

***COMMONWEALTH OF
PENNSYLVANIA***

***STATE EMPLOYEES'
RETIREMENT SYSTEM***

1992 ANNUAL FINANCIAL REPORT

***COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYEES' RETIREMENT SYSTEM
POST OFFICE BOX 1147
HARRISBURG, PENNSYLVANIA 17108-1147
(717) 787-6293***



IN MEMORY OF OUR LATE

BOARD CHAIRMAN

WILLIAM J. MORAN

WHO PASSED AWAY

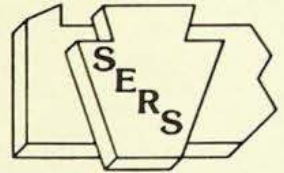
ON AUGUST 15, 1992



NICHOLAS J. MAIALE
CHAIRMAN

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYEES' RETIREMENT BOARD

30 NORTH THIRD STREET
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Honorable Robert P. Casey, Governor
Commonwealth of Pennsylvania

Members, Pennsylvania General Assembly
Members, Pennsylvania State Employees' Retirement System

Dear Governor Casey, Legislators and Members:

The Pennsylvania State Employees' Retirement Board is pleased to present its Annual Financial Report which discusses the operations and investments of the Fund for 1992. This report contains investment highlights and financial information including an independent audit of the Fund by Coopers & Lybrand for 1991.

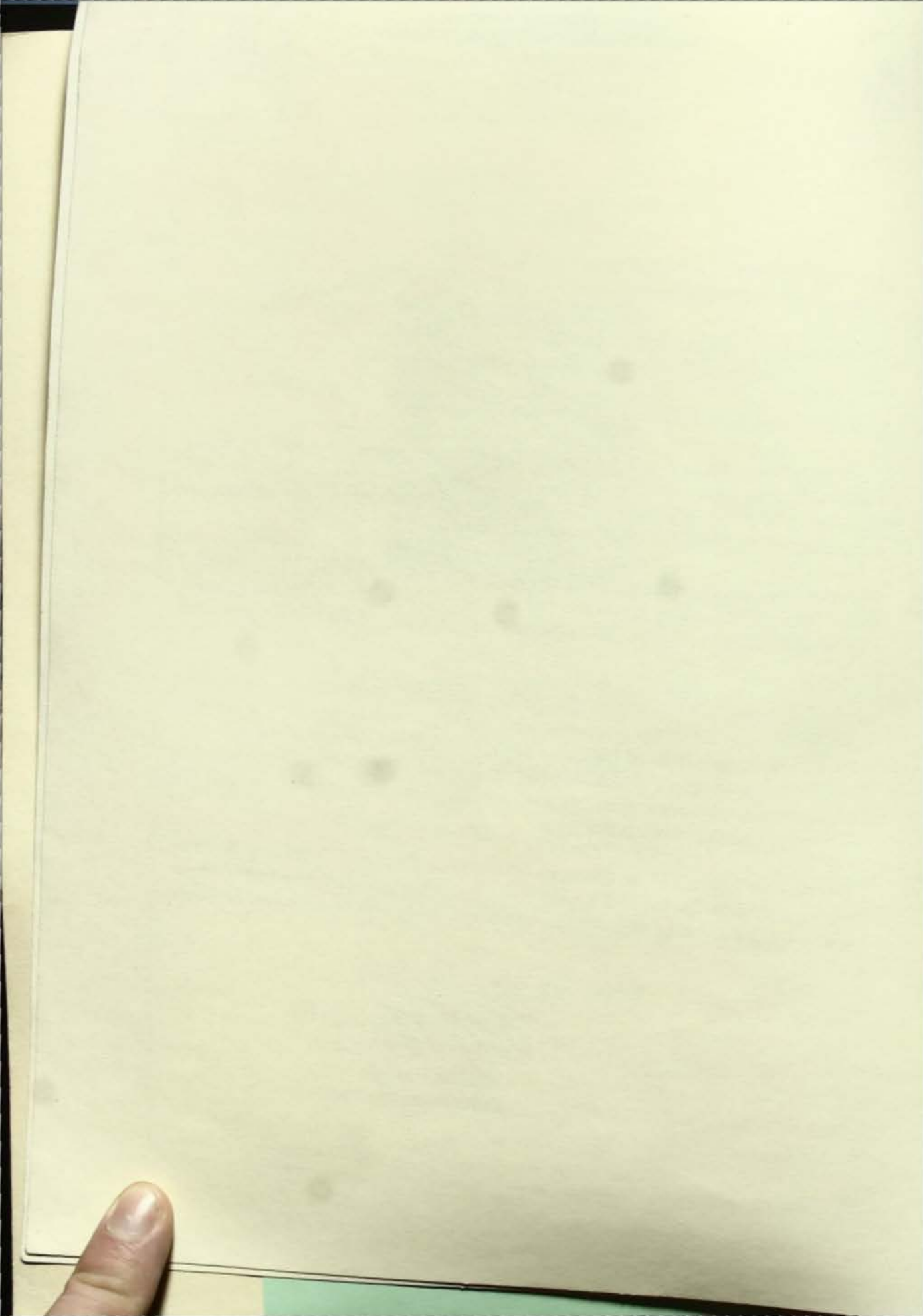
The total market value of the Fund's investments as of December 31, 1992 was \$12.4 billion which reflects a total investment rate of return of 7.4%, after all fees and expenses, for the year. The average annual investment rate of return for the past five years was 12.1%.

SERS investment portfolios have always had substantial investments in Pennsylvania firms. In addition, SERS has invested in portfolios which were designed to give emphasis to in-state investments. As of December 31, 1992, SERS had invested \$1 billion or over 8.1% of its total Fund in a diversified portfolio of in-state investments. Details regarding the investments, investment managers, and other pertinent information that you may find of interest are contained within this report.

I am strongly committed as Chairman of the State Employees' Retirement Board to improving services for the SERS membership and making prudent investments for the Fund to include investing with minority and female investment managers and brokerage firms.

Sincerely,

Nicholas J. Maiale
SERS Board Chairman



ANNUAL FINANCIAL REPORT
FOR THE YEAR ENDING
DECEMBER 31, 1992

*NICHOLAS J. MAIALE, CHAIRMAN
STATE EMPLOYEES' RETIREMENT BOARD*

*JOHN BROSIUS
EXECUTIVE DIRECTOR*

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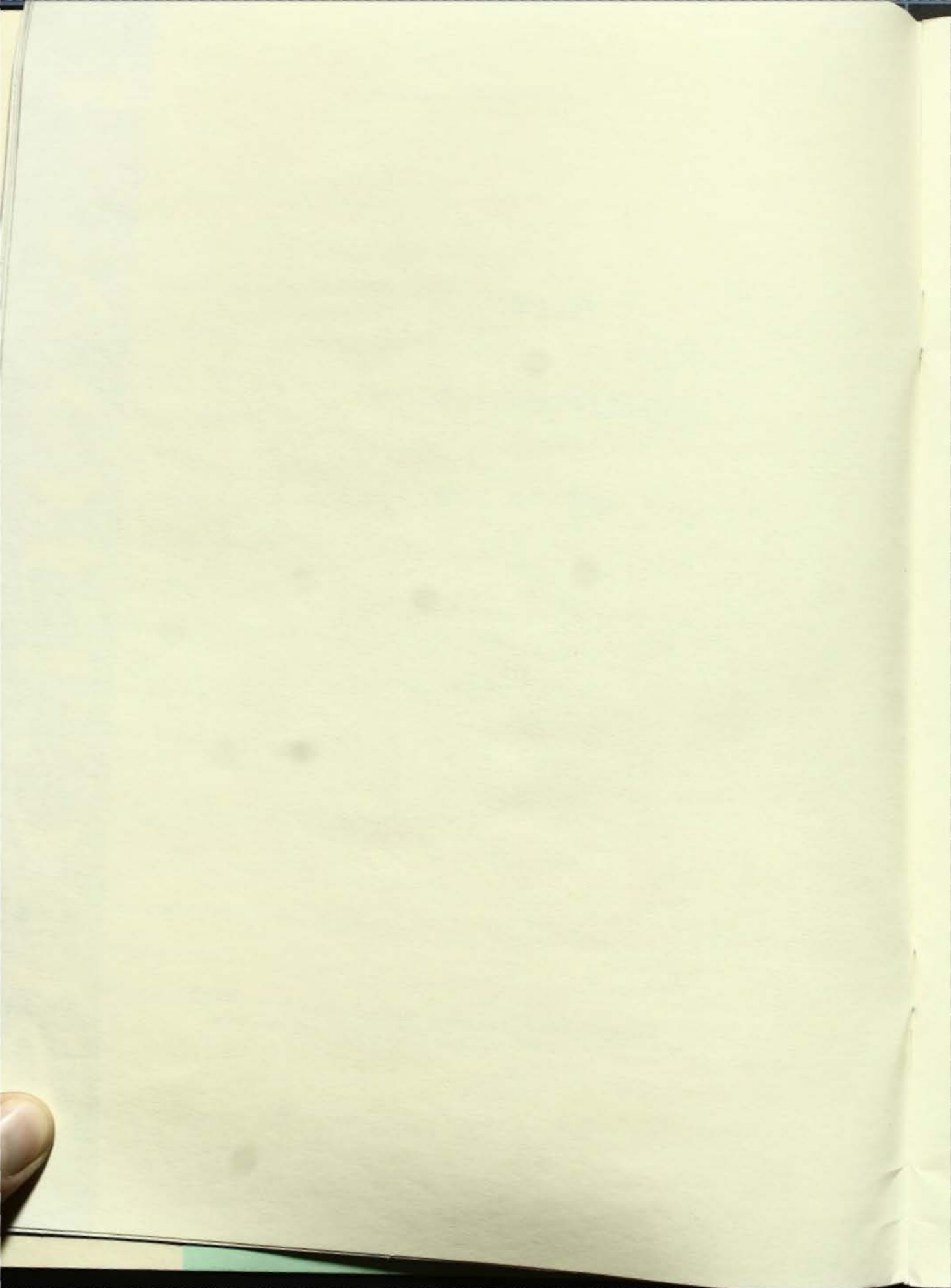
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SECTION I

ANNUAL FINANCIAL REPORT

1992 Investments



SERS Board Members*

Honorable Nicholas J. Maiale Chairman	Honorable Anthony B. Andrezeski State Senator
Honorable Gibson E. Armstrong State Senator	Mr. Robert A. Bittenbender Executive Director Senate Appropriations Committee
Mr. James W. Brown Chief of Staff to the Governor	Mr. Edward J. Keller Executive Director, AFSCME
The Honorable Catherine Baker Knoll State Treasurer	Mr. Charles J. Lieberth Retired Member and Former Secretary of Labor & Industry
Mr. K. Paul Muench Budget Analyst House Minority Appropriations Committee	Honorable Joseph R. Pitts State Representative

SERS Administrative Staff

John Brosius Executive Director	Francis J. Donlevy Director of Financial Management
Dale H. Everhart Assistant Executive Director	Jeffrey B. Clay, Esquire Chief Counsel
Peter M. Gilbert Chief Investment Officer	

Fund Custodian

The State Treasurer

Agent Bank and Trust Accounting Services

PNC Bank
Lester, PA

Consultants

Wilshire Associates Incorporated Santa Monica, CA <i>(Investments)</i>	Ronald A. Karp Associates, Inc. Summit, NJ <i>(Real Estate)</i>
Wilshire Associates Incorporated Pittsburgh, PA <i>(Venture Capital and Alternative Investments)</i>	Hay/Huggins Company, Inc. Philadelphia, PA <i>(Consulting Actuary)</i>

Independent Auditor

Coopers & Lybrand
Harrisburg, PA

*One vacant seat as of December 31, 1992.

Investment Policy

The State Employees' Retirement Board adopted a formal Statement of Investment Policy in 1979 which has been revised to reflect and incorporate legislative changes governing investments.

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

The major elements of the Statement are:

As fiduciaries, the Board will exercise that degree of judgment, skill, and care under the circumstances then prevailing which 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, the Board's policy favors investments which 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, which 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 assets used by the Fund's investment advisors to provide a framework for monitoring quality, diversification, and liquidity;

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

All records of investment transactions are available for public inspection at the offices of the State Employees' Retirement System.

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 Fund, including income and both realized and unrealized gains and losses over full economic cycles, are:

- A. Achieve and maintain State Employees' Retirement Fund in excess of Accrued Benefit Liability;
- B. Achieve a Real Total Rate of Return (as measured by the GNP Implicit Price Deflator). Achieve an Absolute Total Rate of Return not less than the actuarial investment return assumption;
- C. 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;
- D. 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 (effective July 1, 1992):
 - 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
- E. 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;
- F. Achieve in Equity Real Estate Investments a total return that is competitive with market returns for similar types of real estate investments;
- G. Achieve in Short-Term Securities relative performance better than U.S. Treasury Bills (90 days).

Total return includes income and both realized and unrealized gains and losses and is computed on market value.

The Board seeks to meet these objectives within acceptable risk parameters through adherence to a policy of diversification of investments by type, industry, investment manager style, and geographic location. In addition, investments are selected in accordance with quality guidelines.

Investment Highlights

The unaudited market value of the State Employees' Retirement System investments including accruals, was \$12,406.6 million as of December 31, 1992. This was an increase of \$579.8 million from the \$11,826.8 million market value as of December 31, 1991. The increase was from investment income, changes in asset market values, net realized and unrealized gains and losses, and from net contributions (employer and employee contributions minus benefit and administrative payments). Based on market value of assets as of 9/30/92, SERS is the 24th largest public pension fund in the nation and the 39th largest public and corporate pension fund.

For the year ended December 31, 1992, SERS realized a 7.4% total investment rate of return after fees. The Fund achieved in equity securities an 8.2% total return compared to the 9.0% total return of the Wilshire 5000 Index. The Fund achieved in bonds & mortgages an 8.2% total return compared to the 8.1% total return of a blend of the Lehman Aggregate Bond Index and the SERS Bonds & Mortgages Custom Index. SERS annualized five year investment rate of return was 12.1%, which exceeded the Consumer Price Index measure of 4.2%.

SERS invests in six asset classes and uses external investment advisors with various investment styles as a method to ensure overall fund diversification. As of December 31, 1992 the asset class allocation was: 47.6% stocks; 41.9% bonds & mortgages; 6.6% real estate; 3.0% cash; 0.6% venture capital; and 0.3% alternative investments. As of December 31, 1992 SERS had retained the services of 66 external investment advisors to manage 79 portfolios.

As of December 31, 1992 SERS had \$1,008.0 million, over 8.1% of SERS total fund, invested in Pennsylvania. Of this amount, SERS had placed over \$692.2 million in portfolios which were specially designed for Pennsylvania investment. The Pennsylvania portfolios include: a stock index fund; a private placement long term loan account; a mortgage - conventional commercial, FHA projects, and residential properties - portfolio; several real estate portfolios; 16 venture capital limited partnerships; and one LBO limited partnership.

Rate of Return (after fees)

Asset Class	5 years					
	1988-92	1992	1991	1990	1989	1988
SERS - Stocks	15.4%	8.2%	35.2%	-5.6%	27.9%	17.4%
Wilshire 5000 Index	15.9%	9.0%	34.2%	-6.2%	29.2%	17.9%
S&P 500 Index	15.9%	7.7%	30.5%	-3.2%	31.5%	16.8%
SERS - Bonds & Mortgages	11.0%	8.2%	19.0%	7.6%	11.6%	8.9%
Shearson Lehman Aggregate Bond Index	11.0%	8.1%	16.0%	8.9%	14.5%	7.9%
SERS - Real Estate	0.8%	-1.3%	-9.0%	1.8%	7.1%	7.9%
FRC Property Index	-0.4%	-5.0%	-7.6%	0.2%	4.7%	5.9%
SERS - Cash*	9.1%	7.0%	11.5%	8.8%	10.7%	7.4%
90-Day Treasury Bills	6.8%	3.9%	6.4%	8.3%	9.0%	6.7%
SERS - Venture Capital**	5.9%	10.6%	11.7%	-0.4%	6.3%	1.7%
SERS - Alternative Investments**	3.4%	4.4%	2.1%	3.2%	4.0%	3.1%
SERS - Total Fund***	12.1%	7.4%	22.7%	1.1%	17.8%	12.9%
Inflation - GNP Implicit Price Deflator	N/A	N/A	3.3%	4.0%	3.4%	4.3%
Inflation - Consumer Price Index	4.2%	2.9%	3.1%	6.1%	4.6%	4.4%

* Returns for the Treasury Investment Pool Fund, which comprises a portion of cash, are not based on market values

** The venture capital and alternative investments rates of return were estimated.

*** Includes the Wells Fargo Asset Allocation Fund.

Asset Allocation
December 31, 1992
(\$ in millions)

Investment Manager - Portfolio	Bonds &				Cash	Venture Capital	Alternative Investments	Total Market Value	of Total Market Value
	Stocks	Mortgages	Real Estate						
Barrow, Hanley, Mewhinney & Strauss, Inc.	\$635.8						\$635.8	5.1%	
Dietche & Field Advisors	59.5						59.5	0.5%	
Mellon Capital Management- PA Index	72.4						72.4	0.6%	
Mellon Equity Associates - Special Equity	400.7						400.7	3.2%	
Miller, Anderson & Sherrerd	260.8						260.8	2.1%	
Neuberger & Berman	57.0						57.0	0.5%	
Pilgrim, Baxter, Greig & Associates	205.9						205.9	1.7%	
Provident Investment Counsel, Inc.	330.8						330.8	2.7%	
Sturdivant & Co., Inc.	8.1						8.1	0.1%	
SunBank Capital Management, N.A.	388.6						388.6	3.1%	
Trinity Investment Management Corporation	285.0						285.0	2.3%	
Wells Fargo Nikko - Equity Index Fund (S&P 500)	1,851.2						1,851.2	14.9%	
Wells Fargo Nikko - Extended Equity Market Fund	622.8						622.8	5.0%	
Zevenbergen Capital Inc.	7.3						7.3	0.1%	
Dunedin Fund Managers Ltd.	51.0						51.0	0.4%	
Miller, Anderson & Sherrerd - international	301.3						301.3	2.4%	
Morgan Grenfell Investment - European	82.2						82.2	0.7%	
Scudder, Stevens & Clark, Inc. - Pacific Basin	81.1						81.1	0.7%	
Wells Fargo Nikko - Enhan Asset Allocation Fund	201.1	469.3					670.4	5.4%	
Cigna Investments		2.8					2.8	0.0%	
P. G. Corbin		7.6					7.6	0.1%	
Delaware Investment Advisers		2.2					2.2	0.0%	
Dodge & Cox		152.5					152.5	1.2%	
Hamil & Holte		8.0					8.0	0.1%	
John Hancock		18.4					18.4	0.1%	
W. R. Huff Asset Management		436.6					436.6	3.5%	
Latimer & Buck		838.7					838.7	6.8%	
Mellon Bond Associates		1,271.5					1,271.5	10.2%	
Miller, Anderson & Sherrerd		1,573.9					1,573.9	12.7%	
J. P. Morgan		153.9					153.9	1.2%	
Trust Company of the West		77.9					77.9	0.6%	
U.S. Treasury bonds & notes		180.1					180.1	1.5%	
Heitman Advisory Corporation			\$239.0				239.0	1.9%	
JMB - separate account			190.5				190.5	1.5%	
Aetna - 4 pooled funds			95.2				95.2	0.8%	
Alex Brown			21.9				21.9	0.2%	
Copley CIIF-II			14.4				14.4	0.1%	
Corporate Property Investors			113.7				113.7	0.9%	
Forest Investment Associates			3.5				3.5	0.0%	
JMB Group Trust III			33.5				33.5	0.3%	
John Hancock - 2 pooled funds			13.4				13.4	0.1%	
Metric Apartment Fund			41.8				41.8	0.3%	
Prudential - 2 pooled funds			20.5				20.5	0.2%	
PSI III			19.7				19.7	0.2%	
Sentinel Corporation			26.8				26.8	0.2%	
Payden & Rygel					\$308.7		308.7	2.5%	
PA State Treasury - Treasury Investment Pool Funds *					57.4		57.4	0.5%	

* Treasury Investment Pool Fund values are at cost.

** Venture capital and alternative investment market values are estimates.

Numbers may not add due to rounding.

Asset Allocation
December 31, 1992
(\$ in millions)

Investment Manager - Portfolio	Stocks	Bonds &		Cash	Venture Capital	Alternative Investments	Total	
		Mortgages	Real Estate				Market Value	of Total Market Value
APA/Fostin Pennsylvania Venture Capital Fund**					\$19.9		19.9	0.2%
CEO Venture Fund-S**					0.7		0.7	0.0%
CEO Venture Fund-II**					5.0		5.0	0.0%
Fostin Capital**					5.9		5.9	0.0%
Fostin Capital-II**					4.7		4.7	0.0%
Genesis Seed Fund**					1.2		1.2	0.0%
Grotech Pennsylvania**					1.8		1.8	0.0%
Healthcare Ventures III					5.7		5.7	0.0%
Keystone-II**					6.7		6.7	0.0%
NEPA Venture**					2.7		2.7	0.1%
NEPA Venture II**					0.8		0.8	0.0%
Pittsburgh Seed Fund**					0.5		0.5	0.0%
Point Venture Partners**					0.7		0.7	0.0%
PNC Venture Group I**					4.3		4.3	0.0%
TDH-II Limited**					6.3		6.3	0.1%
Zero Stage Capital-II**					1.8		1.8	0.0%
APAX Partners - APA Capital Risque III**						\$1.4	1.4	0.0%
APAX Partners - APA German Ventures**						0.9	0.9	0.0%
Brentwood Associates Buyout Fund, L.P.**						6.0	6.0	0.0%
Code, Hennessy & Simmons, L.P.**						9.4	9.4	0.1%
Hellman & Friedman II**						6.1	6.1	0.0%
Murphy & Fauver, L.P.**						3.5	3.5	0.0%
Pennsylvania Fund #1**						8.5	8.5	0.1%
Schroder Ventures UK III**						2.8	2.8	0.0%
Investment manager cash in transit				3.4			3.4	0.0%
TOTAL MARKET VALUE	\$5,902.7	\$5,193.2	\$834.1	\$369.5	\$68.5	\$38.5	\$12,406.6	100.0%
PERCENT OF TOTAL MARKET VALUE	47.6%	41.9%	6.6%	3.0%	0.6%	0.3%	100.0%	
1992 Investment Plan Policy - Target	47.5%	36.0%	10.0%	3.5%	1.5%	1.5%	100.0%	
1992 Investment Plan Policy - Range	45%-50%	34%-39%	8%-10%	3%-8%	1%-2%	1%-2%		

Investment Pool Fund values are at cost.
Venture capital and alternative investment market values are estimates.

April 20, 1993

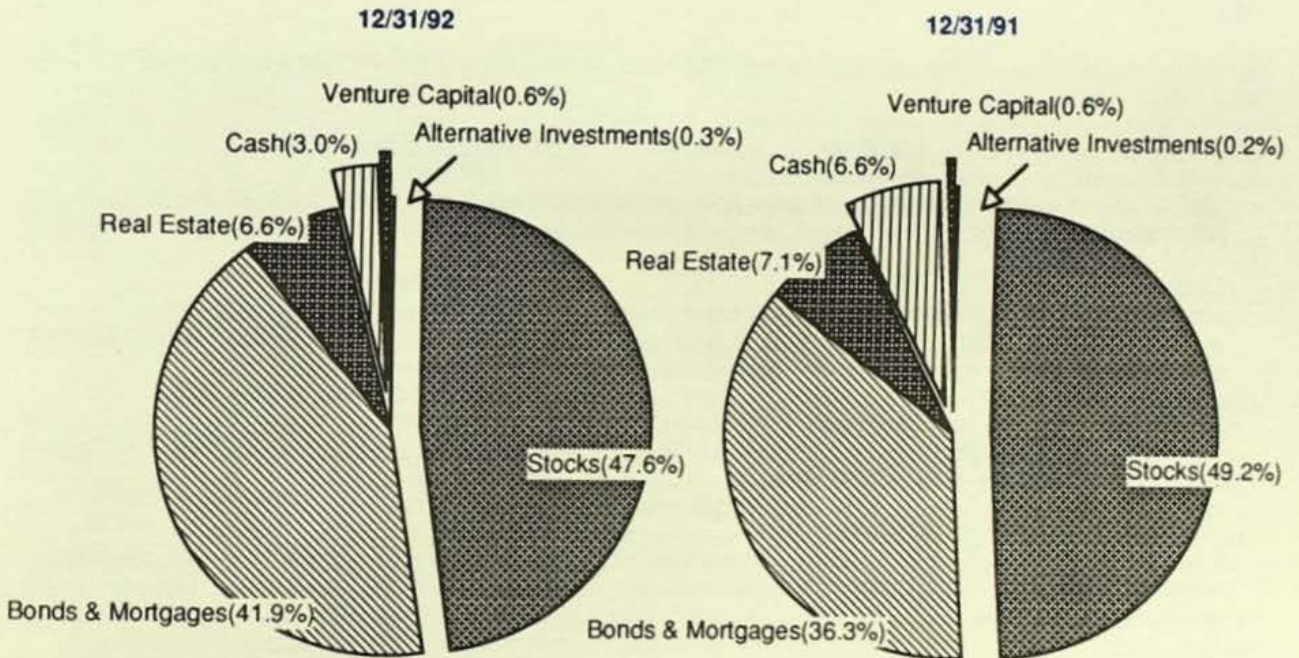
Numbers may not add due to rounding.

**Market Value
1988-92
(\$ in millions)**

<u>Asset Class</u>	<u>12/31/92</u>	<u>12/31/91</u>	<u>12/31/90</u>	<u>12/31/89</u>	<u>12/31/88</u>
Stocks	\$5,902.7	\$5,814.2	\$4,339.6	\$4,484.7	\$3,431.5
Bonds & Mortgages	5,193.2	4,297.1	3,221.9	2,886.6	2,673.4
Real Estate	834.1	838.6	862.2	833.0	566.5
Cash	369.5	781.5	1,255.7	1,382.4	1,387.0
Venture Capital	68.5	68.8	67.8	67.4	62.8
Alternative Investments	<u>38.5</u>	<u>26.5</u>	<u>25.7</u>	<u>21.9</u>	<u>19.7</u>
Total Fund	\$12,406.6	\$11,826.8	\$9,772.7	\$9,676.0	\$8,140.9

Numbers may not add due to rounding

Asset Allocation



**Summary of SERS Pennsylvania Investments
December 31, 1992**

Members of the State Employees' Retirement Board (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, the Board's policy favors investments which have a positive impact on the economy of Pennsylvania.

SERS investment portfolios have always had substantial investments in Pennsylvania firms, as some large national firms are headquartered in the Pittsburgh, Philadelphia and Harrisburg areas, including Bell Atlantic, Rite Aid, Westinghouse, Sun, Rohm & Haas, and H. J. Heinz. In addition, SERS has invested in portfolios which were designed to give emphasis to investments in Pennsylvania. As of December 31, 1992, SERS had \$1,008.0 million (over 8.1% of SERS total fund) invested in Pennsylvania. Of this amount, SERS had placed \$692.2 million in portfolios which were specially designed for Pennsylvania investments.

Stocks

SERS designed the Pennsylvania Equity Index Fund to increase exposure to smaller "in-state" corporations. The fund consists of 211 corporations that are either Pennsylvania-based or employ Pennsylvanians equal to at least 25% of its total corporate employment. Mellon Capital Management manages this passive fund for SERS. The market value of the Pennsylvania Equity Index Fund was \$72.4 million as of December 31, 1992.

The following are some of the top performing Pennsylvania stocks for 1992 included in the Pennsylvania Index Fund:

<u>Company</u>	<u>Location</u>	<u>1992 Total Return</u>
• QVC Network QVC Network markets a variety of consumer products through a televised home shopping program broadcasted by satellite.	West Chester	172.8%
• Unisys Unisys makes and markets computer-based networked information systems, software, and related services on a world-wide basis. Unisys specializes in providing mission-critical solutions based on open information networks for organizations that operate in transaction-intensive environments.	Blue Bell	145.5%
• Respironics Respironics designs, develops, manufactures and sells respiratory medical products for use in home, hospital and emergency medical situations.	Murrysville	138.8%
• Vishay Intertechnology Vishay Intertechnology manufactures and markets electronic components, primarily a wide variety of resistive components, to computer, telecommunications, military/aerospace, instrument, industrial, and automotive industries.	Malvern	99.1%
• Advanta Advanta is a direct marketer of select consumer financial services, including credit cards and home equity loans. Other businesses include ticket equipment leasing, credit insurance and deposit products.	Horsham	89.1%

Bonds & Mortgages

As of December 31, 1992, SERS had \$2.8 million invested in loans of the Pennsylvania Private Placement Separate Account which was designed by the Pennsylvania MILRITE Council and is managed by Cigna.

These loans provide long-term, fixed rate financing to established Pennsylvania firms lacking access to the public bond markets.

SERS had \$338.1 million invested in Pennsylvania mortgages (\$258.0 million in commercial mortgages and \$80.1 million in residential properties) as of 12/31/92. The residential segment of this portfolio is comprised of competitive rate mortgages that are distributed solely throughout Pennsylvania, in accordance with SERS policy to originate 100% of all residential mortgages within the Commonwealth. The commercial segment listed above is comprised of competitive rate mortgages on various industrial, retail, apartment and office complexes within Pennsylvania. Latimer & Buck, SERS mortgage advisor, has committed on 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.

Collectively, these "Pennsylvania-focused" investments in the SERS' Bonds & Mortgages asset class are estimated to have the following direct and indirect impact on the Commonwealth's economy:

- over 4,100 Pennsylvania households have residential mortgages originated by SERS;
- over 12,000 Pennsylvania-based jobs are associated with SERS' commercial mortgage lending and private placement financing activities; this figure does not consider the favorable "ripple effect" that such jobs may have on the local economy; and
- these 12,000 jobs have a total annual payroll in excess of \$48 million.

Additionally, SERS also held \$50.5 million of other public and private corporate debt issued by Pennsylvania-domiciled companies.

Cash

SERS is one of the largest investors in two Treasury Investment Pools managed by the Pennsylvania State Treasury Department. Although exact figures are unavailable, these Treasury Investment Pools have significant holdings of 1) certificates of deposit issued by Pennsylvania-based financial institutions, 2) short-term notes and commercial paper issued by Pennsylvania-based companies, 3) notes and obligations of selected Pennsylvania state agencies, and 4) FNMA mortgage-backed securities backed by loans issued under the HomeStart program. The HomeStart program is designed to encourage home ownership within the Commonwealth by making mortgages available to lower, moderate, and middle-income Pennsylvania households.

Real Estate

In 1987, SERS established two separate account real estate portfolios which are 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 December 31, 1992, these two portfolios had a net market value of \$194.3 million invested in ten Pennsylvania properties out of a total portfolio market value of \$430 million. There currently remains approximately \$50 million of funds to be invested in these two portfolios. The SERS separate account portfolios contain several notable investments:

- Foster Plaza - This is a 10 building office park located on the main corridor from the airport to downtown Pittsburgh. SERS is an owner of seven of the buildings and a mortgage lender on the remaining three buildings. The total project contains approximately 600,000 square feet of prime office space. During 1991 SERS completed the buyout of our partners interest in these buildings so that the buildings are now owned 100% by SERS.
- 1818 Market Street - This is a 950,000 square foot office building in downtown Philadelphia which was purchased in 1988. Although the building suffered a decline in value during 1991, as virtually all office buildings did, it is over 95% leased and 1992 brought about an increase in the property value. During 1991 a major renovation of the building was completed which transformed the property from a Class B building to a Class A building. This \$10 million renovation, in addition to improving the quality of the investment, was one of the largest construction projects that occurred in Philadelphia during 1991 and

**Summary of SERS Pennsylvania Investments
December 31, 1992**

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Stocks

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The following are some of the top performing Pennsylvania stocks for 1992 included in the Pennsylvania Index Fund:

<u>Company</u>	<u>Location</u>	<u>1992 Total Return</u>
• QVC Network QVC Network markets a variety of consumer products through a televised home shopping program broadcasted by satellite.	West Chester	172.8%
• Unisys Unisys makes and markets computer-based networked information systems, software, and related services on a world-wide basis. Unisys specializes in providing mission-critical solutions based on open information networks for organizations that operate in transaction-intensive environments.	Blue Bell	145.5%
• Respironics Respironics designs, develops, manufactures and sells respiratory medical products for use in home, hospital and emergency medical situations.	Murrysville	138.8%
• Vishay Intertechnology Vishay Intertechnology manufactures and markets electronic components, primarily a wide variety of resistive components, to computer, telecommunications, military/aerospace, instrument, industrial, and automotive industries.	Malvern	99.1%
• Advanta Advanta is a direct marketer of select consumer financial services, including credit cards and home equity loans. Other businesses include ticket equipment leasing, credit insurance and deposit products.	Horsham	89.1%

Bonds & Mortgages

As of December 31, 1992, SERS had \$2.8 million invested in loans of the Pennsylvania Private Placement Separate Account which was designed by the Pennsylvania MILRITE Council and is managed by Cigna.

These loans provide long-term, fixed rate financing to established Pennsylvania firms lacking access to the public bond markets.

SERS had \$338.1 million invested in Pennsylvania mortgages (\$258.0 million in commercial mortgages and \$80.1 million in residential properties) as of 12/31/92. The residential segment of this portfolio is comprised of competitive rate mortgages that are distributed solely throughout Pennsylvania, in accordance with SERS policy to originate 100% of all residential mortgages within the Commonwealth. The commercial segment listed above is comprised of competitive rate mortgages on various industrial, retail, apartment and office complexes within Pennsylvania. Latimer & Buck, SERS mortgage advisor, has committed on 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.

Collectively, these "Pennsylvania-focused" investments in the SERS' Bonds & Mortgages asset class are estimated to have the following direct and indirect impact on the Commonwealth's economy:

- over 4,100 Pennsylvania households have residential mortgages originated by SERS;
- over 12,000 Pennsylvania-based jobs are associated with SERS' commercial mortgage lending and private placement financing activities; this figure does not consider the favorable "ripple effect" that such jobs may have on the local economy; and
- these 12,000 jobs have a total annual payroll in excess of \$48 million.

Additionally, SERS also held \$50.5 million of other public and private corporate debt issued by Pennsylvania-domiciled companies.

Cash

SERS is one of the largest investors in two Treasury Investment Pools managed by the Pennsylvania State Treasury Department. Although exact figures are unavailable, these Treasury Investment Pools have significant holdings of 1) certificates of deposit issued by Pennsylvania-based financial institutions, 2) short-term notes and commercial paper issued by Pennsylvania-based companies, 3) notes and obligations of selected Pennsylvania state agencies, and 4) FNMA mortgage-backed securities backed by loans issued under the HomeStart program. The HomeStart program is designed to encourage home ownership within the Commonwealth by making mortgages available to lower, moderate, and middle-income Pennsylvania households.

Real Estate

In 1987, SERS established two separate account real estate portfolios which are 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 December 31, 1992, these two portfolios had a net market value of \$194.3 million invested in ten Pennsylvania properties out of a total portfolio market value of \$430 million. There currently remains approximately \$50 million of funds to be invested in these two portfolios. The SERS separate account portfolios contain several notable investments:

- Foster Plaza - This is a 10 building office park located on the main corridor from the airport to downtown Pittsburgh. SERS is an owner of seven of the buildings and a mortgage lender on the remaining three buildings. The total project contains approximately 600,000 square feet of prime office space. During 1991 SERS completed the buyout of our partners interest in these buildings so that the buildings are now owned 100% by SERS.
- 1818 Market Street - This is a 950,000 square foot office building in downtown Philadelphia which was purchased in 1988. Although the building suffered a decline in value during 1991, as virtually all office buildings did, it is over 95% leased and 1992 brought about an increase in the property value. During 1991 a major renovation of the building was completed which transformed the property from a Class B building to a Class A building. This \$10 million renovation, in addition to improving the quality of the investment, was one of the largest construction projects that occurred in Philadelphia during 1991 and

provided much needed jobs in the construction industry. It is anticipated that this renovation will position the building to take full advantage of the office market recovery.

- Heartland Properties - This is a combination of four bulk warehouse projects located in both Reading and Harrisburg - two very strong regional distribution points in the state. The buildings contain 868,000 square feet of space and have excellent access to both the turnpike and interstate highways in order to better serve Pennsylvania business. SERS is considering expanding its' portfolio of industrial/warehouse projects in Pennsylvania in order to participate in the growth of Pennsylvania manufacturers and distribution companies.
- Lincoln Green - SERS owns a 50% interest in a 636 unit apartment project within the Philadelphia city limits. During 1992 upgrades were completed in order to maintain the project's market position in the area.. This has resulted in higher occupancy rates for 1992.
- York Galleria - SERS owns a significant interest in this 767,000 square foot region shopping mall in York. This has become the dominant mall in the area since its 1990 completion. This mall contains four major retailers and numerous other national retail chains which has created many jobs for local citizens.
- Vartan Parc - SERS owns this major downtown Harrisburg office building which contains 190,000 square feet. The building will serve as both an investment for SERS and as SERS's headquarters in addition to providing office space for other businesses with operations in the city.

As of December 31, 1992, the SERS real estate portfolio contained 19 PA investments totalling 6,471,398 square feet of office, retail, apartment and warehouse space. The Gross Market Value of these investments totals \$450 million of which the SERS share is \$206 million.

Venture Capital

Since its inception, the SERS venture capital program has committed \$167.5 million to 20 venture capital partnership funds. As a part of its focus, the program targets partnerships which plan to make investments in companies either based in Pennsylvania or in companies which employ Pennsylvania citizens. These partnerships are diversified among various geographic regions and financing stages (including five seed funds designated by the Ben Franklin Partnership). SERS, in conjunction with the Pennsylvania Public School Employees' Retirement System (PSERS), created the APA/Fostin Pennsylvania Venture Capital Fund in 1987 with a commitment of \$20 million from each fund. The partnership of Alan Patricof Associates/Fostin Capital manages this venture capital fund with offices in Philadelphia and Pittsburgh. During 1992 SERS and PSERS created a follow-on Fund with a commitment of \$30 million from each fund to APA/Fostin Pennsylvania Venture Capital Fund II. With the establishment of this second fund, APA/Fostin will continue its focus on Pennsylvania venture capital investing.

A key aspect of the SERS venture capital program is the attraction of national funds into Pennsylvania investments. Alan Patricof Associates' expertise as the lead investor in the majority of their investments continues to provide Pennsylvania with a flow of venture capital money from numerous out-of-state funds and investors. The progress of Pennsylvania within the national venture capital community should reap substantial rewards in future years for both Pennsylvania and the SERS fund. As of September 30, 1992, SERS venture capital partnerships have attracted over \$97 million of out-of-state funds to finance their active venture companies based in Pennsylvania.

The SERS venture program after 8 years of venture investing, continues to enhance the pool of venture capital available to Pennsylvania based companies by attracting larger national venture capital funds into the state. The committed capital and managerial talent of these organizations could substantially increase business creation and job opportunities throughout Pennsylvania. These national firms also bring investment capital reserves to Pennsylvania and provide a significant opportunity for SERS to leverage its venture capital dollars while promoting economic growth.

An entrepreneurial environment is necessary to enhance returns on venture capital investing and continue an expansion of various business opportunities. A continuous effort to create this business environment, along with the availability of venture capital money, encourages continued economic growth. Pennsylvania

continues to enjoy its share of venture investment activity as it plays a leading role among the Mid Atlantic States in terms of growth in the venture capital industry.

SERS has been active in seed and early stage financings of Pennsylvania based companies. SERS investment in NEPA Venture Fund has, during its seven year history, provided investment in 15 Pennsylvania-based startup companies which possess a technology orientation. SERS' recent commitment to NEPA Venture Fund II will enable NEPA to cover the Pittsburgh area in addition to Eastern Pennsylvania. The goal of NEPA Venture Fund II will be to invest over the next five years in up to five startup companies within the Pittsburgh area.

The limited partnerships funded by SERS have invested in 51 Pennsylvania companies currently active within their portfolio as of September 30, 1992. The Pennsylvania portfolio companies plus non-Pennsylvania based companies employ 6,850 Pennsylvanians and have an estimated 1993 payroll of \$145,007,399. At year end, \$83.2 million of the \$167.5 million committed to venture capital partnership funds had been drawn down for investment by the partnerships, and \$34.5 million had been returned to SERS as of December 31, 1992.

The following companies are examples of Pennsylvania venture capital investments funded by SERS venture capital partnerships:

- Metallized Paper Corporation of American - This McKeesport, Pennsylvania based company is an example of a startup manufacturing company which was founded with seed money from the APA/Fostin Pennsylvania Fund. The company manufactures products for the decorative packaging industry. In addition to the initial round of seed financing, the company has attracted over \$18 million in investment capital including \$2 million in equity from outside the State. This new state of the art production facility employs a recently trained workforce of over 50 Pennsylvanians from the McKeesport area. This investment is a classic example of a public/private partnership of low interest loans, incentive programs and opportunistic venture capital working together to form a new company in an economically depressed area. The company expects to employ well over 200 employees by the time the company has reached the mature stage.
- Zynaxis - Philadelphia is ranked number 3 in the nation in terms of attracting biotechnology startup companies. Zynaxis is a Malvern, Pennsylvania, biotechnology company formed in 1988 with the help of \$9.7 million in venture backing including Grotech Partners, another SERS venture manager. This company which focuses on research related to the delivery and retention of therapeutic drugs went public during January of 1992 resulting in \$23.8 million in net proceeds to this startup company. Since its inception, this Grotech portfolio company has generated \$33.5 million of capital for this Pennsylvania based business.
- City Pride Bakery - Other examples of start-up companies spawned as a result of venture capital backing by two other venture capital managers hired by SERS include City Pride Bakery and Swan Technologies. City Pride Bakery is a start-up wholesale bakery in Pittsburgh with the goal of capturing private label business of major supermarket chains. Pittsburgh is currently the only major metropolitan area without a major wholesale bakery. In addition to its investment return potential, the social and community impact of this startup company has received favorable media attention, including a feature television spot on ABC's Good Morning America and two feature articles in The New York Times.
- Swan Technologies - This company is a manufacturer and direct marketer of personal computers and accessories located in State College. The company has experienced tremendous success and currently generates over \$ 60 million in annual revenue. Swan Technologies which employs over 130 people could become a likely candidate for a public offering.
- Intelligent Electronics - This Lionville, Pennsylvania based company is a classic example of later stage venture investing which has benefited a Pennsylvania based company financed by TDH Capital Corporation, one of SERS venture managers.. The continued patience and support by the venture investors despite outside pressures to sell and withdraw support, resulted in a series of successful private placement offerings which culminated in a successful public stock offering. The company continues to enjoy tremendous success as a publicly traded company within Pennsylvania employing over 180 Pennsylvania citizens and generating an estimated 1992 payroll of \$9 million. Richard Sanford, founder

and Chief Executive Officer of the company has been named Entrepreneur of the Year by the Delaware Valley Venture Group.

Alternative Investments

SERS has funded \$10 million to one LBO limited partnership fund with a Pennsylvania focus, RR&Z Pennsylvania Fund #1. This LBO fund invests in non-hostile, "friendly," privately negotiated, non-auction deals which are completed with present management in place. The LBO fund focuses on small-to-medium capitalization companies (between \$5 and \$100 million). SERS believes that this particular focus offers the largest potential returns given the risk levels for these types of investments. In addition, another SERS LBO fund manager Brentwood Associates, has invested two out of five investments in Pennsylvania and continues to build an investment strategy around its Pennsylvania based companies.

The following companies are examples of Pennsylvania investments funded by SERS alternative investments partnerships:

- Bundy Industries - This Coraopolis, Pennsylvania based company resides in SERS PA Fund portfolio. The company employees 95 Pennsylvania workers and generates \$6 million in annual sales of commercial baking pans.
- Ductmate Industries - Based in Monongahela, Pennsylvania, this company transacted a subsequent fold-in transaction by purchasing Ward Duct Connectors in West Mifflin, Pennsylvania. The combined companies generate nearly \$21 million in annual sales of HVAC ductwork components and connectors and employ 67 Pennsylvanians within the Mon Valley area.
- Legend Medical Services - This company which was founded by two healthcare professionals and principally backed by one of SERS other LBO managers, Murphy & Fauver, plans to acquire and operate a regional group of select nursing homes. The company which is headquartered in Pittsburgh plans to focus attention on the purchase facilities in Pennsylvania and adjacent regions. Legend Medical's first acquisition was the West Hills Health Care Center, an all-skilled nursing home facility in Coraopolis, Pennsylvania which generates annual revenues in excess of \$4.5 million and employs over 120 full and part-time Pennsylvania employees.
- Horizon Cellular Telephone Company - This company which provides cellular telephone services to the rural area marketplace, located in Doylestown, Pennsylvania, is an example of a startup venture conceived by Brentwood Associates, one of SERS LBO Managers. The company which was capitalized with \$30 million from the Brentwood Fund in addition to \$13 million of cellular interests contributed by McCaw Cellular, is an excellent example of the power of leveraged dollars. The company is currently in the stages of raising an additional \$54 million in equity capital for the purpose of expansion capital to fund and grow its business and build on its Pennsylvania base. SERS commitment to the entire Brentwood Fund which includes investment in a number of other portfolio companies is \$10 million.

SERS VENTURE CAPITAL COMMITTED, DRAWN AND DISTRIBUTED
At December 31, 1992

The capital committed column represents SERS capital committed to each venture capital limited partnership. Capital drawn is that portion of SERS capital commitments which 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.

<u>Limited Partnership</u>	<u>Financing Stage Focus</u>	<u>SERS Initial Funding</u>	<u>Capital Committed (\$ millions)</u>	<u>Capital Drawn (\$ millions)</u>	<u>Market Value of Distributions (\$ millions)</u>
1. APA/Fostin	Diversified	9/30/87	\$20.0	\$20.0	\$6.8
APA/Fostin II	Diversified	*	\$30.0	\$0.0	\$0.0
2. Advent VII	Diversified	*	\$25.0	\$0.0	\$0.0
3. CEO Venture Fund-S	Diversified	7/29/87	\$1.0	\$1.0	\$0.4
CEO Venture Fund-II	Diversified	7/14/89	\$7.5	\$5.8	\$0.4
4. Fostin Capital	Diversified	11/25/85	\$10.0	\$10.0	\$4.5
Fostin Capital-II	Diversified	10/5/89	\$7.5	\$5.0	\$0.3
5. Genesis Seed Fund	Seed	11/20/86	\$2.0	\$2.0	\$0.0
6. Grotech PA	Diversified	6/29/90	\$3.0	\$2.2	\$0.1
7. Healthcare Ventures III	Diversified	7/9/92	\$15.0	\$5.8	\$0.0
8. Keystone-II	Middle/Later	11/25/85	\$10.0	\$10.0	\$11.4
Keystone-III	Middle/Later	*	\$3.0	\$0.0	\$0.0
9. NEPA Venture	Seed/Early	8/29/85	\$2.0	\$2.0	\$0.4
NEPA Venture-II	Seed/Early	7/24/92	\$7.5	\$0.8	\$0.0
10. Pittsburgh Seed	Seed	1/13/87	\$2.0	\$2.0	\$0.0
11. Point Venture PA	Diversified	10/2/90	\$1.0	\$0.7	\$0.0
12. PNC Venture I	Diversified	11/25/85	\$5.0	\$5.0	\$2.3
13. TDH-II Limited	Diversified	11/25/85	\$9.0	\$9.0	\$7.9
TDH-III Limited	Diversified	*	\$5.0	\$0.0	\$0.0
14. Zero Stage II	Seed	4/30/87	<u>\$2.0</u>	<u>\$2.0</u>	<u>\$0.1</u>
Total			\$167.5	\$83.2	\$34.5

* No contract to date.

SERS VENTURE CAPITAL PORTFOLIO COMPANIES
INVESTMENT AND PAYROLL IMPACT OF ACTIVE INVESTMENTS
ON PENNSYLVANIA
AS OF SEPTEMBER 30, 1992

Number of Companies	Amount Invested	Additional Commitment	Non-SERS Partnership Dollars Co-Invested	Non-SERS Partnership Additional Commitment	PA Employees	Estimated 1993 PA Payroll
63	\$51,264,728	\$3,006,523	\$556,108,915	\$13,281,085	6,850	\$145,007,399

Total number of companies include 51 Pennsylvania-based companies and 12 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 which 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 SEPTEMBER 30, 1992

Number of Pennsylvania Companies	Investments at Cost	Current Valuation
51	\$45,716,065	\$63,030,816

Number of Non-Pennsylvania Companies	Investments at Cost	Current Valuation
89	\$79,542,853	\$80,213,916

Number of Companies Written Off	Number of Companies Sold	Number of Public Companies
29	46	17

Total number of active Pennsylvania companies exclude 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.

Real Estate Separate Account Pennsylvania Properties

<u>Property</u>	<u>Location</u>	<u>Description</u>	<u>Market Value of SERS % (\$ in millions)</u>	<u>Manager</u>
1. Bucks County Business Park	Middletown & Falls Township, Bucks Co.	Five, one-story office flex buildings including warehouse and distribution space	\$6.1	Heitman Advisory
2. Columbia Mall	Hemlock Township, Bloomsburg	Shopping Mall	\$17.0	Heitman Advisory
3. Foster Plaza II-VI	Borough of Greentree, Pittsburgh	Multi-story office buildings	\$27.6	JMB Institutional Realty
4. Foster Plaza IX plus land	Borough of Greentree, Pittsburgh	Multi-story office buildings	\$5.8	JMB Institutional Realty
5. Greenwood Square	Bensalem Township, Bucks County	Multi-phased flex office facility	\$12.8	Heitman Advisory
6. Heartland Properties	Reading, Harrisburg, Montgomeryville	Limited partnership consisting of industrial properties including warehouse, distribution, and limited mfg. facilities	\$29.1	JMB Institutional Realty
7. Lincoln Green Apartments	Philadelphia	360 unit Apt. complex consisting of 288 one bedroom units and 72 two bedroom units	\$12.6	JMB Institutional Realty
8. 1818 Market Street	Philadelphia	40 story office tower with a 5 level parking garage	\$46.0	Heitman Advisory
9. York Galleria	York	Shopping Mall	\$19.9	Heitman Advisory
10. Vartan Parc	Harrisburg	10-story office building	<u>\$17.4</u>	JMB Institutional Realty
Total			\$194.3	

Commissions
Paid by SERS Stock Managers to Brokers
1992

Broker	Commissions	Broker	Commissions
Adams Cohen Secs	\$5,548.00	Lynch Jones & Ryan	\$285,392.00
Alex Brown & Sons	38,766.05	Mabon Nugent	8,614.00
Autranet, Inc.	5,292.00	Merrill Lynch Pierce Fenner	177,362.00
Bear Stearns	179,466.22	Montgomery Securities	42,452.00
Blair, William & Company	3,697.00	Morgan Stanley	72,942.00
Blunt Ellis & Loewi	3,372.00	Neuberger & Berman	4,466.00
Brean Murray, Foster Securities	5,640.00	Oppenheimer & Co.	69,930.00
Brimberg & Co	44,088.00	Pacific Crest	22,281.44
Broadcort Capital Corp.	119,258.50	Pennsylvania Group Inc	8,304.00
C J. Lawrence Morgan Grenfell	55,434.44	Paine Webber Jackson Curtis	60,171.00
Cantor Fitzgerald	29,887.53	Perry Investments	9,836.00
Capital Institutional Servs Inc	7,834.00	Pershing Div of DL & J	118,256.00
County Natwest Securities Corp	35,036.00	Piper, Jaffray & Hopwood	8,520.00
Cowen & Co.	12,217.00	Prudential/Bache Securities	29,922.00
Correspondent Serv Corp	8,078.00	Quaker Secs	2,694.00
Credit Lyonnais	5,455.00	Regional Clearing Corp.	12,010.50
Dean Witter Reynolds	7,294.80	Rosenblatt, Richard & Co Inc	4,310.00
Dillon Read	6,294.00	Rothchild Inc.	5,100.00
Ernst & Co.	9,086.00	Salomon Brothers	74,986.04
Ewing Capital	21,856.50	Sanford C. Bernstein	17,596.80
Execution Services	20,801.04	S E I Funds Evaluation	4,992.00
Factset Data Systems, Inc..	7,206.00	Shearson Lehman Hutton Inc.	180,168.45
Fahnestock & Co. Inc.	32,324.00	Smith Barney Harris Upham	52,905.50
First Albany Corp	2,560.00	Southwest Securities, Inc.	10,940.00
First Boston Corp.	285,368.40	Spear, Leeds & Kellogg	3,374.00
First Manhattan Co.	14,064.00	Standard & Poors	10,848.00
Furman Selz Mager Dietz & Birney	4,240.00	UBS Securities, Inc.	17,298.00
Goldman Sachs	117,586.50	U S Clearing Corp	4,725.00
Gordon Haskett	8,274.00	Warburg, S.G. & Co., Inc.	19,108.00
Helfant Lawrence Inc	4,898.00	Weeden & Co.	27,392.00
Instinet Corp.	40,220.50	Wilshire Assoc.	356,866.35
Investment Technology GRP Inc.	12,396.00	York Securities	6,460.00
Janney Montgomery Scott	18,673.00	Other	40,755.88
Jefferies & Co.	121,927.18	Corestates Commissions *	675,815.52
Josephthal Lyon & Ross	4,182.00		
Keane Securities Co	6,114.00		
Kidder Peabody & Co.	100,479.86		
Lazard, W R and Laidlaw	64,322.00		
		Total Commissions	<u>\$3,916,032.00</u>

* Due to the change of custody from Corestates to Provident Bank in March 1992, information on broker commissions for January and February is not available.

Investment Advisors

APA Capital Risque III
New York, NY and Paris, France
(alternative investments)

APA German European Ventures
Munich, Germany
(alternative investments)

Advent VII
Boston, MA
(venture capital)

Aetna Life Insurance Company
Hartford, CT
(real estate)

Alex. Brown Kleinwort Benson
Realty Advisors Corporation
Sacramento, CA
(real estate)

APA/Fostin Pennsylvania Venture Capital Fund
APA/Fostin Pennsylvania Venture Capital Fund II
Philadelphia, PA and Pittsburgh, PA
(venture capital)

Barrow, Hanley, Mewhinney & Strauss, Inc.
Dallas, TX
(stocks)

Brentwood Associates Buyout Fund, L.P.
Los Angeles, CA
(alternative investments)

CEO Venture Fund-S
CEO Venture Fund II
Pittsburgh, PA
(venture capital)

Code, Hennessy & Simmons, L.P.
Chicago, IL
(alternative investments)

Connecticut General Life Insurance Company
Hartford, CT and Philadelphia, PA
(bonds & mortgages)

Copley Real Estate Advisors
Boston, MA
(real estate)

P.G. Corbin Asset Management, Inc.
Philadelphia, PA
(bonds & mortgages)

Corporate Property Advisors
New York, NY
(real estate)

Dietche & Field Advisors, Inc.
New York, NY
(stocks)

Dodge & Cox
San Francisco, CA
(bonds & mortgages)

Dunedin Fund Managers Ltd.
Chicago, IL
(stocks)

Forest Investment Associates
Atlanta, GA
(real estate)

Fostin Capital Associates
Fostin Capital Associates II
Pittsburgh, PA
(venture capital)

Genesis Seed Fund, Ltd
Philadelphia, PA
(venture capital)

Grotech Partners III
Timonium, MD
(venture capital)

Hamil & Holte
Denver, CO
(bonds & mortgages)

Hancock Realty Investors Inc.
Boston, MA
(real estate)

John Hancock Mutual Life Insurance Company
Boston, MA
(bonds & mortgages)

Investment Advisors (Continued)

- Healthcare Ventures III
Edison, NJ
(venture capital)
- Heitman Advisory Corporation
Chicago, IL
(real estate)
- Hellman & Friedman Capital Partners II
San Francisco, CA
(alternative investments)
- JMB Institutional Realty Corporation
Chicago, IL
(real estate)
- Keystone Venture II, L.P.
Philadelphia, PA
(venture capital)
- Latimer & Buck Financial Services, Inc.
Philadelphia, PA
(bonds & mortgages)
- Madison Dearborn Capital Partners, L.P.
Chicago, IL
(alternative investments)
- Maverick Pennsylvania Fund
Pittsburgh, PA
(alternative investments)
- Mellon Bank, N.A.
Pittsburgh, PA
(stocks)
- Mellon Bond Associates
Philadelphia, PA
(bonds & mortgages)
- Mellon Equity Associates
Pittsburgh, PA
(stocks)
- Metric Institutional Realty Advisors
Foster City, CA
(real estate)
- Miller, Anderson & Sherrerd
West Conshohocken, PA
(stocks, bonds & mortgages)
- J.P. Morgan Investment Management, Inc.
New York, NY
(bonds & mortgages)
- Morgan Grenfell Investment Services Limited
New York, NY
(stocks)
- Murphy & Fauver, L.P.
New York, NY
(alternative investments)
- NEPA Venture Fund, L.P.
NEPA Venture Fund, L.P. II
Bethlehem, PA
(venture capital)
- Neuberger & Berman
New York, NY
(stocks)
- Payden & Rygel
Los Angeles, CA
(cash)
- Pennsylvania Fund #1
RR&Z Capital Group Inc.
Pittsburgh, PA
(alternative investments)
- Pilgrim, Baxter, Greig and Associates
Wayne, PA
(stocks)
- Pittsburgh Seed Fund
Pittsburgh, PA
(venture capital)
- PNC Venture Group I
Pittsburgh, PA
(venture capital)
- Point Venture Partners
Pittsburgh, PA
(venture capital)

Investment Advisors (Continued)

Provident Investment Counsel, Inc. Pasadena, CA <i>(stocks)</i>	Trinity Investment Management Corporation Bellefonte, PA <i>(stocks)</i>
The Prudential Asset Management Company, Inc. Newark, NJ <i>(real estate)</i>	Trust Company of the West Los Angeles, (CA) <i>(bonds & mortgages)</i>
PSI Institutional Realty Glendale, CA <i>(real estate)</i>	Wells Fargo Nikko Investment Advisors San Francisco, CA <i>(stocks, TAA)</i>
Schroder Venture Fund III London, England <i>(alternative investments)</i>	W.R. Huff Asset Management Morristown, NJ <i>(bonds & mortgages)</i>
Scudder, Stevens & Clark, Inc. New York, NY <i>(stocks)</i>	Zero Stage Capital II - Central Pennsylvania Limited Partnership State College, PA <i>(venture capital)</i>
Sentinel Corporation New York, NY <i>(real estate)</i>	Zevenbergen Capital Inc. Seattle, WA <i>(stocks)</i>
Sturdivant & Co., Inc. Clementon, NJ <i>(stocks)</i>	
SunBank Capital Management, N.A. Orlando, FL <i>(stocks)</i>	
TDH II Limited Radnor, PA <i>(venture capital)</i>	

SECTION II

SERS Report of Independent Accountants

on Financial Statements

SECTION II

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, 1991 and 1990 and the related statements of changes in net assets 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 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 involves 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, 1991 and 1990, 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 (including mortgage loans and venture capital valued at \$1,658,886,000 as of December 31, 1991, of net assets), 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 determining 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 1991 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 1989. 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.

Coopers & Lybrand

5 North Fifth Street
Harrisburg, Pennsylvania
June 29, 1992

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYES' RETIREMENT SYSTEM

STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

December 31, 1991 and 1990

ASSETS	<u>1991</u>	<u>1990</u>
	(000's omitted)	
Investments at fair value:		
United States Government securities	\$ 2,184,575	\$1,921,104
Corporate and foreign bonds and notes	1,151,317	1,026,855
Common and preferred stocks, including collective trust funds	6,400,135	4,768,574
Temporary investments	324,143	409,805
Mortgage loans	723,488	632,558
Real estate	838,323	862,145
Venture capital	<u>97,075</u>	<u>93,849</u>
Total investments	11,719,056	9,714,890
Contributions receivable:		
Employers	135,520	106,582
Employes	2,496	4,756
Accrued investment income receivable	71,580	59,152
Due from brokers	25,753	14,768
Cash	<u>1</u>	<u>1</u>
Total assets	<u>11,954,406</u>	<u>9,900,149</u>
LIABILITIES		
Accounts payable and accrued expenses	(11,933)	(9,192)
Due to brokers	<u>(2,391)</u>	<u>(5,057)</u>
Total liabilities	<u>(14,324)</u>	<u>(14,249)</u>
Contingencies (Note 7)		
NET ASSETS AVAILABLE FOR BENEFITS	<u>\$11,940,082</u>	<u>\$9,885,900</u>

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

COMMONWEALTH OF PENNSYLVANIA
STATE EMPLOYES' RETIREMENT SYSTEM

STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

for the years ended December 31, 1991 and 1990

	<u>1991</u>	<u>1990</u>
	(000's omitted)	
ADDITIONS:		
Investment income:		
Net appreciation (depreciation) in fair value of investments	\$ 1,605,823	\$ (430,408)
Interest	364,580	360,586
Dividends	153,560	143,537
Other	<u>53,071</u>	<u>61,291</u>
	2,177,034	135,006
Less investment expenses	<u>22,758</u>	<u>20,832</u>
	2,154,276	114,174
Contributions:		
Employers	381,347	418,655
Employes	<u>182,611</u>	<u>175,422</u>
Total additions	<u>2,718,234</u>	<u>708,251</u>
DEDUCTIONS:		
Benefits and refunds paid to participants	655,672	599,525
Administrative expenses	<u>8,380</u>	<u>7,400</u>
Total deductions	<u>664,052</u>	<u>606,925</u>
Net increase	2,054,182	101,326
Net assets available for benefits at beginning of year	<u>9,885,900</u>	<u>9,784,574</u>
Net assets available for benefits at end of year	<u>\$11,940,082</u>	<u>\$9,885,900</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 employes of state government and certain independent agencies. At December 31, 1991, there were 108 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 employes. Members and employes of the legislature and certain elected persons in the executive branch and certain other employes are not required, but are given the option to participate. At December 31, 1991, System membership consisted of:

Retirees and beneficiaries currently receiving benefits and terminated employes entitled to benefits but not yet receiving them	84,936
Current employes:	
Vested	62,547
Nonvested	<u>42,104</u>
Total members	<u>189,587</u>

The System provides retirement, death, and disability benefits. Retirement benefits vest after 10 years of credited service. Employes 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 employes 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

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 \$1,973,197,000 and \$1,855,312,000 as of December 31, 1991 and 1990, 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.

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.

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.

NOTES TO FINANCIAL STATEMENTS, Continued

3. Funding Status and Progress, continued:

The pension benefit obligation was determined as part of an actuarial valuation at December 31, 1991 and 1990. 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 1991 and 1990, (b) projected salary increases of 4% per year compounded annually, attributable to inflation in 1991 and 1990, (c) additional projected salary increases of approximately 2.5% in 1991 and 1990, respectively, attributable to merit/promotion, and (d) no post-retirement benefit increases.

The pension benefit obligation at December 31, 1991 and 1990 is as follows:

	<u>1991</u>	<u>1990</u>
	(000's omitted)	
Pension benefit obligation:		
Retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them	\$ 4,621,861	\$3,554,545
Current employees:		
Accumulated employe contributions and credited interest	1,973,197	1,855,312
Employer-financed, vested	3,532,144	3,776,219
Employer-financed, nonvested	<u>337,681</u>	<u>350,255</u>
Total pension benefit obligation	10,464,883	9,536,331
Net assets available for benefits, at fair value (Note 2)	<u>11,940,082</u>	<u>9,885,900</u>
Net assets in excess of pension benefit obligation	<u>\$ 1,475,199</u>	<u>\$ 349,569</u>

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.

NOTES TO FINANCIAL STATEMENTS, Continued

3. Funding Status and Progress, continued:

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, 1991 and 1990 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	6.50% and 7.25% in 1991 and 1990, respectively

The accumulated plan benefit information at December 31, 1991 and 1990 is as follows:

	<u>1991</u>	<u>1990</u>
	(000's omitted)	
Actuarial present value of accumulated plan benefits:		
Vested benefits:		
Participants currently receiving payments	\$ 4,859,617	\$4,619,085
Other participants	<u>5,496,969</u>	<u>4,026,829</u>
	10,356,586	8,645,914
Nonvested benefits	<u>188,735</u>	<u>134,783</u>
Total	<u>\$10,545,321</u>	<u>\$8,780,697</u>

The changes in the actuarial present value of accumulated plan benefits for the year ended December 31, 1991 are as follows:

	(000's omitted)
Actuarial present value of accumulated plan benefits at January 1, 1991	\$ 8,780,697
Increase during the year attributable to:	
Passage of time and other causes	694,552
Plan provision changes	189,538
Changes in interest rate and salary assumptions	<u>880,534</u>
Actuarial present value of accumulated plan benefits at December 31, 1991	<u>\$10,545,321</u>

NOTES TO FINANCIAL STATEMENTS, Continued

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 1991 and 1990.

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 varying periods ending June 30, 2011. 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>1991</u>	<u>1990</u>
Employer normal cost	6.28%	4.67%
Amortization of unfunded actuarial liability	3.33	5.87
Amortization of supplemental annuities	<u>1.48</u>	<u>2.14</u>
Total employer cost	<u>11.09%</u>	<u>12.68%</u>

Significant actuarial assumptions used to compute contribution requirements are the same as those used to compute the pension benefit obligation in 1990, except for an assumed rate of return on investments of 5.5% per annum and certain revisions to salary increase assumptions.

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, 1991 and 1990 and at all times during the years.

NOTES TO FINANCIAL STATEMENTS, Continued

5. Investments, continued:

The investments of the System at December 31, 1991 and 1990 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, 1991 and 1990. 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>1991</u>	<u>1990</u>
	(000's omitted)	
<u>Category 1</u>		
United States Government securities	\$1,591,810	\$1,196,987
Corporate and foreign bonds and notes	1,112,871	970,532
Common and preferred stocks	2,514,659	1,796,686
Mortgage loans	<u>871</u>	<u>1,046</u>
	<u>5,220,211</u>	<u>3,965,251</u>
 <u>Not Categorized</u>		
Investments held by broker/dealers under reverse repurchase agreements:		
United States government securities	592,765	724,117
Corporate and foreign bonds and notes	38,446	56,323
Common and preferred stocks	77,015	56,904
Collective trust funds	3,808,461	2,914,984
Temporary investments	324,143	409,805
Mortgage loans	722,617	631,512
Real estate	838,323	862,145
Venture capital	<u>97,075</u>	<u>93,849</u>
	<u>6,498,845</u>	<u>5,749,639</u>
Total investments	<u>\$11,719,056</u>	<u>\$9,714,890</u>

NOTES TO FINANCIAL STATEMENTS, Continued

5. Investments, continued:

The System's investments are managed by various fund managers. At December 31, 1991 and 1990, two fund managers accounted for approximately 46% and 43% 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 \$189,800,000 and \$243,000,000 of the real estate portfolio is located in Pennsylvania as of December 31, 1991 and 1990, respectively. The System's remaining real estate investments are not concentrated in any one geographic area or industry.

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.

NOTES TO FINANCIAL STATEMENTS, Continued

5. Investments, continued:

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, 1991:

	<u>Market Exposure</u>		<u>Credit Exposure</u>
	<u>Unhedged</u>	<u>Hedged</u>	
	(000's omitted)		
Currency forward contracts	\$8,811	\$64,772	-

The following table summarizes the hedged and unhedged market exposure, expressed in cash market equivalents, related to financial instrument positions at December 31, 1990:

	<u>Market Exposure</u>		<u>Credit Exposure</u>
	<u>Unhedged</u>	<u>Hedged</u>	
	(000's omitted)		
Equity futures contracts	-	\$36,359	\$1,941
Currency forward contracts	\$16,465	48,996	-
Option contracts	95	6,558	-

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.

NOTES TO FINANCIAL STATEMENTS, Continued

5. Investments, continued:

The System's investments, including investments bought, sold, as well as held during the year appreciated (depreciated) in fair value by \$1,605,823,000 and \$(430,408,000) in 1991 and 1990, respectively, as follows:

	<u>1991</u>	<u>1990</u>
	(000's omitted)	
Fair value as determined by quoted market price:		
United States Government securities	\$ 201,535	\$ 54,071
Corporate and foreign bonds and notes	64,319	(66,406)
Common and preferred stocks, including collective trust funds	<u>1,423,686</u>	<u>(391,805)</u>
	<u>1,689,540</u>	<u>(404,140)</u>
Fair value estimated by using discounted cash flow, appraised value and valuation committee reports, respectively (Note 2):		
Mortgage loans	11,652	1,335
Real estate	(106,734)	(26,053)
Venture capital	<u>11,365</u>	<u>(1,550)</u>
	<u>(83,717)</u>	<u>(26,268)</u>
Net appreciation (depreciation)	<u>\$1,605,823</u>	<u>\$(430,408)</u>

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

	<u>1991</u>	<u>1990</u>
	(000's omitted)	
Wells Fargo Bank:		
Equity Index Fund P - 153,200,309 and 163,294,950 units in 1991 and 1990, respectively	\$2,004,180	\$1,637,889
Asset Allocation Fund - 32,354,258 and 32,354,297 units in 1991 and 1990, respectively	851,904	689,293

The above funds are diversified among three collective funds: equity, which are invested in S&P 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.

NOTES TO FINANCIAL STATEMENTS, Continued

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. 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 which will result in accelerated pension benefits.

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

TEN-YEAR HISTORICAL TREND INFORMATION

**Analysis of Funding Progress
(in millions of dollars)
at December 31, 1991**

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)
1982	\$ 3,730	\$ 5,931	62.9%	\$ 2,201	\$2,334	94.3%
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)

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).

**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, 1991**

Fiscal Year	Revenues by Source				Employer Contributions as a Percentage of Annual Covered Payroll
	Employe Contributions	Employer Contributions*	Investment Income**	Total	
1982	\$121,589	\$383,519	\$ 758,038	\$1,263,146	16.4%
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

* 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 expense.

Fiscal Year	Expenses by Type			
	Benefit Payments	Refunds of Employe Contributions	Admin- istrative Expenses	Total
1982	\$335,342	\$11,785	\$2,938	\$350,065
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