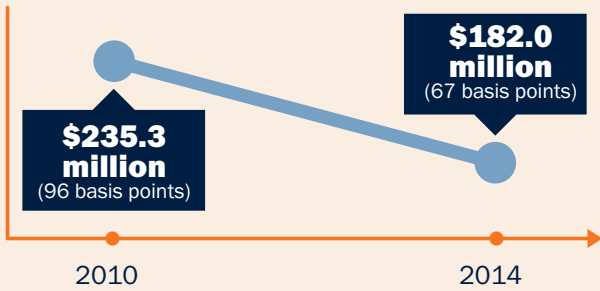


SERS decreased investment fees



In 2014 SERS retired **5,453** members and welcomed **10,666** new members

SERS paid nearly **\$3 billion** in benefits in 2014

21% of SERS active employees belong to post-Act 120 classes of service

As of Dec 31, 2014 SERS had

104,431
active members

122,249
annuitants

Total FY 15/16 Spending Request



\$23.6 million

\$1.5 million directed commissions

\$17.0 million
personnel

\$7.8 million
operations

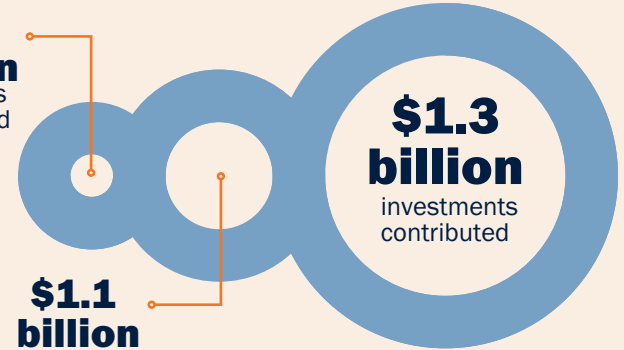
\$0.3 million
fixed assets

Samples from operations =

- real estate **\$1.7 million**
- IT hardware/software **\$1.0 million**
- postage **\$0.4 million**
- legal services **\$0.4 million**
- office equipment **\$0.09 million**
- insurance **\$0.01 million**

2014 contributions to the SERS Fund

\$366 million
employees contributed



\$1.1 billion
employers contributed

SERS average active member

47 years old

12 years of service

SERS average retired member

72 years old

receives **\$26,426** per year

Global Public Equity **3.3%**

Alternative Investments **13.1%**

Liquidity Reserve **0.5%**

In 2014 the SERS fund returned **6.4%** (unaudited)

Diversifying Assets **6.7%**

Real Assets **6.3%**

Fixed Income **6.1%**

Data throughout is estimated/unaudited

SERS 2015 Supplemental Budget Book

March 12, 2015

The Honorable Pat Browne
Chairman, Appropriations Committee
Pennsylvania Senate
281 Main Capitol
Harrisburg, PA 17120

The Honorable Vincent Hughes
Minority Chairman, Appropriations Committee
Pennsylvania Senate
545 Main Capitol
Harrisburg, PA 17120

Gentlemen and Members of the Appropriations Committee:

It is my pleasure to present you detailed information about the Pennsylvania State Employees' Retirement System's operations, investments, and request for spending authority. I trust that the information within will be useful in your deliberations related to the development and passage of the FY 2015-16 commonwealth budget.

Among those details are that SERS serves approximately 230,000 active and retired members and that an average retiree who worked to full retirement age receives an average annual annuity of \$26,426. Also, that the system paid out nearly \$3 billion dollars in 2014, of which approximately \$2.7 billion was paid to members who live within Pennsylvania, helping to stimulate our state and local economies.

This year, SERS proposes a \$23.6 million spending authority, which is drawn from SERS funds, not general government operating accounts. Once again, our unaudited investment returns of 6.4% continue our positive growth and help move the system towards the goal of restored financial health and reduced unfunded liability. We continue to rein in administrative costs and maximize results for our members. Last year, our investments added nearly \$1.3 billion to the bottom line, net-of-fees. These positive results, combined with the continued commitment of SERS employers to make the legislatively mandated contributions have improved our estimated funded ratio to 59.3%, or 61.4% on a market basis over last year.

During this fiscal year the employer contribution rate as set under Act 2010-120 is expected to be 25.0% of payroll, yielding approximately \$1.5 billion in contributions of which 42% originates from the general fund from employers under the Governor's jurisdiction.

Pennsylvania's State Employees' Retirement System remains one of the top-performing pension funds in the country. Our commitment to our members and the taxpayers of Pennsylvania remains to employ a prudent investment policy that will ensure that meaningful retirement benefits will be available to those employees that have given their careers to serving the people of Pennsylvania. It has been, and will continue to be, our honor to do so with the help and support of the members of this committee, as well as the entire General Assembly.

SERS' Executive Director, David Durbin, Chief Investment Officer, Tom Brier, and I look forward to discussing SERS' operations and investments at our March 23, 2015, appearance before your committee. If you have any questions or comments before that time, please do not hesitate to contact Mr. Durbin at 717.787.9657 or DDurbin@pa.gov.

Sincerely,



Glenn E. Becker
Chairman

SERS 2015 SUPPLEMENTAL BUDGET INFORMATION

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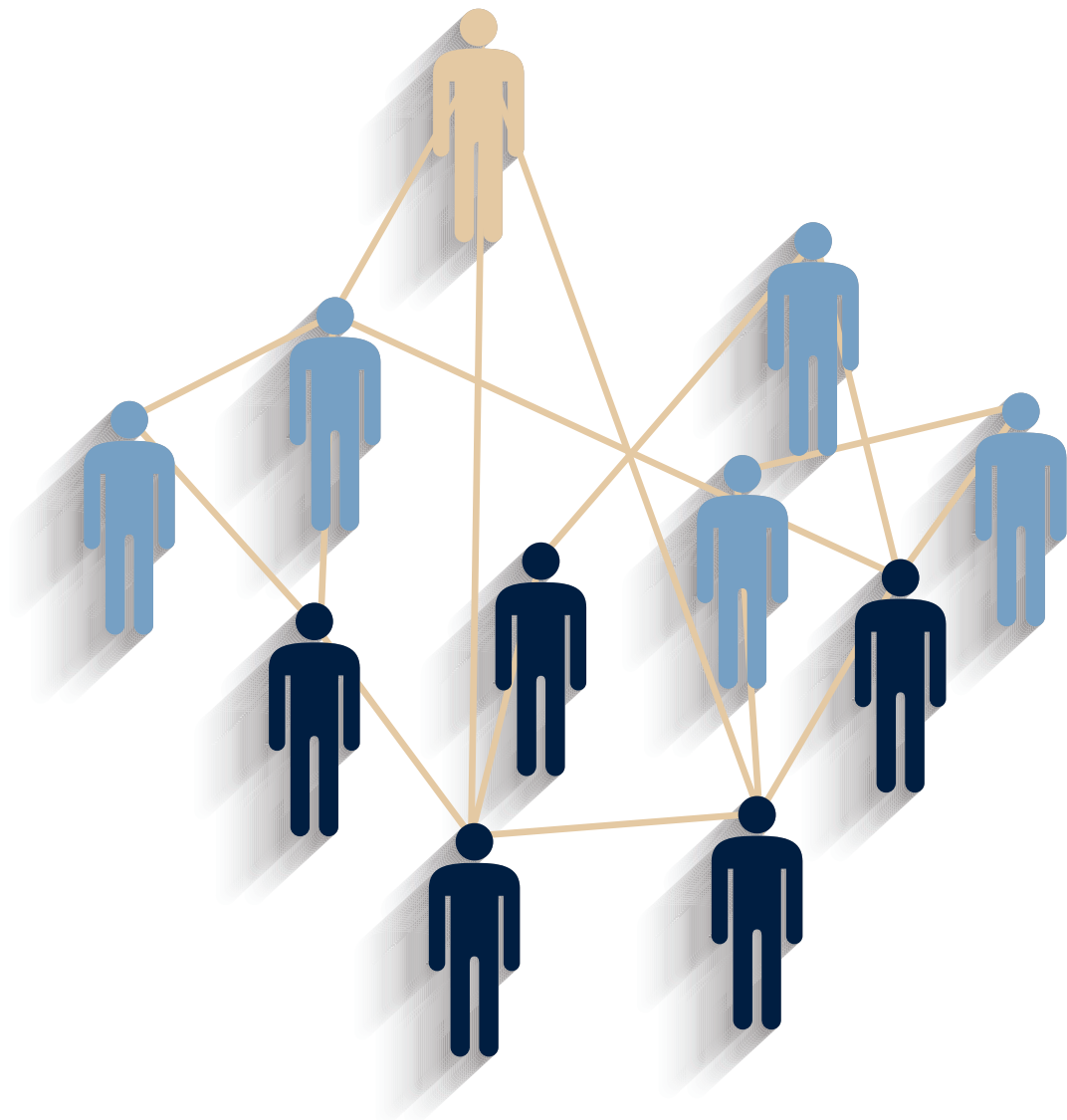
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30 N. 3rd Street, Suite 150
Harrisburg, PA 17101
www.SERS.pa.gov
1.800.633.5461

SERS Organization



SERS ORGANIZATION

Mission, Vision & Guiding Principles

Established in 1923, SERS is one of the nation's oldest and largest statewide retirement plans for public employees, with approximately 230,000 members. SERS is among the largest of public and corporate pension funds, with assets of approximately \$27.2 billion as of December 31, 2014.

SERS is responsible for administering the State Employees' Retirement Code in accordance with the expressed intent of the General Assembly and bears a fiduciary obligation to plan beneficiaries, including state employees and retirees.

State law provides that the administration of the SERS Fund and the fiduciary responsibility for its management be vested in an 11-member board. The management of SERS is the responsibility of the executive director who, with the approval of the board, contracts for professional services and employs the staff needed to operate the system.

Mission

The mission of SERS is to provide retirement benefits and services to our members through sound administration and prudent investments.

Vision

To navigate the fiscal storm so that SERS continues to progress toward fully-funded status while sustaining effective and responsive member services.

Guiding Principles

- Demonstrate integrity
- Develop and empower employees
- Focus on customer service
- Fulfill fiduciary obligations
- Lead innovation and improvement
- Learn from mistakes
- Safeguard information, facilities, and staff
- Share knowledge
- Think strategically

SERS ORGANIZATION

Services & Operations

The nearly 200 professionals who work for the State Employees' Retirement System share a singular focus: serving SERS members. Some SERS professionals serve members by investing and overseeing approximately \$27.2 billion. Other SERS professionals serve members by ensuring that every monthly payment is made correctly and on time. Still others audit and account for each penny, provide online information, or answer members' questions in person or over the phone.

Some work is behind-the-scenes, while other work touches members more directly. Examples of services offered to active and vested members include:

- Issuing annual statements of account
- Offering individual and group educational sessions about retirement benefits
- Helping with the purchase of service, change of beneficiaries, etc.
- Calculating retirement, disability, and vesting estimates
- Providing one-on-one counseling for those leaving state service
- Walking members step-by-step through their retirement experience

Examples of services offered to retired members include:

- Issuing annual statements of account and tax forms
- Providing income tax withholding, direct deposit, address change, and other forms, as requested, as well as assistance in filling out and submitting forms, as needed
- Processing changes to retiree health coverage
- Helping members understand implications of and, if necessary, effecting pension changes related to marriage, divorce, or death
- Tracking and reissuing payments, if necessary
- Assisting spouses, children, and other survivors upon the death of a SERS member

SERS ORGANIZATION

Services & Operations

Approximately a quarter of SERS professionals are wholly dedicated to direct member services through a network of field offices statewide, including:

Bensalem Regional Counseling Center. Serving retired members who live and active members who work in Berks, Bucks, Chester, Delaware, Lancaster, Montgomery, and Philadelphia counties.

Harrisburg Regional Counseling Center. Serving retired members who live and active members who work in Adams, Cumberland, Dauphin, Lebanon, Perry, and York counties.

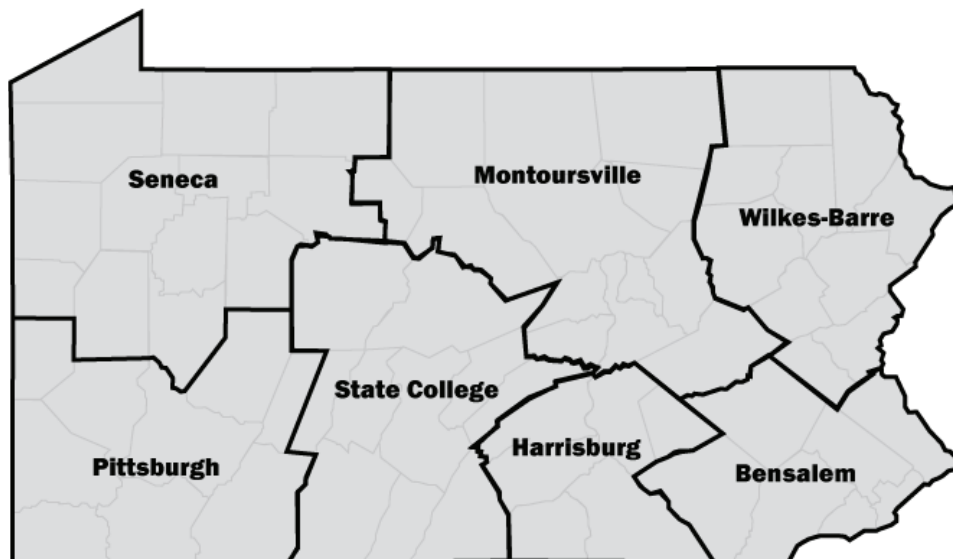
Montoursville Regional Counseling Center. Serving retired members who live and active members who work in Bradford, Cameron, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Schuylkill, Snyder, Sullivan, Tioga, and Union counties.

Pittsburgh Regional Counseling Center. Serving retired members who live and active members who work in Allegheny, Beaver, Western Cambria, Fayette, Greene, Indiana, Somerset, Washington, and Westmoreland counties.

Seneca Regional Counseling Center. Serving retired members who live and active members who work in Armstrong, Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, and Warren counties.

State College Regional Counseling Center. Serving retired members who live and active members who work in Bedford, Blair, Eastern Cambria, Centre, Clearfield, Franklin, Fulton, Huntingdon, Juniata, and Mifflin counties.

Wilkes-Barre Regional Counseling Center. Serving retired members who live and active members who work in Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Susquehanna, Wayne, and Wyoming counties.



SERS ORGANIZATION

Services & Operations

To achieve its mission overall, SERS is organized into the following business units.

The **executive office** provides strategic leadership and administrative oversight of agency operations. It directly serves the State Employees' Retirement Board, including facilitating communications and managing meetings and documentation. The communications and policy office, a component of the executive office, works with the General Assembly on policy-related matters; administers the agency's right-to-know program; serves as liaison to the media; and offers an array of communications support to the agency.

The **office of member services** provides direct assistance to SERS' active, vested, and retired members as well as their families. It conducts individual and group educational sessions statewide. The office also supports SERS employers and processes member enrollments, retirements, status changes, payments, and a host of other transactions.

The **investment office** works closely with the State Employees' Retirement Board to manage the SERS Fund. It establishes and implements investment policies; sets the strategic asset allocation; monitors fund cash flow, composition, and performance; and researches, recommends, and supervises investment managers, among other tasks. The office also maintains deep and current expertise related to the capital and global markets.

The **office of finance and administration** maintains accounting controls and oversees all SERS funds. It administers all transactions including, for example, member payments; member and employer contributions; investment purchases and sales; and operational expenses. The office also manages facilities and procurement, and oversees the deferred compensation program.

The **internal audit division** tests business processes and internal controls to confirm that they are adequate and operating properly to ensure vigilant stewardship of SERS funds. It performs on-site audits of investment consultants and managers, as deemed necessary. The division also coordinates independent, external audits of SERS on an annual basis and performs special projects at the direction of the State Employees' Retirement Board and audit committee.

The **legal office** advises the State Employees' Retirement Board on matters related to member appeals and administrative hearings, securities actions and litigation matters, and other general legal issues for which the board requests advice. In addition, the office reviews, negotiates, assists in drafting, and finalizes all investment contracts, as well as other general business contracts. The office also provides legal support related to legislative drafting, right-to-know requests, and member transactions.

SERS ORGANIZATION

Services & Operations

The **office of information technology** administers the agency's computing infrastructure. It ensures the performance and security of complex databases, which contain sensitive personal and financial information and are relied upon to track investments, process payments, and account for funds. The office also links the regional field offices, develops applications to provide members with online access to SERS information, and provides user support.

The **human resources division** recruits, hires, trains, supports, and assesses the performance of SERS professionals. It offers workforce planning, professional development programs, and labor relations services. The division also facilitates annual financial disclosure and ethics processes for SERS board members and staff.

SERS ORGANIZATION

Services & Operations



SERS ORGANIZATION

Proposed FY 2015-2016 Administrative Budget

	Rebudget 2011-2012	Rebudget 2012-2013	Rebudget 2013-2014	Rebudget 2014-2015	Budget Request
Personnel Services	\$16,218,000	\$16,820,129	\$14,368,800 ^{1/}	\$15,909,014 ^{1/}	\$17,014,544 ^{1/}
Operational					
Travel	141,800	183,600	36,000 ^{1/}	50,050 ^{1/}	56,400 ^{1/}
Training	97,400	90,500	66,600 ^{1/}	153,258 ^{1/}	116,950 ^{1/}
Communication Services	299,900	378,500	353,500	428,200	418,400
Consultants - Non EDP	4,799,000	396,500 ^{1/}	367,600 ^{1/}	385,600 ^{1/}	401,600 ^{1/}
Legal Services/Fees	100,500	175,500	423,800	282,500	386,000
Specialized Services	620,100	421,700	304,200	404,100	455,670
Advertising	10,000	20,000	10,000	20,000	5,000
IT Consulting	1,728,500	947,500	1,138,200	964,600	1,200,000
Contracted Maintenance Non-IT	43,100	52,800	44,800	39,300	41,300
Hardware/Software and Maintenance	356,600	1,084,800	1,325,400	1,334,900	1,072,600
Real Estate	1,725,000	1,770,800	1,886,000	1,842,789	1,680,090
Vehicles	34,100	44,900	27,000	31,700	25,600
Office Equipment	90,000	68,000	75,500	68,100	94,600
Other Rentals/Leases	65,000	18,600	2,700	3,600	3,600
Office Supplies	80,000	84,900	86,900	86,800	87,000
Educational Supplies	2,400	1,700	5,800	500	3,140
Motorized Equipment Maintenance	14,800	10,900	2,600	8,500	3,500
Postage	203,100	294,700	500,000	196,500	352,100
Freight	4,500	3,200	3,000	3,600	3,500
Printing	172,400	226,200	118,600	226,439	157,100
Subscriptions & Investment Licensing	430,800	115,000 ^{1/}	114,500 ^{1/}	65,250 ^{1/}	34,150 ^{1/}
Membership Dues	61,200	59,500	15,100 ^{1/}	23,900 ^{1/}	26,000 ^{1/}
Conference Expenses	8,300	7,400	0	9,700	8,400
Insurance, Surety, & Fidelity Bonds	13,500	13,000	13,000	13,000	13,000
Other Operational	1,200,000	1,449,191	1,062,200	1,001,100	1,192,500
Total Operational	12,302,000	7,919,391	7,983,000	7,643,986	7,838,200
Fixed Assets	0	120,000	150,000	250,000	270,000
Less Directed Commissions	1,200,000	1,200,000	1,500,000	1,500,000	1,500,000
Total Annual Budget	\$27,320,000	\$23,659,520	\$21,001,800	\$22,303,000	\$23,622,744

^{1/}Investment related expenditures previously included in these line items are accounted for as non-appropriated expenditures and reported as investment expenditures.

SERS ORGANIZATION

Proposed FY 2015-2016 Administrative Budget

Directed Commission Revenue & Expense

	FY 2014-15 Budget	FY 2015-16 Budget
Beginning Balance	\$3,718,286	\$2,318,286
Directed Commission Revenue	100,000	100,000
Total Available	3,818,286	2,418,286
Directed Commission Expense	1,500,000	1,500,000
Ending Balance	\$2,318,286	\$918,286

Directed commissions are reimbursements to the system for a portion of the fee paid to a broker for executing a trade.

SERS ORGANIZATION

Legislation

Legislation Enacted During 2014

On July 2, 2014, Governor Corbett signed House Bill 1429, which became Act 2014-95. The bill makes changes to Chapter 56 of the Probate, Estates, and Fiduciaries Code, Title 20 of the Pennsylvania Consolidated Statutes, relating to powers of attorney (POA), in part, to address the Pennsylvania Supreme Court's ruling in the case of *Teresa N. Vine v. SERB*, 9 A.3d 1150 (Pa. 2010). The new law makes numerous changes; those that affect SERS are as follows:

- Requires the signature or mark of the principal to be acknowledged before a notary public and witnessed by two individuals 18 years of age or older
- Requires specific authorization from the principal to change a beneficiary designation; in addition, agents cannot name themselves as a beneficiary unless they are an ancestor, spouse, or descendant of the principal
- Releases a third party from liability as long as it relied on the POA without actual knowledge that the signature or mark was not genuine; in addition, it allows third parties to request and rely upon further supporting information from an agent when there is some question about the validity of the POA or the authority of the agent
- Requires POA's to be accepted or rejected within seven business days of receipt

On October 21, 2014, Governor Corbett signed House Bill 201, which became Act 2014-149. The new law, which provides for terror-free procurement, makes a couple of changes that may affect SERS in that it:

- Prohibits a person or financial institution who engages in investment activities by providing goods/services worth at least \$20 million toward energy-related activities in Iran or extends a minimum of \$20 million in credit for at least 45 days if used to provide goods/services to the energy sector of Iran from entering into state contracts for goods and services valued at least \$1 million (certain exemptions apply); the Department of General Services (DGS) is responsible for developing a list of persons or financial institutions that engage in such investment activities, which is to be updated every 180 days and posted on its website
- Exempts commonwealth agencies that enter into service investment contracts for the management and investment of a fund with fiduciary responsibilities and for which compliance with Protecting Pennsylvania's Investments Act (P.L.266, NO.44) is required – such as SERS and PSERS – from the requirements of the law; however, the agencies' purchase of goods and supplies (valued at least \$1 million) through DGS remains under the restrictions of the law

SERS Members



SERS MEMBERS

Demographics as of December 31

Total Active & Annuitant Members

Year Ending December 31	Total Members ^{1/}	Active Members	Annuitants & Beneficiaries
2014	226,680	104,431	122,249
2013	225,238	105,186	120,052
2012	223,109	106,048	117,061
2011	222,363	107,021	115,342
2010	220,968	109,255	111,713
2009	219,746	110,107	109,639
2008	219,012	110,866	108,146
2007	216,740	109,610	107,130
2006	213,032	110,972	102,060
2005	211,160	109,981	101,179

^{1/}Totals do not include inactive members.

Active Members: Age & Service

Average Age	46.7
Average Years of Service	12.3

Total Annuitants & Beneficiaries: By Category

	2011	2012	2013	2014
Superannuation Annuitants	56,722	57,439	59,020	60,228
Early Retirees	40,483	41,181	42,078	42,683
Disabled Annuitants	7,891	8,053	8,258	8,417
Beneficiary/Survivors	10,246	10,388	10,696	10,921

Annuitants & Beneficiaries: Average Age

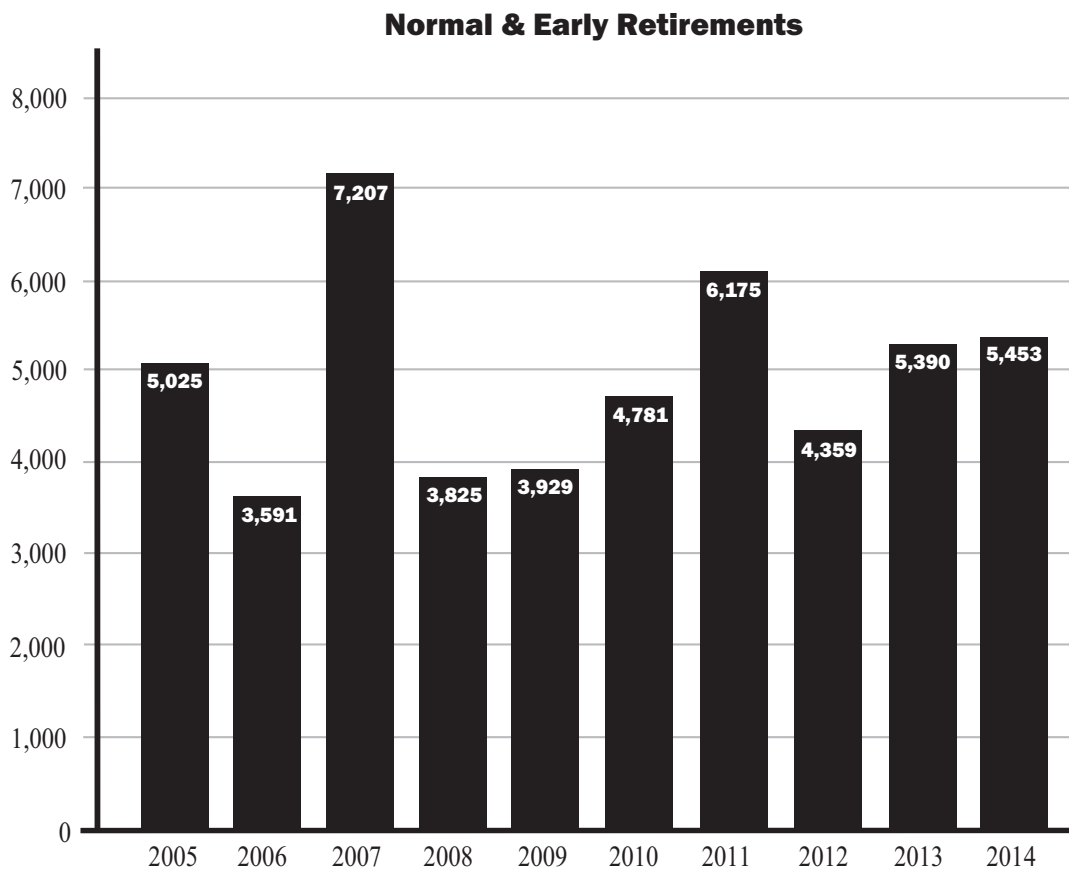
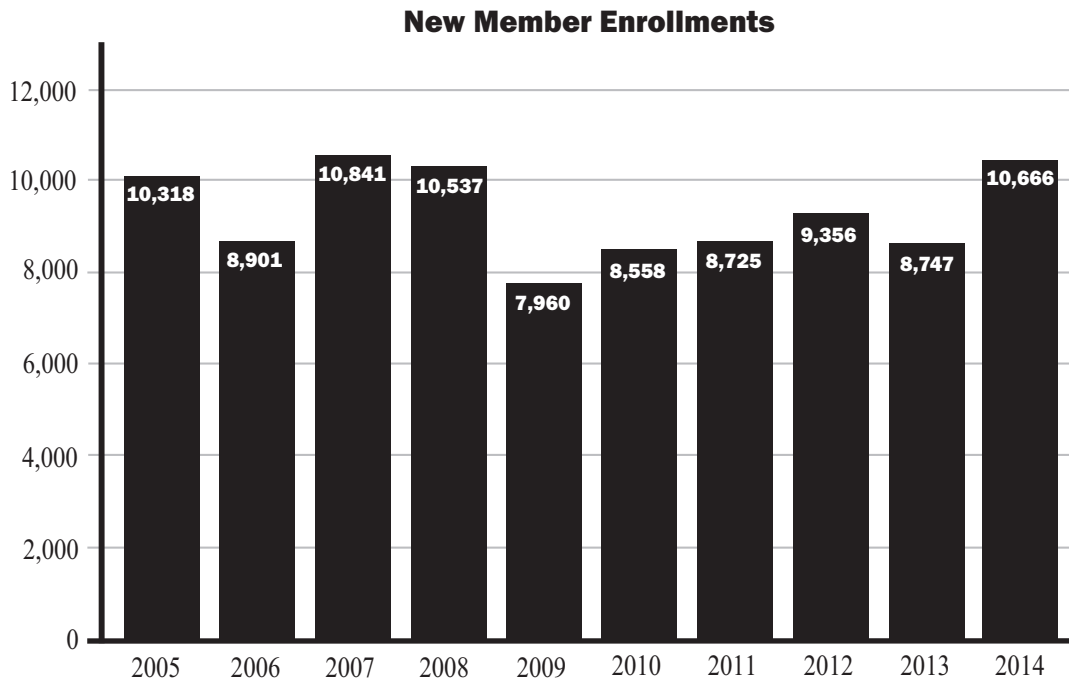
	2011	2012	2013	2014
Superannuation Annuitants	72.4	72.5	72.4	72.4
Early Retirees	62.9	63.2	63.4	63.7
Disabled Annuitants	61.8	62.1	62.4	62.7
Beneficiary/Survivors	74.8	74.8	74.7	74.7

Annuitants & Beneficiaries: Average Annual Pension

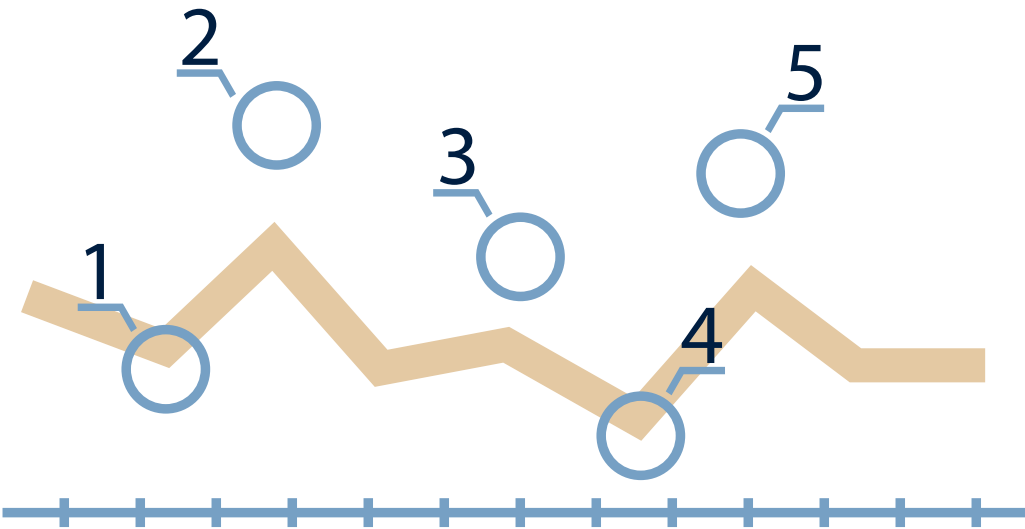
	2011	2012	2013	2014
Superannuation Annuitants	\$24,448	\$25,083	\$25,839	\$26,426
Early Retirees	15,770	16,027	16,333	16,604
Disabled Annuitants	14,027	14,291	14,573	14,797
Beneficiary/Survivors	10,334	10,940	11,386	11,651

SERS MEMBERS

Demographics as of December 31



SERS Fund



SERS FUND

Funding Process

Defined Benefit Plan

The Pennsylvania State Employees' Retirement System administers two retirement plans to help safeguard the financial security of the commonwealth's public workforce in its retirement years. Most state employees are required to participate in Pennsylvania's defined benefit plan. Employees who are eligible to participate in the defined benefit plan may choose to supplement their retirement savings by also voluntarily participating in the deferred compensation program.

The economic engine of the defined benefit plan is the SERS Fund, which is reviewed in depth in this section. Details about the deferred compensation program are provided in the last section of this book.

In the defined benefit plan, both the employer and the employee pay a certain percentage of the employee's salary to the SERS Fund for as long as the employee works for the commonwealth. In FY 2014/15, employers generally are contributing 20.5% (per current legislative mandates) and most employees are paying 6.25%. SERS invests this money to achieve returns to help ensure sufficient funds are available to make payments to current and future retirees. In 2014, SERS earned a 6.4% return on its investments.

When employees meet certain milestones—working a specific number of years to achieve vesting, for example—they become eligible to receive monthly retirement payments for the rest of their lives. The payment amount is based on a formula that includes the employee's length of service, age, compensation over a period of time, and an accrual rate, or multiplier that is determined by the General Assembly.

In 2014, SERS made nearly \$3.0 billion in benefit payments, approximately \$2.7 billion of which stayed in Pennsylvania. The average annual pension paid to a retired state employee who worked to full retirement age was \$26,426.

Determining Adequate Funding for a Defined Benefit Plan

A defined benefit plan operates on a sound basis when the funds on hand, current and expected future contributions, and investment earnings are sufficient to cover the value of all promised benefits.

Defined benefit plans are long-term propositions. When underlying principles remain intact, defined benefit plans offer efficient, stable, and sustainable models for growing assets and delivering benefits through complete economic cycles. A standard feature of these types of plans is that employee and employer contributions invested throughout an employee's working career provide sufficient funding to pay for that particular employee's expected lifetime retirement benefit.

SERS FUND

Funding Process

Because a defined benefit plan guarantees a monthly payment to every retiree for life, it is impossible to develop precise, before-the-fact costs and cash flows for the plan. The number of people paying into the plan, the amount they earn, how long they work, the number of people retiring, the age at which each person retires, and how long each retiree lives are among the myriad factors that vary from day-to-day, month-to-month, and year-to-year.

Actuarial science is used to develop accurate predictions. It applies available data to a number of interrelated mathematical and statistical methods and uses investment and financial practices to study uncertain future events.

SERS' actuarial firm conducts an in-depth investigation and analysis—known as an experience study—of real-world economic and demographic data every five years. Economic assumptions include rates of investment return and salary growth, for example, which are significantly impacted by inflation. Demographic assumptions include workforce, disability, and mortality trends. SERS' last experience study was delivered in early 2011, and is available at SERS.pa.gov in the *Newsroom* section, *SERS Facts*, under *Investigations of Actuarial Experience*.

What is an unfunded liability?

An unfunded liability—also commonly called an unfunded actuarial liability or UAL—is the degree to which the current and projected liabilities exceed the current and projected assets of a defined benefit plan.

In other words, it is the difference between what the commonwealth's defined benefit plan is legally obligated to pay and what assets have been set aside to make those payments.

Current Key Actuarial Assumptions

7.5%
long-term
investment return

6.1%
average salary growth

2.75%
rate of inflation

The selection of economic and demographic assumptions used is generally guided by the Actuarial Standards Board. In SERS' case, some very important assumptions—such as the length of time over which investment gains and losses are recognized—are set by Pennsylvania law.

Each year, SERS' actuarial firm uses the most recent employee and retiree demographic data to determine total expected future obligations. The actuary then compares those obligations to the expected value of the fund's assets, based on current audited financial statements and future economic assumptions.

This calculation is factored in with the statutorily set employee contribution rate and the assumed investment rate of return as the basis for calculating how much employers need to contribute in order to fully fund their employees' retirement benefits.

SERS FUND

Funding Process

Funding Sources & Trends

Defined benefit plans are designed to remain stable by receiving three regular funding streams—employee contributions, investment earnings, and employer contributions.

Employee Contributions

Active employees pay a certain percentage of their pay toward their retirement benefit. While different classes of employees pay different rates, most employees currently pay 6.25% of their pay. Employees' contributions are withheld from their paychecks and sent directly from their employer to SERS. The percentage is set by statute and the rate doesn't change from year to year. In 2014, employee contributions to SERS totaled \$366 million.

Courts have ruled that public retirement benefits may not be retroactively changed in any way that may be a “net detriment” to employees. “Net detriment” has been interpreted as a reduction in benefits already earned, and/or as an increase in employee contributions required to maintain such benefits.

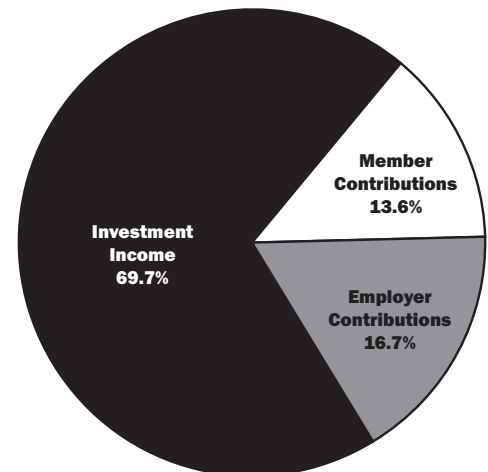
There are some instances, however, in which employee contributions can increase. For example, Pennsylvania's Act 2010-120 introduced a “risk sharing” provision that allows for an increase in contributions of employees generally hired on or after January 1, 2011, if there is a multi-year period of investment returns below the assumed rate and if employers have met their contribution obligations to the pension system. An increased employee “shared risk contribution” can be established every three years beginning in 2014. The additional contribution cannot increase by more than 0.5% in any three-year period, and cannot exceed 2% in total.

Investment Earnings

SERS' overall investment objective is to assure adequate fund reserves at the least cost to commonwealth citizens and to protect against the erosion of principal by inflation. SERS seeks to provide investment earnings that meet, or preferably exceed, the assumed rate of return over complete economic cycles. SERS strives to meet this objective by applying acceptable risk parameters and allocations to investments that are diversified by type, industry, quality, and geography.

Investment earnings can vary widely from year to year; the SERS Fund, for example, produced a nearly 25% return in 2003 and experienced more than a 28% loss in 2008's worldwide downturn. In order to minimize volatility, Pennsylvania law requires that the differences between actual performance and the assumed rate of return be recognized over a five-year period at a rate of 20% per year—a concept often referred to as “smoothing.”

SERS Funding
(10-Year History)



SERS FUND

Funding Process

SERS examines and sets its assumed rate of return each year based on global market dynamics, investment performance, and other considerations. For example, in 2009, SERS reduced its assumed rate of return from 8.5% to 8%, largely as a result of 2008’s global economic collapse.

As a result of SERS’ 90+ years of operation and the generally increasing trend of individual longevity, the system now has more retired members than active members. In 2015, SERS is projected to pay out approximately \$118 million more each month than it takes in through employee and employer contributions.

As a normal consequence of SERS’ greater maturity, the liquidity needs of the fund increase and require an ongoing rebalancing of assets. In recognition of this fact and in acknowledgement of continuing economic challenges, SERS again reduced its assumed rate of return in 2012; this time, from 8% to 7.5%. This change has significant implications for the employer contribution rate, as discussed below.

Public Pension Fund Assumed Rates of Return

(National Association of State Retirement Administrators, 2014)

Rate	# of Plans Using Rate
< 7.00%	4
7.00%	4
7.01% - 7.50%	40 (SERS)
7.51% - 7.99%	33
8.00%	36
8.01% - 8.49%	7
8.50%	2

For 14 of the last 20 years, SERS has exceeded its assumed rate of return. Moreover, even factoring in the unprecedented market volatility, the fund has achieved a 20-year rate of return of 8.8% and a 30-year return of 9.6%. SERS reports its returns net-of-fees.

The “shared risk” provision of Act 2010-120, previously discussed, is designed to moderate the need for future employer rate increases that may be prompted by investment underperformance. To date, the shared risk provision has not been triggered. The next potential shared-risk increase could occur in 2017.

Employer Contributions

Employer contributions make up the final portion of SERS’ overall funding. The employer contribution rate is calculated by an independent actuary, taking into account employee contributions, demographic activity, investment earnings, and future liabilities. Because it is highly unlikely that every assumption could be correct, the Pennsylvania State Employees’ Retirement Code requires SERS to adjust the employer contribution rate each year based on actual experience and investment performance.

SERS FUND

Funding Process

The employer normal cost is expressed as a percentage of payroll and is the amount employers would contribute if all actuarial assumptions were precisely correct, including the fund earning exactly its assumed rate of return. The normal cost of benefits as of the 2013 actuarial valuation was 5.0%.

Based on the actuary's recommendation, the SERS Board annually certifies an employer contribution rate. The rate has fluctuated dramatically over the years: in 1981 the rate was approximately 18%, but from 2001-03 it was 0%. A rate can only be certified at 0% when fund assets and investment earnings are predicted to more than cover the normal cost of benefits earned in any given year. When the contribution rate is less than the normal cost or as low as 0% of payroll, employers can redirect money to other purposes.

As one would expect, the total dollars contributed by employers has varied from year to year. In 1984, employer contributions totaled \$440 million, in 2014 that figure was nearly \$1.1 billion.

According to the Budget Office, SERS employers under the Governor's jurisdiction paid less than half of the employers' total—about 42%—from general funds. About 16% came from special funds; about 18% came from federal funds; and about 24% came from other sources.

The employer contribution rate has two parts: the cost of the benefit for new SERS members in the current year (as applied to all active members) and a contribution toward the unfunded liability. When SERS reduced its assumed rate of return from 8.0% to 7.5% in 2012, the change increased the unfunded liability by approximately \$2.1 billion.

The fiscal year 2015/16 employer contribution is currently legislated to be 25.0% of payroll with increases capped at 4.5% each year until no longer needed. If the contribution were not legislatively capped, the total rate would be 31.4%—about 5.0% to fund the benefits of new SERS members in the current year normal cost and about 26.4% to pay toward the unfunded liability.

Long-Term Snapshot

	1984	2014
Employer Rate	18.03%	20.53%
Employer Contributions	\$440 million	\$1.08 billion
Employee Rate	5.00%	6.25%
Employee Contributions	\$122 million	\$366 million
Active Employees	114,000	104,000
Annuitants	61,000	122,000

SERS FUND

Funding Process

To translate the 4.5% increase into dollars, some projections suggest that increases in employer contributions will range from about \$310 million to \$330 million per year for the next two years. Looking at the relative sizes of the current-year and unfunded liability components discussed above, it's clear to see that the unfunded liability is driving employer contribution rate increases. And, because the employer rate will remain below the actuarially required rate until at least 2015, SERS' unfunded liability will continue to grow in the near term. The rate of growth will slow, however, as the annual employer rate rises.

New Accounting Pronouncements

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 67 (GASB 67) ("*Financial Reporting for Pension Plans an amendment of GASB Statement No. 25,*") which has the objective of providing more useful, transparent, and comparable financial information related to pensions. In this statement, GASB prescribes various actuarial methods and assumptions that must be used in order to comply with the statement. As such, SERS will be obtaining a separate GASB 67 accounting valuation in addition to the funding valuation detailed above. SERS plans to adopt the valuation and reporting requirements of GASB 67 for the year ended December 31, 2014. The results of which will be available in SERS' *2014 Comprehensive Annual Financial Report*.

SERS FUND

Funding Process

Projected Employer Contributions, Payout, & Funding Status

Assuming entry-age funding method, level-dollar amortization, five-year smoothing of assets, Act 2010-120 collars, 6.1% salary growth, 2.75% inflation, 6.4% investment return in CY 2014 with 7.5% return thereafter, 6.25% employee contribution.

Fiscal Year	Expected FY Payroll (\$ millions)	FY Employer Contribution		Calendar Year	CY Payout	CY Funding Status ^{1/}	
		Employer Contribution Rate	Expected FY Contribution (\$ millions)		Benefits & Expenses (\$ billions)	Funded Ratio	Unfunded Liability (\$ billions)
2015/16	\$6,077.5	25.00%	\$1,519.4	2014	\$3.0	59.3%	\$18.24
2016/17	6,262.9	29.50	1,847.6	2015	3.0	59.7	18.44
2017/18	6,453.9	30.18	1,947.9	2016	3.2	61.5	17.98
2018/19	6,650.7	29.10	1,935.6	2017	3.3	63.4	17.44
2019/20	6,853.6	28.46	1,950.9	2018	3.4	64.6	17.20
2020/21	7,062.6	27.80	1,963.4	2019	3.5	65.8	16.91
2021/22	7,278.0	27.17	1,977.5	2020	3.6	66.9	16.61
2022/23	7,500.0	26.58	1,993.2	2021	3.8	68.1	16.29
2023/24	7,728.8	26.01	2,010.0	2022	3.9	69.2	15.96
2024/25	7,964.5	25.45	2,027.3	2023	4.0	70.3	15.60
2025/26	8,207.4	24.92	2,045.2	2024	4.1	71.5	15.21
2026/27	8,457.7	24.40	2,063.8	2025	4.2	72.6	14.78
2027/28	8,715.7	23.90	2,082.9	2026	4.3	73.8	14.33
2028/29	8,981.5	23.41	2,102.7	2027	4.4	75.0	13.83
2029/30	9,255.4	22.94	2,123.1	2028	4.5	76.3	13.29
2030/31	9,537.7	22.48	2,144.1	2029	4.6	77.6	12.71
2031/32	9,828.6	22.04	2,165.8	2030	4.7	78.9	12.08
2032/33	10,128.4	21.60	2,188.1	2031	4.8	80.3	11.40
2033/34	10,437.3	21.19	2,211.2	2032	4.8	81.8	10.66
2034/35	10,755.7	20.78	2,235.0	2033	4.9	83.3	9.87
2035/36	11,083.7	20.39	2,259.5	2034	5.0	84.9	9.00
2036/37	11,421.8	20.00	2,284.8	2035	5.1	86.6	8.07
2037/38	11,770.1	19.63	2,310.8	2036	5.2	88.4	7.07
2038/39	12,129.1	19.27	2,337.7	2037	5.3	90.3	5.98
2039/40	12,499.1	18.93	2,365.5	2038	5.3	92.3	4.81
2040/41	12,880.3	14.90	1,919.8	2039	5.4	94.4	3.54
2041/42	13,273.1	12.01	1,594.0	2040	5.5	95.8	2.65
2042/43	13,678.0	8.77	1,199.5	2041	5.6	96.8	2.04
2043/44	14,095.1	6.78	956.2	2042	5.7	97.2	1.80
2044/45	14,525.0	6.61	959.4	2043	5.8	97.3	1.81

^{1/} Figures are based on 2013 actuarial valuation.

SERS FUND

Actuarial Status

Restoring SERS' Defined Benefit Plan Funding

SERS' unfunded liability is growing more slowly than it otherwise would have because of Act 2010-120, which projected savings of approximately \$1.5 billion over 30 years by reducing the retirement benefit accrual rate; increasing the normal retirement age; eliminating the lump sum withdrawal option; extending the vesting period from five years to 10 years and other provisions for employees hired on or after January 1, 2011. One aspect of Act 2010-120 is that retirement provisions for legislators elected after December 1, 2010, were reduced and made consistent with those of most rank-and-file employees.

It will, however, take considerable time to realize benefits from the lower costs. SERS' funded ratio will improve as employees hired before January 2011 retire and post-January 2011 hires begin to fill employee ranks in greater proportion. In 2014, SERS retired 5,453 state employees and added 10,666 new members. So, currently, approximately 21% of SERS' active members belong to the post Act 2010-120 classes of service.

Act 2010-120 also recognized the need for greater rates of employer funding and does allow employer contributions to increase over time. To ensure predictability and to moderate overall budget impacts, the General Assembly set forth measured intervals for increased employer contribution rates.

Often referred to in shorthand as the "Act 120 collars," as previously discussed, the legislation limits future year-to-year increases in employer contributions to 4.5%. Again, to translate 4.5% into dollars, some projections suggest that increases in SERS employer contributions may well range from about \$310 million to \$330 million per year for the next two years.

Because the employer rate remains below actual cost for a number of years, SERS' unfunded liability will continue to grow in the near term. As the employer rate increases, however, its impact on paying down the liability is dramatic. Such funding is among the most crucial components of the overall, long-term stability of the pension system.

SERS FUND

Actuarial Status

Current Funded Position of SERS' Defined Benefit Plan

The funded position of a defined benefit plan is measured by its funded ratio, which is the actuarially calculated value of assets divided by the actuarially calculated sum of retirement benefits earned by all existing SERS members—approximately 230,000 active, vested, and retired employees.

In general, a funding ratio of 80% or better is considered “healthy” for a pension system. Pennsylvania is among 36 other states that are currently below the 80% threshold. At the close of 2014, SERS' estimated funded ratio was 59.3% (actuarial value) or 61.4% (market value).

SERS' funded ratio has varied significantly over time. In 1984, it dipped below 60%, as it is now. By 2001, however, it had climbed back to well over 100%. Recent funded ratios include:

	Funded Ratio	
	Actuarial Value	Fair (Market) Value
1994	101.8%	97.0%
1999	123.7	147.1
2004	96.1	95.1
2009	84.4	68.9
2014^{4/}	59.3	61.4

^{4/}2014 values are projected.

The unfunded liability associated with the 2014 ratio is estimated to be \$18.2 billion. The liability will continue to grow in the near term, however, as employer contribution rates are suppressed by Pennsylvania law.

Factors influencing the unfunded liability have been building over time, including but not limited to:

- Sustained periods of employer contributions below normal costs: 1992 through 2009, for example
- Losses that neutralized past investment gains used to justify the low employer contributions: -10.9% in 2002 and -28.7% in 2008, for example
- Benefit increases—including cost of living adjustments and increased accrual rates, for example—without providing sufficiently off-setting funding streams: Act 2001-9 and Act 2002-38, for example
- Legislatively mandated actuarial changes that extended the time over which liabilities be paid or artificially suppressed employer contribution rates: Act 2003-40 and Act 2010-120, for example
- Cumulative negative impact of the above on the overall size of the fund and its ability to realize investment returns in positive-earning years

SERS FUND

Actuarial Status

Additions and Deductions to Fiduciary Net Position^{1/}

(\$ millions)

Calendar Year	Member Contributions	Investment Earnings	Employer Contributions	Benefits & Expenses	Fair (Market) Value
2005	\$306	\$3,623	\$148	(\$1,966)	\$28,752
2006	318	4,730	196	(1,943)	32,053
2007	334	5,246	244	(2,361)	35,516
2008	337	(11,061)	235	(2,231)	22,796
2009	349	3,561	253	(2,297)	24,662
2010	349	3,076	273	(2,474)	25,886
2011	351	480	392	(2,732)	24,377
2012	348	2,794	566	(2,696)	25,389
2013	352	3,724	795	(2,866)	27,394
2014 ^{2/}	366	1,278 ^{3/}	1,084	(2,968)	27,154
10-Year Total	\$3,410	\$17,451	\$4,186	(\$24,534)	

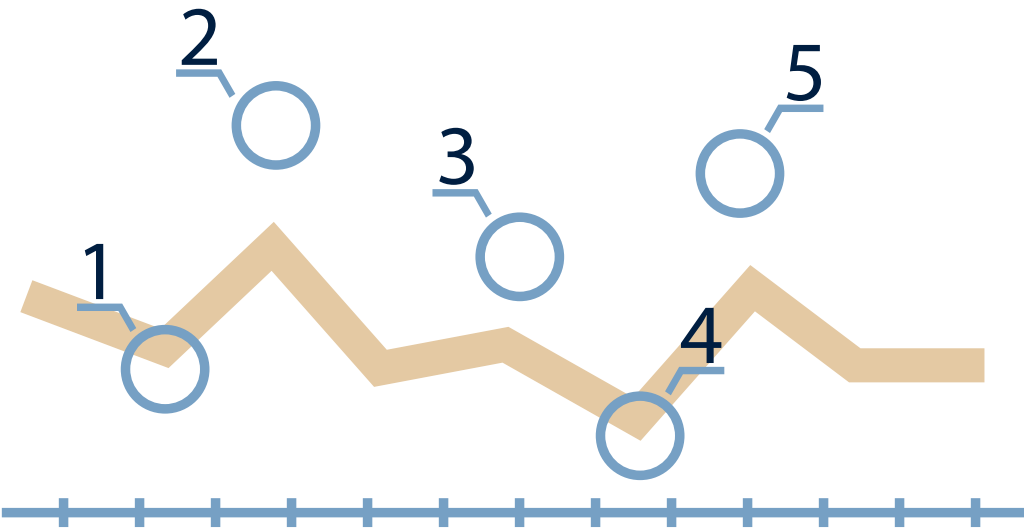
^{1/}10-year net additions and deductions were \$513 million.

^{2/}2014 figures are unaudited.

^{3/}Figure does not include 4th quarter earnings for all Alternative Investments and the Private Energy, Non-Core Real Estate, and Core Real Estate portions of Real Assets. Data not yet available.

SERS Fund

Overview



SERS FUND

Investment Program | Overview

Investment Policy

The SERS Board originally adopted a formal *Statement of Investment Policy* (policy) in 1979. It has been revised periodically to reflect and incorporate legislative changes governing investments and amendments to policies and procedures guiding the investment of the defined benefit portfolio. The policy was last amended in 2014.

The purpose of the policy is to formalize the board's investment objectives and underlying policies, and to define the duties and responsibilities of the various individuals and entities involved in the investment process.

The major elements of the policy are:

- The assets of the SERS Fund will be managed with the primary objectives of the payment of benefit obligations to participants in the plans as well as to maximize return with acceptable risk considerations and sufficient liquidity so that employer contributions can be minimized.
- The SERS Fund's overall investment objective is to provide a total rate of return, over full economic cycles, which achieves SERS' long-term actuarially assumed rate of return consistent with the board's tolerance for risk.
- The board's investment authority is governed by the prudent investor standard as set forth in Title 71, Pennsylvania Consolidated Statutes, Section 5931(a).
- The members of the board, employees of the board, and agents thereof shall stand in a fiduciary relationship to the members of the system regarding the investments and disbursements of any of the moneys of the fund and shall not profit either directly or indirectly with respect thereto.
- The board employs an investment staff, which is responsible to the board to review and analyze the current investment climate, and to recommend adjustments with respect to the policy that are appropriate to take optimum advantage of new conditions and strategies as they arise in the market place. The staff also reviews and analyzes the philosophies, policies, and strategies employed by the investment advisors, evaluating the appropriateness of their decision-making processes and their investment styles in relation to present and projected investment horizons.
- The board continually seeks to employ investment advisors that possess superior capabilities in the management of assets of public retirement systems. Each advisor has full discretion to carry out its investment mandate subject to the investment strategy statement contained in the investment management agreement and will be expected to conduct business on behalf of SERS in accordance with the mandate for which they were retained.

SERS FUND

Investment Program | Overview

- SERS will employ investment consultants, who act as fiduciaries to the fund, and who will provide investment consulting services in their respective areas of expertise.
- Where investment characteristics are equivalent, the policy will favor investments that will have a positive impact on the economy of the Commonwealth of Pennsylvania.

Investment Objectives

As indicated in SERS' *Statement of Investment Policy*, the objectives of the SERS Fund are to provide benefit payments to participants and beneficiaries at the lowest cost to the commonwealth and to fund the program through a carefully planned and executed investment program.

Consistent with achieving these objectives, the board has established the following goals relative to investment performance:

- Achieve a net total return equivalent to the actuarial interest rate assumption, or preferably, in excess of this rate in order to improve the funded ratio of the SERS Fund through investment earnings and favorably impact future employer and employee contribution rates.
- Achieve a net, total long-term return that meets or exceeds an appropriate, composite plan benchmark index on a five- to 10-year rolling time horizon. The composite benchmark index will be based on the asset allocation set forth in the Strategic Investment Plan approved by the board.

SERS FUND

Investment Program | Overview

Asset Allocation Trend

Prudent Investor Investment Standards

The board's investment authority is governed by the prudent investor standard as set forth in Title 71, Pennsylvania Consolidated Statutes, Section 5931(a). Enactment of the prudent investor standard in Act 1994-29 and asset/liability studies completed by SERS' general investment consultants and the SERS investment staff are the foundation of SERS' investment strategy. With prudent investor investment authority, SERS is able to pursue a broader array of investment opportunities that enhance the ability to achieve reasonable rates of return while maintaining risk at acceptable levels. An asset/liability study demonstrated that the prudent application of this expanded authority should result in a more efficient portfolio that better serves the needs of SERS.

Total Fund Asset Allocation

SERS develops a biennial strategic investment plan, which provides direction for the SERS investment program. The *2014-2015 Strategic Investment Plan* will be implemented over a 10-year period. The fund's asset allocation strategy will evolve over this timeframe through a series of interim targets until the long-term target for each asset category is achieved.

Investment Program Summary

The assets of SERS are administered by the board. The board adopted an investment policy that incorporates the provisions of the Retirement Code, which govern the investment of SERS' assets. SERS' investment plan is reviewed and updated biennially for strategic asset allocation purposes, as well as for diversification needs within each asset class.

Asset Allocation

(\$ millions as of December 31, 2014)

Asset Class	Market Exposure	% of Total Fund	Long-Term 10-Year Strategic Target
Alternative Investments	\$5,262.9	19.4%	15.0%
Global Public Equity	9,985.7	36.8	40.0
Real Assets	4,214.4	15.5	17.0
Diversifying Assets	1,721.0	6.3	10.0
Fixed Income	4,417.7	16.3	15.0
Liquidity Reserve	1,552.5	5.7	3.0
Total Fund	\$27,154.2	100.0%	100.0%

SERS FUND

Investment Program | Overview

Number of Investment Managers

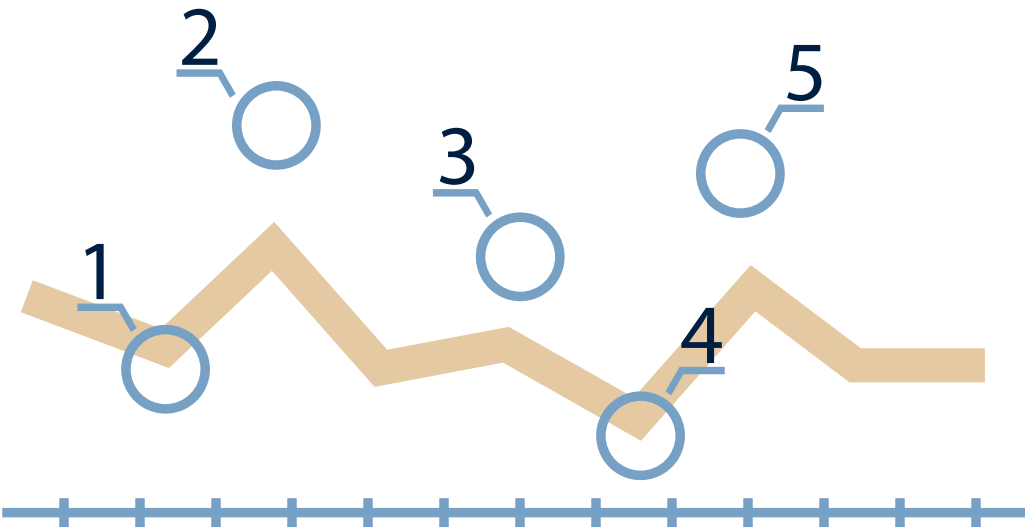
Asset Class	Investment Managers
Alternative Investments	144
Global Public Equity	16
Real Assets	37
Diversifying Assets	17
Fixed Income	16
Liquidity Reserve	3
Total Managers	233

Number of Investment Portfolios

Asset Class	Investment Portfolios
Alternative Investments	337
Global Public Equity	18
Real Assets	74
Diversifying Assets	17
Fixed Income	19
Liquidity Reserve	4
Total Portfolios	469

SERS Fund

Performance



SERS FUND

Investment Program | Performance

Calendar Year, Net-of-Fees Returns^{1/}

For the period ending December 31, 2014

Asset Class	1-Year Total Return	3-Year Total Return	5-Year Total Return	10-Year Total Return
Alternative Investments ^{2/, 5/}	13.1%	12.4%	13.3%	12.6%
<i>Burgiss All Private Equity Custom Index</i> ^{3/, 5/}	15.5	14.5	14.4	13.1
<i>Russell 3000 Index + 3%</i> ^{4/, 5/}	21.3	26.8	19.2	11.7
Global Public Equity	3.3	15.4	10.5	5.8
<i>MSCI ACW Investable Market Index (Net)</i>	3.8	14.3	9.5	6.4
Real Assets ^{5/}	6.3	7.6	7.3	7.2
<i>Real Assets Custom Index</i> ^{5/}	5.4	8.6	8.5	6.0
<i>Consumer Price Index + 3%</i>	3.8	4.4	4.7	5.2
Diversifying Assets	6.7	8.8	6.1	NA
<i>HFRI FOF Strategic Index</i>	4.1	10.7	7.7	NA
Fixed Income	6.1	4.5	6.3	5.9
<i>Barclays U.S. Aggregate Bond Index</i>	6.0	2.7	4.4	4.7
Liquidity Reserve	0.5	0.4	0.3	1.8
<i>BofA ML 3 Month U.S. T-Bill Index</i>	0.0	0.1	0.1	1.5
Total Fund	6.4%	10.6%	9.2%	6.6%
<i>Total Fund Custom Benchmark</i>	6.3%	10.4%	9.2%	7.6%
<i>Total Fund Custom Public Market Equivalent Benchmark</i>	7.6%	12.9%	10.1%	8.0%

^{1/}Returns for periods greater than one year are annualized. Performance was calculated using the Modified Dietz day-weighted return methodology.

^{2/}Historical Alternative Investment performance includes Private Equity, Special Situations, and Venture Capital.

^{3/}The Burgiss All Private Equity Custom Index is intended to compare the program's performance to its peers.

^{4/}The Russell 3000 Index + 3% is a long-term benchmark by which SERS measures its private market performance. Shorter term variances (1-year and 3-year) can be pronounced due to the nature of private assets and are not as relevant for benchmark purposes.

^{5/}Alternative Investments, its corresponding benchmarks, the Private Energy, Non-Core Real Estate, Core Real Estate, and REITs sections of Real Assets, and the corresponding Real Assets Custom Index are reported on a quarter lagged basis.

SERS FUND

Investment Program | Performance

Fiscal Year, Net-of-Fees Returns^{1/}

For the period ending June 30, 2014

Asset Class	1-Year Total Return	3-Year Total Return	5-Year Total Return	10-Year Total Return
Alternative Investments ^{2/, 5/}	17.5%	11.9%	15.6%	12.8%
<i>Burgiss All Private Equity Custom Index</i> ^{3/, 5/}	19.3	12.2	16.0	13.3
<i>Russell 3000 Index + 3%</i> ^{4/, 5/}	26.3	18.1	25.6	11.1
Global Public Equity	22.8	11.5	15.7	7.2
<i>MSCI ACW Investable Market Index (Net)</i>	23.4	10.4	14.8	7.8
Real Assets ^{5/}	13.8	7.4	6.9	7.7
<i>Real Assets Custom Index</i> ^{5/}	13.3	9.2	8.8	6.7
<i>Consumer Price Index + 3%</i>	5.1	4.9	5.1	5.4
Diversifying Assets	10.7	6.9	7.4	NA
<i>HFRI FOF Strategic Index</i>	15.3	11.1	7.9	NA
Fixed Income	6.1	4.4	9.3	6.5
<i>Barclays U.S. Aggregate Bond Index</i>	4.4	3.7	4.9	4.9
Liquidity Reserve	0.6	0.4	0.3	1.9
<i>BofA ML 3 Month U.S. T-Bill Index</i>	0.1	0.1	0.1	1.6
Total Fund	15.7%	9.1%	11.7%	7.5%
<i>Total Fund Custom Benchmark</i>	<i>15.9%</i>	<i>9.5%</i>	<i>12.2%</i>	<i>8.5%</i>
<i>Total Fund Custom Public Market Equivalent Benchmark</i>	<i>16.3%</i>	<i>10.6%</i>	<i>12.9%</i>	<i>8.8%</i>

^{1/}Returns for periods greater than one year are annualized. Performance was calculated using the Modified Dietz day-weighted return methodology.

^{2/}Historical Alternative Investment performance includes Private Equity, Special Situations, and Venture Capital.

^{3/}The Burgiss All Private Equity Custom Index is intended to compare the program's performance to its peers.

^{4/}The Russell 3000 Index + 3% is a long-term benchmark by which SERS measures its private market performance. Shorter term variances (1-year and 3-year) can be pronounced due to the nature of private assets and are not as relevant for benchmark purposes.

^{5/}Alternative Investments, its corresponding benchmarks, the Private Energy, Non-Core Real Estate, Core Real Estate, and REITs sections of Real Assets, and the corresponding Real Assets Custom Index are reported on a quarter lagged basis.

SERS FUND

Investment Program | Performance

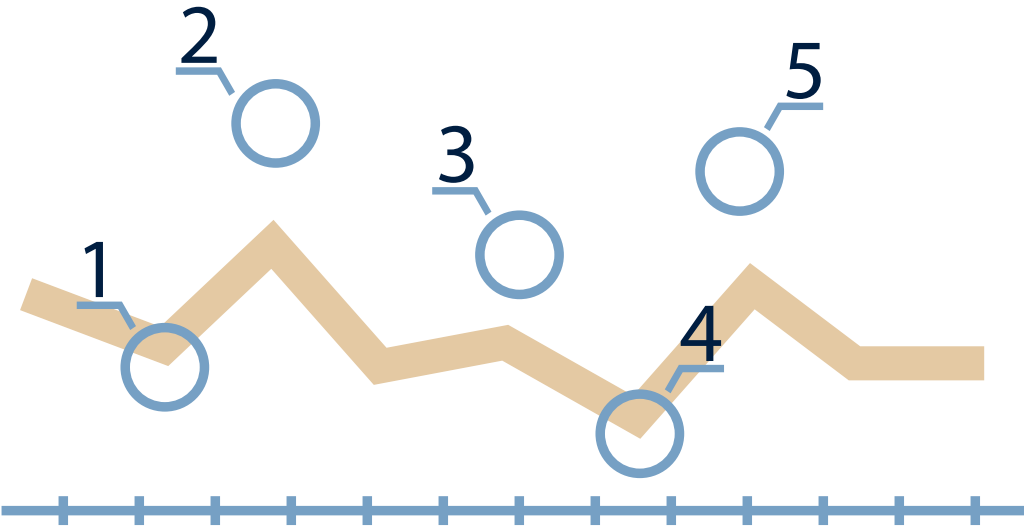
Fund Value & Annual Return

Year End	SERS Fund Fair Value (\$ millions)	Annual Total Fund Rate of Return
1985	\$6,157	23.1%
1986	7,120	15.2
1987	7,367	3.3
1988	8,312	12.8
1989	9,785	17.8
1990	9,886	1.0
1991	11,940	22.6
1992	12,453	7.4
1993	13,701	13.2
1994	13,330	-1.1
1995	16,343	25.2
1996	18,492	15.4
1997	21,312	18.5
1998	24,123	16.3
1999	28,093	19.9
2000	27,880	2.2
2001	24,706	-7.9
2002	20,880	-10.9
2003	24,536	24.3
2004	26,641	15.1
2005	28,752	14.5
2006	32,053	16.4
2007	35,516	17.2
2008	22,796	-28.7
2009	24,662	9.1
2010	25,886	11.9
2011	24,377	2.7
2012	25,389	12.0
2013	27,394	13.6
2014 ^{4/}	27,154	6.4

^{4/} 2014 values are estimated and unaudited. Fund fair values for all Alternative Investment sub-asset classes and the Private Energy, Non-Core Real Estate, and Core Real Estate sub-asset classes of Real Assets are reported on a quarter lagged basis.

SERS Fund

Expenses & Fees



SERS FUND

Investment Program | Expenses & Fees

Investment Expenses

Expense Category	Expenses
Manager	\$182,013,336
Consultant	3,738,919
Personnel	3,373,139
Legal	434,128
Subscription and membership	379,695
Operational	78,036
Custodian	55,317
Total Investment Expenses	\$190,072,570

Consultant Expenses

Firm	Service Type	Expenses ^{1/}
StepStone Group	Alternative investments	\$1,975,000
R.V. Kuhns & Associates	General investments	561,433
Albourn America	Direct hedge fund investments	400,000
The Townsend Group	Real estate investments	342,720
GCM Customized Investment Group	Investment portfolio management	207,277
Korn Ferry	Personnel search firm	111,889
Institutional Shareholder Services	Proxy services	93,600
Abel/Noser	Transaction cost analysis	47,000
Total Consultant Expenses		\$3,738,919

^{1/}The Hay Group, SERS' actuary, was paid \$415,399 and is not included in the table above because it is considered an administrative expense.

Manager Investment Expenses

Asset Class	Fees/Expenses	Fees/Expenses ^{2/} (in basis points)
Alternative Investments	\$74,645,831	131.6
Global Public Equity	27,581,242	27.7
Real Assets	49,658,825	115.9
Diversifying Assets	18,425,431	104.3
Fixed Income	11,147,182	26.1
Liquidity Reserve	554,825	4.0
Total Manager Investment Expenses	\$182,013,336	66.5

^{2/}The fees/expenses were divided by SERS' total fund and asset class quarterly average values during calendar year 2014 to arrive at the basis point calculations.

History of Manager Investment Expenses

Calendar Year	Fees/Expenses	Fees/Expenses (in basis points)
2010	\$235,625,772	95.9
2011	197,264,476	77.3
2012	186,025,370	75.1
2013	175,099,249	68.2
2014	182,013,336	66.5

SERS FUND

Investment Program | Expenses & Fees

SERS employs outside investment managers for their investment expertise. The managers of the SERS investment portfolio are paid through non-budget appropriation. Their fees are treated as a reduction of the investment revenue of the SERS Fund, rather than as a direct administrative expense. Thus, when investment performance is reported, numbers are reported net-of-fees—that is, performance after all investment manager fees have been paid.

2014 Manager Investment Expenses Detail

Manager	City	State/Country	Fees/ Expenses
Alternative Investments			
Abingworth Bioventures V	London	United Kingdom	\$588,140
ABRY Advanced Securities Fund	Boston	MA	191,830
ABRY Mezzanine Partners	Boston	MA	4,921
ABRY Partners V	Boston	MA	87,322
ABRY Partners VI	Boston	MA	226,294
ABRY Partners VII	Boston	MA	304,950
ABRY Senior Equity II	Boston	MA	98,095
ABS Capital Partners V	Baltimore	MD	114,636
ABS Capital Partners VI	Baltimore	MD	545,411
Adams Capital Management III	Sewickley	PA	71,428
Advanced Technology Ventures VI	Waltham	MA	1,632
Advent International GPE VI-A	Boston	MA	339,499
Advent International GPE VII-B	Boston	MA	950,246
Advent Latin American Private Equity Fund IV	Boston	MA	278,337
Advent Latin American Private Equity Fund V	Boston	MA	272,279
AG Capital Recovery Partners V	New York	NY	47,792
Alloy Ventures 2000	Palo Alto	CA	33,170
Alloy Ventures 2002	Palo Alto	CA	177,619
Alloy Ventures 2005	Palo Alto	CA	1,010,547
Alpha Private Equity Fund 4	Paris	France	20
Alpha Private Equity Fund 5	Paris	France	569,550
APAX Europe VI	London	United Kingdom	381,029
APAX Europe VII	London	United Kingdom	77,736
Artiman Ventures II	Palo Alto	CA	282,692
Artiman Ventures III	Palo Alto	CA	541,142
Asia Alternatives Capital Partners	San Francisco	CA	108,468
Asia Alternatives Capital Partners II	San Francisco	CA	81,259
Asia Alternatives Capital Partners III	San Francisco	CA	213,302
Audax Private Equity Fund III	Boston	MA	105,200
Austin Ventures IX	Austin	TX	220,201
Avenue Asia Special Situations Fund IV	New York	NY	153,335
Avenue Special Situations Fund VI	New York	NY	114,390

SERS FUND

Investment Program | Expenses & Fees

2014 Manager Investment Expenses Detail (continued)

Manager	City	State/Country	Fees/ Expenses
Alternative Investments (continued)			
AXA Secondary Fund III	Paris	France	\$24,460
AXA Secondary Fund III-2	Paris	France	13,922
AXA Secondary Fund IV	Paris	France	442,999
AXA Secondary Fund V B	Paris	France	750,000
Bain Capital Asia Fund	Boston	MA	237,421
Bain Capital Europe III	Boston	MA	1,071,953
Bain Capital Fund IX	Boston	MA	1,181,356
Bain Capital Fund VIII-E	Boston	MA	163,593
Bain Capital Fund X	Boston	MA	1,378,520
Bain Capital IX Coinvestment Fund	Boston	MA	204,180
Bain Capital X Coinvestment Fund	Boston	MA	19,482
Baring India Private Equity Fund III Limited	Port Lewis	Mauritius	28,579
Baring Vostok Private Equity Fund IV	Guernsey	Channel Islands	331,212
Battery Ventures VIII	Waltham	MA	587,278
Battery Ventures VIII Side Car Fund	Waltham	MA	147,748
BC European Capital IX	London	United Kingdom	171,398
Berkshire Fund VI	Boston	MA	165,539
Berkshire Fund VII	Boston	MA	354,295
Berkshire Fund VIII	Boston	MA	595,734
Birchmere Ventures III	Pittsburgh	PA	45,662
Blackstone Capital Partners V	New York	NY	285,981
Brait IV	Grand Cayman	Cayman Islands	244,841
Brynwood Partners V	Greenwich	CT	7,876
Brynwood Partners VI	Greenwich	CT	141,738
Capvis Equity IV	Baar	Switzerland	985,057
Care Capital Investments III	Princeton	NJ	157,455
Centerbridge Capital Partners I	New York	NY	306,730
Cerberus Institutional Partners Series Four	New York	NY	355,861
Cerberus Institutional Partners Series Three	New York	NY	97,271
Charterhouse Capital Partners IX	London	United Kingdom	515,426
Charterhouse Capital Partners VIII	London	United Kingdom	339,297
Chequers Capital XV	Paris	France	192,559
CID Greater China Venture Capital Fund II	Taipei	Taiwan	337,582
Clayton Dubilier & Rice V	New York	NY	62,526
Clearstone Venture Partners III-A	Santa Monica	CA	300,000
Clessidra Capital Partners II	Milan	Italy	262,219
Code, Hennessy & Simmons V	Chicago	IL	80,295
Cognetas Fund II	London	United Kingdom	256,690
CVI Global Value Fund	Grand Cayman	Cayman Islands	300,813
Devon Park Bioventures	Wayne	PA	144,391

SERS FUND

Investment Program | Expenses & Fees

2014 Manager Investment Expenses Detail (continued)

Manager	City	State/Country	Fees/ Expenses
Alternative Investments (continued)			
DLJ Merchant Banking Fund III	New York	NY	\$18,702
Dover Street VII	Boston	MA	375,000
Draper Fisher Jurvetson VII	Menlo Park	CA	544
Draper Triangle Ventures	Pittsburgh	PA	9,883
Draper Triangle Ventures II	Pittsburgh	PA	120,000
Draper Triangle Ventures III	Pittsburgh	PA	372,222
Elevation Partners	Menlo Park	CA	59,136
Eureka II	Yardley	PA	109,671
Eureka III	Yardley	PA	800,000
Excelsior Capital Asia Partners III	Hong Kong	China	216,718
Francisco Partners II	San Francisco	CA	188,915
Francisco Partners III	San Francisco	CA	180,336
Frazier Healthcare V	Seattle	WA	126,112
FSN Capital IV	Oslo	Norway	1,363,541
Great Hill Equity Partners III	Boston	MA	477,187
Great Hill Equity Partners IV	Boston	MA	464,205
Gryphon Partners III	San Francisco	CA	35,887
GTCR IX	Chicago	IL	374,506
GTCR XI	Chicago	IL	132,009
Guggenheim Technology Ventures I	King of Prussia	PA	5,134
H.I.G. Bayside Debt & LBO Fund II	London	England	580,597
H.I.G. Bayside Loan Opportunity Fund III	London	England	1,007,020
H.I.G. Europe Capital Partners II	Miami	FL	632,936
H.I.G. Growth LBO & Equity Fund II	Miami	FL	150,000
Hahn & Company II	Seoul	Korea	225,967
HarbourVest IPEP IV	Boston	MA	236,196
HarbourVest Partners VII	Boston	MA	550,578
HarbourVest Partners VIII	Boston	MA	1,000,000
HarbourVest V-Asia Pacific & Rest of World	Boston	MA	297,536
Healthcare Ventures VIII	Princeton	NJ	478,796
Hellman & Friedman Capital Partners V	San Francisco	CA	26,133
Hellman & Friedman Capital Partners VI	San Francisco	CA	290,823
Highland Capital Partners VI	Lexington	MA	248,631
Highland Capital Partners VII	Lexington	MA	689,118
Highland Consumer Fund I	Lexington	MA	525,822
Horizon Impact Fund - BAML	Chicago	IL	26,199
Incline Equity Partners III	Pittsburgh	PA	570,380
Insight Venture Partners VI	New York	NY	384,729
Insight Venture Partners VII	New York	NY	241,324
Insight Venture Partners VIII	New York	NY	874,500

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Investment Program | Expenses & Fees

2014 Manager Investment Expenses Detail (continued)

Manager	City	State/Country	Fees/ Expenses
Alternative Investments (continued)			
InterMedia Partners VII	New York	NY	\$237,191
InterWest Partners IX	Menlo Park	CA	374,115
InterWest Partners X	Menlo Park	CA	734,905
Invemed Catalyst Fund	New York	NY	11,647
IP III	Bellevue	WA	53,348
IP IV	Bellevue	WA	85,936
J.H. Whitney VII	Stamford	CT	181,608
J.W. Childs Equity Partners III	Boston	MA	133,124
JMI Equity Fund V	Baltimore	MD	81,106
JMI Equity Fund VI	Baltimore	MD	594,375
JMI Equity Fund VII	Baltimore	MD	217,023
JP Morgan U.S. Corp Finance Investors II	New York	NY	248,749
JP Morgan Venture Capital Investors	New York	NY	426,279
JP Morgan Venture Capital Investors II	New York	NY	520,431
JP Morgan Venture Capital Investors III	New York	NY	940,194
Kelso VII	New York	NY	41,384
Kelso VIII	New York	NY	1,615,876
Knightsbridge Venture Capital VI	Bartlesville	OK	140,000
KPS Special Situations Fund IV	New York	NY	102,202
LBC Credit Partners III	Philadelphia	PA	625,000
Lexington Capital Partners VI	New York	NY	261,337
Lightspeed Venture Partners VII	Menlo Park	CA	294,798
Lightspeed Venture Partners VIII	Menlo Park	CA	297,848
LLR Equity Partners II	Philadelphia	PA	195,308
LLR Equity Partners IV	Philadelphia	PA	567,187
Madison Dearborn Capital Partners V	Chicago	IL	261,201
Madison Dearborn Capital Partners VI	Chicago	IL	846,227
Meridian Venture Partners II	Radnor	PA	324,852
Meritech Capital Partners III	Palo Alto	CA	131,244
Meritech Capital Partners IV	Palo Alto	CA	450,000
Meritech Capital Partners V	Palo Alto	CA	165,938
Morgenthaler Partners VII	Menlo Park	CA	21,651
Morgenthaler Partners VIII	Menlo Park	CA	415,296
Morgenthaler Partners IX	Menlo Park	CA	482,084
New Enterprise Associates 11	Baltimore	MD	84,811
New Enterprise Associates 12	Baltimore	MD	302,878
New York Life Capital Partners III	New York	NY	179,003
New York Life Capital Partners IV	New York	NY	278,851
Newbridge Asia IV	San Francisco	CA	154,923

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Investment Program | Expenses & Fees

2014 Manager Investment Expenses Detail (continued)

Manager	City	State/Country	Fees/ Expenses
Alternative Investments (continued)			
NewSpring Growth Capital II	King of Prussia	PA	\$84,096
NewSpring Growth Capital III	King of Prussia	PA	437,500
Nordic Capital VI	Stockholm	Sweden	132,057
Nordic Capital VII	Stockholm	Sweden	1,033,341
Novitas Capital III	King of Prussia	PA	37,978
Oak Investment Partners XI	Westport	CT	389,240
Oak Investment Partners XII	Westport	CT	792,936
Oaktree Opportunities Fund VIII	Los Angeles	CA	59,497
Oaktree Opportunities Fund VIIIb	Los Angeles	CA	180,780
Oaktree Opportunities Fund IX	Los Angeles	CA	832,927
OCM Opportunities Fund V	Los Angeles	CA	52,723
OCM Opportunities Fund VI	Los Angeles	CA	105,282
OCM Opportunities Fund VII	Los Angeles	CA	147,818
OCM Opportunities Fund VIIIb	Los Angeles	CA	125,153
OCM Principal Opportunities Fund IV	Los Angeles	CA	63,680
Palamon European Equity	London	United Kingdom	29,843
Palamon European Equity II	London	United Kingdom	298,795
Patriot Financial Partners	Philadelphia	PA	374,974
Permira IV	London	United Kingdom	1,010,923
Pitango Venture Capital Fund IV	Herzliya	Israel	131,437
Pitango Venture Capital Fund V	Herzliya	Israel	555,952
PNC Equity Partners II	Pittsburgh	PA	29,449
Polaris Venture Partners IV	Waltham	MA	98,345
Polaris Venture Partners V	Waltham	MA	959,077
Providence Equity Partners V	Providence	RI	175,861
Providence Equity Partners VI	Providence	RI	274,044
Quaker BioVentures	Philadelphia	PA	312,469
Quaker BioVentures II	Philadelphia	PA	331,580
Sankaty Credit Opportunities III	Boston	MA	283,868
SCP Private Equity Partners II	Wayne	PA	104,732
Segulah IV	Jersey	Channel Islands	208,029
Sentinel Capital Partners V	New York	NY	92,476
ShoreView Capital Partners	Minneapolis	MN	179,920
ShoreView Capital Partners II	Minneapolis	MN	449,850
Siguler Guff BRIC Opportunities Fund	New York	NY	35,599
Siguler Guff BRIC Opportunities Fund II	New York	NY	187,697
Sofinnova Venture Partners VII	San Francisco	CA	317,116
Sterling Capital Partners I	Northbrook	IL	108,860
Sterling Capital Partners II	Northbrook	IL	162,190
Sterling Capital Partners III	Northbrook	IL	356,614

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Investment Program | Expenses & Fees

2014 Manager Investment Expenses Detail (continued)

Manager	City	State/Country	Fees/ Expenses
Alternative Investments (continued)			
Summit Partners Private Equity Fund VII	Boston	MA	\$1,572,692
Summit Partners Venture Capital Fund II	Boston	MA	259,875
T. Rowe Price Stock Distribution Account	Baltimore	MD	533,228
TA X	Boston	MA	1,111,455
Technology Leaders V	Wayne	PA	192,168
Templeton Strategic Emerging Markets Fund III	Fort Lauderdale	FL	1,362,522
Three Arch Capital	Portola Valley	CA	304
Three Arch Partners IV	Portola Valley	CA	224,696
TPG Asia V	Fort Worth	TX	122,454
TPG Partners V	Fort Worth	TX	86,952
TPG Partners VI	Fort Worth	TX	85,602
Versa Capital Partners	Philadelphia	PA	314,284
Versa Capital Partners II	Philadelphia	PA	140,056
Vestar Capital Partners V	New York	NY	222,968
W Capital Partners II	New York	NY	8,093
Weathergag Venture Capital	Redwood City	CA	250,000
Weathergag Venture Capital II	Redwood City	CA	250,000
Weston Presidio V	Boston	MA	276,507
Worldview Technology Partners IV	San Mateo	CA	19,005
Yucaipa American Alliance Fund II	Los Angeles	CA	234,181
Alternative Investments Manager Fees			67,841,084
Alternative Investments Manager Expenses			6,804,747
Total Alternative Investments Manager Investment Expenses			74,645,831
Global Public Equity			
Artisan Partners - Global ex U.S.	Milwaukee	WI	2,695,829
Ashmore Emerging Markets Small Cap	Arlington	VA	1,142,287
BlackRock/Emerging Markets Index Non-Lendable Fund	San Francisco	CA	148,794
Cornerstone Growth	Edina	MN	1,168,637
Delaware Emerging Markets	Philadelphia	PA	3,932,978
Diamond Hill Concentrated	Columbus	OH	795,396
Emerald Advisors - PA Companies	Lancaster	PA	2,034,866
Epoch Value	New York	NY	1,295,493
Globeflex Emerging Markets Small Cap	San Diego	CA	399,217
Harris Associates	Chicago	IL	3,593,936
Iridian Asset Management	Westport	CT	1,894,306
Martin Currie Emerging Markets All-Cap Concentrated	Edinburgh	United Kingdom	986,307
Mellon Capital Management MSCI World ex U.S. Index	Pittsburgh	PA	302,617
Mellon Capital Management Russell 1000 Index	Pittsburgh	PA	236,378

SERS FUND

Investment Program | Expenses & Fees

2014 Manager Investment Expenses Detail (continued)

Manager	City	State/Country	Fees/ Expenses
Global Public Equity (continued)			
Mellon Equity Associates	Pittsburgh	PA	\$332,016
Morgan Stanley Investment Management Limited-developed ex U.S.	London	United Kingdom	1,715,450
Templeton Investment Counsel - Global ex U.S.	Fort Lauderdale	FL	2,092,968
Walter Scott & Partners Limited	Edinburgh	United Kingdom	2,626,053
Global Public Equity Manager Fees			27,393,528
Global Public Equity Manager Expenses			187,714
Total Global Public Equity Manager Investment Expenses			27,581,242
Real Assets			
AG Asia Realty Fund	New York	NY	99,105
BAAM Commodities	New York	NY	4,126,760
Berwind Investment Partnership VII	Yardley	PA	183,949
Berwind Investment Partnership VIII	Yardley	PA	206,470
Berwind Investment Partnership IX	Yardley	PA	127,946
Blackstone Real Estate Partners V	New York	NY	57,865
Blackstone Real Estate Partners VI	New York	NY	851,599
Blackstone Real Estate Partners VII	New York	NY	1,121,977
Carlyle Energy Mezz Opp Fund	New York	NY	750,000
CBRE Clarion Real Estate	Radnor	PA	1,070,803
Clerestory Small Cap Fund I	New York	NY	96,006
Colony Investors VIII	Los Angeles	CA	205,607
Denham Commodity VI	Boston	MA	771,759
Energy Spectrum Partners V	Dallas	TX	101,063
Fidelity Real Estate Opportunistic Income Fund	Smithfield	RI	446,380
Fillmore East Fund	San Francisco	CA	79,039
Fillmore West Fund	San Francisco	CA	106,366
First Reserve Fund X	Greenwich	CT	16,995
First Reserve Fund XI	Greenwich	CT	350,772
First Reserve Fund XII	Greenwich	CT	486,622
Forest I.M.A.	Atlanta	GA	947,235
Goldman Sachs/Whitehall VII & VIII	New York	NY	484
GRIP I	Philadelphia	PA	127,126
Harvest Fund Advisors	Wayne	PA	1,371,316
Hawkeye Scout Fund I	Austin	TX	209,941
Hawkeye Scout Fund II	Austin	TX	568,333
Heitman American Real Estate Trust	Chicago	IL	584,402
Heitman I.M.A.	Chicago	IL	1,636,027
Kayne Anderson Capital Advisors	Los Angeles	CA	1,762,612
LaSalle I.M.A.	Baltimore	MD	9,167,987

SERS FUND

Investment Program | Expenses & Fees

2014 Manager Investment Expenses Detail (continued)

Manager	City	State/Country	Fees/ Expenses
Real Assets (continued)			
LEM Real Estate High-Yield Debt Fund III	Philadelphia	PA	\$375,000
Lime Rock Partners III	Westport	CT	16,068
Lime Rock Partners IV	Westport	CT	259,035
Lime Rock Partners V	Westport	CT	687,794
Lowe GTO	Los Angeles	CA	4,177,097
Lowe I.M.A.	Los Angeles	CA	4,309,264
Lubert Adler Fund IV	Philadelphia	PA	11,040
Lubert Adler Fund V	Philadelphia	PA	94,811
Lubert Adler Fund VI	Philadelphia	PA	50,242
Lubert Adler Fund VII	Philadelphia	PA	456,849
OCM Power Opportunities Fund III	Los Angeles	CA	366,986
OCM/GFI Power Opportunities Fund II	Los Angeles	CA	14,724
Oxford GSA Fund	Pittsburgh	PA	39,821
Prudential Latin America Residential Fund III	Parsippany	NJ	378,773
Prudential Latin America Retail Fund I	Parsippany	NJ	378,147
Prudential Senior Housing III	Parsippany	NJ	243,985
Prudential Senior Housing IV	Parsippany	NJ	162,271
Rockpoint Finance Fund I	Dallas	TX	14,717
Rockpoint Real Estate Fund I	Dallas	TX	1,181
Rockpoint Real Estate Fund II	Dallas	TX	110,191
Rockpoint Real Estate Fund III	Dallas	TX	169,855
SFC Energy Partners I	Denver	CO	115,433
SFC Energy Partners II	Denver	CO	503,422
Starwood Fund VII	Greenwich	CT	357,536
Starwood Fund VIII	Greenwich	CT	417,023
UBS Trumbull Property Fund	Hartford	CT	600,961
UBS Trumbull Property Income Fund	Hartford	CT	423,354
Urdang Real Estate Securities	Plymouth Meeting	PA	271,265
ValStone Opportunity Fund V	Birmingham	MI	211,249
Wellington DIH	Boston	MA	2,958,551
Westbrook Fund VI	Dallas	TX	71,830
Westbrook Fund VII	Dallas	TX	298,870
Westbrook Fund VIII	Dallas	TX	487,695
Real Assets Manager Fees			46,667,586
Real Assets Manager Expenses			2,991,239
Total Real Assets Manager Investment Expenses			49,658,825
Diversifying Assets			
Arden Keystone	New York	NY	1,160,589
Blackstone Keystone	New York	NY	10,110,068

SERS FUND

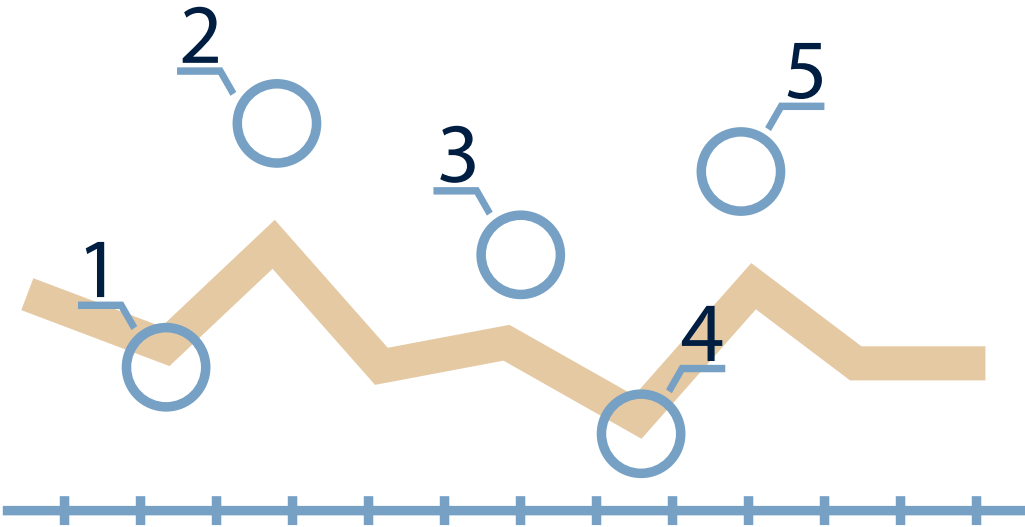
Investment Program | Expenses & Fees

2014 Manager Investment Expenses Detail (continued)

Manager	City	State/Country	Fees/ Expenses
Diversifying Assets (continued)			
Blackstone Stable Alpha	New York	NY	\$381,403
Entrust Keystone	New York	NY	3,206,511
Hoplite Partners	New York	NY	487,290
Luxor Capital Partners	New York	NY	398,939
Mesirow Financial	Chicago	IL	594,529
MKP Opportunity Fund	New York	NY	214,682
PAAMCO	Irvine	CA	103,427
Pine River Fund	Minnetonka	MN	574,012
Rock Creek	Washington	DC	95,936
Samlyn Onshore Fund	New York	NY	305,701
Stelliam Fund	New York	NY	792,344
Total Diversifying Assets Manager Investment Expenses			18,425,431
Fixed Income			
BNY Mellon Cash Investment Strategies	Pittsburgh	PA	267,398
Brandywine Global	Philadelphia	PA	775,068
Brown Brothers Harriman	New York	NY	253,581
MacKay Shields Core	New York	NY	472,659
New Century Advisors	Chevy Chase	MD	267,252
NISA Custom TIPS Intermediate	St. Louis	MO	460,505
PIMCO Core	Newport Beach	CA	433,785
PIMCO U.S. Treasuries	Newport Beach	CA	253,563
Pyramis Global Advisors	Boston	MA	1,943,887
SEI Structured Credit Fund	Oaks	PA	2,132,266
Stone Harbor Emerging Market Debt	New York	NY	643,108
Stone Harbor High Yield	New York	NY	741,112
Taplin Canida Habacht (TCH)	Miami	FL	457,118
UBS Core Bond	Chicago	IL	232,481
W.R. Huff	Morristown	NJ	292
Waterfall Asset Management	New York	NY	1,561,331
Wellington U.S. Treasuries	Boston	MA	251,659
Fixed Income Manager Fees			11,147,065
Fixed Income Manager Expenses			117
Total Fixed Income Manager Investment Expenses			11,147,182
Liquidity Reserve			
PNC Short Duration	Pittsburgh	PA	347,935
Stoneridge Short Duration	Malvern	PA	206,890
Total Liquidity Reserve Manager Investment Expenses			554,825
Total Manager Investment Expenses			\$182,013,336

SERS Fund

Portfolio Snapshots



SERS FUND

Investment Program | Portfolio Snapshot | Alternative Investments

Asset Class Description

The Alternative Investments program includes SERS Fund assets held in partnerships that pursue private market strategies in private equity, special situations, and venture capital with investments typically made over a multi-year period and which offer premium returns to compensate for illiquidity.

Role in the SERS Fund

The program seeks high, long-term capital appreciation to enhance total SERS Fund returns with an investment return horizon that is typically seven or more years.

Portfolio Exposure

The Alternative Investments program is well diversified by sub-sector, geography, and industry focus. As of September 30, 2014, based on fair value, the program's exposure was:

By Fund Sub-Sector		By Geography ^{2/}		By Industry ^{2/}	
U.S. Private Equity	36.0%	United States	66.7%	Financials	23.0%
Non-U.S. ^{1/}	24.3	United Kingdom	5.5	Information Technology	18.8
U.S. Venture Capital	21.5	China	4.0	Consumer Discretionary	18.6
Distressed/Opportunistic	12.8	Italy	2.7	Health Care	13.9
Pennsylvania-Related	5.4	Germany	1.5	Industrials	11.8
		Canada	1.4	Energy	5.7
		France	1.3	Consumer Staples	3.3
		Rest of World	16.9	Materials	2.4
				Telecommunication Services	1.3
				Utilities	1.0
				Other	0.2

^{1/} Some managers with a domestic investment focus may invest globally. Thus, non-U.S. exposure measured on a portfolio company basis will be greater.

^{2/} Geography and industry are determined by the portfolio company.

SERS FUND

Investment Program | Portfolio Snapshot | Alternative Investments

Benchmarks

The program's objective is to generate investment returns that exceed the total return of public equity markets by at least 3% and that exceed the mean return for the asset class over a seven- to 10-year period.

Performance is measured relative to the following benchmarks:

- Public Market Benchmark – Russell 3000 + 300 basis points (illiquidity premium)
- Private Market Benchmark – Burgiss All Private Equity Custom Index

Alternative Investments

as of December 31, 2014

Sub-Asset Class	Unfunded Commitments (\$ millions)	Fair Value (\$ millions)	% of Total Fund
Private Equity	\$1,025.0	\$3,105.2	11.4%
Special Situations	246.2	834.1	3.1
Venture Capital	129.6	1,323.6	4.9
Total Alternative Investments	\$1,400.8	\$5,262.9	19.4%

SERS FUND

Investment Program | Portfolio Snapshot | Alternative Investments

The capital committed column represents total dollars allocated from SERS to each limited partnership. Accumulated capital drawn is the portion of SERS' capital commitments drawn by the general partner to be invested with underlying portfolio companies. The accumulated distributions column shows the value of capital and profits returned to SERS.

Private Equity Committed, Drawn, and Distributed

	Active Private Equity Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
1.	ABRY Broadcast Partners III	Growth Equity	02/07/1997	\$25,000,000	\$22,746,123	\$28,386,169
	ABRY Partners IV	Middle	03/30/2001	35,000,000	25,380,806	52,812,428
	ABRY Partners V	Middle	07/29/2005	45,000,000	41,576,047	75,360,823
	ABRY Partners VI	Middle	03/26/2008	50,000,000	58,799,487	61,689,191
	ABRY Partners VII	Middle	08/10/2011	30,000,000	32,878,265	7,068,890
	ABRY Partners VIII	Middle	*	25,000,000	0	0
2.	ABS Capital Partners III	Growth Equity	03/26/1999	35,000,000	29,428,915	18,757,336
	ABS Capital Partners IV	Growth Equity	10/13/2000	35,000,000	30,984,280	66,247,486
	ABS Capital Partners V	Growth Equity	11/14/2005	20,000,000	19,704,037	21,751,321
	ABS Capital Partners VI	Growth Equity	03/13/2009	40,000,000	37,663,354	2,975,636
3.	Advent Latin American Private Equity Fund IV	Middle	08/02/2007	30,000,000	29,297,073	28,071,689
	Advent International GPE VI-A	Large	07/07/2008	35,000,000	33,466,330	19,601,527
	Advent Latin American Private Equity Fund V	Middle	05/17/2010	15,000,000	11,175,000	1,792,500
	Advent International GPE VII-B	Large	12/06/2012	40,000,000	22,400,000	799,715
4.	Alpha Private Equity Fund 4	Small	05/15/2002	26,508,000	35,605,050	77,986,040
	Alpha Private Equity Fund 5	Small	04/01/2006	57,796,800	65,860,056	78,388,189
5.	APAX Europe IV	Mega	03/31/1999	32,424,000	29,909,800	39,370,494
	APAX Excelsior VI	Small	07/03/2000	35,000,000	34,151,324	55,619,181
	APAX Europe V	Mega	04/27/2001	53,262,000	70,385,477	144,730,834
	APAX Europe VI	Mega	05/19/2005	76,349,190	76,400,840	83,849,158
	APAX Europe VII	Mega	06/27/2007	132,170,235	138,287,004	50,520,808
6.	Apollo Investment Fund IV	Mega	09/30/1998	75,000,000	74,838,620	124,738,828
	Apollo Investment Fund V	Mega	08/23/2001	50,000,000	46,670,022	121,731,819
	Apollo Investment Fund VI	Mega	07/19/2006	40,000,000	38,908,796	41,229,269
7.	Asia Alternatives Capital Partners	Fund of Funds	06/26/2007	50,000,000	24,359,013	14,516,147
	Asia Alternatives Capital Partners II	Fund of Funds	03/07/2008	50,000,000	24,907,452	6,786,175
	Asia Alternatives Korea Buyout Investors (Hahn & Co)	Small	07/22/2011	7,000,000	6,765,375	1,236,179
	Asia Alternatives Capital Partners III	Fund of Funds	08/03/2012	50,000,000	26,734,898	3,418,429
	Penn Asia Investors	Fund of Funds	09/28/2012	83,000,000	17,033,802	3,710,862
8.	Asia Pacific Growth Fund III	Growth Equity	09/28/1999	15,000,000	15,334,963	14,833,684

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Private Equity Committed, Drawn, and Distributed (continued)

Active Private Equity Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
9. Audax Private Equity Fund	Middle	05/25/2000	\$35,000,000	\$36,839,098	\$55,479,437
Audax Private Equity Fund II	Middle	06/17/2005	25,000,000	25,517,169	41,526,587
Audax Private Equity Fund III	Middle	11/07/2007	37,000,000	40,479,677	31,204,684
10. Bain Capital Fund VII	Mega	07/06/2000	25,000,000	25,000,000	47,882,600
Bain Capital Fund VIII-E	Mega	12/15/2004	12,144,000	13,438,215	15,494,080
Bain Capital Fund IX	Mega	04/10/2006	75,000,000	74,362,538	79,676,496
Bain Capital IX Coinvestment Fund	Mega	04/20/2006	15,000,000	15,288,873	16,641,915
Bain Capital Asia Fund	Middle	10/18/2007	12,000,000	11,430,000	6,185,905
Bain Capital Fund X	Mega	01/15/2008	90,000,000	87,255,000	27,816,062
Bain Capital Europe III	Mega	07/10/2008	72,432,276	64,039,370	21,185,437
Bain Capital X Coinvestment Fund	Mega	07/28/2008	5,000,000	1,225,000	225,935
11. Baring Vostok Private Equity Fund IV	Middle	03/10/2008	30,000,000	27,168,763	8,185,945
Baring India Private Equity Fund III Limited	Small	10/10/2008	5,000,000	5,053,649	588,859
12. BC European Capital VII	Large	07/28/2000	32,658,500	37,921,760	96,576,440
BC European Capital VII Top Up	Large	07/02/2001	10,046,300	12,351,504	32,386,202
BC European Capital VIII	Large	12/13/2005	98,107,500	96,125,543	77,650,129
BC European Capital IX	Large	09/16/2011	26,472,535	15,233,737	2,361,238
13. Berkshire Fund VI	Middle	07/11/2002	20,000,000	19,012,265	38,529,500
Berkshire Fund VII	Middle	11/15/2006	32,000,000	30,079,617	28,614,407
Berkshire Fund VIII	Middle	08/25/2011	30,000,000	14,201,519	543,427
14. Blackstone Communications Partners I	Mega	08/29/2000	25,000,000	25,110,848	27,605,755
Blackstone Capital IV	Mega	02/26/2003	75,000,000	68,828,073	158,956,063
Blackstone Capital Partners V	Mega	05/30/2006	150,000,000	148,490,094	90,795,125
15. Brait IV	Small	12/11/2006	25,000,000	21,663,974	2,873,282
16. Brynwood Partners V	Small	07/31/2005	10,000,000	10,491,974	18,302,663
Brynwood Partners VI	Small	10/13/2009	10,000,000	10,901,080	10,460,234
17. Capvis Equity IV	Middle	01/30/2014	49,855,591	10,527,552	0
18. Charterhouse Capital Partners VII	Middle	01/17/2003	62,609,567	54,972,470	101,039,283
Charterhouse Capital Partners VIII	Middle	04/19/2006	81,688,223	72,469,750	47,258,270
Charterhouse Capital Partners IX	Middle	04/28/2009	66,385,000	51,260,296	19,871,804
19. Chequers Capital XV	Middle	07/05/2006	31,133,996	32,668,266	32,213,221
20. Clayton Dubilier & Rice VI	Middle	12/31/1998	50,000,000	36,437,713	57,754,625
21. Clessidra Capital Partners II	Middle	11/05/2008	25,631,168	15,283,617	16,688,583
22. Code Hennessy & Simmons III	Middle	09/30/1997	40,000,000	38,724,000	56,329,887
Code Hennessy & Simmons IV	Middle	09/16/1999	100,000,000	100,000,000	156,498,466
Code Hennessy & Simmons V	Middle	11/10/2005	50,000,000	53,741,751	51,181,053
23. DLJ Merchant Banking Fund II	Large	03/31/1997	75,000,000	83,261,424	105,370,005
DLJ Merchant Banking Fund III	Large	08/14/2001	85,000,000	88,209,507	185,335,045

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Private Equity Committed, Drawn, and Distributed (continued)

	Active Private Equity Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
24.	Elevation Partners	Middle	11/10/2005	\$35,000,000	\$30,934,889	\$47,214,491
25.	Eureka II	Growth Equity	01/30/2006	20,000,000	18,376,280	12,134,151
	Eureka Growth Capital III	Growth Equity	10/21/2013	20,000,000	4,164,597	3,982,122
26.	Excelsior Capital Asia Partners III	Small	08/17/2006	25,000,000	25,058,095	12,514,810
27.	Francisco Partners	Middle	07/27/2000	50,000,000	47,825,987	47,816,733
	Francisco Partners II	Middle	07/10/2006	30,000,000	28,127,870	30,006,763
	Francisco Partners III	Middle	10/17/2011	20,000,000	15,150,000	769,322
28.	FSN Capital IV	Middle	12/19/2013	46,049,703	12,006,477	(68,173)
29.	Great Hill Equity Partners	Middle	04/12/1999	30,000,000	30,000,000	30,444,856
	Great Hill Equity Partners II	Middle	03/28/2001	35,000,000	35,063,336	70,640,735
	Great Hill Equity Partners III	Middle	03/07/2006	35,000,000	34,037,500	22,715,000
	Great Hill Equity Partners IV	Middle	09/08/2008	25,000,000	23,350,662	14,388,162
30.	Gryphon Partners II	Small	11/03/1999	35,000,000	34,700,788	41,953,023
	Gryphon Partners III	Small	09/08/2004	30,000,000	37,461,599	44,351,177
31.	GTCR VI	Middle	09/30/1998	50,000,000	50,000,000	43,229,799
	GTCR VII	Middle	03/15/2000	55,000,000	50,074,671	121,784,179
	GTCR VIII	Middle	07/07/2003	75,000,000	69,393,599	101,658,818
	GTCR IX	Middle	12/01/2006	50,000,000	46,666,718	37,541,989
	GTCR Fund XI	Middle	09/02/2014	25,000,000	1,812,500	0
32.	H.I.G. Growth Buyouts & Equity Fund II	Growth Equity	07/20/2011	15,000,000	5,464,671	0
	H.I.G. Europe Capital Partners II	Small	01/10/2014	27,544,596	345,686	0
33.	Hahn & Company II	Middle	*	50,000,000	0	0
34.	Halpern Denny Fund III	Growth Equity	04/26/2000	25,000,000	24,886,871	28,097,819
35.	HarbourVest IPEP III	Fund of Funds	06/30/1998	40,000,000	39,400,000	58,800,683
	HarbourVest Partners VI	Fund of Funds	05/07/1999	200,000,000	196,586,055	206,655,781
	HarbourVest IPEP IV	Fund of Funds	04/09/2001	40,000,000	39,000,000	57,938,066
	HarbourVest Partners VII	Fund of Funds	03/24/2003	75,000,000	72,562,500	53,163,000
	HIPEP V-Asia Pacific & Rest of World	Fund of Funds	05/09/2006	30,000,000	27,645,316	17,012,072
	HarbourVest Partners VIII	Fund of Funds	10/05/2006	100,000,000	92,500,000	47,106,310
36.	Hellman & Friedman Capital Partners V	Large	12/20/2004	80,000,000	71,603,785	185,626,126
	Hellman & Friedman Capital Partners VI	Large	06/05/2007	125,000,000	118,450,321	158,446,666
	Hellman & Friedman Capital Partners VIII	Large	*	50,000,000	0	0
37.	Horizon Strategic Fund - Carlyle Group	Small	09/19/2014	100,000,000	23,131,680	(39,827)
	Horizon Impact Fund - BAML	Small	*	50,000,000	0	0

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	Active Private Equity Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
38.	Incline Equity Partners III	Small	01/14/2013	\$15,000,000	\$3,916,863	\$145,468
39.	InterMedia Partners VII	Small	01/05/2007	15,000,000	17,364,948	2,803,002
40.	Invemed Catalyst Fund	Small	10/19/1999	25,000,000	14,559,574	11,020,750
41.	J.H. Whitney IV	Small	02/01/2000	20,000,000	17,958,772	6,970,458
	J.H. Whitney VI	Small	01/05/2006	50,000,000	49,681,452	37,034,626
	J.H. Whitney VII	Small	10/12/2010	25,000,000	17,725,228	3,542,606
42.	J.W. Childs Equity Partners III	Middle	08/20/2002	40,000,000	41,966,505	76,500,901
43.	JMI Equity Fund V	Growth Equity	06/07/2005	24,000,000	24,009,205	117,002,561
	JMI Equity Fund VI	Growth Equity	06/27/2007	40,000,000	39,120,000	31,145,764
	JMI Equity Fund VII	Growth Equity	02/14/2011	10,000,000	7,860,000	1,296,923
	JMI Equity Fund VIII	Growth Equity	*	25,000,000	0	0
44.	Kelso VII	Middle	10/18/2004	40,000,000	41,125,677	64,480,172
	Kelso VIII	Middle	11/29/2007	150,000,000	129,925,643	32,868,682
45.	Leeds Equity Partners IV	Small	11/12/2004	20,000,000	20,396,199	21,192,794
46.	LLR Equity Partners	Middle	02/04/2000	25,000,000	24,576,062	52,500,490
	LLR Equity Partners II	Middle	01/29/2004	25,000,000	25,000,000	35,570,591
	LLR Equity Partners III	Middle	07/24/2008	30,000,000	29,108,721	18,231,244
	LLR Equity Partners IV	Middle	03/14/2014	50,000,000	7,292,708	0
47.	Madison Dearborn Capital Partners IV	Middle	04/02/2001	90,000,000	90,632,507	159,090,333
	Madison Dearborn Capital Partners V	Middle	07/31/2006	75,000,000	71,229,812	44,398,826
	Madison Dearborn Capital Partners VI	Middle	05/27/2008	50,000,000	39,942,877	26,527,726
48.	Meridian Venture Partners II	Small	02/11/2005	10,000,000	10,000,000	8,987,734
49.	Motion II B	Middle	11/02/2005	48,204,998	47,303,925	18,911,354
50.	New York Life Capital Partners III	Fund of Funds	06/30/2006	50,000,000	52,167,446	21,006,167
	New York Life Capital Partners IV	Fund of Funds	04/04/2008	50,000,000	52,865,187	36,641,532
51.	NewSpring Growth Capital II	Growth Equity	12/05/2006	10,000,000	9,350,000	8,082,443
	NewSpring Growth Capital III	Growth Equity	07/27/2012	25,000,000	7,473,959	(32,603)
52.	Nordic Capital V	Middle	05/07/2004	34,996,500	46,006,701	128,686,228
	Nordic Capital VI	Middle	07/25/2006	54,369,000	64,343,827	46,749,935
	Nordic Capital VII	Middle	05/02/2008	92,519,165	88,457,662	13,666,572
53.	Oakhill Capital Partners	Middle	05/17/1999	50,000,000	53,718,802	93,747,595
54.	Palamon European Equity	Growth Equity	07/23/1999	29,779,989	38,406,197	55,442,800
	Palamon European Equity II	Growth Equity	10/25/2005	36,114,000	43,737,582	43,083,839
55.	Parthenon Investors II	Small	08/09/2001	20,000,000	22,170,045	33,644,564
56.	Patriot Financial Partners	Small	06/12/2008	25,000,000	25,017,767	8,813,334

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Private Equity Committed, Drawn, and Distributed (continued)

Active Private Equity Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
57. Permira European Fund	Large	09/30/1997	\$33,494,536	\$32,159,947	\$84,005,717
Permira European Fund II	Large	06/07/2000	48,000,000	45,672,612	87,060,380
Permira European Fund III	Large	01/12/2004	115,960,000	125,707,519	182,896,681
Permira IV	Large	12/14/2006	127,779,198	131,056,449	95,285,498
58. PNC Equity Partners II	Small	08/30/2007	15,000,000	13,241,362	11,610,156
59. Providence Equity Partners IV	Large	11/27/2000	25,000,000	23,426,313	54,283,066
Providence Equity Partners V	Large	04/04/2005	45,000,000	42,507,364	38,982,836
Providence Equity Partners VI	Large	03/16/2007	50,000,000	51,041,157	29,654,435
60. Segulah IV	Middle	09/25/2008	16,705,647	15,934,984	4,872,298
61. Sentinel Capital Partners V	Middle	07/15/2014	10,000,000	1,392,451	0
62. ShoreView Capital Partners	Small	06/16/2003	38,000,000	32,432,631	49,197,847
ShoreView Capital Partners II	Small	03/27/2008	40,000,000	36,052,659	20,138,015
63. Siguler Guff BRIC Opportunities Fund	Fund of Funds	05/08/2006	10,000,000	9,558,299	4,528,841
Siguler Guff BRIC Opportunities Fund II	Fund of Funds	04/09/2008	25,000,000	22,263,557	1,587,016
64. Sterling Capital Partners I	Middle	10/31/2002	15,000,000	14,979,168	27,762,291
Sterling Capital Partners II	Middle	08/18/2005	30,000,000	29,893,709	22,770,689
Sterling Capital Partners III	Middle	08/13/2007	32,000,000	31,191,575	8,957,399
65. Summit IV	Middle	09/30/1995	25,000,000	24,250,000	183,419,644
Summit V	Growth Equity	03/31/1998	37,500,000	36,187,500	49,906,903
Summit Ventures VI	Growth Equity	03/23/2001	62,000,000	63,914,751	119,079,287
Summit Partners Private Equity Fund VII	Middle	02/09/2006	97,134,500	97,134,505	56,365,040
66. TA IX	Middle	09/20/2000	45,000,000	43,741,796	105,463,424
TA X	Middle	04/25/2006	70,000,000	69,732,009	52,932,009
67. Thomas H. Lee Equity Fund V	Large	07/03/2001	100,000,000	104,813,679	173,187,961
Thomas H. Lee Equity Fund VI	Large	11/14/2006	50,000,000	51,082,043	28,308,516
68. TPG Partners III	Mega	01/13/2000	75,000,000	64,119,169	163,679,936
Newbridge Asia III	Middle	02/15/2001	15,000,000	14,438,357	55,620,782
TPG Partners IV	Mega	12/29/2003	30,000,000	27,981,463	48,457,028
Newbridge Asia IV	Middle	09/27/2005	40,000,000	38,903,378	62,206,598
TPG Partners V	Mega	06/27/2006	100,000,000	92,333,915	41,641,145
TPG Asia V	Large	02/19/2008	22,500,000	21,603,940	7,504,636
TPG Partners VI	Mega	05/22/2008	45,000,000	45,027,107	19,609,789
69. Vestar Capital Partners III	Middle	06/30/1997	25,000,000	24,362,534	27,746,687
Vestar Capital Partners IV	Middle	01/25/2000	100,000,000	97,632,498	170,311,374
Vestar Capital Partners V	Middle	01/25/2006	50,000,000	51,278,152	16,818,188

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Private Equity Committed, Drawn, and Distributed (continued)

Active Private Equity Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
70. Weston Presidio III	Growth Equity	12/31/1998	\$35,000,000	\$31,989,586	\$30,440,421
Weston Presidio IV	Growth Equity	06/21/2000	35,000,000	34,451,015	38,399,714
Weston Presidio V	Growth Equity	12/08/2005	50,000,000	48,397,829	52,298,132
71. Yucaipa American Alliance Fund II	Middle	01/13/2009	25,000,000	28,126,647	11,283,471
Total Active Private Equity			\$7,883,326,713	\$7,046,925,830	\$8,009,183,370

Cash flows as of September 30, 2014.

*Not funded as of September 30, 2014.

^{1/}Commitments as of December 31, 2014.

^{2/}Distributions include stock distributions. Distributions may include fees that are recorded as negative distributions to be offset against future distributions of the underlying limited partnership investment.

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The capital committed column represents total dollars allocated from SERS to each limited partnership. Accumulated capital drawn is the portion of SERS' capital commitments drawn by the general partner to be invested with underlying portfolio companies. The accumulated distributions column shows the value of capital and profits returned to SERS.

Special Situations Committed, Drawn, and Distributed

Active Special Situations Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
1. ABRY Mezzanine Partners	Mezzanine	03/15/2002	\$30,000,000	\$26,698,593	\$46,795,147
ABRY Senior Equity II	Mezzanine	07/27/2006	30,000,000	27,700,250	42,291,814
ABRY Advanced Securities Fund	Distressed/Restructuring	08/01/2008	25,000,000	23,383,525	37,475,518
2. AG Capital Recovery Partners IV	Distressed/Restructuring	02/04/2003	50,000,000	35,415,216	55,975,314
AG Capital Recovery Partners V	Distressed/Restructuring	04/17/2006	20,000,000	20,000,000	19,424,613
3. Avenue Special Situations Fund IV	Distressed/Restructuring	03/27/2006	50,000,000	50,000,000	68,816,017
Avenue Asia Special Situations Fund IV	Distressed/Restructuring	06/30/2006	50,000,000	31,897,973	22,557,858
Avenue Special Situations Fund V	Distressed/Restructuring	06/04/2007	70,000,000	70,004,050	92,444,416
Avenue Europe Special Situations Fund	Distressed/Restructuring	07/30/2008	38,632,500	25,749,356	37,140,680
Avenue Special Situations Fund VI	Distressed/Restructuring	11/02/2010	20,000,000	20,068,464	8,983,643
4. AXA Secondary Fund III	Secondaries	11/19/2004	26,000,000	21,604,560	35,016,216
AXA Secondary Fund III-2	Secondaries	11/24/2004	14,000,000	11,595,111	17,852,445
AXA Secondary Fund IV	Secondaries	02/26/2007	80,000,000	67,414,866	50,914,276
AXA Secondary Fund V B	Secondaries	06/19/2012	75,000,000	50,317,529	13,613,554
5. Centerbridge Capital Partners I	Distressed/Restructuring	02/27/2007	50,000,000	56,251,691	85,047,694
6. Cerberus Institutional Partners	Distressed/Restructuring	03/05/1999	35,000,000	35,000,000	79,427,565
Cerberus Institutional Partners Series Two	Distressed/Restructuring	10/09/2001	35,000,000	30,100,793	93,008,440
Cerberus Institutional Partners Series Three	Distressed/Restructuring	11/13/2003	35,000,000	22,321,354	41,597,958
Cerberus Institutional Partners Series Four	Distressed/Restructuring	11/27/2006	75,000,000	69,258,215	51,859,192
7. CVI Global Value Fund	Distressed/Restructuring	02/23/2007	60,000,000	57,151,667	65,206,581
8. Dover Street VII	Secondaries	07/02/2008	30,000,000	28,295,287	20,402,018

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Special Situations Committed, Drawn, and Distributed (continued)

	Active Special Situations Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
9.	H.I.G. Bayside Debt & LBO Fund II	Distressed/ Restructuring	06/17/2008	\$30,000,000	\$21,100,000	\$14,315,131
	H.I.G. Bayside Loan Opportunities Fund III	Distressed/ Restructuring	06/12/2013	50,000,000	19,243,996	494,108
	H.I.G. Bayside Loan Opportunities Fund IV	Distressed/ Restructuring	*	25,000,000	0	0
10.	JP Morgan U.S. Corp Finance Investors II	Distressed/ Restructuring	01/14/2003	50,000,000	52,778,782	62,338,738
11.	KPS Special Situations Fund IV	Distressed/ Restructuring	05/08/2014	25,000,000	2,053,119	0
12.	Landmark Equity IV	Secondaries	03/31/1995	14,923,291	12,495,850	18,728,790
	Landmark Equity Partners V	Secondaries	12/31/1995	19,624,113	19,434,947	23,521,627
13.	LBC Credit Partners III	Mezzanine	03/04/2013	50,000,000	22,276,834	2,183,653
14.	Lexington Capital Partners II	Secondaries	06/30/1998	40,000,000	39,538,000	51,929,777
	Lexington Capital Partners III	Secondaries	01/26/1999	35,000,000	34,516,449	42,143,167
	Lexington Capital Partners V	Secondaries	01/17/2002	75,000,000	74,623,418	115,674,584
	Lexington Capital Partners VI	Secondaries	10/21/2005	50,000,000	53,066,325	43,139,674
15.	Matlin Patterson Global Opportunities Partners	Distressed/ Restructuring	05/31/2001	35,000,000	30,091,262	56,689,513
	Matlin Patterson Global Opportunities Partners II	Distressed/ Restructuring	06/30/2004	30,000,000	30,410,597	10,578,309
16.	OCM Opportunities Fund II	Distressed/ Restructuring	03/31/1998	40,000,000	40,000,000	60,332,637
	OCM Opportunities Fund III	Distressed/ Restructuring	01/20/2000	60,000,000	60,007,890	89,277,812
	OCM Principal Opportunities II	Distressed/ Restructuring	04/24/2001	25,000,000	25,000,000	43,867,500
	OCM Opportunities Fund IV	Distressed/ Restructuring	09/26/2001	70,000,000	70,000,000	115,463,024
	Oaktree Capital Management	Distressed/ Restructuring	05/28/2004	40,000,000	40,581,778	93,945,691
	OCM Opportunities Fund V	Distressed/ Restructuring	08/12/2004	40,000,000	40,003,507	62,981,710
	OCM Opportunities Fund VI	Distressed/ Restructuring	09/28/2005	40,000,000	40,000,000	58,630,983
	OCM Principal Opportunities Fund IV	Distressed/ Restructuring	01/24/2007	20,000,000	20,400,000	20,590,668
	OCM Opportunities Fund VII	Distressed/ Restructuring	05/16/2007	40,000,000	40,000,000	47,570,292
	OCM Opportunities Fund VIIb	Distressed/ Restructuring	06/03/2008	40,000,000	36,000,000	55,389,168
	OCM Opportunities Fund VIII	Distressed/ Restructuring	09/20/2010	12,500,000	12,583,425	8,206,679
	OCM Opportunities Fund VIIIb	Distressed/ Restructuring	08/22/2011	12,500,000	12,500,000	0

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Investment Program | Portfolio Snapshot | Alternative Investments

Special Situations Committed, Drawn, and Distributed (continued)

Active Special Situations Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
Oaktree Opportunities Fund IX	Distressed/Restructuring	03/26/2013	\$50,000,000	\$37,500,000	\$0
17. Platinum Equity Capital Partners III	Distressed/Restructuring	08/05/2013	50,000,000	19,183,057	12,856,311
18. Sankaty Credit Opportunities III	Distressed/Restructuring	03/08/2007	50,000,000	50,000,000	37,092,674
Sankaty Credit Opportunities IV	Distressed/Restructuring	07/15/2008	40,000,000	38,000,000	43,203,686
19. Templeton Strategic Emerging Markets Fund III	Distressed/Restructuring	05/29/2009	100,000,000	93,367,388	17,709,920
20. Versa Capital Partners	Distressed/Restructuring	10/16/2005	20,000,000	23,611,753	15,988,714
Versa Capital Partners II	Distressed/Restructuring	07/31/2008	15,000,000	14,404,364	5,867,313
21. W Capital Partners II	Secondaries	08/08/2007	40,000,000	39,034,444	36,848,578
Total Active Special Situations			\$2,233,179,904	\$1,944,035,685	\$2,253,411,390

Cash flows as of September 30, 2014.

*Not funded as of September 30, 2014.

^{1/}Commitments as of December 31, 2014.

^{2/}Distributions include stock distributions. Distributions may include fees that are recorded as negative distributions to be offset against future distributions of the underlying limited partnership investment.

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Investment Program | Portfolio Snapshot | Alternative Investments

The capital committed column represents total dollars allocated from SERS to each limited partnership. Accumulated capital drawn is the portion of SERS' capital commitments drawn by the general partner to be invested with underlying portfolio companies. The accumulated distributions column shows the value of capital and profits returned to SERS.

Venture Capital Committed, Drawn, and Distributed

Active Venture Capital Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
1. Abingworth Bioventures IV	Balanced	09/01/2003	\$20,000,000	\$19,626,273	\$9,460,344
Abingworth Bioventures V	Balanced	01/23/2007	33,775,000	25,792,179	29,502,522
2. Accel Europe	Early Stage	07/02/2001	15,000,000	11,350,000	12,076,190
3. Adams Capital Management II	Early Stage	10/01/1999	30,000,000	30,000,000	3,800,000
Adams Capital Management III	Early Stage	11/21/2000	30,000,000	30,000,000	7,011,905
4. Advanced Technology Ventures VI	Balanced	03/09/2000	10,000,000	10,000,000	4,047,939
Advanced Technology Ventures VII	Balanced	07/11/2001	27,000,000	27,000,000	24,378,062
5. Alloy Ventures 2000	Early Stage	05/19/2000	20,000,000	20,000,000	5,125,846
Alloy Ventures 2002	Early Stage	07/22/2002	25,000,000	25,000,000	14,527,240
Alloy Annex I	Early Stage	10/31/2003	5,000,000	5,000,000	1,271,247
Alloy Ventures 2005	Early Stage	08/11/2005	25,000,000	25,000,000	4,095,478
6. APEX Investment Fund V	Early Stage	04/19/2002	20,000,000	20,645,068	7,347,556
7. Artiman Ventures II	Early Stage	10/27/2006	25,000,000	25,000,000	13,141,575
Artiman Ventures III	Early Stage	08/09/2010	20,000,000	14,860,000	0
8. Atlas Venture Fund V	Early Stage	02/07/2000	37,200,000	37,211,109	40,115,109
Atlas Venture Fund VI	Early Stage	08/01/2001	24,800,000	24,800,000	11,117,236
9. Austin Ventures VIII	Balanced	07/26/2001	20,932,140	21,100,362	29,270,607
Austin Ventures IX	Balanced	01/09/2006	15,000,000	14,999,182	10,904,019
10. Battery Ventures VIII	Balanced	08/13/2007	25,000,000	24,416,202	25,222,296
Battery Ventures VIII Side Car Fund	Balanced	08/29/2008	9,000,000	6,405,956	15,212,353
11. Birchmere Ventures III	Early Stage	05/05/2005	10,000,000	10,288,515	8,692,184
12. Care Capital Investments III	Balanced	02/08/2006	25,000,000	20,099,654	3,133,157
13. Charles River Partnership XI	Early Stage	02/15/2001	11,032,259	11,032,259	14,360,660
14. CID Greater China Venture Capital Fund II	Balanced	08/10/2007	20,000,000	17,780,000	11,692,180
15. Clearstone Venture Partners III-A	Early Stage	12/22/2004	25,000,000	23,000,000	267,818
16. Cross Atlantic Technology Fund	Balanced	02/14/2000	20,000,000	20,149,041	23,742,240
Cross Atlantic Technology Fund II	Balanced	01/28/2002	32,900,000	32,900,000	27,178,304
17. Devon Park Bioventures	Balanced	12/15/2006	10,842,697	8,857,861	950,627
18. Draper Fisher Jurvetson Fund VI	Early Stage	08/13/1999	8,000,000	8,000,000	4,973,853
Draper Triangle Ventures	Early Stage	12/20/1999	20,000,000	20,708,909	11,357,493
Draper Fisher Jurvetson Fund VII	Early Stage	09/22/2000	20,000,000	20,000,000	3,178,088
Draper Triangle Ventures II	Early Stage	10/13/2004	12,000,000	12,808,420	8,441,643
Draper Triangle Ventures III	Early Stage	*	10,000,000	0	0

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Investment Program | Portfolio Snapshot | Alternative Investments

Venture Capital Committed, Drawn, and Distributed (continued)

Active Venture Capital Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
19. Fairview Capital	Fund of Funds	09/30/1994	\$10,000,000	\$10,000,000	\$4,543,128
Fairview II	Fund of Funds	03/31/1998	10,000,000	9,870,000	3,982,519
20. Frazier Healthcare III	Balanced	03/31/1999	30,000,000	30,000,000	12,516,529
Frazier Healthcare IV	Balanced	09/27/2001	30,000,000	29,820,000	24,579,485
Frazier Healthcare V	Balanced	05/10/2005	30,000,000	29,625,000	36,246,683
21. Grotech Partners V	Early Stage	09/30/1998	25,000,000	25,000,000	24,521,934
22. Guggenheim Technology Ventures I	Early Stage	11/17/2008	2,000,000	2,000,000	472,424
23. Healthcare Ventures V	Early Stage	12/31/1997	25,000,000	25,000,000	52,355,501
Healthcare Ventures VI	Early Stage	06/19/2000	35,000,000	35,000,000	4,722,059
Healthcare Ventures VII	Early Stage	10/29/2002	35,000,000	35,000,000	16,404,798
Healthcare Ventures VIII	Early Stage	08/22/2005	30,000,000	26,925,000	9,581,777
24. Highland Capital Partners VI	Early Stage	10/25/2001	25,000,000	25,000,000	33,190,168
Highland Capital Partners VII	Early Stage	10/13/2006	35,000,000	34,301,991	11,962,505
Highland Consumer Fund I	Early Stage	05/04/2007	25,000,000	23,263,199	0
25. IP II	Balanced	12/17/2001	8,600,000	8,584,073	2,602,522
IP III	Balanced	11/19/2004	10,500,000	9,555,000	11,329,558
IP IV	Balanced	09/21/2007	14,000,000	13,300,000	9,431,296
26. Insight Venture Partners VI	Balanced	08/21/2007	30,000,000	32,244,176	33,178,523
Insight Venture Partners VII	Balanced	04/27/2011	20,000,000	20,001,495	6,006,383
Insight Venture Partners VIII	Balanced	07/10/2013	50,000,000	39,850,000	0
27. InterWest Partners VIII	Early Stage	08/25/2000	25,000,000	25,000,000	10,757,162
InterWest Partners IX	Balanced	10/19/2005	20,000,000	18,000,000	13,368,315
InterWest Partners X	Balanced	10/30/2008	30,000,000	24,000,000	1,120,736
28. JP Morgan Venture Capital Investors	Fund of Funds	07/08/1999	100,000,000	107,275,187	63,515,230
JP Morgan Venture Capital Investors II	Fund of Funds	09/08/2000	100,000,000	111,212,081	83,819,234
JP Morgan Venture Capital Investors III	Fund of Funds	06/20/2006	100,000,000	104,381,072	44,333,849
29. Kline Hawkes Pacific	Balanced	08/30/2000	15,000,000	15,100,498	6,974,159
30. Knightsbridge Venture Capital VI	Fund of Funds	12/07/2004	20,000,000	18,266,667	6,500,612
31. Lightspeed Venture Partners VII	Early Stage	02/27/2006	18,000,000	17,737,490	6,375,151
Lightspeed Venture Partners VIII	Early Stage	06/27/2008	15,000,000	13,650,000	11,342,199
32. Media/Communications Ventures Fund V	Growth Equity	09/27/2000	35,000,000	34,812,205	53,978,276
33. Meritech Capital Partners II	Late Stage	01/02/2001	26,475,166	24,842,529	36,426,221
Meritech Capital Partners III	Late Stage	04/05/2006	35,000,000	34,475,000	148,541,444
Meritech Capital Partners IV	Late Stage	02/10/2011	20,000,000	18,300,000	2,995,054
Meritech Capital Partners V	Late Stage	09/03/2014	23,000,000	1,265,000	0
34. Mid-Atlantic Venture Fund III	Early Stage	06/30/1997	20,008,308	20,000,000	5,654,702
Mid-Atlantic Venture Fund IV	Early Stage	05/04/2000	30,000,000	30,246,718	9,177,849

SERS FUND

Investment Program | Portfolio Snapshot | Alternative Investments

Venture Capital Committed, Drawn, and Distributed (continued)

	Active Venture Capital Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
35.	Morgenthaler Partners VII	Balanced	07/26/2001	\$35,000,000	\$35,143,798	\$26,973,415
	Morgenthaler Partners VIII	Balanced	10/03/2005	35,000,000	34,004,696	21,353,695
	Morgenthaler Partners IX	Balanced	11/25/2008	20,000,000	16,000,000	10,221,827
36.	NEPA Venture-II	Balanced	12/31/1992	7,500,000	7,500,000	34,879,769
37.	New Enterprise Associates VI	Early Stage	03/31/1994	25,000,000	25,000,000	200,407,487
	New Enterprise Associates VII	Early Stage	12/31/1996	30,000,000	30,000,000	102,186,705
	New Enterprise Associates IX	Early Stage	11/15/1999	20,000,000	19,600,000	6,543,630
	New Enterprise Associates X	Early Stage	12/11/2000	35,000,000	34,503,000	31,350,264
	New Enterprise Associates 11	Early Stage	03/01/2004	25,000,000	24,500,000	44,650,921
	New Enterprise Associates 12	Early Stage	06/26/2006	35,000,000	34,479,833	28,077,626
38.	Novitas Capital III	Early Stage	04/17/2003	10,000,000	9,675,000	3,924,047
39.	Oak Investment Partners XI	Late Stage	07/21/2004	35,000,000	35,000,000	15,565,248
	Oak Investment Partners XII	Late Stage	07/10/2006	40,000,000	40,000,000	15,753,874
40.	Permira UK Venture Fund IV	Balanced	09/30/1996	15,248,000	15,993,572	23,494,012
41.	Pitango Venture Capital Fund IV	Early Stage	07/19/2004	20,000,000	19,601,534	9,809,664
	Pitango Venture Capital Fund V	Early Stage	08/22/2007	30,000,000	26,963,295	14,796,485
42.	Polaris Venture Partners II	Balanced	09/30/1998	25,000,000	24,750,000	40,118,427
	Polaris Venture Partners III	Balanced	01/21/2000	50,000,000	49,500,000	27,935,600
	Polaris Venture Partners IV	Balanced	09/30/2002	50,000,000	49,750,000	32,145,764
	Polaris Venture Partners V	Balanced	08/08/2006	50,000,000	49,000,000	28,903,318
43.	Quaker BioVentures	Balanced	02/20/2003	20,000,000	20,000,000	3,526,430
	Quaker BioVentures II	Balanced	04/03/2007	25,000,000	21,250,000	9,856,556
44.	SCP Private Equity Partners II	Late Stage	06/15/2000	25,000,000	25,000,000	6,219,887
45.	Sofinnova Venture Partners VII	Early Stage	01/18/2007	20,000,000	18,600,000	18,201,465
46.	Summit Accelerator Fund	Early Stage	11/15/1999	8,000,000	7,609,500	13,127,408
	Summit Partners Venture Capital Fund II	Early Stage	09/22/2006	15,000,000	15,823,703	19,105,860
47.	T. Rowe Price Stock Distribution Account ^{3/}	Late Stage	01/03/2005		See footnote	
48.	Three Arch Capital	Balanced	12/20/2000	20,000,000	19,500,000	12,962,104
	Three Arch Partners IV	Balanced	06/04/2004	20,000,000	19,050,000	8,825,412
49.	TL Ventures IV	Early Stage	05/13/1999	35,000,000	35,000,000	25,582,809
	TL Ventures V	Early Stage	10/18/2000	40,000,000	40,048,219	14,122,113
50.	U.S. Venture Partners VII	Balanced	02/18/2000	13,750,000	13,750,000	4,800,279
	U.S. Venture Partners VIII	Early Stage	06/01/2001	26,250,000	25,830,000	28,701,153

SERS FUND

Investment Program | Portfolio Snapshot | Alternative Investments

Venture Capital Committed, Drawn, and Distributed (continued)

Active Venture Capital Funds Limited Partnership	Strategy/Stage	SERS Initial Funding	Capital Committed ^{1/}	Accumulated Capital Drawn	Accumulated Distributions ^{2/}
51. Weathergag Venture Capital	Fund of Funds	06/26/2007	\$25,000,000	\$22,875,000	\$9,288,524
Weathergag Venture Capital II	Fund of Funds	06/29/2010	25,000,000	18,750,000	488,697
52. Worldview Technology Partners IV	Balanced	01/31/2001	18,130,023	16,951,175	7,034,048
Total Active Venture Capital			\$2,703,943,593	\$2,607,737,696	\$2,089,038,279

Cash flows as of September 30, 2014.

*Not funded as of September 30, 2014.

^{1/}Commitments as of December 31, 2014.

^{2/}Distributions include stock distributions. Distributions may include fees that are recorded as negative distributions to be offset against future distributions of the underlying limited partnership investment.

^{3/}T. Rowe Price acts as a stock liquidation account. All cash and stock distributions are reflected in the corresponding distributions.

SERS FUND

Investment Program | Portfolio Snapshot | Global Public Equity

Asset Class Description

Global Public Equity includes SERS Fund assets held in publicly traded securities of companies throughout the developed world and in emerging markets. These companies have a wide range of market capitalizations in many industries and sectors, and offer vastly different return opportunities.

Global Public Equity is the most highly volatile asset class in SERS Fund, and thus, the largest contributor to total SERS Fund volatility. This asset class contributes a high expected long-term return to SERS Fund but also brings the largest measure of near-term downside risk.

Role in the SERS Fund

The program seeks high total return, which may be accompanied by higher volatility. This asset class offers a high degree of immediate liquidity in normal market conditions and can provide moderate inflation protection.

Program Structure

The Global Public Equity program accomplishes its objective through active and passive ownership of large, mid, and small capitalization stocks worldwide.

The program maintains a neutral profile compared to the composition of the program's benchmark. Regional and capitalization exposures emulate the benchmark. This neutral structure reduces uncompensated risk and makes security selection the primary determinant of excess return performance.

Within the context of benchmark neutrality, the portfolio is organized in a core/satellite structure. In developed markets, core investments include low-cost index funds, which provide equity market exposure in the most efficient regions of the global equity market. In emerging markets, core investments include diverse, actively-managed strategies that provide moderate excess return expectations. The goal of the core portion in less-efficient emerging markets is to capture all available excess returns while controlling risk.

Regardless of region, satellite investments include aggressive investment strategies with moderate-to-high excess return targets. Such investments generally have concentrated exposures. When combined, these investments complement and diversify each other, providing opportunity for more stable, high, risk-adjusted returns.

While passive mandates are routinely employed, the program maintains a moderate bias toward active management, particularly in portions of the equity universe where historical returns have been commensurate with active risk taken. This bias is examined on a periodic basis.

SERS FUND

Investment Program | Portfolio Snapshot | Global Public Equity

Asset Class Benchmark

The objective of the program is to generate annualized total net returns that exceed the benchmark by approximately 100 basis points over a three- to five-year period. Performance is measured and evaluated relative to the MSCI All-Country World Investable Market Index (ACWI-IMI).

Global Public Equity

Manager	Investment Style	Market Exposure as of 12/31/14 ^{1/} (\$ millions)
Global Mandates		
1. Walter Scott & Partners Limited	Growth	\$653.8
Total Global Mandates		653.8
U.S. Equity		
2. Cornerstone Growth	Large-cap growth	356.0
3. Diamond Hill Concentrated	Large-cap concentrated	420.1
4. Emerald Advisers - PA Companies	Small-cap PA companies	446.5
5. Epoch Value	Large-cap value	399.5
6. Iridian Asset Management LLC	Mid-cap private business value	406.2
7. Mellon Capital Management Corp - PA Companies	Small-cap PA companies	278.9
Mellon Capital Management Russell 1000 Index	Russell 1000 Index	2,860.2
Total U.S. Equity		5,167.4
Non-U.S. Developed Markets Equity		
8. Artisan Partners - Global ex U.S.	Global ex-U.S. growth	430.1
9. Harris Associates	Small-cap intrinsic value	483.2
Mellon Capital Management MSCI World ex U.S. Index	MSCI World ex-U.S. Index	1,426.6
10. Morgan Stanley Investment Management Limited-developed ex U.S.	EAFE value	403.4
11. Templeton Investment Counsel - Global ex U.S.	Global ex-U.S. value	592.8
Total Non-U.S. Developed Markets Equity		3,336.1
Emerging Markets Equity		
12. Ashmore EMM	Small-cap value	117.9
13. BlackRock/Emerging Markets Index Non-Lendable Fund	MSCI Emerging Markets Index	143.3
14. Delaware Investment Advisers	Mid/large cap value	252.4
15. GlobeFlex Capital	Small-cap - GARP	80.4
16. Martin Currie Investment Management	All-cap	234.4
Total Emerging Markets Equity		828.4
Total Global Public Equity		\$9,985.7

^{1/} Includes securities and cash, which the manager had available for investment.

SERS FUND

Investment Program | Portfolio Snapshot | Real Assets

Asset Class Description

Real Assets include SERS Fund's investments that predominantly own or develop physical assets and are more correlated to inflation than most other asset classes. There are two categories of investments in this class:

Private Real Assets

- *Private, closed-end, commingled funds and/or limited partnerships* with long-term capital commitments and limited liquidity, including real estate, energy, infrastructure assets, agriculture, timber, mining, water, and other natural resources
- *Investments through separate account relationships* with reasonable levels of liquidity over a 12- to 18-month period
- *Private, open-ended funds* with investor redemption rights with reasonable levels of liquidity over a six- to 12-month period

Public Real Assets

- *REITs* are publicly traded real estate investment trusts.
- *Commodities, listed infrastructure, and master limited partnerships* provide exposure to oil and gas, natural resources, and infrastructure projects.

Role in the SERS Fund

The program is intended to generate competitive long-term returns through capital appreciation and current income. Real Assets generally offer lower volatility than the equity markets and provide at least moderate protection against inflation. The asset class provides significant diversification benefits due to its relatively low correlation to stocks and bonds.

Program Structure

The Real Assets portfolio contains both public and private investments, direct and indirect investments, and investments across a variety of sub-asset classes; however, it is currently dominated by exposure to real estate and commodities. Focus during the plan period is to diversify into other real assets sectors.

SERS FUND

Investment Program | Portfolio Snapshot | Real Assets

Asset Class Benchmark

Performance is measured and evaluated over a three- to five-year period relative to a custom stylized benchmark including market-based sub-asset class indices where available (such as real estate, timber, agriculture), or CPI + 3% where not available, with the various components weighted according to long-term allocation targets within the class.

Real Assets

Manager	Vintage Year	Asset Type	Investment Structure	Fair Value ^v (\$ millions)
Private Energy				
1. Carlyle Energy Mezz Opp Fund	2012	Energy	Limited Partnership	\$35.7
2. Denham Commodity VI	2012	Energy	Limited Partnership	23.3
3. Energy Spectrum Partners IV	2004	Energy	Limited Partnership	0.2
Energy Spectrum Partners V	2007	Energy	Limited Partnership	2.1
4. First Reserve Fund X	2004	Energy	Limited Partnership	0.8
First Reserve Fund XI	2006	Energy	Limited Partnership	32.4
First Reserve Fund XII	2008	Energy	Limited Partnership	40.5
5. Lime Rock Partners III	2004	Energy	Limited Partnership	3.4
Lime Rock Resources	2005	Energy	Limited Partnership	5.2
Lime Rock Partners IV	2006	Energy	Limited Partnership	35.8
Lime Rock Partners V	2008	Energy	Limited Partnership	26.0
6. OCM/GFI Power Opportunities Fund II	2005	Energy	Limited Partnership	1.8
Oaktree Power Opportunities Fund III	2010	Energy	Limited Partnership	13.8
7. SFC Energy Partners I	2007	Energy	Limited Partnership	6.1
SFC Energy Partners II	2011	Energy	Limited Partnership	6.6
Total Private Energy				233.7
Non-Core Real Estate				
8. AG Asia Realty Fund	2007	Diversified	Limited Partnership	8.7
9. Apollo Real Estate Fund III	1998	Diversified	Limited Partnership	1.5
10. Berwind Investment Partnership V	1999	Diversified	Limited Partnership	1.2
Berwind Investment Partnership VI	2002	Diversified	Limited Partnership	5.8
Berwind Investment Partnership VII	2005	Diversified	Limited Partnership	15.2
Berwind Investment Partnership VIII	2007	Diversified	Limited Partnership	12.4
Berwind Investment Partnership IX	2012	Diversified	Limited Partnership	17.5
11. Blackstone Real Estate Partners III	1999	Diversified	Limited Partnership	0.5
Blackstone Real Estate Partners IV	2003	Diversified	Limited Partnership	13.2
Blackstone Real Estate Partners V	2006	Diversified	Limited Partnership	43.4
Blackstone Real Estate Partners VI	2007	Diversified	Limited Partnership	78.9
Blackstone Real Estate Partners VII	2011	Diversified	Limited Partnership	76.7

SERS FUND

Investment Program | Portfolio Snapshot | Real Assets

Real Assets (continued)

	Manager	Vintage Year	Asset Type	Investment Structure	Fair Value ^{1/} (\$ millions)
Non-Core Real Estate (continued)					
12.	Clerestory Small Cap Fund I	2007	Diversified	Limited Partnership	\$11.0
13.	Colony Investors VIII	2007	Diversified	Limited Partnership	5.9
14.	Fillmore East Fund	2005	Debt	Limited Partnership	1.7
	Fillmore West Fund	2008	Debt	Limited Partnership	16.0
15.	Grosvenor Residential Investment Partners I	2007	Residential	Limited Partnership	0.8
16.	Hawkeye Scout Fund I	2006	Diversified	Limited Partnership	22.3
17.	LEM Real Estate High-Yield Debt Fund III	2012	Debt	Limited Partnership	17.8
18.	Lubert Adler Fund III	2000	Diversified	Limited Partnership	0.2
	Lubert Adler Fund IV	2004	Diversified	Limited Partnership	2.5
	Lubert Adler Fund V	2006	Diversified	Limited Partnership	8.1
	Lubert Adler Fund VI	2008	Diversified	Limited Partnership	12.0
	Lubert Adler Fund VII	2014	Diversified	Limited Partnership	1.9
19.	OCM Real Estate Opp Fund III	2003	Diversified	Limited Partnership	3.4
20.	Oxford GSA Fund	2006	Diversified	Limited Partnership	11.7
21.	Prudential Latin America Retail Fund I	2006	Retail	Limited Partnership	23.4
	Prudential Senior Housing Fund III	2006	Senior housing	Limited Partnership	2.9
	Prudential Latin America Residential Fund III	2007	Residential	Limited Partnership	19.6
	Prudential Senior Housing Fund IV	2011	Senior housing	Limited Partnership	20.2
22.	Rockpoint Real Estate Fund I	2004	Diversified	Limited Partnership	0.1
	Rockpoint Real Estate Fund II	2005	Diversified	Limited Partnership	10.7
	Rockpoint Finance Fund I	2006	Diversified	Limited Partnership	1.2
	Rockpoint Real Estate Fund III	2007	Diversified	Limited Partnership	7.9
23.	Starwood Fund IV	1997	Diversified	Limited Partnership	0.2
	Starwood Fund VI	2001	Diversified	Limited Partnership	18.2
	Starwood Fund VII	2005	Diversified	Limited Partnership	17.6
	Starwood Fund VIII	2007	Diversified	Limited Partnership	41.7
24.	Valstone Opportunity Fund	2014	Diversified	Limited Partnership	6.5
25.	Westbrook Fund IV	2000	Diversified	Limited Partnership	0.2
	Westbrook Fund V	2004	Diversified	Limited Partnership	1.3
	Westbrook Fund VI	2005	Diversified	Limited Partnership	14.2
	Westbrook Fund VII	2006	Diversified	Limited Partnership	26.7
	Westbrook Fund VIII	2009	Diversified	Limited Partnership	26.2
Total Non-Core Real Estate					629.1

SERS FUND

Investment Program | Portfolio Snapshot | Real Assets

Real Assets (continued)

	Manager	Vintage Year	Asset Type	Investment Structure	Fair Value ^{1/} (\$ millions)
Core Real Estate					
26.	Fidelity Real Estate Opportunistic Income Fund	2007	Debt	Limited Partnership	\$60.1
27.	Forest I.M.A.	1992	Timber	Separate Account	153.0
28.	Heitman I.M.A.	1988	Diversified	Separate Account	167.7
	Heitman America Real Estate Trust	2007	Diversified	Limited Partnership	151.9
29.	LaSalle I.M.A.	1994	Diversified	Separate Account	329.1
30.	Lowe I.M.A.	1994	Diversified	Separate Account	550.2
	Lowe GTO	2012	Diversified	Separate Account	332.2
31.	UBS Trumbull Property Fund	1988	Diversified	Open-Ended Fund	62.5
	UBS Trumbull Property Income Fund	1988	Diversified	Open-Ended Fund	56.3
Total Core Real Estate					1,863.0
REITs					
32.	CBRE Clarion Real Estate Securities	1996	REITs	Separate Account	289.7
33.	CenterSquare Real Estate Securities	2002	REITs	Separate Account	63.3
Total REITs					353.0
Commodities and Infrastructure					
34.	BAAM Commodities	2007	Commodities	Open-Ended Fund	456.7
35.	Harvest Fund MLP	2013	MLPs	Separate Account	188.6
36.	Kayne Anderson MLP	2013	MLPs	Separate Account	169.6
37.	Wellington DIH	2004	Commodities	Open-Ended Fund	320.7
Total Commodities and Infrastructure					1,135.6
Total Real Assets					\$4,214.4

^{1/}Fair values for Private Energy, Core Real Estate, and Non-Core Real Estate managers reported as of September 30, 2014 and are adjusted for cash flows through December 31, 2014. Fair values for REITs and Commodities & Infrastructure managers reported as of December 31, 2014.

SERS FUND

Investment Program | Portfolio Snapshot | Diversifying Assets

Asset Class Description

The Diversifying Assets program includes investments designed to provide total returns comparable to the total SERS Fund return but with less volatility and lower correlation to other asset classes.

Role in the SERS Fund

The program seeks to provide competitive returns and protect capital in all market conditions by investing in a diverse set of strategies including long/short equity, global macro, relative value, credit, event driven, and other hedge fund strategies—all with attractive long-term, risk-adjusted returns. The program targets a liquidity profile less than that of public equities but significantly more than private equity.

Program Structure

The program contains both direct and fund-of-funds investments, which invest across a wide variety of strategies.

Asset Class Benchmark

Performance is measured and evaluated over a three- to five-year period relative to the HFRI Fund-of-Funds Strategic Index.

SERS FUND

Investment Program | Portfolio Snapshot | Diversifying Assets

Diversifying Assets

	Manager	Investment Style	Market Exposure as of 12/31/14 ^{1/} (\$ millions)
Absolute Return Strategies			
1.	Arden	Fund-of-Funds	\$25.9
2.	Blackstone - Stable Alpha	Fund-of-Funds	54.9
3.	Mesirow Financial	Fund-of-Funds	33.1
4.	Morgan Stanley Alternative Investment Partners	Fund-of-Funds	15.3
5.	PAAMCO	Fund-of-Funds	12.1
6.	Robeco Investment	Fund-of-Funds	0.6
7.	Rock Creek	Fund-of-Funds	13.5
Total Absolute Return Strategies			155.4
Hedged Strategies			
8.	Arden Keystone	Fund-of-Funds	145.9
9.	Blackstone Keystone	Fund-of-Funds	994.1
10.	Entrust Keystone	Fund-of-Funds	313.7
11.	Tiger Keystone	Fund-of-Funds	3.3
Total Hedged Strategies			1,457.0
Direct Investments			
12.	Hoplite Capital	Direct Hedge Fund	21.8
13.	Luxor Capital Partners	Direct Hedge Fund	18.0
14.	MKP Opportunity Fund	Direct Hedge Fund	14.7
15.	Pine River Fund	Direct Hedge Fund	21.1
16.	Samlym Onshore Fund	Direct Hedge Fund	15.9
17.	Stelliam Fund	Direct Hedge Fund	17.1
Total Direct Investments			108.6
Total Diversifying Assets			\$1,721.0

^{1/}Includes securities and cash, which the manager had available for investment.

SERS FUND

Investment Program | Portfolio Snapshot | Fixed Income/Liquidity Reserve

Asset Class Description

Fixed Income includes investments in publicly traded debt obligations of sovereign, quasi-sovereign, and corporate entities. The asset class generates current income and the repayment of principal at maturity. Fixed income investments have substantially lower volatility than equities and most fixed income investments are significantly uncorrelated with equity returns.

The Liquidity Reserve has a distinct mandate to support regular disbursement of SERS Fund obligations and is invested in liquid and short-term instruments either directly or through a fund structure.

Role in the SERS Fund

The program is structured to generate income to pay benefits, provide liquidity to minimize capital impairment risk, reduce volatility in SERS Fund, protect SERS Fund against deflation (via Treasuries) and inflation (via TIPS), and contribute to SERS Fund return when market conditions permit.

Program Structure

There are four key components to the Fixed Income program. The size of each is based on SERS Fund's liabilities and expected cash flows, general liquidity conditions in the capital markets, inflation and economic growth expectations, the risk level of SERS Fund, and current valuations of various fixed income strategies. Components of the program include:

- *Core and Core Plus Fixed Income* provide excess return when performance conditions are favorable, offer varying potential return with a corresponding variance in expected risk, provide capital protection in difficult market conditions, and offer risk mitigation due to low correlation with equity depending on the mix of core and core plus exposures in the composite.
- *Inflation Protection Securities* preserve purchasing power due to high positive correlation to inflation and predominantly includes U.S. Treasury Inflation Protection Securities (TIPS) and some foreign inflation protection securities.
- *Nominal U.S. Treasuries* provide SERS Fund with a deflation hedge and a ready source of liquidity to pay benefits.
- *The Liquidity Reserve* includes cash equivalents and short-duration notes that mature within five years.

SERS FUND

Investment Program | Portfolio Snapshot | Fixed Income/Liquidity Reserve

Asset Class Benchmarks

Performance is evaluated over a five-year period relative to the following benchmarks:

- Fixed Income – Barclays U.S. Aggregate Bond Index
- Liquidity Reserves – BofA ML 3 Month U.S. T-Bill Index

Fixed Income

Manager	Investment Style	Market Exposure as of 12/31/14 ^{1/} (\$ millions)
Core Plus		
1. Brandywine Global	Global Sovereign Credit	\$197.3
2. PIMCO EMD	Emerging Market Debt (liquidating)	0.1
3. OCM Mezzanine Fund	High Yield (liquidating)	0.1
4. Pyramis Global Advisors	Commercial Mortgage-Backed Securities	303.3
5. SEI Structured Credit Fund	High Yield Bank Loans	238.6
6. Stone Harbor	Emerging Market Debt	126.0
Stone Harbor	Global High Yield	196.7
7. W.R. Huff	High Yield (liquidating)	14.6
8. Waterfall Asset Management	Asset-Backed Securities	175.0
Total Core Plus		1,251.7
Core		
9. BNY Mellon Cash Investment Strategies	Barclays Aggregate	1,142.3
10. MacKay Shields Core	Barclays Aggregate	198.2
PIMCO Core	Barclays Aggregate ex. Treasuries	250.4
11. Taplin, Canida & Habacht (TCH)	U.S. Credit	179.8
12. UBS Core Bond	Barclays Aggregate	103.2
Total Core		1,873.9
Global Treasury Inflation Protected Securities (TIPS)		
13. Brown Brothers Harriman	Global TIPS	202.8
14. New Century Advisors	Global TIPS	106.8
15. NISA Investment Advisors	U.S. TIPS	457.9
Total Global Treasury Inflation Protected Securities (TIPS)		767.5
Nominal U.S. Treasuries		
PIMCO U.S. Treasuries	Domestic Treasuries	262.9
16. Wellington U.S. Treasuries	Domestic Treasuries	261.7
Total Nominal U.S. Treasuries		524.6
Total Fixed Income		\$4,417.7

^{1/}Includes securities and cash, which the manager had available for investment.

SERS FUND

Investment Program | Portfolio Snapshot | Fixed Income/Liquidity Reserve

Liquidity Reserve^{1/}

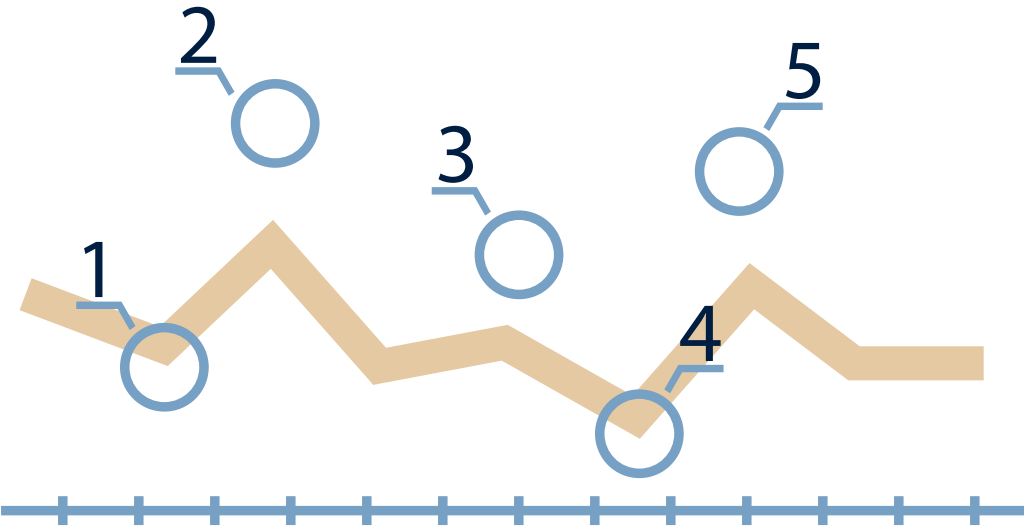
Manager	Investment Style	Market Exposure as of 12/31/14 ^{2/} (\$ millions)
Short-Term Notes		
1. PNC Short Duration	Short Duration Government Credit	\$232.4
2. StoneRidge Short Duration	Short Duration Government Credit	116.4
Total Short-Term Notes		348.8
Cash Equivalent		
3. PA State Treasury (STIF)	Cash	1,190.9
PA Treasury Overnight Cash	Cash	12.8
Total Cash Equivalent		1,203.7
Total Liquidity Reserve		\$1,552.5

^{1/}The SERS Liquidity Reserve is jointly managed by SERS Fixed Income investment staff and the Pennsylvania Treasury.

^{2/}Includes securities and cash, which the manager had available for investment.

SERS Fund

Pennsylvania Investments



SERS FUND

Investment Program | Pennsylvania Investments

Pennsylvania Investments

The board, employees of SERS, and agents of the board stand in a fiduciary relationship to the members and beneficiaries of the system regarding the investments and disbursements of the SERS Fund. Subject to prudent investor investment responsibilities contained in the Retirement Code and the Fiscal Code, the board has exclusive control and management of the SERS Fund and full power to invest the assets of the SERS Fund.

The board adopted a formal *Statement of Investment Policy* in 1979, which was last revised effective October 2014. Where investment characteristics including yield, risk, and liquidity are equivalent, the board's policy favors investments that have a positive impact on the economy of Pennsylvania.

Although the board's fiduciary duty is to SERS' members and beneficiaries, investments in Pennsylvania provide an ancillary and subordinate benefit to the state's economy. The investment policy acknowledges that such benefit, derived from investments in Pennsylvania-based companies or firms employing Pennsylvanians, should be considered after other primary fiduciary investment characteristics are satisfied.

Fair value of Pennsylvania investments as of December 31, 2014, was approximately \$1.2 billion, or 4.3% of the SERS Fund.

Pennsylvania Investments by Asset Class

(\$ millions)

Asset Class	Total PA Fair Value
Alternative Investments	\$157.4
Global Public Equity	778.0
Real Assets	184.2
Fixed Income & Liquidity Reserve	38.5
Total Pennsylvania Investments	\$1,158.1

SERS FUND

Investment Program | Pennsylvania Investments

SERS' investment portfolios have historically held investments in Pennsylvania firms, as some large national firms are headquartered in Pennsylvania, including Comcast Corporation (Philadelphia-communications), PNC Financial Services (Pittsburgh-financial), Air Products & Chemicals, Inc. (Allentown-basic materials), and PPG Industries Inc. (Pittsburgh-basic materials). In addition, SERS has invested in portfolios that are designed to give emphasis to investments in Pennsylvania while meeting the fiduciary standards.

Alternative Investments

SERS' Alternative Investments program dates back to 1985. Initially the program targeted a 1% allocation to venture capital with a focus to invest with managers located in Pennsylvania or with managers who had Pennsylvania investment mandates. Over its life, the program has grown to include national and international based private equity, special situation, and venture capital managers. Since inception, SERS' Alternative Investments program has made commitments of over \$1.2 billion to 65 limited partnerships based in Pennsylvania. In addition, the number of non-Pennsylvania based managers investing in companies that impact the state comprises a meaningful portion of the program.

As of December 31, 2014, SERS' active Alternative Investments managers held investments in 120 Pennsylvania-based companies. SERS' pro-rata investment value in these companies is approximately \$157.4 million. This equates to 3.0% of the Alternative Investments program fair value and does not include investments headquartered outside of Pennsylvania that may have impactful operations within the state.

Global Public Equity

Emerald Advisors of Lancaster and Mellon Capital Management Corporation actively manage portfolios principally derived from the mid/small cap stocks in SERS' Pennsylvania stock universe. These two portfolios, plus the Pennsylvania stocks held in SERS' other stock portfolios, invested \$778 million in Pennsylvania stocks.

SERS' Pennsylvania stock universe is comprised of 358 publicly-traded corporations which:

- Name their headquarters as Pennsylvania and have Pennsylvania employees or operations
- Have Pennsylvania-based employment exceeding 25% of total corporate employment

SERS FUND

Investment Program | Pennsylvania Investments

Top-Performing Pennsylvania Stocks

Company	Location	Return for 2014
INNOVATIVE DESIGNS INC Innovative Designs, Inc. is a development stage company seeking to sell products for the recreation industry that are made from eliotex, a thin, lightweight material that has buoyancy and thermal resistant characteristics.	Pittsburgh	479%
OMEGA FLEX INC Omega Flex, Inc. manufactures flexible metal hose. The company's product is used in a variety of applications to carry gases within residential and commercial buildings, vibration absorbers in high vibration applications, and other types of gases and fluids in a number of industrial applications.	Exton	88%
AUXILIUM PHARMACEUTICALS INC Auxilium Pharmaceuticals, Inc. is a biopharmaceutical company. The company develops and markets therapeutics to urologists, endocrinologists, orthopedists, and select primary care physicians.	Chesterbrook	66%
ORASURE TECHNOLOGIES INC OraSure Technologies, Inc. develops, manufactures, and markets medical devices and diagnostic products. The company supplies oral fluid collection devices and assays to the life insurance industry and public health markets for the detection of antibodies to HIV. OraSure also supplies oral fluid testing solutions for drugs-of-abuse testing.	Bethlehem	61%
CROSSAMERICA PARTNERS CrossAmerica Partners LP wholesales motor fuels. The company offers gasoline and diesel fuel and leases real estate used in the retail distribution of fuels. Lehigh Gas Partners focuses on leasing sites in Pennsylvania, New Jersey, Ohio, Florida, New York, Massachusetts, Kentucky, New Hampshire, and Maine.	Allentown	51%
RITE AID CORP Rite Aid Corporation operates a retail drugstore chain in various states and the District of Columbia. The company's stores sell prescription drugs, as well as other products such as nonprescription medications, health and beauty aids, and cosmetics.	Camp Hill	49%
HFF INC HFF, Inc. provides commercial real estate and capital markets services to the commercial real estate industry in the United States. The company provides capital markets services such as debt placement, investment sales, structured finance, private equity investment banking and advisory services, note sales and advisory services, and commercial loan servicing.	Pittsburgh	43%
CUBESMART CubeSmart is a self-administered and self-managed real estate company that owns, operates, acquires, and develops self-storage facilities in the United States.	Wayne	43%
UGI CORP UGI Corporation distributes and markets energy products and services. The company is a domestic and international distributor of propane. UGI also distributes and markets natural gas and electricity, and sells related products and services in the Middle Atlantic region of the United States.	King of Prussia	41%
UNIVERSAL HEALTH SERVICES Universal Health Services, Inc. is a healthcare management company. The company operates acute care hospitals, behavioral health centers, and surgery centers. Universal provides services such as general surgery, internal medicine, radiology, and pediatric services throughout the United States and Puerto Rico.	King of Prussia	37%

SERS FUND

Investment Program | Pennsylvania Investments

Real Assets

In 1987, SERS began investing directly in the Pennsylvania commercial real estate market and subsequently established two separate account real estate portfolios managed by Heitman Capital Management and Grosvenor Investment Management, formerly Legg Mason Real Estate Services, with a Pennsylvania focus. The Heitman separate account originally had a requirement to invest on a best-efforts basis 50% of its initial allocation within the commonwealth while the Grosvenor account is focused primarily on investing within the state.

As of December 31, 2014, the SERS real estate portfolio contained 39 Pennsylvania investments totaling 2.8 million square feet of office, retail, and warehouse space as well as 5,057 apartment, hotel, and senior housing units.

The gross fair value of the Pennsylvania real estate portfolio investments totaled \$1.3 billion, of which SERS' ownership share was \$184.2 million.

Fixed Income and Liquidity Reserve

SERS had approximately \$38.5 million invested, as of December 31, 2014, in corporate securities issued by Pennsylvania-based companies. These securities are held in SERS' various externally managed bond portfolios.

In 1998, the SERS Board approved the funding for the Pennsylvania Capital Fund with a \$50 million allocation to the program. The program commenced in March 1999 and was managed by Berwind Financial Group (Berwind) and PNC Equity Management (PNC). Each manager was awarded a commitment of \$25 million to be invested over four years. Both entities matched SERS' investment. The program provided debt financing to support the expansion and growth of Pennsylvania's small businesses.

SERS FUND

Investment Program | Pennsylvania Investments

The fund's objective was to lend to established, profitable companies in good financial condition with annual revenues ranging from \$10 - \$100 million. The majority of the fund's investments had a maturity of between five and 10 years. Loan amounts usually ranged from \$2 million to \$15 million. As of December 31, 2014, SERS' portion of both the Berwind and PNC investments had matured and all capital was returned to SERS.

SERS is one of the largest investors in the Pennsylvania Treasury Department's short-term investment pool. The fund also has Pennsylvania exposure with various other asset managers.

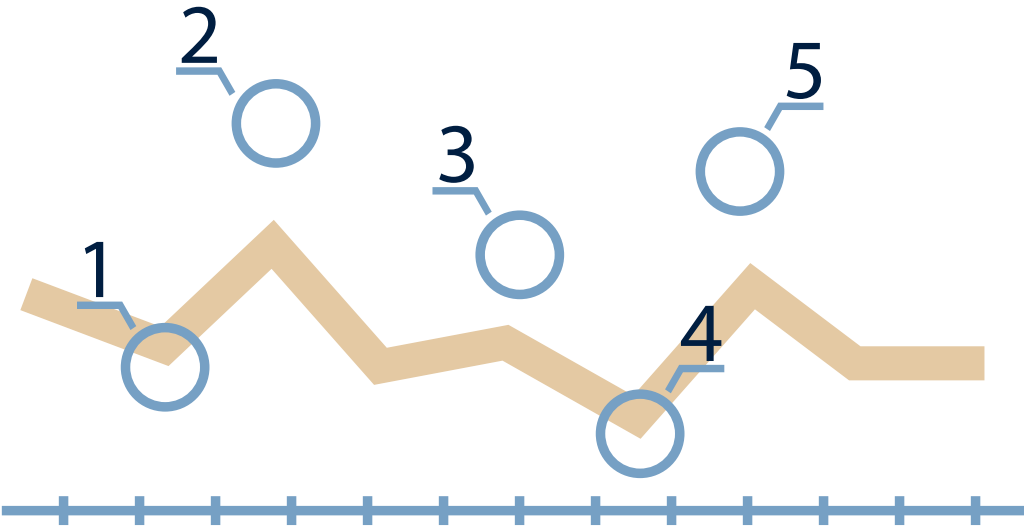
Pennsylvania Investments - Fixed Income & Liquidity Reserve

(\$ millions)

Manager	Fair Value
Pyramis Global Advisors	\$8.2
Taplin Canida Habacht (TCH)	7.9
BNY Mellon Cash Investment Strategies	7.8
Stone Harbor	6.4
PIMCO Core	6.0
MacKay Shields Core	1.1
UBS Core Bond	1.1
Total Pennsylvania Investments - Fixed Income & Liquidity Reserve	\$38.5

SERS Fund

Minority/Woman-Owned Managers and Brokers



SERS FUND

Investment Program | Minority/Woman-Owned Managers and Brokers

Minority/Woman-Owned Investment Managers

The following minority- or woman-owned firms were under contract with SERS to provide investment advisory services as of December 31, 2014:

Firm	Status	SERS Assets Under Management
GlobeFlex Capital, L.P.	Minority/Woman-Owned	\$80.4 million market value
Hawkeye Partners	Woman-Owned	\$105.0 million committed; \$77.0 million funded
New Century Advisors	Woman-Owned	\$106.8 million market value
Rock Creek (Penn Quarter, L.P.)	Minority/Woman-Owned	\$13.5 million market value
StoneRidge Investment Partners	Minority/Woman-Owned	\$116.4 million market value
Taplin Canida & Habacht, Inc.	Minority/Woman-Owned	\$179.8 million market value

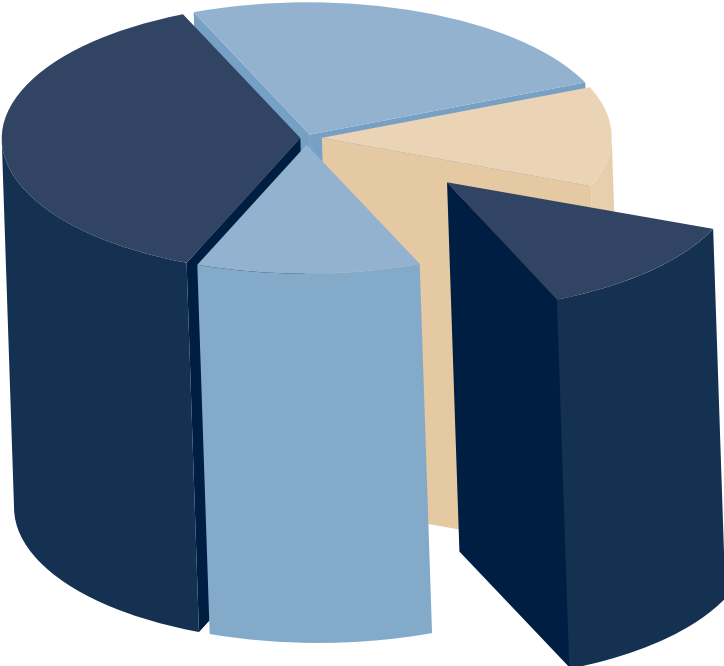
Minority/Woman-Owned Brokers Brokerage Commissions

The table to the right lists the minority/woman-owned brokerage firms utilized by SERS' external investment managers during calendar year 2014.

The board seeks to have advisors direct trades through minority/woman-owned firms and reserves the right to establish proposed trading targets. However, the responsibility for the selection and use of minority brokerage firms is delegated to the investment advisors. Minority/woman-owned brokerage firms' commissions totaled \$264,617 for the year. It is estimated this year that SERS' U.S. equity managers directed 6.3% of their trades through minority/woman-owned brokerage firms. Fixed Income and Liquidity Reserve managers traded a combined \$109.8 million of securities through minority/woman-owned brokerage firms.

Firm	Minority/ Woman-Owned Commissions
Cabrera Capital	\$16,583
C. L. King Directed	21,061
Drexel Hamilton	9,110
East Wing Securities	803
Greentree Brokerage	27,288
Lebenthal	2
Loop Capital	21,796
M. Ramsey King	32,454
Mischler Direct	27,344
MR King Securities	16,128
North South Capital	3,550
Ramirez	2
Seslia Securities	15,349
Sturdivant & Company	49,538
Susquehanna Direct	2,574
Telsey Advisory	8,116
Valdes & Moreno	12,917
Williams	2
Total Minority/Woman-Owned Commissions	\$264,617

Deferred Compensation Program



DEFERRED COMPENSATION PROGRAM

History, Growth & Highlights

As indicated earlier in this book, the Pennsylvania State Employees' Retirement System administers two retirement plans to help safeguard the financial security of the commonwealth's public workforce in its retirement years. Most state employees are required to participate in Pennsylvania's defined benefit plan. Most employees who are eligible to participate in the defined benefit plan may choose to augment their retirement savings by also voluntarily participating in the deferred compensation program (DCP).

The economic engine of the defined benefit plan is the SERS Fund, which is reviewed in-depth in the previous section. Details about DCP are provided here.

DCP History

Act 1987-81 charged the SERS Board with establishing and managing a deferred compensation program for the commonwealth's employees and officers. DCP allows employees to voluntarily build retirement savings and achieve certain tax advantages by deferring a portion of their salaries to selected investment options.

DCP was established as a trust and is administered in accordance with Internal Revenue Code Section 457(b). The array of investment options from which participants may choose is examined, selected, and overseen by the SERS Board.

SERS uses a competitive request-for-proposals process to retain a third-party administrator for DCP. Responsibilities of the third-party administrator include, but are not limited to, marketing DCP, maintaining participant records, and counseling participants with regard to the benefit offered. The most recent competitive process was conducted and a contract was awarded in 2013 to Great-West Financial, which has retained this role since 2003. In 2014, Great-West Financial changed their name to Empower Retirement.

The cost of administering DCP is extremely low and is borne solely by participants, using no commonwealth funds.

In 2012, DCP began accepting deferrals into designated Roth accounts. Participants pay federal income tax on the amount of their Roth deferrals at the time of investment and then qualified distributions from their Roth accounts are tax-free in retirement.

In October 2014, the plan document was amended to allow in-plan conversions of assets to Roth assets.

DEFERRED COMPENSATION PROGRAM

History, Growth & Highlights

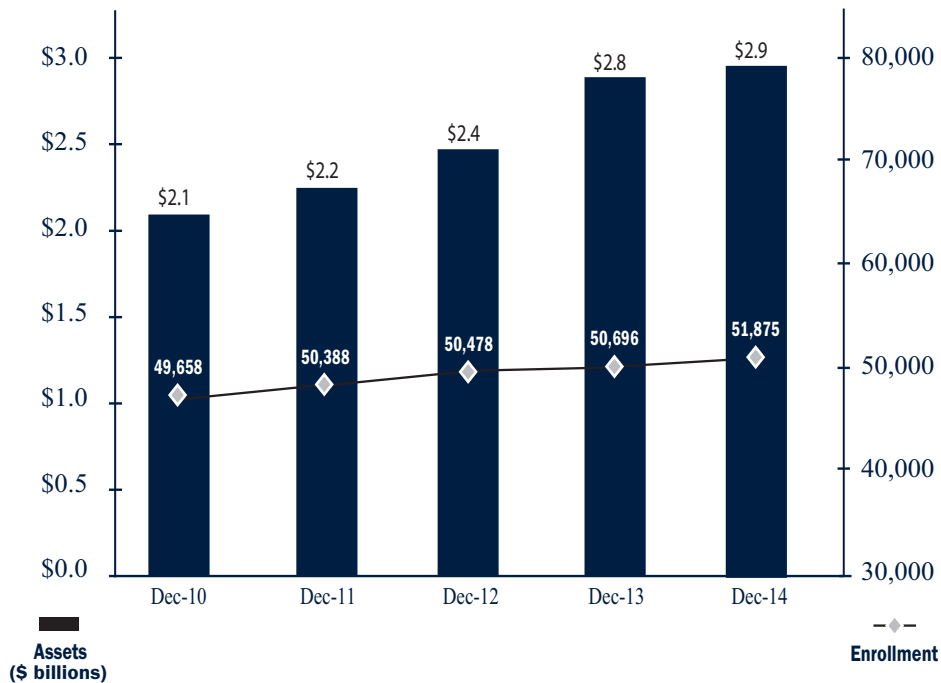
Growth of DCP

In 2014, more than 51,000 participants had saved approximately \$2.9 billion in DCP.

As of December 31, there were 32,035 active and 19,840 inactive participants in DCP. From 2010 to 2014, annual deferrals have ranged from \$122 million to \$136 million per year and total fund value grew from \$2.1 billion to approximately \$2.9 billion.

When employees leave state service, they gain access to the amount they have saved, including the earnings and/or losses on their investments. Benefit payments have grown from \$49 million in 2010 to \$75 million in 2014.

DCP Assets & Enrollment



DEFERRED COMPENSATION PROGRAM

History, Growth & Highlights

DCP Highlights

In DCP, employees may elect to have any sum they choose—as little as \$5 biweekly up to IRS limits— withheld from their pay to save for retirement and achieve certain tax advantages. They may change the amount of their deferrals at any time and it is up to each DCP participant to allocate their investments among the options provided. Once money is invested in DCP, it must remain until an employee leaves state service or an emergency situation exists that is within code parameters.

To assist DCP participants, Empower Retirement offers individual and group counseling sessions at worksites statewide as well as in their downtown Harrisburg walk-in office.

Counselors are also available via a toll-free telephone service. In addition to providing personal assistance, the toll-free line offers a host of automated selections including providing account balances and allowing participants to transfer funds among investment options.

Empower Retirement manages a website that allows participants to view their investment position, change their deferral amounts, transfer money among investment options, change their future allocation, update their beneficiaries, and more. Free educational videos are also available on financial, investment, and retirement topics.

DCP Deferrals by Year
(\$ millions)

