Commonwealth of Pennsylvania
State Employees' Retirement System

Comprehensive Annual Financial Report

For the year ended December 31, 2012

12

A Component Unit of the Commonwealth of Pennsylvania

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State Employees' Retirement System

Comprehensive Annual Financial Report

For the year ended December 31, 2012

Prepared by the staff of the
Pennsylvania State Employees' Retirement System

David E. Durbin
Executive Director

Anthony J. Faiola
Chief Financial Officer

State Employees' Retirement System
30 N 3rd St, Suite 150
Harrisburg, PA 17101-1716

A Component Unit of the Commonwealth of Pennsylvania

Commonwealth of Pennsylvania
State Employees' Retirement System
30 N 3rd St, Suite 150
Harrisburg, Pennsylvania 17101-1716
Telephone: 717-787-9657
www.SERS.state.pa.us

May 31, 2013

The Honorable Tom Corbett
Governor, Commonwealth of Pennsylvania

The Honorable Senators and Representatives
Pennsylvania General Assembly

The Esteemed Current and Retired Commonwealth Employees

Dear Governor Corbett, Senators, Representatives, and SERS Members,

On behalf of the 11-member Board of the Pennsylvania State Employees' Retirement System (SERS or System), I am pleased to provide you with SERS' calendar year 2012 Comprehensive Annual Financial Report (CAFR).

I hope you will find this financial, investment, actuarial, and statistical material to be both interesting and useful. As you may know, SERS is not legally required to produce a CAFR. We do so in the interest of public transparency and accountability, and as a part of our continuing effort to provide accurate, meaningful information to policy makers and SERS members. Moreover, this publication satisfies the legal requirement that SERS publish independently audited financial statements on or before July 1 of each year.

The information in the CAFR confirms that the funds entrusted to SERS are carefully managed. Indeed, in 2012 the SERS fund achieved a 12% return — well exceeding the System's 7.5% assumed rate. Taxpayers and policy makers can remain confident that rigorous control and oversight are exercised in the administration of these public funds. Active and retired SERS members can be reassured that their retirement System is well managed.

In 2012, SERS recognized the final portion of investment losses suffered in 2008 and employer contributions continued to be well below actuarially required rates, adding to the unfunded liability. As of December 31, 2012, on an actuarial basis, the SERS Fund was only 59% funded, down from 65% the previous year.

We recognize that the increasing pension burden on public funds is significant and troubling, particularly given very real and formidable fiscal constraints. Pension systems are long-term propositions — in addition to employer contributions, employee contributions, and investment earnings, time is an important component of the equation. For the $566 million in employer-provided funding in 2012—less than half of which came from the Commonwealth's General Fund—SERS returned $2.4 billion to Pennsylvania's economy in benefit payments to our retired members.

Provided that SERS achieves its assumed rate of return over time, the increasing employer contributions and lower cost of benefits for new employees provided in Act 2010-120 offer an, admittedly, slow but predictable path back to full funding. It will take decades but—with determination and discipline—SERS will return to a healthy funded status.

As I provide you with this CAFR, I would also like to commend SERS' professional men and women who work hard every day to serve Commonwealth employees and retirees. Retirement counselors, investment professionals, auditors, accountants, information technology professionals and others strive to provide careful stewardship of public dollars and exceptional service to those who have dedicated their careers to the citizens of Pennsylvania. Some of their accomplishments include processing retirements, on average, 25% faster than the legal timeframe; achieving 100% divestment from scrutinized companies doing business in Iran and Sudan; reducing investment fees by nearly 42% over the past four years; and maintaining recognition from the Government Finance Officers Association with a Certificate of Achievement for Excellence in Financial Reporting.

Thank you for your interest in the State Employees' Retirement System. I assure you that the SERS Board and SERS professionals will continue to administer the System with tenacity and integrity.

Respectfully,

Nicholas J. Maiale
Chairman of the Board

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Certificate of Achievement for Excellence in Financial Reporting

Presented to

Commonwealth of Pennsylvania State Employees' Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended December 31, 2011

A Certificate of Achievement for Excellence in Financial Reporting is presented by the Government Finance Officers Association of the United States and Canada to government units and public employee retirement systems whose comprehensive annual financial reports (CAFRs) achieve the highest standards in government accounting and financial reporting.

GOVERNMENT FINANCE OFFICERS ASSOCIATION OF THE UNITED STATES AND CANADA CORPORATION SEAL CHICAGO

Christopher P Morrill

President

Jeffrey R. Esser

Executive Director

PPCC

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2012

Presented to

Pennsylvania State Employees' Retirement System

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle

Alan H. Winkle
Program Administrator

Commonwealth of Pennsylvania
State Employees' Retirement System
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May 31, 2013

The Honorable Nicholas J. Maiale
Chairman, State Employees' Retirement Board
Commonwealth of Pennsylvania
30 North Third Street, Suite 150
Harrisburg, Pennsylvania 17101

Dear Mr. Chairman and Members of the Board,

We are pleased to provide you with this Comprehensive Annual Financial Report (CAFR) for the Pennsylvania State Employees' Retirement System (SERS) for the calendar year ended December 31, 2012. While SERS is not legally required to produce a CAFR, we do so as part of our strong commitment to transparency and accountability to our members, the public, and Pennsylvania's policymakers.

KPMG conducted an independent audit of SERS' 2012 financial statements, which are prepared in accordance with generally accepted accounting principles. Their audit includes tests and procedures designed to assure that SERS' financial statements are fairly presented. External auditors have full and unrestricted access to you and the Board to discuss their findings concerning the adequacy of SERS' internal controls and the integrity of SERS' financial reporting. We are pleased to report that SERS received an unqualified opinion (see financial section).

As you know, founded in 1923, SERS is a component unit of the Commonwealth of Pennsylvania that provides a cost-sharing, multiple-employer pension plan for public employees. In 2012, SERS served 105 employers as well as more than 117,000 retirees and 106,000 active members (see statistical section).

The health of the SERS Fund has shifted dramatically over the past 20 years. Growing from nearly 107% funded in 1993 to a peak of 132% funded in 2001. The surplus turned to a deficit in 2005 when funded status dipped to a still-healthy 96%. In 2010, however, the funded status fell to 75%, below the generally accepted measure of health: 80%.

To adapt to current realities and in an effort to help reverse the troubling trend, SERS adopted a new investment plan in 2012. The plan established a strategic asset allocation considered by the Board to be optimal for achieving the Fund's objectives over a five- to ten-year investment horizon. Key themes of the plan include reorganization, rebalancing and liquidity. Through a series of incremental and opportunistic rebalancing activities, the SERS Fund earned a 12% return and closed the year with a balance of $25.4 billion. A key driver of this year's positive return was the global public equity asset class, which earned more than 17% (see investment section).

Despite the positive performance in 2012, however, SERS' unfunded liability grew to $17.8 billion and SERS' actuarially funded status declined from 65.3% in 2011 to 58.8% at year-end 2012. Two main factors are responsible for the decline: recognition of the final 20% of 2008's unprecedented investment losses and continued employer underfunding as mandated by Pennsylvania Act 2010-120 (see management discussion and analysis).

2012 CAFR Transmittal Letter - pg 2

If there is any "encouraging" news in this situation, it is that:

- In 2012, the investment portfolio's ability to significantly surpass SERS' 7.5% return assumption slowed the growth of the unfunded liability by $158 million; and

- The current projected growth in the employer contribution rate, as provided by Act 2010-120, is expected to help SERS' funded status to steadily recover beginning FY 17/18.

Other notable activity in 2012 included fully operationalizing Act 2010-120, which—among other provisions—reduced the benefit accrual rate; increased retirement age; and extended the vesting period for employees hired on or after January 1, 2011. Key funding provisions of Act 2010-120 include keeping the employee contribution rate at 6.25%; instituting a 'shared-risk' provision by which employees can pay more if the Fund's investments fail to meet return targets; re-amortizing SERS' liabilities for 30 years; and capping the growth of employer contributions.

In addition, SERS began to implement the provisions of Act 2012-181, which brought the State Employees' Retirement Code into compliance with the federal Uniformed Service Employment and Reemployment Rights Act of 1994, the Heroes Earnings Assistance and Relief Tax Act of 2008, and the Internal Revenue Code. Act 2012-181 also allows the purchase of non-intervening military service for post-Act 2010-120 members at the pre-Act 2010-120 formula.

We are solely responsible for the contents of this report, however, we do wish to acknowledge the significant contributions of many SERS professionals whose work to compile, quality assure, and produce it are essential. Moreover, we are mindful of and thankful for the nearly 200 SERS employees whose daily work enables SERS to maintain effective internal controls that assure assets are safeguarded, transactions are properly executed, and financial statements conform to generally accepted accounting principles while providing effective, high-quality member services.

In addition to assisting with SERS' annual independent audits and preparation of this CAFR, these are the same professionals whose day-to-day hard work has rightly earned SERS the Public Pension Coordinating Council Standards Award for SERS' "high level of plan design, funding, member communications and administrative practices" as well as a Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association of the United States and Canada.

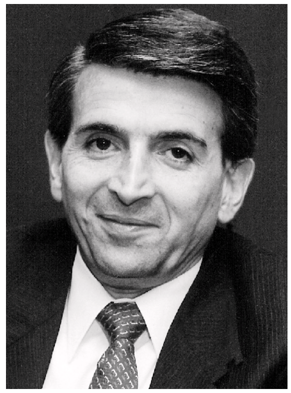
As you know, there is currently significant debate among the state's policymakers about the System and level of retirement benefits that is appropriate to provide for Commonwealth employees. Among the myriad proposals are those that call for even greater underfunding of the current system and replacing the current system with a 401(k) style plan for newly hired employees. Even amidst the uncertainty, we—and every member of our staff—will continue to ensure that SERS provides accurate, accountable, prudent, and careful stewardship of the assets entrusted to us by public employees and taxpayers.

Respectfully submitted,

David E. Durbin
Executive Director

Anthony J. Faiola, CPA
Chief Financial Officer

Honorable Nicholas J. Maiale
Chairman



Honorable Robert A. Bittenbender
Former State Secretary of the Budget

David R. Fillman
Executive Director, AFSCME Council 13

Honorable Dan B. Frankel*
State Representative

Honorable Robert W. Godshall
State Representative

**Appointed to the Board January 22, 2013.*

Honorable Vincent J. Hughes

State Senator

Honorable Robert M. McCord

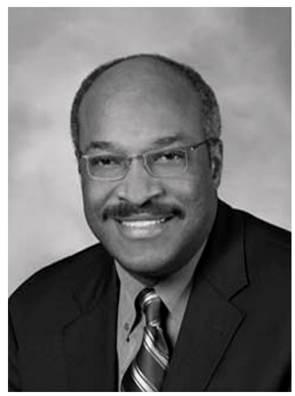
State Treasurer

Honorable Charles T. McIlhinney, Jr.

State Senator

Oliver C. Mitchell, Jr.

Attorney



Wallace H. Nunn

Retired

Honorable M. Joseph Rocks

Retired Member and Former State Senator

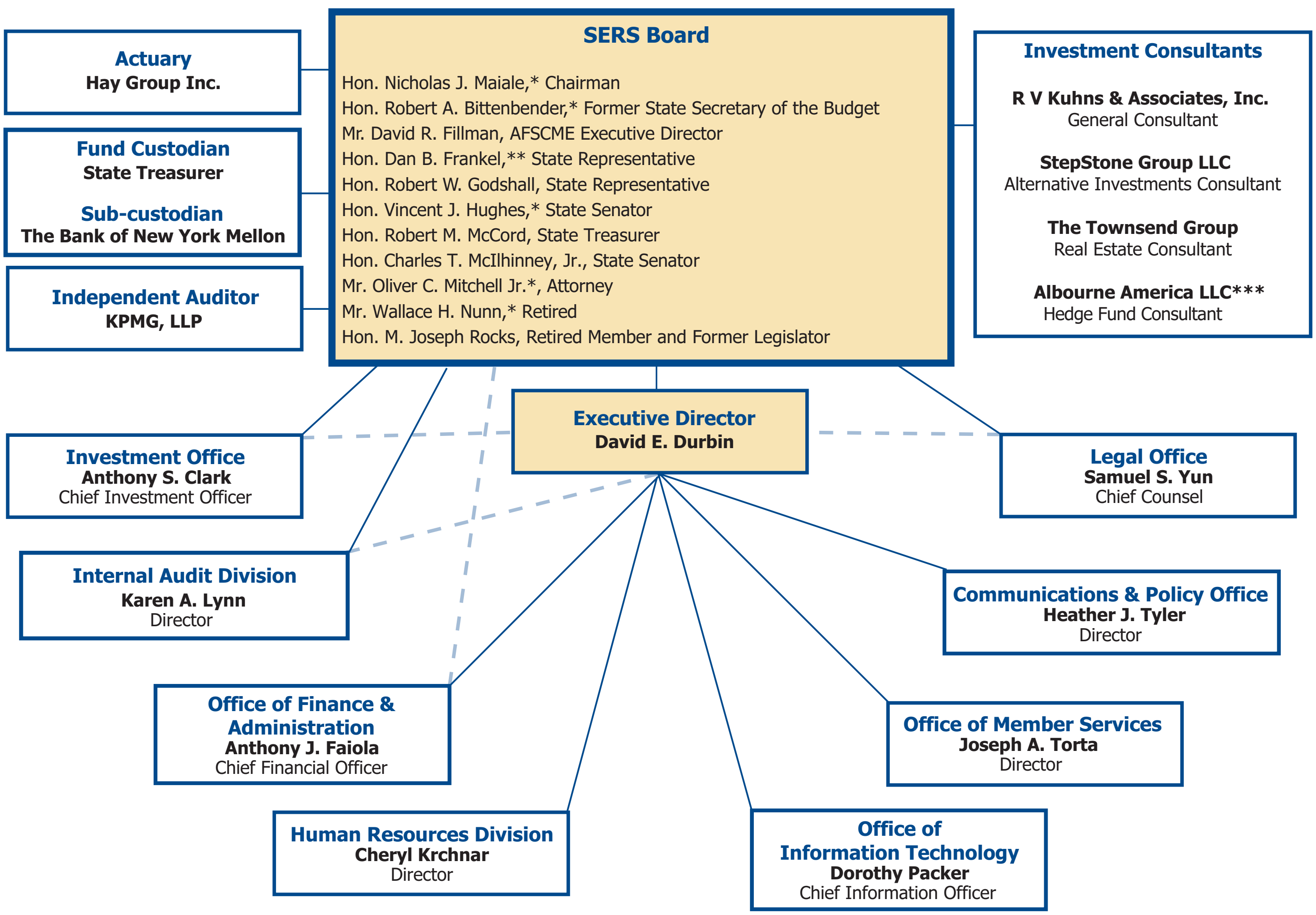
SERS' Vision

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

SERS' Mission

To provide retirement benefits and services to our members through sound administration and prudent investments.

SERS' Organizational Chart



Organizational chart reflects the Board members as of December 31, 2012
* Audit Committee Member
** Appointed to the Board January 22, 2013
*** Contract finalized 1/11/13

Financial Section

KPMG

KPMG LLP
Suite 1000
30 North Third Street
PO Box 1190
Harrisburg, PA 17108-1190

Independent Auditors' Report

The Members of the Board
Commonwealth of Pennsylvania
State Employees' Retirement System:

Report on the Financial Statements

We have audited the accompanying statements of plan net position of the Commonwealth of Pennsylvania State Employees' Retirement System (the System), a component unit of the Commonwealth of Pennsylvania, as of and for the years ended December 31, 2012 and 2011, and the statements of changes in plan net position and the related notes to the financial statements for the years then ended.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the System's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the plan net position of the Commonwealth of Pennsylvania State Employees' Retirement System as of December 31, 2012 and 2011, and its changes in plan net position for the years then ended in accordance with U.S. generally accepted accounting principles.

KPMG

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the Management's Discussion and Analysis on pages 3–9 and Required Supplementary Information Schedules 1 and 2 on page 23 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audit was conducted for the purpose of forming an opinion on the System's basic financial statements taken as a whole. The Supplementary Information (Schedule of Administrative Expenses and Summary of Investment Expenses and Consultant Fees) on pages 24–25 are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Supplementary Information (Schedule of Administrative Expenses and Summary of Investment Expenses and Consultant Fees) are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Supplementary Information (Schedule of Administrative Expenses and Summary of Investment Expenses and Consultant Fees) are fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory section, investment section, actuarial section and statistical section as listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

KPMG LLP

Harrisburg, Pennsylvania
May 15, 2013

This section presents Management's Discussion and Analysis of the Pennsylvania State Employees' Retirement System's (the System or SERS) financial statements and the significant events and conditions which affected the operations and performance of the System during the years ended December 31, 2012, 2011, and 2010.

The Management's Discussion and Analysis includes forward-looking statements that involve certain risks and uncertainties. Actual results and performance may differ materially from those expressed or implied in the forward-looking statements due to a wide range of factors including: changes in securities markets, general economic conditions, interest rates, energy policies, legislation and global conflicts.

Overview of the Financial Statements and Accompanying Information

(1) **Fund Financial Statements.** The System presents Statements of Plan Net Position as of December 31, 2012 and 2011 and Statements of Changes in Plan Net Position for the years then ended. These statements reflect resources available for the payment of benefits as of year end, and the sources and uses of those funds during the year.

(2) **Notes to Financial Statements.** The notes to financial statements are an integral part of the financial statements. We encourage readers to review them because the additional detail will provide a better understanding of the financial statements. The notes provide information about the System's organization, benefits and contributions, how asset values are determined, the limited use of derivatives in managing the System's assets, contingencies and commitments, actuarial methods, assumptions, and funding.

(3) **Required Supplementary Information.** The Required Supplementary Information consists of:

- This Management's Discussion and Analysis;
- A schedule reflecting the funding progress of the System; and
- A schedule showing the employer-required contributions in dollars and percentage.

(4) **Other Supplementary Information Schedules.** Other schedules include detailed information on administrative expenses incurred by the System, a breakout of investment related expenses, and fees paid to consultants for professional services.

Financial Analysis

The System provides retirement benefits to the employees of the Commonwealth of Pennsylvania and certain other public agencies. The System's benefits are funded through member and employer contributions and investment income. The net position of the System increased approximately $1.0 billion for the year ended December 31, 2012 compared to a decrease of approximately $1.5 billion for the year ended December 31, 2011, as reflected in the table on page 9. As the global markets continue to recover from the 2008 recession, so does SERS' investment program (Fund), as it earned an annual rate of return of 11.9% for 2010. The 2011 return dipped to 2.7% but recovered in 2012 with a return of 12.0%. The System's 2012 actuarial funded status of 58.8% decreased from 65.3% in 2011 mainly due to recognizing the final portion of investment losses suffered in 2008 and employer contributions capped significantly below actuarially required rates. By comparison, as reported in the Wilshire Associates' ***2012 Wilshire Report on State Retirement Systems***, a compilation of 2012 data on 134 state pension plans, the average funding level of state plans was 72%.

Every five years, the System is required to undergo an actuarial experience study to determine whether the assumptions used in the annual actuarial valuation are representative of current and anticipated trends. The latest ***17th Investigation of Actuarial Experience*** study for the period 2006–2010 was released in January 2011. The actuary, with the Board's oversight, reviewed economic assumptions such as the assumed future investment returns on Fund assets and salary increases as well as demographic assumptions regarding turnover, retirement, disability, and death rates. While some of the changes in assumptions increase the projected cost of the System and some decrease the cost, overall adoption of the recommended assumptions will slightly lower costs, due primarily to the slower expected pace of future salary increases.

Economic assumption recommendations resulting from the experience study included keeping the targeted investment return rate assumption at 8.0%; decreasing the inflation rate from 3.0% to 2.75%; and decreasing the general salary growth rate from 3.3% to 3.05%. In addition to the five-year experience study, every year as part of the annual valuation, SERS reviews its investment return assumption taking into account the latest economic conditions. These reviews resulted in a recommendation and adoption by the Board of the actuarial assumed rate of return on assets to be reduced to 7.5% from 8.0% for the 2011 and 2012 actuarial valuations.

Most of the demographic assumptions were similar to or the same as experienced in the last five years, with two exceptions. First, the actuary recommended to add a margin to the annuitant mortality rates to anticipate continued improvement in mortality. The SERS experience showed some signs that the continuous improvement in mortality may have paused, with higher than expected mortality at both younger (under 55) and older (over 90) ages. Second, it is assumed that the rate of disability retirements will be lower, but not as large a decrease in rates as observed during the last five years. Therefore, the disability rate should be set at 85% of the experience rather than 100%.

The Board adopted the actuarial assumptions set forth in the ***17th Investigation of Actuarial Experience*** at the January 2011 meeting. The complete report can be viewed at www.SERS.state.pa.us.

Biennially, the System reviews and modifies, as necessary, its strategic investment plan. This process enables the System to position itself to respond to changing dynamics and fulfill its primary mission of meeting its benefit obligations to the System's members. A restructuring of the investment strategy is underway with an emphasis on liquidity, as outlined in the ***2012-2013 Strategic Investment Plan***. The restructuring was driven by the fact that benefit expenses, including refunds of contributions, were expected to rise in the future. Benefit expenses were $2.4 billion in 2010 and increased 13% to $2.7 billion in 2011 and 2012.

Funded Ratio

The System's funded ratio measures the ratio of actuarially determined assets against actuarial liabilities; which is a good indicator of a pension fund's fiscal strength and ability to meet its obligations to its members. The System is required by statute to perform an annual actuarial valuation. The actuarial process to develop the funded ratio is highly dependent on estimates and assumptions, particularly those regarding investment returns, salary growth, inflation, and demographics. In addition, statutorily mandated methods, such as amortization periods, affect employer contribution rates and the funded ratio of the System. The System's funded ratio as of December 31, 2012 was 58.8%, a decrease from 65.3% at December 31, 2011 and 75.2% at December 31, 2010. The funded ratio of the System changed due to a decrease in actuarial assets and an increase in actuarial liabilities.

Actuarial assets decreased from $27.6 billion at December 31, 2011 to $25.3 billion at December 31, 2012 for an 8.3% decrease. At December 31, 2010 the actuarial assets were $29.4 billion. The decrease in 2012 actuarial assets was impacted by the limit on employer contributions by Act 120 collars. The collars capped the employer contributions at 11.5% excluding the benefit completion plan (see note 1(d) of the financial statements) of retirement covered compensation for the Commonwealth fiscal year (FY) beginning July 1, 2012 and at 8.0% for FY beginning July 1, 2011. These rates were well below the actuarial prescribed rates of 26.4% for FY 12/13 and 18.9% for FY 11/12. The actual contributions paid were only 53.9% and 42.8% of the annual required contribution (ARC) calculated by the actuary under GASB Guidelines for 2012 and 2011, respectively. Another factor contributing to the decrease in 2012 actuarial assets is the continued amortization of the 2008 loss. Due to the five year smoothing of investment gains and losses, 20% of the 2008 loss was recognized each year with the final portion being recognized in 2012. The increase in actuarial liabilities from $39.2 billion at December 31, 2010 to $42.3 billion at December 31, 2011 is due to changes in the economic assumptions, particularly the change in the assumed rate of return on assets, and the difference in actual vs. projected investment earnings. The increase in actuarial liabilities from $42.3 billion in 2011 to $43.1 billion at December 31, 2012 is due to natural benefit and interest growth.

Member Contributions

Member contributions were approximately $348 million for the year ended December 31, 2012, $351 million for the year ended 2011 and $349 million for the year ended 2010. There was a slight decrease in gross salaries, which were $5.5 billion for 2012 and $5.6 billion for 2011. This was a result of minimal across-the-board salary increases and an overall decrease of 973 in active members as of year end. The member rate of 6.25% of gross salary for most members is set by statute and has remained unchanged for the years presented.

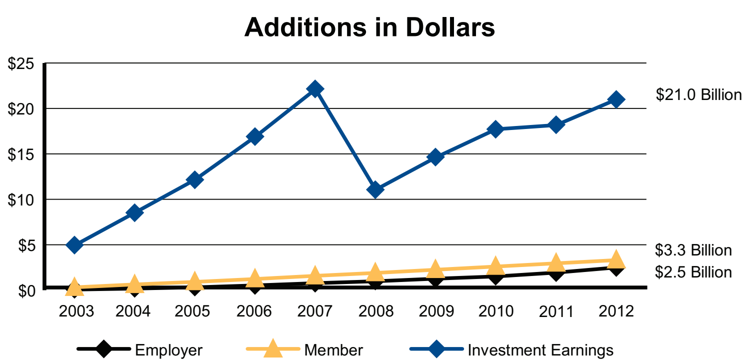
Employer Contributions

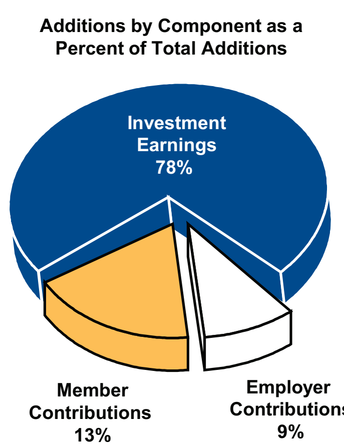
Employer contributions were approximately $566 million, $392 million, and $273 million for the years ended

December 31, 2012, 2011 and 2010, respectively, with 2012 contributions representing an increase of $174 million or 44.4% compared to 2011. The increase from 2011 to 2012 was due to an increase in the employer rate on July 1, 2012 from 8.0% to 11.5% excluding the benefit completion plan as described in notes 1(d) to the financial statements. The $119 million or 43.6% increase from 2010 to 2011 was due to an increase in the employer rate on July 1, 2011 from 5.0% to 8.0%. PA Act 120 has established employer contribution collars that capped rate increases at 3.0% for Commonwealth FY 11/12, 3.5% for 12/13, and 4.5% each subsequent year until no longer needed.

Over the last ten years, employer contributions have been the smallest component of additions to the System's plan net position. Employer contributions were kept artificially low due to statutory contribution rates being less than the ARC as calculated under GASB standards. From 2003 through 2012, employer contributions totaled $2.5 billion, representing 9% of total additions to plan net position, compared to $3.3 billion or 13% of total additions attributed to member contributions, and $21.0 billion, or 78%, of total additions attributed to investment earnings as illustrated in the following charts:

Ten Year Cumulative Additions to Plan Net Position





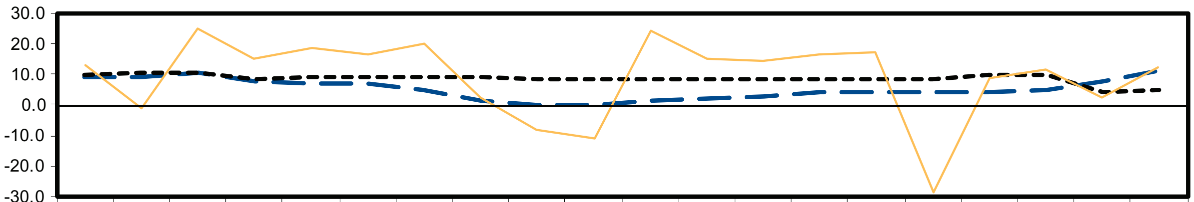
Over this time period, the retirement covered compensation has grown from $4.8 billion in 2002, to $5.8 billion in 2012.

With the investment return of 12.0% for 2012, this marks 16 out of the last 20 years that the Fund's annual earnings have been positive and 14 out of the last 20 years they have exceeded the actuarial assumed rate of return. One of the reasons for the low employer contribution rate over the last 20 years has been the Fund's overall positive investment returns. This was the primary driver of lower employer contribution rates over much of the first half of the last 20 years; however, over the last nine years, the lower employer rates were statutorily driven as a result of passage of Act 40 in 2003 and Act 120 in 2010. The significant provisions of Act 40 changed the periods in which unfunded liabilities were amortized in a manner that artificially suppressed the employer contribution rate below the ARC as recommended by GASB guidelines. Starting in 2005, the actual employer contributions have been below 54% of the ARC. The benefits of reduced employer contributions pass directly back to the participating Commonwealth agencies and the taxpayers of Pennsylvania. However, the short term benefits of lower employer contributions resulting from artificially suppressed rates, will result in the employers contributing a substantially larger amount over a 30 year period due to implied financing costs. These financing costs are being incurred because the monies are not presently available to invest and compound.

The employer normal cost is the cost of future benefits that is allocated to the current year by the actuarial cost method. In theory, if the unfunded actuarial liability were zero, and there were no deviations from the actuarial assumptions or amendments to the Retirement Code, the employer normal cost would be that amount required to fund the ongoing liabilities for plan participants.

The chart at the top of the next page shows the history of the employer contribution rate, employer normal cost, and investment returns from 1993 through 2012. In the first ten years, with some fluctuations, the general trend of the employer contribution rate has been downward with the rate declining from 8.9% in 1993 to zero in accordance with the 2000 and 2001 valuations. The primary reason for the downward trend has been the excess of the investment return over the assumed investment rate of return over the years. The higher than expected investment return resulted in reductions in cost in those earlier years. Over the last eight years, employer rates reacted less to investment

SERS Employer Contribution Rates, Employer Normal Cost Rates, and Investment Returns



	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12
Employer Contribution Rates %	8.9	8.9	10.3	7.7	7.3	6.7	5.0	1.4	-	-	1.1	2.0	3.0	4.0	4.0	4.0	4.0	5.0	8.0	11.5
Employer Normal Cost Rates %	9.8	10.2	10.7	8.5	8.9	9.0	9.0	9.0	8.7	8.6	8.4	8.3	8.3	8.4	8.2	8.4	9.5	9.5	4.1	5.1
Investment Return %	13.2	-1.1	25.2	15.4	18.5	16.3	19.9	2.2	-7.9	-10.9	24.3	15.1	14.5	16.4	17.2	-28.7	9.1	11.9	2.7	12.0

Employer Contribution Rates % Employer Normal Cost Rates % Investment Return %

returns because the employer rates were statutorily held at a low level. Had the Commonwealth agencies paid just the employer normal cost over the last 20 years, there would have been an additional $3.6 billion in employer contributions paid into the System.

The significant losses in 2008 reduced the System's ten year annualized investment return to 4.8% for 2010, 6.0% for 2011, and 8.4% for 2012. As a result of the losses in 2008 and other factors, the employer rate was expected to spike in FY 12/13. To address this rate spike Act 120 of 2010 was passed. See pages 8 and 9 for a summary of Act 120 provisions.

Net Investment Income

Investment portfolio performance produced returns of 12.0%, 2.7%, and 11.9%, for the years 2012, 2011, and 2010, respectively. Performance contributed to net investment income of approximately $2.8 billion in 2012, $0.5 billion in 2011, and $3.1 billion in 2010. Strong performance in the global public equity and alternative investment asset classes helped the overall Fund performance for 2012. Fixed income returns exceeded the benchmark by 5.8% and diversifying assets exceeded its benchmark by 2.0%. For the three, five, and ten year periods ended December 31, 2012, the System earned compounded annual rates of return of 8.8%, 0.0%, and 8.4%, respectively. The table at right shows the System's annual rates of returns for the last three years by major asset class.

Investment expenses decreased $8 million in 2012 as compared to a decrease of $38 million in 2011. The System's assets are managed 100% by external investment managers hired by the Board. Many of these managers are paid a fee based on the assets under management. Managers were generally compensated less in 2012 than in prior years because of a shift in asset allocation and negotiated lower fee structures. For investments in the alternative investment class, the industry practice for the limited partners is to pay fees to the general partner based on commitments to the partnership during the initial years.

Annual Rates of Return

Asset Class/Strategy	2012	2011*	2010*
Alternative investments	11.4%	12.7%	16.5%
Global public equity	17.6	(7.0)	15.4
Real assets	8.6	6.0	7.4
Diversifying assets	8.6	(1.8)	6.3
Fixed income	10.0	6.2	11.7
Liquidity reserve	0.4	0.2	0.3
Total fund	**12.0%**	**2.7%**	**11.9%**

As discussed earlier, as part of the adoption of the **2012-2013 Strategic Investment Plan, the asset classes and strategies were restructured. Therefore, returns for 2011 and 2010 were reclassifed to conform to the new asset allocation.*

Benefits, Refunds, and Expenses

Benefit payments to annuitants are the most significant recurring deduction from plan net position. During 2012 and 2011, the System paid out approximately $2.7 billion in benefits and refunds. There were approximately 5,500 new retirees added to the annuity payroll in 2012 with an average annual benefit of $24,800. This was a decrease from the 7,700 retirees added in 2011 at an average annual benefit of $26,800. As is typical in mature retirement plans, new retirees in 2012 received a much higher annual benefit than those removed from rolls. There were more than 3,800 retirees removed from the rolls with an average annual benefit of $13,100. In 2012, supplemental payments decreased 38%, from $514 million in 2011 to $371 million in 2012. This decrease is attributable to fewer retirees withdrawing accumulated contributions and interest from the System in 2012 as compared to 2011. Those withdrawals reduce the retirees' payments over the annuitants' remaining life. Act 120 no longer allows the withdrawal of accumulated contributions and interest for new members when they retire.

Going forward, the System expects benefit expenses to continue to steadily rise. This is attributable to the fact that the number of new retirees added to the rolls is expected to be about 50% higher than retirees removed from the rolls. Additionally, the monthly annuity of new retirees is approximately 100% higher than the annuity of those being removed. The System was established in 1923 but did not pay more than $1 billion in annual benefits until 1997. The System's annual benefit payments reached $2 billion in 2007; based on recent actuarial projections, it will reach $3 billion by 2015.

Growth in Annuity Payroll

	December		
	2012	2011	2010
Monthly annuity payroll (in millions)	$194	$187	$174
Retirees	117,061	115,342	111,713

The administrative costs of the System represented 0.1% of average net position in 2012 and 2011. All costs were within budget.

System Assets

Investments are the most significant component of the System's assets. The fair value of investments increased to $25.6 billion in 2012 from $24.0 billion as of December 31, 2011. The $1.6 billion increase in investments was primarily due to a net investment gain of $2.8 billion and contributions of $0.9 billion exceeding the $2.7 billion paid in benefits.

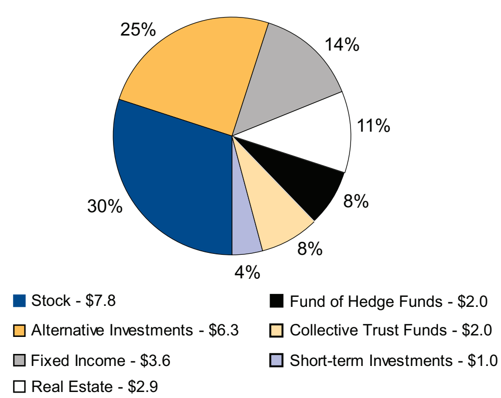
The System reports its assets at "fair value" as discussed in the accounting policies note 2(c) to the financial statements. Fair value is the value the System expects to receive in a current sale between a willing buyer and a willing seller that are equally motivated; that is, other than a forced or liquidation sale. The value of publicly traded securities, stocks and bonds, is determined using the latest quote from national exchanges or pricing services. Those prices reflect the securities' pricing at the close of business and are affected by such items as liquidity, current events and the size of lots being traded.

Real estate is valued by the investment advisor using discounted cash flows, recent comparable sales, and current market conditions to arrive at a fair value. The real estate portfolios undergo an annual independent financial audit of the estimated fair values as well as an independent appraisal process on a routine cycle conducted by approved appraisers who meet specified professional qualifications. The appraisal process involves a significant amount of judgment and estimating. As a result, the ultimate value on sale of the asset may differ from the appraised value.

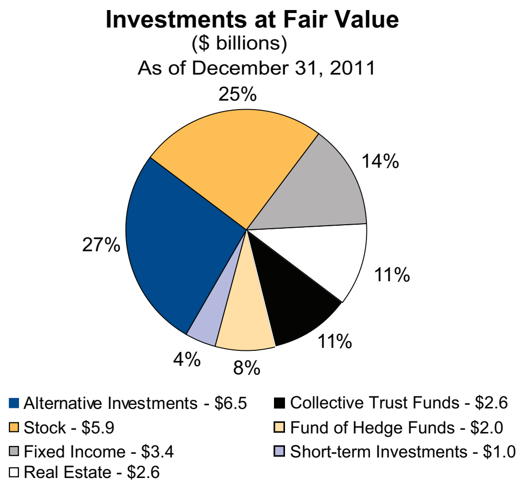
Values for alternative investments are determined by the general partners and by valuation committees. The partnerships' investments, as well as the assumptions and estimates used in developing the investment values, are subject to annual independent audits. Because the investments in those partnerships are generally illiquid and holding periods may last for several years, the ultimate value realized by the System on the disposition may differ from the estimated values reflected in the financial statements, and those differences could be material.

Fund of hedge funds fair values were $2.0 billion at December 31, 2012 and 2011. Stock fair values of $7.8 billion for December 31, 2012 represent an increase of $1.9 billion from 2011. This increase is mainly from favorable market returns. The fixed income fair values were $3.6 billion which is an increase of $0.2 billion from 2011. Alternative investment and real estate fair values were $6.3 billion and $2.9 billion, respectively for December 31, 2012. This represents a decrease of $0.2 billion for alternative investments mainly due to distributions and an increase of $0.3 billion for real estate was primarily due to positive investment returns from 2012. The total investment portfolio fair value of $25.6 billion was comprised as shown by the chart below.

Investments at Fair Value
($ billions)
As of December 31, 2012



The total investment portfolio fair value of $24.0 billion for 2011 was comprised as shown in the chart below:



The System earns additional investment income by lending investment securities to brokers. The brokers provide collateral to the System for borrowed securities generally equal to 102% to 105% of the borrowed securities. The System invests the collateral to earn interest. Income, net of expenses, from securities lending is dependent on the volume of lending generated at the custodian bank and the spreads (profits) on those loaned securities. In 2008, certain securities purchased with cash collateral by the lending agent had values significantly less than amortized cost reflected on the custodian records. The loss to the System was approximately $25 million in 2008 and was established as a liability in the financial statements. In 2012, this payable was reduced to $10 million. Despite this loss, the System earned $60 million over the last ten years. Since 2008, due to the increased risk associated with the market uncertainty, the securities lending program was scaled back in both the number of securities on loan and the market value of those securities for which cash collateral was provided. The pool's investment guidelines provide for investment of cash collateral in highly liquid, highly rated securities. As of December 31, 2012 and 2011, the fair value of loaned securities was $344 million and $231 million, respectively; the fair value of the associated collateral was $354 million and $238 million, of which $203 million and $115 million was cash, respectively.

Derivatives

Within narrowly prescribed policy guidelines, SERS permits investment advisors to use derivatives as a means to provide market exposure to various asset classes. Used properly, these derivatives deliver returns similar to indexed returns in the respective asset classes in a cost efficient manner without disrupting the liquidity needs of the System. The System's investment advisors manage counterparty credit risk by entering into contracts with parties with strong credit ratings and by establishing collateral requirements. The System monitors derivative levels and types to ensure that portfolio derivatives are consistent with the intended purpose and at the appropriate level.

Liquidity

In the past, the System's liquidity needs were met through member and employer contributions, earnings from investments, and its well-diversified investment portfolio. Increasing liquidity requirements of the Fund necessitated a change in the role and strategy of the investment program. The ***2012-2013 Strategic Investment Plan*** established a liquidity reserve asset class that will serve as the primary source of short-term liquidity for the Fund. In periods of market distress, liquid reserves will reduce capital impairment risk (i.e. selling assets below intrinsic value) and enhance fund returns by enabling the purchase of mispriced securities from distressed sellers. At December 31, 2012, the Fund held $610.6 million or 2.4% of the Fund in the liquidity reserve asset class. The long-term target for the liquidity reserve is 3.0% of the Fund.

Pennsylvania Act 120

On November 23, 2010, the Governor signed HB 2497 into law as PA Act 120. This legislation preserved the benefits in place for the current members at that time but mandated a number of benefit reductions for new members effective January 1, 2011 (except that the effective date is the expiration of collective bargaining agreements for State Police Troopers, Capitol Police and Park Rangers, and December 1, 2011 for legislators newly elected in November. State Police retain special retirement benefits as a result of a collective bargaining arbitration award).

Highlights of the bill include:

- Reduced benefit accrual for new employees by 20% – from 2.5% to 2% of salary for each year of service
- Retained employee contributions at pre-reform levels
- Increased normal retirement age
- Eliminated lump sum withdrawals of contributions and interest at retirement
- Extended vesting period from five to ten years

- Required that members purchase prior non-state service at full actuarial cost
- Created "shared risk" to allow increased employee contributions for investment underperformance
- Capped growth of employer contribution:
    - 3.0% in Commonwealth FY 11/12
    - 3.5% in Commonwealth FY 12/13
    - 4.5% each year thereafter until no longer needed
- Re-amortized the System's existing liabilities over 30 years through an Actuarial "Fresh Start".

In addition to the changes detailed above, the bill also prohibits the use of pension obligation bonds (POBs) for funding liabilities. POBs are bonds issued by a state or local government to pay its obligation to the pension fund.

Condensed Financial Information
(Dollar Amounts in Millions)

Net Position

Assets:	2012	Increase (Decrease)	2011	Increase (Decrease)	2010
Total receivables	$303	$(304)	$607	$71	$536
Total investments	25,575	1,579	23,996	(1,507)	25,503
Securities lending collateral pool	203	88	115	(178)	293
Total assets	26,081	1,363	24,718	(1,614)	26,332
Liabilities:					
Accounts payable and accrued expenses	46	(10)	56	8	48
Securities lending collateral pool payable	10	(3)	13	(3)	16
Investment purchases and other liabilities	433	276	157	68	89
Obligations under securities lending	203	88	115	(178)	293
Total liabilities	692	351	341	(105)	446
Total net position	**$25,389**	**$1,012**	**$24,377**	**$(1,509)**	**$25,886**

Changes in Net Position

Additions:	2012	Increase (Decrease)	2011	Increase (Decrease)	2010
Member contributions	$348	$(3)	$351	$2	$349
Employer contributions	566	174	392	119	273
Net investment gain	2,794	2,314	480	(2,596)	3,076
Total additions	3,708	2,485	1,223	(2,475)	3,698
Deductions:					
Benefits and refunds	2,674	(31)	2,705	256	2,449
Administrative expenses	22	(5)	27	2	25
Total deductions	2,696	(36)	2,732	258	2,474
Increase/(decrease) in net position	**$1,012**	**$2,521**	**$(1,509)**	**$(2,733)**	**$1,224**

Statements of Plan Net Position
December 31, 2012 and 2011
(Dollar amounts in thousands)

	2012	2011
Assets:		
Receivables:		
Plan members	$923	$3,699
Employers	27,304	14,995
Investment income	53,202	59,960
Investment proceeds and other receivables	216,182	521,123
Miscellaneous	5,578	7,031
Total receivables	303,189	606,808
Investments:		
Short-term investments	1,039,802	1,057,796
United States government securities	2,315,575	1,601,674
Corporate and foreign bonds and notes	1,276,514	1,793,408
Common and preferred stocks	7,865,595	5,892,767
Collective trust funds	1,955,956	2,566,772
Fund of hedge funds	1,967,400	1,980,495
Real estate	2,870,536	2,580,907
Alternative investments	6,284,053	6,522,434
Total investments	25,575,431	23,996,253
Securities lending collateral pool	202,880	115,484
Total assets	26,081,500	24,718,545
Liabilities:		
Accounts payable and accrued expenses	45,582	55,785
Securities lending collateral pool payable	10,426	13,507
Investment purchases and other liabilities	433,277	156,590
Obligations under securities lending	202,880	115,484
Total liabilities	692,165	341,366
Net position held in trust for pension benefits	**$25,389,335**	**$24,377,179**

See accompanying notes to financial statements.

Statements of Changes in Plan Net Position
Years ended December 31, 2012 and 2011
(Dollar amounts in thousands)

	2012	2011
Additions:		
Contributions:		
Plan members	$347,937	$350,852
Employers	565,621	391,749
Total contributions	913,558	742,601
Investment gain:		
Net appreciation in fair value of investments	2,268,730	614,117
Collective trust fund appreciation/(depreciation) and income	275,103	(267,177)
Interest	144,431	165,082
Dividends	190,733	78,823
Real estate	97,641	82,707
Miscellaneous	4,583	2,316
	2,981,221	675,868
Investment expenses	(189,722)	(197,505)
Net gain from investing activities	2,791,499	478,363
From securities lending activities:		
Securities lending income	3,953	2,376
Securities lending expenses	(512)	(294)
Net income from securities lending activities	3,441	2,082
Total net investment gain	2,794,940	480,445
Total additions	3,708,498	1,223,046
Deductions:		
Benefits	2,664,242	2,695,732
Refunds of contributions	9,891	9,531
Administrative expenses	22,209	26,706
Total deductions	2,696,342	2,731,969
Net increase (decrease)	1,012,156	(1,508,923)
Net position held in trust for pension benefits:		
Balance, beginning of year	24,377,179	25,886,102
Balance, end of year	**$25,389,335**	**$24,377,179**

See accompanying notes to financial statements.

(Dollar Amounts in Thousands)

(1) Organization and Description of the System

(a) Organization

The Commonwealth of Pennsylvania State Employees' Retirement System (the System) was established as of June 27, 1923, under the provisions of Public Law 858, No. 331. The System was developed as an independent administrative agency of the Board which exercises control and management of the System, including the investment of its assets. The System's Board has eleven members including the State Treasurer (ex officio), two Senators, two members of the House of Representatives, and six members appointed by the Governor, one of whom is an annuitant of the System. At least five board members must be active members of the System and at least two have ten or more years of credited service.

The System is the administrator of a cost sharing multiple employer defined benefit retirement plan established by the Commonwealth of Pennsylvania (Commonwealth) to provide pension benefits for employees of state government and certain independent agencies. The System is a component unit of the Commonwealth and is included in the Commonwealth's financial report as a pension trust fund. Administration costs are financed through contributions and investment earnings.

Membership in the System is mandatory for most state employees. Members and employees of the General Assembly, certain elected or appointed officials in the executive branch, department heads, and certain employees in the field of education are not required, but are given the option to participate. At December 31, 2012 and 2011, System membership consisted of the following:

System Membership

	2012	2011
Retirees and beneficiaries currently receiving benefits	117,061	115,342
Terminated members entitled to benefits but not yet receiving them	6,725	6,189
Current active members	106,048	107,021
Total members	**229,834**	**228,552**
Number of participating agencies	105	107

(b) Pension Benefits

The System provides retirement, death, and disability benefits. Cost of Living Adjustments (COLA) are provided at the discretion of the General Assembly. Article II of the Commonwealth of Pennsylvania's Constitution assigns the authority to establish and amend the benefit provision of the plan to the General Assembly.

Prior to Act 120, employees who retire at age 60 with three years of service, or with 35 years of service if under age 60, are entitled to a normal annual retirement benefit. Members of the General Assembly and certain employees classified in hazardous duty positions can retire with full benefits at age 50, with at least three years of service. Act 120 preserved all benefits in place for members, but mandated a number of benefit reductions for new members effective January 1, 2011. The benefit reduction included a new class of membership that accrues benefits at 2% of their final average salary instead of the previous 2.5%. The new vesting period changed from five to ten years of credited service, and the option to withdraw lump sum accumulated deductions was eliminated. The new normal retirement age is 65 for most employees and age 55 for members of the General Assembly and certain employees classified in hazardous duty positions.

Most members of the System, and all state employees hired after June 30, 2001 and prior to January 1, 2011 (except state police officers and certain members of the judiciary and legislators), are Class AA members. Each class of benefits is based on a multiple of the base accrual rate of 2%, which is called the multiplier. The multiplier for Class AA is 1.25, which translates into an annual benefit of 2.5% of the member's highest three year average salary times years of service and became effective for members July 1, 2001. The general annual benefit for Class A members is 2% of the member's highest three year average salary times years of service. State police are entitled to a benefit equal to a percentage of their highest annual salary, excluding their year of retirement. The benefit is 75% of salary for 25 or more years of service and 50% of salary for 20-24 years of service. Judges are entitled to a benefit of 4% of final average salary for each of the first ten years of service and 3% for subsequent years. District Justices are entitled to a benefit of 3% of final average salary for each year of service. Legislators taking office before December 1, 2010 are Class D-4. The multiplier for Class D-4 is 1.5, which translates into an annual benefit of 3% of the final average salary for each year of service. Act 120 created a new A-3 class of service and an optional A-4 class for most employees that entered SERS membership for the first time on or after January 1, 2011 and December 1, 2010 for legislators newly elected in November 2010. Employees who enter SERS membership after the effective date of Act 120 enter as members of the A-3 class with a 45 day window to elect membership in the optional A-4 class. The general annual benefit for Class A-3 members is 2% of the member's highest three year average salary times years of service while the Class A-4 benefit accrual rate is 2.5%.

(Dollar Amounts in Thousands)

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

(c) Contributions

The System's funding policy, as set by the Board, provides for periodic active member contributions at statutory rates. The System's funding policy also provides for periodic employer contributions at actuarially determined rates, expressed as a percentage of annual retirement covered payroll, such that they, along with employee contributions and an actuarially determined rate of investment return, are adequate to accumulate assets to pay benefits when due. However, Act 120 imposes rate increase collars (limits on annual rate increases) on employer contributions that keep the employer contribution rate below the rates established in accordance with actuarial parameters suggested by the GASB Standards. The collar for Commonwealth FY 11/12 is 3.0%, capping the employer contribution rate at 8.0%. The Commonwealth FY 12/13 collar is 3.5% capping the rate at 11.5%. The collar for Commonwealth FY 13/14 is 4.5% and will remain at that rate until no longer needed. A variation of the entry age normal actuarial cost method is used to determine the liabilities and costs related to all of the System's benefits, including superannuation, withdrawal, death, and disability benefits, and to determine employer contribution rates. The significant difference between the method used for the System and the typical entry age normal actuarial cost method is that the employer normal cost is based on the benefits and contributions for new employees rather than for all current employees from their date of entry. The System believes that this variation should produce approximately the same results as the typical method over the long run. These rates are computed based upon actuarial valuations on the System's fiscal year end of December 31 and applied to the Commonwealth based on its fiscal year end June 30; therefore, the employer contribution rates, in effect for the System's year end of December 31, reflect a blended average of calculated rates. The blended contribution rates, which include the benefit completion plan, were as follows:

In addition to the employer normal cost, the total employer cost includes other costs and credits resulting from COLAs, differences between actual investment results and actuarial estimated returns, and changes in benefits. These additional costs and credits are amortized over a period of future years as set by the Legislature. Act 120 established a fresh start on liabilities beginning in 2011. The member contribution rate for all Class A and Class AA members is 5% and 6.25% of salary, respectively. The member contribution rate under Act 120 for A-3 and A-4 members is 6.25% and 9.3% of salary, respectively. The contribution rate for Class D-4 members is 7.5%. Judges and district justices have the option of electing special membership classes requiring a contribution of 10.0% and 7.5%, respectively. All employee contributions are recorded in an individually identified account that is credited with interest, calculated at 4.0% per annum, as mandated by statute. Accumulated employee contributions and credited interest vest immediately and are returned to the employee upon termination of service if the employee is not eligible for other benefits.

(d) Benefits Completion Plan

Act 2002-234 amended the State Employees' Retirement Code by adding Section 5941 to the Code. Section 5941 directs the Board to establish and serve as trustee of a retirement benefit plan that is in conformity with Internal Revenue Code (IRC) Section 415(m), the benefits completion plan (BCP). The BCP is a separate trust fund established to provide benefits to all annuitants of the System's defined benefit plan and their survivor annuitants and beneficiaries whose retirement benefit exceeds the IRC Section 415(b) limits.

The BCP is funded on an ongoing basis. A monthly annuity or death benefit is paid under the BCP only if a corresponding monthly annuity or death benefit is paid from the defined benefit plan to the extent permitted by IRC Section 415(b) and the Retirement Code. There were 21 and 25 members receiving benefits from the BCP at December 31, 2012 and 2011, respectively.

Blended Contribution Rates

	2012	2011
Employer normal cost	4.59%	6.81%
Amortization of unfunded actuarial assets in excess of liabilities	18.07	3.20
Amortization of supplemental annuities	—	2.28
Maximum rate factor	(12.86)	(5.78)
Total employer cost	**9.80%**	**6.51%**

(2) Summary of Significant Accounting Policies

(a) Basis of Accounting

The financial statements of the System are prepared on the accrual basis of accounting under which expenses are recorded when the liability is incurred, revenues are recorded in the accounting period in which they are earned and become measurable, and investment purchases and sales are recorded as of their trade date. Member and employer contributions are based on when member salaries are earned and are recognized when due, pursuant to statutory requirements and formal commitments. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

(b) Use of Estimates

Management of the System has made certain estimates and assumptions relating to the reporting of assets and liabilities, and the disclosure of contingent assets and liabilities, to prepare these financial statements in conformity with accounting principles generally accepted in the United States of America. Actual results could differ from those estimates.

(c) Investments

The System's investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller — that is, other than in a forced or liquidation sale. The investments in short-term investment funds, including those managed by the Treasurer of the Commonwealth of Pennsylvania, are reported at cost plus allocated interest, which approximates fair value. The securities lending collateral pool, which is a fund operated by the securities lending agent, also is accounted for at cost plus accrued interest, which approximates fair value. U.S. government securities, corporate and foreign bonds and notes, common and preferred stocks, and the underlying holdings in funds of hedge funds, are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Securities that are not traded on a national security exchange are valued by the asset manager or third parties based on similar sales. Foreign exchange, futures and swap contracts are marked to market daily with changes in fair value recognized as part of investments and investment income. Real estate investments, which are subject to annual independent audits, are primarily valued based on independent appraisals. For properties that have not been appraised, projected future net income streams are used to approximate fair value.

Alternative investments, which are subject to an annual independent audit, include interests in limited partnerships invested in venture capital, leveraged buyouts, private equities, and other investments, are valued based on estimated fair value established by valuation committees.

The collective trust funds (CTF) consist primarily of domestic and international institutional mutual and index funds. The funds do not pay interest or dividends to shareholders, and reinvest all income earned on securities held by the fund. The fair value of the CTF is based on the reported share net asset value of the respective fund. The CTF is subject to annual independent audit.

Unsettled investment sales are reported as investment proceeds receivable and unsettled investment purchases are reported as investment purchases payable. Investment expenses consist of investment managers' fees and those expenses directly related to the System's investment operations.

Investments in venture capital, private equity, and real estate are generally illiquid. Because of the inherent uncertainty in valuing privately held securities, the fair value may differ from the values that would have been used had a ready market for such securities existed, and the difference can be material. Accordingly, the realized value received upon the sale of the asset may differ from the fair value.

(d) Commitments

As of December 31, 2012 and 2011, the System had contractual commitments totaling approximately $1.5 billion and $1.8 billion, respectively, to fund future alternative investments, and $125 million and $155 million, respectively, to fund future real estate investments.

(e) Federal Income Taxes

Management believes the System meets the definition of a Governmental Plan. In the System's communications with the Internal Revenue Service (IRS), it has been treated as a qualified plan, and is, therefore, considered exempt from federal income taxes. The System has, however, requested a determination letter from the IRS relating to the status of the System under the IRC.

(f) Risk Management

The System is exposed to various liabilities and risks of loss related to theft or destruction of assets, injuries to employees, and court challenges to fiduciary decisions.

(Dollar Amounts in Thousands)

As an administrative agency of the Commonwealth, the System is accorded sovereign immunity. The System participates in certain Commonwealth pooled insurance programs and requires asset managers to carry certain insurance coverage. The System is self insured for fiduciary and director and officer liability. During the past three fiscal years, SERS' insurance settlements did not exceed insurance coverage.

(g) New Accounting Pronouncements - Adopted

The GASB issued Statement No. 63 "Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position" in June 2011. This statement provides accounting and financial reporting requirements to address the presentation issues associated with the new financial position elements created in GASB's Concepts Statement No. 4, "Elements of Financial Statements." This Statement amends the net asset reporting requirements in Statement No. 34, "Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments."

(3) Description of Accounts

The Retirement Code requires the System to maintain the following accounts representing the net assets held for future and current benefit payments:

The **Member Savings Account** accumulates contributions and interest earnings of active employees. Member balances are transferred to the Annuity Reserve Accounts as members retire.

The **State Accumulation Account** accumulates contributions of the employer and the net earnings of the Fund. Funds are transferred to the Annuity Reserve Accounts as members retire. The amount transferred is actuarially determined. Negative balances represent the amounts transferred to other reserve account balances in excess of accumulated employer contributions and net earnings.

The **Annuity Reserve Accounts** are the accounts from which all death and retirement benefits and supplemental annuities are paid. The balances in these accounts are actuarially determined.

The **Interest Reserve Account** accumulates all income earned by the Fund and from which all administrative and investment expenses incurred by the Fund and the Board necessary for operation of the System are paid. Any balance in this reserve is transferred to the State Accumulation Account at year-end.

The **Benefit Completion Plan (BCP) Reserve Account** accumulates all BCP employer contributions and net earnings of the Fund less any benefits paid out of the Fund.

Account balances at December 31, 2012 and 2011 are as follows:

Account Balances

	2012	2011
Members savings account	$4,551,507	$4,406,306
State accumulation account	(941,632)	(333,800)
Annuity reserve accounts:		
Annuitants and beneficiaries	19,775,554	18,554,379
State police	1,956,111	1,700,612
Enforcement officers	44,871	43,935
Benefit completion plan reserve account	2,924	5,747
Total	**$25,389,335**	**$24,377,179**

(4) Investments

As provided by statute, the Board has exclusive control and management responsibility of System funds and full power to invest the funds. In exercising its fiduciary responsibility to System membership, the Board is governed by the "prudent investor" rule in establishing investment policy. The "prudent investor" rule requires the exercise of that degree of judgment, skill and care under the circumstances then prevailing which investors of prudence, discretion and intelligence, who are familiar with such matters, exercise in the management of their own affairs not in regard to speculation, but in regard to permanent disposition of the funds, considering the probable income to be derived there from, as well as the probable safety of their capital. The Board has adopted its ***Statement of Investment Policy*** to formally document investment objectives and responsibilities. This policy, as well as applicable state law, establishes guidelines for permissible investments of the System.

The System's investments are subject to various risks. Among these risks are custodial credit risk, credit risk, interest rate risk, and foreign currency risk. Each one of these risks is discussed in more detail on the following pages.

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the System would not be able to recover the value of investment or collateral securities that are in the possession of an outside party. Pursuant to Title 71, Pennsylvania Consolidated Statutes Section 5931(c), the State Treasurer serves as custodian of the Fund. In accordance with a contractual relationship between the Commonwealth's Treasury Department and its custodial agent, substantially all investments, where securities are used as evidence of the investment, are held by the custodian in book entry form in the System's name. Those investments are defined as insured or registered investments for which the securities are held by the System or its agent and, therefore, have very minimal level of custodial credit risk losses. All remaining investments do not have securities that are used as evidence of the investments. These investments are primarily in collective trust funds and limited partnerships, which include real estate, alternative investments, and fund of hedge funds.

(Dollar Amounts in Thousands)

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The credit risk of a debt instrument is measured by nationally recognized statistical rating agencies such as Moody's Investors Services (Moody's), Standard & Poor's (S&P), and Fitch Ratings (Fitch).

In June of 2012, the Board approved the ***2012-2013 Strategic Investment Plan***. Under this plan fixed income is structured to generate current income to pay benefits, provide liquidity sufficient to preserve capital and satisfy liabilities, and protect the Fund against inflation and deflation. Secondarily, when market conditions are favorable, the program will seek to enhance the total return of the Fund. This plan established a target allocation to the fixed income asset class of 19%. This allocation is to be divided among four distinct segments each of which fulfills a specific role within the scope of the fixed income structure. The segments are as follows:

- Core Plus fixed income: contributes excess total return to the Fund when market conditions permit.
- Core fixed income: provides income and liquidity with relatively low risk.
- Treasury Inflation Protected Securities (TIPS): protects the Fund against inflation and provides liquidity.
- Nominal U.S. Treasuries: protects the Fund against deflation and provides liquidity.

For securities exposed to credit risk in the fixed income portfolio, the following table discloses aggregate fair value, by the least favorable credit rating issued using Moody's, S&P, and Fitch credit ratings at December 31, 2012 and 2011:

Debt Securities Exposed to Credit Risk

	Fair Value	
Rating	**2012**	**2011**
AAA	$283,575	$180,368
AA	262,509	218,329
A	218,029	229,770
BAA	437,974	495,015
BA and below	416,388	801,972
NA[1/]	27,591	38,244
Short-term investments[2/]	1,005,525	962,717
Total exposed to credit risk	**$2,651,591**	**$2,926,415**

[1/]NA represents securities that were either not rated or had a withdrawn rating. NA also includes the fair value of certain swaps, which by nature do not have credit quality ratings. See note 6 for additional information regarding the nature of these swap agreements.

[2/]Represents short-term investments mostly in the Commonwealth Treasury Department's Short-Term Investment Fund (STIF). This category is comprised of short-term, investment grade securities, which are mainly U.S. Treasuries, agencies, or repurchase agreements.

U.S. government guaranteed securities with a fair value of $2.0 billion and $1.5 billion as of December 31, 2012 and 2011 respectively, were not included in the above table because they are not subject to credit risk.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. As a means for limiting the System's exposure to fair value losses arising from rising interest rates, the System's long term asset allocation policy diversifies its fixed income core segment between intermediate duration and longer duration strategies based on the Barclays Capital Aggregate Index. Duration is a measure of an investment's sensitivity to changes in interest rates. The higher the duration, the greater the changes in fair value when interest rates change. The System measures interest rate risk using option adjusted duration, which considers the effect of a security's embedded options on cash flows. At December 31, 2012 and 2011, the System's fixed income portfolio had the following option adjusted durations by debt sector.

(Dollar Amounts in Thousands)

Debt Option-Adjusted Durations

	2012		2011	
	Fair Value	Option-Adjusted Duration	Fair Value	Option-Adjusted Duration
Agencies	$80,937	7.4	$48,395	3.6
Asset-backed securities	32,298	1.9	64,313	0.9
Corporates	533,056	6.3	727,694	5.2
Government	1,962,377	7.4	1,512,224	4.7
Sovereign debt	313,102	8.2	535,203	6.4
Mortgage-backed securities	357,365	2.7	194,232	2.5
Private placements[1/]	344,629	5.1	405,443	3.4
Short-term investments	1,005,525	0.1	962,717	0.1
Other investments[2/]	2,602	N/A	2,657	N/A
Total	**$4,631,891**		**$4,452,878**	

[1/]*Private placements raise capital via offerings directly to qualified investors rather than through public offerings. Private placements do not have to register with the Securities and Exchange Commission if the securities are purchased for investment as opposed to resale. These private placements have exposure to various fixed income securities.*

[2/]*Other investments represent certain securities and the value of swaps and futures agreements as of December 31, for which the duration is not available.*

(Dollar Amounts in Thousands)

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. As part of the System's program to manage risk and enhance returns, the System invests in global markets. At December 31, 2012 and 2011, the System had the following currency exposures:

Foreign Currency Exposures 2012

Currency	Short term Investments[1/]	Fixed Income	Stock	Real Estate	Alternative Investments	Total
European Euro	$5,596	$29,547	$834,076	$17,393	$913,935	$1,800,547
British Pound Sterling	4,696	48,388	654,578	16,638	26,475	750,775
Japanese Yen	(731)	2,547	514,073	47,867	-	563,756
Swiss Franc	3,961	-	282,313	1,865	-	288,139
Hong Kong Dollar	1,621	-	166,642	32,523	-	200,786
Australian Dollar	1,728	454	151,938	29,898	-	184,018
Canadian Dollar	1,877	14,437	149,524	5,115	-	170,953
Singapore Dollar	308	-	54,186	15,970	-	70,464
Swedish Krona	3,424	(2,776)	54,697	2,437	7,819	65,601
Mexican Peso	1,159	28,473	-	26,901	-	56,533
Norwegian Krone	69	-	38,331	-	-	38,400
Danish Krone	96	-	33,489	-	-	33,585
South Korean Won	(147)	8,455	24,492	-	-	32,800
Polish Zloty	319	12,194	-	-	-	12,513
Brazilian Real	2	11,012	599	313	-	11,926
Malaysian Ringgit	110	9,355	553	-	-	10,018
Other currencies (5)	1,896	49,462	19,718	-	-	71,076
Total	**$25,984**	**$211,548**	**$2,979,209**	**$196,920**	**$948,229**	**$4,361,890**

[1/] *Includes receivables and payables as of December 31 for securities sold and purchased.*

Foreign Currency Exposures 2011

Currency	Short term Investments[1/]	Fixed Income	Stock	Real Estate	Alternative Investments	Total
European Euro	($15,443)	$16,598	$547,180	$12,364	$427,609	$988,308
British Pound Sterling	(57,826)	83,809	459,563	11,281	-	496,827
Japanese Yen	1,646	(464)	347,007	28,416	-	376,605
Swiss Franc	1,642	-	179,675	1,919	-	183,236
Hong Kong Dollar	(394)	-	148,753	28,401	-	176,760
Australian Dollar	(17,403)	17,936	89,234	25,456	-	115,223
Canadian Dollar	(18,014)	32,221	86,713	5,832	-	106,752
Singapore Dollar	341	6,125	44,524	10,103	-	61,093
Swedish Krona	-	-	35,406	1,359	7,199	43,964
South Korean Won	-	7,911	27,767	-	-	35,678
Mexican Peso	822	31,749	1	-	-	32,572
Norwegian Krone	223	185	30,904	-	-	31,312
Malaysian Ringgit	79	25,167	4,602	-	-	29,848
Brazilian Real	1,291	20,383	3,593	1,230	-	26,497
South African Rand	999	23,209	-	-	-	24,208
Polish Zloty	584	21,230	725	-	-	22,539
Danish Krone	225	-	21,077	-	-	21,302
New Turkish Lira	196	18,076	-	-	-	18,272
Indonesian Rupiah	1,605	15,867	-	-	-	17,472
Thai Baht	174	9,348	2,560	-	-	12,082
Other currencies (14)	1,421	44,946	14,846	-	-	61,213
Total	**($97,832)**	**$374,296**	**$2,044,130**	**$126,361**	**$434,808**	**$2,881,763**

[1/] *Includes receivables and payables as of December 31 for securities sold and purchased.*

(5) Securities Lending

In accordance with a contract between the Commonwealth's Treasurer and its custodian, the System participates in a securities lending program.

The custodian, acting as lending agent, lends the System's equity, debt, and money market securities for cash, securities, or letter of credit collateral. Collateral is required at 102% of the fair value of the securities loaned except for the equity securities of non-U.S. corporations, for which collateral of 105% is required. Collateral is marked to market daily. If the collateral falls below guidelines for the fair value of the securities loaned, additional collateral is obtained. Cash collateral is invested by the lending agent in accordance with investment guidelines approved by the Board. The lending agent cannot pledge or sell securities collateral unless the borrower defaults.

As of December 31, 2012 and 2011, the System's credit exposure to individual borrowers was limited because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System. The Treasurer's contract with the lending agent requires the agent to indemnify the System if the borrowers fail to return the underlying securities and the collateral is inadequate to replace the loaned securities or if the borrowers fail to pay income distributions on the loaned securities.

All loaned securities at December 31, 2012 and 2011 could be terminated on demand by either the lending agent or the borrower. Cash collateral is invested in a short-term collective investment pool. The duration of the investments in the pool at December 31, 2012 and 2011 was two days and three days, respectively. Interest rate risk may be posed by mismatched maturities and could be affected by other program features, such as the lending agent's ability to reallocate loaned securities among all of its lending customers.

In 2008, certain securities purchased with cash collateral by the lending agent, had values at levels significantly less than amortized cost reflected on the custodian records. The loss to the System was estimated at $25 million and is reflected as a liability in the financial statements. Subsequent securities lending income is being used to repay the liability. The balance at December 31, 2012 and 2011 were $10.4 million and $13.5 million, respectively.

As of December 31, 2012 and 2011, the fair value of loaned securities was $344 million and $231 million, respectively; the fair value of the associated collateral was $354 million and $238 million, of which $203 million and $115 million was cash, respectively. The $151 million noncash collateral is invested in U.S. government guaranteed securities which are not subject to credit risk.

(6) Derivative and Structured Financial Instruments and Restricted Assets

Within narrowly prescribed guidelines, SERS permits investment advisors to enter into certain derivative and structured financial instruments primarily to enhance the performance and reduce the volatility of its portfolio. Typically, investment advisors enter into foreign exchange contracts to make payment for international investments, futures contracts to gain exposure to certain equity markets and to manage interest rate risk, and swaps to gain equity exposure.

The System is exposed to counterparty credit risk on all open derivative positions. Counterparty credit risk is the risk that a derivative counterparty may fail to meet its payment obligation under the derivative contract. As of December 31, 2012 and 2011, the System's counterparty credit risk was not significant. The System mitigates its legal risk on investment holdings including derivatives by carefully reviewing and selecting investment advisors. It manages its exposure to market risk within risk limits set by management.

The System's advisors also indirectly hold foreign exchange contracts, futures contracts, and certain swap contracts through its investments in collective trust funds and absolute return funds of hedge funds. These funds invest in instruments directly, and indirectly through a securities lending collateral pool, to gain foreign exchange exposure, to synthetically created equity like returns, and to manage interest rate risk by altering the average life of the portfolio.

Foreign exchange contracts are agreements to exchange the currency of one country for the currency of another country at an agreed upon price and settlement date. The investment advisor uses these contracts primarily for its international investments to settle pending trades that occur more than two business days after trade date. The contracts are used by the investment advisor for the purpose of eliminating foreign exchange risk. As a matter of policy, the investment advisors enter into these contracts at their full discretion to protect currency fluctuations. To reduce the risk of counterparty nonperformance, the investment advisors generally enter into these contracts with institutions regarded as meeting high standards of credit worthiness. The unrealized gain/loss on contracts is included in the System's net position and represents the fair value of the contracts on December 31. At December 31, 2012 and 2011, the System's contracts to purchase and sell foreign currencies are shown in the following tables:

(Dollar Amounts in Thousands)

Foreign Exchange Contracts
As of December 31, 2012

Currency	Purchases	Unrealized Gain/(Loss)	Sells	Unrealized Gain/(Loss)
Japanese Yen	$13,014	($304)	$36,072	$3,936
Brazilian Real	10,717	276	1,450	(33)
South Korean Won	8,602	382	-	-
Indian Rupee	6,835	(38)	-	-
Chilean Peso	5,901	44	-	-
Russian Ruble	5,534	156	-	-
European Euro	4,223	24	28,337	(376)
British Pound Sterling	971	10	12,484	(186)
New Romanian Leu	421	5	-	-
Australian Dollar	-	-	47,256	(1,615)
Swiss Franc	-	-	19,293	(211)
Norwegian Krone	-	-	8,522	(300)
New Zealand Dollar	-	-	7,359	81
Other (4)	103	-	7,667	(87)
Total	**$56,321**	**$555**	**$168,440**	**$1,209**

Foreign Exchange Contracts
As of December 31, 2011

Currency	Purchases	Unrealized Gain/(Loss)	Sells	Unrealized Gain/(Loss)
British Pound Sterling	$71,539	($82)	$59,335	$96
Australian Dollar	41,850	660	81,562	(1,577)
European Euro	27,074	(209)	60,891	1,823
Brazilian Real	18,986	(275)	25,585	397
Canadian Dollar	18,406	(34)	18,393	33
Chinese Yuan Renminbi	16,026	157	5,325	(21)
Malaysian Ringgit	14,455	(850)	400	-
Turkish Lira	13,262	(414)	462	9
South Korean Won	9,090	(232)	1,179	23
Russian Ruble	9,050	(833)	1,304	(4)
Singapore Dollar	6,131	(14)	154	-
Japanese Yen	5,997	61	62,944	(6)
Chilean Peso	5,231	(193)	1,713	46
Mexican Peso	3,189	(86)	2,497	21
Swiss Franc	2,654	(260)	32,333	2,103
Philippine Peso	2,492	(27)	1,755	25
South African Rand	1,528	42	12,312	204
Indonesian Rupiah	1,402	(88)	4,736	83
Polish Zloty	955	(56)	1,211	98
Hungarian Forint	903	(32)	3,318	270
Hong Kong Dollar	824	-	-	-
Norwegian Krone	-	-	12,560	61
Other (6)	279	(1)	11,908	245
Total	**$271,323**	**($2,766)**	**$401,877**	**$3,929**

(Dollar Amounts in Thousands)

Futures contracts are standardized, exchange traded contracts to purchase or sell a specific financial instrument at a predetermined price. Gains and losses on futures contracts are settled daily based on a notional (underlying) principal value and do not involve an actual transfer of the specific instrument. The exchange assumes the risk that the counterparty will not pay and generally requires margin payments to minimize such risk. Futures are generally used to achieve the desired market exposure of a security or index or to rebalance the total portfolio. The System's exposure to futures contracts was not significant at December 31, 2012 and 2011.

Swap agreements provide for periodic payments between parties based on the change in value of underlying assets, indexes, rates and credit worthiness. The System uses contracts with multiple counterparties as well as collateral posting requirements to manage its counterparty credit risk. Credit default swaps are agreements with counterparties to either purchase or sell credit protection. The System's advisors use credit default swaps to either increase or decrease credit exposure to certain credit markets. Interest rate swaps are over the counter contracts that allow counterparties to exchange a fixed rate liability for a floating rate liability or vice versa. The System's advisors use interest rate swaps as a cost effective way of gaining exposure to certain sectors of the fixed income market. The System's exposure to swap agreements was not significant at December 31, 2012 and 2011.

(7) Commission Recapture Program

The System has commission recapture contracts with several brokers. These contracts generally stipulate that the brokers rebate a percentage of commissions earned on investments directly to the System. During the years ended December 31, 2012 and 2011, the System earned $103 thousand and $99 thousand of income resulting from a commission recapture program, respectively. No expenditures were paid from the program in either year. At December 31, 2012 and 2011, the System has accumulated $4.0 million and $3.9 million, respectively that are available for future expenditures.

(8) Post-Employment Benefits for Employees of the System

The System makes employer contributions to the pension plan. The System's employees' contribution requirements and benefits are described in note 1. The System's contributions for the years ended December 31, 2012, 2011 and 2010 were $901 thousand, $603 thousand and $397 thousand, respectively. The contributions were equal to the required contributions each year.

The System also participates in the Commonwealth of Pennsylvania Office of Administration's (OA) Retired Employees Health Program (REHP). The REHP is a single employer plan and provides certain healthcare benefits to qualifying individuals meeting specified age and/or service requirements. The OA, in its sole discretion, determines available REHP benefits on an ongoing basis.

The REHP is administered through the Pennsylvania Employees' Benefit Trust Fund (PEBTF) as a third party administrator for the Commonwealth. Employer costs for retiree healthcare benefits are charged as a component of payroll expenditures on a "pay as you go" basis. During 2012, SERS funded REHP benefits by paying $240 per pay period from January 1 to June 30, 2012, and $265 per pay period from July 1 to December 31, 2012 for each active SERS employee.

The Commonwealth's latest actuarial valuation, dated September 2011, provides an ARC for the REHP amounting to $870.2 million for the Commonwealth's Fiscal Year (FY) ended June 30, 2012; the System's allocated portion of the total REHP ARC was $5.8 million. Based on the aggregate REHP qualifying contributions for FY 2012, the System's net Other Post-Employment Benefit (OPEB) liability was $550 thousand. The ARC for the REHP for the Commonwealth's FY ended June 30, 2011 was $883.2 million; the System's allocated portion of the total REHP ARC was $2.0 million. Based on the aggregate REHP qualifying contributions for FY 2011, the System's net OPEB liability was $633 thousand. The Commonwealth's 2009 actuarial valuation provided the OPEB reporting used for FY 2010. The ARC for the REHP for the Commonwealth's FY June 30, 2010 was $850.4 million; the System's allocated portion of the total REHP ARC was $2.3 million. Based on the aggregate REHP qualifying contributions for FY 2010, the System's net OPEB liability was $889 thousand. The cumulative three year total net OPEB liability as of the Commonwealth's FY year ended June 30, 2012 was $2.1 million. This information is summarized in the table below:

OPEB Liability
(as of the Commonwealth's fiscal year ending June 30)

Year	Commonwealth ARC	SERS' ARC	SERS' Net OPEB
2012	$870,200	$5,795	$550
2011	883,160	2,005	633
2010	850,440	2,257	889
Three-year cumulative OPEB			**$2,072**

Both valuation reports can be viewed in their entirety on the Office of the Budget's web site at: *http://www.budget.state.pa.us/portal/server.pt/community/financial_reports/4574*.

(9) Litigation and Contingencies

The System is involved in various individual lawsuits, generally related to benefit payments, which, in the event of an adverse result, could increase estimated actuarial liabilities by approximately $1 billion. Some of the individual cases involve legal issues that, if extended to the entire membership, may result in significant costs to the System. If such an event were to occur, the additional costs would be recovered by the System through adjustments to the employer contribution rate.

(10) Additional Pension Disclosures

(a) Plan Description

The System is the administrator of a cost sharing multiple employer defined benefit pension plan. The System provides retirement, death, and disability benefits. COLAs are provided at the discretion of the General Assembly. The System was developed as an independent administrative agency of the Board which exercises control and management of the System, including the investment of its assets. The System issues a publicly available financial report that includes financial statements and Required Supplementary Information (RSI).

The System investments are reported at fair value as discussed in note 2 (c) Summary of Significant Accounting Policies. The ARC is actuarially determined, but for fiscal year beginning July 1, 2011, the maximum annual contribution rate has been reduced from the actuarially determined rate through Act 120. For the Commonwealth fiscal year beginning July 1, 2012, the actuarially determined rate was 26.39% and the actual composite rate was 11.59%. For Commonwealth fiscal year beginning July 1, 2013, the actuarially determined rate is 31.22% and the actual composite rate is 16.05%.

(b) Funding Status and Funding Progress

As of December 31, 2012, the most recent actuarial valuation date, the Plan was 58.8% funded. The actuarial accrued liability for benefits was $43.1 billion, and the actuarial value of assets was $25.3 billion, resulting in an unfunded actuarial accrued liability (UAAL) of $17.8 billion. The covered payroll (annual payroll of active employees covered by the Plan) was $5.8 billion, and the ratio of the UAAL to the covered payroll was 304.2%.

As of December 31, 2011 the Plan was 65.3% funded. The actuarial accrued liability for benefits was $42.3 billion, and the actuarial value of assets was $27.6 billion, resulting in an UAAL of $14.7 billion. The covered payroll was $5.9 billion, and the ratio of the UAAL to the covered payroll was 248.9%.

The schedule of funding progress, presented as RSI following the notes to the financial statements, presents multi-year trend information about whether the actuarial value of Plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits.

For 2012, the ARC and the percentage contributed were $1,044,632 and 53.9% respectively. For calendar years 2011 and 2010, the ARC was $913,778 and $866,822, respectively. The percentage contributed for the same periods were 42.8% and 31.4%.

(c) Actuarial Methods and Assumptions

In the December 31, 2012 and 2011 actuarial valuations, a variation of the entry age actuarial cost method was used. The significant difference between the method used for SERS and the typical entry age actuarial cost method is that the normal cost is based on the benefits and contributions for new employees rather than for all current employees from their date of entry. The SERS variation should produce approximately the same results as the typical method over the long run. The actuarial assumptions included (a) a 7.5% investment rate of return during 2012 and an 8.0% rate for 2011 (b) projected salary increases ranging from 4.3% to 11.05% with an average increase of 6.2%, and (c) a 2.75% rate of inflation. The assumptions did not include a cost of living adjustment. The remaining amortization period at December 31, 2012, was 27 – 30 years.

For purposes of determining the ARC, a 30-year equivalent amortization period was used for both December 31, 2012 and 2011.

Schedule 1
Schedule of Funding Progress
(Dollar amounts in millions)

Actuarial Valuation Year Ended December 31	Actuarial Value of Assets	Actuarial Accrued Liabilities (AAL)	Unfunded Actuarial Accrued Liabilities (UAAL)	Ratio of Assets to AAL	Covered Payroll[1/]	UAAL as a Percentage of Covered Payroll
2012	$25,303	$43,056	$17,753	58.8%	$5,836	304.2%
2011	27,618	42,282	14,664	65.3	5,891	248.9
2010	29,444	39,180	9,736	75.2	5,852	166.4
2009	30,205	35,797	5,592	84.4	5,936	94.2
2008	30,636	34,437	3,801	89.0	5,660	67.2
2007	30,840	31,754	914	97.1	5,529	16.5

[1/] *Covered Payroll represents the total annualized compensation adjusted to an appropriate fiscal year (July 1 to June 30) using the salary scale assumption and expected turnover and replacement estimates.*

Schedule 2
Schedule of Employer Contributions
(Dollar amounts in thousands)

Year Ended December 31	Annual Required Contributions	Percentage Contributed
2012	$1,044,632	53.9%
2011	913,778	42.8
2010	866,822	31.4
2009	643,861	39.1
2008	584,248	39.9
2007	617,253	39.3

GASB 25 establishes a range of actuarial cost and amortization methods for the UAAL and ARC. The scheduled payments since July 1, 2006 have been below the minimum amount required to meet the GASB minimum. This is a result of financing changes implemented by Act 2003-40 in December 2003.

The increase in the ARC from 2008 to 2009 was influenced by the $0.8 billon increase in average UAAL. In 2010, the average UAAL was $4.7 billion as a result of the "Fresh Start" from Act 120. The 30-year amortization of this substantially higher UAAL resulted in the larger increase in the ARC from 2009 to 2010.

See accompanying independent auditors' report.

Schedule of Administrative Expenses
December 31, 2012
(Dollar amounts in thousands)

Personnel services:		
Salaries	$10,790	
Benefits	4,102	
Temporary personnel wages, overtime, and outservice training	66	
Total personnel services		$14,958
Professional services:		
Treasury department services	1,073	
Information technology services	833	
Consultant fees	726	
Legal fees	130	
Other specialized services	91	
Other Commonwealth services	70	
Total professional services		2,923
Rentals:		
Real estate rent	1,799	
Other equipment rental	84	
Total rentals		1,883
Communication:		
Telephone	261	
Postage	259	
Printing and advertising	115	
Total communication		635
Other expenses:		
Maintenance	886	
Supplies	380	
Subscriptions and memberships	261	
EDP and office equipment	211	
Travel and conferences	72	
Total other expenses		1,810
Total administrative expenses		**$22,209**

See accompanying independent auditors' report.

Summary of Investment Expenses and Consultant Fees
December 31, 2012
(Dollar amounts in thousands)

Investment Expenses

	Expenses
Investment manager expenses:	
Alternative investments	$87,125
Real assets	42,478
Global public equity	16,187
Diversifying assets	13,965
Fixed income	11,844
Liquidity reserve	349
Total investment manager expenses	171,948
Investment related expenses:	
Alternative investments	12,949
Consultants	3,162
Real estate	1,117
Investment administrative	337
Custodial	195
Other	14
Total investment related expenses	17,774
Total investment expenses	**$189,722**

Consultant Fees*

Firm	Service type	Fees
StepStone Group	Alternative investments	$2,032
R.V. Kuhns & Associates	General investment	562
The Hay Group	Actuary	395
Credit Suisse Asset Management	Portfolio management	338
The Townsend Group	Real estate	323
Institutional Shareholder Services	Proxy services	153
Other	Miscellaneous	85
Total consultant fees		**$3,888**

** Includes both investment expenses and administrative expenses.*

See accompanying independent auditors' report.

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Investment Section

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State Employees' Retirement System
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Anthony S. Clark, CFA
Chief Investment Officer

May 31, 2013

Dear Members of the State Employees' Retirement Board:

The following pages provide details on the structure, strategy, and performance of the Pennsylvania State Employees' Retirement System (SERS) investment program (Fund). The data contained in the Investment Section was compiled by the SERS investment office, financial reporting and auditing staff; SERS' consultants, R.V. Kuhns & Associates, Inc, StepStone Group LLC, and the Townsend Group; and SERS' subcustodian, BNY Mellon. Performance was calculated using the Modified Dietz day–weighted return methodology, a method that takes into account the timing of cash flows and assumes that there is a constant rate of return over a specified period of time.

The Fund is managed in accordance with the investment policy and objectives established by the Board, operating as fiduciaries in the sole interest of members of the SERS pension plan. The primary investment objective of the Fund is to assure the adequate accumulation of reserves at the least cost to the citizens of the Commonwealth while preserving the principal of the Fund against erosion due to inflation. The Board seeks to meet these objectives within acceptable risk parameters through broad diversification of investments by type, industry, investment manager style, and geographic location. Investment diversification is the primary approach used to achieve return objectives with minimal acceptable risk.

The SERS investment office, in conjunction with the Fund's consultants, performs an annual review of the Fund, recommending modifications to the investment plan and asset allocation. The results of this annual review and recommended changes are presented to the Board for review and approval. Asset allocation decisions are among the most important decisions the Board makes to achieve the Fund's investment objectives. The Fund's structure is highly complex and broadly diversified. The investment program contained 212 investment advisors managing 467 investment portfolios, with distinct mandates, as of December 31, 2012.

The outcome of the 2012 investment program review was adoption of a strategic redirection of the Fund to better satisfy the changing liability requirements of a maturing pension plan by increasing the liquidity and reducing the return volatility of the Fund. The primary strategic changes made were reducing allocations to illiquid asset classes such as private equity, venture capital, and absolute return strategies, and increasing exposure in more liquid market segments, primarily public equity and fixed income, while realizing a total return that equals or exceeds the present actuarial return assumption of 7.5%. The Board approved the ***2012-2013 Strategic Investment Plan*** to implement the new Fund strategy.

After a multi-year recovery from the market collapse in 2008, capital market returns were strong in 2012 as European sovereign debt concerns receded, monetary policy remained accommodating, and global economic conditions improved. U.S. and European equity markets posted robust gains. Fixed income

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assets also produced healthy returns due to declining interest rates and improving credit conditions. Prospectively, record low interest rates and diminishing need for monetary stimulus as global economic conditions improve may pose challenges for fixed income returns. Those same conditions favor equity returns absent inflationary pressures. Corporations are generating record profits and have strong balance sheets with large cash reserves. Moreover, the liquidity and capital base of the global financial system continues to improve as the banking system worldwide recapitalizes and sheds risky assets. As this recapitalization process continues, global credit capacity should improve and enable economic activity to improve further. Inflation may pose increasing risk ahead, but remain subdued due to significant slack in economic capacity worldwide.

For 2012, the Fund recorded a gain of 12.0% for the year, well ahead of the Fund's 7.5% actuarial return assumption. The Fund had investment income and employer and employee contributions of $3.7 billion. These increases were offset by benefit and expense payments of $2.7 billion, resulting in a $1.0 billion increase in total Fund assets. SERS' ten–year annualized net return of 8.4% exceeded the Fund's long–term 7.5% actuarial return assumption. SERS' long-term 20, 25 and 30 year annualized net return of 8.4%, 9.1%, and 9.7%, respectively, also surpassed the Fund's benchmark.

As mentioned last year, SERS instituted an aggressive cash management program. One of the objectives of this initiative was to ensure that cash flows matched SERS' benefit obligations for 2012 and beyond in the wake of liquidity challenges in 2008. The Fund achieved this objective in 2012, and is well on its way to meeting its long-term liquidity goal.

SERS continues to invest in the Commonwealth of Pennsylvania, providing funding for investments that have a positive impact on the economy of the state. In aggregate, as of December 31, 2012, the Fund had approximately $1.0 billion or 4.0% of the Fund invested in Pennsylvania. Investments included public equities, fixed income, real estate, and alternative investments. SERS invested with 29 investment managers domiciled in Pennsylvania and provided capital to 388 publicly traded corporations with operations and employees in the Commonwealth.

SERS' investment office vigilantly monitors economic conditions and market events, working to position the Fund to achieve its performance objectives under a wide variety of economic scenarios. Under the supervision and guidance of the Board, be assured that SERS is making every effort to ensure that members receive the financial security they have earned and deserve.

Sincerely,

Anthony S. Clark, CFA

Chief Investment Officer

Investment Policy

The Board originally adopted a formal ***Statement of Investment 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 latest ***Statement of Investment Policy*** was adopted in 2009. The purpose of the statement is to formalize the Board's investment objectives, policies, and procedures; to establish guidelines for the investment of Fund assets; and to define the duties and responsibilities of the various entities involved in the investment process. The major elements of the statement are:

- as fiduciaries, the Board will exercise that degree of judgment, skill and care under the circumstances then prevailing which investors of prudence, discretion and intelligence, who are familiar with such matters, exercise in the management of their own affairs in investment matters;
- the Fund's overall investment objective is to provide a total rate of return, over full economic cycles, which exceeds the return of a fully diversified market portfolio within each asset class. The Board seeks to meet this objective within acceptable risk parameters through adherence to a policy of diversification of investments by type, industry, quality and geographic location;
- the Board employs an investment staff and also contracts with investment advisors and consultants to provide expert, professional judgment in all investment decisions;
- a strategic investment plan is prepared to establish the allocation of funds among investment advisors and categories of assets during the year;
- objectives are established for each category of assets used by the Fund's investment advisors to provide a framework for monitoring quality, diversification and liquidity;
- SERS is committed to promoting and improving good corporate governance practices of companies within the portfolio; and
- where investment characteristics, including yield, risk and liquidity are equivalent, the Board's policy favors investments which have a positive impact on the economy of Pennsylvania.

Investment Objectives

As indicated in SERS' ***Statement of Investment Policy***, the primary goal of the Fund is to provide benefit payments to plan participants and beneficiaries at the lowest cost to the Commonwealth through a carefully planned and diligently executed investment program.

Consistent with this goal, the Fund's overall investment objective is to achieve a total net return over a rolling five- to ten-year period that:

- exceeds the actuarial rate of return adopted by the Board; and,
- exceeds the composite benchmark for the Fund in the Board-approved strategic investment plan, with market risk (i.e., equity beta) that does not exceed that of the Fund's composite benchmark.

Schedule of Portfolio Returns* After Fees
For the period ending December 31, 2012

Asset Class	1 Year Total Return	3 Years Total Return	5 Years Total Return	10 Years Total Return
Alternative Investments [1/, 4/]	11.4%	13.5%	4.7%	12.0%
Alternative Investments Custom Benchmark [2/, 4/]	*14.3*	*9.0*	*3.0*	*8.8*
Russell 3000 Index + 3% [3/, 4/]	*34.1*	*16.7*	*4.3*	*11.7*
Global Public Equity	17.6	8.1	-0.9	8.9
MSCI ACW IMI Index (Net) [6/]	*16.4*	*7.0*	*-0.7*	*8.6*
Real Assets [4/]	8.6	7.3	-2.0	8.2
Real Assets Custom Benchmark [4/]	*12.3*	*10.2*	*-0.3*	*7.6*
CPI + 3%	*4.8*	*5.1*	*4.9*	*5.5*
Diversifying Assets [5/]	8.6	4.2	1.6	N/A
Diversifying Assets Custom Benchmark	*6.6*	*4.4*	*4.0*	*N/A*
Fixed Income	10.0	9.3	7.3	7.5
Barclays Capital U.S. Aggregate Bond Index [6/]	*4.2*	*6.2*	*5.9*	*5.2*
Liquidity Reserve	0.4	0.3	1.0	2.1
3 Month U.S. T-Bill Index	*0.1*	*0.1*	*0.5*	*1.8*
Total Fund	**12.0%**	**8.8%**	**0.0%**	**8.4%**
Total Fund Custom Benchmark	***11.5%***	***8.7%***	***2.6%***	***9.1%***
Total Fund Custom Public Market Equivalent Benchmark	***15.7%***	***9.1%***	***2.8%***	***9.3%***

** Returns for periods greater than one year are annualized. Performance was calculated using the Modified Dietz day-weighted return methodology.*

[1/] Historical Alternative Investment performance includes Private Equity, Special Situations and Venture Capital.

[2/] The Alternative Investments Custom Benchmark is intended to measure the program's performance to its peers.

[3/] 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.

[4/] Alternative Investments, its corresponding benchmarks, the Private Energy, Non-Core Real Estate, Core Real Estate, and REIT sections of Real Assets, and the corresponding Real Assets Custom Benchmark are reported on a quarter lag basis.

[5/] Diversifying Assets includes legacy Absolute Return Strategy funds-of-hedge funds which were initially funded in 2007 and Hedged Equity funds-of-one which were funded in 2012.

[6/] Represents the current benchmark. Benchmark has changed over time.

U.S. Equity

Holding	Fair Value
Apple Inc	$124,959,542
Exxon Mobil Corp	81,346,441
Microsoft Corp	62,402,119
Pfizer Inc	50,362,218
Proctor & Gamble Co	49,197,032
Google Inc	48,896,228
JPMorgan Chase & Co	45,568,812
Johnson & Johnson	44,271,305
Abbott Laboratories	42,792,002
Occidental Petroleum Corp	41,655,692

Non-U.S. Equity

Holding	Fair Value
Nestle SA	$67,069,420
HSBC Holdings PLC	47,335,795
Sanofi SA	40,753,645
Novartis AG	39,152,676
Roche Holdings AG	38,093,739
Unilever NV CVA	34,600,321
Toyota Motor Corp	31,497,137
Bayer AG	31,315,333
Reckitt Benckiser Group PLC	30,453,408
Honda Motor Co Ltd	29,163,950

Non-U.S. Fixed Income

Holding	Fair Value
United Kingdom Treasury, 4.500% March 7, 2013	$23,121,905
United Mexican States, 8.500% May 31, 2029	14,949,837
Russian Federation Bond, Variable Rate March 31, 2030	14,606,361
Buoni Poliennali Del Tes, 5.000% August 1, 2039	11,859,667
United Kingdom Gilt Inflation Linked, 1.250% November 22, 2017	9,802,718
Poland Government Bond, 5.750% September 23, 2022	9,404,897
New S Wales Treasury CRP, 6.000% April 1, 2016	8,611,972
Turkey Government Bond, 9.000% March 5, 2014	7,682,860
Malaysia Government Bond, 3.741% February 27, 2015	7,398,882
Hungary Government Bond, 5.500% February 12, 2016	6,724,194

U.S. Government and Government Related Fixed Income

Holding	Fair Value
U.S. Treasury Note, 0.750% October 31, 2017	$403,127,937
U.S. Treasury Note, 1.625% November 15, 2022	344,121,668
U.S. Treasury Inflation Index Note, 0.625% July 15, 2021	87,254,862
U.S. Treasury Inflation Index Note, 1.625% January 15, 2015	72,260,335
U.S. Treasury Inflation Index Note, 2.375% January 15, 2017	48,101,199
U.S. Treasury Inflation Index Note, 2.375% January 15, 2027	45,137,951
U.S. Treasury Note, 0.375% November 15, 2015	44,979,241
U.S. Treasury Inflation Index Note, 2.125% January 15, 2019	41,186,591
U.S. Treasury Note, 0.250% October 31, 2014	39,989,195
U.S. Treasury Inflation Index Note, 1.875% July 15, 2019	39,793,684

U.S. Corporate Fixed Income

Holding	Fair Value
Goldman Sachs Group Inc, 5.750% January 24, 2022	$7,211,481
Silverleaf Finance LLC , 4.450% March 17, 2025	6,819,711
N-Star Real Estate CDO Ltd, Variable Rate July 27, 2040	6,674,235
Structured Asset Securities Corp, Variable Rate July 25, 2029	5,266,223
SRERS Funding Ltd, Variable Rate May 9, 2046	5,048,793
Morgan Stanley, 5.750% January 25, 2021	5,024,976
National Collegiate Student Loan Trust, Variable Rate November 27, 2028	4,912,949
General Electric Co, 2.700% October 9, 2022	4,688,826
Bank of America Corp, 5.000% May 13, 2021	4,566,600
JPMorgan Chase & Co, 4.500% January 24, 2022	4,524,960

Note: A detailed list of SERS' investment holdings at December 31, 2012, may be viewed at www.SERS.state.pa.us

Schedule of Trading Broker Commissions
Year Ended December 31, 2012

Broker fees on equity and fixed income investment transactions for the year ended December 31, 2012 were $3.6 million. Below is a list of brokers receiving fees in excess of $20,000 during the year.

Broker	Commissions	Broker	Commissions
Northern Trust	$377,383	Bloomberg Tradebook	$45,970
Fidelity	297,913	Baird	39,666
Merrill Lynch	268,814	Nomura Bank International	35,129
Credit Suisse First Boston	244,685	Raymond James & Associates	35,014
Deutsche Bank	181,650	Keybank	31,664
JP Morgan Chase	181,199	Macquarie Bank	30,729
Goldman Sachs	156,324	Redburn Partners	27,993
Morgan Stanley Smith Barney	125,046	BTIG	27,466
UBS Securities	115,395	Jefferies & Company	27,202
Liquidnet	114,926	Cantor Fitzgerald	25,358
Citigroup	111,004	Keefe Bruyette & Woods	25,241
Barclays	94,136	BNP Paribas	24,819
Sturdivant & Company	82,062	HSBC Securities	24,750
Sanford C Bernstein & Company	77,276	WR Hambrecht + Co	23,778
Investment Technology Group	65,182	Janney Montgomery Scott	23,672
Credit Agricole	52,506	Daiwa Bank	21,415
Stifel Nicolaus	48,807	ISI	20,605

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

SERS Asset Allocation Report - Total Fund Summary
(Unaudited - Dollars in Millions)

Asset Class	Market Exposure*	% of Total Fund	2012-2013 Long-Term 10-Year Target
Alternative Investments	$6,197.7	24.4%	13.0%
Global Public Equity	8,553.2	33.7	38.0
Real Assets	4,170.9	16.4	15.0
Diversifying Assets	1,967.4	7.8	12.0
Fixed Income	3,892.3	15.3	19.0
Liquidity Reserve	610.6	2.4	3.0
Total Fund	**$25,392.1**	**100.0%**	**100.0%**

Numbers may not add due to rounding.
** The market exposure includes receivables and accruals at year-end.*

Number of Investment Advisors

Asset Class	Investment Advisors
Alternative Investments	135
Global Public Equity	15
Real Assets	36
Diversifying Assets	9
Fixed Income	16
Liquidity Reserve	1
Total Advisors	**212**

Number of Investment Portfolios

Asset Class	Investment Portfolios
Alternative Investments	338
Global Public Equity	17
Real Assets	80
Diversifying Assets	10
Fixed Income	20
Liquidity Reserve	2
Total Portfolios	**467**

Alternative Investments Summary

Asset Class Description

Alternative investments (AI) include all Fund assets held in commingled limited partnerships that pursue an array of private market investment strategies, including private equity, special situations, and venture capital. All these strategies require capital commitments greater than five years, offer premium returns to compensate for the illiquidity of these assets, and are subject to the funding limitation on illiquid investments established by this plan.

Role in the SERS Fund

AI seeks high, long-term capital appreciation to enhance total Fund returns. The program's investment horizon is longer than most public investments, often targeting seven to ten-year investment periods.

The program is constructed to increase Fund diversification and participate in opportunities not available to other investors or from public markets.

The program includes both pro-cyclical and counter-cyclical positions across a broad range of industries, countries, and securities to generate returns in all economic environments.

Portfolio Exposure: The AI program is well–diversified by sub-sector, geography and industry focus. As of September 30, 2012, based on fair value, the program's exposure was as follows:

By Fund Sub-Sector:

U.S. Private Equity	39.5%
U.S. Venture Capital	24.1
Non-U.S.[1/]	20.9
Distressed/Opportunistic	11.9
Pennsylvania-Related	3.7

By Portfolio Company Geography:

United States	67.6%
United Kingdom	5.9
France	2.4
China	2.1
Germany	2.0
Canada	2.0
Italy	1.9
Rest of World	15.8

By Portfolio Company Industry:

Information Technology	22.3%
Financials	20.3
Consumer Discretionary	19.0
Health Care	15.1
Industrials	10.2
Consumer Staples	3.5
Materials	3.4
Telecommunication Svcs	2.5
Energy	1.7
Other	2.0

[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.*

Program Objectives

The 2012-2013 objectives of the AI program are to:

- generate investment returns that exceed the total return of public equity markets by 3% and the mean return for the asset class over a market cycle;
- reduce the overall Fund exposure to this asset class to 21% within five years and 13% within ten years;
- increase liquidity of the AI portfolio;
- decrease cash-flow volatility; and
- reduce program complexity and overhead.

Asset Class Benchmarks

AI performance is measured and evaluated over a seven to ten-year period based on the following benchmarks:

- Public Market Benchmark – Russell 3000 + 300 basis points (illiquidity premium)
- Private Market Benchmark – Alternative Investments Custom Benchmark

SERS Alternative Investments

Sub-Asset Class	Unfunded Commitments ($ millions)	Fair Value ($ millions)	Percent of Total Fund
Private Equity	$959.7	$3,869.0	15.2%
Special Situations	336.6	970.2	3.8
Venture Capital	225.8	1,358.5	5.4
Total Alternative Investments	**$1,522.1**	**$6,197.7**	**24.4%**

Numbers may not add due to rounding.

Private Equity Committed, Drawn and Distributed

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

	Active Private Equity Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed**	Capital Drawn	Distributions
1.	ABRY Broadcast Partners III	Growth Equity	02/07/1997	$25,000,000	$22,641,544	$22,326,867
	ABRY Partners IV	Middle	03/30/2001	35,000,000	25,254,201	45,522,786
	ABRY Partners V	Middle	07/29/2005	45,000,000	41,229,820	66,324,832
	ABRY Partners VI	Middle	03/26/2008	50,000,000	56,587,513	28,635,883
	ABRY Partners VII	Middle	08/10/2011	30,000,000	9,277,823	1,909,973
2.	ABS Capital Partners III	Growth Equity	03/26/1999	35,000,000	29,428,915	18,542,069
	ABS Capital Partners IV	Growth Equity	10/13/2000	35,000,000	30,984,280	62,124,257
	ABS Capital Partners V	Growth Equity	11/14/2005	20,000,000	19,704,037	18,334,131
	ABS Capital Partners VI	Growth Equity	03/13/2009	40,000,000	36,649,033	2,975,636
3.	Advent International GPE VI-A	Large	07/07/2008	35,000,000	31,541,325	4,783,825
	Advent International GPE VII-B	Large	*	50,000,000	0	0
	Advent Latin American Private Equity Fund IV	Middle	08/02/2007	30,000,000	28,350,000	10,492,308
	Advent Latin American Private Equity Fund V	Middle	05/17/2010	15,000,000	4,402,500	0
4.	Alpha Private Equity Fund 4	Small	05/15/2002	26,508,000	35,605,050	75,876,296
	Alpha Private Equity Fund 5	Small	04/01/2006	57,796,800	65,860,055	44,105,238
5.	APAX Europe IV	Mega	03/31/1999	32,424,000	29,909,800	38,420,276
	APAX Europe V	Mega	04/27/2001	53,262,000	70,385,477	139,303,976
	APAX Europe VI	Mega	05/19/2005	76,349,190	75,559,000	57,189,539
	APAX Europe VII	Mega	06/27/2007	132,170,235	131,967,625	20,641,354
6.	Apollo Investment Fund IV	Mega	09/30/1998	75,000,000	74,838,620	124,420,446
	Apollo Investment Fund V	Mega	08/23/2001	50,000,000	46,638,778	109,524,671
	Apollo Investment Fund VI	Mega	07/19/2006	40,000,000	36,361,834	8,698,952
7.	Asia Alternatives Capital Partners	Fund of Funds	06/26/2007	50,000,000	22,545,379	6,332,919
	Asia Alternatives Capital Partners II	Fund of Funds	03/07/2008	50,000,000	16,512,818	1,623,506
	Asia Alternatives Capital Partners III	Fund of Funds	08/03/2012	50,000,000	7,291,355	0
	Asia Alternatives Korea Buyout Investors (Hahn & Co)	Small	07/22/2011	7,000,000	4,153,033	33,137
	Penn Asia Investors	Fund of Funds	09/28/2012	33,000,000	2,601,588	0
8.	Asia Pacific Growth Fund III	Growth Equity	09/28/1999	15,000,000	15,328,255	12,712,967
9.	Audax Private Equity Fund	Middle	05/25/2000	35,000,000	36,839,098	55,435,972
	Audax Private Equity Fund II	Middle	06/17/2005	25,000,000	25,517,169	33,664,293
	Audax Private Equity Fund III	Middle	11/07/2007	37,000,000	39,324,186	19,624,075
10.	Bain Capital Asia Fund	Middle	10/18/2007	12,000,000	11,310,000	2,743,746
	Bain Capital Europe III	Mega	07/10/2008	72,432,276	39,223,450	3,438,359
	Bain Capital Fund IX	Mega	04/10/2006	75,000,000	73,354,725	22,351,476
	Bain Capital Fund VII	Mega	07/06/2000	25,000,000	25,000,000	43,949,333

Private Equity Committed, Drawn and Distributed (continued)

	Active Private Equity Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed**	Capital Drawn	Distributions
	Bain Capital Fund VIII-E	Mega	12/15/2004	$12,144,000	$13,299,364	$9,643,572
	Bain Capital Fund X	Mega	01/15/2008	90,000,000	72,225,000	8,024,364
	Bain Capital IX Coinvestment Fund	Mega	04/20/2006	15,000,000	14,640,000	4,119,987
	Bain Capital X Coinvestment Fund	Mega	07/28/2008	5,000,000	1,225,000	16,957
11.	Baring India Private Equity Fund III Limited	Small	10/10/2008	5,000,000	2,685,913	261,932
	Baring Vostok Private Equity Fund IV	Middle	03/10/2008	30,000,000	23,406,458	1,163,149
12.	BC European Capital IX	Large	09/16/2011	26,472,535	4,181,136	2,151
	BC European Capital VII	Large	07/28/2000	32,658,500	37,754,746	95,769,965
	BC European Capital VII Top Up	Large	07/02/2001	10,046,300	12,278,596	32,142,279
	BC European Capital VIII	Large	12/13/2005	98,107,500	95,116,382	44,389,205
13.	Berkshire Fund VI	Middle	07/11/2002	20,000,000	18,831,830	32,996,033
	Berkshire Fund VII	Middle	11/15/2006	32,000,000	26,829,457	12,957,510
	Berkshire Fund VIII	Middle	08/25/2011	30,000,000	3,405,496	0
14.	Blackstone Capital III	Mega	11/03/1997	75,000,000	77,293,680	154,671,415
	Blackstone Capital IV	Mega	02/26/2003	75,000,000	68,342,881	125,366,669
	Blackstone Capital Partners V	Mega	05/30/2006	150,000,000	145,326,834	17,845,629
	Blackstone Communications Partners I	Mega	08/29/2000	25,000,000	25,035,029	23,483,697
15.	Brait IV	Small	12/11/2006	25,000,000	19,301,969	2,540,477
16.	Brynwood Partners V	Small	07/31/2005	10,000,000	10,352,210	10,180,508
	Brynwood Partners VI	Small	10/13/2009	10,000,000	7,532,348	1,723,397
17.	Charterhouse Capital Partners IX	Middle	04/28/2009	66,385,000	35,764,063	8,867,964
	Charterhouse Capital Partners VII	Middle	01/17/2003	61,145,000	54,529,726	94,710,603
	Charterhouse Capital Partners VIII	Middle	04/19/2006	73,374,000	72,166,830	7,490,704
18.	Charterhouse Equity Partners III	Middle	12/31/1997	50,000,000	55,395,586	75,000,205
19.	Chequers Capital XV	Middle	07/05/2006	26,000,000	32,668,259	2,828,448
20.	Clayton Dubilier & Rice V	Middle	06/30/1995	50,000,000	49,756,029	49,826,483
	Clayton Dubilier & Rice VI	Middle	12/31/1998	50,000,000	36,433,007	56,532,998
21.	Clessidra Capital Partners II	Middle	11/05/2008	20,000,000	9,640,077	2,242,896
22.	Code Hennessy & Simmons	Middle	09/28/1989	10,000,000	9,650,000	29,444,933
	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	154,943,496
	Code Hennessy & Simmons V	Middle	11/10/2005	50,000,000	53,357,135	25,827,074
23.	Cognetas Fund II	Middle	11/02/2005	49,707,800	45,384,801	2,854,538
24.	DLJ Merchant Banking Fund II	Large	03/31/1997	75,000,000	83,261,423	103,859,860
	DLJ Merchant Banking Fund III	Large	08/14/2001	85,000,000	87,875,094	162,730,471
25.	Elevation Partners	Middle	11/10/2005	35,000,000	30,626,170	19,333,075
26.	Eureka II	Growth Equity	01/30/2006	20,000,000	17,521,463	7,544,104
27.	Excelsior Capital Asia Partners III	Small	08/17/2006	25,000,000	23,310,259	4,675,694
28.	Francisco Partners	Middle	07/27/2000	50,000,000	47,825,987	43,376,495
	Francisco Partners II	Middle	07/10/2006	30,000,000	28,233,760	19,190,078

Private Equity Committed, Drawn and Distributed (continued)

	Active Private Equity Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed**	Capital Drawn	Distributions
	Francisco Partners III	Middle	10/17/2011	$20,000,000	$7,600,000	$0
29.	Frontenac VII	Growth Equity	09/30/1997	40,000,000	40,000,000	55,943,934
30.	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	68,540,735
	Great Hill Equity Partners III	Middle	03/07/2006	35,000,000	34,037,500	5,250,000
	Great Hill Equity Partners IV	Middle	09/08/2008	25,000,000	16,662,500	5,212,500
31.	Gryphon Partners II	Small	11/03/1999	35,000,000	35,051,942	41,439,219
	Gryphon Partners III	Small	09/08/2004	30,000,000	36,156,320	22,486,742
32.	GTCR IX	Middle	12/01/2006	50,000,000	46,359,954	9,453,983
	GTCR V	Middle	03/31/1997	11,400,000	11,400,000	20,502,976
	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	121,729,912
	GTCR VIII	Middle	07/07/2003	75,000,000	69,393,599	99,644,168
33.	H.I.G. Growth Buyouts & Equity Fund II	Growth Equity	07/20/2011	15,000,000	1,317,964	0
34.	Halpern Denny Fund III	Growth Equity	04/26/2000	25,000,000	24,900,560	27,407,758
35.	Harbourvest IPEP II	Fund of Funds	06/30/1997	25,000,000	24,500,000	33,921,047
	HarbourVest IPEP III	Fund of Funds	06/30/1998	40,000,000	39,400,000	56,568,683
	Harbourvest IPEP IV	Fund of Funds	04/09/2001	40,000,000	38,200,000	47,114,655
	HarbourVest Partners VI	Fund of Funds	05/07/1999	200,000,000	195,086,055	161,975,566
	HarbourVest Partners VII	Fund of Funds	03/24/2003	75,000,000	69,000,000	26,989,875
	HarbourVest Partners VIII	Fund of Funds	10/05/2006	100,000,000	78,000,000	10,889,137
	HIPEP V-Asia Pacifc & Rest of World	Fund of Funds	05/09/2006	30,000,000	25,845,316	3,925,862
36.	Hellman & Friedman Capital Partners IV	Large	02/14/2000	75,000,000	67,317,209	188,912,266
	Hellman & Friedman Capital Partners V	Large	12/20/2004	80,000,000	71,069,217	130,434,929
	Hellman & Friedman Capital Partners VI	Large	06/05/2007	125,000,000	118,781,678	42,231,795
37.	Incline Equity Partners III	Small	*	15,000,000	0	0
	PNC Equity Partners II (Incline Equity)	Small	08/30/2007	15,000,000	13,200,402	4,300,595
38.	InterMedia Partners VII	Small	01/05/2007	15,000,000	16,199,761	1,893,229
39.	Invemed Catalyst Fund	Small	10/19/1999	25,000,000	14,245,496	11,020,749
40.	J.H. Whitney Equity Fund III	Small	03/31/1998	20,000,000	20,171,316	50,793,206
	J.H. Whitney IV	Small	02/01/2000	20,000,000	17,958,772	6,867,894
	J.H. Whitney V	Small	03/29/2001	20,000,000	23,454,301	44,497,646
	J.H. Whitney VI	Small	01/05/2006	50,000,000	48,969,661	20,996,914
	J.H. Whitney VII	Small	10/12/2010	25,000,000	11,105,683	2,611,177
41.	J.W. Childs Equity Partners III	Middle	08/20/2002	40,000,000	41,738,136	44,442,270
42.	JMI Equity Fund V	Growth Equity	06/07/2005	24,000,000	23,117,205	33,460,342
	JMI Equity Fund VI	Growth Equity	06/27/2007	40,000,000	39,120,000	9,093,796
	JMI Equity Fund VII	Growth Equity	02/14/2011	10,000,000	4,840,000	0
43.	Kelso VII	Middle	10/18/2004	40,000,000	40,156,958	32,332,307
	Kelso VIII	Middle	11/29/2007	150,000,000	99,041,725	9,989,973

Private Equity Committed, Drawn and Distributed (continued)

	Active Private Equity Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed**	Capital Drawn	Distributions
44.	Leeds Equity Partners IV	Small	11/12/2004	$20,000,000	$20,104,739	$7,652,650
45.	LLR Equity Partners	Middle	02/04/2000	25,000,000	24,357,320	51,608,574
	LLR Equity Partners II	Middle	01/29/2004	25,000,000	25,000,000	21,540,400
	LLR Equity Partners III	Middle	07/24/2008	30,000,000	25,208,721	6,164,384
	LLR Equity Partners IV	Middle	*	50,000,000	0	0
46.	Madison Dearborn Capital Partners III	Middle	04/06/1999	75,000,000	75,186,728	112,755,445
	Madison Dearborn Capital Partners IV	Middle	04/02/2001	90,000,000	90,521,996	124,568,135
	Madison Dearborn Capital Partners V	Middle	12/14/2006	75,000,000	70,440,041	20,305,826
	Madison Dearborn Capital Partners VI	Middle	05/27/2008	50,000,000	21,159,173	16,478,489
47.	Meridian Venture Partners II	Small	02/11/2005	10,000,000	10,000,000	7,325,308
48.	New York Life Capital Partners III	Fund of Funds	06/30/2006	50,000,000	51,070,700	13,432,824
	New York Life Capital Partners IV	Fund of Funds	04/04/2008	50,000,000	46,791,491	8,600,935
49.	NewSpring Growth Capital II	Growth Equity	12/05/2006	10,000,000	8,000,000	4,383,422
	NewSpring Growth Capital III	Growth Equity	07/27/2012	25,000,000	1,250,000	0
50.	Nordic Capital V	Middle	05/07/2004	34,996,500	45,856,317	93,739,909
	Nordic Capital VI	Middle	07/25/2006	54,369,000	64,015,419	36,362,879
	Nordic Capital VII	Middle	05/02/2008	92,519,165	74,910,059	104,168
51.	Palamon European Equity	Growth Equity	07/23/1999	29,779,989	38,373,776	55,410,378
	Palamon European Equity II	Growth Equity	10/25/2005	36,114,000	39,110,389	21,030,990
52.	Parthenon Investors II	Small	08/09/2001	20,000,000	22,038,045	27,043,453
53.	Patriot Financial Partners	Small	06/12/2008	25,000,000	21,267,767	146,667
54.	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	84,520,061
	Permira European Fund III	Large	01/12/2004	115,960,000	125,077,125	166,505,594
	Permira IV	Large	12/14/2006	127,779,198	121,255,089	35,437,869
55.	Providence Equity Partners IV	Large	11/27/2000	25,000,000	23,412,704	53,091,951
	Providence Equity Partners V	Large	04/04/2005	45,000,000	42,078,920	28,914,674
	Providence Equity Partners VI	Large	03/16/2007	50,000,000	47,195,495	9,896,582
56.	Segulah IV	Middle	09/25/2008	16,705,647	9,413,218	63,821
57.	ShoreView Capital Partners	Small	06/16/2003	38,000,000	31,462,555	48,438,606
	ShoreView Capital Partners II	Small	03/27/2008	40,000,000	24,096,673	9,311,317
58.	Sterling Capital Partners I	Middle	10/31/2002	15,000,000	15,272,797	23,366,651
	Sterling Capital Partners II	Middle	08/18/2005	30,000,000	29,722,511	17,996,633
	Sterling Capital Partners III	Middle	08/13/2007	32,000,000	29,631,471	2,408,422
59.	Summit IV	Middle	09/30/1995	25,000,000	24,250,000	182,964,329
	Summit Partners Private Equity Fund VII	Middle	02/09/2006	97,134,500	97,134,505	21,106,914
	Summit V	Growth Equity	03/31/1998	37,500,000	36,187,500	49,398,777
	Summit Ventures VI	Growth Equity	03/23/2001	62,000,000	63,914,751	77,812,028
60.	TA IX	Middle	09/20/2000	45,000,000	43,659,073	98,743,201
	TA X	Middle	04/25/2006	70,000,000	68,068,105	34,993,105

Private Equity Committed, Drawn and Distributed (continued)

	Active Private Equity Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed**	Capital Drawn	Distributions
61.	Thomas H. Lee Equity Fund V	Large	07/03/2001	$100,000,000	$104,702,576	$149,190,921
	Thomas H. Lee Equity Fund VI	Large	11/14/2006	50,000,000	40,231,333	7,314,411
62.	TPG Partners III	Mega	01/13/2000	75,000,000	64,119,169	151,962,183
	TPG Partners IV	Mega	12/29/2003	30,000,000	27,999,752	32,033,970
	TPG Partners V	Mega	06/27/2006	100,000,000	89,768,411	13,861,116
	TPG Partners VI	Mega	05/22/2008	45,000,000	33,178,745	6,706,109
	TPG Asia V	Large	02/19/2008	22,500,000	20,440,460	2,827,800
	Newbridge Asia III	Middle	02/15/2001	15,000,000	14,438,357	54,857,234
	Newbridge Asia IV	Middle	09/27/2005	40,000,000	38,587,391	32,512,079
63.	UMS Partners Fund I	Small	02/15/2005	5,000,000	5,000,000	3,004,752
64.	Vestar Capital Partners III	Middle	06/30/1997	25,000,000	24,362,534	27,600,015
	Vestar Capital Partners IV	Middle	01/25/2000	100,000,000	97,630,147	145,467,690
	Vestar Capital Partners V	Middle	01/25/2006	50,000,000	50,549,384	16,352,319
65.	Weston Presidio III	Growth Equity	12/31/1998	35,000,000	31,989,586	28,989,700
	Weston Presidio IV	Growth Equity	06/21/2000	35,000,000	34,451,015	34,789,577
	Weston Presidio V	Growth Equity	12/08/2005	50,000,000	43,097,829	21,129,987
66.	Yucaipa American Alliance Fund II	Middle	01/13/2009	25,000,000	24,967,780	7,695,134
	Total Active Private Equity			**$7,682,235,670**	**$6,871,745,723**	**$6,527,448,576**

Numbers may not add due to rounding.
Cash flows as of 9/30/12
**Not funded as of 9/30/12*
***Commitments as of 12/31/12*

Inactive Private Equity Funds

	Capital Committed	Capital Drawn	Distributions
Total Inactive Private Equity	**$643,630,323**	**$634,381,543**	**$1,228,422,850**

Special Situations Committed, Drawn and Distributed

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

	Active Special Situations Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed**	Capital Drawn	Distributions
1.	ABRY Advanced Securities Fund	Distressed/ Restructuring	08/01/2008	$25,000,000	$22,672,541	$16,904,825
	ABRY Mezzanine Partners	Mezzanine	03/15/2002	30,000,000	26,607,475	44,027,183
	ABRY Senior Equity II	Mezzanine	07/27/2006	30,000,000	27,331,534	33,889,734
2.	AG Capital Recovery Partners IV	Distressed/ Restructuring	02/04/2003	50,000,000	35,415,216	55,777,537
	AG Capital Recovery Partners V	Distressed/ Restructuring	04/17/2006	20,000,000	20,000,000	17,677,673
3.	Avenue Asia Special Situations Fund IV	Distressed/ Restructuring	06/30/2006	50,000,000	31,897,973	11,765,932
	Avenue Europe Special Situations Fund	Distressed/ Restructuring	07/30/2008	38,632,500	25,749,356	31,785,451
	Avenue Special Situations Fund IV	Distressed/ Restructuring	03/27/2006	50,000,000	50,000,000	65,633,690
	Avenue Special Situations Fund V	Distressed/ Restructuring	06/04/2007	70,000,000	70,004,050	88,849,488
	Avenue Special Situations Fund VI	Distressed/ Restructuring	11/02/2010	20,000,000	18,210,238	356,781
4.	AXA Secondary Fund III	Secondaries	11/19/2004	26,000,000	21,430,041	32,493,884
	AXA Secondary Fund III-2	Secondaries	11/24/2004	14,000,000	11,494,000	16,482,881
	AXA Secondary Fund IV	Secondaries	02/26/2007	80,000,000	61,602,693	13,501,138
	AXA Secondary Fund V B	Secondaries	06/19/2012	75,000,000	27,447,380	0
5.	B III Capital Partners	Distressed/ Restructuring	09/30/1997	35,000,000	34,503,390	50,539,227
6.	Centerbridge Capital Partners I	Distressed/ Restructuring	02/27/2007	50,000,000	55,456,969	44,151,749
7.	Cerberus Institutional Partners	Distressed/ Restructuring	03/05/1999	35,000,000	35,000,000	77,876,355
	Cerberus Institutional Partners Series Four	Distressed/ Restructuring	11/27/2006	75,000,000	69,258,215	19,472,615
	Cerberus Institutional Partners Series Three	Distressed/ Restructuring	11/13/2003	35,000,000	22,321,354	25,703,130
	Cerberus Institutional Partners Series Two	Distressed/ Restructuring	10/09/2001	35,000,000	30,100,793	76,185,652
8.	CVI Global Value Fund	Distressed/ Restructuring	02/23/2007	60,000,000	57,151,667	27,023,177
9.	Dover Street VII	Secondaries	07/02/2008	30,000,000	25,445,287	4,874,897
10.	H.I.G. Bayside Debt & LBO Fund II	Distressed/ Restructuring	06/17/2008	30,000,000	15,800,000	3,740,809
11.	JP Morgan US Corp Finance Investors II	Distressed/ Restructuring	01/14/2003	50,000,000	51,125,300	40,895,831

Special Situations Committed, Drawn and Distributed (continued)

	Active Special Situations Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed**	Capital Drawn	Distributions
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	*	50,000,000	0	0
14.	Lexington Capital Partners II	Secondaries	06/30/1998	40,000,000	39,538,000	50,512,359
	Lexington Capital Partners III	Secondaries	01/26/1999	35,000,000	34,516,449	41,204,203
	Lexington Capital Partners V	Secondaries	01/17/2002	75,000,000	74,623,418	104,082,394
	Lexington Capital Partners VI	Secondaries	10/21/2005	50,000,000	50,995,176	26,604,927
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.	Oakhill Capital Partners	Distressed/ Restructuring	05/17/1999	50,000,000	53,683,590	86,761,262
17.	Oaktree Capital Management	Distressed/ Restructuring	05/28/2004	40,000,000	40,581,778	66,949,642
	OCM Opportunities Fund IX	Distressed/ Restructuring	*	50,000,000	0	0
	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	60,332,637
	OCM Opportunities Fund IV	Distressed/ Restructuring	09/26/2001	70,000,000	70,000,000	115,396,501
	OCM Opportunities Fund V	Distressed/ Restructuring	08/12/2004	40,000,000	40,003,507	59,495,797
	OCM Opportunities Fund VI	Distressed/ Restructuring	09/28/2005	40,000,000	40,000,000	41,600,000
	OCM Opportunities Fund VII	Distressed/ Restructuring	05/16/2007	40,000,000	40,000,000	32,750,032
	OCM Opportunities Fund VIIb	Distressed/ Restructuring	06/03/2008	40,000,000	36,000,000	36,000,000
	OCM Opportunities Fund VIII	Distressed/ Restructuring	09/20/2010	12,500,000	12,583,425	0
	OCM Opportunities Fund VIIIb	Distressed/ Restructuring	08/22/2011	12,500,000	7,187,500	0
	OCM Principal Opportunities Fund IV	Distressed/ Restructuring	01/24/2007	20,000,000	20,400,000	7,036,481
	OCM Principal Opportunities II	Distressed/ Restructuring	04/24/2001	25,000,000	25,000,000	39,481,616
18.	Sankaty Credit Opportunities III	Distressed/ Restructuring	03/08/2007	50,000,000	50,000,000	7,360,126
	Sankaty Credit Opportunities IV	Distressed/ Restructuring	07/15/2008	40,000,000	36,000,000	22,176,668
19.	Templeton Strategic Emerging Markets Fund II	Distressed/ Restructuring	09/06/2005	100,000,000	76,394,099	149,948,034

Special Situations Committed, Drawn and Distributed (continued)

	Active Special Situations Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed**	Capital Drawn	Distributions
	Templeton Strategic Emerging Markets Fund III	Distressed/ Restructuring	05/29/2009	$100,000,000	$68,685,538	$16,836,350
20.	Versa Capital Partners	Distressed/ Restructuring	10/16/2005	20,000,000	22,811,753	15,988,714
	Versa Capital Partners II	Distressed/ Restructuring	07/31/2008	15,000,000	8,189,170	521,999
21.	W Capital Partners II	Secondaries	08/08/2007	40,000,000	37,919,138	28,349,547
	Total Active Special Situations			**$2,268,179,904**	**$1,923,578,559**	**$2,007,539,873**

Numbers may not add due to rounding.
Cash flows as of 9/30/12
**Not funded as of 9/30/12*
***Commitments as of 12/31/12*

Inactive Special Situations Funds

	Capital Committed	Capital Drawn	Distributions
Total Inactive Special Situations	**$171,600,000**	**$158,186,047**	**$251,722,747**

Venture Capital Committed, Drawn and Distributed

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

	Active Venture Capital Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed*	Capital Drawn	Distributions
1.	Abingworth Bioventures IV	Balanced	09/01/2003	$20,000,000	$19,020,000	$7,045,960
	Abingworth Bioventures V	Balanced	01/23/2007	33,775,000	22,476,359	12,239,260
2.	Accel Europe	Early Stage	07/02/2001	15,000,000	11,350,000	11,433,483
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	4,761,905
4.	Advanced Technology Ventures VI	Balanced	03/09/2000	10,000,000	10,000,000	3,847,939
	Advanced Technology Ventures VII	Balanced	07/11/2001	27,000,000	25,784,700	13,053,074
5.	Alloy Annex I	Early Stage	10/31/2003	5,000,000	5,000,000	345,895
	Alloy Ventures 2000	Early Stage	05/19/2000	20,000,000	20,000,000	4,058,488
	Alloy Ventures 2002	Early Stage	07/22/2002	25,000,000	25,000,000	9,260,604
	Alloy Ventures 2005	Early Stage	08/11/2005	25,000,000	25,000,000	0
6.	Apax Excelsior VI	Balanced	07/03/2000	35,000,000	34,151,324	48,407,576
	P/A Fund I	Early Stage	06/30/1993	30,000,000	30,000,000	66,195,539
7.	APEX Investment Fund IV	Early Stage	09/17/1999	25,000,000	25,765,509	2,661,681
	APEX Investment Fund V	Early Stage	04/19/2002	20,000,000	20,568,870	5,027,374
8.	Artiman Ventures II	Early Stage	10/27/2006	25,000,000	23,312,500	0
	Artiman Ventures III	Early Stage	08/09/2010	20,000,000	6,450,000	0
9.	Atlas Venture Fund IV	Early Stage	03/31/1999	26,000,000	23,809,496	8,460,313
	Atlas Venture Fund V	Early Stage	02/07/2000	37,200,000	37,211,109	39,164,709
	Atlas Venture Fund VI	Early Stage	08/01/2001	24,800,000	24,800,000	8,447,523
10.	Austin Ventures IX	Balanced	01/09/2006	15,000,000	14,070,609	1,372,438
	Austin Ventures VIII	Balanced	07/26/2001	20,932,140	21,100,362	10,659,995
11.	Battery Ventures VIII	Balanced	08/13/2007	25,000,000	24,399,048	10,964,228
	Battery Ventures VIII Side Car Fund	Balanced	08/29/2008	9,000,000	6,391,962	5,281,102
12.	Birchmere Ventures III	Early Stage	05/05/2005	10,000,000	9,991,565	7,252,243
13.	Care Capital Investments III	Balanced	02/08/2006	25,000,000	16,064,046	2,928,536
14.	Charles River Partnership XI	Early Stage	02/15/2001	11,032,259	10,883,284	14,360,660
15.	CID Greater China Venture Capital Fund II	Balanced	08/10/2007	20,000,000	17,000,000	6,439,746
16.	Clearstone Venture Partners III-A	Early Stage	12/22/2004	25,000,000	23,000,000	267,818
17.	Cross Atlantic Technology Fund	Balanced	02/14/2000	20,000,000	20,149,041	22,362,181
	Cross Atlantic Technology Fund II	Balanced	01/28/2002	32,900,000	32,900,000	18,871,600
	Novo Vita	Balanced	12/26/2000	11,616,498	11,616,498	5,377,593
18.	Devon Park Bioventures	Balanced	12/15/2006	10,842,697	6,472,469	950,627
19.	Draper Fisher Jurvetson Fund VI	Early Stage	08/13/1999	8,000,000	8,000,000	3,820,841
	Draper Fisher Jurvetson Fund VII	Early Stage	09/22/2000	20,000,000	20,000,000	3,178,088
	Draper Triangle Ventures	Early Stage	12/20/1999	20,000,000	20,431,137	10,505,577

Venture Capital Committed, Drawn and Distributed (continued)

	Active Venture Capital Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed*	Capital Drawn	Distributions
	Draper Triangle Ventures II	Early Stage	10/13/2004	$12,000,000	$12,192,324	$696,538
20.	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
21.	Frazier Healthcare III	Balanced	03/31/1999	30,000,000	30,000,000	10,337,350
	Frazier Healthcare IV	Balanced	09/27/2001	30,000,000	29,670,000	19,873,617
	Frazier Healthcare V	Balanced	05/10/2005	30,000,000	29,175,000	23,699,011
22.	Grotech Partners V	Early Stage	09/30/1998	25,000,000	25,000,000	24,521,934
23.	Guggenheim Technology Ventures I	Early Stage	11/17/2008	2,000,000	1,960,000	297,134
24.	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	3,542,050
	Healthcare Ventures VII	Early Stage	10/29/2002	35,000,000	33,862,500	13,792,373
	Healthcare Ventures VIII	Early Stage	08/22/2005	30,000,000	22,275,000	8,700,895
25.	Highland Capital Partners VI	Early Stage	10/25/2001	25,000,000	25,000,000	32,442,073
	Highland Capital Partners VII	Early Stage	10/13/2006	35,000,000	31,587,500	3,547,906
	Highland Consumer Fund I	Early Stage	05/04/2007	25,000,000	20,263,199	0
26.	IP II	Balanced	12/17/2001	8,600,000	8,584,074	1,437,641
	IP III	Balanced	11/19/2004	10,500,000	9,555,000	3,019,134
	IP IV	Balanced	09/21/2007	14,000,000	12,880,000	1,887,139
27.	Insight Venture Partners VI	Balanced	08/21/2007	30,000,000	31,898,328	7,363,848
	Insight Venture Partners VII	Balanced	04/27/2011	20,000,000	12,520,000	1,927,164
28.	InterWest Partners IX	Balanced	10/19/2005	20,000,000	16,000,000	1,106,563
	InterWest Partners VIII	Early Stage	08/25/2000	25,000,000	25,000,000	9,657,162
	InterWest Partners X	Balanced	10/30/2008	30,000,000	15,000,000	0
29.	JP Morgan Venture Capital Investors	Fund of Funds	07/08/1999	100,000,000	106,275,378	54,090,777
	JP Morgan Venture Capital Investors II	Fund of Funds	09/08/2000	100,000,000	107,812,521	53,677,758
	JP Morgan Venture Capital Investors III	Fund of Funds	06/20/2006	100,000,000	88,048,577	13,950,776
30.	Kline Hawkes Pacific	Balanced	08/30/2000	15,000,000	15,100,498	6,873,957
31.	Knightsbridge Venture Capital VI	Fund of Funds	12/07/2004	20,000,000	17,133,334	935,101
32.	Lightspeed Venture Partners VII	Early Stage	02/27/2006	18,000,000	16,477,490	5,924,962
	Lightspeed Venture Partners VIII	Early Stage	06/27/2008	15,000,000	12,300,000	6,673,550
33.	Media/Communications Ventures Fund V	Growth Equity	09/27/2000	35,000,000	34,812,205	49,627,103
34.	Meritech Capital Partners II	Late Stage	01/02/2001	26,475,166	24,842,529	32,317,264
	Meritech Capital Partners III	Late Stage	04/05/2006	35,000,000	33,950,000	62,184,929
	Meritech Capital Partners IV	Late Stage	02/10/2011	20,000,000	8,000,000	878,096
35.	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	30,000,000	1,835,977
	NEPA Venture-II	Balanced	12/31/1992	7,500,000	7,500,000	34,879,769

Venture Capital Committed, Drawn and Distributed (continued)

	Active Venture Capital Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed*	Capital Drawn	Distributions
36.	Morgenthaler Partners IX	Balanced	11/25/2008	$20,000,000	$10,000,000	$1,028,659
	Morgenthaler Partners VII	Balanced	07/26/2001	35,000,000	35,000,000	24,815,617
	Morgenthaler Partners VIII	Balanced	10/03/2005	35,000,000	31,500,000	14,803,400
37.	New Enterprise Associates 11	Early Stage	03/01/2004	25,000,000	23,500,000	18,702,783
	New Enterprise Associates 12	Early Stage	06/26/2006	35,000,000	32,029,833	11,255,558
	New Enterprise Associates IX	Early Stage	11/15/1999	20,000,000	19,600,000	5,220,073
	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 X	Early Stage	12/11/2000	35,000,000	34,503,000	29,560,918
38.	Novitas Capital III	Early Stage	04/17/2003	10,000,000	8,950,000	3,049,757
39.	Oak Investment Partners XI	Late Stage	07/21/2004	35,000,000	35,000,000	13,703,385
	Oak Investment Partners XII	Late Stage	07/10/2006	40,000,000	36,710,052	9,376,418
40.	Permira UK Venture Fund IV	Balanced	09/30/1996	15,248,000	15,993,572	22,721,533
41.	Pitango Venture Capital Fund IV	Early Stage	07/19/2004	20,000,000	19,601,534	7,816,308
	Pitango Venture Capital Fund V	Early Stage	08/22/2007	30,000,000	21,263,295	3,593,498
42.	Polaris Venture Partners II	Balanced	09/30/1998	25,000,000	24,750,000	32,698,524
	Polaris Venture Partners III	Balanced	01/21/2000	50,000,000	49,500,000	25,728,399
	Polaris Venture Partners IV	Balanced	09/30/2002	50,000,000	49,750,000	21,854,628
	Polaris Venture Partners V	Balanced	08/08/2006	50,000,000	41,750,000	9,870,463
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	18,250,000	3,565,264
44.	SCP Private Equity Partners II	Late Stage	06/15/2000	25,000,000	25,000,000	5,972,493
45.	Siguler Guff BRIC Opportunities Fund	Fund of Funds	05/08/2006	10,000,000	9,558,299	2,270,657
	Siguler Guff BRIC Opportunities Fund II	Fund of Funds	04/09/2008	25,000,000	19,929,950	1,009,385
46.	Sofinnova Venture Partners VII	Early Stage	01/18/2007	20,000,000	15,800,000	12,769,943
47.	Sprout VII	Early Stage	03/31/1995	18,000,000	18,000,000	47,828,701
48.	Summit Accelerator Fund	Early Stage	11/15/1999	8,000,000	7,609,500	12,168,635
	Summit Partners Venture Capital Fund II	Early Stage	09/22/2006	15,000,000	15,823,703	11,250,306
49.	T.Rowe Price Stock Distribution Account	Late Stage	01/03/2005	0	442,918,329	415,021,515
50.	TA/Advent VIII	Balanced	06/30/1997	30,000,000	29,400,000	66,756,735
51.	Three Arch Capital	Balanced	12/20/2000	20,000,000	19,500,000	9,066,583
	Three Arch Partners IV	Balanced	06/04/2004	20,000,000	18,050,000	6,209,207
52.	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	13,065,207
53.	US Venture Partners VII	Balanced	02/18/2000	13,750,000	13,750,000	4,800,279
	US Venture Partners VIII	Early Stage	06/01/2001	26,250,000	25,830,000	20,488,962
54.	Weathergage Venture Capital	Fund of Funds	06/26/2007	25,000,000	18,875,000	2,086,714

Venture Capital Committed, Drawn and Distributed (continued)

	Active Venture Capital Funds Limited Partnership	Financing Stage Focus	SERS Initial Funding	Capital Committed*	Capital Drawn	Distributions
	Weathergage Venture Capital II	Fund of Funds	06/29/2010	$25,000,000	$7,250,000	$0
55.	Worldview Technology Partners IV	Balanced	01/31/2001	18,130,023	16,951,175	7,034,048
	Total Active Venture Capital			**$2,831,560,091**	**$3,068,660,805**	**$2,159,907,981**

Numbers may not add due to rounding.
Cash flows as of 9/30/12
**Commitments as of 12/31/12*

Inactive Venture Capital Funds

	Capital Committed	Capital Drawn	Distributions
Total Inactive Venture Capital	**$422,619,599**	**$414,845,561**	**$673,630,567**

Global Public Equity Investments Summary

Asset Class Description

Global public equity (GPE) comprises Fund assets held in publicly traded equity securities of companies located throughout the developed world and emerging markets. These companies have a wide range of market capitalizations in different industries and sectors that offer vastly different return opportunities.

Role in the SERS Fund

GPE provides the Fund with high total return but with high volatility. This asset class offers immediate liquidity in normal capital market conditions and can provide moderate inflation protection.

Investing in public equity securities globally—rather than in limited regions—offers the best risk-adjusted return and diversification benefits for the Fund.

Program Objective

The 2012-2013 objective of the GPE program is to generate annualized total net return that exceeds the Global Equity benchmark return by 100 to 200 basis points per annum, accomplished through active and passive ownership of large, mid, and small capitalization stocks worldwide.

Asset Class Benchmark

GPE performance is measured and evaluated over a three to five-year period relative to the MSCI All-Country World Investable Market Index (ACWI-IMI) benchmark.

Global Public Equity

Manager	Investment Style	Market Exposure as of 12/31/12* ($ millions)
Global Mandates		
1. Walter Scott & Partners Limited	Growth	$529.4
Total Global Mandates		**529.4**
U.S. Equity		
2. Cornerstone Growth	Large-cap growth	264.2
3. Diamond Hill Concentrated	Large-cap concentrated	275.8
4. Epoch Value	Large-cap value	268.3
5. Iridian Asset Management LLC	Mid-cap private business value	252.7
6. Mellon Capital Management Russell 1000 Index	Russell 1000 Index	2,676.8
Mellon Capital Management Corp-PA Companies	Small-cap PA companies	194.2
7. Emerald Advisers, Inc. - PA Companies	Small-cap PA companies	334.9
Total U.S. Equity		**4,267.0**
Non-U.S. Developed Markets Equity		
8. Artisan Partners L.P. - Global ex US	Global ex-US growth	348.8
Mellon Capital Management MSCI World ex US Index	MSCI World ex-US Index	1,278.0
9. Morgan Stanley Investment Management Limited-developed ex US	EAFE value	369.0
10. Templeton Investment Counsel - Global ex US	Global ex-US value	546.1
11. Harris Associates L.P.	Small-cap intrinsic value	408.7
12. Pictet Asset Management Limited	Small-cap value	0.2
Total Non-U.S. Developed Markets Equity		**2,950.9**
Emerging Markets Equity		
13. BlackRock/Emerging Markets Index Non-Lendable Fund	MSCI Emerging Markets Index	631.3
14. Vanguard/MSCI Emerging Market ETF	MSCI Emerging Markets Index	174.1
Total Emerging Markets Equity		**805.4**
Transition Assets		
15. Northern Trust Public Equity	Transition Assets	0.6
Total Transition Assets		**0.6**
Total Global Public Equity		**$8,553.2**

**Includes stocks and cash which the manager had available for investment. Numbers may not add due to rounding.*

Real Assets Investments Summary

Asset Class Description

Real assets (RA) include the Fund's investments that predominantly own or develop physical assets and that are highly correlated to inflation. Two categories of investments, real estate and inflation protection, make up SERS' RA asset class:

Real Estate

- *Core real estate* through separate account relationships with reasonable levels of liquidity over a 12 to 18-month period.
- *Non-core real estate* through private real estate limited partnerships requiring long-term capital commitments and offering limited liquidity.
- *REITS* which are publicly traded real estate investment trusts.

  The most recent property diversification data is as follows:

- 43% pooled funds, 57% separate accounts;
- 22% office, 3% industrial, 9% retail, 28% multifamily, 11% hotel, 7% timber, 20% other (including senior and student housing, land and various niche property investments);
- 9% Pennsylvania, 35% East excluding Pennsylvania, 25% West, 14% South, 5% Midwest, 12% International;
- 17% of the fair value of the separate accounts was invested in 14 investments located in Pennsylvania

Inflation Protection

- *Public energy* through commodities exposure, master limited partnerships, or other publicly traded securities with exposure to the energy markets.
- *Private energy* through investments in limited partnerships requiring long-term capital commitments and offering limited liquidity.
- *Commodities* through both passive and active investment strategies which provide exposure to oil and gas, metals, livestock, and agricultural products.
- *Natural resources* through investment in publicly traded companies that generate a large portion of their revenues from natural resources.
- *Timberland and farmland* through direct and indirect investment in real estate whose value is determined by timber and farming operations.
- *Infrastructure* through indirect investments in large-scale infrastructure projects such as toll roads, airports and ports, and pipelines.

Role in the SERS Fund

RA provides positive real return during periods of high or rising inflation and thereby helps preserve the purchasing power of the Fund. The RA portfolio is also expected to generate attractive, long-term return with lower volatility than the broad equity markets.

RA provides significant diversification benefits to the Fund due to its relatively low correlation to economic-sensitive assets such as stocks and bonds.

Finally, energy investments, in particular, offer high total return opportunity, provide inflation protection, and are effective U.S. dollar hedges (because crude oil worldwide is denominated in U.S. dollars). These attributes are particularly attractive because SERS' liabilities are not indexed to inflation and are denominated in U.S. dollars.

Program Objectives

The 2012-2013 objectives of the RA program are to:

- primarily, generate real total return that exceeds inflation; and,
- secondarily, provide competitive total return over the long-term through capital appreciation and income generation.

Asset Class Benchmarks

RA performance is measured and evaluated over a three to five-year period relative to the following benchmarks:

- Real Assets Custom Benchmark
- CPI + 3%

Real Assets

	Investment	Vintage Year	Asset Type	Investment Structure	Fair Value as of 12/31/12 ($ millions)
Private Energy					
1.	Carlyle Energy Mezz Opp Fund	2012	Energy	Limited Partnership	$8.5
2.	Denham Commodity VI	2012	Energy	Limited Partnership	6.2
3.	Energy Spectrum Partners IV	2004	Energy	Limited Partnership	8.1
	Energy Spectrum Partners V	2007	Energy	Limited Partnership	6.6
4.	First Reserve Fund X	2004	Energy	Limited Partnership	6.1
	First Reserve Fund XI	2006	Energy	Limited Partnership	50.7
	First Reserve Fund XII	2008	Energy	Limited Partnership	40.8
5.	Lime Rock Partners III	2004	Energy	Limited Partnership	11.7
	Lime Rock Partners IV	2006	Energy	Limited Partnership	31.9
	Lime Rock Partners V	2008	Energy	Limited Partnership	35.4
	Lime Rock Resources	2005	Energy	Limited Partnership	7.5
6.	Oaktree Power Opportunities Fund III	2010	Energy	Limited Partnership	7.9
	OCM/GFI Power Opportunities Fund II	2005	Energy	Limited Partnership	2.2
7.	SFC Energy Partners I	2007	Energy	Limited Partnership	5.1
	SFC Energy Partners II	2011	Energy	Limited Partnership	7.1
	Total Private Energy				**235.8**
Non-Core Real Estate					
8.	AG Asia Realty Fund	2007	Diversified	Limited Partnership	10.5
9.	Apollo Real Estate Fund III	1998	Diversified	Limited Partnership	7.3
10.	Berwind Investment Partnership V	1999	Diversified	Limited Partnership	8.8*
	Berwind Investment Partnership VI	2002	Diversified	Limited Partnership	10.4*
	Berwind Investment Partnership VII	2005	Diversified	Limited Partnership	12.6*
	Berwind Investment Partnership VIII	2007	Diversified	Limited Partnership	11.1*
	Berwind Investment Partnership IX	2012	Diversified	Limited Partnership	7.5
11.	Blackstone Real Estate Partners III	1999	Diversified	Limited Partnership	0.5
	Blackstone Real Estate Partners IV	2003	Diversified	Limited Partnership	15.2
	Blackstone Real Estate Partners V	2006	Diversified	Limited Partnership	57.7
	Blackstone Real Estate Partners VI	2007	Diversified	Limited Partnership	89.9
	Blackstone Real Estate Partners VII	2011	Diversified	Limited Partnership	35.5
12.	Clerestory Small Cap Fund I	2007	Diversified	Limited Partnership	12.0
13.	Colony Investors VIII	2007	Diversified	Limited Partnership	7.4
14.	Fillmore East Fund	2005	Debt	Limited Partnership	10.5
	Fillmore West Fund	2008	Debt	Limited Partnership	20.4*
15.	Goldman Sachs Whitehall V & VI	1994	Diversified	Limited Partnership	0.2
	Goldman Sachs Whitehall VII & VIII	1996	Diversified	Limited Partnership	0.1
16.	Grosvenor Residential Investment Partners I	2007	Residential	Limited Partnership	14.9
17.	Hawkeye Scout Fund I	2006	Diversified	Limited Partnership	67.6
18.	LEM Real Estate High-Yield Debt Fund III	2012	Debt	Limited Partnership	(0.2)
19.	Lubert Adler Fund II	1998	Diversified	Limited Partnership	0.0

Non-Core Real Estate (continued)

	Investment	Vintage Year	Asset Type	Investment Structure	Fair Value as of 12/31/12 ($ millions)
	Lubert Adler Fund III	2000	Diversified	Limited Partnership	$0.4
	Lubert Adler Fund IV	2004	Diversified	Limited Partnership	5.0*
	Lubert Adler Fund V	2006	Diversified	Limited Partnership	9.3*
	Lubert Adler Fund VI	2008	Diversified	Limited Partnership	10.1*
	Lubert Adler Fund VI-A	2010	Diversified	Limited Partnership	2.7*
20.	OCM Real Estate Opp Fund A	1996	Diversified	Limited Partnership	1.2
	OCM Real Estate Opp Fund II	1998	Diversified	Limited Partnership	0.1
	OCM Real Estate Opp Fund III	2003	Diversified	Limited Partnership	3.8
21.	Oxford GSA Fund	2006	Diversified	Limited Partnership	11.8
22.	Prudential Latin America Residential Fund III	2007	Residential	Limited Partnership	27.1
	Prudential Latin America Retail Fund I	2006	Retail	Limited Partnership	26.9
	Prudential Senior Housing Fund III	2006	Senior housing	Limited Partnership	32.5
	Prudential Senior Housing Fund IV	2011	Senior housing	Limited Partnership	8.1
23.	Rockpoint Finance Fund I	2006	Diversified	Limited Partnership	1.1
	Rockpoint Real Estate Fund I	2004	Diversified	Limited Partnership	2.2
	Rockpoint Real Estate Fund II	2005	Diversified	Limited Partnership	12.2
	Rockpoint Real Estate Fund III	2007	Diversified	Limited Partnership	37.7
24.	Starwood Fund IV	1997	Diversified	Limited Partnership	0.2
	Starwood Fund V	1999	Diversified	Limited Partnership	0.1
	Starwood Fund VI	2001	Diversified	Limited Partnership	17.8
	Starwood Fund VII	2005	Diversified	Limited Partnership	24.3
	Starwood Fund VIII	2007	Diversified	Limited Partnership	60.8
25.	Westbrook Fund II	1997	Diversified	Limited Partnership	0.1
	Westbrook Fund III	1998	Diversified	Limited Partnership	2.3
	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	9.8
	Westbrook Fund VII	2006	Diversified	Limited Partnership	40.0
	Westbrook Fund VIII	2009	Diversified	Limited Partnership	48.5
	Total Non-Core Real Estate				**797.4**

	Investment	Vintage Year	Asset Type	Investment Structure	Fair Value as of 12/31/12 ($ millions)
Core Real Estate					
26.	Fidelity Real Estate Opportunistic Income Fund	2007	Debt	Limited Partnership	$50.2
27.	Forest I.M.A.	1992	Timber	Separate Account	191.0
28.	Heitman America Real Estate Trust	2007	Diversified	Limited Partnership	120.5
	Heitman I.M.A.	1988	Diversified	Separate Account	94.1
29.	LaSalle I.M.A.	1994	Diversified	Separate Account	273.0
30.	Lowe I.M.A.	1994	Diversified	Separate Account	381.1
	Lowe GTO	2012	Diversified	Separate Account	363.8
31.	Sentinel Real Estate Fund	1986	Residential	Open-Ended Fund	68.2
32.	UBS Trumbull Property Fund	1988	Diversified	Open-Ended Fund	80.4
	UBS Trumbull Property Income Fund	1988	Diversified	Open-Ended Fund	75.9
	Total Core Real Estate				**1,698.3**
REITs					
33.	CBRE Clarion Real Estate Securities	1996	REITs	Separate Account	314.7
34.	Urdang Real Estate Securities	2002	REITs	Separate Account	68.0
	Total REITs				**382.7**
Commodities & Infrastructure					
35.	BAAM Commodities	2007	Commodities	Open-Ended Fund	569.1
36.	Wellington DIH	2004	Commodities	Open-Ended Fund	487.6
	Total Commodities & Infrastructure				**1,056.7**
	Total Real Assets				**$4,170.9**

Numbers may not add due to rounding.
**Fair values for these advisors have not been received as of year end. The values are third quarter fair values adjusted by fourth quarter cash flows.*

Diversifying Assets Investments Summary

Asset Class Description

Diversifying assets (DA) replaces SERS' absolute return strategies (ARS) program, which included seven fund-of-hedge funds structured with a low-risk, low-return benchmark of LIBOR plus 300 basis points (3-4% annual total return). These funds were structured to serve as collateral for equity exposure derivatives to implement a "portable alpha" strategy. Extreme volatility in 2008-2009 prompted SERS to wind down its portable alpha program, leaving legacy assets in strategies with return objectives materially below the Fund's target rate of return.

To initiate rebalancing the former ARS return targets and liquidity profiles, the Board approved mandates with Tiger Management and Entrust Capital in 2011. Transitioning the remaining assets in ARS mandates into the DA program will bring the asset class to approximately 9% of Fund assets. The DA long-term target allocation in this plan is 12%.

The assets that comprise the DA portfolio include:

- **Fund-of-one** mandates with SERS as sole limited partner, with discretion given to general partners to build customized programs in which SERS benefits from greater transparency, increased oversight, and better liquidity; and,

- **Fund-of-hedge funds** which include customized separate accounts and commingled funds that invests in hedge funds.

Role in the SERS Fund

DA seeks to generate a return equal to or greater than the Fund's total return target with lower volatility than that of public equities. DA targets a liquidity profile between public equity markets and private equity buyouts, with a three-year investment horizon. The portfolio will provide significant Fund diversification due to the low correlation of the underlying strategies to public capital markets. Diversification is achieved through long/short equity, global macro, managed futures, long/short credit, and event-driven strategies—all with long-term histories of attractive risk-adjusted returns.

Program Objectives

The 2012-2013 objectives of the DA program are to:

- produce annualized total returns of 8-12%, net of fees, with volatility (standard deviation of returns) below that of public equities;

- provide competitive total returns in bull markets and preserve capital in bear markets; and,

- increase Fund diversification.

Asset Class Benchmark

Performance of the DA program will be measured and evaluated over a five-to seven-year period based on the Diversifying Assets Custom Benchmark.

Diversifying Assets

	Manager	Investment Style	Market Exposure as of 12/31/12* ($ millions)
Absolute Return			
1.	Arden	Fund-of-hedge fund	$118.0
2.	BAAM - Stable Alpha	Fund-of-hedge fund	271.3
3.	Mesirow Financial	Fund-of-hedge fund	114.2
4.	Morgan Stanley Alternative Investment Partners	Fund-of-hedge fund	34.5
5.	PAAMCO	Fund-of-hedge fund	51.8
6.	Robeco Investment	Fund-of-hedge fund	1.1
7.	Rock Creek	Fund-of-hedge fund	81.8
	Total Absolute Return Strategies		**672.6**
Hedged Strategies			
	BAAM Keystone	Fund-of-one	784.5
8.	Entrust Keystone	Fund-of-one	260.1
9.	Tiger Keystone	Fund-of-one	250.2
	Total Hedged Strategies		**1,294.8**
	Total Diversifying Assets		**$1,967.4**

**Includes securities and cash which the manager had available for investment. Numbers may not add due to rounding.*

Fixed Income Investments Summary

Asset Class Description

Fixed income (FI) includes the Fund's investments in publicly-traded debt obligations of sovereign, quasi-sovereign, and corporate entities. FI generates income from the periodic payment of interest as well as the eventual repayment of principal at maturity. Debt obligations are contractual in nature and are senior to equity securities. The legal protection afforded to debt and the shorter duration of debt compared to equities result in lower volatility (i.e., investment risk) than equities.

Role in the SERS Fund

Historically, the SERS' FI portfolio was managed for excess return. Changing financial and capital market conditions, threats from deflation and inflation, and increasing liquidity requirements of the Fund necessitated changes in the role and strategy of the FI program.

FI will be structured to generate current income to pay benefits, provide liquidity sufficient to preserve capital and satisfy liabilities, and protect the Fund against inflation and deflation. Secondarily, when market conditions are favorable, the program will seek to enhance the total return of the Fund.

Program Objectives

The 2012-2013 objectives of the fixed income allocation are to:

- provide income and liquidity with a relatively low risk;
- protect the Fund against inflation and deflation; and,
- contribute excess total return to the Fund when market conditions permit.

Asset Class Benchmarks

FI performance will be evaluated over a three to five-year period related to the following benchmarks:

- Fixed income assets – Barclay's Capital U.S. Aggregate Bond Index
- Liquidity reserve assets – Barclay's Capital U.S. Government/Credit 1-3 Year Index*

**Since 1-3 year credit managers were not hired as of December 31, 2012, SERS is using a three month U.S. T-Bills Index to benchmark cash management.*

SERS Fixed Income

	Manager	Investment Style	Market Exposure as of 12/31/12[1/] ($ millions)
Core Plus			
1.	Berwind - PA Capital Fund	PA Capital Fund (liquidating)	$2.7
2.	Brandywine Global	Global Core Fixed	180.6
3.	Oaktree Capital Management	Mezzanine Fund (liquidating)	0.2
4.	PIMCO EMD	Emerging Market Debt (liquidating)	1.0
5.	Pyramis Global Advisors	Commercial Mortgage-Backed Securities	241.7
6.	SEI Structured Credit Fund	High Yield Bank Loans	183.7
7.	Stone Harbor	Emerging Market Debt	152.1
	Stone Harbor	Global High Yield	156.4
8.	WaterfallAsset Management	Asset-Backed Securities	138.9
9.	W.R. Huff	High Yield (liquidating)	16.8
	Total Core Plus Fixed Income		**1,074.0**
Core			
10.	BNY Mellon Cash Investment Strategies	Barclays Agreggate	673.3
	PIMCO Core	Barclays Agreggate ex. Treasuries	249.3
11.	Taplin, Canida & Habacht (TCH)	US Credit	181.0
	Total Core Fixed Income		**1,103.6**
Treasury Inflation Protected Securities (TIPS)			
12.	Brown Brothers Harriman	US TIPS	213.4
13.	New Century Advisors	Global TIPS	106.8
14.	NISA Investment Advisors	US TIPS	484.0
	PIMCO TIPS	Global TIPS (liquidating)	3.1
	Total TIPS		**807.2**
Treasuries			
	PIMCO US Treasuries	Domestic Treasuries	257.3
15.	Wellington US Treasuries	Domestic Treasuries	256.3
	Total Treasuries		**513.6**
Transition Assets			
16.	Northern Trust Fixed Income	Transition Management	393.9
	Total Transition Assets		**393.9**
	Total Fixed Income Investments		**$3,892.3**

Numbers may not add due to rounding.
[1/]Includes securities and cash which the manager had available for investments.

SERS Liquidity Reserve[2/]

Manager	Investment Style	Market Exposure as of 12/31/12[1/] ($ millions)
Cash		
1. PA State Treasury (STIF)	Cash	$603.7
PA Treasury Overnight Cash	Cash	6.9
Total Liquidity Reserve Investments		**$610.6**

[1/]Includes securities and cash which the manager had available for investments.
[2/]The SERS Liquidity Reserve will be jointly managed by SERS Fixed Income and Investment Operations.

Actuarial Section

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May 2, 2013

Mr. David E. Durbin
Executive Director
State Employees' Retirement System
30 North Third Street
Suite 150
Harrisburg, PA 17101-1716

Dear Mr. Durbin:

The purpose of this letter is to certify the actuarial adequacy of the contributions being made by the Commonwealth of Pennsylvania and other participating agencies to the Pennsylvania State Employees' Retirement System (SERS), and to discuss the approach currently being taken toward meeting the financing objectives of the plan. The results provided herein are based upon the December 31, 2012 annual actuarial valuation.

The funding objective of the plan is set forth in the State Employees' Retirement Code (SERC). The annual employer contribution is equal to the sum of the following for the fiscal year beginning July 1, 2013:

(1) The employer share of the normal cost.
(2) The fresh start amortization of the December 31, 2009 unfunded liability over a 30-year period beginning July 1, 2010 and ending on June 30, 2040.
(3) The amortization of the change in liability due to Act 2010-120 over a 30-year period beginning July 1, 2011 and ending on June 30, 2041.
(4) The amortization of changes in liability due to actual experience differing from assumed experience after December 31, 2009 over 30-year periods beginning with the July first following the actuarial valuation determining such changes.
(5) The amortization of benefit improvements, including cost-of-living increases, over 10-year periods beginning with the July first following the actuarial valuation determining such changes.

The amortization payments are level amounts over the remaining applicable amortization periods. The employer cost is determined as a percent of retirement covered compensation. The total employer cost is the average contribution amount that needs to be received from the employer groups participating in the system. Some employer groups contribute a higher percent of compensation, and some employer groups contribute a lower percent of compensation depending on the benefits payable to their employees.

All costs and liabilities have been determined in conformance with generally accepted actuarial principles and procedures in accordance with the principles of practice prescribed by the American Academy of Actuaries. The calculations were performed on the basis of actuarial assumptions and methods, which are internally consistent, and reasonable (taking into account the past experience of SERS and reasonable expectations) and which in combination represent the best estimate of anticipated experience under the plan.

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The actuarial valuation is based on financial and participant data, which is prepared by SERS staff. The data are reviewed for internal and year-to-year consistency as well as general reasonableness prior to their use in the actuarial valuation.

The actuarial valuation uses assumptions regarding future rates of investment return and rates of retirement, withdrawal, death, and disability among SERS members and their beneficiaries. The current set of assumptions used in the December 31, 2012 actuarial valuation, with the exception of the investment return assumption, was adopted by the State Employees' Retirement Board (the Board) based upon actual experience of SERS during the years 2006 through 2010. Based upon subsequent review of SERS investment data and results, the Board approved a reduction in the assumed annual investment return from 8.0% to 7.5% effective as of the December 31, 2011 actuarial valuation. The 7.5% assumption remains in effect for the December 31, 2012 actuarial valuation. We will continue to closely monitor this assumption and will recommend changing it if conditions warrant such change. The actuarial value of assets is developed by recognizing the difference between the expected actuarial value of assets and the market value of assets over a five-year period.

Governmental Accounting Standards Board (GASB) Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* establishes a range of actuarial cost and amortization methods for the Unfunded Actuarial Accrued Liability. The scheduled payments since July 1, 2005 have been below the minimum amount required to meet the GASB #25 minimum. Previously this was a result of financing changes implemented by Act 2003-40 in December 2003. Currently this is a result of the contribution collars required under Act 2010-120. After June 30, 2015, provided that employer contributions are made in accordance with current law, we expect employer contributions to exceed the GASB #25 minimum.

The "Schedule of Funding Progress" and "Schedule of Employer Contributions" included in the Financial Section are provided as part of the accounting disclosure statements in accordance with GASB #25. These two schedules were derived from the December 31, 2012 actuarial valuation.

With the exception of the "Schedule of Retirees and Beneficiaries Added to and Removed from Rolls" and the "Summary of Plan Provisions", the schedules appearing in the Actuarial Section were derived from the December 31, 2012 actuarial valuation.

Based upon the valuation results, it is our opinion that, provided future employer contributions are made in accordance with current law, the Pennsylvania State Employees' Retirement System is in sound condition in accordance with generally accepted actuarial principles and procedures. The employer contribution has been below the GASB Statement No. 25 minimum since July 1, 2005 and will likely remain below the minimum through June 30, 2015. Thereafter, provided that employer contributions are made in accordance with current law, we expect employer contributions to exceed the GASB minimum.

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It should be noted that, with the passage of Act 2010-120 (Act 120), significant changes to many key benefit provisions of SERS have been legislated. This was in response to the significant funding challenges SERS has been facing in recent years, and will continue to face in coming years. By reducing pensions for future Commonwealth employees and providing funding relief to SERS employers through the use of contribution collars, Act 120 addressed both SERS' long-term and short-term funding challenges.

As actuaries for SERS, Hay Group considers it important to note that the establishment of contribution collars results in employer funding for FY2013 and FY2014 (and likely for the next few years) at levels below the otherwise applicable actuarially required funding levels. This is not to say that required employer contributions will never be made; rather, Act 120 provides that they will be deferred and paid in future years. It is therefore essential to the long-term funding of the system that the Commonwealth adhere not only to the short-term collars provided by Act 120 but also to the long-term funding obligations that the statute established. We expect that the contribution collars will govern employer contribution levels for at least the next few years, and this will continue to be the case until such time as the actuarially determined annual employer funding requirement is below the collared contribution level. While Hay Group would prefer that SERS funding be based upon our actuarially determined funding level, we recognize, given the extraordinary funding challenges the Commonwealth of Pennsylvania is facing over coming years, that the contribution collars represent an important and necessary funding deferral mechanism for a temporary period, after which funding on an actuarial basis will resume.

The results shown in this section are reasonable actuarial results. However, a different set of results could also be considered reasonable actuarial results. The reason for this is that actuarial standards of practice describe a "best-estimate range" for each assumption, rather than a single best-estimate value. Thus, reasonable results differing from those presented in this section could have been developed by selecting different points within the best-estimate ranges for various assumptions.

The actuaries certifying to this valuation are members of the Society of Actuaries or other professional actuarial organizations, and meet the General Qualification Standards of the American Academy of Actuaries for purposes of issuing Statements of Actuarial Opinion.

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Respectfully submitted,
Hay Group, Inc.

By ______________________
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Member American Academy of Actuaries
Enrolled Actuary No. 11-3885

By ______________________
James J. McPhillips, F.S.A.
Member American Academy of Actuaries
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- The investment rate of return is 7.5% per year based on an underlying rate of inflation of 2.75% per year. The investment rate of return assumed last year (for the December 31, 2011 actuarial valuation) was 7.5% per year.
- The Plan uses a five–year smoothed market approach to value plan assets for actuarial purposes.
- Actuarial methods are specified by statute. Actuarial assumptions are recommended by the Plan's actuary and approved by the SERS Board of Trustees.
- For current and future non-disabled retirees, beneficiaries, and survivors, the plan uses the RP-2000 Healthy Annuitant Mortality Table projected to 2008 and updated to reflect actual SERS experience through 2010. For current and future disabled retirees, the Plan uses the RP-2000 Disabled Retiree Annuitant Mortality Table projected to 2008 and updated to reflect actual SERS experience through 2010. For all pre-retirement active members, the mortality is based on actual SERS experience.
- The rates for probability of retirement and the probabilities of withdrawal from active service, including death, before age and service retirements are presented in the **Schedule of Active Member Valuation Data**.
- The projected average salary increase is 6.2% with a range of 4.30% to 11.05%. This increase includes an underlying assumption of 2.75% for inflation. The annual rate of salary increase for promotions and longevity for members is presented in the **Schedule of Active Member Valuation Data**.
- The plan uses a variation of the entry-age normal actuarial cost method to determine the liabilities and costs related to the System's benefits. The method is based on the benefits and contributions for new members rather than for all current members from their date of entry. This variation should produce approximately the same results as the typical method over the long run. The Plan uses amortization periods of ten years and 30 years as follows:
  (1) Act 2010-120 established a Fresh Start amortization of the December 31, 2009 unfunded liability over a 30-year period beginning July 1, 2010 and ending June 30, 2040.

  (2) The amortization of the change in liability due to Act 2010-120 over a 30-year period beginning July 1, 2011 and ending on June 30, 2041.

  (3) The amortization of changes in liability due to actual experience differing from assumed experience after December 31, 2009 over 30-year periods beginning with the July first following the actuarial valuation determining such changes.
- The Plan does not use an assumption for cost-of-living adjustments in the determination of actuarial valuations.
- The Plan periodically prepares a study using actual experience in order to develop assumptions to be used in its actuarial valuations. The latest study was completed January 12, 2011, for the period January 1, 2006, through December 31, 2010.
- The most recent valuation was based on members of the Plan as of December 31, 2012. All census data was supplied by the Plan and was subject to reasonable consistency checks. Asset data was also supplied by the Plan.
- The actuarial computations were prepared by, or made under the supervision, of a Member of the American Academy of Actuaries (M.A.A.A.).

Table A[1/]
Withdrawal From Active Employment Before Age & Service Retirement
Annual Rate of Active Members Separating Within the Next Year
As of December 31, 2012

Sample Age	Male						Female					
	Withdrawal Years of Service				Death	Disability	Withdrawal Years of Service				Death	Disability
	0	5	9	14+			0	5	9	14+		
20	20.70%	NA	NA	NA	0.04%	-	22.40%	NA	NA	NA	0.02%	-
25	16.20	0.80%	0.80%	NA	0.04	0.02%	20.50	2.70%	1.90%	NA	0.02	0.04%
30	13.90	0.80	0.60	0.60%	0.05	0.07	17.90	2.40	1.70	1.80%	0.02	0.09
35	13.60	0.70	0.40	0.40	0.06	0.12	12.80	1.90	1.20	1.30	0.03	0.16
40	13.00	0.50	0.40	0.40	0.08	0.19	10.00	1.90	0.70	0.50	0.04	0.21
45	12.10	0.50	0.20	0.20	0.12	0.33	9.80	1.80	0.70	0.50	0.06	0.33
50	11.30	0.50	0.20	0.20	0.22	0.46	9.80	1.80	0.40	0.50	0.09	0.50
55	11.30	0.60	0.60	0.60	0.27	0.60	9.80	1.50	1.20	1.20	0.14	0.63
60	-	-	-	-	0.32	-	-	-	-	-	0.24	-

Table B[1/]
Annual Rate of Retirement

Sample Age	Full Benefits	
	Male	Female
53	25.0%	23.0%
54	26.0	23.0
55	27.0	23.0
56	28.0	23.0
57-59	30.0	23.0
60	25.0	25.0
61	20.0	20.0
62	25.0	25.0
63-64	20.0	20.0
65	25.0	25.0
66-79	20.0	20.0
80	100.0	100.0

Table C
Annual Rate of Salary Increase

Completed Years of Service	Increase	Completed Years of Service	Increase
1	8.00%	16	2.50%
2	6.00	17	2.40
3	4.50	18	2.30
4	4.00	19	2.20
5	3.75	20	2.10
6	3.50	21	2.00
7	3.25	22	1.90
8	3.20	23	1.80
9	3.15	24	1.70
10	3.10	25	1.60
11	3.00	26	1.50
12	2.90	27	1.40
13	2.80	28	1.30
14	2.70	29	1.25
15	2.60	30 +	1.25

Table D
Reduced Benefits

Sample Age	5 - 14 Years of Service		15 or More Years of Service	
	Male	Female	Male	Female
25	1.0%	1.0%	-	-
30	1.5	1.5	-	-
35	1.5	1.5	1.5%	1.5%
40	1.0	1.0	1.5	1.5
45	1.0	1.0	1.5	1.5
50	1.0	1.0	2.0	2.0
55	1.0	1.0	5.5	5.5

[1/] The assumptions presented in Table A and Table B on this page were based on a review of SERS' experience from 2006 through 2010. The rates are the probabilities that an event will occur in the year after the valuation. For instance, the male retirement rate of 25% at age 62 means that 250 of every 1,000 male employees age 62 and eligible for full benefits are expected to retire before they reach age 63.

Active Members by Age and Years of Service - Male

	Years of Service								
Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 Plus	Total	Average Salary
< 20	15	-	-	-	-	-	-	15	$25,275
20 - 24	911	18	-	-	-	-	-	929	30,746
25 - 29	3,178	823	12	-	-	-	-	4,013	41,010
30 - 34	2,442	2,534	550	9	-	-	-	5,535	47,678
35 - 39	1,764	1,963	1,711	480	6	-	-	5,924	52,056
40 - 44	1,721	1,800	1,962	2,237	1,073	31	-	8,824	59,588
45 - 49	1,478	1,523	1,565	1,663	2,421	815	27	9,492	61,298
50 - 54	1,430	1,481	1,394	1,190	1,595	1,587	832	9,509	58,319
55 - 59	1,334	1,386	1,314	1,119	1,238	1,196	1,370	8,957	58,691
60 - 64	878	1,011	962	790	649	464	684	5,438	59,225
65+	403	493	431	292	208	143	313	2,283	62,593
Total	**15,554**	**13,032**	**9,901**	**7,780**	**7,190**	**4,236**	**3,226**	**60,919**	**$56,118**

Average Age: 46.64
Average Service: 12.23

Active Members by Age and Years of Service - Female

	Years of Service								
Age Group	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 Plus	Total	Average Salary
< 20	26	-	-	-	-	-	-	26	$22,561
20 - 24	887	20	-	-	-	-	-	907	27,733
25 - 29	2,050	666	18	-	-	-	-	2,734	35,400
30 - 34	1,730	1,741	531	22	-	-	-	4,024	41,129
35 - 39	1,426	1,429	1,082	321	28	-	-	4,286	44,420
40 - 44	1,353	1,450	1,210	873	571	61	-	5,518	46,980
45 - 49	1,479	1,421	1,070	829	1,003	648	63	6,513	48,170
50 - 54	1,426	1,524	1,269	887	1,024	965	969	8,064	49,915
55 - 59	1,105	1,415	1,184	953	1,128	876	1,258	7,919	51,015
60 - 64	523	828	737	533	502	324	477	3,924	51,102
65+	176	265	240	155	149	92	137	1,214	50,922
Total	**12,181**	**10,759**	**7,341**	**4,573**	**4,405**	**2,966**	**2,904**	**45,129**	**$46,981**

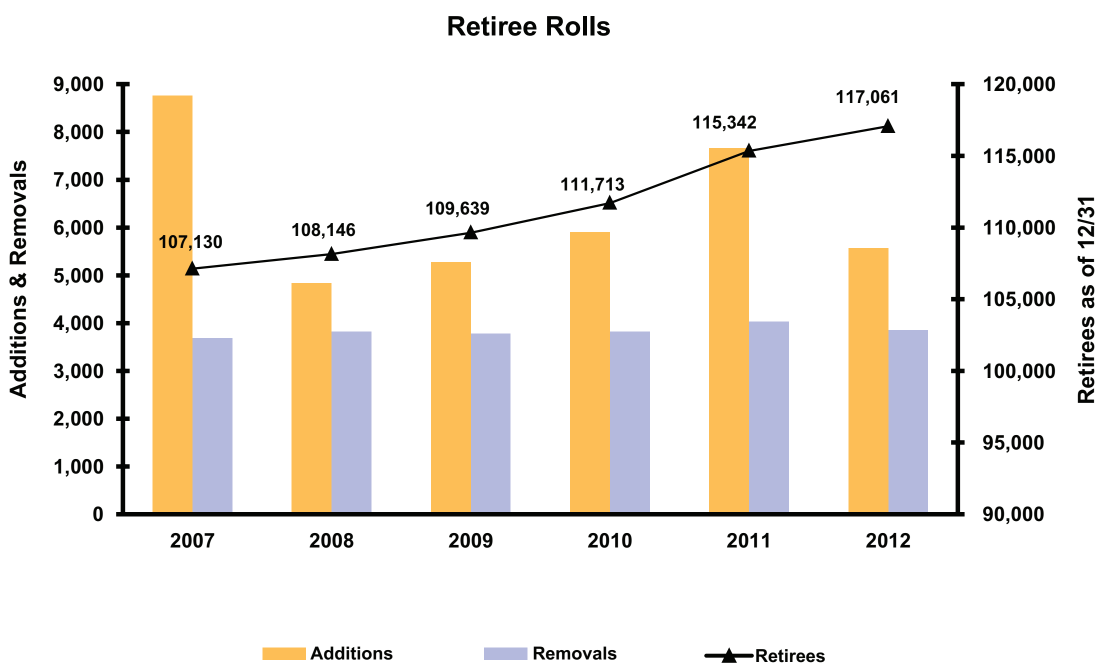
Average Age: 46.90
Average Service: 11.79

Aggregate Active Member Valuation Data

Valuation Year Ended Dec 31	Number Employers	Number Active Members	Annual Payroll	Annual Average Pay	% Increase/(Decrease) in Average Pay
2012	105	106,048	$5,539,000,000	$52,230	0.1%
2011	107	107,021	5,582,000,000	52,159	1.8
2010	106	109,255	5,597,000,000	51,228	0.8
2009	106	110,107	5,595,000,000	50,813	3.8
2008	108	110,866	5,428,000,000	48,957	1.3
2007	108	109,610	5,299,000,000	48,345	4.8

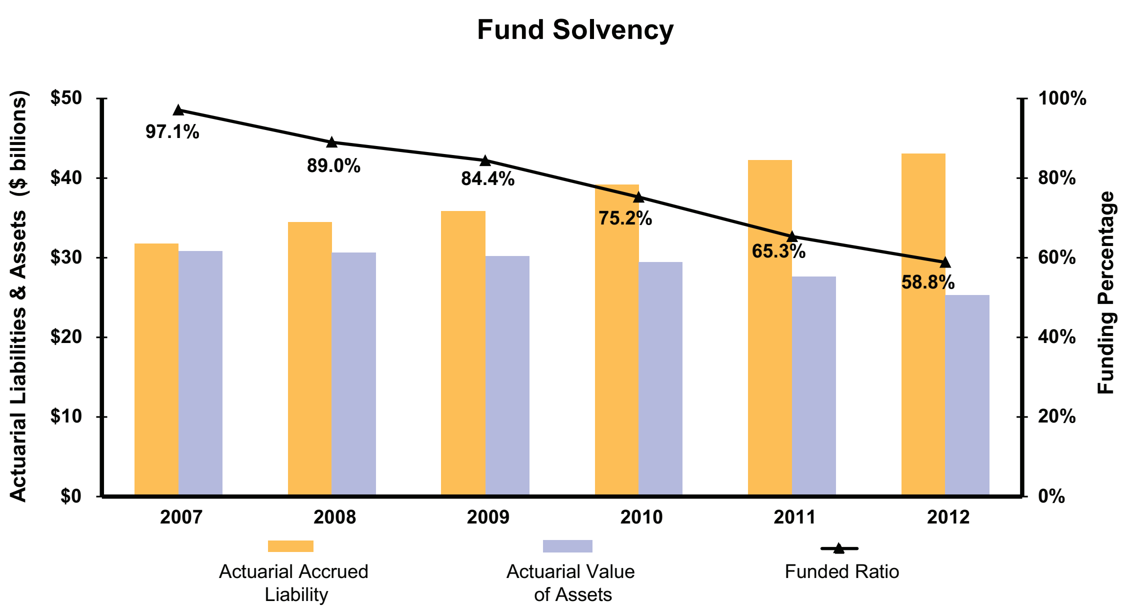
Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
Six Years Ended December 31, 2012

	Added to Rolls		Removed from Rolls		Rolls - End of Year		Percentage Change	
Year	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances
2012	5,572	$138,363,766	3,853	$50,453,118	117,061	$2,329,489,208	1.49%	3.92%
2011	7,669	205,521,876	4,040	50,132,667	115,342	2,241,716,566	3.25	7.43
2010	5,906	148,169,231	3,832	48,182,212	111,713	2,086,701,831	1.89	5.01
2009	5,278	125,610,303	3,785	45,195,072	109,639	1,987,109,540	1.38	4.19
2008	4,841	105,374,596	3,825	45,068,366	108,146	1,907,133,859	0.95	3.22
2007	8,761	234,585,550	3,691	42,238,843	107,130	1,847,681,816	4.97	11.58



Solvency Test
Six Years Ended December 31, 2012
(Dollar Amounts in Thousands)

Valuation Year Ended Dec 31	Aggregate Accrued Liabilities For (1) Active Member Contributions	(2) Retirees & Beneficiaries	(3) Active Members (Employer Financed Portion)	Total Actuarial Accrued Liability (AAL)	Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Assets (1)	(2)	(3)	Funded Ratio
2012	$4,551,507	$22,095,052	$16,409,005	$43,055,564	$25,302,688	100.0%	93.9%	0.0%	58.8%
2011	4,406,306	21,222,075	16,653,481	42,281,862	27,618,461	100.0	100.0	11.9	65.3
2010	4,409,444	18,995,355	15,774,795	39,179,594	29,443,945	100.0	100.0	38.3	75.2
2009	4,280,680	17,962,741	13,553,596	35,797,017	30,204,693	100.0	100.0	58.7	84.4
2008	4,068,036	17,305,971	13,063,389	34,437,396	30,635,621	100.0	100.0	70.9	89.0
2007	3,849,293	16,255,843	11,648,835	31,753,971	30,839,877	100.0	100.0	92.2	97.1



Gains & Losses in Accrued Liabilities
Resulting from Differences Between Assumed Experience and Actual Experience
(Dollar Amounts in Thousands)

Type of Activity	2012	2011	2010	2009
(Loss) from Investment Earnings	$(2,541,098)	$(2,113,087)	$(1,251,332)	$(1,118,036)
Changes in Demographics of New Entrants	(54,250)	12,149	(64,191)	11,597
Pay Increases/(Decreases) Different than Assumptions	383,003	5,916	421,224	(84,681)
Retirements Different than Expected and Other Demographic Changes	(90,631)	(296,743)	(98,384)	37,289
(Loss) During Year From Financial Experience	(2,302,976)	(2,391,765)	(992,683)	(1,153,831)
Non Recurring Items:				
Changes in Economic Assumptions	-	(2,148,326)[4/]	235,734[1/]	-
Benefit changes under Act 2010-120	-	-	(2,694,535)[2/]	-
Underfunding due to retroactive Fresh Start and other changes	-	-	(741,207)[3/]	-
Loss due to collar restrictions	(941,267)[5/]	(477,988)[5/]	-	-
Composite (Loss)	**$(3,244,243)**	**$(5,018,079)**	**$(4,192,691)**	**$(1,153,831)**

[1/]*Revised annual inflation rate of 2.75% and salary growth rate of 3.05% due to 17th Investigation of Actuarial Experience.*

[2/]*Act 2010-120 reduces benefits for most new members effective January 1, 2011 and new Legislators effective December 1, 2010.*

[3/]*Act 2010-120 re-amortizes the System's existing liabilities over 30 years through an Actuarial "Fresh Start."*

[4/]*Adoption of a 7.5% annual investment return assumption effective December 31, 2011 (versus 8.0% assumed in prior years) resulted in this increase in accrued liability.*

[5/]*Act 120 caps the growth of employer contributions to 3% for FY 11/12, 3.5% for FY 12/13 and 4.5% for each subsequent year until no longer needed.*

History and Projection of Contribution Rates and Funded Ratios[1/]
(Dollar Amounts in Thousands)

Valuation Year Ended Dec 31	Covered Payroll	Contribution Rates[2/] Member Contribution Rate [3/]	Employer Normal Cost Rate	Unfunded Liability Rate [4/]	Preliminary Employer Contribution Rate [5/]	Final Employer Contribution Rate	Funded Ratio
2003[6/]	$4,965,360	6.25%	8.32%	(11.12)%	(2.80)%	2.00%	104.9%
2004[6/]	5,093,573	6.25	8.25	(7.29)	0.96	3.00	96.1
2005[6/]	5,138,377	6.25	8.39	(6.32)	2.07	4.00	92.9
2006[7/]	5,661,675	6.25	8.21	(6.30)	1.91	4.00	92.7
2007	5,529,069	6.25	8.42	(9.57)	(1.15)	4.00	97.1
2008	5,660,319	6.25	9.51	(5.88)	3.63	4.00	89.0
2009[8/]	5,935,988	6.25	9.53	(3.89)	5.64	5.00	84.4
2010[9/]	5,851,704	6.25	4.08	14.85	18.93	8.00	75.2
2011	5,890,704	6.25	5.10	21.29	26.39	11.50	65.3
2012	**5,836,402**	**6.25**	**5.01**	**26.21**	**31.22**	**16.00**	**58.8**
2013[10/]	6,014,412	6.25	5.01	26.22	31.23	20.50	58.6
2014	6,197,852	6.25	5.01	26.69	31.70	25.00	58.0
2015	6,386,886	6.25	5.01	26.97	31.98	29.50	57.6
2016[11/]	6,581,686	6.25	5.01	26.42	31.43	31.43	58.6
2017	6,782,428	6.25	5.01	25.81	30.82	30.82	59.8
2018	6,989,292	6.25	5.01	25.12	30.13	30.13	61.0
2019	7,202,465	6.25	5.01	24.44	29.45	29.45	62.3
2020	7,422,140	6.25	5.01	23.79	28.80	28.80	63.5
2021	7,648,516	6.25	5.01	23.15	28.16	28.16	64.7
2022	7,881,795	6.25	5.01	22.54	27.55	27.55	65.9
2023	8,122,190	6.25	5.01	21.94	26.95	26.95	67.1

[1/]*The projection of contribution rates is based on the assumption that there are no changes in SERS statutory funding methodology, no changes in demographics or economic assumptions, no changes in benefit provisions, and no actuarial gains or losses on the actuarial value of assets that result from recognizing currently deferred gains or losses on the fair value of assets.*

[2/]*Rates and values are for the fiscal year beginning July 1st following the valuation year and do not include the Benefit Completion Plan contribution.*

[3/]*Member contribution rate is for Class AA employees as they comprise most of SERS membership.*

[4/]*Act 2003-40 imposed a split amortization that recognized COLAs and certain large gains over ten years, while recognizing other gains and losses over 30 years. The effect has been to suppress the unfunded liability rate for ten years ending in 2011.*

[5/]*Actuarial rate before floor and collar.*

[6/]*Act 2003-40 amended the Retirement Code to place a floor of 2.00%, 3.00%, and 4.00% for fiscal years beginning July 1, 2004, 2005, and 2006, respectively, for the employer contribution rate.*

[7/]*Act 2007-8 amended the Retirement Code to place a permanent floor of 4.00% on the employer contribution rate.*

[8/]*Act 2010-46 amended the Retirement Code to set the final employer contribution rate at 5.00% for fiscal year beginning July 1, 2010.*

[9/]*Act 2010-120 amended the Retirement Code to place a collar on increases to employer contribution rate of 3.00% and 3.50% for fiscal years beginning July 1, 2011 and 2012, respectively. The employer contribution rate will be collared at 4.50% for fiscal year beginning July 1, 2013 and thereafter until collar becomes unnecessary.*

[10/]*Numbers are projected from 2013 to 2023 based on 2012 actuarial valuation.*

[11/]*Act 2010-120 amended the Retirement Code to place a permanent floor at employer normal cost after collars expire.*

Benefit and Contribution Provisions as of December 31, 2012

The State Employees' Retirement System makes provision for retirement, disability, and death benefits for all State employees, except for those specifically excluded under section 5301 of the State Code, and certain other eligible groups. The major provisions may be summarized as follows:

Eligible Employees

Class A

All regular State employees, employees of certain Commissions and Authorities, employees of state-owned educational institutions, and the Pennsylvania State University (unless such employees have joined the Public School Employees' Retirement System (PSERS), TIAA-CREF, or Alternative Retirement Program (ARP) hired before July 1, 2001, who did not elect into the Class AA membership as of December 31, 2001. This excludes Judges and Magisterial District Judges who have elected Class E-1 or Class E-2.

Class AA

All regular State employees who are hired after June 30, 2001 and before January 1, 2011, and former Class A State employees hired before July 1, 2001 , who elected into Class AA as of December 31, 2001. This includes employees of certain Commissions and Authorities, employees of state-owned educational institutions, and the Pennsylvania State University (unless such employees have joined PSERS, TIAA-CREF, or ARP), but excludes State Police Troopers, Judges, Magisterial District Judges, and Legislators with Class D-4.

Class A-3

All regular State employees who enter SERS membership for the first time on or after January 1, 2011 and all Legislators who became members on or after Dec. 1, 2010; Capitol Police and Park Rangers who became members after July 1, 2011; and State Police Officers who became members after July 1, 2012, provided the member did not elect membership in the optional A-4 Class within 45 days of becomin a member.

Class A-4

All members who would be Class A-3 but elected A-4 within 45 days of becoming a member.

Class D-4

Legislators coming into service after June 30, 2001 and before December 1, 2010, who elect to be SERS members, and legislators who elected Class D-4 before July 1, 2001.

Class E-1

Judges who elect class E-1.

Class E-2

Magisterial District Judges who elect Class E-2.

Age and Service Requirements for Superannuation (Full Formula Benefits)

Class AA/A

Age 60 with three years of service; except for members of the General Assembly, enforcement officers, correction officers, psychiatric security aids, and officers of the Delaware River Port Authority for whom the requirement is age 50 with three years of service. Members of Class AA/A with 35 years of credited service are entitled to full formula benefits regardless of age. State Police Officers can retire on full benefits after age 50 or with 20 years of service. Capitol Police and Park Rangers can retire on full benefits at age 50 with 20 years of Capitol Police or Park Ranger service.

Class A-3/A-4

Age 65 for most members and age 55 for members of the General Assembly, enforcement officers, correction officers, psychiatric security aides, Delaware River Port Authority police officers, officers of the Pennsylvania State Police, and for Capitol Police Officers and Park Rangers with 20 or more years of credited service in the Classification. Members of Class A-3/A-4 are eligible for full formula benefits with 35 years of credited service with a superannuation score of 92.

Class D-4

Age 50, with three years of service.

Class E-1

Age 60, with three years of service; or 35 or more years of credited service, regardless of age.

Class E-2

Age 60, with three years of service; or 35 or more years of credited service, regardless of age.

Formula for Superannuation Annuity

The standard single-life annuity for most members is 2% of the high three-year average salary of the member multiplied by years and fractions of credited service multiplied by the Multiplier of the Class of membership.

The annuity paid to a member shall not exceed the member's highest salary during any period of 12 consecutive months of creditable service.

The multipier for each of the major classes are as follows:

Multiplier for Major Classes

Class	Multiplier	
A	1.00	For State Police with years of service between 20 and 25, the minimum annuity is 50% of highest annual salary. With more than 25 years of service the benefit is a minimum of 75% of highest annual salary.
AA	1.25	
A-3	1.00	
A-4	1.25	
D-4	1.50	
E-1	2.00	For each of the first ten years of judicial service dropping to 1.5 for each subsequent year of judicial service.
E-2	1.50	For each year of judicial service.

NOTE: There are conditions under which long-service members or members retiring at advanced ages may receive somewhat larger benefits than those described above. Further, benefit limitations exist for most members of SERS.

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Statistical Section

The Statistical Section of SERS' CAFR presents detailed information related to the financial statements, as well as highlights of actuarial valuations. The schedules within the Statistical Section are classified into the following four categories: Financial Trends, Revenue Capacity, Demographic and Economic Information, and Operating Information.

Financial Trends

The **Schedule of Trend Data** provides key financial, actuarial, and demographic data for ten years ended December 31, 2012. This data includes items such as employer and member contribution rates, contributions received by the System and benefits paid, fair value and actuarial value of assets, and the number of annuitants, beneficiaries, and active members.

The **Schedule of Additions to Plan Net Position** presents the member and employer contributions, as well as the net investment income/loss for the ten years ended December 31, 2012. The System's investment returns have the most significant impact on plan net position.

The **Schedule of Deductions from Plan Net Position** presents the benefits, refunds of contributions, and administrative expenses for the ten years ended December 31, 2012. Of these three categories, the System's benefit payments have the most significant impact on the total deductions from plan net position.

The **Schedule of Benefit and Refund Deductions from Net Position by Type** presents the amount of benefit payments and refunds by type for the ten years ended December 31, 2012. Most benefit types are either superannuated or early which is determined by the number of years of service and/or age at retirement.

The **Schedule of Total Changes in Plan Net Position** combines the additions to and deductions from plan net position from the Schedule of Additions to Plan Net Position and Schedule of Deductions from Plan Net Position to arrive at net increase/decrease of changes in plan net position for the ten years ended December 31, 2012.

Revenue Capacity

The **Schedule of Investment Income/Loss** presents the details of the total net investment gain/loss for the ten years ended December 31, 2012. The System has two outside sources of revenue and one own-source (internal) of revenue. Employer contributions and member contributions, which information is provided for in the Schedule of Additions to Plan Net Position, are the two outside sources of revenue, and investment income is the System's own-source revenue. Since investment income/loss has the greatest impact to the System, this schedule provides more detail on the major components of the investment income/loss, which is also disclosed in total on the Schedule of Additions to Plan Net Position.

Demographic and Economic Information

The **Schedule of Active Member Statistics** provides the total number of active members, as well as the average age, average service, and average salary by gender for the ten years ended December 31, 2012.

Operating Information

The **Schedule of Retired Members by Type of Benefit** presents, for given benefit ranges, the total number of retirees, total monthly benefits and total number of retirees by retirement type as of December 31, 2012.

The **Schedule of Retired Members by Option** presents, for given benefit ranges, the total number of retirees, total monthly benefits and total number of retirees by retirement option as of December 31, 2012.

The **Schedule of Average Monthly Benefit Payments** presents, in five-year increments of credited service, the average monthly benefit, average final average salary and number of retired members for the ten years ended December 31, 2012.

The **Schedule of Average Annual Benefit Payments** presents, in five-year age increments and by gender, the average annual benefit for each major retirement type as of December 31, 2012.

The **Schedule of SERS Agency Participation** provides the number of covered members and the corresponding percentage of participation for the 20 largest employers for the ten years ended December 31, 2012, as well as a listing of additional employers participating with SERS as of December 31, 2012.

Sources: Unless otherwise noted, the information for these schedules is derived from the Financial Section and Actuarial Section of the Comprehensive Annual Financial Report for the relevant year.

Schedule of Trend Data[1/]

Ten Years Ended December 31, 2012

	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Contribution Rates										
Employer[2/,3/]	11.59%[8/]	8.01%[8/]	5.01%[7/]	4.01%[6/]	4.04%[6/]	4.04%[6/]	4.02%[5/]	3.02%[5/]	2.03%[5/]	1.07%
Member	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%	6.25%
Contributions:										
Employer[2/]	$565,621	$391,749	$273,083	$253,250	$235,288	$243,936	$196,420	$148,375	$106,703	$68,604
Member	$347,937	$350,852	$349,049	$348,805	$336,833	$333,818	$317,790	$305,624	$309,923	$308,014
Average Annual Compensation	$52,230	$52,159	$51,228	$50,813	$48,957	$48,345	$46,118	$44,815	$45,382	$44,519
Fair Value of Net Position	$25,389,335	$24,377,179	$25,886,102	$24,661,949	$22,795,813	$35,516,198	$32,052,830	$28,751,871	$26,641,399	$24,535,949
Actuarial Value of Assets	$25,302,688	$27,618,461	$29,443,945	$30,204,693	$30,635,621	$30,839,877	$28,148,834	$26,793,782	$26,900,027	$27,465,615
Accrued Actuarial Liability	$43,055,564	$42,281,862	$39,179,594	$35,797,017	$34,437,396	$31,753,971	$30,364,997	$28,851,716	$27,999,026	$26,179,761
Funded Ratio	58.8%	65.3%	75.2%	84.4%	89.0%	97.1%	92.7%	92.9%	96.1%	104.9%
Total Benefits and Refunds	$2,674,133	$2,705,263	$2,449,253	$2,273,372	$2,204,579	$2,336,368	$1,919,426	$1,943,643	$1,859,255	$1,632,281
Average Pension[4/]	$25,083	$24,448	$23,491	$22,695	$21,965	$21,326	$20,025	$19,372	$18,414	$17,192
Annuitants and Beneficiaries	117,061	115,342	111,713	109,639	108,146	107,130	102,060	101,179	98,727	94,412
Active Members	106,048	107,021	109,255	110,107	110,866	109,610	110,972	109,981	108,405	109,018

[1/] *All dollar amounts are in thousands, except Average Pension and Average Annual Compensation.*

[2/] *Includes Benefits Completion Plan Contribution.*

[3/] *Employer rate represents total contributions as a percent of covered payroll as of 12/31.*

[4/] *Average pension amount represents average annual pension only for members who have reached superannuation through age or service credits.*

[5/] *Act 40 of 2003 established a minimum employer contribution rate of 2%, 3%, and 4% effective July 1, 2004, 2005 and 2006 respectively.*

[6/] *Act 2007-8 established a permanent minimum employer contribution rate floor of 4%.*

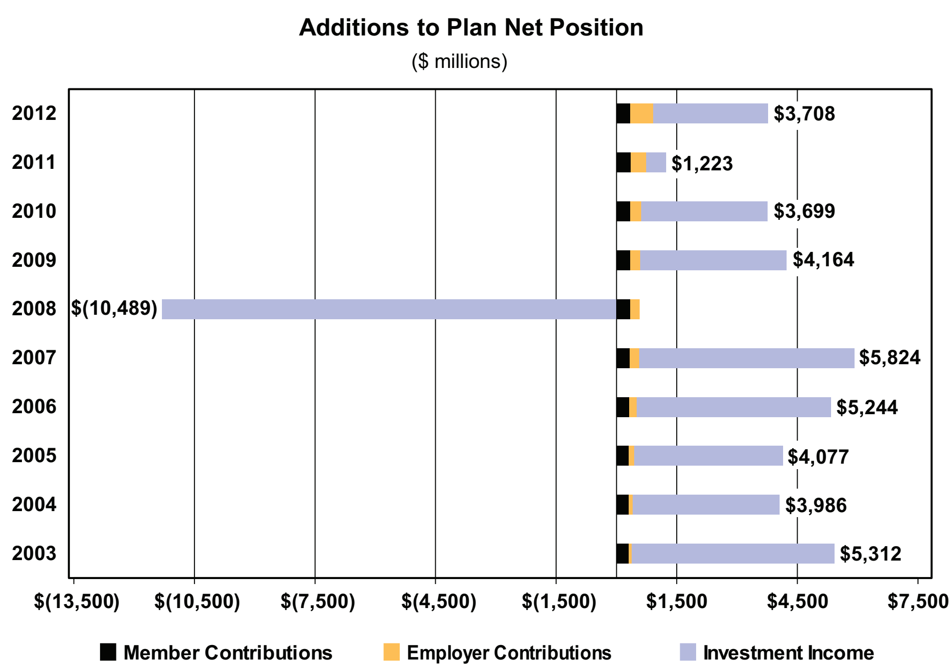
[7/] *Act 2010-46 set the employer contribution rate at 5% effective July 1, 2010.*

[8/] *Act 120 set collars on the increase of the employer contribution rate at 3% effective July 1, 2011, 3.5% for July 1, 2012, and 4.5% every year thereafter until no longer needed.*

Source: State Employees' Retirement System

Schedule of Additions to Plan Net Position
Ten Years Ended December 31, 2012
(Dollar Amounts in Thousands)

Year Ending	Member Contributions	Employer Contributions: Dollar Amount	Employer Contributions: % of Annual Payroll	Net Investment Gain / (Loss)	Total
2012	$347,937	$565,621	10.2%	$2,794,940	$3,708,498
2011	350,852	391,749	7.0	480,445	1,223,046
2010	349,049	273,083	4.9	3,076,410	3,698,542
2009	348,805	253,250	4.5	3,561,526	4,163,581
2008	336,833	235,288	4.3	(11,061,207)	(10,489,086)
2007	333,818	243,936	4.6	5,246,730	5,824,484
2006	317,790	196,420	3.8	4,730,043	5,244,253
2005	305,624	148,375	3.0	3,622,820	4,076,819
2004	309,923	106,703	2.2	3,569,323	3,985,949
2003	308,014	68,604	1.4	4,935,699	5,312,317



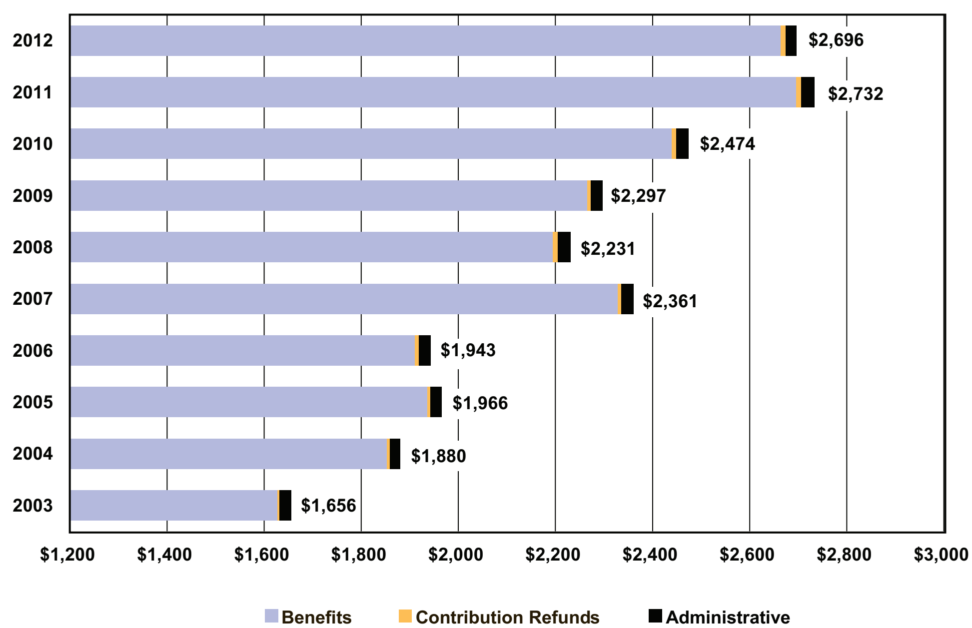
Source: State Employees' Retirement System

Schedule of Deductions from Plan Net Position
Ten Years Ended December 31, 2012
(Dollar Amounts in Thousands)

Year	Benefits	Refund of Contributions	Administrative	Total
2012	$2,664,242	$9,891	$22,209	$2,696,342
2011	2,695,732	9,531	26,706	2,731,969
2010	2,440,246	9,007	25,136	2,474,389
2009	2,265,404	7,968	24,073	2,297,445
2008	2,195,206	9,373	26,720	2,231,299
2007	2,328,185 [1/]	8,183	24,748	2,361,116
2006	1,911,330	8,096	23,868	1,943,294
2005	1,936,428	7,215	22,704	1,966,347
2004	1,853,117	6,138	21,244	1,880,499
2003	1,627,166	5,115	23,646	1,655,927

[1/] *22% increase from prior year is due to large number of employees retiring as a result of changes in health care benefits.*

Deductions from Plan Net Position
($ millions)



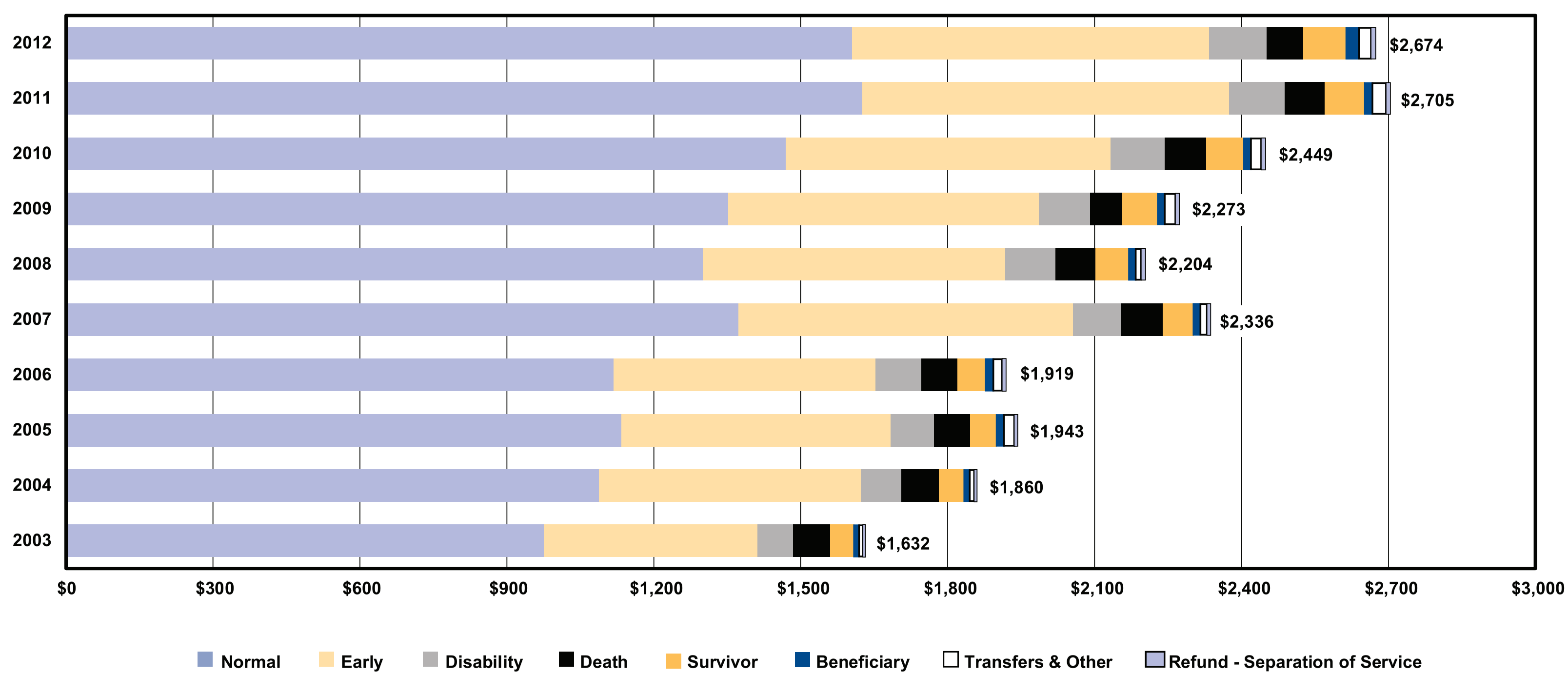
Source: State Employees' Retirement System

Schedule of Benefit and Refund Deductions from Plan Net Position by Type
Ten Years Ended December 31, 2012
(Dollar Amounts in Thousands)

	Retirement								Refunds		
Year	Normal	Early	Disability	Death	Survivor	Beneficiary	Transfers & Other	Total Benefit Deductions	Separation of Service	Death	Total Refunds
2012	$1,604,985	$728,719	$116,914	$75,254	$88,055	$26,497	$23,818	$2,664,242	$9,673	$218	$9,891
2011	1,626,233	749,180	112,575	82,123	82,467	15,093	28,061	2,695,732	9,271	260	9,531
2010	1,470,101	663,004	109,506	84,878	77,384	14,039	21,334	2,440,246	8,693	314	9,007
2009	1,351,710	633,880	105,207	65,873	72,466	14,143	22,125	2,265,404	7,824	144	7,968
2008	1,300,312	618,027	102,250	81,728	67,623	14,209	11,057	2,195,206	9,222	151	9,373
2007	1,372,909	683,467	98,605	83,687	62,726	13,949	12,842	2,328,185 [1/]	8,007	176	8,183
2006	1,117,801	535,156	93,358	73,885	58,038	14,988	18,104	1,911,330	7,971	125	8,096
2005	1,133,694	550,437	88,250	74,312	53,873	14,650	21,212	1,936,428	7,086	129	7,215
2004	1,088,129	534,674	82,515	76,216	51,946	10,818	8,819	1,853,117	6,013	125	6,138
2003	976,102	436,325	72,880	75,368	48,687	9,876	7,928	1,627,166	4,994	121	5,115

[1/] *For most members who retired after July 1, 2007, members must contribute to medical insurance premiums as a result of AFSCME agreement dated July 1, 2007.*

Benefit and Refund Deductions from Plan Net Position by Type
($ millions)



Source: State Employees' Retirement System

Schedule of Total Changes in Plan Net Position
Ten Years Ended December 31, 2012
(Dollar Amounts in Thousands)

	Additions to Plan Net Position				Deductions from Plan Net Position				
Year Ending	Member Contributions	Employer Contributions	Net Investment Income	Total Additions	Benefits	Refund of Contributions	Administrative	Total Deductions	Net Increase / (Decrease)
2012	$347,937	$565,621	$2,794,940	$3,708,498	$2,664,242	$9,891	$22,209	$2,696,342	$1,012,156
2011	350,852	391,749	480,445	1,223,046	2,695,732	9,531	26,706	2,731,969	(1,508,923)
2010	349,049	273,083	3,076,410	3,698,542	2,440,246	9,007	25,136	2,474,389	1,224,153
2009	348,805	253,250	3,561,526	4,163,581	2,265,404	7,968	24,073	2,297,445	1,866,136
2008	336,833	235,288	(11,061,207)	(10,489,086)	2,195,206	9,373	26,720	2,231,299	(12,720,385)
2007	333,818	243,936	5,246,730	5,824,484	2,328,185	8,183	24,748	2,361,116	3,463,368
2006	317,790	196,420	4,730,043	5,244,253	1,911,330	8,096	23,868	1,943,294	3,300,959
2005	305,624	148,375	3,622,820	4,076,819	1,936,428	7,215	22,704	1,966,347	2,110,472
2004	309,923	106,703	3,569,323	3,985,949	1,853,117	6,138	21,244	1,880,499	2,105,450
2003	308,014	68,604	4,935,699	5,312,317	1,627,166	5,115	23,646	1,655,927	3,656,390

Source: State Employees' Retirement System

Schedule of Investment Income
Ten Years ended December 31, 2012
(Dollar Amounts in Thousands)

	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003
Investment gain/(loss):										
Net appreciation/(depreciation) in fair value of investments	$2,268,730	$614,117	$2,211,065	$2,456,209	$(9,979,685)	$4,164,231	$3,723,160	$2,811,470	$2,807,290	$3,423,081
Collective trust fund appreciation/(depreciation) and income	275,103	(267,177)	810,147	1,063,673	(1,377,568)	798,941	641,718	420,888	391,248	1,165,463
Interest	144,431	165,082	146,995	149,040	342,163	347,507	350,783	368,610	280,221	237,786
Dividends	190,733	78,823	61,964	69,400	154,779	149,488	152,690	128,480	124,099	113,634
Real estate	97,641	82,707	73,355	73,561	109,523	112,148	145,871	112,057	148,133	168,427
Miscellaneous	4,583	2,316	6,471	3,499	5,969	6,149	3,519	3,537	6,722	7,138
	2,981,221	675,868	3,309,997	3,815,382	(10,744,819)	5,578,464	5,017,741	3,845,042	3,757,713	5,115,529
Investment expenses	(189,722)	(197,505)	(235,826)	(260,376)	(310,454)	(344,707)	(298,204)	(234,760)	(196,859)	(187,139)
Net gain/(loss) from investing activities	2,791,499	478,363	3,074,171	3,555,006	(11,055,273)	5,233,757	4,719,537	3,610,282	3,560,854	4,928,390
From securities lending activities:										
Securities lending income	3,953	2,376	2,511	7,092	41,319	155,067	170,675	116,477	40,854	16,163
Securities lending expenses	(512)	(294)	(272)	(572)	(47,253)	(142,094)	(160,169)	(103,939)	(32,385)	(8,854)
Net income from securities lending activities	3,441	2,082	2,239	6,520	(5,934)	12,973	10,506	12,538	8,469	7,309
Total net investment gain/(loss)	**$2,794,940**	**$480,445**	**$3,076,410**	**$3,561,526**	**$(11,061,207)**	**$5,246,730**	**$4,730,043**	**$3,622,820**	**$3,569,323**	**$4,935,699**

Source: State Employees' Retirement System

Schedule of Active Member Statistics
Ten Years Ended December 31, 2012

	Male			Female			Total
	Average Age	Average Service	Average Salary	Average Age	Average Service	Average Salary	Number of Active Members
2012	46.64	12.23	$56,118	46.90	11.79	$46,981	106,048
2011	46.55	12.17	56,008	46.70	11.70	46,992	107,021
2010	46.58	12.36	54,983	46.71	11.91	46,206	109,255
2009	46.50	12.35	54,414	46.52	12.00	45,987	110,107
2008	46.23	12.21	52,536	46.18	11.79	44,176	110,866
2007	46.11	12.22	51,663	45.95	11.76	43,888	109,610
2006	46.39	12.80	49,455	46.20	12.49	41,616	110,972
2005	46.12	12.71	48,129	45.91	12.46	40,331	109,981
2004	46.14	13.03	48,801	46.01	12.88	40,716	108,405
2003	46.25	13.42	47,717	46.12	13.39	40,120	109,018

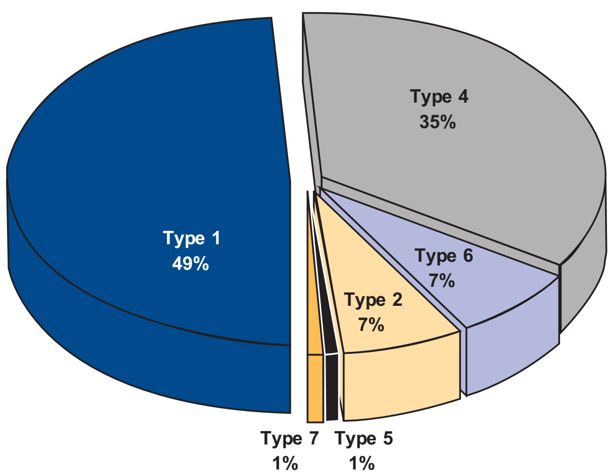
Source: State Employees' Retirement System

Schedule of Retired Members by Type of Benefit
As of December 31, 2012

Amount of Monthly Benefit	Total Monthly Benefits	Total Number of Retirees	Type of Benefit					
			1	2	4	5	6	7
≤ $500	$6,831,781	27,777	6,460	609	16,361	476	3,503	368
> 500 to 1,000	16,678,611	22,496	10,832	3,684	5,091	310	2,283	296
> 1,000 to 1,500	20,763,113	16,814	9,170	1,804	4,357	122	1,175	186
> 1,500 to 2,000	22,086,963	12,679	6,776	931	4,276	62	560	74
> 2,000 to 2,500	22,621,453	10,097	5,666	483	3,539	41	349	19
> 2,500 to 3,000	20,836,890	7,609	4,596	280	2,524	23	181	5
> 3,000	84,305,290	19,589	13,939	261	5,034	48	298	9
Totals	**$194,124,101**	**117,061**	**57,439**	**8,052**	**41,182**	**1,082**	**8,349**	**957**

Type of Retirement
1 - Superannuation
2 - Disabled
4 - Early
5 - Beneficiary
6 - Survivor
7 - Alternate Payee

Retired Members by Type of Benefit



Source: State Employees' Retirement System

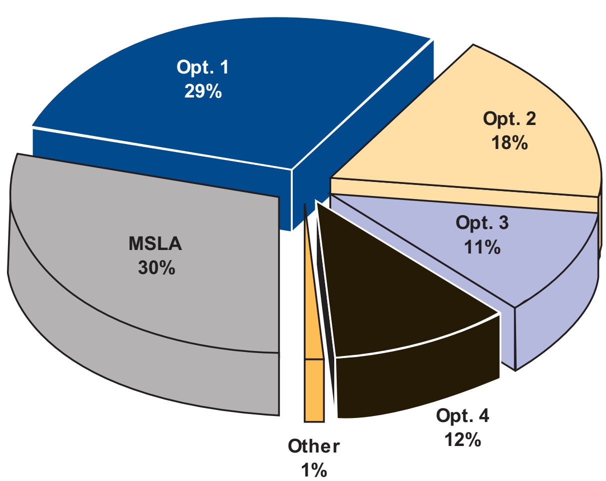
Schedule of Retired Members by Option
As of December 31, 2012

Amount of Monthly Benefit	Total Monthly Benefits	Total Number of Retirees	Option Selected					
			MSLA	1	2	3	4	Other
≤ $500	$6,831,781	27,777	6,433	11,249	6,143	1,976	1,467	509
> 500 to 1,000	16,678,611	22,496	7,586	6,192	4,359	2,150	1,859	350
> 1,000 to 1,500	20,763,113	16,814	4,951	4,522	3,295	1,824	2,077	145
> 1,500 to 2,000	22,086,963	12,679	3,802	3,244	2,170	1,557	1,828	78
> 2,000 to 2,500	22,621,453	10,097	2,944	2,445	1,661	1,302	1,698	47
> 2,500 to 3,000	20,836,890	7,609	2,277	1,762	1,180	1,006	1,354	30
> 3,000	84,305,290	19,589	6,538	3,970	2,364	2,744	3,919	54
Totals	**$194,124,101**	**117,061**	**34,531**	**33,384**	**21,172**	**12,559**	**14,202**	**1,213**

Options

MSLA - Maximum Single Life Annuity
Opt. 1 - Annuity for life with beneficiary receiving remainder of present value when member dies
Opt. 2 - Annuity for life with beneficiary receiving same annuity when member dies
Opt. 3 - Annuity for life with beneficiary receiving one half the member's annuity when member dies
Opt. 4 - Member designs a different plan approved by SERS not covered under the above option
Other - Death benefit and domestic relations order

Retired Members by Option



Source: State Employees' Retirement System

Schedule of Average Monthly Benefit Payments[1/]

Ten Years Ended December 31, 2012

	Years Credited Service						
Retirement Effective Dates	**< 5**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**
Period 1/1/2012 to 12/31/2012							
Average monthly benefit	$261	$406	$823	$1,495	$2,101	$3,464	$4,073
Average final average salary	$38,197	$42,106	$46,477	$54,120	$58,807	$74,455	$70,238
Number of retired members	94	899	724	535	680	908	1,184
Period 1/1/2011 to 12/31/2011							
Average monthly benefit	$263	$445	$843	$1,430	$2,095	$2,994	$3,829
Average final average salary	$36,895	$44,808	$46,588	$52,687	$58,928	$67,793	$66,989
Number of retired members	103	851	716	769	856	1,134	2,276
Period 1/1/2010 to 12/31/2010							
Average monthly benefit	$254	$398	$788	$1,332	$2,109	$2,938	$3,818
Average final average salary	$39,114	$41,128	$44,562	$50,607	$57,784	$66,053	$65,579
Number of retired members	75	755	505	646	712	846	1,662
Period 1/1/2009 to 12/31/2009							
Average monthly benefit	$209	$374	$740	$1,337	$1,936	$2,919	$3,767
Average final average salary	$32,925	$38,184	$43,520	$50,161	$55,113	$65,193	$64,685
Number of retired members	60	543	448	545	539	710	1,287
Period 1/1/2008 to 12/31/2008							
Average monthly benefit	$198	$340	$729	$1,266	$1,903	$2,968	$3,782
Average final average salary	$30,280	$39,066	$45,753	$48,823	$55,471	$65,893	$65,569
Number of retired members	64	646	484	788	586	705	938
Period 1/1/2007 to 12/31/2007							
Average monthly benefit	$219	$322	$674	$1,214	$1,883	$2,538	$3,464
Average final average salary	$31,359	$37,629	$42,759	$45,817	$53,241	$58,974	$60,726
Number of retired members	53	637	476	1,057	759	1,258	3,384
Period 1/1/2006 to 12/31/2006							
Average monthly benefit	$174	$316	$690	$1,171	$1,878	$2,487	$3,489
Average final average salary	$27,898	$35,283	$42,358	$45,225	$53,513	$58,031	$60,582
Number of retired members	51	584	491	667	471	627	1,205
Period 1/1/2005 to 12/31/2005							
Average monthly benefit	$197	$335	$695	$1,161	$1,844	$2,409	$3,464
Average final average salary	$31,822	$34,767	$40,577	$45,052	$51,985	$55,391	$60,758
Number of retired members	57	579	544	785	588	885	2,034
Period 1/1/2004 to 12/31/2004							
Average monthly benefit	$170	$355	$674	$1,171	$1,820	$2,255	$3,230
Average final average salary	$26,332	$34,645	$39,343	$44,095	$49,960	$53,306	$56,940
Number of retired members	53	550	558	878	686	1,130	3,100
Period 1/1/2003 to 12/31/2003							
Average monthly benefit	$201	$370	$661	$1,126	$1,721	$2,201	$3,179
Average final average salary	$30,920	$34,935	$37,342	$41,727	$47,340	$51,372	$55,947
Number of retired members	33	514	538	851	701	984	2,633

[1/] *Includes normal retirement, early retirement and disability benefits for new retirees in the years listed.*

Source: State Employees' Retirement System

Schedule of Average Annual Benefit Payments
As of December 31, 2012

	Superannuation		Early Retirement		Disability		Beneficiary and Survivor	
Age	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Under 25	-	-	-	-	-	-	$9,784	$8,396
25-29	-	-	$742	$571	-	-	7,495	7,922
30-34	-	-	1,144	862	$11,487	$11,470	23,047	8,944
35-39	-	-	1,714	1,295	13,272	11,717	11,040	8,692
40-44	-	-	5,003	2,182	15,680	12,132	14,266	8,133
45-49	-	-	18,736	4,467	16,488	13,472	7,208	10,055
50-54	$39,889	$33,829	21,249	9,222	18,263	15,903	5,474	10,003
55-59	38,873	39,094	19,749	14,927	18,393	16,425	9,147	11,647
60-64	34,313	31,405	22,618	16,714	16,393	15,120	9,183	13,476
65-69	31,474	24,641	22,746	15,659	13,472	13,220	12,153	14,197
70-74	29,428	20,568	17,219	11,914	10,910	9,731	9,184	15,332
75-79	24,531	16,205	14,533	9,235	8,933	8,628	9,088	11,474
80-84	21,039	12,111	15,079	9,176	9,716	7,548	9,071	10,177
85-89	17,620	10,508	12,978	7,735	9,275	7,212	8,101	8,641
90 and over	14,992	8,590	12,695	7,922	8,471	7,143	6,154	6,734
Total Average	**$28,388**	**$20,550**	**$19,169**	**$12,660**	**$15,140**	**$13,508**	**$9,576**	**$11,100**

	Superannuation	Early Retirement	Disability	Beneficiary and Survivor
Average Pension	$25,083	$16,035	$14,291	$10,940
Average Age	72.5	63.2	62.1	74.7

Source: State Employees' Retirement System

Schedule of SERS Agency Participation - Twenty Largest Employers
Ten Years Ended December 31, 2012

\# - Number of Active Members
% - Percentage of Total Active Members

	2012		2011		2010		2009		2008		2007		2006		2005		2004		2003	
Employer Name	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Dept of Public Welfare	16,764	15.81	17,087	15.97	18,007	16.48	18,201	16.53	18,618	16.79	18,761	17.12	19,355	17.44	19,781	17.99	20,175	18.61	20,417	18.73
Dept of Corrections	15,682	14.79	15,764	14.73	16,133	14.77	16,174	14.69	16,075	14.50	15,523	14.16	15,151	13.65	15,126	13.75	14,463	13.34	14,267	13.09
Dept of Transportation	12,729	12.00	12,826	11.98	12,427	11.37	12,548	11.40	12,494	11.27	12,264	11.19	12,484	11.25	12,388	11.26	12,428	11.46	12,603	11.56
Pennsylvania State University	6,368	6.00	6,532	6.10	6,653	6.09	6,608	6.00	6,468	5.83	6,210	5.67	6,265	5.65	6,210	5.65	6,085	5.61	6,102	5.60
Pennsylvania State Police	6,012	5.67	6,033	5.64	6,084	5.57	6,102	5.54	6,222	5.61	6,266	5.72	6,172	5.56	6,127	5.57	5,885	5.43	5,803	5.32
Dept of Labor and Industry	5,474	5.16	5,768	5.39	5,919	5.42	5,719	5.19	5,178	4.67	5,234	4.78	5,692	5.13	5,608	5.10	5,648	5.21	5,823	5.34
State System of Higher Education	5,123	4.83	5,138	4.80	5,375	4.92	5,556	5.05	5,521	4.98	5,316	4.85	5,344	4.82	5,240	4.76	5,248	4.84	5,432	4.98
Liquor Control Board	4,141	3.90	4,080	3.81	4,286	3.92	4,303	3.91	4,097	3.70	3,969	3.62	4,102	3.70	3,994	3.63	3,840	3.54	3,686	3.38
PA Higher Education Assistance Agency	2,776	2.62	2,460	2.30	2,265	2.07	2,230	2.03	2,135	1.93	2,494	2.28	2,524	2.27	2,378	2.16	1,968	1.82	1,957	1.80
Dept of Environmental Protection	2,632	2.48	2,643	2.47	2,623	2.40	2,677	2.43	2,802	2.53	2,767	2.52	2,921	2.63	2,836	2.58	2,854	2.63	2,916	2.67
Dept of Military and Veterans Affairs	2,385	2.25	2,471	2.31	2,505	2.29	2,478	2.25	2,568	2.32	2,545	2.32	2,540	2.29	2,492	2.27	2,402	2.22	2,291	2.10
PA Turnpike Commission	2,126	2.00	2,104	1.97	2,132	1.95	2,164	1.97	2,254	2.03	2,232	2.04	2,276	2.05	2,227	2.02	2,282	2.11	2,354	2.16
Dept of Conservation & Natural Resources	2,037	1.92	1,909	1.78	1,913	1.75	2,031	1.84	2,111	1.90	2,080	1.90	2,093	1.89	1,971	1.79	1,927	1.78	2,009	1.84
Administrative Office of PA Courts	2,018	1.90	1,977	1.85	2,025	1.85	1,992	1.81	2,015	1.82	1,988	1.81	1,989	1.79	1,953	1.78	1,957	1.81	1,884	1.73
Dept of Revenue	1,994	1.88	2,059	1.92	2,166	1.98	2,170	1.97	2,366	2.13	2,289	2.09	2,319	2.09	2,322	2.11	2,238	2.06	2,312	2.12
Executive Offices	1,851	1.75	1,949	1.82	2,006	1.84	2,155	1.96	2,257	2.04	2,201	2.01	2,247	2.02	2,246	2.04	2,237	2.06	2,351	2.16
House of Representatives	1,590	1.50	1,792	1.67	1,825	1.67	1,779	1.62	1,736	1.57	1,758	1.60	1,701	1.53	1,706	1.55	1,662	1.53	1,619	1.49
Dept of Health	1,262	1.19	1,333	1.25	1,335	1.22	1,409	1.28	1,473	1.33	1,433	1.31	1,479	1.33	1,435	1.30	1,386	1.28	1,393	1.28
Board of Probation and Parole	1,161	1.09	1,096	1.02	1,100	1.01	1,108	1.01	1,098	0.99	1,009	0.92	974	0.88	1,010	0.92	998	0.92	986	0.90
Dept of General Services	961	0.91	1,022	0.95	1,108	1.01	1,208	1.10	1,270	1.15	1,267	1.16	1,340	1.21	1,306	1.19	1,230	1.13	1,281	1.18
Active Members for Twenty Largest Employers	**95,086**	**89.65**	**96,043**	**89.74**	**97,887**	**89.59**	**98,612**	**89.56**	**98,758**	**89.08**	**97,606**	**89.05**	**98,968**	**89.18**	**98,356**	**89.43**	**96,913**	**89.40**	**97,486**	**89.42**
Total Number of Active Members	106,048		107,021		109,255		110,107		110,866		109,610		110,972		109,981		108,405		109,018	

Source: State Employees' Retirement System

Bloomsburg University Community Activities
Bucks County Community College
Bucks County Health Department
Bucks County Intermediate Unit
California University Student Association
Capitol Preservation Committee
Center for Rural Pennsylvania
Central Susquehanna Intermediate Unit
Chester County Health Department
Civil Service Commission
Clarion University Student Association
Community College of Allegheny County
Community College of Philadelphia
Delaware County Community College
Delaware River Joint Toll Bridge
Delaware River Port Authority
Delaware Valley Regional Planning Commission
Department of Aging
Department of Agriculture
Department of Banking
Department of Community & Economic Development
Department of Drug and Alcohol Programs
Department of Education
Department of State
Department of the Auditor General
East Stroudsburg University Student Association
Edinboro University Services Inc.
Environmental Hearing Board
Erie County Health Department
Fish and Boat Commission
Game Commission
Governor's Office
Harrisburg Area Community College
Historical and Museum Commission
House Appropriations Committee(D)
House Appropriations Committee(R)
Independent Fiscal Office
Independent Regulatory Review Commission
Indiana University Student Co-op
Insurance Department
Intergovernmental Cooperation Authority
Joint Legislative Conservation Committee
Joint State Government Commission
Kutztown University Student Services
Lancaster-Lebanon Intermediate Unit
Legislative Budget & Finance Committee
Legislative Data Processing Center
Legislative Reference Bureau
Lehigh Carbon Community College
Lieutenant Governor's Office
Local Government Commission
Luzerne County Community College
Mansfield University Community Services
Milk Marketing Board
Millersville Student Services
Montgomery County Community College
Northampton Community College
Office of Attorney General
Office of Liquidations
Pennsylvania College of Technology
Pennsylvania Convention Center Authority
Pennsylvania Emergency Management Agency
Pennsylvania Gaming Control Board
Pennsylvania Health Care Cost Containment Council
Pennsylvania Highlands Community College
Pennsylvania Housing Finance Agency
Pennsylvania Infrastructure Investment Authority
Pennsylvania Municipal Retirement System
Pennsylvania Port Authority
Port Authority Transit Corporation
Public School Employees' Retirement System
Public Utility Commission
Reading Area Community College
Senate of Pennsylvania
Shippensburg Student Association
Slippery Rock Student Government
State Employees' Retirement System
State Ethics Commission
State Public School Building Authority
State Tax Equalization Board
Susquehanna River Basin Commission
Thaddeus Stevens College of Technology
Treasury Department
West Chester University Student Services
Westmoreland County Community College

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