators hired prior to March 1, 1974 and judges (18.75% and 7.5% to 10.0% of gross pay, respectively) who are entitled to increased benefits. The contributions are recorded in an individually identified account which is also credited with interest, calculated quarterly to yield 4% per annum, as mandated by statute. Accumulated employee contributions and credited interest, which amounted to \$1,994,567,000 and \$1,973,197,000 as of December 31, 1992 and 1991, respectively, vest immediately and are returned to the employee upon termination of service if the employee is not eligible for other benefits.

Participating agency contributions are also mandated by statute and are based upon an actuarially determined percentage of gross pay that is necessary to provide the System with assets sufficient to meet the benefits to be paid to System members.

According to the retirement code, all obligations of the System will be assumed by the Commonwealth should the System terminate.

2. Significant Accounting Policies:

Basis of Accounting:

The financial statements are prepared using the accrual basis of accounting. The System follows Statements No. 3, "Deposits with Financial Institutions, Investments (Including Repurchase Agreements), and Reverse Repurchase Agreements," and No. 5, "Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers," of the Governmental Accounting Standards Board (GASB) for reporting and disclosure purposes.

Valuation of Investments:

The System records its investments at fair value which is determined differently for each investment type. Marketable securities, which consist of debt and equity securities, are stated principally at market value. Securities traded on a national securities exchange are valued at the last reported sales price on the last day of business of each plan year. Securities which were not traded on the last day of the plan year or which were not traded on a national securities exchange are valued by the respective fund manager or other third parties based on similar securities sales. Temporary investments are valued at cost, which approximates market value.

NOTES TO FINANCIAL STATEMENTS, Continued

2. Significant Accounting Policies, continued:

Valuation of Investments, continued:

The fair value of the participation units owned by the System in the collective trust funds was based on quoted redemption value on the last business day of the year.

Mortgage loans are valued by the mortgage advisors using a discounted cash flow method. Investments in real estate are stated at appraised value. Venture capital pools are stated at fair values as determined principally by the respective valuation committees and accepted by the respective general partners of the venture capital funds. The valuation committees consider various factors including financial condition, operating results and the nature of the investment.

Real estate investments are stated at estimated fair market value based on an appraisal report prepared annually or more often as required, by an independent real estate appraiser (member of the American Institute of Real Estate Appraisers). This estimated fair market value is determined in accordance with the policies and procedures of the American Institute of Real Estate Appraisers. This estimated fair market value does not necessarily represent the price at which the investment would sell since market prices of real estate investments are determined by negotiation between a willing buyer and seller. Actual sales price may differ from the fair market value estimates. Management believes that this estimated fair market value is a reasonable approximation of market price.

The System presents in the statements of changes in net assets the net appreciation (depreciation) in the fair value of its investments which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments. Realized gains or losses on sales of investments are determined on a specific identification or average cost basis, depending upon the type of investment.

Fair Value of Financial Instruments:

Statement of Financial Accounting Standards No. 107, "Disclosures about Fair Value of Financial Instruments," (SFAS No. 107), requires the disclosure of estimated fair values for certain financial instruments. Financial instruments include investments, contributions receivable, accrued investment income receivable, due from brokers, cash, due to brokers, accounts payable and accrued expenses. The carrying amounts reported in the statements of net assets available for benefits for these financial instruments approximate their fair values.

NOTES TO FINANCIAL STATEMENTS, Continued

1. Description of the System, continued:

Covered employees are required to contribute to the System at a rate of 5% of their gross pay, except for employees hired on or after July 22, 1983, who contribute at a rate of 6.25% of their gross pay. Higher contributions are required of legislators hired prior to March 1, 1974 and judges (18.75% and 7.5% to 10.0% of gross pay, respectively) who are entitled to increased benefits. The contributions are recorded in an individually identified account which is also credited with interest, calculated quarterly to yield 4% per annum, as mandated by statute. Accumulated employee contributions and credited interest, which amounted to \$1,994,567,000 and \$1,973,197,000 as of December 31, 1992 and 1991, respectively, vest immediately and are returned to the employee upon termination of service if the employee is not eligible for other benefits.

Participating agency contributions are also mandated by statute and are based upon an actuarially determined percentage of gross pay that is necessary to provide the System with assets sufficient to meet the benefits to be paid to System members.

According to the retirement code, all obligations of the System will be assumed by the Commonwealth should the System terminate.

2. Significant Accounting Policies:

Basis of Accounting:

The financial statements are prepared using the accrual basis of accounting. The System follows Statements No. 3, "Deposits with Financial Institutions, Investments (Including Repurchase Agreements), and Reverse Repurchase Agreements," and No. 5, "Disclosure of Pension Information by Public Employee Retirement Systems and State and Local Governmental Employers," of the Governmental Accounting Standards Board (GASB) for reporting and disclosure purposes.

Valuation of Investments:

The System records its investments at fair value which is determined differently for each investment type. Marketable securities, which consist of debt and equity securities, are stated principally at market value. Securities traded on a national securities exchange are valued at the last reported sales price on the last day of business of each plan year. Securities which were not traded on the last day of the plan year or which were not traded on a national securities exchange are valued by the respective fund manager or other third parties based on similar securities sales. Temporary investments are valued at cost, which approximates market value.

NOTES TO FINANCIAL STATEMENTS, Continued

2. Significant Accounting Policies, continued:

Valuation of Investments, continued:

The fair value of the participation units owned by the System in the collective trust funds was based on quoted redemption value on the last business day of the year.

Mortgage loans are valued by the mortgage advisors using a discounted cash flow method. Investments in real estate are stated at appraised value. Venture capital pools are stated at fair values as determined principally by the respective valuation committees and accepted by the respective general partners of the venture capital funds. The valuation committees consider various factors including financial condition, operating results and the nature of the investment.

Real estate investments are stated at estimated fair market value based on an appraisal report prepared annually or more often as required, by an independent real estate appraiser (member of the American Institute of Real Estate Appraisers). This estimated fair market value is determined in accordance with the policies and procedures of the American Institute of Real Estate Appraisers. This estimated fair market value does not necessarily represent the price at which the investment would sell since market prices of real estate investments are determined by negotiation between a willing buyer and seller. Actual sales price may differ from the fair market value estimates. Management believes that this estimated fair market value is a reasonable approximation of market price.

The System presents in the statements of changes in net assets the net appreciation (depreciation) in the fair value of its investments which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments. Realized gains or losses on sales of investments are determined on a specific identification or average cost basis, depending upon the type of investment.

Fair Value of Financial Instruments:

Statement of Financial Accounting Standards No. 107, "Disclosures about Fair Value of Financial Instruments," (SFAS No. 107), requires the disclosure of estimated fair values for certain financial instruments. Financial instruments include investments, contributions receivable, accrued investment income receivable, due from brokers, cash, due to brokers, accounts payable and accrued expenses. The carrying amounts reported in the statements of net assets available for benefits for these financial instruments approximate their fair values.

NOTES TO FINANCIAL STATEMENTS, Continued

3. Funding Status and Progress:

The amount shown as "pension benefit obligation" is a standardized disclosure measure of the present value of pension benefits, adjusted for the effects of projected salary increases, estimated to be payable in the future as a result of employee service to date. The measure is the actuarial present value of credited projected benefits and is intended, on an ongoing basis, to facilitate the assessment of the System's funding status and progress made in accumulating sufficient assets to pay benefits when due and to allow for appropriate comparison of this data among public employee retirement systems. The pension benefit obligation is calculated based on GASB Statement No. 5 and is independent of the actuarial funding method used to determine contributions to the System as discussed in Note 4.

The pension benefit obligation was determined as part of an actuarial valuation at December 31, 1992 and 1991. Significant actuarial assumptions used include (a) a rate of return on the investment of present and future assets of 9.25% per year compounded annually in 1992 and 1991, (b) projected salary increases of 4% per year compounded annually, attributable to inflation in 1992 and 1991, (c) additional projected salary increases of approximately 2.5% in 1992 and 1991, attributable to merit/promotion, and (d) no post-retirement benefit increases.

The pension benefit obligation at December 31, 1992 and 1991 is as follows:

	<u>1992</u>	<u>1991</u>
	(000's omitted)	
Pension benefit obligation:		
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	\$ 4,739,326	\$ 4,621,861
Current employees:		
Accumulated employee contributions and credited interest	1,999,511	1,973,197
Employer-financed, vested	4,033,101	3,532,144
Employer-financed, nonvested	<u>373,891</u>	<u>337,681</u>
Total pension benefit obligation	11,145,829	10,464,883
Net assets available for benefits, at fair value (Note 2)	<u>12,453,359</u>	<u>11,940,082</u>
Net assets in excess of pension benefit obligation	<u>\$ 1,307,530</u>	<u>\$ 1,475,199</u>

NOTES TO FINANCIAL STATEMENTS, Continued

3. Funding Status and Progress, continued:

A comparative ten-year summary of the pension benefit obligation, which has been calculated in conformance with the requirements of GASB Statement No. 5, is presented as supplementary information following the notes to the financial statements. This information is presented for purposes of additional analysis of System progress in accumulating sufficient assets to pay benefits when due. The calculation of the pension benefit obligation under GASB Statement No. 5 differs from the calculation required under Financial Accounting Standards Board (FASB) Statement No. 35 of the actuarial present value of accumulated plan benefits principally by the consideration of future salary increases and the use of a 9.25% assumed rate of return on investments.

The significant actuarial assumptions used in the valuations of the actuarial present value of accumulated plan benefits under FASB Statement No. 35 as of December 31, 1992 and 1991 are as follows:

Mortality:

Superannuation (normal retirement) and early retirement

The 1971 Group Annuity Mortality Table

Disability

Modifications of the Federal Civil Service Disability Mortality Table

Assumed rate of return on investments

5.75% and 6.50% in 1992 and 1991, respectively

The accumulated plan benefit information at December 31, 1992 and 1991 is as follows:

	<u>1992</u>	<u>1991</u>
	(000's omitted)	
Actuarial present value of accumulated plan benefits:		
Vested benefits:		
Participants currently receiving payments	\$ 6,001,723	\$ 4,859,617
Other participants	<u>6,012,343</u>	<u>5,496,969</u>
	12,014,066	10,356,586
Nonvested benefits	<u>246,519</u>	<u>188,735</u>
 Total	 <u>\$12,260,585</u>	 <u>\$10,545,321</u>

NOTES TO FINANCIAL STATEMENTS, Continued

3. Funding Status and Progress, continued:

The changes in the actuarial present value of accumulated plan benefits for the year ended December 31, 1992 are as follows:

	(000's omitted)
Actuarial present value of accumulated plan benefits at January 1, 1992	\$10,545,321
Increase during the year attributable to:	
Passage of time and other causes	611,811
Changes in interest rate and salary assumptions	<u>1,103,453</u>
Actuarial present value of accumulated plan benefits at December 31, 1992	<u>\$12,260,585</u>

4. Contributions:

The System funding policy provides for periodic member contributions at statutory rates and employer contributions at actuarially determined rates (expressed as a percentage of annual gross pay) that are sufficient to accumulate assets to pay benefits when due. All required contributions were made for the years 1992 and 1991.

Employer contribution rates are determined using the entry age normal actuarial cost method, with amortization of the unfunded actuarial liability and of supplemental annuities arising from cost of living and other adjustments over 20 year periods. These rates are computed based upon actuarial valuations on the Commonwealth's fiscal year of June 30; therefore the employer contribution rates in effect for the System's year end of December 31 reflect a blended average of the rates as calculated. The blended contribution rates were as follows:

	<u>1992</u>	<u>1991</u>
Employer normal cost	8.20%	6.28%
Amortization of unfunded actuarial liability	.23	3.33
Amortization of supplemental annuities	<u>.96</u>	<u>1.48</u>
Total employer cost	<u>9.39%</u>	<u>11.09%</u>

The reduction in total employer cost is a result of the excess actual return on investments over the assumed rate of return on investments. However, the make-up of employer cost has changed as a result of legislation. Prior law required indirect reflection of realistic assumptions. Current law permits the direct reflection of realistic assumptions, primarily as it relates to investment return and future salary increases, thereby reallocating the components of total employer cost.

NOTES TO FINANCIAL STATEMENTS, Continued

4. Contributions, continued:

Significant actuarial assumptions used to compute contribution requirements are the same as those used to compute the pension benefit obligation, except for the use of an interest rate scale starting at 9.9 percent in 1993 graded down to 6 percent after 2015. The graded scale is equivalent to the 9.25 percent investment return rate used in the projected benefit obligation calculation.

5. Investments:

As provided by statute, the System's Board of Trustees (Board) has exclusive control and management responsibility of System funds and full power to invest the funds. In exercising its fiduciary responsibility to System membership, the Board is governed by the "prudent man" rule, which requires the exercise of due care in establishing investment policy, and has adopted its Statement of Investment Policy to formally document investment objectives and responsibilities. This policy, as well as applicable state law, defines permissible investments of the System, including all investment types held in the portfolio at December 31, 1992 and 1991 and at all times during the years.

The investments of the System at December 31, 1992 and 1991 have been categorized to indicate the level of risk assumed by the System, in accordance with GASB Statement No. 3. In accordance with a contractual relationship between the Commonwealth's Treasury Department and a custodial agent, substantially all securities subject to categorization are held in book entry form in a unique account so as to be identified at all times as the possession of the Commonwealth; all such investments, as well as certain securities held in physical form at the Commonwealth's Treasury Department, the statutory custodian of the Fund, are reflected in Category 1, which is defined as securities insured or registered, or held by the System or its agent in the System's name. GASB Statement No. 3 provides for Category 2 and 3 investments, which reflect a higher risk. The System has no holdings of these types at December 31, 1992 and 1991. Certain investments have not been categorized because securities are not used as evidence of the investment. The investments not categorized include ownership interests in collective trust funds, mortgage loans, real estate and venture capital pools.

Summary of Investment Risk

	<u>Fair Value</u>	
	<u>1992</u>	<u>1991</u>
	(000's omitted)	
<u>Category 1</u>		
United States Government securities	\$ 1,632,890	\$ 1,591,810
Corporate and foreign bonds and notes	1,430,818	1,112,871
Common and preferred stocks	2,568,364	2,514,659
Mortgage loans	<u>801</u>	<u>871</u>
	<u>5,632,873</u>	<u>5,220,211</u>

NOTES TO FINANCIAL STATEMENTS, Continued

5. Investments, continued:

Summary of Investment Risk

Fair Value
1992 1991
 (000's omitted)

Not Categorized

Investments held by broker/dealers under reverse repurchase agreements:

United States Government securities	\$ 542,959	\$ 592,765
Corporate and foreign bonds and notes	259,770	38,446
Common and preferred stocks	91,855	77,015
Collective trust funds	3,659,983	3,808,461
Temporary investments	372,959	324,143
Mortgage loans	801,245	722,617
Real estate	834,087	838,323
Venture capital	<u>104,876</u>	<u>97,075</u>
	<u>6,667,734</u>	<u>6,498,845</u>
 Total investments	 <u><u>\$12,300,607</u></u>	 <u><u>\$11,719,056</u></u>

The System's investments are managed by various fund managers. At December 31, 1992 and 1991, two fund managers accounted for approximately 43% and 46% of the System's total investment portfolio, respectively. This concentration is in accordance with the System's Statement of Investment Policy. Because the System's assets are invested in a variety of financial instruments, the related values as presented in the financial statements are subject to various market fluctuations which include changes in the equity markets, interest rate environment and the general economic conditions.

The System's investments in real estate are concentrated principally in office, industrial, retail, and residential projects. Approximately \$201,090,000 and \$189,800,000 of the real estate portfolio is located in Pennsylvania as of December 31, 1992 and 1991, respectively. The System's remaining real estate investments are not concentrated in any one geographic area or industry.

NOTES TO FINANCIAL STATEMENTS, Continued

5. Investments, continued:

The System participates in a security lending program, whereby certain securities are transferred to an independent broker/dealer in exchange for collateral equal to 102% of the market value of securities on loan (reverse repurchase agreements). As the System represents only one of several Commonwealth agencies participating in the security lending program and, as collateral received by the custodial agent in exchange for System securities is not specifically identifiable by agency, the System does not record the receipt of such collateral or the corresponding liability to return collateral via repurchase of securities under loan. Securities under loan, however, are maintained on the System's financial records and have been classified accordingly in the summary of investment risk. The System has minimized its exposure to credit risk due to broker/dealer default by having the custodial agent determine daily that required collateral meets 102% of the market value of securities on loan. The System has not experienced any losses due to credit risk on security lending activity since implementation of the program.

The System uses a variety of financial instruments including futures, options, and security borrowing arrangements to adjust market exposure. These instruments are integral to the asset allocation and risk management and control systems of overall investment management strategies and practices. The following table summarizes the hedged and unhedged market exposure, expressed in cash market equivalents, related to financial instrument positions at December 31, 1992 and 1991:

	<u>Market Exposure</u>		
	<u>Unhedged</u>	<u>Credit Hedged</u>	<u>Exposure</u>
<u>1992</u>			(000's omitted)
Currency forward contracts	\$61,204	\$105,688	
<u>1991</u>			
Currency forward contracts	8,811	64,772	

NOTES TO FINANCIAL STATEMENTS, Continued

5. Investments, continued:

These financial instruments necessarily involve counterparty credit exposure. The policy of the System is to require collateral to the maximum extent possible under normal trading practices. In the event of counterparty default, the System has the right to use the collateral to offset the loss associated with the replacement of the exchange agreements. Specific credit limits have been established for each counterparty and are monitored and adjusted daily. The limits are developed based on the counterparty's creditworthiness, overall industry and other considerations, such as the length and legal structure of the contract, type of collateral advanced, and historical volatility indicators. Credit exposures shown in the above table primarily represent cash or securities advanced by the System to meet legal margin requirements in connection with future, forward, and option contracts.

The System's investments, including investments bought, sold, as well as held during the year appreciated (depreciated) in fair value by \$322,423,000 and \$1,605,823,000 in 1992 and 1991, respectively, as follows:

	<u>1992</u>	<u>1991</u>
	(000's omitted)	
Fair value as determined by quoted market price:		
United States Government securities	\$ (8,967)	\$ 201,535
Corporate and foreign bonds and notes	136,320	64,319
Common and preferred stocks, including collective trust funds	<u>279,441</u>	<u>1,423,686</u>
	<u>406,794</u>	<u>1,689,540</u>
Fair value estimated by using discounted cash flow, appraised value and valuation committee reports, respectively (Note 2):		
Mortgage loans	(19,811)	11,652
Real estate	(55,951)	(106,734)
Venture capital	<u>(8,609)</u>	<u>11,365</u>
	<u>(84,371)</u>	<u>(83,717)</u>
Net appreciation	<u>\$322,423</u>	<u>\$1,605,823</u>

NOTES TO FINANCIAL STATEMENTS, Continued

5. Investments, continued:

The fair value of individual investments that represent 5% or more of the System's net assets available for benefits are as follows:

	<u>1992</u>	<u>1991</u>
	(000's omitted)	
Wells Fargo Nikko Investment Advisors:		
Equity Index Fund P - 131,531,390 and 153,200,309 units in 1992 and 1991, respectively	\$1,851,213	\$2,004,180
Enhanced U.S. Tactical Asset Allocation Fund - 23,502,169 and 32,354,258 units in 1992 and 1991, respectively	670,444	851,904
Extended Equity Market Fund - 14,638,376 and 14,637,825 units in 1992 and 1991, respectively	622,805	549,185

The above funds are diversified among three collective funds: equity, which are invested in Standard & Poor's 500 Companies; long-term fixed income, which are invested in corporate notes and bonds; and short-term cash fund, which are invested in money market instruments.

6. Income Taxes:

Management believes the System meets the definition of a Governmental Plan and in the System's communications with the Internal Revenue Service (IRS) has been treated as a qualified plan. Therefore, the System has not requested a determination letter from the IRS relating to the status of the System under the Internal Revenue Code.

7. Contingencies:

The System is involved in various lawsuits which, if settled adversely, would not have a material effect on the financial statements in management's opinion. However, the individual cases involve legal issues that, if extended to the entire membership, may result in significant costs to the System. If such an event were to occur, the additional costs would be recovered by the System through adjustments to the employer contribution rate.

8. Early Retirement Incentive Program:

On August 5, 1991, Act 1991-23, was enacted which provided for an early retirement incentive for active members of the System who elected this early retirement option by December 31, 1991. To qualify for the incentive members had to meet certain conditions; if qualified a member received an additional 10% service credit at retirement. Approximately 6,700 members elected the early retirement option resulting in accelerated pension benefits beginning in 1992.

SUPPLEMENTARY INFORMATION

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYEES' RETIREMENT SYSTEM

TEN-YEAR HISTORICAL TREND INFORMATION

Analysis of Funding Progress
(in millions of dollars)
at December 31, 1992

Fiscal Year	(1) Net Assets Available for Benefits*	(2) Pension Benefit Obligation	(3) Percentage Funded (1)/(2)	(4) Unfunded (Assets in Excess of) Pension Benefit Obligation (2)-(1)	(5) Annual Covered Payroll	(6) Unfunded (Assets in Excess of) Pension Benefit Obligation as a Percentage of Annual Covered Payroll (4)/(5)
1983	\$ 4,396	\$ 6,367	69.0%	\$ 1,971	\$2,386	82.6%
1984	4,922	6,896	71.4	1,974	2,464	80.1
1985	6,157	6,565	93.8	408	2,427	16.8
1986	7,120	6,984	101.9	(136)	2,518	(5.4)
1987	7,367	7,384	99.8	17	2,663	0.6
1988	8,312	8,257	100.7	(55)	2,779	(2.0)
1989	9,785	8,782	111.4	(1,003)	2,998	(33.5)
1990	9,886	9,536	103.7	(350)	3,197	(10.9)
1991	11,940	10,465	114.1	(1,475)	3,120	(47.2)
1992	12,453	11,146	111.7	(1,307)	3,359	(38.9)

Analysis of the dollar amounts of net assets available for benefits, pension benefit obligation, and unfunded (assets in excess of) pension benefit obligation in isolation can be misleading. Expressing the net assets available for benefits as a percentage of the pension benefit obligation provides one indication of the System's funding status on a going-concern basis. Analysis of this percentage over time indicates whether the system is becoming financially stronger or weaker. Generally the greater this percentage, the stronger the Plan. Trends in unfunded (assets in excess of) benefit obligation and annual covered payroll are both affected by inflation. Expressing the unfunded (assets in excess of) pension benefit obligation as a percentage of annual covered payroll approximately adjusts for the effects of inflation and aids analysis of the System's progress made in accumulating sufficient assets to pay benefits when due. Generally, where there is an unfunded pension benefit obligation the smaller this percentage, the stronger the Plan. However, when assets are in excess of pension benefit obligation the higher the bracketed percentage, the stronger the Plan.

* Reflects investment valuation at fair value (Note 2).

SUPPLEMENTARY INFORMATION

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYEES' RETIREMENT SYSTEM

TEN-YEAR HISTORICAL TREND INFORMATION

Revenues by Source and Expenses by Type
(in thousands of dollars)
at December 31, 1992

Revenues by Source					Employer Contributions as a Percentage of Annual Covered Payroll
Fiscal Year	Employee Contributions	Employer Contributions*	Investment Income**	Total	
1983	\$135,841	\$413,809	\$ 488,266	\$1,037,916	17.3%
1984	121,929	439,835	363,365	925,129	17.9
1985	132,695	460,435	1,105,778	1,698,908	19.0
1986	139,454	407,276	916,323	1,463,053	16.2
1987	147,061	366,463	223,382	736,906	13.8
1988	153,131	382,413	929,778	1,465,322	13.8
1989	164,653	416,513	1,464,707	2,045,873	13.8
1990	175,422	418,655	114,174	708,251	13.1
1991	182,611	381,347	2,154,276	2,718,234	12.2
1992	187,167	319,093	857,770	1,364,030	9.5

* Contributions were made in accordance with actuarially determined contribution requirements.

**Includes net realized and unrealized appreciation or depreciation in fair value of investments and is net of investment expenses.

Expenses by Type

Fiscal Year	Benefit Payments	Refunds of Employee Contributions	Administrative Expenses	Total
1983	\$360,434	\$ 8,528	\$2,856	\$371,818
1984	384,406	11,247	4,044	399,697
1985	447,556	10,680	5,472	463,708
1986	483,603	11,338	4,938	499,879
1987	474,598	10,671	4,811	490,080
1988	504,697	10,446	5,391	520,534
1989	556,324	10,777	6,028	573,129
1990	589,832	9,693	7,400	606,925
1991	645,936	9,736	8,380	664,052
1992	829,533	9,719	11,501	850,753